

# **SELF STUDY REPORT**

**IN RESPECT OF**

**MAHATMA GANDHI INSTITUTE OF MEDICAL SCIENCES**

**SEVAGRAM, WARDHA, MAHARASHTRA, INDIA**



**SUBMITTED FOR**

**REACCREDITATION BY  
NATIONAL ASSESSMENT & ACCREDITATION COUNCIL  
2016**



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with invaluable inputs, comments and support from the:

Management, faculty & students of MGIMS, and employees of KHS.



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## **PART A: PREFACE AND DEAN'S MESSAGE**

The Mahatma Gandhi Institute of Medical Sciences (MGIMS), Sevagram, India's first rural medical college, was founded in 1969. MGIMS is attached to Kasturba Hospital, which has the distinction of being the only hospital in the country which was started by the Father of the Nation himself. In 1964, the 'Kasturba Health Society' was set up with Dr Sushila Nayar as its President to manage Kasturba Hospital. The institute was started at the behest of then Prime Minister, Shri Lal Bahadur Shastri, who suggested starting medical colleges in rural areas to produce doctors sensitive to the health of the rural poor, disadvantaged and underprivileged. The expenditure of MGIMS is shared by the Government of India, Government of Maharashtra and the Kasturba Health Society in the proportion of 50:25:25.

Spread over a sprawling campus of 450 acres, Kasturba Hospital is a 934-bedded hospital with 690 teaching beds, 100 service beds, 32 private rooms and 62 beds in different intensive care units. The institute also runs a 50-bedded Dr Sushila Nayar Hospital, in the tribal areas of Utawali, in Melghat in Amravati district.

MGIMS is affiliated to the Maharashtra University of Health Sciences (MUHS) Nashik. Besides MBBS, it offers Medical Council of India (MCI) recognized degrees in 19 postgraduate disciplines, diplomas in 9 disciplines and PhDs in nine departments. The institute has been a pioneer in community oriented medical education. Some teaching innovations we have been running for more than four decades are: the village adoption scheme, social service camp, orientation camp in Gandhi Ashram, Reorientation of Medical Education (ROME) camp and rural placement scheme. This kind of participatory community immersion experience is hardly provided by a handful of medical institutes across the country. The Report of the Task Force on Medical Education of the National Rural Health Mission spells out the need to draw upon our initiatives and experience in curriculum innovation and rural placement of its graduates and formulate national guidelines.

The institute strives to produce doctors of high clinical competence, professional attitudes and ethical behavior. It believes that Gandhian values are relevant even today and it displays a fierce commitment to advancement of medical education without losing the humane touch.

In recognition of our efforts to maintain quality, NAAC had accredited MGIMS as an A grade medical institution in 2011. Post accreditation, the institute has developed a proactive Internal Quality Assurance Cell to sustain this endeavor to maintain quality and promote holistic academic excellence. As we enter the second cycle of

accreditation, the institution understands that quality is a byproduct of our ongoing efforts to strive for excellence and a commitment to institutionalize it as a core value. This Self Study Report represents a self-evaluation of our efforts in this direction in our quest for excellence.

**Dr KR Patond**  
**Dean, MGIMS**



## **PART B: EXECUTIVE SUMMARY**

The Mahatma Gandhi Institute of Medical Sciences (MGIMS), Sevagram is India's first rural medical college. Kasturba Hospital has the distinction of being the only hospital in the country which was started by the Father of the Nation himself. Nestled in the *karmabhoomi* of Mahatma Gandhi, in Sevagram, MGIMS was founded by Dr Sushila Nayar in 1969 in the Gandhi centenary year.

### **VISION**

The vision of the institute is to develop a replicable model of community oriented medical education which is responsive to the changing needs of our country and is rooted in an ethos of professional excellence.

### **MISSION STATEMENT**

In the spirit of its Founder, the Mahatma Gandhi Institute of Medical Sciences, Sevagram is committed to pursuit of exemplary standards of professional excellence in medical education, research and clinical care by evolving a pattern of integrating value-based medical education with accessible and affordable health care, especially to underprivileged rural communities.

### **HISTORY**

In 1930, Mahatma Gandhi left Sabarmati Ashram. Thereafter he set up his ashram at Sevagram in 1936. In 1944, Babu got his guest house converted into a dispensary, and later, into a 15 bedded hospital for women and children. He put Dr Sushila Nayar, a young graduate from Delhi's Lady Hardinge Medical College, in charge of the hospital. It was christened 'Kasturba Hospital' in memory of Kasturba Gandhi, who had passed away in 1942. The hospital was later expanded and its services were also extended to men.

On 11 September 1964, an autonomous body, the 'Kasturba Health Society' was set up with Dr Sushila Nayar as its President to manage the hospital. When Dr Sushila Nayar became the Union Health Minister in 1962, she realized that the distribution of doctors in urban and rural areas was skewed and rural health care was being neglected. In July 1965, Prime Minister, Shri Lal Bahadur Shastri, suggested starting medical colleges in rural areas so that young doctors trained in rural settings would be sensitive to the health of the rural people. Kasturba Hospital at Sevagram was the natural choice for setting up India's first experimental rural medical college. MGIMS was started as a Gandhi Centenary Project in 1969 and was designed to be an experimental institute where medical education was reoriented to meet the needs of rural masses.

## **CURRICULAR ASPECTS**

The Institute is affiliated to the Maharashtra University of Health Sciences (MUHS) Nashik and aligned with the regulations of the Medical Council of India (MCI). At MGIMS, every effort is made to acquaint the medical student to the real rural India. The spotlight on community oriented medical education focuses on attempts to make our graduates sensitive to the felt needs of the people they would be serving in their future.

Students at MGIMS come from all parts of the country - half the students are admitted from Maharashtra and the remaining from all other states. In addition to the constitutional reservation policy, the institute offers reservation for students from rural areas, girls and for the differently-abled. Earlier, the entrance examination to the MBBS course included a separate qualifying paper on Gandhian Thought. In 2016 however, admissions have been conducted exclusively based on the NEET scores.

The students and staff of the Institute adhere to a unique code of conduct, where they are expected to wear handwoven khadi, participate in shramdan and attend a weekly all-religion prayer.

## **TEACHING, LEARNING AND EVALUATION**

Besides MBBS, the Institute offers MCI recognized degrees in 19 postgraduate disciplines, diplomas in 9 subjects and PhDs in nine departments. MGIMS boasts of an impressive list of committed faculty, some of whom are recipients of the national BC Roy Award or the Best Teacher Award instituted by MUHS.

At the beginning of each academic year, the curriculum committee plans the teaching-learning and assessment schedule for the entire year and designs the academic calendar. The academic calendar and the assessment schedule are scrupulously followed as per the MUHS guidelines. Modern methods of teaching-learning such as interactive lectures, small group teaching, bedside teaching, project based learning, experiential and workplace based learning are used. MGIMS pays a lot of attention to skills training and has established a modern simulation lab to train doctors and paramedical staff in life saving skills. The institute's new e-learning project is into its second phase of faculty training at the moment.

During the MBBS course, students experience living in rural settings on three occasions. Immediately after admission, a fortnight long Orientation Camp is held in the Gandhi ashram to help acquaint them to the profession and imbibe Gandhian values. Each year a village is adopted by the new MBBS batch and 3-5 families are allotted to each student. For 15 days of the Social Service Camp, all students live in this village and experience rural life. At the end of the fifth semester, the students are

again posted at a rural health training centre of the institute for 15 days in a Reorientation of Medical Education (ROME) camp where they are exposed to the health care delivery system. Since 1990, the Institute has asked all its graduates to serve for two years in a rural hospital run by one of the 80 approved non-governmental organizations chosen by the institute. Rural service is a mandatory criterion for applying for post-graduation in this Institute. While the institute follows the assessment pattern of MUHS, this is one of the rare institutes where students are also assessed for some competencies in actual community settings.

### **RESEARCH, CONSULTANCY, EXTENSION ACTIVITIES**

The focus of MGIMS has been on community based medical research. Quality research has been the hallmark of this rural institute and the large number of funded projects awarded to various departments is ample testimony to the potential of the researchers. Various departments of the institute have consistently received funding from the Indian Council of Medical Research, Department of Science and Technology, Department of Biotechnology, WHO, UNICEF, PATH (USA), Fogarty AIDS Research and Training Program, USA, National Institutes of Health (NIH), National Heart Lung Blood Institute (NHLBI) and other such organizations. Each year, the large numbers of national and international peer reviewed publications from this Institute provide evidence of excellence in research. The faculty has been invited to national and international committees to frame guidelines or share their expertise.

The institute's commitment to the community is well known. Community programmes have consistently been implemented to enhance health care services. The institute has adopted three primary health centres and developed a model of decentralized healthcare delivery at village level through Community-based Organizations and the Panchayati Raj Institutions. It has formed 275 Self-help groups, 10 *Kisan Vikas Manch* and 89 *Kishori Panchayats* in the adopted villages. The National Rural Health Mission has lauded the 'positive contribution of MGIMS in maternal health activities conducted in partnership with the Govt of India'.

The health insurance scheme of the institute has won several accolades as it seeks to create health consciousness in the community. There are two schemes- the health insurance scheme and the Jowar health assurance scheme. Under the first scheme, a villager can insure himself and his family by paying Rs 400 a year and in return he gets 50% subsidy on OPD and indoor bills. Under the Jowar Health Assurance Scheme each participating village is made responsible to pay a payment with the rest of the health expense being covered by the hospital with financial support from the central and state governments. In 2015-16, 18807 families (86199 members) around Sevagram volunteered to obtain health insurance from this hospital. Similarly 40 villages were totally insured and 90201 rural people were insured under this scheme.

No other medical institution has achieved this kind of coverage so consistently and at so affordable a rate.

### **INFRASTRUCTURE AND LEARNING RESOURCES**

Kasturba Hospital has 934 beds: 690 teaching beds, 100 service beds, 32 private rooms and 62 beds in different intensive care units. The institute also runs a 50-bedded Dr Sushila Nayar Hospital, in the tribal areas of Utawali, in Melghat in Amravati district. Almost three-fourths of the patients who visit our hospital come from rural backgrounds. The patient load comes to us from Vidarbha in Maharashtra, and from the adjoining areas of Andhra Pradesh, Telangana, Madhya Pradesh and Chhatisgarh. Kasturba Hospital offers the benefits of modern technology with affordable costs and compassionate health care.

In 2015-16, 826808 patients attended the hospital as outpatients and 47304 patients were admitted for various ailments. The Hospital has state-of-the-art intensive care units in Medicine, Surgery, Obstetrics and Gynecology and Pediatrics which provide excellent critical care. The Sri Satya Sai Accident and Emergency Unit (Trauma Centre) provides succour to patients of trauma. The Institute has a Blood Component Unit which provides components not only to patients in Kasturba Hospital, but also to adjoining private hospitals. Patients of sickle cell anemia and thalassemia are given blood free of cost. Facilities for MRI, CT Scan and mammography are available. The Institute's radiotherapy department has state-of-the-art equipment for treatment of cancer patients including advanced dual energy linear accelerator with intensity modulated radiotherapy (IMRT) with 3D conformal radiotherapy (CRT) with multiple electron beam, simulator, and HDR brachytherapy. The Pathology, Microbiology and Biochemistry laboratories have in-house facilities to conduct a battery of diagnostic tests. MGIMS has also added a Cardiac Catheterization Lab and digital subtraction angiography to its armamentarium. All departments of the hospital are connected by an advanced Hospital Information System.

Kasturba Hospital has constructed a brand new state-of-the-art operation theatre (OT) complex extending over 15000 square feet this year. It features ten modular OT suites, an intensive care unit and pre-operative assessment ward with ten beds each, two recovery rooms and a medical store. In September this year, a model Maternal and Child Health (MCH) wing has been inaugurated. The MCH wing has beds for Obstetrics and Gynecology and Pediatrics and Neonatology. It includes the outpatient department, antenatal and postnatal wards, high dependency units, operation theatres, sick newborn critical unit, labour rooms, obstetric intensive care units, skills labs and other such areas. Plans are afoot to redesign the huge space of over 17000 sq feet of the previous Dept of Obstetrics and Gynecology into a futuristic library premises.

Infrastructure for learners in classrooms and laboratories is good. The Central Library at MGIMS has gone digital and acquired a 24x7 dedicated library server. With this new facility, its users can access all its resources at their computer terminals or smart phones and other wifi enabled gadgets in the comfort of their rooms. All students stay on campus and have single occupancy rooms in the hostels. The campus, hostels, faculty residences and peripheral centres are completely linked by high speed broadband. Each student and faculty has an individual email ID on the intramail.

### **STUDENT SUPPORT AND PROGRESSION**

The institute runs an effective mentoring cell. In addition students have access to a student guidance and counseling centre. Each year a new Students' Council is nominated according to MUHS guidelines. The Council organizes several curricular, co-curricular and extra-curricular activities. Remedial programmes are undertaken to help all students reach the desired level of competence. MGIMS offers interest-free loans to students and faculty to purchase laptops and tablets to encourage them to adapt to advances in information and communication technology. This has manifested in use of ICT in several ways: in contacting teachers, in use of the internet for learning, circulating information about campus events, in expressing their views through online blogs and the social media and in online versions of the student magazine. Students are encouraged to take up research projects under the guidance of faculty and present their work at scientific platforms. Regular feedback is obtained from students, faculty, alumni and parents. The results of the feedback are analyzed and each department tries to incorporate these suggestions to improve the teaching-learning experience. A student grievance redressal cell and prevention of sexual harassment cell are in place. Financial assistance and book bank schemes are available for needy students. The institute has a strong supportive alumni network which is very active on the social media.

### **GOVERNANCE AND ADMINISTRATION**

The Kasturba Health Society (KHS) runs MGIMS and Kasturba Hospital. The various governing bodies of the organization such as the Local Managing Committee, the Standing Finance Committee, the Governing Council and the Kasturba Health Society meet periodically and take important decisions about the functioning, planning, budgeting and expansion of the activities of the institute and hospital. Details of these committees are provided later in this report. The functioning of the institute is decentralized and several institutional committees comprising of faculty, non teaching staff and students look after different aspects of governance and administration. The Dean is the head of academic affairs and deals with issues related to students, faculty and parents. The Secretary of the Kasturba Health Society looks after all management issues with KHS employees, i.e. both teaching and non-teaching staff. The Medical Superintendent is responsible for the day-to-day running of the hospital and deals with

concerns of the patients and clinicians. The President of the KHS along with his team of trustees oversees all these roles and also handles financial responsibilities. KHS has explicit guidelines for functioning which ensures that each individual employee contributes to institutional development. Regular academic and administrative audits are conducted.

### **INNOVATIONS AND BEST PRACTICES**

The institute is known for its pioneering innovations in community oriented medical education. Our innovations like the village adoption scheme and social service camp, ROME camp, rural health insurance scheme and low cost drug initiative have now been adopted by other institutes or are part of government guidelines. The Report of the Task Force on Medical Education of the National Rural Health Mission spells out the need to draw upon MGIMS Sevagram’s initiatives and experience in curriculum innovation and rural placement of its graduates. It suggests launching a participatory exercise with MGIMS and other like-minded institutions, so that national guidelines can be formulated.

Kasturba Hospital and MGIMS are one of the best examples of public-private partnership working to the advantage of the public. The institute runs on funding from the Government of India (50%), Government of Maharashtra (25%) and the Kasturba Health Society (25%). The Mahatma Gandhi Institute of Medical Sciences (MGIMS) is an excellent exemplar of a ‘not-for profit’ hospital which combines the efficiency and missionary zeal of private voluntary sector, and the concern for access of services and high coverage, compliance to rules and equal opportunities in employment of the public sector. Despite its rural location, its reputation for affordable, quality health care attracts patients not only from Vidarbha, but also the adjacent states of Chhatisgarh, Telangana and Andhra Pradesh. The hospital has all the amenities of a tertiary care hospital at prices which are affordable to rural patients.

### **SWOC ANALYSIS**

We carried out a SWOC analysis of our institute in the process of preparing this self study report. Our major findings are summarized in the table below:

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
<ul style="list-style-type: none"> <li>- Credibility and reputation of the institute built over last 47 years with strong value system based on Gandhian ideology</li> <li>- Strong linkages with the community allow us to teach and train our graduates in the field beyond the walls of a medical college, carry our community oriented teaching innovations and conduct extension work in the community</li> <li>- Strong linkages with all levels of the health system</li> </ul>	<ul style="list-style-type: none"> <li>- University internal assessment pattern is restrictive and does not allow us to give additional weightage to students for their performance in our curricular innovations in the community or to research endeavours of students</li> <li>- Faculty do not have protected time for research after patient care and teaching</li> </ul>

<ul style="list-style-type: none"> <li>- which allow us to participate in advocacy and framing health policy and guidelines at the national level</li> <li>- State of the art infrastructure and availability of patient care facilities at affordable costs: trained specialists, spacious wards, radiation oncology unit, advanced hospital information system, sophisticated laboratories</li> <li>- Innovative patient schemes: health insurance schemes, low cost drug initiative, no Q card</li> <li>- Updated learning resources including skills laboratory, committed faculty, responsive management, vibrant medical education unit</li> </ul>	<ul style="list-style-type: none"> <li>- The rigid University schedule makes it difficult for our students to enter into exchange programmes with other universities</li> </ul>
<b>OPPORTUNITIES</b>	<b>CHALLENGES</b>
<ul style="list-style-type: none"> <li>- Recognition of institute by government and non-governmental agencies as a pioneer in community based innovations in medical education</li> <li>- Ability to attract research grants and infrastructure development funds from national and international research agencies</li> <li>- Large campus with opportunities to expand infrastructure with changing needs</li> <li>- Good networking with governmental and non-governmental organizations</li> <li>- Management gives freedom and opportunities to innovate in health care, teaching and research</li> <li>- Opportunities to conduct community based and service oriented research</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of academic flexibility: Finding time for further curricular innovations within the tight schedule prescribed by MCI and MUHS</li> <li>- Uncertainty about consequences of NEET, especially its impact on internship and our rural placement scheme. May affect our networking with NGOs</li> <li>- Rural location affects higher education opportunities for children of faculty</li> <li>- Retention of faculty (especially super-specialists) in the rural location</li> </ul>

At MGIMS, we are conscious of the fact that medical education needs to maintain the right balance in the eternal triangle of ‘quality, quantity and equity’. In our perennial quest to attain the perfect blend, we never forget that these three arms are not in conflict, and equity cannot be kept in abeyance. Our students are expected to adhere to professional norms which include altruism, compassion, empathy, accountability, honesty and integrity. Over the last four and a half decades, the MGIMS faculty has been striving hard to imbibe the philosophy which makes it pursue excellence in academics, healthcare and research, more than mundane needs and money; and to maintain excellence in quality.

This self study report is an attempt to review and self evaluate our work, share our findings with all stakeholders, as well as streamline and improve our processes of functioning in our quest to achieve excellence.





## PART C: INSTITUTIONAL PROFILE

### 1. Name and Address of the Institution:

Name:	Mahatma Gandhi Institute of Medical Sciences	
Address:	Mahatma Gandhi Institute of Medical Sciences, Sevagram, Wardha- Maharashtra, 442102	
City: Wardha	Pin: 442102	State: Maharashtra
Website: www.mgims.ac.in		

### 2. For communication:

Principal / Dean / Director Designation	Name	Telephone with STD code	Mobile	Fax	Email
<b>Vice Chancellor</b>	NA	O: R:			
<b>Pro Vice Chancellor (s)</b>	NA	O: R:			
<b>Registrar</b>	NA	O: R:			
<b>Dean</b>	Dr KR Patond	O: 91-7152-284341-55 Ext: 210 R: 91-7152-284575	91-9049577833	91-7152-284333	dean@mgims.ac.in deanoffice@mgims.ac.in
<b>Vice Principal</b>	-	O: R:			
<b>Steering Committee / IQAC Coordinator</b>	Dr Anshu	O: 91-7152-284341 Ext 265 R: 91-7152-284285	91-9822726984		anshu@mgims.ac.in

### 3. Status of the Institution: **College is affiliated to Maharashtra University of Health Sciences, Nashik**

- Autonomous College
- Constituent College
- Affiliated College**
- State University
- State Private University
- Central University

University under Section 3 of UGC (A Deemed to be University)  
 Institution of National Importance  
 Any other (specify)

4. Type of University: Not applicable

Unitary	<input type="checkbox"/>
Affiliating	<input type="checkbox"/>

5. Type of College:

Ayurveda	<input type="checkbox"/>
Dentistry	<input type="checkbox"/>
Homoeopathy	<input type="checkbox"/>
Medicine	<input checked="" type="checkbox"/>
Nursing	<input type="checkbox"/>
Pharmacy	<input type="checkbox"/>
Physiotherapy	<input type="checkbox"/>
Siddha	<input type="checkbox"/>
Unani	<input type="checkbox"/>
Yoga and Naturopathy	<input type="checkbox"/>
Others (specify and provide details)	<input type="checkbox"/>

6. Source of funding:

Central Government	<input checked="" type="checkbox"/>
State Government	<input checked="" type="checkbox"/>
Grant-in-aid	<input checked="" type="checkbox"/>
Self-financing	<input type="checkbox"/>
Trust	<input checked="" type="checkbox"/>
Corporate	<input type="checkbox"/>
Any other (specify)	<input type="checkbox"/>

**The funding of MGIMS is shared between Govt of India (50%). Govt of Maharashtra (25%) and Kasturba Health Society (25%)**

7. a. Date of establishment of the institution: **12/09/1969**

b. In the case of university, prior to the establishment of the university, was it a/an

i. Autonomous College	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
ii. Constituent College	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
iii. Affiliated College	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
iv. PG Centre	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
v. De novo institution	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
vi. Any other (specify)				

**Not applicable**

c. In the case of college, university to which it is affiliated : **Maharashtra University of Health Sciences, Nashik**

8. State the vision and the mission of the institution.

### **Vision**

The vision of the institute is to develop a replicable model of community oriented medical education which is responsive to the changing needs of our country and is rooted in an ethos of professional excellence.

### **Mission Statement**

In the spirit of its Founder, the institute is committed to pursuit of exemplary standards of professional excellence in medical education, research and clinical care by evolving a pattern of integrating value-based medical education with accessible and affordable health care, especially to the underprivileged rural community.

The vision and mission of the institute translate into following objectives:

### **Objectives:**

#### **Medical education**

- To evolve an integrated pattern of medical education
- To provide value-based and cost-effective medical education with a community oriented approach
- To teach and train doctors to be responsive to the health needs of people living in resource limited settings

#### **Health Service**

- To provide high-quality, low-cost, evidence-based health care to the local communities
- To design efficient and effective health care delivery systems consonant to the needs of communities
- To empower the community by involving people in their own health care
- To promote professionalism and ethical application of practice standards

#### **Research**

- To promote excellence in designing and conducting research that focuses on local health problems, is feasible, interesting, novel, ethical and relevant
- To develop collaborative and consultative research partnerships with patients, care givers and the community

9. a. Details of UGC recognition / subsequent recognition (if applicable): Yes

Under Section	Date, Month and Year (dd/mm/yyyy)	Remarks (If any)
i. 2(f)*	29/01/ 1998	See <b>Annexure A</b> for certificate of recognition
ii. 12B*	30/03/1998	See <b>Annexure B</b> for certificate of recognition
iii. 3*		

b. Details of recognition/approval by statutory/regulatory bodies other than UGC (MCI, DCI, PCI, INC, RCI, AYUSH, AICTE, etc.)

Under Section/clause	Day, Month and Year (dd/mm/yyyy)	Validity	Program/ institution	Remarks
i. MCI letter no. MCI-6(92)/75/-Med./	24/03/1976	5 years	MBBS	Recognized by Nagpur University
ii. MUHS letter no. MUHS/E-1504/2002	26/04/2002	2001-02	MBBS 65 seats	MUHS recognition
iii. MCI No. 37 (1)/2012-Med/114256	26/06/2012	2012-13	Increase in seats from 65 to 100	MCI permission for increase in MBBS seats
iv. MUHS letter no. MUHS/PG/E-1/FL26/1504/2/22/2015	15/05/2015	2015-16	All PG courses	Continuation of affiliation
v. MUHS letter no. MUHS/E-1/UG/1504/34/4003/2015	30/09/2015	2015-16	MBBS 100 seats	MUHS affiliation
vi. MOHFW letter no. U.I 2012/670/2015-ME.1	30/05/2016	2016-17	MBBS 100 seats	Renewal of permission for 100 seats
vii. MUHS affiliation	26/08/2016	2016-17	MBBS 100 seats	Latest MUHS affiliation
viii. MUHS letter no. MUHS/PG/E-1/26/1504/2372/16	23/09/2016	2015-16	All UG and PG courses	Validity of affiliation for 2015-16

(See **Annexures C-J** for Certificate of recognition/approval/ Affiliation)

10. Has the institution been recognized for its outstanding performance by any national / international agency such as DSIR, DBT, ICMR, UGC-SAP, AYUSH, WHO, UNESCO, etc.?

Yes  No

If yes, name of the agency: WHO, ICMR, DST

date of recognition: given below

nature of recognition:

- MGIMS was awarded the WHO Award for Excellence in Training to Primary Health Care Providers at the ICICI Lombard and CNBC TV18 India Health Care Awards on 22/12/ 2011.
- WHO has recognized the Dr Sushila Nayar School of Public Health as a WHO Collaborating Centre for Research and Training in Community Based Maternal, New Born and Child Health on 14/07/2009
- The Department of Pathology has been designated by ICMR as the Population Based Cancer Registry of Wardha District on 24/12/2009
- The Department of Biochemistry has been recognized for DST- Fund for Improvement in S & T Infrastructure support by Department of Science & Technology, Ministry of Science & technology, Govt. of India

11. Does the institution have off-campus centres?

Yes  No

The institute runs a 50 bedded Dr Sushila Nayar Hospital in Utawali in the tribal areas of Melghat in Amravati district of Maharashtra

If yes, date of establishment : 01/01/2012

12. Does the institution have off-shore campuses?

Yes  No

If yes, date of establishment : ..... (dd/mm/yyyy)

date of recognition by relevant statutory body/ies: ..... (dd/mm/yyyy)

13. Location of the campus and area:

	Location *	Campus area in acres	Built up area in sq. mts.
i. Main campus area	Rural	450.75	129116.7
ii. Other campuses in the country (Dr Sushila Nayar Hospital, Utawali)	Tribal (Melghat)	7.5	2912.49
iii. Campuses abroad	-		

(\* Urban, Semi-Urban, Rural, Tribal, Hilly Area, any other (specify))

If the institution has more than one campus, it may submit a consolidated self-study report reflecting the activities of all the campuses.

14. Number of affiliated / constituent institutions in the university – **Not applicable**

Types of institutions	Total	Permanent	Temporary
Ayurveda			
Dentistry			
Homoeopathy			
Medicine			
Nursing			
Pharmacy			
Physiotherapy			
Siddha			
Unani			
Yoga and Naturopathy			
Others (specify and provide details)			

15. Does the University Act provide for conferment of autonomy to its affiliated institutions? If yes, give the number of autonomous colleges under the jurisdiction of the University.

**Not applicable**

Yes  No  Number

16. Furnish the following information: **Not applicable**

Particulars	Number
a. Accredited colleges by any professional body/ies	
b. Accredited course / department by any professional body/ies	
c. Affiliated colleges	
d. Autonomous colleges	
e. Colleges with Postgraduate Departments	
f. Colleges with Research Departments	
g. Constituent colleges	
h. University Departments	
Undergraduate Post graduate Research centres on the campus and on other campuses	

Particulars	Number
i. University recognized Research Institutes/Centres	

17. Does the institution conform to the specification of Degrees as enlisted by the UGC?

Yes  No

If the institution uses any other nomenclatures, specify.

18. Academic programs offered and student enrolment: (Enclose the list of academic programs offered and approval / recognition details issued by the statutory body governing the program)

Programs	Number of Programs	Number of students enrolled
UG	MBBS- 1	361
PG	MD/MS- 20 (List given below in next table)	146
DNB	-	-
Integrated Masters		
Integrated Ph.D.		
PharmD.		
M.Phil.		
Ph.D.	9 (List given below)	14
Certificate		
Diploma	9 (List given below)	28
PG Diploma	3 (List given below)	37
D.M. / M.Ch.		
Sub / Super specialty Fellowship		
Any other : Interns		65
Total		651

Course	Recognition status	Number Permitted	Number admitted last year
Community Medicine	Recognized	5	5
Medicine	Recognized	4	4
	Permitted	2	2
Pediatrics	Recognized	2	2

Obst.& Gynecology	Recognized	2	2
Pharmacology	Recognized	4	4
Pathology	Recognized	4	4
Biochemistry	Recognized	2	2
Microbiology	Recognized	5	5
Physiology	Recognized	2	2
Forensic Medicine	Recognized	2	2
Psychiatry	Recognized	1	1
Radiology	Recognized	2	2
Orthopedics	Recognized	2	2
Anesthesiology	Recognized	2	2
	Permitted	2	2
Anatomy	Recognized	2	2
ENT	Recognized	2	2
Ophthalmology	Recognized	2	2
	Permitted	2	2
General Surgery	Recognized	3	3
	Permitted	1	
Skin & V.D.	Recognized	1	1
Radiotherapy	Permitted	1	1

### **DIPLOMA**

<b>Course</b>	<b>Recognition status</b>	<b>Number Permitted</b>	<b>Number admitted last year</b>
D.C.H.	Recognized	2	2
DGO	Recognized	4	4
DLO	Recognized	1	1
DOMS	Recognized	1	1
DPM(Psychiatry)	Recognized	1	1
DMRD	Recognized	2	2
DA	Recognized	1	1
D. Ortho	Recognized	2	2
DDVL	Recognized	1	1

### **PhD**

Anatomy, Biochemistry, Physiology, Microbiology, Pathology, Pharmacology, Obstetrics and Gynecology, Orthopedics, Community Medicine.

### **PG DIPLOMA (IGNOU COURSES)**



Post Graduate Diploma in Geriatric Medicine, PG Diploma in Counseling and Family Therapy, PG Diploma in Maternal and Child Health

19. Provide information on the following general facilities (campus-wise):

- Auditorium/seminar complex with infrastructural facilities Yes  No
- Sports facilities
  - Outdoor Yes  No
  - Indoor Yes  No
- Residential facilities for faculty and non-teaching staff Yes  No
- Cafeteria Yes  No
- Health centre
  - First aid facility Yes  No
  - Outpatient facility Yes  No
  - Inpatient facility Yes  No
  - Ambulance facility Yes  No
  - Emergency care facility Yes  No
  - Health centre staff Yes  No
  - Qualified Doctor Full time  Part-time
  - Qualified Nurse Full time  Part-time
- Facilities like banking, post office, book shops, etc. Yes  No
- Transport facilities to cater to the needs of the students and staff Yes  No
- Facilities for persons with disabilities Yes  No
- Animal house Yes  No
- Incinerator for laboratories Yes  No
- Power house Yes  No
- Fire safety measures Yes  No

- Waste management facility, particularly bio-hazardous waste Yes  No
- Potable water and water treatment Yes  No
- Any other facility: Engineering and maintenance section. Yes  No

20. Working days / teaching days during the past four academic years

	Working days					Teaching days				
	11-12	12-13	13-14	14-15	15-16	11-12	12-13	13-14	14-15	15-16
Number stipulated by the Regulatory Authority	264	251	266	240	262	250	237	252	226	248
Number by the Institution	264	251	266	240	262	250	237	252	226	248

(‘Teaching days’ means days on which classes/clinics were held. Examination days are not to be included.)

21. Has the institution been reviewed or audited by any regulatory authority? If so, furnish copy of the report and action taken there upon (last four years).

Yes. Academic audit reports have been submitted to MUHS annually.

The institute’s financial accounts are audited regularly. M/s KK Mankeshwar & Sons, a chartered accountant firm of 80 years standing conducts these audits. The accounts are also subject to audit by the Comptroller and Auditor General (CAG). Besides these, auditors from the Govt of India and Govt of Maharashtra also visit us for audits.

All these documents are available and will be made available to the NAAC assessors’ team during the onsite visits.

22. Number of positions in the institution

Positions	Teaching faculty						Non-teaching staff	Technical staff
	Professor	Associate Professor / Reader	Assistant Professor	Lecturer	Tutor / Clinical Instructor	Senior Resident		
Sanctioned by the Government Recruited								

Positions	Teaching faculty						Non-teaching staff	Technical staff
	Professor	Associate Professor / Reader	Assistant Professor	Lecturer	Tutor / Clinical Instructor	Senior Resident		
Yet to recruit								
Sanctioned by the Management/Society or other authorized bodies	61	39	76		191	32	436	464
Recruited	61	33	55		174	32	363	452
Yet to recruit	0	06	21		17	0	73	12
Stipulated by the regulatory authority								
Cadre ratio								
Recruited								
Yet to recruit								
Number of persons working on contract basis								

### 23. Qualifications of the teaching staff

Highest Qualification	Professor		Associate Professor/Reader		Assistant Professor		Lecturer		Tutor /Clinical Instructor		Senior Resident	
	M	F	M	F	M	F	M	F	M	F	M	F
<b>Permanent teachers</b>												
D.M./ M.Ch.												
Ph.D./D.Sc./D.Litt/M.D./ M.S.	44	16	19	12	31	20						
PG (M.Pharm./ PharmD, DNB, M.Sc., MDS., MPT, MPH, MHA)	01		02		1	3						
AB/FRCS/FRCP/ MRCP/MRCS/FDSRCS												
M.Phil.												
UG												
<b>Temporary teachers</b>												
D.M./ M.Ch.												
Ph.D./D.Sc./D.Litt/M.D./ M.S.												

Highest Qualification	Professor		Associate Professor/Reader		Assistant Professor		Lecturer		Tutor /Clinical Instructor		Senior Resident	
	M	F	M	F	M	F	M	F	M	F	M	F
PG (M.Pharm./ PharmD, DNB, M.Sc., MDS., MPT, MPH, MHA)												
AB/FRCS/FRCP/ MRCP/MRCS/FDSRCS												
M.Phil.												
UG									91	83		
<b>Contractual teachers</b>												
D.M./ M.Ch.												
Ph.D./D.Sc./D.Litt/M.D./ M.S.												
PG (M.Pharm./ PharmD, DNB, M.Sc., MDS., MPT, MPH, MHA)												
AB/FRCS/FRCP/ MRCP/MRCS/FDSRCS												
M.Phil.												
UG												
<b>Part-time teachers</b>												
D.M./ M.Ch.												
Ph.D./D.Sc./D.Litt/M.D./ M.S.												
PG (M.Pharm./ PharmD, DNB, M.Sc., MDS., MPT, MPH, MHA)												
AB/FRCS/FRCP/ MRCP/MRCS/FDSRCS												
M.Phil.												
UG												

24. Emeritus, Adjunct and Visiting Professors.

	Emeritus		Adjunct		Visiting	
	M	F	M	F	M	F
Number	04				14	1

25. Distinguished Chairs instituted:

Department	Chairs
Jamnial Disease Tropical Disease Research Centre (JBTDRRC)	Dr BC Harinath
Dr Sushila Nayar School of Public Health	Dr BS Garg

## 26. Hostel

- Boys' hostel

- \*Number of hostels: One (Jawaharlal Nehru Boys Hostel)- seven blocks

- \*Number of inmates: 240 undergraduates, 31 interns, 50 postgraduates

- \*Facilities: The hostel has seven blocks. Each block has 50 rooms. Thus there are 350 rooms. Of these 5 blocks (250 rooms) are allotted to undergraduate students.

Each block has the following facilities:

- The rooms are single seated and have an inbuilt cupboard and are provided with hard furniture
- Each block has wi-fi facility and a central play area.
- There is a water cooler along with water purifier in each block
- Washing machine
- Solar water heater of 2000 L capacity in each block.

Common Facilities for all boys:

- Well equipped gymnasium
- Modern dining hall with a capacity for 100 at a time
- Modern kitchen
- Indoor games facility: table tennis etc
- Outdoor courts: volley ball court, cricket ground, badminton court
- Cafeteria
- Two well furnished guest rooms with attached toilets are available for stay of parents/ family members of the inmates

- \* Girls' hostel

- i. Number of hostels: One (Jawaharlal Nehru Girls Hostel)- seven blocks

- ii. Number of inmates: 185 undergraduates, 27 interns, 42 postgraduates

- iii. Facilities

Each block has the following facilities:

- The rooms are single seated and have an inbuilt cupboard and are provided with hard furniture
- Each block has wi-fi facility and a central play area.
- There is a water cooler along with water purifier in each block.
- Solar water heater of 2000 L capacity in each block.

Common Facilities for all girls:

- Well equipped gymnasium

- Modern dining hall with a capacity for 100 at a time with television
  - Modern kitchen
  - Two coffee machines
  - Indoor games facility: table tennis
  - Outdoor courts: badminton court, volleyball court
  - Cafeteria
  - One well furnished guest room with attached toilet is available for stay of exchange students
- \* Overseas students hostel: No separate hostel is available. However the exchange students who come from abroad are accommodated in the guest rooms of JN Boys and Girls Hostels which have attached toilets.
- i. Number of inmates: 1
- \* Hostel for interns
- i. Number of hostels: The JN Boys Hostel and JN Girls Hostel have one block each (50 rooms) allotted to interns.
  - ii. Number of inmates: 31 male interns, 27 female interns
  - iii. Facilities: Same as above
- \* PG Hostel
- i. Number of hostels: There is one married PG hostel with 36 rooms. In addition, the JN Boys Hostel has one block (50 rooms) allotted to postgraduate male students while the JN Girls hostel has two blocks allotted to postgraduate female students.
  - ii. Number of inmates: 36 postgraduates in married PG hostel with families. 50 postgraduates in JN Boys Hostel; 42 postgraduates in JN Girls Hostel
  - iii. Facilities:  
In the married postgraduate hostel, the inmates have two rooms with kitchen and attached toilet. Cupboard and hard furniture is provided. They have free wi-fi access. For JN Boys and Girls Hostels: Same as above

27. Students enrolled in the institution during the current academic year, with the following details:

Students	UG	PG			Integrated Masters	M.Phil	Ph.D.	Integrated Ph.D.
		PG	DM	MCH				
	M F	M F	M F	M F	M F	M F	M F	M F

Students	UG	PG			Integrated Masters	M.Phil	Ph.D.	Integrated Ph.D.
		PG	DM	MCH				
	M F	M F	M F	M F	M F	M F	M F	
From state where the institution is located	79 104	81 73					8 6	
From other states	97 81	10 10						
NRI students								
Foreign students								
Total	176 185	91 83					8 6	

\*M-Male \*F-Female

28. Health Professional Education Unit / Cell / Department

- Year of establishment 1994
- Number of continuing education programs conducted by MEU (with duration)
  - \* Induction 12
  - \* Orientation 13
  - \* Refresher 6
  - \* Post Graduate 12 (Details given in **Annexure 2U**)

These include sessions conducted for medical and nursing faculty, as well as postgraduate and undergraduate students.

Total no. of Academic activities organized in institute	
Year	Number
2011-12	50
2012-13	57
2013-14	49
2014-15	149
2015-16	54

29. Does the university offer Distance Education Programs (DEP)?

Yes  No

If yes, indicate the number of programs offered.

Are they recognized by the Distance Education Council?

30. Is the institution applying for Accreditation or Re-Assessment?

Accreditation  Re-Assessment

Cycle 1  Cycle 2  Cycle 3  Cycle 4

31. Date of accreditation\* (applicable for Cycle 2, Cycle 3, Cycle 4)  
 Cycle 4: ..... (dd/mm/yyyy), Accreditation outcome/Result .....  
 Cycle 3: ..... (dd/mm/yyyy), Accreditation outcome/Result .....  
 Cycle 2: ..... (dd/mm/yyyy), Accreditation outcome/Result .....  
 Cycle 1: **17/09/2011** Accreditation outcome/Result **3.16 CGPA A Grade**  
 \* See **Annexure O** for accreditation certificate(s) and **Annexure P** peer team report(s)
32. Does the university provide the list of accredited institutions under its jurisdiction on its website? Provide details of the number of accredited affiliated / constituent / autonomous colleges under the university.  
**Not applicable**
33. Date of establishment of Internal Quality Assurance Cell (IQAC) and dates of submission of Annual Quality Assurance Reports (AQAR).  
 IQAC **established on 30/03/2012** (dd/mm/yyyy)  
 AQAR (i) **26/06/2013** (dd/mm/yyyy)  
 (ii) **28/02/2014** (dd/mm/yyyy)  
 (iii) **19/06/2015** (dd/mm/yyyy)  
 (iv) **13/08/2016** (dd/mm/yyyy)
34. Any other relevant data, the institution would like to include (not exceeding one page).



## **PART D: CRITERIA-WISE INPUTS**

### **CRITERION I: CURRICULAR ASPECTS**

#### **1.1 Curriculum Planning, Design and Development**

##### **1.1.1 Does the institution have clearly stated goals and objectives for its educational program?**

Yes. The Mahatma Gandhi Institute of Medical Sciences (MGIMS) was established as India's first rural medical college in 1969, after then Prime Minister Shri Lal Bahadur Shastri mooted the idea of producing doctors who would be sensitive to the needs of rural masses. Since its inception, the institute has a clearly defined goal of producing doctors with high clinical competence in addition to Gandhian values and principles.

##### **Vision**

The vision of the institute is to develop a replicable model of community oriented medical education which is responsive to the changing needs of our country and is rooted in an ethos of professional excellence.

##### **Mission Statement**

In the spirit of its Founder, the Mahatma Gandhi Institute of Medical Sciences, Sevagram is committed to pursuit of exemplary standards of professional excellence in medical education, research and clinical care by evolving a pattern of integrating value-based medical education with accessible and affordable health care, especially to underprivileged rural communities.

The vision and mission of the institute translate into following objectives:

##### **Objectives:**

##### **Medical education**

- To evolve an integrated pattern of medical education
- To provide value-based and cost-effective medical education with a community oriented approach
- To teach and train doctors to be responsive to the health needs of people living in resource limited settings

### **Health Service**

- To provide high-quality, low-cost, evidence-based health care to the local communities
- To design efficient and effective health care delivery systems consonant to the needs of communities
- To empower the community by involving people in their own health care
- To promote professionalism and ethical application of practice standards

### **Research**

- To promote excellence in designing and conducting research that focuses on local health problems, is feasible, interesting, novel, ethical and relevant
- To develop collaborative and consultative research partnerships with patients, care givers and the community

#### **1.1.2 How are the institutional goals and objectives reflected in the academic programmes of the institution?**

The academic programmes of the institution are in line with institution's goals and objectives. We follow the updated curricula developed by the affiliating university, Maharashtra University of Health Sciences (MUHS). These have been framed in alignment with the needs of society and have relevance to national and global trends in health. The MUHS curriculum is itself based on the guidelines of the Medical Council of India and lays emphasis on national health priorities. (**Annexure 1A**)

However, the institute also conducts additional programmes to fulfill its stated institutional goals and objectives. The Institute believes that Gandhian values and principles are relevant even today and it displays a fierce commitment to advancement of medical education without losing the humane touch.

Every effort is made to acquaint the medical student to the real rural India. Our approach to medical education with the spotlight on rural community oriented education makes our doctors sensitive to the felt needs of the people they would be serving in their future. Our students are expected to adhere to professional norms which include altruism, compassion, empathy, accountability, honesty and integrity.

The MBBS curriculum followed at MGIMS Sevagram has a heavy tilt towards Community Oriented Medical Education. **Annexure 1B** showcases the milestones that an MBBS student goes through when he joins MGIMS. The salient features of this modified curriculum are as follows: and the Academic Calendar showcases these elements.

**Value inculcation in Orientation Camp:**

Immediately after admission into the MBBS course students spend a fortnight in the Gandhi ashram during the orientation camp. Students stay in dormitories. The curriculum followed in the Orientation Camp has an inbuilt component of values, attitude building and ethics. Well known Gandhians and renowned people from all walks of life interact with them during this duration and inspire them to find the humanistic dimensions of their choice of becoming a health professional. Besides regular classes on Anatomy, Physiology and Biochemistry, students are taught about the relevance of Gandhian ideology in today's world with reference to personal hygiene, environmental sanitation, nutrition and spiritual health. The roles of yoga and nature cure are discussed. They are thus helped to appreciate the humanistic dimensions of their profession. The students engage in self-help by washing their own utensils and cleaning their own clothes. The importance of dignity of labour is impressed upon them with activities like performing *shramdan* or spinning *khadi*. Students also participate in all-religion prayers. Separate workshops on bioethics and communication skills are conducted in this phase. (**Annexure 1C- Time table of Orientation Camp**)

**Village Adoption Scheme and Social Service Camp:**

MGIMS Sevagram has an old tradition of adopting a village for each batch of medical students. Students of I MBBS spent a fortnight in their adopted village. During the duration of the social service camp, each student is allotted 4-5 families for their camp activities. They live with the villagers, visit their adopted families daily and interact with them. For most students, this experience comes as an eye-opener as it is often their first exposure to the woes of rural India. The camp is organized with the cooperation of villagers.

The Institute extends its health care services free of cost to the village for the duration of the social service camp. Complete health check-up of all the villagers is conducted. Hematological, urine and stool investigations are carried out for each villager and those who are found to have any abnormality in these investigations are provided free treatment. General OPD is run each day in the morning, and specialist visits are organized in the afternoon. The camping students ensure that all members in their adopted families get complete treatment for their ailments. Those who require hospital admission are also provided treatment free of cost if they get admitted to the Kasturba Hospital Sevagram during the duration of camp or within 7 days of completion of the camp.

Students get a chance to see the impact of environment, ecology, education and economy on health during these 15 days. With the help of interns and staff of

MGIMS they conduct socio-demographic, dietary and health appraisals in their adopted families. The students also observe how community leaders, social organizations and village health committees work together for health. The roles of village health workers, village health committees, school teachers and other stakeholders are demonstrated. This community-academic partnership offers a unique opportunity to learn the social and cultural determinants of health. Thus, the village serves as a laboratory and a demonstration center for the students to learn the practice of public health. The concept of family health care is brought home to students with the help of auxiliary nursing midwives, social workers, health educators, sanitary inspectors, psychologists and public health physicians working in the villages. **(Annexure 1D: Time table of Social Service Camp)**

Following the Social Service Camp, for the next three and a half years, the students visit their adopted village every month on a Saturday. In the first year, the students study personal hygiene, basic sanitation, housing, immunization, diet, nutrition, growth and development. During the subsequent period, groups of students undertake improvement projects on topics of sanitation, drinking water, nutrition, personal hygiene, immunization and other relevant issues. The bond between the adopted families and the students is strong and alumni often visit these families when they come for their silver jubilee reunion programmes.

### **Reorientation of Medical Education (ROME) Camp**

A field camp lasting for two weeks is organized for students, during their third year in the medical college. The students stay at one of the Rural Health Training Centres of MGIMS, Sevagram. The camp is organized with the objectives; 1) to expose students to the health care delivery system; other support systems available in the community and implementation of national health programs at PHC level; 2) to make students understand the effect of family and social environment in the etiology of diseases; community beliefs and practices related to health and illnesses; and treatment-seeking practice; 3) to expose students to commonly used survey methodology for community need assessment.

During this camp, the students visits different levels of health care facilities and interact with health care providers. Through this, they are exposed to the functioning of a primary health centre and the roles of its various staff members. District level program managers for various national health programmes discuss with them implementation of national health programmes; their strengths; and barriers and challenges in implementation of these programmes.

Clinical case discussion is organized at the family level through which attention of students is drawn to the influence of social and environmental factors in the causation of disease. Students also come to understand the common community beliefs and practices related to health and illness and treatment seeking practices of the community.

The students design and conduct small community surveys for community health need assessment in rural area. Through these surveys, they become acquainted with the collection, entry and analysis of data and with report writing. Their insight gained into essential national health research (ENHR) through the ENHR workshop and project conducted in their adopted village is further enhanced. (**Annexure 1 E- Time table of ROME camp**)

### **Internship training**

Interns are posted in the Department of Community Medicine for two months out of their 12 months internship period. During this period they are posted at General OPD, Kasturba Rural Health Training Centre (KRHTC) Anji & Bhidi and Urban Health Centre as well as in Melghat. The setting at Sevagram provides them with an opportunity not only to learn management of illnesses at individual level, but also learn organization and functioning of Primary Health Centre & various National Health Programmes.

### **Rural Placement Scheme**

In 1992, MGIMS, Sevagram designed a programme for placement of graduate students in rural areas. Under the programme, if a graduates desires to take up post-graduation at MGIMS, they have to compulsorily serve in a rural area for a period of two years. The institute collaborates with select non-governmental organizations (NGOs) to identify peripheral health care centres. These are approved based on their patient load, facilities and supervision available. Until 2015-16, 24 batches (1155 students) have been posted to over 80 rural centres across India.

### **Essential community-based national health research:**

To build research aptitude and interest in priority health topics among undergraduate students, they are provided opportunities to participate in conducting community-based research on priority health topics (Essential National Health Research). To orient undergraduate students to research methodology, initially a two-day workshop is organized for students. The workshop aims at providing the students knowledge and skills on 'asking the right question', 'designing an appropriate study design to answer the question', 'searching relevant literature' and 'writing a protocol' for carrying out a project. During the workshop, students in groups identify a topic of their interest for further enquiry. The students conduct the project in groups in their adopted villages under the guidance of a faculty member from the Department of Community

Medicine. Community-based projects, with the interventions related to behavior change are encouraged, so that the community also gets benefitted in this process. With the help of faculty members, the students perform data entry, analyze it and write a report for their project. Posting during Re-orientation of Medical Education (ROME) Camp, of 15-days duration at the end of fifth semester, provides another opportunity to learn how to identify community needs using rapid survey methodology and qualitative research methods. Further, students also conduct research in all other departments under research schemes promoted by ICMR and MUHS.

Besides these, some other features which are unique to the philosophy of MGIMS Sevagram are:

*Gandhian Thought Paper:* Candidates from all over the country are selected on the basis of a common eligibility examination, which includes a mandatory qualifying paper on Gandhian Thought. This enabled around 15000 aspirants to the course to get acquainted to Gandhian philosophy even during the preparation for the entrance examination. This was done till 2015 until the NEET guidelines changed this.

*Unique code of conduct:* The students and staff of the Institute adhere to a unique code of conduct, where they are expected to wear handwoven khadi, participate in shramdan and attend an all-religion prayer every Friday evening. Non-vegetarian food, alcohol and tobacco are taboo.

**1.1.3 Does the institution follow a systematic process in the design, development and revision of the curriculum? If yes, give details of the process (needs assessment, feedback, etc.).**

Yes. We follow the updated curricula developed by the affiliating university, Maharashtra University of Health Sciences (MUHS).

Based on the guidelines of the Medical Council of India (**Annexure 1F**), MGIMS has constituted a curriculum committee. **Annexure 1G** provides names of the faculty and students who have been nominated to the curriculum committees.

**Process of functioning (Annexure 1H):**

- Based on the guidelines of the MUHS, the curriculum committee meets every 6 months to ensure that the basic guidelines required by MUHS are being fulfilled. (Minutes of the last two meetings conducted on 23 July 2015 and 12 Feb 2016 are attached as **Annexure 1I**).

- The committee encourages each department to review its academic activities for the entire year. During these meetings, the staff members are encouraged to make suggestions for changes or improvements to be made in the areas of syllabus, teaching and academic performance of students. Attendance of students, as well as, results at the internal assessment and university level are discussed, and modalities for improvement of the same are decided.
- The committee also discusses the infrastructural and faculty requirements (e.g. lecture halls, projection facilities, skills laboratory postings, community postings etc) to conduct classes in the next semester.
- The committee finalizes the timetable for the entire course each year. Departmental responsibilities are assigned. Decisions of the committee are shared with all departmental heads.
- Suggestions which are required to be implemented at the level of the University are drafted and communicated to MUHS through the Dean. Other feedback pertaining to separate disciplines are submitted to the University through several institute faculty who are representatives at MUHS and on the University's Board of Studies (**Annexure 1J**)
- The committee works in collaboration with the IQAC. Feedback from faculty, students, alumni and supporting staff is collated and analyzed by members of the IQAC. The feedback is discussed by the committee and modifications to the implementation of the curriculum are made as required.
- The committee works in collaboration with the Medical Education Unit (MEU) for training of faculty in several areas such as mentoring, MCQ construction, curriculum development, skills training. In view of MCI's and MUHS' recent thrust on competency based medical education, special sessions have been included in the Basic MEU workshops to make faculty familiar with these concepts.
- The committee works in collaboration with the research committee and ethics committees. Research methodology workshops have been made mandatory for all postgraduate guides at the level of the university.

In addition to these activities, different subgroups of the MEU perform **needs assessment and evaluation** of the institute's specific programmes using different programme evaluation methodologies:

- Written feedback is collected from students posted to our rural placement centres. Based on this, inspections are carried out at these centres about quality of supervision, patient load, and student satisfaction. The centres are added or removed depending on the reports of these inspections (**Annexure K**)
- The institute's flagship community oriented programmes such as the orientation camp, social service camp and ROME camp are evaluated on a regular basis using

standard questionnaires as well as qualitative methods such as focus group discussions (**Annexure L and M**)

- The MEU decided to go ahead with its e-learning initiative after taking feedback both from students and faculty. Student feedback was presented to faculty and discussed thoroughly to gather support before implementation (**Annexure N**)
- Discussions were carried out with students by Personal & Professional Development Subgroup of the MEU to understand how they were acquiring non-scholastic abilities presently and suggestions were invited to explore further opportunities within the curriculum to impart these soft skills (**Annexure O**)

Our faculty members serve as expert consultants to reviewing and updating the curriculum on several international, national and state bodies such as the MCI and MUHS (**Annexure P**). They serve as Faculty of Medicine or Board of Studies members or Research Committee members at MUHS. They have helped in writing UG and PG curriculum for several subjects in the competency based format. Our faculty members were invited on the national team by MCI to re-write a new competency based UG curriculum in different subjects.

#### **1.1.4 How does the curriculum design and development meet the following requirements?**

##### **\* Community needs**

The Sevagram Model of medical education has been lauded by the Government of India. The Report of the Task Force on Medical Education of the National Rural Health Mission spells out the need to draw upon MGIMS Sevagram's initiatives and experience in curriculum innovation and rural placement of its graduates. It suggests launching a participatory exercise with MGIMS and other like-minded institutions, so that national guidelines can be formulated.

MGIMS was established with the objective of producing doctors with a bias towards underprivileged and rural areas. The institute has made several innovations in its curriculum to raise the social consciousness of medical students as well as to equip them to work in rural areas. These innovations have been woven into every stage of the medical curriculum at MGIMS, Sevagram as described in Section 1.1.2. (E.g: village adoption scheme, social service camp, ROME camp and Rural placement scheme). MGIMS Sevagram partners with the community on the one hand and the district health system and the other related departments on the other hand, for the mutual benefit of all partners.

##### **\* Professional skills and competencies**



The institute follows MUHS Nashik's competency based curriculum. Focus is on acquiring different competencies at different levels. The milestones and proficiencies expected from learners are clearly defined in the curriculum. Efforts are on at the University level to implement an assessment system which will value development of competencies.

From the first year itself, students are trained in bioethics and communication skills through workshops. Students are oriented towards elements of professionalism during the orientation camp in their interactions with different members from all walks of society. In their clinical years, students participate in learning of skills not only at the bed side but also in the centralized skills laboratory. A number of hands on workshops are conducted where students are taught cardiopulmonary resuscitation, neonatal resuscitation etc. Computer skills and skills of literature search, creating databases and statistical analysis using software like EPI Info are taught all across the course. As interns they are taught use of the hospital information system.

**\* Research in thrust / emerging areas**

The emphasis has been on community based medical research. Quality research has been the hallmark of this rural institute and in 2015-16, 33 funded projects were awarded to the various departments which is ample testimony to the potential of the researchers. 133 international and national journals featured research articles from MGIMS. Undergraduates and postgraduates are encouraged to conduct short term research projects. The curriculum committee encourages undergraduates to apply for ICMR-STC projects in their summer vacation. Details of all these are provided in Criterion III.

**\* Innovation-**

The Sevagram model of community oriented learning has been emulated by several institutes all across the country. This comprehensive model exposes and trains our students to rural health needs, use of local resources and community participation in improving the health scenario of the region. This model of experiential learning or 'learning while serving the community' is our attempt to make our graduates sensitive to the needs of rural patients. The village adoption scheme, social service camp and the rural placement scheme have been replicated by several institutes and have become part of government policy.

**\* Employability**

The institute posts its graduates across the country in 80 NGOs working for rural health, to serve the community after completion of internship for two years. Details of this are provided in Section 1.1.2

**1.1.5 To what extent does the institution use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the institution been instrumental in leading any curricular reform which has created a national impact?**

The institute follows the guidelines of the national regulatory body (MCI) and those of the affiliating University (MUHS) as has been outlined in Section 1.1.2. However, it has its unique innovations. Notable innovations pioneered by MGIMS include: village adoption scheme, social service camp and rural placement scheme (See Section 1.1.2)

The Report of the Task Force on Medical Education of the National Rural Health Mission spells out the need to draw upon MGIMS Sevagram's initiatives and experience in curriculum innovation and rural placement of its graduates. It suggests launching a participatory exercise with MGIMS and other like-minded institutions, so that national guidelines can be formulated. The National Rural Health Mission has lauded the 'positive contribution of MGIMS in maternal health activities conducted in partnership with the Govt of India'. MCI implemented mandatory rural service after internship in all colleges, which is an initiative started by MGIMS.

MGIMS has a distinction of developing nation's first Clinical Forensic Medicine Unit (CFMU) (**Annexure 1Q**). Medical schools, countrywide, shall soon develop Clinical Forensic Medicine Unit- (CFMU) based on the existing unit in the MGIMS. The Forensic Medicine department has led the way in social activism. Over the last decade, the Clinical Forensic Medicine Unit has re-designed the way Forensic medicine in the country is being taught and practiced. For instance, based on suggestions offered by unit, the Government of Maharashtra has developed new formats and a manual for forensic medical examination of sexually assaulted cases. In addition, the government also decided to computerize postmortem reports. Persons accused of sexual assault, have traditionally been asked several questions by the police that had no scientific, legal or rational basis. Similarly, they had their semen collected and preserved – a practice which lacked scientific evidence. The department has also been able to convince Maharashtra Government to stop such three-decade-old practices. The unit has also drafted guidelines for the Department of Health Research (DHR) & ICMRs on Forensic Medical Care for Sexual Assault Victims.

Of the several roles taken by the unit for shaping the emergency medicine practices in country, noteworthy is its suggestion for upgrading the emergency medical services. Faculty from the department argued that the existing emergency services in the country are pathetic and needed to be quickly improved. The National Human Rights Commission took note of the argument and asked the Union Ministry of Health and Family Welfare to upgrade the emergency medical services.

**1.1.6 Does the institution interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the institution benefitted through interactions with the stakeholders?**

Whenever revisions of the curriculum are planned at the level of the University or MCI, several of our faculty members are invited as experts to review and revise the curriculum (See **Annexure 1P**). In addition, we take the advice of experts in research bodies such as ICMR, national and international public health organizations and committees such as WHO, government and non-governmental organizations and eminent people from society in evolving our community based curricular innovations. These people regularly visit our institute, interact with students and provide us inputs on how to improve our curriculum. Support and collaboration with village organizations help us to organize the village adoption scheme and social service camp each year. Our linkages with around 80 NGOs help us to run the rural placement scheme efficiently.

**1.1.7 How are the global trends in health science education reflected in the curriculum?**

As part of faculty development, the MUHS Medical Education Department provides inputs to the University about global trends such as WFME standards. Some of our faculty members are adjunct faculty in the University's Medical Education department. Some of the recent changes which have been incorporated in the UG and PG curriculum based on global trends are:

- *Competency based model of education*: UG and PG curriculum have been updated at MUHS level. Log books have been introduced for PGs. Progress reports and feedback from guides has to be sent to University each year along with PG dissertations.
- *Community Oriented Medical Education*: This is MGIMS' strength and details of the same have been outlined in Section 1.1.2
- *Early Clinical Exposure*: The social service camp provides ample exposure to students about the complex interaction between health, environment, hygiene, education and economics right from first year. Applied aspects of clinical subjects are taught in all first year subjects

- *Foundation Course*: While this has recently been recommended by the MCI, we have been conducting the Orientation programme since the last four and half decades. Details mentioned in Section 1.1.2
- *Incorporation of a new bioethics curriculum*: Faculty from MGIMS were trained at the University to become trainers at other institutes. Components of this curriculum have been introduced from the 2015 batch
- *Skills training*: In view of the requirements of MCI, a centralized skills laboratory was constructed. Skills laboratory posting has been included in the timetable for clinical batches. In addition the Department of Pediatrics is an Indian Academy of Pediatrics (IAP) accredited CPR training centre. Neonatal resuscitation skills workshops are regularly conducted by Pediatrics department for undergraduates. We have established an MGIMS Institute for Simulation Training (MIST), where the Department of Anesthesiology conducts AHA accredited BLS and ACLS workshops. KHS has spent around Rs 40 lakhs for this purpose.
- *AT-COM module*: Faculty have already been trained at the MCI regional centre in the module on attitudes and communication skills. The programme will be implemented when MCI gives the green signal to go ahead
- *E-learning*: Going with the global trend, MGIMS has decided to develop an e-learning platform to complement the classroom, clinical and community based training of its undergraduates and postgraduates.  
MOODLE has been installed as a virtual learning environment. In the first phase, a core group was constituted and trained in use of MOODLE by the MEU in 2015. This team then trained most of the faculty members in developing e-courses on MOODLE in the next six months. Faculty is being trained in best practices in online pedagogy and to integrate it with classroom learning in a blended fashion. Many courses are being developed in individual subjects and also in integrated fashion by multiple departments.
- *Integration in horizontal and vertical levels*: This is another aim of the curriculum committee and MEU and we are experimenting with new topics of integration each year.

**1.1.8 Give details of how the institution facilitates the introduction of new programs of studies in its affiliated colleges.**

Not applicable

**1.1.9 Does the institution provide additional skill-oriented programs relevant to regional needs?**

The Department of Obstetrics and Gynecology and Anesthesiology are involved in training medical officers and nurses under the Emergency Obstetric Care (EmOC) , Basic Emergency Obstetric Care (BEmOC) programmes and Life saving Anesthesia Skills (LSAS) programmes. The Department of Pediatrics Conducts 6 month

Certificate courses for medical officers for the Govt of Maharashtra. It is also a nodal centre for training of health care personnel (including pediatricians, medical officers, nurses) from Govt facilities in “Facility Based Newborn Care”. Sanction has also been received for the National Emergency Life Support (NELS) programme and construction is underway.

For undergraduate students we have already described skills and simulation training in detail in Sections 1.1.3 and 11.7. We also pay special emphasis on community oriented training. During the Social Service Camp (SSC) and the monthly follow up field visits to the adopted villages, our students receive hands on training in preventive care, and social medicine.

#### **1.1.10 Explain the initiatives of the institution in the following areas:**

##### **\* Behavioral and Social Science.**

As explained in Section 1.1.2, the social service camp and village adoption schemes provide excellent platforms for vertical integration of medical sciences with behavioral and social science. Students live with villagers for 15 days during in this camp. They are allotted 3-5 families each which they visit daily, with set objectives. This provides students an immersion experience with an insight into social determinants of health. They also learn to mobilize the community for health promotion and health empowerment. Students follow up these families during monthly visits with faculty of the Department of Community Medicine. Details of needs assessment of students in this area conducted by MEU to identify opportunities for training in these areas are submitted as **Annexure 10**. Besides this psychologists and sociologists also conduct sessions during the orientation camp.

##### **\* Medical Ethics / Bio Ethics / Nursing Ethics.**

Workshops are conducted for first year students during orientation camp on Bioethics and Communication skills. Bioethics curriculum has been introduced on the directive of MUHS since 2015. The institutional ethics committee approves all research projects

##### **\* Practice Management towards curriculum and/or services.**

The curriculum has an inbuilt component of hands on training in terms of community postings, postings in OPDs, wards and operation theatres, where students observe and learn in the workplace. The community component is strong and students are exposed to the different aspects of the health system in the primary health centre and district hospitals. The ROME camp takes care of these aspects.

##### **\* Orientation to research.**

All postgraduate guides have to mandatorily go through a seven day research methodology workshop, approved by the University. All postgraduate students have to mandatorily go through a seven day research methodology workshop, approved by the University before submission of their thesis protocols.

Undergraduate students are mentored by faculty when they take up research projects funded by ICMR-STs or MUHS Short term research grants.

Research in appropriate and need based areas like infectious, nutritional deficiencies and lifestyle diseases are encouraged

**\* Rehabilitation.**

The Alcohol and Drug De-addiction centre working under department of Psychiatry seeks to rehabilitate patients who are addicted to drugs and alcohol. A recent initiative taken up by undergraduate students in this direction is formation of a 'White coat army'. This is a group of sensitized and trained students who meet patients and their relatives in the wards and OPDs and counsel them regarding hazards of tobacco and alcohol abuse. Details of the functioning of the White Coat army are provided in Section 3.6.11.

**\* Ancient scriptural practices.**

Relevant history of Medicine, with emphasis on the legacy of ancient Indian medicine, is taught to students in all the subjects.

**\* Health Economics.**

During their community postings and during, students get enough exposure to economical aspects of health. The clinicians at the hospital are role models to the students. We use e-prescriptions to prescribe drugs through generic names. Our low cost drug initiative explained in **Annexure 1R** allows patients to access drugs at affordable rates at a fraction of the rate available in the market. Our students learn from these initiatives. The health insurance scheme of the hospital also is a learning opportunity for students on how to engage with the community and involve them in their own health (**Annexure 1S**)

**\* Medico legal issues.**

Students of II MBBS are taught these issues during their classes in Forensic Medicine. Postgraduates are briefed on these issues by the Clinical Forensic Medical Unit, which is another innovation started by MGIMS (**Annexure 1Q**). MGIMS has a distinction of developing nation's first Clinical Forensic Medicine Unit (CFMU). The unit handles all forensic issues related to the accidents and emergencies and also looks at medico legal problems of the inpatients. Located in the Accident and Emergency Section of the hospital, this unit offers its services 24/7. The Forensic Medicine consultants collect data form of all patients who seek healthcare in the accident and emergency unit of

hospital because of accidents, injuries and trauma, assess victims of sexual assault and also deal with such issues as estimating the age of the patients and determining whether or not the person is alcohol intoxicated. The Department also has a Toxicology laboratory.

**\* Enhancement of quality of services and consumer satisfaction.**

Some of the initiatives in this area are:

- **Installation of Advanced Hospital Information System:** The Hospital Information System (HIS) at MGIMS is a state-of-the-art, fully integrated hospital information system. The system provides the health workers in the hospital with a full suite of tools for registering patients, ordering tests, retrieving test results and generating electronic discharge summaries. This system captures, stores and retrieves all data related to half a million outpatients and 45,000 inpatients every year. Most laboratories are paperless now, and residents and consultants are able to access all test results, radiologic images- anytime anywhere. The system has close to 18 modules- all functioning – that capture data from registration, insurance, admission counters, outpatient departments, labs (Pathology, Microbiology, Biochemistry and radiology), inpatient departments, blood bank, operating rooms, Pharmacy, Kitchen and discharge counter. A Picture Archival and Communication System (PACS) now enables doctors to access the radiology images (radiographs, CT images, MRI images and USG) on their desktops. **(Annexure 1T)**
- **Low cost drug initiative:** Beginning 2010 a low-cost drug initiative was implemented at MGIMS aimed at providing appropriate and affordable drugs to our patients. This initiative to reduce the cost of drugs to the patient was made possible by first minimizing the ‘supply chain effect’ and then by overcoming the ‘marketing effect’. This was done by using a multi-pronged strategy. Health care workers were involved in making a list of essential drugs and surgical items and they deleted from the list as many irrational drugs as was feasible in our setting. Drugs were procured at substantially cheap prices by inviting competitive quotations from drug distributors and the electronic hospital information system was used to buy, stock and dispense drugs and surgical items. **(Annexure 1R)**
- **E-prescriptions:** Kasturba Hospital has introduced computerized prescriber order entry (CPOE) to prescribe drugs. We also created e-prescriptions on the iPad app, specially designed for this purpose. The electronic applications help doctors identify drugs by both their generic names, check for their availability in the drug store and display their prices- thus minimizing prescription errors and improving the quality of evidence-based therapies. **(Annexure 1R)**

- **Electronic queue management system:** This has been installed in all OPDs to make patients wait comfortably instead of crowding around consultants. All routine laboratory test reports are available within two hours of submission of sample from a single counter.
- **Health insurance Scheme:** The health insurance scheme of the institute has won several accolades as it seeks to create health consciousness in the community. A villager can insure himself and his family by paying Rs 400 a year and in return he gets 50% subsidy in OPD and indoor bills. In 2015-16, 18807 families (86199 members) around Sevagram volunteered to obtain health insurance from this hospital. Similarly 40 villages were totally insured and 90201 rural people were insured under this scheme. No other medical institution has achieved this kind of coverage so consistently over the years and at so affordable a rate. (**Annexure 1S**)
- **No Q card:** No-Q Card, as the name suggests, is a card which seeks to minimize long hours of waiting in queues and thus help patients enjoy a hassle-free experience at our hospital. No-Q Card is a unique ATM-like card (with pre-deposited cash) that can be easily and effectively used at various counters across the hospital to save time. On an average, the No-Q card helps patients save 90 minutes whenever they revisit the hospital, get tested and buy drugs.
- **Rajiv Gandhi Jeevandayee Arogya Yojana (RGJAY):** In November 2013, Kasturba Hospital was identified as a key hospital in Vidarbha to run Rajiv Gandhi Jeevandayee Yojana (RGJAY). This health package has been implemented throughout the state of Maharashtra. The main objective of the scheme is to improve access of Below Poverty Line (BPL) and Above Poverty Line (APL) families to quality medical care for identified speciality services requiring hospitalization for surgeries and therapies or consultations through an identified Network of health care providers. The scheme entails around 971 surgeries/therapies/procedures along with 121 follow up packages in following 30 identified specialized categories. The major beneficiaries of the scheme are patients with cancer, those seeking emergency healthcare because of traumatic accidents and seriously ill patients with life threatening catastrophic medical, pediatric and surgical illnesses.

**1.1.11 How does the institution ensure that evidence based medicine and clinical practice guidelines are adopted to guide patient care wherever possible?**



- All clinical units and laboratories have prepared standard operating procedures (SOPs) according to current guidelines for patient care procedures. Faculty and students involved in patient care follow these SOPs.
- In order to ensure that all faculty and residents practice evidence based medicine, the library has subscribed to UpToDate. This is a evidence based clinical decision making support software which is accessible to everyone on the campus wifi. Clinicians are able to access this software at the point of care and take most suited decisions for the management of their patients.

#### **1.1.12 What are the newly introduced value added programs and how are they related to the internship programs?**

An Internship Orientation Programme is conducted for each new batch of interns. The interns are oriented to bioethics, professionalism, communication, medico-legal issues, critical thinking, rational use of drugs and investigations, national health programs, cardiopulmonary resuscitation, use of hospital information system in a five day orientation program at the start of internship. (**Annexure 1U-Schedule of internship orientation program**)

#### **1.1.13 How does the institution contribute to the development of integrated learning methods and Integrated Health Care Management?**

MGIMS has moved the training of students from the four walls of a tertiary care hospital into the community. It has changed the way they think, learn and practice medicine. The MEU and curriculum committee use various platforms to integrate relevant parts of the syllabus for learners at all levels.

#### **\* Vertical and horizontal integration of subjects taught.**

Integration is done by various methods:

1. Collaboration between preclinical, paraclinical and clinical faculty where they conduct sessions together. At undergraduate level, topics like liver, kidney, pancreas are taught by horizontal integration. Vertical integration was done in topics like thyroid (E.g.:**Annexure 1V**– integrated teaching module on thyroid)
2. Case based learning: Departments like Biochemistry and Pathology use paper based cases to teach rational use of investigations and clinical correlation
3. Problem based learning: In departments like Community Medicine, problem based learning sessions are held regularly during the clinical postings to teach in an integrated manner and promote self directed learning
4. At the postgraduate level, clinicopathological correlation meetings are held in the Academy of Medical Sciences. Intradepartmental meetings like seminars between medicine and pathology; orthopedics and pathology; dermatology and pathology and medicine and radiology are conducted.

5. We not only conduct vertical and horizontal integration of subjects in the classroom, but also in the community. The whole experience for an MBBS student at MGIMS is based on the principles of workplace based learning. There is integration between clinical and community teaching.

**\* Integration of subjects taught with their clinical application.**

Students learn applied aspects of basic sciences when faculty of preclinical, paraclinical and clinical branches collaborate. Details are given in the previous question.

**\* Integration of different systems of health care (Ayurveda, Yoga, Unani, Homeopathy, etc.) in the teaching hospital.**

The institute runs a Centre for Alternative Systems of Medicine. A centre for promotion of positive health, yoga and naturopathy called Arogyadham is also run by KHS. In past five years five PG research projects were done on pharmacology of Indian medicinal plants. A UG research project was also conducted in collaboration with Arogyadham, on the role of yoga in de-stressing medical students.

**1.1.14 How is compatibility of programs with goals and objectives achieved with particular reference to priority of interface between public health, medical practice and medical education?**

The need for medical education to be socially responsive has always been highlighted by the programmes followed by MGIMS. The practice of medicine and training of students both are intimately related to community health which is the basic leitmotif of the institute. The quality of the graduate that we produce has to be able to function efficiently in the health care system. We ensure that this compatibility is achieved by:

- Proper selection of the students: A percentage of seats is reserved for students coming from rural areas
- The high level of community engagement of the institute has facilitated the conduct of its unique community based health education programmes which have been outlined above.
- Emphasis is laid on teaching common illnesses. This is done in the community as part of the training using the principles of early clinical exposure. Besides this Kasturba Hospital runs a General OPD (GOPD). This is a replica of a primary health centre in a tertiary care hospital. Community medicine faculty deal with common ailments themselves and refer only those patients who require specialist care to the specialty OPDs. This reduces the workload of clinicians and allows them to pay attention to more critical patients. In the GOPD, interns learn to diagnose and treat common illnesses.
- Involvement of district health system in training of its students during the ROME camp. Stakeholders such as the district health officials (e.g. District

RNTCP officials come to teach tuberculosis to students, District Malaria Officer and their team teach students malaria in the ROME camp). The District Health Officer briefs students about the entire functioning of the health system. Students also interact with ASHA workers, anganwadi workers and village health workers and learn how they function.

- Focus on training in the National Health Programmes
- Emphasis on research in areas which are relevant to daily practice: infectious disease, non-communicable disease, lifestyle disorders

## **1.2 Academic Flexibility**

### **1.2.1 Furnish the inventory for the following:**

#### **\* Programs offered on campus**

A wide range of programmes are available at the post graduate level, whereas at undergraduate level, there is a single programme.

*Under graduate course:* MBBS

*Post graduate courses –*

- MD/MS Degrees in:  
Anatomy, Physiology, Biochemistry, Pathology, Microbiology, Forensic Medicine, Pharmacology, Community Medicine, Ophthalmology, ENT, General Medicine, Surgery, Pediatrics, Obstetrics and Gynecology, Psychiatry, Orthopedics, Anesthesiology, Radiology, Radiotherapy, Skin and VD.
- Diploma in:  
Child Health (DCH), Orthopedics (DOrtho), Otolaryngology (DORL), Ophthalmology (DO), Obstetrics and Gynecology (DGO), Anesthesiology (DA), Radiology (DMRD), Public Health (DPH), Dermatology, Venereology and Leprosy (DDVL), Psychological Medicine (DPM).
- PhD courses:  
Anatomy, Biochemistry, Physiology, Microbiology, Pathology, Pharmacology, Obstetrics and Gynecology, Orthopedics, Community Medicine.
- IGNOU courses:  
Post Graduate Diploma in Geriatric Medicine, PG Diploma in Counseling and Family Therapy, PG Diploma in Maternal and Child Health

#### **\* Overseas programs offered on campus**

MoU has been signed with Maastricht University, Netherlands, and Ben Gurion University, Beer Sheva, Negev, Israel. Exchange students from these countries come to MGIMS to do their elective postings in Community Medicine, Pediatrics and Ob/Gyn. Since 2014, a few of our students have been granted fellowships to attend Global Health Summer Programme in Israel.

**\* Programs available for colleges/students to choose from**

Students are given a choice to choose the NGO of their choice from a list of approved centres as part of the rural placement scheme. Allotment of centre is based on academic merit. (See Section 1.1.2)

**1.2.2 Give details on the following provisions with reference to academic flexibility**

**a. Core options**

The syllabi and curriculum is prescribed by the Medical Council of India. Undergraduates have to complete the core curriculum. They have no options. However, during postgraduation, students are able to choose the specialty of their choice. Seat allotments are done depending on merit and their choice.

**b. Elective options**

No electives at the moment are offered to undergraduates. The Medical Council of India did propose two months of electives in its Vision 2015 document, but this was never implemented for MBBS by MCI. Students are allowed to volunteer and conduct research projects in their summer vacations

During internship period there are a few elective short postings of 15 days each (**Annexure 1W**). Options are

- Dermatology and Sexually Transmitted Diseases.
- Radiodiagnosis
- Forensic Medicine
- Pathology and Blood Bank

**c. Bridge course**

The principles of early clinical exposure are followed to bridge the gap between the preclinical and the clinical years. The transition between preclinical and clinical years is made easier by the following means:

- During community orientation students learn to communicate with people in the villages. They learn basic skills such as interviewing skills, communication skills, how to give key health education messages etc.
- Introducing applied aspects of basic sciences in the first MBBS

Workshops on developing good study skills for learners are also offered to students who have difficulty in studying.

**d. Enrichment courses**

Many value-based enrichment courses are offered to students in MGIMS. They are described under section 1.1.2. (Communication skills, leadership, spiritual health, bioethics, research methodology, skills teaching etc.)

**e. Credit accumulation and transfer facility**

These are not permissible under MCI rules

**f. Courses offered in modular form**

The following courses are offered to undergraduates and postgraduates in modular form:

- Integrated management of neonatal and childhood illnesses (IMNCI)
- Neonatal resuscitation workshop
- Pediatric advanced life support skills workshop
- Basic and advanced life support skills course
- Research methodology workshop for postgraduates

**g. Lateral and vertical mobility within and across programs, courses and disciplines and between higher education institutions**

Not permissible under MCI guidelines

**h. Twinning programs**

Not permissible under MCI guidelines

**i. Dual degree programs**

Not permissible under MCI rules

**1.2.3 Does the institution have an explicit policy and strategy for attracting students from**

**\* other states,**

At MGIMS, 50% seats are reserved from the state of Maharashtra while the remaining 50% are from the rest of the country. This policy allows diversity of student population. At the moment MGIMS has students from at least 17 states of India.

**\* socially and financially backward sections,**

MGIMS follows constitutional reservation policy. Seats in MBBS and PG courses are reserved not only for socially backward communities according to government

instructions, but also for differently abled students, and students coming from rural backgrounds. 30% of all seats are reserved for women. Section 2.1.5 provides details of reservation policy in admissions to MBBS and postgraduate courses at MGIMS

**\* international students?**

The institute has signed an MoU with Maastricht University, Netherlands and Ben Gurion University Israel. Students from these universities come for elective postings to Community Medicine, Pediatrics and Ob/Gyn.

**1.2.4 Does the institution offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programs?**

No.

**1.2.5 Has the institution adopted the Choice Based Credit System (CBCS) / credit based system? If yes, for how many programs? What efforts have been made by the institution to encourage the introduction of CBCS in its affiliated colleges?**

Not permissible under University rules.

**1.2.6 What percentage of programs offered by the institution follow:**

**\* Annual system**

**\* Semester system**

**\* Trimester system**

The institute follows the pattern of its affiliating university, MUHS Nashik. In MBBS the semester system is followed. Internal assessment examinations are carried out at the end of each semester. University examination is conducted at the end of each professional. Post graduate examinations are conducted by the University at the end of the duration of their course.

**1.2.7 How does the institution promote multi/inter-disciplinary programs? Name a few programs and comment on their outcome.**

- Faculty members of several clinical and non-clinical disciplines collaborate in the successful organization of the orientation camp ROME camp and social service camp for MBBS students. Annexures 1L and 1M show the evaluation reports of the social service camp and ROME camp.

- The internship orientation course of five days and the research methodology workshop for PGs are both carried out by faculty of different disciplines in a collaborative manner.

- Similarly basic medical education technology workshops for faculty development, and study skills workshops for students are carried out by faculty of different departments depending on their areas of expertise.

Collaboration between faculty enhances the communication between departments and also enables richer quality of interactions, as faculty bring in differing areas of experience and expertise.

### **1.2.8 What programs are offered for practicing health professionals for skills training and career advancement?**

The institute trains health professionals (both within the institute and to external candidates) through its courses in:

1. Basic life support skills (BLS) and Advanced cardiovascular life support skills (ACLS): Both these AHA recognized courses are conducted by the MGIMS Institute for Simulation based training since 2015.
2. Emergency Obstetrics Training (EmOC): This is a 16 weeks national certificate course for non-specialist doctors working in Government sector in rural areas conducted by Dept of Ob/Gyn. This is an initiative by the Ministry of Health and Family Welfare, Government of India through a public – private partnership with FOGSI, to provide high quality emergency obstetric care services in under-served areas. It is a competency based, group based course conducted at a Medical College Center aiming to train around 20,000 non-specialists from all over the country. MGIMS has trained 88 doctors from Maharashtra, 68 doctors from other parts of India and 20 ANMs from Wardha district until now.
3. Facility based newborn care- For medical officers by Dept of Pediatrics
4. Life saving skills and Anesthesia skills (LSAS) programme- Dept of Anesthesia
5. National Vector Borne Disease Control Programme Training- Dept of Community Medicine
6. Integrated Disease Surveillance Programme Training- Dept of Community Medicine
7. RNTCP programme- Dept of Community Medicine

## **1.3 Curriculum Enrichment**

### **1.3.1 How often is the curriculum of the institution reviewed and upgraded for making it socially relevant and/or skill oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?**

The Curriculum Committee meets half yearly and discusses on feedback received from students and faculty for any feasible revisions in institute curriculum. In addition, the College Council (a body of all heads of the teaching departments) meets monthly to discuss day to day problems with implementation of curriculum.

**1.3.2 During the last four years, how many new programs were introduced at the UG and PG levels ? Give details.**

**\* multi/inter-disciplinary**

Workshop on Developing Good Study Skills

Research Methodology Workshop for PGs

**\* programs in emerging areas:**

Workshops on Bioethics

Workshops on Communication skills

BLS and ACLS courses

E-learning has just been started for 2016 batch- in phase 2 of faculty development

VIHASA course on spiritual health

**1.3.3 What are the strategies adopted for the revision of the existing programs? What percentage of courses underwent a syllabus revision?**

MUHS and MCI announced major shifts to a competency based curriculum. So the syllabi of all subjects in the MBBS course and the PG course were reviewed and changes were made by the Board of Studies. Elements of bioethics were introduced to all MBBS subjects in a step wise manner. Changes were made to the assessment patterns in several subjects.

**1.3.4 What are the value-added courses offered by the institution and how does the institution ensure that all students have access to them?**

Details of these have been provided already in Section 1.1.2. These courses are mandatory for all undergraduates. Examples are Workshops on Communication Skills, Bioethics, VIHASA course on spiritual health. Some workshops like study skills workshops were offered on a voluntary basis. These were advertised on intramail and on hostel notice boards.

**1.3.5 Has the institution introduced skills development programs in consonance with the national health programs?**

Yes. BLS and ACLS courses have been started. IMNCI programmes are taught. In the ROME camp, students are trained in skills needed to run national health programs in that village in a systematic way. They are taught behavior change communication skills. They are also taught to use the management information systems.

**1.3.6 How does the institution incorporate the aspects of overall personality development addressing physical, mental, emotional and spiritual well being of the student?**



Yes. All students have access to sports and gymnasium facilities provided in hostels and college campus for their physical fitness. Weekly 'Shramdaan' activity is also there to keep them physically able and teach them dignity of physical labour. All students are insured for their health by the institute and any ill health is being taken care of. Students of MGIMS can regularly be seen at regional and state level medical quiz competitions, sports, literary and cultural events, and are encouraged to bring laurels to the institute. There is a student mentoring cell which provides mentoring for their academic and personal problems and for advice, on monthly basis. Also a student guidance and counseling cell is functional in the campus giving free need based counseling. A weekly all religion prayer is held for students and faculty for spiritual well being. The Academy of Medical Sciences is another platform where guests from outside the campus share their experiences with students and faculty.

**1.3.7 Does the curriculum provide for adequate emphasis on patient safety, confidentiality, rights and education?**

The Workshop on Bioethics conducted during the orientation camp addresses this issue for first year students. Later, during clinical training and in Forensic Medicine teaching these points are emphasized. Postgraduates are reinforced these teachings during the Research Methodology workshop.

**1.3.8 Does the curriculum cover additional value systems?**

The faculty and students are expected to follow the institute's Gandhian code of conduct which includes embracing khadi, abstinence from alcohol and smoking and following vegetarianism.

## **1.4 Feedback System**

**1.4.1 Does the institution have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?**

The Internal Quality Assurance Cell has formulated a feedback questionnaire which is given to all students on a pre notified date and the students are encouraged to write their frank feedback on different curricular aspects in a structured manner. The feedback is also obtained by informal discussion of students with their mentors and faculty of individual departments. It is analyzed, discussed by the curriculum committee and the feasible changes are made and informed to the students.

**1.4.2 Does the institution elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and their impact.**

The institute is visited by many experts from India and abroad, who come here to look the Sevagram model of medical curriculum closely. Recently Prof Carmi Margolis

from Ben Gurion University, Israel visited us and discussed and shared his views regarding our way of teaching-learning with MEU members and compared it with the system in his country.

In 2015 we hosted the National Conference on Health Professions Education where our curriculum innovations were discussed on various platforms and appreciated. **(Annexure IX)**

**1.4.3 Specify the mechanism through which affiliated institutions give feedback on curriculum and the extent to which it is made use of.**

Not applicable

**1.4.4 Based on feedback, what are the quality sustenance and quality enhancement measures undertaken by the institution in ensuring the effective development of the curricula?**

Departmental feedback from faculty is taken about the curriculum whenever the MUHS asks for it. This is compiled and submitted to the respective Board of Studies for their consideration. Faculty trained in medical education also give their inputs at University meetings.

**1.4.5 What mechanisms are adopted by the management of the institution to obtain adequate information and feedback from faculty, students, patients, parents, industry, hospitals, general public, employers, alumni and interns, etc. and review the activities of the institution?**

Collecting feedback is the regular feature of the Internal Quality Assurance Cell. Feedback is collected from

- a) Faculty: faculty gives feedback through survey questionnaires and also through agendas raised in meetings of college council
- b) Alumni: A structured online feedback form is sent to alumni on email and through social networks. In the past, forms were circulated to alumni along with the institutional news bulletin.
- c) Parents: Every year the parents are informed about the progress of their ward and along with that a feedback form is also sent which is analyzed after getting back the filled form
- d) Community: Regular interactions are done with community leaders, social workers and patients to get necessary feedback.
- e) Patients: Regular feedback is taken from inpatients who are admitted for more than 3 days. OPDs have suggestion boxes to provide feedback

***Any other information regarding Curricular Aspects which the institution would like to include.***

## **CRITERION II: TEACHING-LEARNING AND EVALUATION**

### **2.1 Student Enrolment and Profile**

#### **2.1.1 How does the institution ensure publicity and transparency in the admission process?**

The Institute advertises its admission process through

- Advertisements in regional as well as national newspapers
- Its prospectus to prospective candidates
- Information on the college website (URL: [www.mgims.ac.in](http://www.mgims.ac.in))
- Circulars posted on institutional notice boards

#### Undergraduate admissions:

MGIMS conducts its own pre-medical admission test for the MBBS course. The dates of the entrance examination and number of seats are advertised in prominent national and regional newspapers and on the MGIMS website. Prospective applicants can pay online and buy the prospectus.

After the examination, a merit list consisting of five times the number of seats available is prepared, so that students know who has been selected and who is on the waiting list. Merit lists are posted on the website as well as the institute notice boards. To ensure transparency, the aggregate marks of candidates who make it to the merit list are displayed publicly. Each student can view his/her own marks in each subject through a protected password on the website. Selected candidates are individually informed through email as well as speed post.

For selected candidates, verification of certificates, biometric identification of the candidate and medical examination are done by an admission scrutiny committee which is assigned this task.

#### Post-graduate admissions:

Wide publicity is given for admission to post graduate courses through the institutional website, sale of prospectus and institutional notice boards. Prospective applicants can pay online and buy the prospectus. Since 2014, the entire process of postgraduate admissions has been made online. Students can fill an online form to apply for the seats.

Merit lists are prepared on the basis of aggregate marks of all years of MBBS and subject marks. The merit list is displayed on the notice board of the Institute and objections are called for.

Counseling for distribution of seats is done in presence of all applicants by the selection committee consisting of all HODs with Dean as Chairperson. Candidates are displayed the availability of seats as it changes dynamically after each allotment.

**2.1.2 Explain in detail the process of admission put in place by the institution. List the criteria for admission: (e.g.: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test, aptitude and interview, (iv) common entrance test conducted by state agencies and national agencies (v) any other criteria (specify).**

- a) General
- b) Professional
- c) Vocational

**Undergraduate course (Annexure 2A: Prospectus of MBBS)**

- Each year a total of 100 students are admitted into the MBBS course.
- The institute conducts its own All India Entrance Examination for MBBS course at six examination centers New Delhi, Nagpur, Mumbai, Hyderabad, Allahabad and Kolkata.
- 50% of the seats are reserved for students from Maharashtra and 50% from rest of India.
- Seats are also reserved for differently abled students and students who belong to rural areas.
- Age limit: Students should have completed 17 years on or before the 31<sup>st</sup> December of the year of admission.
- The basic qualification is 10+2 or equivalent examination with at least 50% marks for general category and 40% for constitutional reservation category (SC/ST/VJ/NT/OBC).
- There is one paper of multiple choice questions in Physics, Chemistry and Biology. The general standard of the examination is that of the Std 12 examination of CBSE and Maharashtra Board.
- There is a separate paper in Gandhian Thought (short and long answer type) with equal weightage for admission.
- In 2015-16, the cut off percentage for open category for students from Maharashtra and non-Maharashtra were both 74.16%. For reserved category these cut offs were 52.5% for Maharashtra and 49.16% for non-Maharashtra students.

- MGIMS conducted PMT on 17th April 2016 for admissions to MBBS course for the academic year 2016-17 as permitted by Nagpur Bench of Bombay High Court by order dated 31st March, 2016. In the meantime Hon'ble Supreme Court has directed that admissions for MBBS course for the year 2016-17 shall take place according to the NEET. As a consequence from 2016 all admissions shall be done only on the basis of NEET scores.

**Post-graduate courses (Annexure 2B: Prospectus- postgraduate admission)**

- The admission for post-graduate courses is on the basis of merit of aggregate marks obtained in first, second and final professional examination at the university level and the subject marks.
- Eligibility criterion: All students are required to complete 2 years rural service before their application to the post graduate course. However they are allowed to do post graduation after one year with a bond for completing left over service after post graduation.
- First preference is given to students from MGIMS who have completed their rural posting at NGOs recognized by the Institute. The second preference is given to students from MGIMS who have completed their rural posting at Government PHCs. The third preferences are given to candidates other than that of the Institute and have done their rural posting at Government PHCs.

**2.1.3 Provide details of admission process in the affiliated colleges and the university's role in monitoring the same.**

Not applicable

**2.1.4 Does the institution have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?**

The institute reviews its admission process and student profile annually at the meeting of the Local Managing Committee and later at the meetings of the Governing Council and the Kasturba Health Society where the details are tabled in the Institute's Annual Report. Some of the pertinent points related to the outcome analysis are as follows:

- MGIMS was permitted by the Medical Council of India to increase the number of admissions in its undergraduate course from 65 to 100, from the 2012-13 session. This permission was granted by the Medical Council of India based on its evaluation of the Institute's faculty strength, infrastructural facilities and clinical material available for teaching purposes.
- Further in view of the increasing number of prospective applicants from all across the country, the institute decided to increase the number of sites where

its entrance examination was held from four (Delhi, Nagpur, Mumbai, Hyderabad) to six centres (Delhi, Nagpur, Mumbai, Hyderabad, Allahabad, Kolkata) to make it convenient for them to appear in the exam.

- In view of the increased incidences of impersonation during entrance examinations found all across the country, biometric identification through fingerprinting was made mandatory during the admission process.
- Efforts have been made to streamline the process and make it more efficient and transparent through use of the website to disseminate information. As of now the application process for postgraduate admissions has been made completely online. Plans are being discussed to do the same with undergraduate applications as well.
- From 2016, in view of the Supreme Court judgment on NEET, admissions to MGIMS have been conducted based on the NEET scores (**See website Notification appended to Annexure 2A**).

**2.1.5 What are the strategies adopted to increase / improve access for students belonging to the following categories:**

- \* **SC/ST**
- \* **OBC**
- \* **Women**
- \* **Persons with varied disabilities**
- \* **Economically weaker sections**
- \* **Outstanding achievers in sports and other extracurricular activities**

The institute provides access to admission into its MBBS course to all marginalized communities by providing constitutional reservation as follows for 100 seats(**refer to Annexure 2A**):

- 12 seats (6 Maharashtra and 6 Non-Maharashtra) for Scheduled Castes.
- 6 seats (3 Maharashtra and 3 Non-Maharashtra) for Scheduled Tribes.
- 3 seats (1 Maharashtra and 2 Non-Maharashtra) for Vimukta Jati.
- 5 seats (3 Maharashtra and 2 Non-Maharashtra) for Nomadic Tribes 1, 2, 3.
- 18 seats (9 Maharashtra and 9 Non-Maharashtra) for Other Backward classes.

Besides these:

- 3 seats (2 Maharashtra and one non-Maharashtra) are reserved for differently abled category
- 12 seats (6 Maharashtra and 6 Non-Maharashtra) for students belonging to rural areas.

- 30% of the total seats are reserved for women candidates in all categories, i.e. 28 seats (14 Maharashtra and 14 non-Maharashtra)

For postgraduate admissions, 50% constitutional reservation guidelines are adhered to as follows (**Refer to Annexure 2B**):

- Scheduled Castes and Scheduled Caste converts to Buddhism (SC) 13.0 %
- Scheduled Tribes (ST) 7.0 %
- Vimukta Jati ( VJ/DT A ) 3.0 %
- Nomadic Tribes ‘b’ (NT1)(before Jan 90 & equi. castes) 2.5 %
- Nomadic Tribes ‘c’ (NT2)(Dhangar & equi.castes) 3.5 %
- Nomadic Tribes ‘d’ (NT3)(Vanjari & equi.castes) 2.0 %
- Other Backward Classes (OBC) including SBC\* 19.0 %
- Total 50.0 %

#### 2.1.6 Number of students admitted in the institution in the last four academic years:

Categories	2011-12		2012-13		2013-14		2014-15		2015-16	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SC	3	9	3	6	7	6	4	9	3	9
ST	3	3	2	3	2	4	3	5	3	3
OBC	10	8	4	7	9	9	11	8	11	8
General	21	24	18	13	26	20	23	24	21	28
Others	7	8	4	5	8	9	6	7	6	4

#### 2.1.7 Has the university conducted any analysis of demand ratio for the various programs of the university departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase / decrease.

Every year, MGIMS compiles its data of admissions in its annual report, tables and discusses it during the meetings of the Local Management Committee, the Governing Council and the Kasturba Health Society

Data of MBBS admissions for last five years is as follows:

	2011	2012	2013	2014	2015
Prospectus sold	14168	18589	8290	15946	13196

Applications returned	12518	16003	8119	15555	12871
Candidates who took PMT	11263	14384	7359	14239	11415
Candidates admitted	65	100	100	65	96
Demand ratio (based on prospectus sold)	218:1	186:1	83:1	245:1	137:1
Demand ratio (based on applications returned)	193:1	160:1	81:1	239:1	134:1

Mean Demand Ratio of last 5 years = On basis of prospectus sold= 174:1  
On basis of applications returned= 161:1

The significant trends in the demand ratio are as follows:

- The demand ratio has remained consistent, except in 2013. That year, there was a lot of ambiguity about NEET and confusion if we would be allowed to conduct our separate exam autonomously. And on analysis we also found that since the cost of the prospectus was increased from Rs 4000 to Rs 5000, only candidates who were genuinely interested in appearing for the entrance test bought the prospectus.
- In 2012, after the MCI approved increase in the MBBS seats from 65 to 100, the number of prospective applicants went up (**Annexure E**). Two batches of students were admitted to MBBS in 2012 and 2013 with 100 seats
- In 2014, after physical verification of our premises, the MCI disapproved the rise in seats in view of certain deficiencies such as lack of air-conditioned lecture halls, and not enough senior residents.
- However we were allowed to admit 100 students in 2015 after another inspection. (**Annexure H**)
- In 2015, in view of the uncertainty and confusion over NEET, the demand for the MBBS course came down.
- In 2015, the names of four Govt of India nominees were not received. As a result of this only 96 admissions were made.

Post graduate courses –

*Note: Postgraduate seats are only for MGIMS students. If any seats remain, they are offered to outside candidates*



	2011-12		2012-13		2013-14		2014-15		2015-16	
	Degree/ Diploma	DNB	Degree/ Diploma	DNB	Degree/ Diploma	DNB	Degree/ Diploma	DNB	Degree/ Diploma	DNB
Prospectus sold	205	-	149	5	168	4	265	4	247	4
Applications returned	188	-	149	5	136	4	265	4	247	4
Candidates admitted	65	-	64	5	61	4	67	4	69	4
Mean demand ratio based on applications returned	2.9:1	-	2.3:1	1:1	2.2:1	1:1	3.9:1	1:1	3.6:1	1:1

Mean Demand Ratio for Degree/ Diploma for last 5 years =2.96:1

**2.1.8 Were any programs discontinued/ staggered by the institution in the last four years? If yes, specify the reasons.**

DNB (Family Medicine) and DNB (Rural Surgery) have been discontinued since 2016, because we cannot use the same resources (faculty, beds, and infrastructure) to run both DNB (National Board of Examinations) and MD (Medical Council of India) courses in the same department.

**2.2 Catering to Student Diversity**

**2.2.1 Does the institution organize orientation / induction program for freshers? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.**

Both undergraduate and postgraduate students go through an orientation programme after admission.

**Undergraduate Orientation Programme**

Undergraduate students stay at the Orientation Camp conducted at Gandhi Ashram in Sevagram for 15 days immediately after admission. Students live in dormitories. During the camp, students are briefed about the code and conduct of the Institute. Renowned Gandhians and prominent people from all walks of society interact with

them and emphasize the relevance of ethics, dignity of labor and Gandhian principles. During this induction programme, separate workshops are conducted on communication skills, bioethics with specific emphasis on respecting the cadaver. Another workshop on Values in Health- A Spiritual Approach (VIHASA) is also conducted. All religion prayers and yoga sessions are conducted daily. More details of this camp have already been provided in 1.1.2. **Annexure IC** shows a sample time table of the Orientation Camp

### **Internship Orientation Programme**

Interns attend a five-day orientation programme when they join. They are briefed about the rules and regulations of the internship programme. They learn cardiopulmonary resuscitation, ethics, professionalism, collection and transport of samples, use of Hospital Information System software, obstetrics care, rational use of drugs, management of polytrauma cases, alternative therapy, National Health Programmes etc. **Annexure IU** shows a detailed programme of the internship orientation programme.

### **Postgraduate Research Methodology Programme**

For postgraduates, a week-long orientation programme is conducted before submission of thesis protocol to the University to acquaint them with basic research methodology, literature search, and statistics and data management and also about medico-legal problems, ethics, etc. **Annexure 2C** shows a detailed programme of the postgraduate research methodology programme.

#### **2.2.2 Does the institution have a mechanism through which the “differential requirements of the student population” are analyzed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?**

During the orientation camp, students are asked to fill a format where they are asked to give information about their backgrounds and specific health related requirements. The format also asks general questions like sports interests of students as well as hobbies. In the hostels, care is taken that differently abled students are given rooms on the ground floor for easy accessibility.

#### **2.2.3 How does the institution identify and respond to the learning needs of advanced and slow learners?**

- Slow and advanced learners are identified on the basis of (a) day to day interaction between the teachers and students in classrooms, tutorials or clinics; (b) marks

obtained in internal assessment; and (c) during mentoring sessions organized each month

- Slow learners are provided additional remedial teaching and individual attention by the faculty through extra classes or by giving them additional assignments. During mentoring sessions guidance is also provided by their mentors.
- The Medical Education Unit has launched Workshops on Developing Good Study Skills. As it may be unethical to identify and isolate slow learners, we have kept attendance in this workshop voluntary. These workshops teach students to: manage time, how to deal with memory issues, Cornell's note taking technique, Speed reading techniques, team learning etc. (**Annexure 2D-** Programme of Workshop on Developing Good Study Skills)
- Advanced learners are also given more attention and encouragement to improve and maintain their higher academic standards. They are encouraged to participate in state and national level quiz competitions and apply for research grants from agencies like ICMR-STs and MUHS.
- Other non-academic skills of students are nurtured and students are given leadership roles in the Students' Council as per their talent in cultural, literary, debating, arts and sports arena.

**2.2.4 Does the institution offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise?**

- Students who do not fare well in the internal assessments are called for remedial teaching by individual departments. They are given extra assignments and individual feedback on their performance
- Tutorials are structured into the time table. Each subject has a slot of one hour per week of tutorials. Here faculty members discuss topics of importance with students in small groups of 6-10 students. This interaction is useful in clarifying doubts and guiding students.
- As stated above, the Medical Education Unit has launched Workshops on Developing Good Study Skills. Students who wish to learn, volunteer to attend these classes.
- For students who wish to learn Marathi, classes are held if a group of students asks for them. Two faculty members conduct these classes.

**2.2.5 Has the institution conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, differently-abled, etc.? If yes, what are the main findings?**

- There are scholarships provided to the economically and socially disadvantaged students of the institute. Details of these are provided in Section 5.1.7 and 5.1.8.
- Book bank is available in the library to give them easy access to books.
- The institute makes attempts to create a barrier free environment on campus to provide easy access to the differently-abled. In hostels care is taken to provide rooms for them on the group floor.
- The differently-abled students are encouraged to live like other students with other students in the same campus. Similarly during Orientation, Social service and ROME camps, all students live together in dormitories which give a feeling of oneness. However, special needs of these students are taken care of so that they do not suffer from any impediments.

**2.2.6 Is there a provision to teach the local language to students from other states/countries?**

Yes. There are classes conducted for students of other states to learn the local language on their demand. These classes are conducted in the first year MBBS. Two of our faculty members have been conducting these sessions since 2014 and till date around 7-8 sessions have been held.

**2.2.7 What are the institution's efforts to teach the students moral and ethical values and their citizenship roles?**

Inculcation of moral and ethical values is done right from the beginning when students are inducted into the MBBS course. Moral and ethical values as well as citizenship roles are taught in the following sessions:

- (a) **ORIENTATION CAMP:** This Camp is held for all new admissions to MBBS in the Gandhi ashram for 15 days. They are oriented to Gandhian values and their relevance in medical education, *Sarvodaya vichar*, code of conduct of the institute, nutrition, self help, spiritual health, nature cure and yoga. Separate workshops on bioethics and VIHASA (values in healthcare- a spiritual approach) are conducted.
- (b) **SOCIAL SERVICE CAMP:** MGIMS Sevagram has an old tradition of adopting a village for each batch of medical students. Social Service camp is organized for a fortnight in this village. Each student is allotted 3-5 families for camp activities and they follow-up these families for the next 4 years. Students live with the villagers and learn about community health, hygiene, sanitation and socioeconomic factors affecting health.

- (c) **WHITE COAT ARMY:** A group of undergraduate students were sensitized about the issue of drugs and alcohol abuse. With the help of the faculty, the students themselves formed the White Coat Army. In their free time in the evenings, this “army” of students conducts talks for patients and their relatives at various wards of Kasturba hospital. The main focus of their talks is spreading awareness, clearing misconceptions about addiction and not de-addiction- for they believe that the former can be worked out more efficiently and is a better way to bring about change, rather than convincing some people to stop addiction. They expect change at individual level directly. They do talk about de-addiction but that is only informative and not subjective. (**Annexure 2 E**)
- (d) Students are also taught about ethics within the individual subject domains. They are involved in dissemination of health education in the community. They participate in National Health Programmes like the Pulse Polio campaign.
- (e) Students learn about Panchayati Raj Institutions (PRI) and Village Health Nutrition and Sanitation Committee (VHNSC) during their training. The Department of Community Medicine continuously engages with PRI members in all villages in its field practice area. Orientation sessions are organized through the Rural and Urban Health Training Centres to empower the PRI and VHNSC members for health action at community level.
- (f) Undergraduate students are actively involved in NSS activities like Red Ribbon club (pledge against HIV/AIDs), tree plantation activity, Andhashraddha nirmulan, rural technology etc. The Red Ribbon club organizes activities to raise awareness about HIV/ AIDS. Tree plantation program was conducted in the village Selu Kate. A total of 110 saplings were planted. The students gifted a tree to each of their adopted families. Mr Gajendra Surakar, the renowned social activist in the Wardha district presented a thought provoking talk on Andhashraddha nirmulan to students and the villagers. The students are sensitized about appropriate rural technology Demonstration of smokeless chullah and sarai cooker was given to the students and the villagers.

**2.2.8 Describe details of orientation/ foundation courses which sensitize students to national integration, Constitution of India, art and culture, empathy, women’s empowerment, etc.**

- During the orientation camp, students are sensitized about the issues of national integration, cultural ethos, women’s issues and Gandhian values right in the

beginning of their MBBS course.

- During the social service camp, as part of the village adoption scheme, students are sensitized to the sociocultural milieu in the villages and to the consequences of health due to economic, educational and ecological differences. During the surveys they carry out in the households in villages they are acquainted with the status of women and issues related to empowerment.
- On Gandhi Jayanti Day, the topic of the debate and elocution competition is usually an issue of relevance to national importance. Similarly in the annual Taradevi Memorial Debate also, topics of topical importance are chosen.
- Students organize an art gallery during the Annual Social Gathering which showcases the arts from all over the country. The cultural events also represent dances from all over the country, skits, songs and other such events
- Students observe work of the Department of Community Medicine in the context of community mobilization. They learn about organization of Women's Self Help Groups, Kishori Panchayat (Adolescent girls groups) and Kisan Vikas Manch (Farmer's Club)

### **2.2.9 Has the institution incorporated the principles of life style modifications for students based on Eastern approaches in their day to day activities?**

The institute has adopted the well proven eastern philosophy to physical and mental well being and is focused on proactive, self directed self-care through meditation, breathing exercises, yoga etc.

- Students are sensitized to the concept of Yoga for healthy living in the orientation camp.
- Weekly all religion prayer is conducted every Friday evening which all students and faculty are expected to attend
- Breathing exercises and meditations designed to develop mindfulness are promoted during the orientation camp.
- Vegetarianism is advocated and is part of the code of conduct for students and faculty.
- Addictions (such as tobacco and alcohol) are prohibited on campus.
- Physical habits such as shramdan are taught to respect dignity of labour
- A VIHASA (Values in Health care- A Spiritual approach) workshop is conducted for undergraduates in the orientation camp

### **2.2.10 Has Yoga/Meditation/any other such techniques been practiced by students regularly as self-discipline?**

Yes. Students are taught Yoga and its benefits in the orientation camp. A VIHASA (Values in health care- a spiritual approach) workshop is conducted for

undergraduates in the orientation camp. Here, they are introduced to the basics. Yoga classes are available for students and faculty at Arogyadham. Regular workshops are also conducted by Arogyadham.

**2.2.11 How does the institution attend to the diverse health issues (physical and mental) of students and staff?**

- The physical health of students and staff is maintained by encouraging yoga right from the admission into the college. The students are taught the benefits of yoga. Faculty members are encouraged to learn and practice yoga with the provision of yoga classes and trainer at the Naturopathy and positive health centre, Arogyadham, run by the Kasturba Health Society.
- Walkathons and marathons are conducted for both creating awareness and for promoting healthy life style. “Don’t let your waistline become a wasteland. Start running!” – was the tagline of a recently held mini marathon on the campus of Mahatma Gandhi Institute of Medical Sciences, Sevagram. The marathon—held on 20th March 2016—was aimed at promoting a healthy lifestyle which has inarguably taken a back step these days.
- MGIMS has launched the “cycles on campus” initiative to create a green and physically active campus that encourages students, faculties and staff to drive less and use the cycles to commute within the campus. On 11- 12 Mar 2016 the institute organized a Cycle Mela in which the cycle vendors from Nagpur showcased their cycles and helped the students, faculty and staff to pick one best suited to them. In Dec 2015, the MGIMS Academy of Medical Sciences had hosted a talk on the ‘why, what and how of bicycling’. Several members of the faculty and students have taken up cycling. To promote cycling, MGIMS shall soon help students and staff members to acquire cycles at a discounted price and shall also offer them interest- free loans.
- Student guidance and counseling centres are available for both UGs and PGs within the campus. (Details given in Section 5.1.4)
- Mentorship programme also ensures that students talk about their issues with their mentors and let down their stress and apprehensions. (Details given in Section 5.1.1)
- All faculty, students and KHS employees are enrolled in the health insurance scheme of the Kasturba Hospital

**2.2.12 Does the institution cater to the needs of groups / individuals requiring special attention by conducting group classes / special individual trainings / focused group discussion / additional training measures etc.?**

Yes.

- Students who require language classes are given language training
- Students who require special coaching are given the option of volunteering for

- Study Skills Workshops or subject-specific remedial classes
- Students who require sports training are given facilities by the sports section.

## **2.3 Teaching-Learning Process**

### **2.3.1 How does the institution plan and organize the teaching-learning and evaluation schedules such as:**

#### **\* Academic calendar**

The curriculum committee meets and prepares the academic calendar annually. The academic calendar consists of the course objectives, rules and regulations, names of faculty, teaching plan, clinical postings, dates of internal assessment examinations, tentative dates of university examinations, vacations, list of holidays, dates for annual social gathering, social service camp and ROME camp and important telephone numbers. This calendar is provided to all students and is also available on the college website. (**Annexure 2F- Academic Calendar**)

#### **\* Master plan**

The curriculum committee decides and finalizes the teaching programme for each department before the start of every academic year. The committee is represented by the Dean, faculty representatives from the preclinical, paraclinical, surgical and allied branches, medicine and allied branches, student representatives and the MEU coordinator. The timetables for each professional are approved by head of each department and finalized by this committee. (**Annexure 2G: Time tables of each professional**)

#### **\* Teaching plan**

At the level of each professional, meetings are held, where they schedule classes, allocate lecture halls and decide minor schedules. E.g. I MBBS details are decided by Heads of Departments of Anatomy, Physiology and Biochemistry and so on. Further, each departmental committee decides finer details of teaching and learning.

#### **\* Rotation plan**

Clinical rotations are planned by the Curriculum Committee and circulated to departments and students. (**Annexure 2H: Clinical Rotations Time Table**)

#### **\* Course plan**

Individual departments plan the course delivery according to University guidelines. Each department allots topics and hours to its faculty and puts up a time table and schedule.



**Maharashtra University of Health Sciences**

Subject	Lectures	Practicals	Tutorials	Assessment	Hours
Anatomy	209	354	42	-	650
Physiology	191	110	25	-	480
Biochemistry	113	126	14	-	240
Pathology	101	110	58	31	300
Microbiology	71	120	26	33	250
Pharmacology	105	120	15	60	300
Forensic Medicine	40	40	20	-	100

Subject	Lectures	Tutorials	Bedside Clinics	
			Weeks	Hours
Medicine	265	50	24	432
Skin	35	10	2	36
Psychiatry	20	10	2	36
Pediatrics	65	20	12	216
Surgery	160	140	26	468
Orthopedics	50	50	10	180
Anesthesia	20	-	2	36
Radiology	20	-	2	36
Dentistry	10	-	2	36
ENT	48	22	8	144
Ophthalmology	70	30	10	180
Obs/Gyn	130	170	26	468
Com. Medicine	148	-		228

**\* Unit plan**

The teacher responsible for teaching each unit decides the mode of delivery of the lectures and practicals. Teachers are given freedom to innovate and be creative. They are expected to use interactive methods and only less than one-third of classes are expected to be didactic in nature. Two-thirds of the session should include practicals and group discussions/ seminars / tutorials.

**\* Evaluation blue print**

Blueprinting of the examination is done at the level of Maharashtra University of Health Sciences (MUHS). These blueprints and the assessment pattern are displayed on the University website.

Internal assessment guidelines are issued by MUHS. Attendance records and marks of internal assessment have to be submitted online to the university. Record keeping of internal assessment is monitored by University officials by regular on-site visits.

MUHS conducts the final university examinations twice every year for both undergraduates and postgraduates: in May/June and November/December. The dates for theory examination are notified by the University 6 months prior to the examination through website and circulars sent to affiliated colleges. These circulars are notified to students by the Dean's office.

As per the university rules for undergraduate examinations, the theory answer scripts are divided in three sections. Section A consists of multiple choice questions (MCQ) and is assessed by OMR scanning. Sections B and C are assessed separately by examiners appointed by the university in a centralized assessment programme. All the sections are bar coded. Double evaluation is done. Moderation of the answer sheets for students securing less than 45% marks and more than 70% marks is done by the examiners appointed by the university. The practical and viva examinations are conducted by four examiners, two internal and two external examiners (one of them from outside the state) appointed by university.

As per the University rules for post graduate examination, the theory answer scripts are bar coded and assessed in a central assessment programme. The practical and viva examinations are conducted by four examiners, two internal and two external examiners from outside the state appointed by university.

**\* outpatient teaching**

The curriculum committee makes a schedule according to which students are posted in groups in different clinical departments starting in their 2nd year until their final year. The postings range from 2-3 weeks to 4-6 weeks depending on the weightage of the subject and availability of days in the term. The clinical departments then post the students in OPDs. The students shadow the consultant during their outpatient posting and learn the art of focused history taking in outpatient setting, learn spot diagnosis of certain conditions, and also learn about outpatient management. The students are assessed by also discussing outpatients with them.

**\* in-patient teaching**

The curriculum committee makes a schedule according to which students are posted in groups in different clinical departments starting in their 2nd year until final year. The posting ranges from 2-3 weeks to 4-6 weeks depending on the weightage of the subject and availability of days in the term. In each clinical department the students are assigned beds -such that each student has 4-5 beds. The students have to take

histories of patients on their beds and follow them till discharge. Within departments, different faculty members are assigned the responsibility of bedside teaching. Students have to take a detailed history and examination of case of different systems and present it to the assigned faculty. During case presentations the faculty teaches them history taking, examination and management. At the end of each clinical posting the students undergo a ward leaving examination where each student is assessed on the different skills taught to them.

#### **clinical teaching in other sites**

Students are posted to the skills laboratory. Separate time is made within the timetable for this posting. They are accompanied by teachers to the skills laboratory and taught essential skills related to that subject. These essential skills range from cardiopulmonary resuscitation to giving injections. Teaching is also done in the operation theatre, labour rooms, ICUs, antenatal and post-natal wards etc.

Besides this, for the last 22 years, the Department of Pediatrics, MGIMS has been a pioneer in the country by initiating and regularly conducting Basic Neonatal Care and Neonatal Resuscitation training workshops for last 23 years for the final year MBBS students, a unique activity in the country. (See **Annexure 2I**)

#### **\* teaching in the community**

Social Service Camp: Three months after admission all students are taken to a village for a residential camp of 15 days, where the students experience the same conditions as the inhabitants. They reside in the village and learn from the community. Each student conducts socio-demographic, dietary and health appraisals in three or four families. We have developed a well-structured journal for recording different aspects of the health assessment for each family. Following the health appraisals performed at household level, each student prepares individual diagnosis for each family member and family diagnosis for each family allotted to him/her. Information for all families in the village is compiled to prepare community diagnosis. Students also conduct short projects during the camp; e.g. feeding practices for children, dietary assessment at family level, physical activities among adults, care of elderly etc.

The roles of village health workers, school teachers and village health committees are examined. The students are also able to observe that the identification and solving of health problems by the villagers themselves is of considerable importance and how the community leaders, social organizations and village health committee work together for health. This Community–Academic partnership offers unique opportunities of great importance for learning viz. the social and cultural determinants of health, health promotion etc.

Due to this camp approach of community based training of medical students a heightened understanding is gained of the need for adequate nutrition, safe water and basic sanitation, and of the influence of various socio-economic and cultural factors on health.

The concept of family health care is brought home to the students with the help of auxiliary nurse midwives, social workers, health educators, sanitary inspectors, psychologists and social physicians working in the villages.

Monthly village visit following social service camp: Following social service camp, the students visit their adopted village every month on a Saturday. During these visits they follow-up families allotted to them. This exercise helps them understand the common health problems for rural population, their beliefs related to health and diseases, their health seeking practices etc.

In addition, there is a topic for each visit (List of topics for monthly village visit and reporting format is attached as **Annexure 2J**). Students are briefed on this topic. While they visit their allotted family during the monthly visit, they collect information from their families on the topic. They also provide the family members relevant health information on the topic. This provides excellent setting for learning communication skills.

Since last year, we have started utilizing e-learning for the social service camp and monthly village visits. For topics on monthly village visit, learning resources are being posted on an e-learning course specially developed for this purpose a week prior to the monthly village visit. The students go through the learning resource and come prepared on the topic. They also enter the information collected from their allotted families in online forms developed for this purpose.

Re-orientation of Medical Education (ROME) Camp: Re-orientation of Medical Education (ROME) camp is a two week residential camp at one of the rural centres of the Department of Community Medicine (DCM). The students stay at the RHTC and do clinical case study, survey for assessment community health needs and other activities in the villages of field practice area of the RHTC.

The camp curriculum focuses on primary health care and attempts to create conditions for the students to gain a hands-on understanding of the nature of rural health problems. The camp is an integrated approach to public health and clinical disciplines where the field clinics for students are arranged within the patient's house. For one week daily in the morning hours (9am-12pm) faculties from Medicine, Surgery, Pediatrics, OBGY, ENT and Ophthalmology visit the RHTC and take clinical case

presentation in the families from a nearby village. Attempt is made to imprint on the minds of budding doctors the role of family, environment and culture on origin, progress of the disease and treatment seeking behavior.

The students are taken for exposure visit to various Government Health Facilities, e.g. Subcentre, Primary Health Centre, Rural Hospital and interact with health care providers. Discussions are held on various roles of a PHC medical officer, importance and approaches for community mobilization and health promotion, management of health management information system etc. Interaction with District Health Officer and other District level Program Managers are organized in which implementation of various National Health Programs are discussed.

The students are also given practical exposure on assessment of community health needs. After being trained on the methods of community health needs assessment, the students identify 3-4 issues for community needs health assessment, develop plan, prepare tools, do data collection, analyze data and present their final report it during the valedictory function.

Assessment:

Formative assessment: During the community teaching (Social Service Camp, Monthly village visit and ROME Camp), the students are under supervision of faculty and post-graduate students from Department of Community Medicine. They are observed frequently, while they are involved in these community processes (e.g. collecting information, providing health education, designing data collection tools, data entry and analysis etc.) and feedback is provided.

Summative assessment: During the final examination in community medicine, the students are taken for family study to their adopted village and one of the families, from the families allocated to them during their social service camp and monthly village visits, is provided to them for family study. Apart from their performance during the examination, they are also given credit for their rapport with the family and the changes they brought in the household health practices during their community learning exercises.

**2.3.2 Does the institution provide course objectives, outlines and schedules at the commencement of the academic session? If yes, how is the effectiveness of the process ensured?**

The course academic calendar, objectives and schedules of theory as well as clinics is provided to the students right at the commencement of academic year (See **Annexure 2F** for Academic Calendar). The effectiveness of the process is maintained by:

Meetings with faculty: Faculty meet at the levels of department, each professional, curriculum committee and college council. Any change required in the process is discussed and action is taken wherever necessary.

Meetings with students: Regular meetings with students' representatives are held to understand their requirements and difficulties faced by them. This also ensures that the academic schedule is on time and is as per the needs of the students.

Internal assessment: Marks obtained in internal assessment examination, part completion tests and unit completion tests gives feedback to the student as well as the teachers about the effectiveness of the teaching process. This helps in ensuring that all of them are in sync with the learning objectives. If required, changes are made to the regular schedule to reinforce or reteach certain topics through revision classes or tutorials.

Attendance: Strict records of attendance are maintained to ensure 80% attendance for both theory and practicals.

**2.3.3 Does the institution face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.**

Usually, no. However, if sometimes there are challenges in completing the curriculum within the stipulated time frame and calendar, these are met by regular review meetings. The departmental committees and the curriculum committees keep a check on the curriculum schedule and take action if any changes are needed. If a course is occasionally behind schedule, extra classes are taken to make up for this.

**2.3.4 How is learning made student-centric? Give a list of participatory learning activities adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.**

There are serious attempts to shift from teaching to learning. Interactivity is encouraged. The following types of interactive teaching are being used at present:

- Interactive lectures: Teachers are trained during the basic medical education technology workshops to make their large group teaching more interactive. This is by using methods such as questioning, buzz groups, quizzes, brainstorming etc. Scientific methods to introduce interactivity are taught. Teachers go through

- microteaching sessions in these workshops and receive feedback on how to improve these microskills. In 2014 a separate workshop was organized on how to engage the learners through interactivity. Almost all departments use group discussions and interactive methods for teaching.
- **Problem based learning:** The Department of Community Medicine has initiated problem based learning for 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> semester students. These cases are related to reproductive and child health, communicable and non-communicable diseases. The triggers used are either paper case scenarios or real patients. Each case is discussed over four sessions with three days of self directed learning in between. Students are given demonstrations of related topics like counseling etc in the intersession period to deepen their understanding. (PBL cases available at <https://uglibrary-publichealth.wikispaces.com/PBL+Resources>) See **Annexure 2K**
  - **Case based learning:** The Departments of Biochemistry and Pathology use Case based learning to teach undergraduates in I and II MBBS. These are paper based cases which are given in advance to the students. The objective is to teach them rational use of investigations and to teach them the applied aspect of basic sciences. (**Annexure 2K** shows a case used as triggers for CBL). Group discussions follow.
  - **Self directed learning:** Based on student feedback and their request, we have given students more self study time within the time table for I MBBS students. There are 4-5 hours per week in the time table allotted for self directed learning. Faculty are available to facilitate learning in these classes if required.
  - **Project based learning:** In I MBBS, the Academy of Basic Sciences, ensures that each student presents a seminar on a topic of clinical relevance. Students prepare innovative models and demonstrate learning. (See **Annexure 2L** for details)
  - **Role plays and drills:** Several clinical and para-clinical departments teach using role plays and emergency drills to drive the importance of collaboration, team work and cooperation home.
  - **Literature search:** During the ROME camps, students are taught how to search literature and critically analyze available literature.
  - **Promoting e-learning:** The institute has helped students and faculty to buy laptops at subsidized rates on interest-free installments. A lot of junior faculty, residents and many undergraduates availed of this offer.

### **2.3.5 What is the institution's policy on inviting experts / people of eminence to augment teaching-learning activities?**

The institution is proactive in augmenting teaching-learning activities and invites experts and people of eminence to interact with undergraduates and post graduates. The MGIMS Academy of Medical Sciences conducts such sessions every Wednesday between 4.00-5.00 p.m. where experts are invited to speak on various topics. (**Annexure 2M- Activities of Academy of Medical Sciences**)

### **2.3.6 Does the institution formally encourage learning by using e-learning resources?**

Yes. In year 2014-15, MGIMS, Sevagram launched an e-learning platform to complement the classroom, clinical and community-based training of under-graduate and post-graduate students. The institute has decided to use MOODLE as a virtual learning environment and it has been installed in a section of MGIMS server. The primary objective of the E-learning initiative at MGIMS is to enhance the learning experiences of our undergraduate and postgraduate students through principles of blended learning within the campus. Presently this initiative is in the second phase where faculty members are being trained in e-learning. (See **Annexure 2N** for further details)

### **2.3.7 What are the technologies and facilities such as virtual laboratories, e-learning and open educational resources used by the faculty for effective teaching?**

**Campus wide free access to UpToDate:** In 2012, MGIMS bought an annual campus wide subscription of UpToDate®, an evidence-based, physician-authored clinical knowledge resource which clinicians trust to make the right point-of-care decisions. Medical students, residents, faculty and researchers at MGIMS now use UpToDate in diverse locations - in their classrooms, in the post-graduate teaching sessions, at the point of care in the hospital wards and intensive care units and even in the crowded outpatient departments. The evidence-based electronic source of information helps doctors to use the most appropriate screening test, order the most reliable diagnostic test, choose the best option for their patients, compare and contrast the two modes of therapy and predict the outcomes of their patients. By combining rich experience with evidence, now the doctors at MGIMS help patients get the best therapy that is also tailored to their socioeconomic status, their wishes, and their choices.

**Library:** Each year, the library subscribes to 218 medical journals; 154 of them, international. Journals with very high impact factor such as Lancet, New England Journal of Medicine, JAMA, Annals of Internal Medicine, BMJ and Archives of Internal Medicine, WHO global periodicals and publications arrive in the library within 2 weeks of their publication. In addition, the library has subscribed to 2074 e-resources of the digital library of Maharashtra University of Health Sciences, Nashik. The library stocks 28127 books. The library has also carefully archived old journals-a total of 17580 hard-bound journals, neatly stacked, occupy the shelves of the library. The journals are alphabetically arranged. Although several journals date as far back as 1960, they can be easily accessed. The books are classified according to the DDC system and catalogued according to AACR II system. Since 1992, the library has been



identified as a resource library in Western India within HELLIS Network. The membership of the library is open to MGIMS students and faculty and also to the supporting staff of the Kasturba Health Society. Members can borrow books and journals and retain them for a fortnight.

**DELNET:** In order to promote resource sharing among libraries through the development of a network of libraries, DELNET was established in 1988 as a Metropolitan Area Network in Delhi region. It has now become a major resource sharing library network in South Asia. It has about 600 libraries in all states in India and five countries outside India as its institutional members. DELNET offers access to about three million books and other documents through a number of union catalogues, union lists and other databases that are accessible through the internet. MGIMS has become a member of DELNET and this will provide us an array of facilities towards modernization of the central library.

**Videoconferencing:** The Department of Community Medicine uses video conferencing to link and discuss academic issues with students posted to their peripheral centres at Anji and Bhidi.

**2.3.8 Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the institution's educational processes?**

Though no separate group is assigned this duty, members of the Medical Education Unit frequently share all relevant updates with all faculty and students through intramail. The intramail access has enabled all faculty (not just MEU members) to discuss scientific and academic questions on an open forum. Topics such as plagiarism, scientific developments etc are often discussed. The library staff also shares pertinent material with faculty of different departments.

**2.3.9 What steps has the institution taken to transition from traditional classrooms into an e-learning environment?**

An e-learning initiative has been started at MGIMS in the form of MGIMS Classroom. This intends to develop a blended learning environment for both undergraduates and postgraduates. The initiative is in the second phase of development. The following steps have been taken:

- Sensitization phase: Introducing E learning platform and its advantages, challenges and preparation to the Dean and faculty.
- Training of core team: Training of faculty (phase 1) for MOODLE based MGIMS

classroom

- Training of all faculty by the core team
- Cluster meetings with various department heads and faculty for planning development of modules for E learning in their respective subjects.  
See **Annexure 2N** for more details.

**2.3.10 Is there provision for the services of counselors / mentors/ advisors for each class or group of students for academic, personal and psycho-social guidance? If yes, give details of the process and the number of students who have benefitted.**

- The mentoring system does exist. Each mentor is allotted 5-8 students. They meet the students on alternate months on fourth Wednesdays as per timetable and also in multiple unscheduled meetings singly or in groups. If the scheduled meeting is not possible, then it occurs on a mutually convenient date. The mentors are provided with all requisite information about the pupil so that they can provide academic and personal guidance. Details of functioning of mentoring cell are provided in Section 5.1.1
- The institute also has a Student Guidance and Counselling Centre. Details of this are provided in Section 5.1.4. In 2014-15, six students approached the centre for help.

**2.3.11 Were any innovative teaching approaches/methods/practices adopted and implemented by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?**

- As written above, the second phase of launch of e-learning is on (See **Annexure 2N**). Faculty have been trained and are being encouraged to produce e-learning modules in the blended learning format
- Interactive teaching, group discussions are carried out by most departments
- Problem based learning and case based learning have been introduced as written in Section 2.3.4
- Role plays and emergency drills started- See Section 2.3.4
- Peer teaching: The Department of Anatomy used peer teaching where students teach their fellow students in presence of faculty members. Topics are allotted to students and the one who is about to deliver is trained a day prior. Then that student is asked to speak in front of his class mates.

- Reflective practice: I MBBS students have been initiated towards writing reflections. They are asked to write reflections after their social service camp where they interact with their adopted families
- Fortnightly review: The Department of Anatomy has devised a concept of fortnightly review of learning. In this activity a meeting of all Anatomy faculty and UG students is conducted in a classroom. Students are openly asked to express their views on teaching activities conducted during last fifteen days. If student do not understand any topic they are encouraged to clarify the doubts. The faculty also asked the questions to students on topic taught earlier in all topics of Anatomy during last fifteen days. Initially students had little hesitation in expressing their view but later on this approach came out to be very fruitful. We found it effective method in identifying low achievers also.
- Internship orientation programme: Interns are taught medicolegal aspects, CPR, ethics, collection and transport of samples and public health issues along with National programmes, use of Hospital Information System when they first join in a 10 day programme.
- The Clinical Epidemiology Unit, Medical Education Unit and the Academy of Medical Sciences conduct orientation programme in Research Methodology for postgraduates. This is done a month before submission of thesis protocol to the University. They are taught how to decide a research topic, how to search literature using PubMed and Google Scholar, how to write a protocol, study design, how to collect data and analyze it and report writing.
- A workshop on Developing Good Study Skills has been started by MEU for undergraduates. This workshop deals with how to remember things, time management, Cornell's note taking, learning styles, Speed reading techniques, team work etc.

Faculty are encouraged to try out new things creatively. The MEU showcases these endeavours. Such stories are shared on intramail to encourage other teachers to try these methods.

### **2.3.12 How does the institution create a culture of instilling and nurturing creativity and scientific temper among the learners?**

- The Clinical Epidemiology Unit, Medical Education Technology cell and the Academy of Medical Sciences conduct orientation programme in Research Methodology for postgraduates. This is done a month before submission of thesis protocol to the University. They are taught how to decide a research topic, how to search literature using PubMed and Google, how to write a protocol, study design, how to collect data and analyze it and report writing.
- Undergraduates are being asked to volunteer to learn basics of research

methodology. Undergraduates take up research projects under Indian Council of Medical Research (ICMR- STS), KVPY, MUHS and others. Students who volunteer pair up with faculty mentors. These teams then learn the basics of research methodology and write protocols for projects to be completed in their summer vacation.

- In 2012, undergraduate students organized MEDICON- an undergraduate research conference. It was completely organized by undergraduates and was a huge success. Next year our undergraduates are organizing a National Bioethics Conference.
- The Students' Council provides ample opportunity to students to showcase their creativity. The Council has a Literary Society which organizes debates, elocutions, poetry sessions and other literary contests. The Magazine Society brings out Sushruta, the college magazine each year. The Cultural Society organizes the Annual College Festival which has dances, skits, fashion shows and other cultural activities. The Music Society organizes Sargam which is the college orchestra. The Sports Society facilitates the conduct of Sports day and intercollegiate programmes.

**2.3.13 Does the institution consider student projects mandatory in the learning program? If yes, for how many programs have they been (percentage of total) made mandatory?**

- **number of projects executed within the institution**
  - **names of external institutions for student project work**
  - **role of faculty in facilitating such projects**
- The Academy of Basic Medical Sciences is a body of faculty and students from the I MBBS. Under this, each student is expected to prepare a seminar in an allotted topic. Students prepare models and demonstrate these topics. Faculty from Anatomy, Physiology and Biochemistry departments facilitate these seminars. (See **Annexure 2L** for details)
  - The Department of Community Medicine facilitates the students to work in groups of 3-6 and conduct small research projects and surveys in the community. This is Essential National Health Research which students do under the guidance of a group of faculty. More details are given in Section 3.1.6)
  - While research projects are not mandatory, undergraduate students do volunteer to conduct research projects during their summer vacations. The faculty mentors serve as guides and together they submit protocols to ICMR-STS or MUHS STRG committees for funding.

Year	No of students doing research under ICMR, KVYP, MUHS and others
2011-12	9
2012-13	9
2013-14	8
2014-15	9
2015-16	13

See Criterion III and **Annexure 3 X** for more details of undergraduate research

**2.3.14 Does the institution have a well qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?**

- The institution has full time faculty in all departments as per the need of MCI. They are well qualified for teaching both undergraduates and postgraduates.
- Apart from this institute invites experts and faculty from outside (both national and international) through the platform of the MGIMS Academy of Medical Sciences for deliberating on certain topics of importance.

**2.3.15 How are the faculty enabled to prepare computer-aided teaching / learning materials? What are the facilities available in the institution for such efforts?**

- The institute has three artists- Mr Dinesh Gudadhe, Mr Ashok Wahiwatkar and Mr Gunwant Mahalle who have expertise in model making and art. They have also developed expertise in computer graphics and help in creating drawings and flowcharts and other educational material. In the past they have helped illustrate books and health education materials for the community, as well as organize health exhibitions.
- The institute has a photography section. Mr Satish Shingare, the photographer has expertise in preparing slides and transparencies. He also helps in videography and photography of clinical material for educational purposes.
- The institution has well equipped library with multiple computer stations with internet connectivity which can be utilized by the faculty for preparation computer aided teaching-learning activities.
- The entire campus is Wi-Fi enabled and has online resources like UpToDate which not only assist the clinicians in point of case decision making but are an irrefutable source for teaching and learning for undergraduate and postgraduates. The faculty also utilizes this resource for being updated about latest developments in their respective fields.

**2.3.16 Does the institution have a mechanism for the evaluation of teachers by the students / alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?**

Students' feedback is being taken and analyzed at the institutional level. The feedback form consists of departmental feedback. Feedback for individual teachers is not taken. However in the departmental feedback, there are open ended questions and students are free to give teacher feedback if necessary. The results of this feedback are disseminated to all departmental heads for discussion in their departments. Feedback which needs to be acted upon is implemented after building a consensus. Mentor-students meeting feedback also helps. This has resulted in improving the general facilities available to students at the hostels and the college building and in improving teaching.

**2.3.17 Does the institution use telemedicine facilities for teaching-learning processes? If yes, cite a few instances.**

No. However teleconferencing facilities are available. The Department of Community Medicine posts its residents and postgraduates to its peripheral centres. They have begun using the Big Blue Button facility available on MOODLE to conduct their postgraduate activities while simultaneously connecting to the peripheral centres in KRHTC Anji, RHTC Bhidi and Urban Health Centre Wardha.

**2.3.18 Does the institution utilize any of the following innovations in its teaching-learning processes?**

**\* ICT enabled flexible teaching system.**

Yes. We are in the process of starting blended learning. Teachers have been briefed about the concept of flipped classrooms. MGIMS has installed MOODLE on its server. Almost all faculty have received training in how to use MOODLE. Now the Medical Education Unit is helping faculty create and improve their e-learning modules. In the next phase students will be introduced to e-learning.

**\* Reflective learning**

Since 2015, we have started teaching I MBBS students how to write reflections. A special session is taken on the importance of reflections. Students are asked to write reflections after their social service camp. Students responded well to this session.

**\* Simulations**

The institute has a centralized skills laboratory. List of equipment available in the lab is given in Section 2.3.31. The timetable has specific time slots for Skills Lab teaching.

Cardiopulmonary resuscitation and neonatal resuscitation workshops are conducted regularly. Both Basic and Advanced Life Support Skills workshops (recommended by AHA) have been conducted. IAP accredited workshops for neonatal and pediatric CPR training are also regularly held. The Government of India has chosen MGIMS to begin a Skills Centre for National Emergency Life Support training. Rs 2.68 crores have been sanctioned for this purpose. Mannequins have been procured already.

**\* Evidence based medicine**

Yes. Postgraduates are taught the basics of evidence based medicine. In the research methodology workshops they are taught how to search literature, and critically appraise a research paper. With free availability of tools such as UptoDate and internet, they are able to access latest literature at the point of care and start appropriate management of patients.

**\* Emphasis on development of required skills, adequate knowledge and appropriate attitude to practice medicine.**

Yes. A lot of emphasis has been given to skills teaching as written above under simulation, knowledge as well as developing the appropriate attitudes (mentioned above in details of orientation and social service camps)

**\* Problem based learning (PBL)**

Yes. Both problem based learning and case based learning are being used by some departments. Details have been provided in Section 2.3.4 and in **Annexure 2 K**

**\* Student assisted teaching (SAT)**

Peer teaching is done by some departments like Anatomy with faculty supervision. In I MBBS, senior students are involved to teach new students the importance of respecting the cadaver in the Bioethics workshops.

**\* Self directed learning and skills development (SDL)**

On the demand of students, at least four hours of self directed learning have been incorporated in the first year's time table. This allows them time for self directed learning. Faculty facilitators are available around in case their guidance is required. Students are taught basics of literature search using PubMed. They are also give time to hone their skills in the skills laboratory.

**\* Narrative based medicine**

Several teachers use this style of teaching on an individual basis to narrate experiences to students and influence their attitudes. Gandhian values are imparted by narrating stories about the life and times of Gandhi in the orientation camp. This style is also used to teach adolescent health, HIV/AIDS, tuberculosis, gender discrimination and

women's health issues during the social service camp.

**\* Medical humanities**

Several aspects of medical humanities such as communication skills, professionalism, ethics and values are taught and discussed with students at different forums. This is not only done in individual specialities, but also when required special workshops are conducted. As described earlier, these topics are integrated into the entire curriculum right from the Orientation camp where workshops on communication skills, verbal and non verbal communication, bioethics, values in health care (VIHASA) etc are organized. These are reinforced again and again in later years and different aspects such as breaking bad news, grief counseling, medicolegal aspects, ethics are dealt with in deeper detail. Guest speakers are also invited to the Academy of Medical Sciences to speak on these issues.

**\* Drug and poison information assistance centre**

No separate drug and poison information assistance centre exists. However during the Forensic Medicine classes, undergraduates are taught about drugs and poisons. They have specimens in the museum. There is also a Toxicology laboratory which is used to find out causes of poisoning in patients. That is also used for teaching purposes.

**\* Ayurveda practices**

The institute has a Centre for Alternative Systems of Medicine. Ayurveda is not taught to undergraduates in the MBBS course.

**\* Yoga practices, Yoga therapy techniques, Naturopathy and its practices.**

Yoga is introduced to students and practiced daily during the orientation camp. Besides this yoga and naturopathy are practiced at Arogyadham and this is open to all students. Arogyadham regularly organizes camps and workshops on these topics.

**\* Any other.**

**2.3.19 Does the institution have an Electronic Medical Records facility, staffed by trained and qualified personnel? Is it used for teaching-learning process?**

Kasturba Hospital has an advanced state of the art Hospital Information System (HIS). It is manned by a database administrator and other trained personnel. This system captures, stores and retrieves all data related to half a million outpatients and 45,000 inpatients every year. Most laboratories are paperless now, and residents and consultants are able to access all test results, radiologic images- anytime anywhere.



The system has close to 18 modules- all functioning – that capture data from registration, insurance, admission counters, outpatient departments, labs (Pathology, Microbiology, Biochemistry and radiology), inpatient departments, blood bank, operating rooms, Pharmacy, Kitchen and discharge counter. A Picture Archival and Communication System (PACS) now enables doctors to access the radiology images (radiographs, CT images, MRI images and USG) on their desktops.

The unique addition to the system is the use of iPads at the point of care- now the doctors can access the patient data at the bedside itself. This application – specially designed and developed for MGIMS- has been introduced for the first time in India- no public or private hospital in the country is using iPads at the point of care. They can peep into the patients’ records, review past histories, and generate electronic discharge summaries using this system. The system has minimized human errors, increased the accuracy of data and improved patient outcomes.

The system is being used by residents for teaching learning and dissertation work. They are trained in use of the HIS. It is utilized for training post graduates to help in patient care, better access of investigations and point of care decision making.

**2.3.20 Does the institution have well documented procedures for case sheet writing, obtaining informed consent and the discharge process of the patients?**

Yes. Students are taught essentials of case sheet writing in the clinics. Residents learn how to write discharge cards in the workplace. The department of Forensic Medicine trains undergraduates in how to write injury reports, fitness reports, death certificate, postmortem reports, sickness reports and reports of weapon examination. It also trains them in how to take informed consent.

**2.3.21 Does the institution produce videos of clinical cases and use them for teaching-learning processes?**

Yes. Several departments produce clinical videos and use them for teaching purposes. The Department of Ob/Gyn has produced videos of normal delivery, breech delivery, application of vacuum, forceps, suturing of episiotomy, catheter insertion, IV line insertion, hysterectomy, procedures of managing PPH and Caesarean section for teaching purposes. The Department of Ophthalmology uses special recording equipment to produce videos of intraocular surgeries mainly cataract surgery. These are used to teach the surgical steps of cataract surgery to undergraduates. Other videos of phacoemulsification and SICS are routinely used by them in lectures. The Department of Community Medicine teaches the importance of community mobilization through videos produced under Community Led Initiatives for Child Survival (CLICS) program run by them.

In addition, other standard videos are used for teaching. E.g.:

- Videos or movies made by the Voluntary Health Association of India (VHAI) on addiction, sanitation and life skills
- Standard IAP videos for teaching Specific skills of Neonatal resuscitation
- UNICEF videos for IMNCI: Various danger signs in a sick newborn and child eg. chest retraction; Signs of good attachment and positioning in breastfeeding.

**2.3.22 Does the institution perform medico legal/post-mortem procedures with a view to train the undergraduate and post-graduate students in medico legal procedures?**

Yes, the institute has a full fledged Forensic Medicine department and mortuary. Undergraduates are expected to attend 10 post mortems and record them in their journals. Post graduates in the department of Forensic Medicine do perform post mortems and other post-graduates observe all post mortems. In addition, the department trains students, residents and nurses in medicolegal aspects of medical practice. The department has adequate number of charts, models and weapons in its museum for teaching purposes.

MGIMS has a distinction of developing nation's first Clinical Forensic Medicine Unit (CFMU). The unit handles all forensic issues related to the accidents and emergencies and also looks at medico legal problems of the inpatients. See **Annexure 1Q** for details.

**2.3.23 Does the institution have drug and poison information and poison detection centers? How are these used to train the students?**

While the Dept of Forensic Medicine and Toxicology does not have drug & poison information and poison detection centre, undergraduate students are taught about drugs and poisons in their course using specimens from the museum. Theory and practical classes are held on these topics.

**2.3.24 Does the institution have a Pharmacovigilance / Toxicology centre /clinical pharmacy facility / drug information centre/Centre for disease surveillance and control/ Prevention through Yoga/Promotion of positive health/Well-equipped Psychology Laboratory/ Naturopathic diagnostic centre, etc.?**

- Toxicology laboratory: The Department of Forensic Medicine and Toxicology runs a Toxicology laboratory which helps in diagnosis of poisoning cases. This

laboratory is also used to teach postgraduates details of medicolegal aspects of poisoning.

- **Pharmacovigilance:** The Department of Pharmacology is recognized as a Regional Pharmacovigilance Centre by the Govt. of India where it collects data of adverse drug reactions and sends the reports to the National ADR centers for further analysis from Vidarbha Region. It provides services for pharmacodynamic drug estimation on request from the Clinical Departments.
- **Epidemiological Surveillance Unit:** Under the activity of Epidemiological Surveillance Unit, daily data is collected from the hospital wards (especially Medicine, Pediatrics and Skin) based on standard definition given for each disease. Investigation and follow up are carried out for all these patients. Depending upon the need, necessary action is taken for its control. The report is finally sent to the district authorities. During 2015-16, epidemiological surveillance was done for 708 patients suffering from various communicable diseases. The break-up of confirmed cases of communicable diseases are as follows:

<b>Disease</b>	<b>TOTAL</b>
AFP	7
AGE	193
Diphtheria	0
Malaria	67
Measles	4
Dengue	32
Typhoid	15
Cholera	11
Meningitis	5
Tetanus	0
Viral Hepatitis	116
Viral Encephalitis	5
Leptospirosis	191
<b>TOTAL</b>	<b>708</b>

- **Arogyadham:** Arogyadham is an integrative health care and research project of Kasturba Health Society on the medical campus for promotion of positive health. In addition to taking care of preventive and curative aspects of health care in lifestyle disorders and chronic ailments such as hypertension, back pain, bronchial asthma, diabetes etc. with Naturopathy and Yoga therapy, it has a nature park.

Arogyadham presently has a Kasturba Nisargopchar Kendra equipped with nature cure facilities with specialization in holistic life style management, acupressure, reflexology, walkways, cottages for short stay, canteen with vegetarian health foods, yoga and pyramid meditation hall, spiritual library with number of health and spiritual books and magazines, audio-visual and recreation facilities for the benefit of residents. In addition, a nature park with accu-pebbles walking track with serene herbal garden (225 acres) (aonla), simple cottages with solar water heaters for comfortable stay have been established.

- Kasturba Yoga and Naturopathy Kendra: Nature cure facilities namely hydrotherapy (steam bath, spinal bath & spray, hip bath, packs etc.), massage (partial & full), vibratory massage, mud therapy (partial & full), colour therapy with chromothermoleum, yoga therapy (daily classes, kriyas etc.), acupressure, diet therapy etc. are available. 24 cottages have been constructed with financial support from Smt. Aparna Ben Trivedi.

During the year 2015-2016, 2192 (including packages) persons visited Arogyadham with physical complaints like arthritis, bronchial asthma, hypertension, diabetes, obesity, and got treatment and benefited. Further, healthy people also utilized the facilities of massage, steam bath etc. for refreshing and energizing themselves. 1431 persons took treatment as Out-Patient (OPD) and 761 persons took treatment as In-Patient (IPD).

### 2.3.25 Laboratories / Diagnostics

- \* **How is the student's learning process in the laboratories / diagnostics monitored? Provide the laboratory time table (for the different courses).**
- \* **Student staff ratio in the laboratories / diagnostics.**

Student learning in the laboratories is monitored during practicals and through the practical examinations. Students have separate time for practicals in the time table (**See Annexure 2G**). Here, small group teaching is carried out where both faculty and residents are involved in demonstrations. Student: staff ratio in the various preclinical and paraclinical departments for undergraduate teaching are as follows:

Department	Student: staff ratio in practicals
Anatomy	10: 1
Biochemistry	10: 1
Physiology	10:1
Pathology	4:1
Microbiology	8:1

Forensic Medicine	10:1
Pharmacology	10:1

**2.3.26 How many procedures / clinical cases / surgeries are observed, assisted, performed with assistance and carried out independently by students in order to fulfill learning objectives?**

Undergraduate students are demonstrated the following procedures in their clinical postings:

- Incision and drainage of abscess
- Debridement and suturing open wound
- Venesection
- Excision of simple cyst and tumors
- Biopsy of surface malignancy
- Catheterization
- Nasogastric intubation
- Umbilical venous catheter insertion
- Central venous catheter insertion
- Intra arterial cannulation for invasive blood pressure monitoring
- Central venous line insertion
- Circumcision
- Vasectomy
- Diagnostic proctoscopy
- Hydrocoele operation
- Endotracheal intubation
- Spinal Anesthesia, Epidural anesthesia, Upper limb regional anesthesia, General Anesthesia with various airway devices like supraglottic airways and endotracheal intubation.
- Basics about managing airway and cardio pulmonary resuscitation on simulation mannequins.
  - Tracheostomy
  - Chest tube insertion
  - Wound Suturing
  - Pleural tap, Ascitic tap
  - Lumbar puncture
  - Bone marrow aspiration and biopsy
  - FNAC
  - Liver biopsy
  - Endoscopic procedures
  - ECG

- X Ray, CT, USG, MRI
- Pulmonary function tests
- Blood gas analysis
- Dialysis
- Slit skin smears
- Skin biopsy
- Anthropometry
- Immunization
- Collection of vital statistics
- Waste disposal
- Nutritional assessment
- Splinting, plaster, immobilization for orthopedic lesions
- CPR
- Visual acuity testing
- Tonometry
- Direct ophthalmoscopy
- Sac syringing
- Color vision testing
- Confrontation Perimetry
- Refraction
- IOL power calculation - Biometry
- Slit Lamp Microscopy
- Corneal curvature assessment using Placido's Disc
- Fluorescein Staining of cornea/tear film
- Corneal foreign body removal
- Corneal sensation testing
- Anterior chamber depth assessment
- Eye drops instillation
- Dacryocystectomy
- Cataract Surgery -SICS and Phacoemulsification with IOL implantation
- Dentistry: Root canal treatment, dental extraction under LA; Third molar (wisdom tooth) surgery;Dental trauma cases and mgt; oral prophylaxis; ceramic crowns and bridges; diagnosis and mgt of precancerous lesions and conditions; gum surgery; full mouth rehabilitation;cosmetic dentistry including braces
- Ear syringing
- Nasal packing
- Removal of foreign bodies from nose, ear, throat
- Normal delivery
- Resuscitation of newborn
- Immediate postnatal care

- IUCD insertion, tubectomy
- Pap smear, wet smear for trichomonas, moniliasis
- Caesarean section episiotomy suturing
- Cervical encerclage
- Dilatation and curettage
- Hysterectomy
- Laparotomy
- Tubectomy
- Preparation of ORS
- Giving injections (intramuscular, subcutaneous and intradermal)
- Cold chain maintenance, How to check thermal stability of the vaccines using vaccine vial monitor
- Epidemiological skills: How to prepare survey tools, Data collection (both quantitative and qualitative data), Data entry and analysis, Tabulation and presentation of data, Calculation of morbidity and mortality indicators
- Community skills: Health education on common topics, Use of essential drugs in the community with the awareness of availability, cost and side effects

**2.3.27 Does the institution provide patients with information on complementary and alternative systems of Medicine?**

The institutional principles believe in the philosophy of alternative and complementary medicine and the information is propagated to patients at all possible avenues. Mind and body interventions like yoga, meditation, prayer, mental healing is utilized to augment better outcomes after diseases. Manipulative and body based methods in the form of massages and various naturopathic practices are offered to patients in the Naturopathy centre run by the Kasturba Health Society. The institute runs Arogydham and a Centre for Alternative Systems of Medicine.

**2.3.28 What are the methods used to promote teaching-learning process in the clinical setting?**

The various teaching learning methods being used to promote clinical teaching in this institute are:

- Bedside teaching
- Skills teaching, simulation based teaching
- Problem based learning
- Case based learning
- Role plays, Drills
- Integrated teaching
- Project based learning

- Observation in clinics, OPD, Operation theatres
- Community oriented teaching and training in Social service camps, ROME camps by community based projects
- Experiential learning: small research projects are carried out by students

**2.3.29 Do students maintain log books of their teaching-learning activities?**

- Log books have to be maintained by interns and postgraduate students which helps them in keeping a record of their teaching and learning. This is mandatory for MUHS guidelines.
- Undergraduate students are expected to keep journals of their practical learning in most subjects in pre and paraclinical subjects

**2.3.30 Is there a structured mechanism for post graduate teaching-learning process?**

The various departments in the institute have well established structured programmes for post graduates. Each department has established mechanisms by which teaching learning for post graduates is governed. The teaching learning process for postgraduates is done over the period of three years and is distributed across the various faculties of the speciality in which the student is undergoing post graduation. Typically a post graduate goes through rotations in all the subspecialties requisite for that particular subject. Teaching and learning not only happen in the workplace but also during the regular postgraduate teaching sessions in the form of seminars, symposia, journal clubs, slide seminars, case presentations, discussion on diagnostics, mortality meets and inter departmental meets like clinico-radiological meetings and clinico-pathological meetings.

**2.3.31 Provide the following details about each of the teaching programs:**

**\* Number of didactic lectures:**

Lectures constitute one third of all teaching methods. The duration of each lecture is of one hour. The MUHS guidelines are followed and the recommended hours for lectures are as follows:

Anatomy	209
Physiology	191
Biochemistry	113
Pathology	101



Microbiology	71
Pharmacology	105
Forensic Medicine	40
Community Medicine	148
ENT	48
Ophthalmology	70
Medicine	265
Skin	35
Psychiatry	20
Pediatrics	65
Surgery	160
Orthopedics	50
Anesthesia	20
Radiology	20
Dentistry	10
Obs/Gyn	130

**\* Number of students in each batch**

2011	65
2012	100
2013	100
2014	65
2015	96

**\* Number of rotations**

The Chairperson of the Curriculum Committee plans out the schedule, and circulates to all departments and students. See Annexure 2H for details of rotations

**\* Nursing Care Conference (NCC)**

Nursing care is not actively taught to undergraduates. However some tasks which are taught to them are: temperature recording; injection techniques; disposal of sharps; nasogastric tube insertion; and catheterization. Other tasks that an undergraduate student passively learns while seeing the staff nurses performing during their clinical postings are:

- Tepid water sponging

- Bladder, bowel and back care for stroke patients.
- Care of a central line
- Care of ventilated patient

\* **Number of medical / dental procedures that the students get to see**

The undergraduate students get to see the following procedures in their pre, para and clinical postings:

***Preclinical years:***

- Spirometry
- Perimetry
- Stethography
- Ergography
- Cardiopulmonary Efficiency Tests
- ECG
- Spectroscopy
- Chromatography
- Electrophoresis
- Performing routine biochemical tests (glucose, proteins, urea, creatinine, bilirubin, liver enzymes etc.)
- Urine Analysis

***Para clinical years***

- Collection of samples
- Basic hematological techniques
- Basic blood bank techniques: grouping, cross match
- Basic histopathologic techniques
- Basic microbiologic procedures: Gram and ZN staining, sterilization, plating, stool examination
- Urine analysis
- Autopsy
- Semen analysis
- Pregnancy test
- CSF examination
- Age determination
- Sputum examination

***Clinical postings:***

- Incision and drainage of abscess
- Debridement and suturing open wound

- Venesection
- Excision of simple cyst and tumors
- Biopsy of surface malignancy
- Catheterization
- Nasogastric intubation
- Umbilical venous catheter insertion
- Central venous catheter insertion
- Intra arterial cannulation for invasive blood pressure monitoring
- Central venous line insertion
- Circumcision
- Vasectomy
- Diagnostic proctoscopy
- Hydrocoele operation
- Endotracheal intubation
- Spinal Anesthesia, Epidural anesthesia, Upper limb regional anesthesia, General Anesthesia with various airway devices like supraglottic airways and endotracheal intubation.
- Basics about managing airway and cardio pulmonary resuscitation on simulation mannequins.
  - Tracheostomy
  - Chest tube insertion
  - Wound Suturing
  - Pleural tap, Ascitic tap
  - Lumbar puncture
  - Bone marrow aspiration and biopsy
  - FNAC
  - Liver biopsy
  - Endoscopic procedures
  - ECG
  - X Ray, CT, USG, MRI
  - Pulmonary function tests
  - Blood gas analysis
  - Dialysis
  - Slit skin smears
  - Skin biopsy
  - Anthropometry
  - Immunization
  - Collection of vital statistics
  - Waste disposal
  - Nutritional assessment
  - Splinting, plaster, immobilization for orthopedic lesions

- CPR
- Visual acuity testing
- Tonometry
- Direct ophthalmoscopy
- Sac syringing
- Color vision testing
- Confrontation Perimetry
- Refraction
- IOL power calculation - Biometry
- Slit Lamp Microscopy
- Corneal curvature assessment using Placido's Disc
- Fluorescein Staining of cornea/tear film
- Corneal foreign body removal
- Corneal sensation testing
- Anterior chamber depth assessment
- Eye drops instillation
- Dacryocystectomy
- Cataract Surgery -SICS and Phacoemulsification with IOL implantation
- Dentistry: Root canal treatment, dental extraction under LA; Third molar (wisdom tooth) surgery;Dental trauma cases and mgt; oral prophylaxis; ceramic crowns and bridges; diagnosis and mgt of precancerous lesions and conditions; gum surgery; full mouth rehabilitation;cosmetic dentistry including braces
- Ear syringing
- Nasal packing
- Removal of foreign bodies from nose, ear, throat
- Normal delivery
- Resuscitation of newborn
- Immediate postnatal care
- IUCD insertion, tubectomy
- Pap smear, wet smear for trichomonas, moniliasis
- Caesarean section episiotomy suturing
- Cervical encerclage
- Dilatation and curettage
- Hysterectomy
- Laparotomy
- Tubectomy
- Preparation of ORS
- Giving injections (intramuscular, subcutaneous and intradermal)
- Cold chain maintenance, How to check thermal stability of the vaccines using vaccine vial monitor

- Epidemiological skills: How to prepare survey tools, Data collection (both quantitative and qualitative data), Data entry and analysis, Tabulation and presentation of data, Calculation of morbidity and mortality indicators
- Community skills: Health education on common topics, Use of essential drugs in the community with the awareness of availability, cost and side effects

**\* Mannequins / Simulation / skills laboratory for student teaching**

The skills lab has seating space, blackboard and an LCD projector to conduct classes for groups up to 25 students at a time. This is a list of equipment available in the centralized skills laboratory for students teaching:

- Dummy to train in basic and advanced life support
- Pediatric PALS or PBLIS child mannequins with expandable lungs- for teaching CPR, airway management, IV, ECG, umbilical cannulation, intraosseous infusion
- Adult ACLS mannequin with interactive arrhythmia simulator- to teach CPR, airway management, intravenous and intramuscular injections, BP measurements and defibrillation support, ECG monitoring
- Child heart and lung sound trainer/ simulator
- Adult CPR torso with light controller with ambu bag
- ECG simulator (both adult and pediatric) for demonstration of various rhythms in adult and child. Can be connected to defibrillator and external pacer
- Suture practice arm
- Male and female catheterization simulator
- Surgery and laparoscopy trainer
- Childbirth simulator- for normal, breech and vertex delivery, two fetus (for Leopold's manoeuvre and foetal position), full term foetus with fontanelles and cranial sutures, placenta with cord
- Articulating fetus
- Articulating pelvis- to demonstrate childbirth, fetal head progress through pelvis-- female pelvis with movable symphysis, hip bone, sacrum, coccyx and two lumbar vertebrae
- Cervical dilatation assessment model
- Episiotomy and perineal laceration training simulator
- Model showing female reproductive organs
- Fetal skull 30 wk gestation
- Female pelvis

- Model showing perineum with ligaments, nerves, pelvic floor and organs(6 part model)
- Model for IUCD insertion- family planning educator

Besides this individual departments have their own equipment in their departmental skills labs:

Pediatrics: 10 basic infant mannequins and 7 basic child mannequins (capable of showing only chest rise and hence useful to teach- initial steps of resuscitation and Bag-Mask ventilation). These include the manikins from the IAP CPR Training Center of the department.

Anesthesia: Runs the MGIMS institute of simulation training. Conducts AHA accredited BLS and ACLS courses. They have their own equipment for this.

A new centre for National Emergency Life Support (NELS) training worth over Rs 2 crores is under construction.

**\* Number of students inside the operation rooms at a given time**

There are a total of 13 operation theatres (OT). These consist of ten main operation theatres and three OTs for septic and emergency operations. Around 8-10 students per batch are simultaneously posted in the OT on each day. Two such batches join in different OTs each day. They observe live surgeries over 3 hours. Students are posted in various clinical departments (Surgery, Ophthalmology, Obstetrics and Gynecology, ENT and Orthopedics). The individual departments decide on when to post students to the operation theatre during their clinical posting. They are taught about preoperative work, anesthesia. In some subjects like Ophthalmology, surgeries are also projected via microscope to a large 32" LCD monitor for proper viewing of details

Students are posted in emergency area including Labor room for one week and expected to conduct at least 2 deliveries under supervision. They also observe abnormal deliveries and Caesarian sections. They are posted in the ICU on night emergency for one week.

**\* Average number of procedures in the ORs per week, month and year**

Each day, 20-25 major surgeries are carried out and 30-35 surgeries are carried out under local and regional short acting general anesthesia in the main operation theatre. Average operations / week is 326. Average operations / month is 1414. These are details of the total number of surgeries carried out in 2015-16

## OPERATIONS & PROCEDURES

Speciality	Major	Simple	Minor	Total
Obst. & Gyn.	2892	-	3588	6480
Surgery	1959	-	3395	5354
Orthopedics	1209	-	208	1417
Ophthalmology	5456	229	2549	8234
Neurosurgery	101	-	25	126
ENT	746	-	542	1288
Dental	443	-	1674	2117
Utawali Project	148	-	239	387
<b>Total</b>	<b>12954</b>	<b>229</b>	<b>12220</b>	<b>25403</b>

Anesthesia data for 2015-16 is as follows:

## ANESTHESIA

General	2068
Regional	3768
Short GA	1653
IV Anesthesia	260
PAC OPD	7984

### \* Autopsy / Post-mortem facility

Undergraduates are expected to see at least 10 postmortems and record details of them in their journals. The Department of Forensic Medicine has facilities for conducting postmortem with a gallery for students to view from. Students are also taught basics of how to fill up postmortem forms, injury examination, weapon examination forms, death certificates etc.

## 2.4 Teacher Quality

### 2.4.1 How does the institution plan and facilitate its faculty to meet the changing requirements of the curriculum?

- As mentioned earlier, we follow the curricula developed by the affiliating university; Maharashtra University of Health Sciences (MUHS). The Boards of Studies take care of reviews and updates.
- Any changes in the curriculum are updated on the website and all the stakeholders are accordingly informed. The undergraduate and postgraduate curriculum

committees incorporate these changes to the time tables and inform departments accordingly.

- Recently, the MUHS shifted to a competency based curriculum. Focus is on acquiring competencies at different levels. The milestones and proficiencies expected from learners are clearly defined in the curriculum. Efforts are on at the University level to implement an assessment system which will value development of competencies. To facilitate faculty development in this area, the Regional Nodal MET Centres of the Medical Council of India as well as our Medical Education Unit trained our teachers in Competency Based Medical Education. The MEU of the institute introduces the concept of curriculum and trains all faculty in Competency Based Medical Education
- MUHS has recently introduced the concept of Bioethics for the undergraduates. Faculty members from the institute were trained by the University to teach students as well train the trainers.
- We organized a National Conference on Health Professions Education in 2014 where all recent topics such as competency based education, reflective practice, simulation based teaching, curriculum planning etc. were dealt with in detail. (See Annexure 1X)

**2.4.2 Does the institution encourage diversity in its faculty recruitment? Provide the following details (department / school-wise).**

Yes. The institution encourages faculty from all parts of India to join its ranks. There is no preference for faculty of any particular state. Details are provided below:

<b>Department</b>	<b>% of faculty from the same institution</b>	<b>% of faculty from other institutions within the State</b>	<b>% of faculty from institutions outside the State</b>	<b>% of faculty from other countries</b>
Anatomy	27.77%	27.77%	45.45%	0
Biochemistry	50%	0	50%	0
Community Medicine	41%	41%	18%	0
Dentistry	16.6%	66.6%	16.6%	0
ENT	33.33%	66.66%	0	0
Forensic Medicine	75%	25%	0	0
Medicine	21%	57%	42%	0
Microbiology	16.6%	66.6%	16.6%	0
Obs & Gynec	66.66%		33.33%	0



Ophthalmology	17%	50%	33%	0
Orthopedics	84%	16%	0	0
Pathology	72.72%	-	27.27%	0
Pediatrics	32%	68%	0%	0
Pharmacology	20%	60%	20%	0
Physiology	16.66%	66.66%	16.66%	0
Psychiatry	0	33.33%	66.67%	0
Radiology	0	100%	0	0
Radiotherapy	17%	17%	66%	0
Skin & VD	33.33%	0	66.66%	0
Surgery	45.45%	27.27%	27.27%	0
<b>Total</b>	<b>33.57%</b>	<b>37.14%</b>	<b>29.28%</b>	<b>0</b>

**2.4.3 How does the institution ensure that qualified faculty are appointed for new programs / emerging areas of study? How many faculty members were appointed to teach new programs during the last four years?**

- Members of the faculty are selected by a Selection Committee appointed by the Maharashtra University of Health Sciences. Experts are appointed by the University and an interview is conducted.
- The college has adequate number of qualified and competent teachers. However in certain cases, Visiting Professors and Honorary members are appointed to train faculty and students in newer advances or superspecialities. The institute avails facilities of a neurosurgeon, a laparoscopic surgeon, gastroenterologist, arthroscopic surgeon, cardiologists, interventional radiologist and a pediatric surgeon as visiting consultants.
- The institute doesn't usually appoint new teachers to new programs, but believes in capacity building. The existing faculty members are allowed to train in the new areas. Faculty members are sent for training programmes / workshops / conferences either by granting them special leave or on deputation. (**Annexure 20**- List of faculty sent for training)

**2.4.4 How many Emeritus / Adjunct Faculty / Visiting Professors are on the rolls of the institution?**

These are shown in the table below:

	<b>Emeritus Professor</b>	<b>Professor</b>	<b>Associate Professor</b>	<b>Assistant Professors</b>	<b>Total</b>	<b>Visiting Professors</b>
<b>2012</b>	2	62	26	73	164	7
<b>2013</b>	2	59	29	63	154	9
<b>2014</b>	2	61	29	68	159	9
<b>2015</b>	2	59	25	56	143	11
<b>2016</b>	3	58	29	51	142	14

**2.4.5 What policies/systems are in place to academically recharge and rejuvenate teachers? (e.g. providing research grants, study leave, nomination to national/international conferences/seminars, in-service training, organizing national/international conferences etc.)**

The institute encourages its faculty members to be academically motivated and focused by providing a conducive environment to recharge and rejuvenate them academically. The following policies are in place.

- The institute has a provision of providing 15 special leaves per year for its faculty to attend conference / workshops/training/ scientific meets either nationally or internationally. The course should be approved by the University, State or Central Government or an International Agency inside or outside the country. Out of the above 15 days, special leave may also be granted to a faculty member to enable him to be an examiner in other Medical College/ University provided such faculty member spends at least five days for attending conference/ workshop/seminar outside the Institute in a calendar year. (**Annexure 2P**)
- For attending International Conferences out of the country - Faculty is granted permission once in 5 years. Amount sanctioned is a maximum of Rs. 1,00,000/- (Rupees one Lac only) and is sanctioned for the expenditure incurred and preference will be given to the outstanding faculty members which will be decided by the President, KHS. (**Annexure 2P**)
- Faculty members are permitted under the rules to attend national and international conference, workshops and scientific meets. within the country are entitled for reimbursement of registration fees, boarding & lodging expenses and travel expenses only once a year as follows:
- For Conference: Registration fee upto Rs. 10,000/- is paid only on production of documentary proof of paper presentation or chairing the session.
- For Workshop & CME : Registration fee upto Rs. 10,000/- is paid only on production of documentary evidence of attendance.
- Rs 2500 per day for not more than three days is paid for boarding and lodging expenses on production of documentary evidence (**Annexure 2P**)

- 2 Tier AC Train fare is reimbursed on actual basis on production of original tickets
- The institute also permits faculty to avail study leave depending on their performance. In such cases, faculty may have to sign a bond to continue working with the institute after their training is complete for a certain time period.
- Faculty is encouraged to apply for research grants to outside agencies. However the Kasturba Health Society has also earmarked Rs 10 lakhs for small faculty research projects upto a maximum of Rs 25000 each.
- Departments are encouraged to organize conference and workshops. While we apply to national and international agencies for funding, Kasturba Health Society also funds part of the conference organization.

**2.4.6 How many faculty received awards / recognitions for excellence in teaching at the state, national and international level during the last four years?**

The institute and its faculty have received the following awards and recognition for teaching and training:

- MGIMS was awarded the WHO Award for Excellence in Training to Primary Health Care Providers at the ICICI Lombard and CNBC TV18 India Health Care Awards on 22 Dec 2011.
- MGIMS was ranked as the 17th best medical school in the country by the Outlook weekly magazine.
- Dr MVR Reddy received the Dr Sharadini Dahanukar Best Teacher Award from Maharashtra University of Health Sciences, Nashik
- Dr KY Vilhekar was awarded “Excellence in Teaching” award by Maharashtra IAP at Nashik
- Dr Anshu has been awarded International Fellowship in Medical Education (IFME) for the year 2012 by the Foundation for Advancement of International Medical Education and Research (FAIMER) to pursue Masters in Health Professions Education (MHPE) from Maastricht University, 2012-14 She was awarded Masters in Health Professions Education (MHPE) with distinction from Maastricht University on 3 Jun 2014.
- Dr Shuchi Jain awarded Certificate of Appreciation in recognition of laudable participation in conducting EmOC by FOGSI, ICOG and Ministry of Health and Family Welfare, GOI on 10th Feb 2013.
- Dr Akash Bang awarded ‘Champion of NRP FGM’ trophy in January 2013 for outstanding contribution to Indian Academy of Pediatrics NRP FGM (Neonatal Resuscitation Program- First Golden Minute) as Maharashtra State Academic Coordinator.

- Dr MVR Reddy received GSMC FAIMER Fellowship from FAIMER Regional Institute, Seth GS Medical College & KEM Hospital, Mumbai on 9 June 2013
- Dr Vijayshree Deotale and Dr Surekha Tayade were awarded for PSG-FAIMER Fellowship at PSG FAIMER Regional Institute, Coimbatore
- Dr Nitin Gangane was appointed as Acting Pro-Vice Chancellor of MUHS Nashik from 5 Feb to 24 Mar 2014
- Dr Akash Bang was felicitated by Indian Academy of Pediatrics (IAP) on 7 Jan 14 in Indore at the 51st Annual National Conference of IAP- Pedicon 2014 for contribution to the Neonatal Resuscitation Training activities.
- The Dept of Pediatrics was declared by the Indian Academy of Pediatrics as an IAP accredited CPR training center for conducting provider and instructor level courses in Basic Life Support.
- The Dept of Pediatrics was selected by the Directorate of Health Services Maharashtra as the only nodal center in Vidarbha and one of the only 3 nodal centers in Maharashtra state for training of government health personnel in “Facility Based Newborn Care”.
- The Dept of Pediatrics was selected as training center by Govt of Maharashtra for 6 months training of Medical Officers in Pediatrics under “Medical Officers Certificate Program.”
- The three laboratories of MGIMS in the Departments of Pathology, Biochemistry and Microbiology have been nominated under the “Labs for Life” project of CDC, NACO and Ministry of Health and Family Welfare (MOHFW).
- Dr Anupama Gupta was awarded the Shikshak Bhushan award by the Mahatma Gandhi International Hindi University on 5 Sep 2014
- Dr Subodh Sharan Gupta and Dr Anshu were awarded TUFH Fellowships to attend the Network Conference Towards Unity for Health, Fortaleza, Brazil, 19-23 Nov 2014
- Dr Anshu was nominated as Member, Indian Advisory Board of Robbins & Cotran’s Pathologic Basis of Disease,
- 9th edition, South Asia Edition (Ed: Kumar, Abbas, Fausto), 2014
- Dr Akash Bang was awarded the Diamond Trophy by Indian Academy of Pediatrics (IAP) on 20 Jan 15 in New Delhi at the 52nd Annual national conference of IAP- PEDICON 2015 for significant contribution to the Neonatal Resuscitation Training activities in the state of Maharashtra.
- Dr Bharati Taksande was selected for the GSMC-FAIMER Fellowship from, GSMC- FAIMER Regional Institute, Mumbai in 2015.

#### 2.4.7 **How many faculties underwent professional development programs**

**during the last four years? (Add any other program if necessary)**

Please also see **Annexures 2Q** for conference attended, workshops attended

Faculty Development Programs	Number of faculty who attended				
	2011-12	2012-13	2013-14	2014-15	2015-16
Induction programs	66	71	8	48	121
Re-orientation programs	74	72	35	28	43
Refresher courses	51	143	66	103	94
Capacity building programs	63	74	101	36	36
Programs by regulatory / apex bodies	7	2	1	11	14
Meetings	59	65	60	58	63

**2.4.8 How often does the institution organize academic development programs (e.g.: curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc.) for its faculty aimed at enriching the teaching-learning process?**

See **Annexure 2R** for all academic activities conducted by Medical Education Unit and Research Committee

**Curriculum development program**

- The MEU conducts Basic MET workshops and sensitizes the faculty of the institute to basic concepts of curriculum development.
- The sixth National Conference on Health Professions Education (NCHPE 2014) was organized by the Medical Education Unit of MGIMS at Sevagram from 24-27 September 2014. The conference focused on curriculum development and curricular reforms. There was a preconference workshop on “How to design, implement and assess Competency based curriculum” which addressed the issues like Competency based curriculum, assessment of competencies etc. There was another pre-Conference workshop on “Curriculum Review and Planning: Towards Transformative Health Professions Education a competency based curriculum” which focused on use of a matrix to review current curriculum and identify areas that need attention/strengthening to make it transformative (**Annexure 1X**)

**Teaching learning methods program**

- The MEU carries out workshops of Basic MET and sensitizes the faculty to various teaching learning methods and its application.

### **Examination reforms**

- The MEU conducted workshops on MCQ construction to train its faculty in making reliable and valid MCQs. The basic MET workshop also contains details of assessment and assessment procedures

### **Content /knowledge management**

- The Bioinformatics Centre carries out in house training programmes for faculty, students and staff involved in hospital information system service. It also conducts annual national Workshops on Medical Informatics and Biomedical Communication.
- There are special orientation sessions for interns, residents, nurses and other staff on use of hospital information system by the HIS team. These sessions are carried out each year as part of the Internship orientation programme, postgraduates Orientation Programme.
- The Medical Education Unit carries out sessions on E-Learning as part of its in house annual workshops. Use of information technology is stressed upon.
- The Department of Community Medicine carries out workshops on data analysis using EPI-Info, health research methodology, basic epidemiology, different aspects of quantitative and qualitative research, literature search etc.

#### **2.4.9 Does the institution have a mechanism to retain faculty? What is the annual attrition rate among the faculty?**

The institute is constantly striving to retain its faculty by giving them a congenial atmosphere for growth and encouraging faculty development. The following measures have been successful in retaining faculty:

- Faculty emoluments are paid according to the 6<sup>th</sup> Pay Commission guidelines.
- The institute has a personal promotion scheme where in recognizes the individual's contribution to the department and the institute, looks at the research and publication potential apart from the basic required experience and promotes its faculty.
- The institute also encourage also promotes and supports faculty development by either sending faculty on deputation or on leave for professional development programs or higher education.

<b>Year</b>	<b>Total</b>	<b>Faculty left</b>	<b>Attrition rate</b>
<b>2012</b>	164	25	15.2
<b>2013</b>	154	24	15.5
<b>2014</b>	159	14	8.8
<b>2015</b>	143	18	12.5
<b>2016</b>	142	17	11.9

- 2.4.10 Does the institution have a mechanism to encourage**
- \* **mobility of faculty between institutions /universities for teaching/research?**
  - \* **faculty exchange programs with national and international bodies?**
- If yes, how have these schemes helped in enriching the quality of the faculty?**

No. The institute has to follow the norms of the regulatory body and which doesn't allow the same faculty to be present in more than one institution. Hence faculty exchange programs or mobilization of faculty is not done.

However the institute allows its faculty on case-to-case basis to enroll in other institutions for higher education. Faculty members have been allowed to pursue PhD, MPH, MHPE in various universities such as University of Berkeley, Umea University, Maastricht University and Keele University. These faculty members have to sign a bond of staying on after completion of their course. They usually come back and improve the functioning of various departments of the institute.

- 2.4.11 Does the institution have well defined career advancement policy for Health Science professionals? If yes, outline the policy.**

The institute has a personal promotion scheme where it recognizes the individual's contribution to the department and the institute, looks at the research and publication potential apart from the basic required experience and promotes its faculty.

The institute also encourage also promotes and supports faculty development by either sending faculty on deputation or on leave for professional development programs or higher education. This helps the institute to develop speciality areas. In the past Dr Dhiraj Bhandari and Dr Sumedh Jajoo were sent on study leave to pursue fellowship in Critical Care. They have come back and helped us improve our intensive care units. Similarly, other faculty have been given opportunities to do PhD, MPH or MHPE from outside institutes. They have signed bonds on leaving, and returned to improve or develop a particular area of the hospital or institute.

- 2.4.12 How does the institution create synergies with other PG institutes for generating required number of specialists and super specialists?**

MCI norms do not allow the same faculty to be present in more than one institution. Hence the institute cannot do this. However we do have visiting professors who are superspecialists come and render their services to our hospital.

**2.4.13 Does the institution conduct capacity building programs / courses in subspecialties for its faculty?**

Yes. The institute conducts capacity building programs /courses in subspecialties for its faculties. The Medical Education Unit organizes Basic MET courses and Research Methodology Workshops. In addition, academic activities like CMEs, Workshops, Conferences which are theme based are organized. **See Annexure 3J** for complete list of academic activities organized.

<b>Department</b>	<b>Courses /capacity building programs</b>
Medicine	Post graduate diploma in Geriatric Medicine (IGNOU) Evidence based certificate course in diabetes management ( PHFI)
Community Medicine	Maternal and child health (IGNOU)
All faculty	Research Methodology workshops
All faculty	Basic MET workshops

**2.5 Evaluation Process and Reforms**

**2.5.1 How does the institution ensure that all the stakeholders are aware of the evaluation processes that are in place?**

The examination assessment formats are available on the University website ([www.muhs.ac.in](http://www.muhs.ac.in)). This information is also circulated by the Dean to all students and Departments for wider dissemination of the assessment format. Teachers of all departments also brief students about examination patterns. The library also keeps copies of old question papers.

The examination results are available to individual students on the University website (<http://www.muhs.ac.in/showpdf.aspx?src1=mnk/res.aspx>). These results are accessible only on providing specific personalized information. Institutional performance and results are also sent to the college. The Students' Section then disseminates information about individual department performance to each department through internal circulars. Students' signatures are mandatory on internal assessment mark sheets.

Each department monitors the performance of its students. Details of students with low attendance and/or poor performance at internal examinations are conveyed to the Dean at regular intervals. These students are given periodic



feedback about their attendance by Heads of Departments and need to be more regular. The student section informs parents and guardians twice a year just before vacation time and more frequently in case of consistently poor performance and attendance.

**2.5.2 What are the important examination reforms implemented by the institution? Cite a few examples which have positively impacted the examination system.**

- In 2013, MUHS amended the existing guidelines and introduced double evaluation. Under this all theory undergraduate and postgraduate answer books are assessed by two independent examiners at the Central Assessment Programme (CAP) centres. These compiled results are sent to the Results section of the University. Here, the best of the two scores will be considered as final score of the candidate for that paper. (**Annexure 2S**)
- Further as a consequence of this, revaluation of papers was abolished. Retotalling of marks has however been permitted on payment of a certain fee to the university.
- Students also get to see a photocopy of their answer books on payment of a stipulated fee to the University.
- In 2012, the Government of Maharashtra set up the Aggarwal Committee to suggest reforms in assessment system in the Universities of Maharashtra with use of technology. (See <https://www.maharashtra.gov.in/Site/upload/WhatsNew/Report%20on%20Reforms%20in%20Examinations%20Systems.pdf>)
- The Committee studied the examination systems of several Universities including MUHS and came up with a list of best practices and recommendations to improve security and effectiveness of the assessment system.
- The Good Practices followed by Maharashtra University of Health Sciences, Nashik include: Computerized Result Processing System: Computerized result processing system and printing mark sheets/certificates/hall ticket is in effect since inception as the University i.e. from 1998. The e University is able to maintain schedule in each case; due to computerization of Results Processing system resulting in speedy and accurate execution. Consequently, the examinations are conducted and results are declared as per schedule
- Some of the recommendations of the committee which were adapted by MUHS were:
  - (a) Use of ICT in
    - Student Registration to issuance of Hall Ticket
    - Question Bank/ Question Paper Bank Generation

- OMR and Barcode Technology in Answer Sheets
- Results Processing and Publication
- (b) Physical security measures: Examination strong room, CCTV
- (c) Plagiarism check for dissertations
- In addition, the institute makes efforts to train and educate faculty in good assessment practices through its medical education unit. The Basic course in medical education technology covers details of assessment and assessment methods. We have organized special workshops on MCQ construction on the demand of faculty.

**2.5.3 What is the average time taken by the University for Declaration of examination results? In case of delay, what measures have been taken to address them? Indicate the mode adopted by the institution for the publication of examination results (e.g. website, SMS, email, etc.).**

Examination results are declared within 45 days of conduct of examinations. Results of summer examinations (held in May-June) are declared in the last week of July or the first week of August, while the winter examination (held in Nov-Dec) results are declared in the last week of January or first week of February.

Recently the MUHS has introduced the online entry of practical examination results and this will hasten the process of the declaration of results online.

Results are declared online on the MUHS website.

**2.5.4 How does the institution ensure transparency in the evaluation process?**

- Very few cases of malpractice and absolutely no cases of paper espionage have been reported during 10 years of MUHS existence.
- Internal assessment answer books are shown to examinees and their signature is obtained before the marks are passed on online to the University.
- In the summative examination, each subject answer book is evaluated by two examiners
- Identity of the examinee cannot be established as answer books are masked and coded
- Students can obtain photocopies of their corrected answer books from University on application and payment of a nominal fee.

**2.5.4 What are the rigorous features introduced by the university to ensure confidentiality in the conduct of the examinations?**

All answer books are OMR and bar coded. The identity of the candidate cannot be

ascertained. The entire checking of answer books is decentralized and is done in a central assessment programme, both for undergraduates and postgraduates

**2.5.5 Does the institution have an integrated examination platform for the following processes?**

- \* **pre-examination processes – Time table generation, hall ticket, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, online transmission of questions and marks, etc.**
- \* **examination process – Examination material management, logistics, etc.**
- \* **post-examination process – Attendance capture, OMR-based exam result, auto processing, result processing, certification, etc.**

Yes. The university does use an integrated examination platform. Most processes are online and ICT based. The MUHS communicates with colleges online. Attendance and internal assessment and practical examination marks are entered online. Question banks are created. Question paper setters are sent online passwords where they can enter their questions online. This has been done in line with the recommendations of the Aggarwal Committee report. Thus data entry and retrieval becomes easy. Degree verification is also possible online.

**2.5.7 Has the university / institution introduced any reforms in its evaluation process?**

Yes. In 2003, the MUHS directed the Education and Research Group, Pune to conduct an in-depth study of examination system of MUHS on various parameters. ERG had looked at all the parameters of examination such as question paper design, pattern of QP, language, student responses, focus of examination, conduct of examination, impact of various reforms, analysis of result various systems related to examination, quality of product etc. Again in 2012, as described above the recommendations of the Aggarwal Committee came after the MUHS processes were studied.

The recent evaluation reforms undertaken by the affiliating University as a result of this study, and implemented by this Institution are as follows:

- University maintains online question banks which are validated. Question paper setters are sent online passwords, which allows them to frame questions online. All the teachers are given a unique username and password by which they can frame and submit the question paper online. This makes sure that multiple sets of question papers are available and decreases the chances of question paper leakage.

- Question papers were made more scientific. Earlier, they had only note/ essay type questions. Now there is inclusion of problem solving type of questions aimed at assessing and developing various domains of students. Emphasis is on including questions related to understanding, analysis, synthesis and application
- Introduction of multiple choice questions, short answer questions and long answer questions proportionately has resulted in more objective assessment and improved pass percentage.
- All MUHS question papers have high competitive focus and help in identifying between the average and high achievers.
- Internal assessment and moderation have been made more transparent. Answer books of internal assessment are circulated to students. Entry of internal assessment marks is done online. University teams periodically visit on site and monitor record keeping and papers.
- Each subject answer book is evaluated by two examiners in central assessment programme. The best of the two marks is taken. This double evaluation eliminates malpractice at revaluation.
- Revaluation is no longer allowed. Retotalling is allowed on payment of a nominal fee.
- Recently the MUHS has introduced the online practical marks entry system where in the convener of the exam gets a onetime password by which they can do the entry of marks on the same day of the practical examination. Students can obtain photocopies of their corrected answer books from University on application and payment of a nominal fee.
- Answer books of students securing 40-50 % marks and more than 75% marks are moderated. In addition, a random 10% of other evaluated answer books are also moderated.
- Identity of the examinee cannot be easily established as answer books are bar coded.
- The MUHS moderation system is adopted by all other Universities in Maharashtra on the recommendations of the Nigavekar committee.
- Results are declared within 45 days of examination.
- MUHS handles results and all allied processing, including personal communications with students with utmost sensitivity
- Issues related to bias in practical examinations are addressed immediately
- Teaching professionals are being continuously trained in teaching technology, question paper formulation and assessment.
- There is emphasis on proper formatting and editing of question papers.
- Undergraduate students are granted facilities and allowed to keep term (ATKT) as per the criteria below:

- a) Complete passing in I professional course exam is compulsory before pursuing the II year course.
- b) A student who fails in the II year course exam shall not be allowed to appear in III year (Part – I) Course exam unless he/she passes all the subjects of II year course.
- c) Passing in III year (Final MBBS Part - I) course exam is not compulsory for entering for 8<sup>th</sup> & 9<sup>th</sup> semesters training. However, passing in III year (Part – I) Course exam fully is compulsory for being eligible to appear in III year (Part - II) course exam.

**2.5.8 What is the mechanism for redressal of grievances with reference to examinations? Give details.**

All students have to sign on their internal assessment mark sheets before the results are forwarded to the University by the institution. In case students are absent for examinations due to illness or other reasons or feel the need for re-evaluation, they can approach the Internal Assessment Grievance Committee which looks into their complaints. The Institutional Internal Assessment Grievance committee is headed by Dr KR Patond (Dean) and consists of the following members: Dr AK Shukla, Professor & Head, Dept of Ophthalmology; Dr AM Mehendale, Professor & Head, Dept of Community Medicine and Dr MVR Reddy, Professor & Head, Dept of Biochemistry.

Students are allowed to approach the University for retotalling of theory marks after the final examination. Examinees are also entitled to procure the photocopy of his/her own answer book(s) on application and payment of a prescribed fee after declaration of results

**2.5.9 Does the institution have a Manual for Examinations and if yes, does it specifically take cognizance of examination malpractices by students, faculty and non-teaching staff?**

No.

The institute follows the guidelines of examination as given by the affiliated university MUHS. These guidelines strictly discourage any malpractice on the part of the students, faculty or the non teaching staff. An internal vigilance squad monitors the conduct of examinations. It is headed by Dr Smita Singh and includes Dr A Gupta in the team.

**2.5.10 What efforts have been made by the university to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved the process and functioning of**

**the examination division/section.**

Not applicable. This is done at the MUHS level.

However in the institute, a Custodian of examinations is appointed by the University. He/She looks after the conduct of examinations as well as Central Assessment Programme according to MUHS guidelines. An examination strong room has been set up. CCTV cameras have been installed in the examination room. This team facilitates proper conduct of examinations and paper evaluation.

**2.5.11 What are the efforts of the institution in the assessment of educational outcomes of its students? Give examples against the practices indicated below:**

**a. Compatibility of education objectives and learning methods with assessment principles, methods and practices.**

We make sure that educational objectives are aligned to teaching learning methods and assessment at all levels. Enough weightage is given to skills teaching and passing in practicals is mandatory for clearing the examination. Learning objectives and competencies are defined and assessment methods are aligned to these learning outcomes. One example of how this is done is by use of X and Y tables for internship assessment (See **Annexure 2T**)

**b. Balance between formative and summative evaluations**

Weightage is given to day to day performance of the student and not just year-end summative performance. Three internal assessment examinations are carried out in each subject. Minimum 35% marks in these examinations are mandatory for appearing in the final examination. A weightage of 30% from these marks of formative assessment are included in the summative assessment. Exact internal assessment scheme of each subject is given with the syllabus of each subject (**Annexure 1A**). In addition to part completion examinations, ward leaving examinations are carried out in clinical subjects.

**c. Increasing objectivity in formative evaluations**

MUHS examination formats include a section on multiple choice questions and other two sections of brief answer questions and long answer questions. Long answer questions are structured and not of essay type to maintain objectivity in marking. The internal assessment formats are a replica of the summative examinations. In practicals and viva each student gets exposed to at least four different examiners. Thus no teacher has too many marks and use of multiple examiners improves reliability of marking.

**d. Formative (theory / orals / clinical / practical) internal assessment; choice based credit system; grading / marking.**

Multiple examiners assess students during internal assessment, both in theory and practicals, thereby improving the reliability of the examination. The marking scheme of the internal assessment is clarified in **Annexure 1A**. 30% of internal assessment marks are included in the final marks. The internal assessment record keeping is regularly monitored by the MUHS officials by on site checking of papers and records.

There is no choice based elective system in MBBS.

**e. Summative (theory / orals / clinical / practical)**

Theory papers are assessed by two different assessors in central assessment programme. Double evaluation is followed by the best of the two marks being included in the final score. This eliminates the need for reevaluation. In practicals, two internal and two external examiners assess each student in different aspects of the subject. This eliminates bias and improves reliability of the examination.

**f. Theory – structure and setting of question papers – Essays, long answers, shorts answers and MCQs etc. Questions bank and Key answers.**

Online question banks are maintained by departments and the University for multiple choice questions. These are updated and validated at frequent intervals. Model answers are created and moderated for the central assessment programme. The MUHS maintains online question banks which are validated. Question paper setters are sent online passwords, which allows them to frame questions online. All the teachers are given a unique username and password by which they can frame and submit the question paper online. This makes sure that multiple sets of question papers are available and decreases the chances of question paper leakage.

**g. Objective Structured Clinical Examination (OSCE)**

**h. Objective Structured Practical Examination (OSPE).**

OSCE and OSPE have been introduced in several departments including Ophthalmology, Microbiology and Pathology. OSCE is being used to provide formative feedback in several departments. The University also encourages use of OSCE in assessment. Basic MEU workshops that have been held by the Medical Education Unit acquaint faculty members and train them in OSCE.

**2.5.12 Describe the methods of prevention of malpractice, and mention the number of cases reported and how are they dealt with?**

An Internal Vigilance Squad monitors examinations and takes measures to avoid malpractice. This Squad is headed by Dr Smita Singh (Professor, Ophthalmology). So far, no cases of malpractice have been reported.

## **2.6. Student Performance and Learning Outcomes**

### **2.6.1 Has the institution articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?**

The required competencies of students are defined in the University syllabus. The Students' Section regularly monitors the University results. These are discussed in detail in the College Council meetings. In case some departments show lesser than expected results, they are asked to explore the reasons behind it, and work towards better results. Student feedback is taken seriously and shared with all departments. Feedback is also received from the rural placement centres of student performance.

### **2.6.2 Does the institution have clearly stated learning outcomes for its academic programs/departments? If yes, give details on how the students and staff are made aware of these?**

The academic programmes of the institution are in line with institution's goals and objectives. We follow the updated curricula developed by the affiliating university, Maharashtra University of Health Sciences (MUHS). These have been framed in alignment with the needs of society and have relevance to national and global trends in health. The MUHS curriculum is itself based on the guidelines of the Medical Council of India and lays emphasis on national health priorities. (**Annexure 1A**)

The MUHS curriculum is adapted according to the mission of the institute by the institutional curriculum committee. This is disseminated to the departments, teachers and the students. The circulars of the departmental academic programmes are put up on the notice boards in the department, at the library and also on the notice board at the undergraduate hostels. Any change in the programs is also intimated to the students and faculty.

### **2.6.3 How are the institution's teaching-learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?**

While the predominant teaching-learning and assessment strategies are shaped by the MUHS guidelines, MGIMS does make its alterations and modifications keeping its mission in mind. We have a heavy tilt towards community oriented medical education. As mentioned in Section 1.1.2 we have identified milestones which the student needs to achieve (**Annexure 1B**). Teaching in the community and assessment is also done related to these objectives.

### **2.6.4 How does the institution ensure that the stated learning outcomes have been achieved?**



The assessment pattern is aligned to the learning objectives and teaching-learning methods. And the minimum requirements to achieve these outcomes are defined. Based on student performance in each department, we determine if the stated learning outcomes are achieved. The curriculum committee oversees the entire process and evaluates the quality of the programme.

*Any other information regarding Teaching-Learning and Evaluation which the institution would like to include.*



## **CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION**

### **3.1 Promotion of Research**

#### **3.1.1 Is there an Institutional Research Committee which monitors and addresses issues related to research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.**

Yes, there is an Institutional Research Committee which addresses and monitors issues related to research. The Committee, headed by the Dean as the Chairperson, meets regularly. The composition of current Research Committee as given in **Annexure 3A**

The activities of the Committee are:

- Calling, reviewing and approving research proposals of post graduate students and junior faculty members for financial support from the Institute,
- Monitoring the progress and expenditure of the sanctioned projects,
- Compilation and circulation of information regarding availability of research funds,
- Making available the protocols of different funding agencies for financial support for projects/ conferences/ workshops/ CMEs etc. to interested organizing departments

One of the recommendations of the Committee was the creation of a platform for undergraduate students to present their research findings. This was taken forward with the authorities and an annual award in the name of our founder director - Dr. Sushila Nayar Memorial Award for UG Research was instituted in 2015. Under this, nominations were invited from the undergraduate students who have conducted research. These project reports were assessed by a panel of judges and a certain number of students were invited to present their research in an award session organized in collaboration with Medical Education Unit and Academy of Medical Sciences. Apart from best paper and second best paper, all students whose paper was accepted for presentation in the award session received a trophy and a certificate.

In July 2016, the Research Committee recommended initiation of an institutional research grant for undergraduate research. The matter was discussed with the authorities and an annual grant of Rs. 300,000 has been accepted for promoting undergraduate research in the institute. This money will be utilized for providing research studentship for individual as well as group projects and for training programs for research methodology.

The last minutes of meeting of Research Committee are attached as **Annexure 3B**.

**3.1.2 Does the institution have an institutional ethics committee to monitor matters related to the ethics of inclusion of humans and animals in research?**

The institute has an Institutional Ethics Committee (IEC) approved by the Drug Controller General of India (DCGI). It is mandatory that all research studies conducted in the institute (including post-graduate students' thesis and undergraduate students' research projects) get sanction from the IEC before being initiated. In addition, there is a separate Institutional Animal Ethics Committee (IAEC). Any project where animals are the study subjects need to get additional approval from the IEAC as well. The composition of IEC for human and animal subjects is as given in **Annexure 3C-1 and 3C-2**.

Also as per the Standard Operating Procedure (SOP) of the IEC, quarterly reports for funded clinical trials are to be submitted to the IEC for review. The SOPs of IEC and IAEC are available and are utilized for all processes.

**3.1.3 What is the policy of the university to promote research in its affiliated / constituent colleges? Not applicable**

**3.1.4 What are the proactive mechanisms adopted by the institution to facilitate the smooth implementation of research schemes/projects?**

The institute has the following proactive mechanisms to facilitate smooth implementation of research projects.

- Providing seed money - The Institute has a provision of seed fund of Rs. 10 lakhs every year to provide financial support to the research projects of postgraduate students. Total amount of Rs. 2107907 was sanctioned for 96 PG students through this scheme during 2011-16. (See the table below).

Year	Total number of students who received funding	Total amount (in Rs.)
2011	17	363990
2012	16	354217
2013	13	304000
2014	15	314000
2015	21	448700
2016	14	323000

From 2016, the institute has decided initiate an institutional research studentship program. For this purpose, an annual grant of Rs. 3 lakhs will be sanctioned.

- Simplification of procedures related to sanctions / purchases to be made by the

- investigators: An institute level committee is formed to smoothen the process of purchasing/procuring by the investigators. Three tender quotations are invited for every purchase that is to be made, the committee then reviews that and a final decision is made regarding the purchases to be made in a transparent manner.
- Autonomy to the principal investigator/coordinator for utilizing overhead charges: The Principal Investigator is allowed to utilize the institutional overhead charges for developing/strengthening research facilities in his/her department after approval from the authorities.
  - Timely release of grants: The concerned Principal Investigator/ research coordinator has to apply for release of funds to the competent authority. The funds are then released within a few days.
  - Timely auditing: An annual audit either at the end of a financial year or end of a research project whichever is earlier is conducted for each of the funded research projects by the Auditors appointed by the institute for the same.
  - Submission of utilization certificate to the funding authorities: Utilization certificate is submitted to the respective funding agency either at the end of a financial year or end of a research project whichever is earlier.
  - Any training given for writing proposals: All the faculty and postgraduates are trained in research methodology and encouraged to undertake research.
  - Writing proposals for funding: The research methodology workshops for faculty and post-graduate students include a dedicated session on protocol writing. In addition, under 'ICMR advanced center for community-based maternal, neonatal, child health and nutrition', workshops are being organized every year of both internal and external faculty members on how to write research protocols for funding in the area of maternal, neonatal, child health and nutrition.
  - Availability of access to online databases: The institute has its own MGIMS Digital Library (Web OPAC) with the latest library management software that has access to many e- books, e-journals, theses, published articles/ papers and many other e-resources. The MGIMS digital library has online subscription to UpToDate, DELNET, MUHS digital library, a link to free medical journals, WHO publications and those free journals available which have been compiled by Stanford University. The list of journals (international as well as national journals) is given in **Annexures 3D1 and 3D2**
  - Incentives: The institute has a system of awarding best research work done by undergraduate and post-graduate students as well as faculty members. Participation in research is also considered for merit-based promotion scheme. *(Details about this have been provided in response to question 3.1.13 section: incentives)*

**b. Institution sponsored projects:**

- Availability of funding for research /training/resources - The Institute has a

provision to provide financial support to the research projects of postgraduate students. A list of postgraduate students who availed this grant during the years 2013-15 has been attached as **Annexure 3E**.

- The institute also provides Rs. 6 lakhs every year to Jammalal Bajaj Tropical Disease Research Center for research in tropical diseases. Kasturba Health Society provides an amount of Rs. 15 lakhs every year to Medical Research Center (MRC), Mumbai for research in reverse pharmacology. In addition, funds are made available for development of departments and equipping them with research facilities on annual basis.

### **3.1.5 How is multidisciplinary/ interdisciplinary/ trans-disciplinary research promoted within the institution?**

- The institute promotes interdisciplinary research wherein more than one department works together on a research project. A total of 22 research projects were conducted during the period 2011-15. This included projects under ICMR Advance Center for Community-based Research in Maternal, Neonatal, Child Health and Nutrition'; Sentinel Surveillance Unit under National Program for Control of Blindness, Government of India; ISPOT Study funded by IndiaCLEN. **Annexure 3F** gives the list of interdisciplinary research projects undertaken in the institute in the last five years (2011-16).
- Collaboration with national/international institutes / industries: The Institute promotes faculty members to undertake such research. Most of the departments are conducting collaborative research projects with national and international organizations, foreign and Indian universities, scientific and research organizations, industries, charitable organizations and departments of Government of India and Maharashtra also. During the last 5 years (2011-2016), a total of 90 projects have been implemented. Currently 34 projects are being implemented in various departments. (List of funded research projects enclosed as **Annexure 3G**).

As a policy decision, the institute does not conduct research funded directly by the drug or device industry. However, the institute partners with the industry through a third party (e.g. Government of India, Govt of Maharashtra, Maharashtra University of Health Sciences, International Organization working for health, e.g. PATH etc).

- The Biochemistry Department as part of the ongoing DBT project developed a rapid diagnostic test kit for filarial IgG4 antibody in collaboration with Ubio Biotechnology Pvt. Ltd., Kerala. The gene of the filarial antigen used in this test was identified, cloned and produced as recombinant antigen in our laboratory.

- The Department of Community Medicine is at present doing a Phase III clinical trial to evaluate the efficacy and safety of live attenuated Bovine-Human Rotavirus Reassortant Pentavalent Vaccine (BRV-PV) produced by Serum Institute of India Limited.

**3.1.6 Give details of workshops/ training programs/ sensitization programs conducted by the institution to promote a research culture in the institution.**

MGIMS, Sevagram conducts the following programmes for its undergraduate and post-graduate students as well as for the faculty members:

- During the third semester every year, a two-day workshop in Essential National Health Research is conducted for the undergraduate students interested in taking up group projects in their adopted village (See table below).
- For every batch of post-graduate students, two workshops in research methodology are conducted every year. These workshops are conducted based on the guidelines provided by Maharashtra University of Health Sciences, Nashik.
- Over the last 5 years, three Research Methodology Workshops, based on the guidelines by MUHS, Nashik, have been organized exclusively for faculty members.

Year	Target group	Date of workshop	Number of participants
2011	Postgraduate students	03-09 Oct 2011	55
	Postgraduate students	16-22 Nov 2011	11
2012	Postgraduate students	06-11 Aug 2012	36
	Postgraduate students	17-24 Sep 2012	24
2013	Faculty members	07-12 Jan 2013	20
	Faculty members	18-22 Feb 2013	27
	Postgraduate students	26-31 Aug 2013	37
	Postgraduate students	16-21 Dec 2013	21
2014	Postgraduate students	04-09 Aug 2014	29
	Postgraduate students	25-30 Aug 2014	33
	Faculty members	10-14 Nov 2014	30
	ENHR Workshop for Undergraduate students	13-14 Sep 2014	30
2015	Postgraduate students	21-26 Sep 2015	34 (32 PGs & 2 Faculty)
	Postgraduate students	28 Sep – 05 Oct 2015	30 (26 PGs & 4 Faculty)
	ENHR Workshop for Undergraduate students	01 – 02 Aug 2015	36

The institute has a system of awarding best research work done by undergraduate and post-graduate students as well as faculty members. Participation in research is also considered for merit-based promotion scheme. *(Details about this have been provided in response to question 3.1.13 section: incentives)*

**3.1.7 How does the institution facilitate researchers of eminence to visit the campus? What is the impact of such efforts on the research activities of the institution?**

Over the years MGIMS has built up a reputation and credibility in research. So most eminent researchers are eager to visit our state-of-the-art laboratories for research like JBTDR or experience our community based research initiatives.

- The Academy of Medical Sciences at MGIMS organizes a lecture on topics of current interest every Wednesday. Frequently, eminent scientists at national and international level are invited to give guest lectures in the Academy.
- MGIMS invites eminent researchers, guest faculty and experts in their respective disciplines as resource persons to the various conferences/workshops/ CMEs that the institute organizes.
- The institute hosts PJ Gangadharam Memorial Oration every year. Scientists who have made significant contribution to the field of Tuberculosis are bestowed upon the PJ Gangadharam Oration Award.

**Annexure 3H** gives the list of researchers of eminence who visited the institute in the last five years (2011-16).

Such platforms not only help to foster the research and leadership skills among its faculty and students but also facilitate undertaking multi-centric collaborative research projects. In past, MGIMS, Sevagram has been invited to participate in multi-centric community-based research in the fields of maternal and child health by World Health Organization, UNICEF, Indian Council of Medical Research, Department of Biotechnology, Aga Khan Foundation to name a few. We have earlier participated in prestigious research projects; e.g. USAID-awarded Community-led Initiatives for Child Survival, GOI-ICMR funded Home-based Management of Young Infants etc. Recently, Government of India provided funding for building model Maternal and Child wing. This is first model Maternal and Child wing based on the guidelines issued by Ministry of Health and Family Welfare.

**3.1.8 What percentage of the total budget is earmarked for research? Give details of heads of expenditure, financial allocation and actual utilization.**

- Between 2011-16, 85 research grants worth Rs 25.18 crores were sanctioned by



various national and international agencies in various departments of the institute. The institute contributes not only to the manpower and salaries of the investigators who conduct these projects, but also provides infrastructural support. In addition, faculty members are allowed to go on specialized training programmes with salaries.

- Each year all departments are expected to submit their annual plans to the management with justification for infrastructural support requirements. Most research requirements are granted by the management.
- The Institute has a provision to provide financial support to the research projects of postgraduate students. A list of postgraduate students, who availed this grant during the years 2013-15 has been attached as **Annexure 3E**.
- The institute also provides Rs. 6 lakhs every year to Jannalal Bajaj Tropical Disease Research Center for research in tropical diseases. Kasturba Health Society provides an amount of Rs. 15 Lakhs every year to Medical Research Center (MRC), Mumbai for research in reverse pharmacology. In addition, funds are made available for development of departments and equipping them with research facilities on annual basis.

**3.1.9 In its budget, does the university earmark funds for promoting research in its affiliated colleges? If yes, provide details.**

Not applicable

**3.1.10 Does the institution encourage research by awarding Postdoctoral Fellowships/ Research Associateships? If yes, provide details like number of students registered, funding by the institution and other sources.**

At present, there is no provision for Postdoctoral Fellowships/ Research Associateships.

**3.1.11 What percentage of faculty have utilized facilities like sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the institution monitor the output of these scholars?**

The institute promotes faculty members to pursue courses to further enhance their skills. Depending on the merit of the case, faculty members have been allowed to pursue training outside; e.g. Commonwealth fellowship, WHO fellowship, PhD, MPH. **Annexure 3I** provides list of faculty members who were provided leave for attending courses.

The output of such faculty is monitored by the number of scientific activities organized by them, number and quality of publications, funded research projects undertaken. These criteria are counted towards the promotion of the faculty members.

**3.1.12 Provide details of national and international conferences organized by the institution highlighting the names of eminent scientists/scholars who participated in these events.**

**Annexure 3J and 2R** provides the list of all academic activities organized by the Institute. The following table gives the number of academic activities organized every year since 2011-12 to 2015-16.

Academic activities organized	
Year	Number
2011-12	50
2012-13	57
2013-14	49
2014-15	149
2015-16	54

We are describing a few among these briefly:

**MEDICON 2012 (11-14 July 2012):** This conference, a national medical students' research conference, was entirely organized by undergraduate students at MGIMS, Sevagram. The British Medical Journal (BMJ), The Cochrane Collaboration, and Lady Tata Trust supported the conference. The theme of the conference was "Return to your roots". Nearly 400 students participated in the meet and presented their research work through papers and posters. Four parallel preconference workshops on Basic Life support skills, Laboratory Medicine, Evidence Based Medicine and How to write a paper were conducted.

**International Conference on Neuropsychopharmacology: Miracles and progress of Neuropsychopharmacology in 21st century (09-10 Feb 2013):** The conference was attended by nearly 200 psychiatrists and pharmacologists from around the world.

**NCHPE 2014 (24-27 Sep 2014):** The sixth National Conference on Health Professions Education (NCHPE 2014) was organized by the Medical Education Unit of MGIMS at Sevagram. Around 300 teachers belonging to different health professions including medicine, dentistry, nursing, physiotherapy and AYUSH specialities participated in these proceedings. The theme of the conference was "Socially responsive health professions education: Forging partnerships between academic institutions and the health care delivery system". Nine pre-conference workshops on various contextual topics in medical education and faculty development were conducted on 24 Sep 2014.

**3.1.13 Mention the initiatives of the institution to facilitate a research culture in the below mentioned areas:**

\* **Training in research methodology, research ethics and biostatistics.**

For undergraduate students:

- Two-day Essential National Health Research workshop for the undergraduate students during the 3<sup>rd</sup> semester
- Training in community survey during the Re-orientation of Medical Education (ROME) Camp in 3<sup>rd</sup> year

For post-graduate students

- Training program in Research Methodology conducted each year after admission into post-graduate courses by Medical Education Unit and Clinical Epidemiology Unit. Please see response to question 3.1.6.
- Post-graduate students are also encouraged to attend training programmes outside for skill development.

For Faculty

- Training programme in Research Methodology
- Capacity building workshops within the institute
- Encourage faculty to attend training programs outside for skill development

\* **Development of scientific temperament**

For undergraduate students:

- Encouragement to apply for ICMR Short-term Studentship
- Encouragement to apply for MUHS Short-term Research Grant
- Dr. Sushila Nayar Memorial award for the best under-graduate research instituted in 2015- incentive plus provides forum to present work in Academy of Medical Sciences
- Library facilities, free wifi access , online access to journals through digital library
- Organized MEDICON 2012 (See response to 3.1.12 for more details)
- The institute plans to organize an undergraduate National Undergraduate Bioethics Conference next year. Permission for the same has already been granted from the institute.
- The Institute encourages the undergraduate students to attend scientific sessions organized specially for undergraduate students.

For post-graduate Students

- An annual award – Sushruta Award for best thesis
- Encouraging students to attend Conferences/ Workshops/ CMEs
- The institute encourages the post-graduate students to attend conferences and workshops and present scientific papers.

- Several departments post their post-graduate students to other institutes of repute.
- Library facilities, wi-fi access, online access to journals through digital library
- Funding for research for post-graduate students through KHS research committee
- A forum to present the research done by post-graduate students is provided by the Academy of Medical Sciences

#### For Faculty

- Encouraged to attend conferences and workshops within the institute as well as outside
- Encouraged to attend training programs outside for skill development
- An annual award for best research paper, instituted in 2015
- Each faculty is entitled to 15 days special leave for attending the training workshops and conferences. The institute also provides study leave to attend short-term courses for professional development of faculty. A list of faculty members who have attended various courses and training programs of 7 days or more is attached **Annexure 3I**. The institute also gives permission to the faculty to attend meetings in relation with collaborative research projects.

#### \* **Presence of Medical / Bio Ethics Committee.**

The Institute has an Institutional Ethics Committee which convenes its meeting regularly. It is mandatory for all faculty members and students to get approval for all research projects, including the dissertations by the post-graduate students and undergraduate projects submitted under ICMR short term studentship or MUHS short-term research grant. The Institute also has an Animal Ethics Committee (**Annexures 3C1 & 3C2** provides the constitution of Institutional Ethics Committee as well as Institutional Animal Ethics Committee). Standardized Operating Protocol for the Institutional Ethics Committee and Institutional Animal Ethics Committee is available and adhered to for all processes.

Recently, as per guidelines of MUHS, a new Bioethics committee has been constituted. This committee is affiliated to the Asia Pacific Bioethics Network Nodal Center under UNESCO Chair at MUHS, Nashik. Four members of this committee have been trained at MUHS based on UNESCO modules. This committee has the responsibility to integrate teaching of ethics during the undergraduate period. (See **Annexure 3K** for constitution of the Bioethics committee).

#### \* **Research linkages with other institutions, universities and centers of excellence. (national and international).**

The Institute promotes the faculty members to undertake collaborative research. Many departments are conducting collaborative research with the following organizations:

- UN and other International Organizations; e.g. World Health Organization, UNICEF, UNFPA, USAID, National Institute of Health (NIH), International Agency for Research in Cancer, Bill & Melinda Gates Foundation (BMGF), PATH, Jiv Daya Foundation, USA; Union for International Cancer Control;
- National Organizations; e.g. Ministry of Health and Family Welfare, Govt of India; University Grants Commission; National Institute of Health and Family Welfare (NIHFW); National Institute of Public Cooperation and Child Development (NIPCCD); National AIDS Control Organization; Central Salt & Marine Chemicals Research Institute, Bhavnagar; Tuberculosis Association of India; CCRYN, Dept of AYUSH, CCRS (AYUSH); Central TB Division, Dr. Ambedkar Research Foundation, New Delhi; Center for Innovations in Public Systems etc.
- State level: Government of Maharashtra; State Health System Resource Center, Pune; Maharashtra State AIDS Control Society;
- Foreign and Indian Universities: MUHS, Nashik; St Johns' Bangalore; CMC, Vellore
- Scientific and Research Organizations: Indian Council of Medical Research, Department of Biotechnology, Department of Science and Technology etc.
- Industries: Serum Institute India Limited, GeNext Genomics Pvt. Ltd., SRISTEK, Hyderabad
- Charitable Organizations and Departments of Government of India and Maharashtra.

\* **Research programs in Basic Sciences, Clinical, Operational Research, Epidemiology, Health Economics, etc.**

PhD programs have been approved for ten departments (Biochemistry, Anatomy, Physiology, Pharmacology, Pathology, Microbiology, Forensic Medicine, Community Medicine, Medicine and Obstetrics and Gynecology) through Maharashtra University of Health Sciences. Over the last 5 years, a total of 6 students have been awarded PhD (Biochemistry 4, Physiology 2). In addition, theses of 5 more students have been submitted for evaluation to the University. In addition, we have 6 students registered for PhD (3 in Biochemistry and 3 in Community Medicine). The institute has also supported students of other universities doing research in health. **Annexure 3L** provides details of the PhD students including those who were awarded the certificate

\* **Promotional avenues for multi-disciplinary, inter-disciplinary research.**

The institute has always encouraged research by building appropriate research infrastructure and providing the right environment to conduct research. The major research facilities developed in the Institute include:

- Department of Anatomy - Cytogenetics laboratory
- Jannalal Bajaj Tropical Disease Research Center (JBTDRC) with the Department of Biochemistry

- Department of Physiology: Neurophysiology, reproductive physiology laboratory, sleep medicine
- Departments of Microbiology: Advanced diagnostic facilities for research especially in tuberculosis and zoonoses
- Department of Pathology: Population Based Cancer Registry of Wardha district, Research facilities for immunohistochemistry, immunophenotyping, flow cytometry
- Department of Forensic Medicine: Toxicology laboratory
- Department of Pharmacology: Pharmacovigilance centre
- Dr. Sushila Nayar School of Public Health incorporating Department of Community Medicine - Rural and Urban Health Training Centers for community-based research
- Department of Ophthalmology: Expertise and facilities for community ophthalmology projects
- Department of Medicine: Facilities for research on communicable and non-communicable diseases
- Department of Obstetrics and Gynecology: Community-based reproductive health, Nodal Centre emergency obstetric care
- Clinical Epidemiology Unit
- Bioinformatics Centre
- Animal house
- Geriatric Outpatients Clinic
- Sexually Transmitted Diseases Clinic: STD Clinic has been sponsored by Maharashtra AIDS Control Society.
- Hospital Information System: Access to patient information for research purposes
- Digital library with up to date journal access

**Annexure 3M** provides details of the research facilities developed within the individual department.

\* **Promotional avenues for translational research**

Please see response to Section 3.1.13 (Promotional avenues for multi-disciplinary, inter-disciplinary research) above

- WHO Collaborating Centre for Research and Training in Community Based Maternal, Newborn and Child Health: The Dr Sushila Nayar School of Public Health received the designation in year 14 Jul 2009, which was renewed in 2013.
- Centre for Advanced Research for Community Based Maternal, Newborn and Child Health (ICMR): We have been awarded four projects under this with a total budget of Rs. 4.31 crores.

\* **Instilling a culture of research among undergraduate students**

The Institute encourages the undergraduate students to attend scientific forums organized specially for undergraduate students. The institute has also initiated a special award for best under-graduate research to encourage research among the undergraduates. Also see response to Section 3.1.13 (Training in research methodology, research ethics and biostatistics)

\* **Publication-based promotion/incentives**

The institute has its own personal promotion scheme where along with their contribution to the growth of their respective department and institute, publications made by the faculty are taken into consideration before they are promoted.

\* **Providing travel grant for attending national/international conference and workshops.**

The Institute has a policy of sanctioning special leave for attending conference/workshop/ course with provision for reimbursement of expenditure incurred once in a year to each faculty. They are provided reimbursement for registration fee, transport and accommodation. The Institute also provides financial support to its faculty to attend international conference/ workshop/ short course once in three years. The expenditure reimbursement towards registration, travel and stay is as per the rules of Kasturba Health Society stated in the Circular KHS/I-6 (A)/ 291 dated 24<sup>th</sup> Apr 2006 (**Annexure 2P**). **Annexure 3N** provides details of the faculty members who were reimbursed for attending various academic activities in the last 5 years.

### 3.1.14 Does the institution facilitate

\* **R&D for capacity building and analytical skills in product development like diagnostic kits, biomedical products, etc. for the national / international market**

Yes. The institute supports respective departments who are involved in undertaking research on diagnostic kits / biomedical products. The department of Biochemistry and Microbiology are actively involved on research on some diagnostic test kits.

Biochemistry and Jamnalal Bajaj Tropical Disease Research Center:

- Repository for filarial parasites and reagents
- Developed filarial immunodiagnostic tests and provide routine filarial diagnostic services to the patients of Kasturba Hospital as well as to other outstation patients
- Identification of novel recombinant proteins for diagnostic use by using filarial antibody assay

- Immunoprophylactic studies
- The animal models for testing filarial vaccine and anti-filarial drugs,
- In vitro screening of herbal extracts as potential anti-filarial agents
- Molecular biology laboratory,
- Training courses on the basic and advanced laboratory methods for infectious diseases.

Microbiology:

- Advanced set up for research in tuberculosis

\* **Development of entrepreneur skills in health care**

Not applicable

\* **Taking leadership role for stem cell research, organ transplantation and harvesting, Biotechnology, Medical Informatics, Genomics, Proteomics, Cellular and Molecular Biology, Nanoscience, etc.**

Proteomics:

The Bioinformatics Centre (BIC) at MGIMS has acquired servers, workstations, scientific software packages and bioinformatics software etc for access to PG/PhD students. Sophisticated software for proteomics, genomics etc. are accessible to students of our institutes and other medical colleges across India for gaining experience and for carrying out their research projects on related aspects of Bioinformatics.

BIC has developed databases on Mycobacterial proteases (Mycoprotease-DB, <http://www.bicjbtdrc-mgims.in/MycoProtease-DB/>), Mycobacterium tuberculosis Proteome comparison (MTB-PCDB, <http://www.bicjbtdrc-mgims.in/MTB-PCDB/>) and Human Papillomavirus Proteome (hpvPDB, <http://www.bicjbtdrc-mgims.in/hpvPDB/>) quite useful to the users involved in research in the related fields.

Further, BIC has created in silico platform for exploring novel inhibitors against HPV/H1N1/ZIKA viruses through Molecular Docking and Virtual Screening approach in collaboration with Dr. Varma Lab at Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Mumbai.

BIC supports short term and dissertation projects under DBT's traineeship and studentship programs and conducts curriculum-based training and research in Bioinformatics and Biotechnology for students pursuing post-graduate courses in the related disciplines.



### Cellular and molecular biology, Biotechnology

The Department of Biochemistry and Jammalal Bajaj Tropical Disease research Centre are involved in the following activities:

- Repository for Filarial parasites & reagents
- Developed filarial immunodiagnostic tests and provide routine filarial diagnostic services to the patients of Kasturba Hospital as well as to other outstation patients
- Identification of novel recombinant proteins for diagnostic use by using filarial antibody assay
- Immunoprophylactic studies
- The animal models for testing filarial vaccine and anti-filarial drugs,
- In vitro screening of herbal extracts as potential anti-filarial agents
- Molecular biology laboratory,
- Regularly conducts following academic activities:
  - Training courses on the basic and advanced laboratory methods for infectious diseases.

### Medical informatics

The Bioinformatics Centre (BIC), a Sub-Distributed Information Centre was established in March 1999 at the Mahatma Gandhi Institute of Medical Sciences with grant-in-aid from the Department of Biotechnology, Ministry of Science Technology, Government of India, New Delhi as a part of Biotechnology Information System Network (BTISNet) Project. The Centre has thrust on Medical / Health Informatics.

In addition to providing academic bibliography service and in-house training programme for staff involved in Hospital Information service, the Centre organizes yearly National level Workshop / Seminar / Symposium / CMEs on Medical Informatics and Biomedical Communication. So far 17 such events have been organized which were well received.

The Centre has started an online Health Informatics Certification (OHIC) Course from July 2010 with quarterly enrolment from India and abroad which is being well received. OHIC provides basic concepts in Health Informatics in the form of online training to healthcare personnel and interested graduates in Science, Business Administration and Information Technology (<http://www.bicjbt-drc-mgims.in/ohic>). So far 35 students from UK, Uganda, Mauritius, Ethiopia, Saudi Arabia and from different states of India have registered and 29 completed the certificate course.

### **3.1.15 Are students encouraged to conduct any experimental research in Yoga and/or Naturopathy?**

Yes, the institute promotes research on Yoga and/ or naturopathy. A project was conducted by undergraduate students on 'Impact of Yoga on stress experienced by medical students - an interventional study'. The aim of this study was to find out the short-term impact of yoga intervention on the stress experienced by medical students. The results points to the beneficial role of yoga in not only causing reduction in basal anxiety level but also enhancement in parameters like better sense of well being, feeling of relaxation, improved concentration, self confidence, improved efficiency, good interpersonal relationship, increased attentiveness, lowered irritability levels and an optimistic outlook in life. The student conducting this research received the best paper award at SIMSCON 2016.

## **3.2 Resource Mobilization for Research**

### **3.2.1 How many departments of the institution have been recognized for their research activities by national / international agencies (ICMR, DST, DBT, WHO, UNESCO, AYUSH, CSIR, AICTE, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition.**

#### Community Medicine

- The Dr Sushila Nayar School of Public Health has been recognized as WHO Collaborating Centre for Research and Training in Community Based Maternal, Newborn and Child Health: The WHO Collaborating Center was recognized since 14 Jul 2009. The re-designation was done in Jul 2013.
- Centre for Advanced Research for Community Based Maternal, Newborn and Child Health (ICMR): Under this, the department has four projects with a total committed funds of 4.31 Crore.

#### Bioinformatics Center

- A Sub-Distributed Information Centre was established in March 1999 at Mahatma Gandhi Institute of Medical Sciences with grant-in-aid from Department of Biotechnology, Ministry of Science & Technology, Government of India, New Delhi as a part of Biotechnology Information System Network (BTISNet) Project. The Centre has thrust on Medical / Health Informatics.
- Bioinformatics Centre at MGIMS has acquired Servers, Workstations and Scientific Software packages & Bioinformatics software etc for access to PG/PhD students. Sophisticated software for proteomics, genomics etc. are accessible to students of our Institutes and other Medical colleges across India for gaining experience and for carrying out their research projects on related aspects of Bioinformatics. BIC supports Short Term & Dissertation Projects under DBT' traineeship and studentship programs

and conducts Curriculum-based training & research in Bioinformatics & Biotechnology for students pursuing post-graduate courses in the related disciplines.

#### Microbiology

- Microbiology laboratory has been designated as the IDSP reference laboratory  
Laboratory of Microbiology is designated as advanced laboratory for research in tuberculosis.

#### Obstetrics and Gynecology

- The Govt of India, state government, FOGSI and AVNI foundation have chosen the Department of Ob/Gyn as a nodal centre for its EmOC programme to prevent maternal morbidity and mortality. Master trainers from 11 states have been trained under this programme.

#### Pediatrics

- The Directorate of Health Services, Maharashtra Govt. recognized the training excellence by selecting the Department as the only centre in Vidarbha and one of the only three centres in the whole state for training of health care personnel from various government facilities for Facility Based Newborn Care.

#### Pathology

- The Department of Pathology has been designated by ICMR as the Population Based Cancer Registry of Wardha District. Coordinating with National Cancer Registry Program under ICMR, on development of an Atlas of Cancer, India. In 2001-02, the Department ran a Hospital based Cancer Registry. From 2003 to 2008 department ran a Population based Cancer Registry which collates data from Wardha district, which was the only centre in the country which collected both rural and urban data. From 2010, the rural population based cancer registry has been given permanent status under the National Cancer Registry Program of ICMR.

#### Examples of significant outcomes

- MGIMS, Sevagram was one of the sites for GOI/ ICMR funded multicentric study, 'Home-based management of young infants', which tested the Gadchiroli model of home-based newborn care. In 2011, special training strategy was developed for involvement of ASHA in newborn care throughout the country.
- MGIMS was identified as a centre for the 'Demonstration study to assess the feasibility and impact of use of Loopamp™ MTBC detection Kit for case detection of tuberculosis. Our institute was one of the three centres selected for the study by the Foundation for Innovative New Diagnostics (FIND), Geneva (The other two centres were in Peru and Uganda). The data was submitted to the WHO Technical Advisory Group to decide on the inclusion of this test in routine protocol for

diagnosis of TB. WHO has endorsed this test on 11 Aug 2016. One paper was published in the Journal of Clinical Microbiology.

- In an ICMR funded study, we found that up to 35% of cases with acute undifferentiated fever attending Kasturba Hospital have diseases of zoonotic origin (e.g. scrub typhus, brucellosis, leptospirosis). This project has laid the foundation for establishment of the National Zoonosis Institute at Nagpur.
- In an ICMR funded study on ‘Multi-centric hospital based surveillance of acute encephalitis syndrome (AES) for viral etiology among children in selected districts of Maharashtra and Andhra Pradesh’, capacity was built for testing of AES cases in 4 districts of Maharashtra. In this study, scrub typhus has been found as a cause of AES in central India.
- We are currently conducting a study funded by Central TB Division, Government of India, ‘Multi-centric cohort study of recurrence of tuberculosis among newly diagnosed sputum positive pulmonary tuberculosis patients treated under RNTCP (ongoing). This study may pave the way for modification of guidelines under RNTCP.
- The Bioinformatics Centre has developed databases on Mycobacterial proteases (Mycoprotease-DB, <http://www.bicjbtdrc-mgims.in/MycoProtease-DB/>), Mycobacterium tuberculosis Proteome comparison (MTB-PCDB, <http://www.bicjbtdrc-mgims.in/MTB-PCDB/>) and Human Papillomavirus Proteome (hpvPDB, <http://www.bicjbtdrc-mgims.in/hpvPDB/>) quite useful to the users involved in research in the related fields.
- The Bioinformatics Centre has created an in silico platform for exploring novel inhibitors against HPV/H1N1/ZIKA viruses through molecular docking and virtual screening approach in collaboration with Dr. Varma Lab at Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Mumbai.

Further details have been given in research highlights in **Annexure 30**.

### **3.2.2 Provide the following details of ongoing research projects of faculty:**

During the last 5 years (2011-2016), a total of 90 projects have been implemented. Currently 34 projects are being implemented in various departments. (List enclosed as **Annexure 3G**). The Institute promotes the faculty members to undertake such research and most of the departments are conducting collaborative research projects with national and international organizations, foreign and Indian Universities, scientific and research organizations, industries, charitable organizations and departments of Government of India and Maharashtra also.

### **3.2.3 Does the institution have an Intellectual Property Rights (IPR) Cell?**

No

**3.2.4 Has the institution taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?**

The institute encourages the concerned department to file a patent where ever possible. The following patents have been granted:

- A process for isolation and purification of M. tuberculosis excretory-secretory (M. tb ES-31) protein for use in antibody based assay or antigen based assay. Patent No.- 184510, granted on June 2, 2001.
- A process for the preparation of Brugia malayi microfilarial excretory-secretory (mf ES-22) glycoprotein. Indian Patent No. 224560 granted on October 17, 2008.

**3.2.5 Does the institution have any projects sponsored by the industry / corporate houses? If yes, give details such as the name of the project, funding agency and grants received.**

As a policy decision, the institute does not conduct research funded directly by the drug or device industry. However, the institute partners with the industry through a third party (e.g. Government of India, Govt of Maharashtra, Maharashtra University of Health Sciences, International Organization working for health, e.g. PATH etc).

- The Biochemistry Department as part of the ongoing DBT project developed a rapid diagnostic test kit for filarial IgG4 antibody in collaboration with Ubio Biotechnology Pvt. Ltd., Kerala. The gene of the filarial antigen used in this test was identified, cloned and produced as recombinant antigen in our laboratory.
- The Department of Community Medicine is at present doing a Phase III clinical trial to evaluate the efficacy and safety of live attenuated Bovine-Human Rotavirus Reassortant Pentavalent Vaccine (BRV-PV) produced by Serum Institute of India Limited.

**3.2.6 List details of**

- a. Research projects completed and grants received during the last four years (funded by National/International agencies).**
- b. Inter-institutional collaborative projects and grants received**
  - i) National collaborations**
  - ii) International collaborations**

Please refer to **Annexure 3G** for the complete list of funded research projects

**3.2.7 What are the financial provisions made in the institution budget for supporting students' research projects?**

The Institute has a provision of seed fund to provide financial support to the research projects of junior faculty and PG students. The list of projects of postgraduate students funded from 2011 to 2015 is enclosed (**Annexure 3E**). In addition, funds are made available for development of departments and equipping them with research facilities on annual basis.

### 3.3 Research Facilities

#### 3.3.1 What efforts have been made by the institution to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researchers in emerging disciplines?

The Institute encourages and funds different departments to develop their research facilities. It supports infrastructural development towards research. Each year, all departments are asked to submit their requirements with justifications. On this basis grants are allocated for infrastructural development. The major research facilities developed in the Institute include:

- Department of Anatomy - Genetics laboratory
- Jannalal Bajaj Tropical Disease Research Center (JBTDRC) with the Department of Biochemistry
- Department of Physiology - Neurophysiology, reproductive physiology and cardio-respiratory physiology laboratory
- Departments of Microbiology- Advanced diagnostic facilities for research especially in tuberculosis
- Department of Pathology- Population based cancer registry of Wardha District
- Department of Forensic Medicine- Toxicology laboratory
- Department of Pharmacology – Drug Research
- Dr. Sushila Nayar School of Public Health incorporating Department of Community Medicine - Rural and Urban Health Training Centers for community-based research
- Department of Ophthalmology- Expertise and facilities for community ophthalmology projects
- Department of Medicine- Facilities for research on communicable and non-communicable diseases
- Department of Obstetrics and Gynecology- Community-based reproductive health, Nodal Centre emergency obstetric care
- Clinical Epidemiology Unit
- Bioinformatics Center
- Animal house
- Geriatric Outpatients Clinic.
- Sexually Transmitted Diseases Clinic – STD Clinic has been sponsored by Maharashtra AIDS Control Society.
- Hospital Information System - Analysis of patients information for research purposes
- Arogyadham

Apart from this, the rest of the departments of the Institute are also engaged in research activities. **Annexure 3M** provides details of the research facilities developed within the individual department.

The Institute encourages young researchers to train in their disciplines. Study leave is granted on a case to case basis to gain expertise in research. Faculty have not only attended conferences, training workshops and CMEs, but have also gone to higher centres in India and abroad to pursue PhD, Masters and other research interests. **Annexure 3I** shows faculty who have been granted leave to train in special areas.

**3.3.2 Does the institution have an Advanced Central Research facility? If yes, have the facilities been made available to research scholars? What is the funding allocated to the facility?**

Yes, the institute has an advanced central research facility. This is located in the Department of Biochemistry & Jamnalal Bajaj Tropical Disease Research Centre. It has full time working research scholars and supportive staff and the facilities are accessible to be used by any faculty of other Departments, postgraduate and undergraduate students as well.

**3.3.3 Does the institution have a Drug Information Centre to cater to the needs of researchers? If yes, provide details of the facility.**

The institute has subscribed to UpToDate, which is an evidence-based decision support software. It gives information about 10,000 different topics in 20 different specialties at the point of care. This also includes information regarding drugs. Faculty and residents can access the most relevant information about diagnosis and management of their patients through the MGIMS server on intranet.

The institute also introduced computerized prescriber order entry (CPOE) to prescribe drugs. We also created e-prescriptions on the iPad app, specially designed for this purpose. The electronic applications help doctors identify drugs by both their generic names, check for their availability in the drug store and display their prices - thus minimizing prescription errors and improving the quality of evidence-based therapies.

**3.3.4 Does the institution provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/international)?**

The institute supports the research scholars, visiting scientists and international students coming through the student exchange programme in every possible way. They are provided residential facilities in the hostel (subject to availability of rooms) and/or rural health training centres. They also are given free access to internet.

**3.3.5 Does the institution have centres of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.**

The respective departments in the institute have following facilities for research wherein research scholars from different national/international universities come and complete their research work. **Annexure 3P** provides the details of external research scholars who completed their research work at MGIMS in last 5 years. Depending on their requirements, researchers either use the research laboratories to conduct their research work or they are trained in these specialties in special sessions.

**Anesthesia:** A tertiary training center has been started for training of health professionals in Life Saving and Anesthetic Skills (LSAS) and MGIMS Institute for Simulation & Training (MIST).

**Biochemistry and Jamanalal Bajaj Tropical Disease Research Center:**

- Repository for Filarial parasites & reagents
- Developed filarial immunodiagnostic tests and provide routine filarial diagnostic services to the patients of Kasturba Hospital as well as to other outstation patients
- Identification of novel recombinant proteins for diagnostic use by using filarial antibody assay,
- Immunoprophylactic studies
- The animal models for testing filarial vaccine and anti-filarial drugs,
- In vitro screening of herbal extracts as potential anti-filarial agents
- Molecular biology laboratory,

**Dr Sushila Nayar School of Public Health**

- WHO Collaborative Centre for Research and Training in Community Based Maternal, Newborn and Child Health
- Centre for Advanced Research for Community Based Maternal, Newborn and Child Health (ICMR)

**Microbiology**

- Advanced set up for research in tuberculosis

**Obstetrics & Gynecology:**

Ñ EMOC nodal center for training of Medical officers and master trainers in Emergency Obstetric Care

**Ophthalmology:**



- Sentinel surveillance for prevention of blindness –for training of doctors from all over the country and services to districts.

### 3.3.6 Clinical trials and research

#### **Are all the clinical trials registered with CTRI (Clinical Trials Research of India)?**

Yes. All the trials are registered with the CTRI and are undertaken as per the regulatory and ethical guidelines laid down by the DCGI and ICMR.

#### **List a few major clinical trials conducted with their outcomes.**

- Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study To Evaluate The Efficacy And Safety Of Live Attenuated Bovine-Human Rotavirus Reassortant Pentavalent Vaccine (Brv-Pv) Against Severe Rotavirus Gastroenteritis In Healthy Indian Infants. (Ongoing) (Registered with Clinical trial registry of India (CTRI/2013/05/003667))
- Effect of Probiotics VSL#3 on Prevention of Sepsis in the 0-2 months period: A Double Blind Randomized Controlled Trial (Registered with Clinical trial registry of India CTRI/2008/091/000049)
- HOPE 3: Heart Outcomes Prevention Evaluation (ClinicalTrials.gov number, NCT00468923)
- DIABETES Study: A randomized open trial comparing structured interventions by community health worker to standard care in patients with type 2 diabetes mellitus (CTRI/2012/04/002559)

## 3.4 Research Publications and Awards

### 3.4.1 Does the institution publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.

The Institute publishes the Journal of Mahatma Gandhi Institute of Medical Sciences. It is a peer-reviewed journal published twice a year. In 2013, JMGIMS collaborated with Medknow to develop an online portal (manuscript management system) on their journal on web. Through this portal authors can submit their articles and keep a track of it. The portal also allows reviewers to access articles and submits their comments- thus giving one point access for management of articles to the authors, reviewers and editor. The URL of the website for JMGIMS is [www.jmgims.co.in](http://www.jmgims.co.in).

The composition of the Editorial Board of the Journal is enlisted in **Annexure 3Q**

Editorial policies: The journal allows free access (Open Access) to its contents and

permits authors to self-archive final accepted version of the articles on any OAI-compliant institutional / subject-based repository. The journal does not charge for submission, processing or publication of manuscripts and even for color reproduction of photographs. The journal covers technical and clinical studies related to health, ethical and social issues in field of all medical specialties. Articles with clinical interest and implications are given preference.

The journal is registered with the following abstracting partners: CNKI (China National Knowledge Infrastructure), EBSCO Publishing's Electronic Databases, Exlibris – Primo Central, Google Scholar, Hinari, Infotrieve, Journal Guide, National Science Library, OpenJGate, ProQuest, TdNet. The journal is indexed with, or included in, the following: Index Copernicus, Indian Science Abstracts, IndMed, MedInd.

### 3.4.2 Give details of publications by the faculty and students:

\* **Number of papers published in peer reviewed journals (national / international)**

A total of 773 papers were published in peer reviewed journals in the last five years. The complete list of publications are attached as **Annexure 3R-1 and 3R-2**

Year	Number of papers	PubMed indexed
2011-12	145	34
2012-13	187	45
2013-14	139	38
2014-15	158	54
2015-16	144	64
<b>TOTAL</b>	<b>773</b>	<b>235</b>

- \* Monographs – 18 (in five years) See **Annexure 3R-3**
- \* Chapters in Books – 37 (in five years) See **Annexure 3R-3**
- \* Books edited – 9 (in five years) See **Annexure 3R-3**
- \* Books with ISBN with details of publishers – See **Annexure 3R-3**
- \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, EBSCO host, Google scholar, etc.) – PubMed indexed 235
- \* Citation Index – range/ average – Ranges from 1 - 445
- \* Impact Factor – range/ average - Ranges from 0 – 8.7
- \* Source Normalized Impact per Paper (SNIP) – Ranges from 0 – 2.1
- \* SCImago Journal Rank (SJR) – Ranges from 0 - 4.1
- \* h-index – Journal h-index ranges up to 233

### **3.4.3 Does the institution publish any reports/compilations/clinical round-ups as a part of clinical research to enrich knowledge, skills and attitudes?**

SEVAMED - Quarterly Update on Infectious Disease Research and Lifestyle Diseases has entered 17th year of its publication. The first issue of SEVAMED was published in April, 2000 by Bioinformatics Centre, JB Tropical Disease Research Centre, MGIMS with financial support from Department of Biotechnology, Government of India. It is now available online with complete bibliography and link to abstracts for easy retrieval with interactive web pages (<http://www.bicjbt-drc-mgims.in/sevamed/>) SEVAMED is a journal with judicious blend of spiritual and medical sciences for updating medical teachers, students and practitioners. SEVAMED is the quarterly current awareness service on diagnosis, pathogenesis, vaccines and therapy in infectious diseases, certain clinical conditions and traditional medicine with research update on complementary systems of medicine for lifestyle diseases to promote medical research. It contains (1) Brief review by experts on current health topics, (2) Health Bytes from Web, (3) Health news and Sparks of Wisdom & (4) Bibliography with selected abstracts

### **3.4.4 Give details of**

- \* **faculty serving on the editorial boards of national and international journals**  
See **Annexure 3S**
- \* faculty serving as members of steering committees of national and international conferences recognized by reputed organizations / societies  
See **Annexure 3T-1 and 3T-2.**

### **3.4.5 Provide details for the last four years**

- \* **research awards received by the faculty and students**  
The table below provides the number of research awards received by faculty and students. We are describing in details a few recent ones:
  - Ms Sahitya Rao stood first in the Pure Sciences Undergraduate Research Project Category at the University level research competition organized by the Maharashtra University of Health Sciences (MUHS). Sahitya was awarded for her project titled “Study for exploration of efficacy of piperidine derivatives against *Brugia malayi* by in vitro and bioinformatics study as a valid antifilarial candidate”. She got an opportunity to represent MUHS at Aavishkar 2015 - the 10th Maharashtra State University Research Convention held at Savitribai Phule University.
  - In a National Undergraduate students conference organized recently, between 28-30 July 2016, at Sri Manakula Vinayagar College and Hospital, Pondicherry

named SIMSCON 2016, four students from MGIMS presented their research work done under grants provided by ICMR and MUHS. Our students were ranked 2<sup>nd</sup>, 3<sup>rd</sup>, 6<sup>th</sup> & 10<sup>th</sup>.

	<b>Faculty</b>	<b>PG students</b>	<b>UG students</b>
2011-12	9	17	2
2012-13	8	17	5
2013-14	7	16	4
2014-15	8	12	4
2015-16	7	13	5

\* **national and international recognition received by the faculty from reputed professional bodies and agencies**

	<b>Oration</b>	<b>Fellowship</b>	<b>Other awards</b>
2011-12	1	9	4
2012-13	0	3	3
2013-14	2	3	3
2014-15	3	7	3
2015-16	2	4	5

- MGIMS was awarded the WHO Award for Excellence in Training to Primary Health Care Providers at the ICICI Lombard and CNBC TV18 India Health Care Awards on 22 Dec 2011.

Complete list of Awards is seen in **Annexure 3U**

### **3.4.6 Indicate the average number of post graduate and doctoral scholars guided by each faculty during the last four years.**

There are 71 post-graduate seats in the institute-56 degree and 15 diploma. Over the last 5 years, a total of 14 students are admitted for PhD.

The list of the faculty members recognized as Research Guides for Post-graduate courses and PhD students are attached (**Annexure 3V and 3L**). List of theses submitted is given as **Annexure 3W-1**.

<b>Year</b>	<b>Number of theses submitted</b>
2011-12	53
2012-13	47
2013-14	49
2014-15	42
2015-16	56

**3.4.7 What is the official policy of the institution to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.**

All theses submitted to MUHS go through plagiarism check through anti-plagiarism software. The institute takes plagiarism and malpractice seriously. The issue of plagiarism is discussed with students and faculty members during the research methodology workshop.

The institute does take suitable corrective action as and when such events are reported. In the last five years, two cases were reported. In both of these cases, immediate action was taken and the issues were resolved.

In one case, an Assistant Professor, who resigned from the Institute, plagiarized the thesis of one of the post-graduate students and published it. After a complaint was registered with the journal, the article was retracted from the journal. The post-graduate student was able to publish the paper in another journal later on.

In another case, a post-graduate student had published an article without showing the manuscript to all authors. On the complaint from one of the authors, the journal retracted the article.

**3.4.8 Does the institution promote multi/interdisciplinary research? If yes, how many such research projects have been undertaken and mention the number of departments involved in such endeavors?**

Yes. Please refer to the response to question 3.1.5.

**3.4.9 Has the university instituted any research awards? If yes, list the awards.**

Not applicable

**3.4.10 What are the incentives given to the faculty and students for receiving state, national and international recognition for research contributions?**

- In 2015, MGIMS, Sevagram instituted the Dr Sushila Nayar Memorial Award for Under-graduate Research. In 2016, we decided to felicitate students who have received recognition at university, state, national or international level and give them award equivalent to the first prize under this scheme.
- Postgraduates are given Sushruta Award- (**Annexure 3W-2** provides details of Sushruta Award.)
- Incentives for faculty members who win recognition includes the following:
  - Considered for Personal Promotion
  - Sanctioned special leave and/or study leave to attend academic and

scientific endeavors

- The institute also gives permission to the faculty to attend meetings in relation with collaborative research projects.
- The institute also has provision of reimbursement of expenditure incurred on attending conference/ workshop/ course once in a year to each faculty. They are provided reimbursement for registration fee, transport and accommodation. The Institute also provides financial support to its faculty to attend international conference/ workshop/ short course once in three years

**3.4.11 Give details of the postgraduate and research guides of the institution during the last four years.**

- Undergraduate students - **Annexure 3X-1** provides details of research carried out by undergraduate students along with names of their guides. **Annexure 3X-2** provides details of the award session held for Dr. Sushila Nayar Memorial Award for UG research
- Post-graduate students - **Annexure 3W-1** provides details of Post-graduate dissertation. **Annexure 3W-2** provides details of the Sushruta award held in year 2016 for best thesis by a Post-graduate student.
- PhD students – **Annexure 3L** provides details of PhD theses along with their guides.

See **Annexure 3V** for complete list of recognized postgraduate guides.

## **3.5 Consultancy**

**3.5.1 What are the official policy/rules of the institution for structured consultancy? List a few important consultancies undertaken by the institution during the last four years.**

The institutional policy does not permit any financial incentives to be accepted for consultancy. However the faculty members have been providing expert advice and consultancy to the following national and international agencies.

Few important academic consultancies undertaken by the institution during the last four years were for:

- World Health Organization (WHO)
- United Nations Children’s Fund (UNICEF)
- United Nations Population Fund (UNFPA)

- United States Agency for International Development (USAID)
- Foundation for Advancement of International Medical Education and Research (FAIMER), Philadelphia
- Open University and Keele University, UK
- Government of India (GOI)
- Department of Science and Technology (DST)
- Indian Council of Medical Research (ICMR)
- National Institute of Health and Family Welfare (NIHFW)
- National Institute of Public Cooperation and Child Development (NIPCCD)
- Public Health Foundation of India (PHFI)
- National Institute of Health and Family Welfare (NIHFW)
- India Clinical Epidemiology Network (IndiaCLEN)
- Government of Maharashtra (GOM)
- Medical Council of India (MCI)
- Maharashtra University of Health Sciences (MUHS, Nashik) and other health sciences universities
- Voluntary Health Association of India (VHAI)
- Non-government Organizations working in health sector
- District Health System
- Academic Institutes at international, national and local level

One of our faculty members was permitted by the institute to provide paid consultancy to UNICEF in Bhutan for the following:

- Identification of causes of under-five deaths in health facilities in Bhutan; UNICEF Bhutan, August 2012
- Assessment of Child Health Care Services in Hospitals in Bhutan; UNICEF, Bhutan; March 2013
- Capacity Building for Database Management, Analysis and Report writing; UNICEF Bhutan; March 2013
- Rapid Assessment of Facility based newborn care with special focus on SCNUs in Karnataka; Sep 2012

He also contributed to the following package as independent member of Expert Group:

- Operational Guidelines for 'Rashtriya Bal Swasthya Karyakram' (Child Health Screening and Early Intervention Services under NRHM)

**3.5.2 Does the university have an industry institution partnership cell? If yes, what is its scope and range of activities?**

Not applicable

**3.5.3 What is the mode of publicizing the expertise of the institution for consultancy services? Which are the departments from whom consultancy has been sought?**

The Institute utilizes its networks. The profiles of the faculty members have been uploaded at the World Health Organization SEARO directory for training institutions, NIPCCD website, MUHS website, MGIMS website and departmental websites (wherever applicable). Apart from this it is also publicized through the MGIMS bulletin and annual reports.

**3.5.4 How does the institution utilize the expertise of its faculty with regard to consultancy services?**

The Institute encourages its faculty members to provide consultancy services to other organizations. The faculty members are considered on duty during the period of consultancy.

**3.5.5 Give details regarding the consultancy services provided by the institution for secondary and tertiary health care centers and medical / dental practitioners.**

The faculty members

- Conduct collaborative projects for UN, international and national organization
- Have provided consultation in development of training modules for various levels of health professionals
- Are members of various national task forces
- Have been member of program evaluation teams for evaluation of national health programs as well as programs implemented by various UN and international agencies.
- Act as resource persons for various academic activities at international, national and local level
- Are on editorial board of several scientific journals and are members of several professional bodies
- Are on various boards for MUHS, Nashik and other universities for development of curriculum, new courses, assessment methods etc.
- Lend their expertise to various academic and research institutions in the country in areas of research planning
- Various departments are recognized for standard training courses of health care professionals; e.g. Emergency Obstetric Care training program, Integrated Management of Neonatal and Childhood Illnesses, Life Saving and Anesthetic Skills
- MGIMS networks with Non-government organizations and builds their capacity
- Various departments of the institute help the district health system in planning and implementation of national health programs
- District health authorities in Wardha seek support of the institute whenever they



- face an epidemic of communicable disease
- Organize conferences and workshops for public and private health care providers.

### **3.5.6 List the broad areas of consultancy services provided by the institution and the revenue generated during the last four years.**

The broad areas of consultancy provided by the faculty members are:

- Medical Education
- Research Methodology
- Reproductive and child health: for quality of child health services, audit of information and cause of death analysis
- Newborn care
- School health services
- Communicable diseases; especially research in zoonosis, filariasis and tuberculosis
- Non-communicable disease
- Community mobilization for health action
- Early childhood care and development
- Research methodology

The institutional policy does not permit any financial incentives to be accepted for consultancy. However the faculty members have been providing expert advice and academic consultancy to the several national and international agencies.

## **3.6 Extension Activities and Institutional Social Responsibility (ISR)**

### **3.6.1 How does the institution sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programs which have created an impact on students' campus experience during the last four years.**

MGIMS Sevagram was started with the basic aim to produce doctors, who have better understanding of the health problems of the rural areas and would be more willing to work in the villages. Thus, raising social consciousness of medical students becomes part of the basic objective of the Institute. For this purpose, the institute has made several innovations in the curriculum.

**Curricular innovations including community immersion program:** Efforts to make students conscious towards the society have been weaved into every stage of the medical curriculum at MGIMS, Sevagram. The key approaches for sensitizing students and faculty

towards the institutional social responsibility are: Orientation Camp, Social Service Camp and Village Adoption Scheme, Reorientation of Medical Education (ROME) Camp, Essential National Health Research and Rural Placement Scheme. The details of these sensitization activities and social outreach programs have already been described in section 1.1.2 (Also see **Annexure 1B**). The Social Service Camp and Village Adoption Scheme provide a community immersion experience to the students. This experience gets further enriched as the students also get exposed to the strong community mobilization activities in the field practice area of the institute. This leaves a long-lasting impact on the minds of students and helps create a rural bias among our students.

**Health insurance scheme:** The health insurance scheme of the institute seeks to create health consciousness in the community and helps in making health services accessible to people. A villager can insure himself and his family by paying Rs 400 a year and in return he gets 50% subsidy in OPD and indoor bills. In 2015-16, 18807 families (86199 members) around Sevagram volunteered to obtain health insurance from this hospital. Similarly 40 villages were totally insured and 90201 rural people were insured under this scheme.

**Low cost drug initiative:** Over the last five years, the institute implemented a low-cost drug initiative which aims to provide appropriate and affordable drugs to patients. This is done using a multi-pronged strategy. The low-cost drug initiative has reduced the cost of medical treatment at Kasturba hospital, both in outpatient and inpatient setting by more than two-third.

**Rajiv Gandhi Jeevandayee Arogya Yojana (RGJAY):** In November 2013, Kasturba Hospital was identified as a key hospital in Vidarbha to run RGJAY. This health package has been implemented throughout the state of Maharashtra. The main objective of the scheme is to improve access of Below Poverty Line (BPL) and Above Poverty Line (APL) families to quality medical care for identified speciality services requiring hospitalization for surgeries and therapies or consultations through an identified Network of health care providers. The scheme entails around 971 surgeries/ therapies/ procedures along with 121 follow up packages in 30 identified specialized categories. The major beneficiaries of the scheme are patients with cancer, those seeking emergency healthcare because of traumatic accidents and seriously ill patients with life threatening catastrophic medical, paediatric and surgical illnesses.

Over a year, in 2014, 1499 patients with a spectrum of illnesses availed themselves of the benefits of RGJAY - 840 with cancer. On 30 March 2015, our hospital was awarded 88.4% score and A1 grade in a six-monthly assessment carried out by the empanelment committee for the RGJAY.

**Community Based Reproductive Health Care Projects:** Community based reproductive health services are being provided, in 53 villages. Village Health Workers / Volunteers try to

keep track of pregnancies and provide information to the ANMs, who are based at the institute. These retrained ANMs provide antenatal care, intranatal and post natal advice through home visits and gynecological disorders, screening and cervical cancer prevention is also going on.

**Community-based health care services in field practice area:** The Institute has done extensive community mobilization in its field practice area. With involvement in the ‘Health and Nutrition’ days at village level, coverage with the basic maternal and child health services has improved markedly. In the Rural Health Clinic run in 20 villages, there is also a provision of providing free care to the poor households. The Institute believes in women-centered development and it strengthens women’s self-help groups at village level.

### **3.6.2 How does the institution promote university-neighborhood network and student engagement, contributing to the holistic development of students and sustained community development?**

We describe here some of the approaches being used by MGIMS, Sevagram to promote university-neighborhood network.

**Empowering community for health action:** The Institute’s commitment to the community is well known. Community-based programs have been consistently implemented to enhance health care services. The Department of Community Medicine has adopted three primary health centres and developed a model of decentralized healthcare delivery at village level through Community-based Organizations and the Panchayati Raj Institutions. It has formed 275 Self-help groups, 10 Kisan Vikas Manch and 89 Kishori Panchayats in the adopted villages. Through innovative strategies, family life education is provided to adolescent girls in all the program villages. The institute continuously works to empower the village health nutrition and sanitation committees (VHNSCs) in each village in its field program area. Today, each of these VHNSCs have prepared their village health plan. These committees meet every month and discuss what more could be done to improve the health of the villagers. In every village in the field program area, they have implemented their innovative ideas to do health promotion and disease prevention.

**Seva Bhaav:** MGIMS launched a weekly radio program called Seva Bhaav on 23 Apr 2015, in collaboration with a community based Wardha radio station - MGIRI Radio 90.4 FM. The program throws light on a variety of issues related to health and disease in the community and airs on Thursday at 9:00 am and 8:00 pm. (See **Annexure 3Y**)

**White Coat Army:** ‘White Coat Army’ is a team of undergraduate medical students who came together to create awareness about the hazards of alcohol and tobacco abuse. The initial team of 29 students, guided by a faculty in Psychiatry, conducted 22 awareness talks

in August 2015 in and succeeded reaching out to 1147 patients admitted in the hospital wards and their relatives. In 2016, the team decided to reach out to the community and have successfully conducted health awareness session in several villages in the field practice area of the institute. The White Coat Army also conducted surveys on the efficacy of alcohol ban implementation in the villages. The team has now reached out to more than 2300 people and tried to unhook people from cigarette smoking, bidi smoking, use of chewing tobacco and alcoholism. Sessions were also held for the new entrants to the MBBS course in an attempt to teach them how to deal with peer pressure and how to reverse it positively. The group also has a well-designed approach of inducting new members.

### **3.6.3 How does the institution promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International programs?**

The Institute participates actively in all the National Service Scheme (NSS) activities. Under MUHS, Nashik; it has a sanctioned strength of 130 volunteers and has been regularly conducting regular as well as special camp activities. The NSS Unit at MGIMS, Sevagram was recognized as the best NSS Unit under MUHS Nashik in the year 2006.

The Institute started a rural placement scheme in 1990 according to which all graduates serve for two years at rural non-government organization. As many as 112 NGOs from all over the country are partners in this initiative. It is mandatory to be eligible for applying for a post-graduation course at the institute. Until 2015, 24 batches (1155 students) have been posted to over 80 centres across India. Details of Rural Placement of Scheme have already been included in Section 1.1.2. Please find **Annexure 3Z** with approved NGOs where our students were posted in year 2015-16.

### **3.6.4 Give details of social surveys, research or extension work, if any, undertaken by the institution to ensure social justice and empower the underprivileged and the most vulnerable sections of society?**

The Department of Community Medicine is very active in its field area and carries out the following activities:

#### **Women's Self-Help Group**

Self-Help Group is a very effective tool not only for women's empowerment, but also for overall development of the community. The Department of Community Medicine fully appreciates the critical link between women's empowerment and health empowerment and considers the involvement of women's self-help groups (SHGs) to be the key to the success of any health programme. The Department has now achieved the formation of 3-4 SHGs per village in all the villages of its field practice area; viz. PHC Anji, Kharangana, Gaul and Talegaon. With passage of time, the members of SHGs have learnt to manage their groups individually and have developed as member-owned and member-managed institutions. The

Department provides assistance to SHGs to add a health action agenda to their primary financial function (finance plus) so that the women are able to determine health priorities and to play a pro-active role in health care delivery in their villages. A total of 275 Self-Help Groups were functioning on 31 Mar 2016 in the adopted villages of the Institute: Anji PHC area (55), Gaul PHC area (24), Kharangana (89), Talegaon PHC area (81), Wardha Urban Health Center adopted area (26). All the SHGs are linked with banks and have updated member account books.

### **Kisan Vikas Manch**

*Kisan Vikas Manch* (Farmers' club) has evolved as a way to involve men in the health activities at village level. The programme provides learning opportunities for members to improve their agricultural yield and in turn improve their economical status. The health action agenda is added to the primary purpose so as to empower them to actively participate in the health programme. A total of 10 *Kisan Vikas Manch* (KVM) were functioning on Mar 31, 2016 in the adopted villages of the Institute. In Anji PHC area, a federation of all the *Kisan Vikas Manch* from the villages has been formed in Dec 2008. This is being utilized as a platform to strengthen health agenda among the men in the program. An E-Chaupal center has been established at Anji for the federation of KVM. This center will be utilized for training of KVM members. A resource center for *Kisan Vikas Manch* has been developed at KRHTC, Anji.

### **Adolescent Girls' Groups (Kishori Panchayat)**

The Department of Community Medicine has taken an initiative to form groups of non-school going adolescent girls in several villages in Anji, Gaul, Kharangana and Talegaon PHC areas. At village level, an elected body of the adolescent girls has been formed, which is known as *Kishori Panchayat*. Adolescent-to-adolescent education program is undertaken in all the villages through these groups. These groups have been oriented towards the issues of adolescent health, maternal health, child survival, environmental health, family life education, RTI/ STD, HIV/ AIDS etc. In turn, these girls will train their peers and younger adolescents in their villages.

The elected body also provides a mechanism for adolescent girls to participate in decision-making at village level. Apart from health issues, other village development related issues are also discussed with this group. The programme ultimately aims to produce leadership qualities in the adolescents and utilize them for health action at village level. The Department has successfully formed *Kishori Panchayats* in almost each village of its field practice area. There are total 89 *Kishori Panchayats* functional in the three PHC areas adopted by the department: Anji PHC area (24), Gaul PHC area (11), Kharangana (26), Talegaon PHC area (22) and UHC (06). For the members of the *Kishori Panchayat*, various training programmes on nutrition, pregnancy and newborn care, health and sanitation, menstrual hygiene, safe motherhood, first-aid etc. were taken up. Peer educators were identified from the members of *Kishori Panchayat* and they have been trained for HIV/ AIDS awareness in a workshop

setting. A number of *Kishori Panchayat* members have taken up responsibility of imparting health education to pregnant and post-natal mothers. These groups have become an excellent means to create health awareness among the adolescent girls. A resource centre for *Kishori Panchayat* was developed at the RHTC, Bhidi in 2008-09.

### **Health Insurance**

Health insurance has been one of the important activities in the program villages. The VHNSC members have accelerated their activity in respect to insurance coverage in their village with the Kasturba Health Society and a total Rs. 25,68,681 has been collected for insurance coverage for the Jan-Dec 2015. This includes full insurance coverage of 715 community based organizations and 23 villages.

### **Continuing Education Programme for Anganwadi Workers**

Continuing education programme for the Anganwadi workers are being done in the three PHC areas adopted by the Department of Community Medicine. These continuing education programmes aimed at improving the skills of Anganwadi workers. During these training programmes, efforts are made to provide the workers with training on health as well as other issues of Early Childhood Development.

### **Village Health Nutrition and Sanitation Committee**

The Village Health Nutrition and Sanitation Committee have been entrusted with the responsibility of organizing the day and also ensuring that the beneficiaries access the services. The active participation of the Village Health Nutrition and Sanitation Committee members has led to increased turnouts of beneficiaries during the Health and Nutrition Day at village level and thus increased coverage with maternal and child health services.

### **Continuing Education Programme for the Health Workers**

Continuing education programme has also been started for the health workers from the three PHC areas (viz. Anji, Gaul and Talegaon). A total of 60 health workers from these PHC areas participate in the one-day continuing education programme every month, which is aimed to improve their skills in delivering Reproductive and Child Health Services in the community.

### **Family Life Education through Schools**

Propounding the need for Family Life Education (FLE) for adolescent girls, the Department of Community Medicine has facilitated family life education in all the high schools and junior colleges of the three adopted PHC areas. Following this, the trained teachers have started imparting family life education in the respective schools and junior colleges. At RHTC, Bhidi 54 sessions were conducted in 6 schools, while 31 sessions in 3 schools were conducted at KRHTC Anji. In Kharangana 80 sessions were conducted in 13 schools, in Talegaon 44 sessions were conducted in 6 schools, while 54 sessions were conducted in 6 schools at UHC, Wardha.

The other activities carried out by other departments are:

**Aakanksha: An adoption centre for abandoned babies:** Aakanksha, started in 2002, provides foster care for abandoned babies. The obstetricians noted that unwed mothers often abandoned their babies after they were delivered. The faculty in the Obstetrics and Gynecology department, moved by the plight of such babies, decided to start a center where such babies could be sheltered and, cared for and given to a loving and caring family. The center started with 12 babies. Of the 492 babies the center has cared for till now, 443 babies have found their permanent homes by wanting couples, countrywide.

**Utawali project, Melghat:** Melghat is a tribal area in Dharni and Chikhaldara of Amravati district is located at a distance of 250 Kms from Sevagram. This area attracted wide media coverage because of malnutrition-associated deaths in the last decade. Three-fourths of the population is tribal- inhabited by Korku Adivasis. Through a base hospital at Dharni, the institute had been running an OPD and in-patient services since the last 16 years. However, in view of high maternal and infant mortality rates, it was decided to take this initiative forward. The institute runs a 50 bedded Dr Sushila Nayar hospital in the tribal area of Utawali, Dharni. The hospital was initiated with funding support from the Shri Brihad Bharatiya Samaj, a Mumbai based nongovernmental organization. The Government of Maharashtra has recognized this as a referral unit.

In 2015-16, a total of 12272 patients were seen in the OPD. 845 patients were admitted in the wards of the hospital. 188 babies were delivered, 60 by Caesarian section. A total of 387 surgeries were conducted; of which, 148 were major surgeries. Medical officers examined 3478 patients in community clinics. A diagnostic and therapeutic camp was conducted with cooperation from specialists and staff of MGIMS Sevagram. 2197 patients availed the benefit. Patients requiring further investigations and complicated surgical procedures were brought to Sevagram where they underwent treatment.

#### **Community Ophthalmology:**

The Department of Ophthalmology, Kasturba Hospital, MGIMS, Sevagram, has been providing preventive, promotive, curative and rehabilitative eye care. Primary to tertiary level eye care which are currently available to residents in metropolises are provided to poor people living in rural areas and urban slums at their door step. Community based comprehensive and specialty eye care services are provided to people living in and around Wardha district.

**Cataract Blindness Control in Wardha District Project:** Under this project daily screening eye camps have been conducted door to door in all the villages of 8 blocks of Wardha district covering a population aged > 50 years. Screening for blindness and operable cataract is conducted door-to-door. Blind register is prepared at the village level. This year 31,706

villagers have been screened by doctors at their door steps in 855 villages. Individuals aged more than 50 years with visual acuity less than 6/60 due to cataract in either eye who were in need of cataract surgery were motivated, provided free to-and-fro transport and brought to Kasturba Hospital Sevagram for operation. All services including surgical treatment, medicines, intra-ocular lenses (IOL) and glasses were provided free of cost. Computerized data bank is maintained to keep records pertaining to all patients screened and operated for follow-up. In the current year, 4247 cataract surgeries were performed. In 4237 patients, IOL implantation was done and in 10 patients conventional cataract surgery was performed. Visual acuity of 31,706 persons (aged > 50 years) was tested by trained paramedical workers and 14108 villagers who had visual acuity <6/60 was examined by eye specialists at their door steps. 4701 patients were referred to Kasturba Hospital and of these 4312 patients were provided free transport facility.

So far 55171 poor rural patients from the project area who were suffering from curable blindness have undergone cataract surgery at Kasturba Hospital and 54154 (98.2%) of these were successfully implanted with intra ocular lens and their sight has been restored. Use of modern technique of small incision cataract surgery has resulted in early post-operative visual rehabilitation of patients. Through this project, benefits of modern cataract surgery have been made accessible to poor, rural patients suffering from curable cataract blindness in Wardha district.

CBCWD project has made huge contribution in control of cataract blindness in Wardha District. So far 8,96,689 villagers aged above 50 years have been screened at their door steps in all the 855 villages of Wardha District. From the project area 55,171 poor rural patients who were suffering from curable blindness had their sight restored by modern technique of small incision cataract surgery at Kasturba Hospital and of these 54,154 (98.2%) were successfully implanted with intra ocular lens.

### **3.6.5 Does the institution have a mechanism to track the students' involvement in various social movements / activities that promote citizenship roles?**

Database of all alumni is maintained in the institute. Social media platforms (Facebook and Whatsapp) are helping the alumni remain connected with the institute and within themselves. On Facebook, 'Alumni of the month' are highlighted with special focus on achievers who have gone into community service. Interviews with these alumni are published on Facebook each month.

### **3.6.6 How does the institution ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the institution that have encouraged community participation in its activities.**



MGIMS has developed a strong partnership with community through intense mobilization efforts. The Department of Community Medicine, MGIMS, Sevagram (DCM) is actively involved in community mobilization in approximately 75 villages in three primary health centers under its field practice area. DCM acts as a catalyst to form community-based organizations (CBO) and builds their capacity for health action. The CBOs and engagement with local governing bodies ensure an enabling environment for individual and group behavior change. Individual and group behavior change in this context translates into community norms which once adopted will be sustained through intergenerational communication networks.

The community-based organizations being promoted by MGIMS, Sevagram in its field practice area are:

- **Women's Self-Help Groups:** Women's Self-Help Group (SHG) is a very effective tool for not only women empowerment, but also overall development of the community. MGIMS fully appreciates the critical link between women empowerment and health empowerment and plays a catalytic role to add health action agenda to their primary microfinance function. With this women have been empowered to determine health priorities and play a proactive role in health care delivery in their villages. The department has now achieved formation of 3-4 SHGs per village in all villages in its field practice area. A total of 277 Self-Help Groups were functioning on Mar 31, 2014 in the adopted villages of the Institute. Apart from these Self Help Groups, MGIMS, Sevagram also engages with the Self Help Groups formed by other non-governmental organizations in these villages.
- **Kisan Vikas Manch:** Kisan Vikas Manch (Farmers' club) has evolved as a way to involve men in health activities at village level. The Institute provides learning opportunities for members to improve their agricultural yield and in turn improve their economical status. The health action agenda is added to the primary purpose so as to empower them to actively participate in the health program. Kisan Vikas Manch in the villages of Anji PHC area came together to form a federation. The federation engages experts in agriculture sector for capacity building of the members of Kisan Vikas Manch, so that farmers can get better yield from their agricultural land.
- **Adolescent Girls' groups (Kishori Panchayat):** The Institute has taken an initiative to form groups of non-school going adolescent girls in all the villages of its field practice area. At the village level, an elected body of the adolescent girls has been formed, which is known as Kishori Panchayat. Adolescent to adolescent education programme is undertaken in all villages through these groups. These groups have been oriented towards issues of adolescent health, maternal health, child survival, environmental health, and family life education, RTI/ STD, HIV/ AIDS etc. In turn, these girls will train their peers and younger adolescents in their villages. A resource center for Kishori Panchayat has been developed at the RHTC, Bhidi since 2008-09. This includes a library of health

education material for adolescents with 5 satellite libraries at the school level and 10 satellite libraries at the village level.

- **Panchayati Raj Institutions (PRI) and Village Health Nutrition and Sanitation Committee (VHNSC):** DCM continuously engages with PRI members in all villages in its field practice area. Orientation sessions are organized through the Rural and Urban Health Training Centers to empower the PRI and VHNSC members for health action at community level. Due to its continuous engagement with VHNSC, in most villages in the field practice area, monthly meetings of VHNSC members are ensured. DCM has also developed a system of community monitoring of health, which was successfully piloted in 20 villages in its field practice area.
- The **Rural Health Insurance Scheme** has a strong component of community participation and action. Under the Jowar scheme of health insurance, to be eligible, villagers have to participate in community services such as self-help groups for women, spinning and weaving, experiment in organic farming and participate in community building.
- Under the **Community-based Reproductive Health Care Project**, a Village Health Worker tracks all the pregnancies in the village and keep the ANM based in the institute informed.

### **3.6.7 Give details of awards received by the institution for extension activities and/contributions to social/community development during the last four years.**

In recent times, the institute has received the following awards for its extension activities:

- WHO award for Excellence in Training in Primary Health Care in 2011
- Mahaveer award for excellence in sphere of education and medicine

### **3.6.8 What intervention strategies have been adopted by the institution to promote the overall development of students from rural/ tribal backgrounds?**

The institute has the following schemes for students from rural/ tribal backgrounds:

#### **Reservations in Admission process:**

12 seats (6 Maharashtra and 6 Non-Maharashtra) are reserved for students belonging to rural areas.

12 seats (6 Maharashtra and 6 Non-Maharashtra) are reserved for Scheduled Castes.

6 seats (3 Maharashtra and 3 Non-Maharashtra) are reserved for Scheduled Tribes.

3 seats (1 Maharashtra and 2 Non-Maharashtra) are reserved for Vimukta Jati.

5 seats (3 Maharashtra and 2 Non-Maharashtra) are reserved for Nomadic Tribes 1, 2, 3.

18 seats (9 Maharashtra and 9 Non-Maharashtra) are reserved for Other Backward classes.

**Book bank scheme:** The institute has several book bank schemes, including:

- 1) MUHS Book Bank Scheme for economically backward students,
- 2) Book bank for SC/ ST students and beneficiary of GoI scholarship,
- 3) Needy Students Library for all students, and
- 4) Dr. Anand Karkhanis Book Bank Scheme for all students.

There are a total of 2786 books combining for all four book bank schemes. Approximately, 100 students are beneficiaries of all book bank schemes together.

**Scholarships/ Freeships:** The institute also provides scholarships/ freeships to several students. Every year, approximately 100 students from SC/ ST/ VJNT/ OBCs avail scholarships/ freeships every year and a total amount of Rs. 2,08,78,614 was given as scholarships or freeships over the last five years. Scholarships is also available; over the last five years, an amount of Rs. 7,29,854 was given to economically backward students. In addition, the President arranges scholarships for 4-6 students every year for the needy students. Details are provided in Section 5.1.7 and 5.1.8

**Earn and Learn scheme of MUHS, Nashik:** Under 'Earn and Learn Scheme' of MUHS, Nashik student/s are chosen to do part-time paid work in the institute. At MGIMS, Sevagram, Ms. Snehal Kawale has been selected under this scheme. She helps in the library two hours every day. In 2015-16, she received Rs. 16500/- under this scheme.

**Dhanwantri Vidyadhan Yojana:** Under this scheme, students who have taken educational loan from banks are chosen for this benefit. For the chosen student, the University bears the interest on the loan. Ms. Urmila Phad from MGIMS, Sevagram has been chosen under this scheme.

**Sanjeevani Students' Security Scheme:** This scheme launched by MUHS, Nashik provides insurance cover for all under-graduate students, interns and post-graduate students for death, major injuries and illnesses.

**Financial assistance from alumni:** The alumni also provide financial support to the needy students. Since 2011, 8 students from different batches have been provided financial assistance (total amount: Rs. 183,400/-) from the alumni of 1978 batch.

**3.6.9 What initiatives have been taken by the institution to promote social-justice and good citizenship amongst its students and staff? How have such initiatives reached out to the community?**

The curricular innovations at MGIMS, Sevagram, comprising of Orientation Camp, Social Service Camp and Village Adoption Scheme, and Reorientation of Medical Education, have been designed to create social consciousness among its students. These have already been described in detail in section 1.1.2 and 2.2.7.

Apart from this, other activities include:

**Students' Council:** We have a vibrant Students' Council, which conducts several activities in a year. e.g. On Gandhi Jayanti, students have elocution contests on a relevant aspect of Gandhian philosophy. They also take a pledge of non-violence. The Tara Devi Memorial Intercollegiate Debate is conducted each year on a pertinent raging social issue of the times. During the college literary day each year, a number of competitions are organized; e.g. essay writing, short story writing, and poetry competition to name a few. All students at MGIMS, Sevagram also participate in National Service Scheme. NSS at MGIMS, Sevagram organized blood donation camp, tree plantation and school health education.

**White Coat Army:** 'White Coat Army' is a team of undergraduate medical students who came together to create awareness about the hazards of alcohol and tobacco abuse. (See Annexure 2E)

**3.6.10 How does the institution align itself with the annual themes/programs of WHO/ICMR?**

Every year, we celebrate World Health Day and a Post-graduate symposium is conducted on the theme of the year. In addition, we also conduct poster competitions for medical and nursing students. Depending on the theme of the World Health Day topics, additional activities are also conducted.

The symposia conducted in the last five years were as follows:

Date	Theme	Speakers
7 Apr 2011	Combat antimicrobial drug resistance: No action today, no cure tomorrow	Dr Vijayshree Deotale Dr Abhishek Raut Dr Hitesh Gulhane
7 Apr 2012	Ageing and Health: Good health adds life to years	Postgraduates from Dept of Community Medicine and Medicine
10 Apr 2013	Hypertension: Healthy heart beat, healthy blood pressure	Dr Akash Ranjan Dr Vineeta Singh Dr Anupriya Singh

7 Apr 2014	Vector borne diseases	Postgraduates from Dept of Community Medicine and Microbiology
7 Apr 2015	Food safety: From farm to plate, make food safe	Post graduates from Community Medicine, Microbiology

Different departments of the institute are encouraged to apply for projects to ICMR in its priority areas.

### 3.6.11 What is the role of the institution in the following extension activities?

- \* **Community outreach health programs for prevention, detection, screening, management of diseases and rehabilitation by cost effective interventions.**

The institute carries out a lot of extension activities. The table below gives details of the number of patients seen in outreach areas:

Year	No. of outreach patients examined
2011-12	128182
2012-13	192511
2013-14	106371
2014-15	160088
2015-16	94063

Outreach clinics (through Rural and Urban Health Training Centers): The Department of Community Medicine operates *Rural Health Clinics* in 26 villages in its field practice area. These clinics are managed by the community themselves. The villagers have created a Village Health Fund with contributions from each household. A part of this fund is utilized for revolving drug fund. The patients seen in the rural health clinics purchase medicines at 'no profit, no loss' from the community pharmacy developed using this fund. The villagers provide the space and services of a volunteer for management of these clinics. A clinic is also run at Urban Health Center. In addition, Geriatric clinic and Body, mind medicine clinic has been initiated at the Urban Health Center. The total patients seen in these clinics were 46806 in year 2015-16.

Year	No. of patients seen by Dept of Community Medicine in outreach areas
2011-12	27402
2012-13	34583

2013-14	30266
2014-15	47047
2015-16	46806

**Diagnostic camps:** The Institute conducts diagnostic camps in the villages in Wardha and nearby districts where out-patient services are provided. Those who require specialized care for diagnosis and treatment are referred to Kasturba Hospital and with 50% concession on all the hospital charges. During the camp, health promotion and disease prevention activities are also undertaken.

Year	No. of patients seen in diagnostic camps
2011-12	8119
2012-13	88159
2013-14	16336
2014-15	60609
2015-16	12073

**Social service camp and village adoption scheme:** The institute provides outpatient services in villages adopted for each batch of medical students during the social service camp and also during monthly visit to these villages. Details of the social service camp and village adoption scheme are provided in section 1.1.2.

Year	Adopted villages
2011	Mandaogad
2012	Sonegaon (St)
2013	Seloo Kate
2014	Dhanora
2015	Padegaon

**Utawali project:** Dr Sushila Nayar Hospital has been established in Utawali village to cater to the needs of tribal population in Melghat. In 2015-16, a total of 12272 patients were seen in the OPD. 845 patients were admitted in the wards of the hospital. 188 babies were delivered, 60 by Caesarian section. A total of 387 surgeries were conducted; of which, 148 were major surgeries. Medical officers examined 3478 patients in community clinics. More details of Utawali project is provided in section 3.6.4.

**Community ophthalmology:** Department of Ophthalmology provides primary to tertiary level eye to poor people living in rural areas and urbanslums at their door step. Visual acuity of 31,706 persons (aged > 50 years) was tested by trained paramedical workers and 14108 villagers who had visual acuity <6/60 was examined by eye specialists at their door steps. 4701 patients were referred to Kasturba Hospital and of these 4312 patients were provided free transport facility. So far 55171 poor rural patients from the project area who were suffering from curable blindness have undergone cataract surgery at Kasturba Hospital and 54154 (98.2%) of these were successfully implanted with intra ocular lens and their sight has been restored.

Year	No. of eye patients seen in diagnostic camps
2011-12	92661
2012-13	69769
2013-14	59769
2014-15	52432
2015-16	31706

**Cancer registry and surveillance:** Diagnostic cancer screening camps including Pap smear screening camp for cancer cervix is held regularly. The Department of Pathology runs a population based cancer registry program under ICMR, where social workers gather data from all major hospitals in Wardha district. In the next step, surveillance of patients of cancer is also being planned.

- \* **Awareness creation regarding potable water supply, sanitation and nutrition.**
- \* **Awareness creation regarding water-borne and air-borne communicable diseases.**
- \* **Awareness creation regarding non-communicable diseases - cardiovascular diseases, diabetes, cancer, mental health, accident and trauma, etc.**
  - The Department of Community Medicine has developed a strong behavior change communication strategy in its field practice area which utilizes the network of community-based organizations (CBOs); viz. Panchayati Raj Institutions, Village Health Nutrition and Sanitation Committee, Self-help group of women, Kishori Panchayat & Kisan Vikas Manch. A platform for community dialogue has been established through regularization of monthly meetings of all CBOs and other innovative approaches; e.g. Parenting Workshop at village level. Details of the Behavior change communication strategy is described in **Annexure 3AA**.
  - In the registration area of the hospital itself, health education posters have been displayed which people can read everyday. In addition audio-visual

information of facilities as well as health education is played continuously in lounge in out-patient areas. Also first entry of all patients is in General OPD which is replica of Primary Health Care where also IEC is done.

- In addition, a multicare project is going on in Department of Medicine which is creating awareness regarding lifestyle disorders among the rural and population in Wardha district.
  
- \* **Awareness creation regarding the role of healthy life styles and physical exercise for promotion of health and prevention of diseases.**
- \* **Awareness creation regarding AYUSH Systems of medicines in general and / or any system of medicine in particular.**
- \* **Complementary and alternative medicine.**
  
- Arogyadham is an integrative health care and research project of Kasturba Health Society created on the medical campus for promotion of positive health. The center takes care of preventive and curative aspects of health care in chronic ailments, such as hypertension, back pain, bronchial asthma, diabetes etc. with naturopathy and Yoga. It has a budget of Rs. 6 Lakhs per year for 5 years for running naturopathy/ yoga treatment-cum-propagation centre and is supported the Central Council for Research in Yoga & Naturopathy, Department of AYUSH.
- \* MGIMS launched the “cycles on campus” initiative to create a green and physically active campus that encourages students, faculties and staff to drive less and use the cycles to commute within the campus. On 11- 12 Mar 2016 the institute organized a Cycle Mela in which the cycle vendors from Nagpur showcased their cycles and helped the students, faculty and staff to pick one best suited to them. In Dec 2015, the MGIMS Academy of Medical Sciences had hosted a talk on the ‘why, what and how of bicycling’. Several members of the faculty and students have taken up cycling. To promote cycling, MGIMS shall soon help students and staff members to acquire cycles at a discounted price and shall also offer them interest- free loans.
  
- \* **Pharmaco economic evaluation in drug utilization**  
**Low cost drug initiative:** Beginning 2010, we implemented a low-cost drug initiative at MGIMS aimed at providing appropriate and affordable drugs to our patients. This initiative to reduce the cost of drugs to the patient was made possible by first minimizing the ‘supply chain effect’ and then by overcoming the ‘marketing effect’. We did this by using a multi-pronged strategy. We involved healthcare workers in making a list of essential drugs and surgical items and deleted from the list as many “me too” and irrational drugs as was feasible in our setting. We procured drugs at substantially cheap prices by inviting competitive quotations from drug distributors and used the electronic hospital information system to buy, stock and dispense drugs



and surgical items. (See **Annexure 1R**) Our low cost drug initiative allows patients to access drugs at affordable rates at a fraction of the rate available in the market.

- \* **Participation in national programs like Family Welfare, Mother and Child Welfare, Population Control, Immunization, HIVAIDS, Blindness control, Malaria, Tuberculosis, School Health, anti tobacco campaigns, oral health care, etc.**

Please see our response to the Section 3.6.13 below.

- \* **Promotion of mental health and prevention of substance abuse**

The under-graduate students of MGIMS have formed a White Coat Army (WCA) for prevention of substance abuse and have reached to more than 1000 patients in last one year. WCA also conducts role plays, health talks, awareness campaigns in neighboring villages and schools.

- \* **Adoption of population in the geographical area for total health care**

The institute has its own village adoption scheme. Initially a 15-day residential camp in a village with health care free of cost for the duration of the camp and a week beyond. Following the Social Service Camp, for the next four years, the students visit their families every month on a Saturday. The camp, on the other hand, also provides students with opportunity to learn socio-demographic and environmental factors affecting health of people and their health seeking behavior. During the second year, groups of the students undertake improvement projects concerned with sanitation, drinking water, nutrition, and personal hygiene, immunization and other relevant issues.

- \* **Research or extension work to reach out to marginalized populations**

Please refer to section 3.6.4 above

### **3.6.12 Do the faculty members participate in community health awareness programs? If yes, give details.**

There are several platforms through which the faculty members participate in community health awareness program.

**Seva Bhaav:** Seva Bhaav is a radio show that throws light on a variety of issues related to health and disease in the community. Seva Bhaav was designed with to reach out to the people by using radio-a universal mode of communication. The weekly radio programme was launched on 23 Apr 2015 in collaboration with a community-based Wardha radio station - MGIRI Radio 90.4 FM. Each week, the show airs on Thursday at 9:00 am and 8:00 pm. broadcasting the talks of MGIMS faculty. Seva Bhaav offer listeners an opportunity to engage with doctors from different specialties that creates health awareness in the community, separate myths

from truth and help people understand what it takes to stay healthy. (See Annexure 3Y for list of Sevabhaav talks)

**Engagement with Community-based Organizations:** MGIMS, Sevagram has done extensive community mobilization activity in its field practice area. Currently, there are 275 self-help groups of women, 89 Kishori Panchayat and 10 Kisan Vikas Manch. These CBOs meet once ever month. In addition to the CBOs, the Department of Community Medicine works to strengthen the Village Health Nutrition and Sanitation Committee in all villages in its field practice area. Department of Community Medicine also organizes training programs for Panchayati Raj Institutions and members of VHNSC frequently. Melawa

**School health programme:** Faculty members from department of Community Medicine, Obs & Gyn and several other departments engage in school health programmes in several schools. This provides opportunity for the faculty members to interact with students and teachers in these schools.

### **3.6.13 How does the institution align itself and participate in National programmes for prevention and control of diseases?**

- **Integrated Counseling and Testing Centre:** The Department of Obstetrics and Gynecology operates an ICTC center in its OPD under the National AIDS Control Programme.
- **Universal Immunization Programme:** The maternal and child health cell in Kasturba Hospital is located in the General OPD. All vaccines under UIP are provided through the maternal and child health cell. In the year 2006-07, 12113 doses of various vaccines were provided to mothers and children. Apart from this, the ANMs also provided 3734 doses of vaccines to mothers and children in villages around Sevagram.
- **Integrated Management of Neonatal and Childhood Illness:**The Department of Community Medicine provided support to the district health system in implementation of IMNCI. It provides training in IMNCI to all the staff of the three Primary Health Centres under the Institute.
- **Revised National Tuberculosis Control Programme:**The GOPD in the Hospital operates has a microscopy and a DOTS center under the RNTCP. On behalf of the Central TB Division, Microbiology is conducting a disease survey on the prevalence of tuberculosis in Wardha district. We are the first centre to start data collection as part of a multicentric trial being conducted in five such centers.
- **National Leprosy Elimination Programme:** The General OPD also acts as a drug delivery center for National Leprosy Elimination Programme.

- **Integrated Disease Surveillance Programme:** A regular programme for epidemiological surveillance is operational for several years. Further strengthened after launch of IDSP in Wardha district. The institute provides consultation and helps the district health system in investigations of epidemics.
- **Integrated Child Development Services:** Continuing education programme for the Anganwadi workers are being provided in the three PHC with the Institute.
- **National Cancer Control Programme:** The Department of Pathology is coordinating with National Cancer Registry Programme under ICMR, on development of an atlas of cancer, India. In 2001-02, we ran a Hospital based Cancer Registry. Since 2003 a Population based Cancer Registry which collates data from Wardha district, the only centre in the country which collects both urban and rural data.
- **National Rural Health Mission:** Various Projects under NRHM, IMNCI, EmOC, LSAS, are going on in addition to consultancy to Government of Maharashtra and Government of India by the faculty.
- **Adolescent Health Programme:** Adolescent health program for both school-going and school drop out adolescents have been undertaken. At village level, family life education is provided to the adolescents through Kishori Panchayat also.
- **National Programme for Control of Blindness:** The Department of Ophthalmology recognized by Ministry of Health and Family Welfare, New Delhi to conduct small incision cataract surgery and Intra-ocular Lens Implantation Training for eye surgeons working in government hospitals. The training programme is being undertaken for the last 4 years and every year 4 eye surgeons go through a 2 months training programme. So far 16 eye surgeons from 6 states (Madhya Pradesh-4, Uttar Pradesh-5, West Bengal-3, Gujarat-2, Rajasthan -1 and Jharkhand-1) have benefited from this project and enhanced their surgical skills in this new technique of cataract surgery.

### **3.7 Collaborations**

#### **3.7.1 How has the institution's collaboration with other agencies impacted the visibility, identity and diversity of campus activities? To what extent has the institution benefitted academically and financially because of collaborations?**

Through its consistent work in the community and due to its consistent performance in community oriented medical education through the last 45 years, the institute has built its credibility and reputation. This has helped us grow, expand and diversify our areas of work. Some of its major collaborations which have helped us grow academically and in terms of infrastructure are as follows:

**Development of field practice area:** The Institute's unique and innovative community-based medical education has been lauded by several government and non-governmental organizations. Through its community mobilization activities, we have managed to harness support from the surrounding villages. It has helped in strengthening our field practice area which acts as a demonstration area for community-based health services for the undergraduate and post-graduate students. We are able to carry out the village adoption scheme due to our strong bonds with the villagers.

**Rural placement scheme:** The Institute has a rural placement scheme under which all the students after completing their internship are posted for two years at non-government organization doing voluntary health work. As many as 80 NGOs from all over the country are partners in this initiative of the institution. This is a symbiotic relationship where the NGOs get doctors to run their centres and our students get an opportunity to train in rural areas.

**Utawali project, Melghat:** The institute has developed a hospital in Melghat, a tribal area in Amravati, which attracted wide media coverage because of malnutrition-associated deaths in the last decade. The Kasturba Health Society (KHS) started its OPD in the Dr Sushila Nayar Hospital (earlier called Mahatma Gandhi Adivasi Mother and Child Hospital) on 1 Jan 2012. A 30 bed hospital for women and children in the tribal area of Utawali, Dharni was also initiated with funding support from the Shri Brihad Bharatiya Samaj, a Mumbai-based nongovernmental organization. The Government of Maharashtra has recognized this as a referral unit. A 50 bedded multispeciality hospital has been commissioned on the site on 4 Feb 2016, and 7.5 acres of land has been acquired for the purpose. A team of obstetrician-gynecologists, pediatricians, anesthetists, medical officers, interns, administrative officer and nurses are working at Utawali hospital round the clock and managing emergencies, outpatients and inpatients.

**New Medicine building:** In 2012, MGIMS added a new modern building which houses all the services provided by the Department of Medicine. The construction of the building was partly funded by Mrs Sarla Parekh, Member of the Kasturba Health Society, in memory of her son and daughter in law who died in the 26/11 terror attacks in Mumbai. The state of the art construction spread over 70000 sq ft area, comprises of an outpatient department, triage facility, medical wards, a 26 bedded ICU, facilities for endoscopy, hemodialysis, cath lab, a pharmacy, prayer room and a well equipped conference and seminar room with all modern amenities.

**Hospital Information System:** MGIMS, Sevagram has been able to develop a state-of-art, fully integrated hospital information system (HIS). This was among the first of

its kind in the entire country. The Ministry of Information Technology, Government of India earmarked a sum of Rs 3.18 crores to fund this research project and identified Centre for Development of Advanced Computing (C-DAC), Noida, India to budget, design and develop a comprehensive and integrated Hospital Information System (HIS) to manage the administrative, financial and clinical aspects of the hospital over a three year period.

**Model Maternal and Child Wing:** In 2014, the MOHFW, Govt of India, under the aegis of National Health Mission approved the setting up of a model MCH wing for comprehensive reproductive, maternal, newborn and child and adolescent health (RMNCH+A) at MGIMS Sevagram. This centre will provide quality maternal and child health services covering the whole perspective of RMNCH+A and will showcase all the technical protocols including infection prevention. The MCH wing will have beds for Obstetrics and Gynecology and Pediatrics and Neonatology. It will include the outpatient department, antenatal and postnatal wards, high dependency units, operation theatres, sick newborn critical unit, labour rooms, obstetric intensive care units, skills labs and other such areas.

**Ophthalmology links with Lions' Club:** The Lions Club International Foundation has disbursed the first grant of USD 166332 to the Lions Eye Centre at Kasturba Hospital Sevagram to strengthen Community Ophthalmology services. This fund shall be used to provide for a vehicle, diagnostic and surgical equipment including operating microscope, autokeratorefractometer, laser, vitrectomy machine etc. costing Rs 75-80 lakhs to KHS. This linkage requires Kasturba Hospital to perform 6-8 thousand cataract surgeries per year free of cost for the next three years.

Queen Elizabeth Diamond Jubilee Trust through Indian Institute of Public Health , Hyderabad has sanctioned a grant of Rs 2 Crores to implement project on Screening for Diabetic Retinopathy in Wardha District as a pilot project in Maharashtra state. The project aims at strengthening public health system by capacity building to screen diabetic patients registered in NCD clinics in the district.

### **3.7.2 Mention specific examples of how these linkages promote**

#### **\* Curriculum development**

The work done at MGIMS has been noticed at the national level. The Task Force on Medical Education of the National Rural Health Mission spells out the need to draw upon MGIMS Sevagram's initiatives and experience in curriculum innovation and rural placement of its graduates. It suggests launching a participatory exercise with MGIMS and other like-minded institutions so that national guidelines can be

formulated.

Several of our faculty members have been invited to work on committees to develop curricula of different courses. These are enlisted in **Annexure 1P**

\* **Internship**

Interns are posted for two months at the Rural Health Training Center and as part of team. During this posting, they assist the medical officer at PHC, Anji or RHTC, Bhidi for outpatient and in-patient care. They also get opportunity to learn about the health care delivery system in India and implementation of national health programs.

\* **On-the-job training**

The Institute partners with the government health care system for on-the-job training of the Post-graduate students in Community Medicine. The Institute started a rural placement scheme in 1990 according to which all the graduates serve for two years at non-government organization. As many as 80 NGOs from all over the country are partners in this initiative of the institution. The rural posting of two years is mandatory to be eligible for applying for a post-graduation course at the institute.

\* **Faculty exchange and development**

PhD students from Department of Biochemistry are being trained at University of Illinois College of Medicine, Rockford, USA. Continuing faculty development goes on when faculty visit different higher centres.

\* **Research**

Collaborative research projects are undertaken with all the National and International Institutes noted above. Please refer to section 3.2.2

\* **Publications**

Most of the publications of the faculty members are based on the collaborative projects. **Annexure 3R-1.**

\* **Consultancy**

The collaborative projects implemented by various departments have built in the capacity of the faculty members. This capacity is utilized for consultancy services provided by the faculty members.

\* **Extension**

Please refer to section 3.7.7

\* **Student placement**

The Institute started a rural placement scheme in 1990 according to which all the graduates serve for two years at non-government organization. As many as 80 NGOs from all over the country are partners in this initiative of the institution. The rural posting of two years is mandatory to be eligible for applying for a post-graduation course at the institute.

\* **Any other (specify)**

**3.7.3 Has the institution signed MoUs or filed patents with institutions of national/international importance/other universities/ industries/corporate houses etc.? If yes, how have they enhanced the research and development activities of the institution?**

The Institute has signed MoUs with the following institutions and agencies:

- International School of Medicine, Ben Gurion University of Negev, Beer Sheva, Israel
- Institute of Education, Medical Program, Maastricht University, The Netherlands
- UICT, Mumbai on screening anti filarial compounds

**3.7.4 Have the institution-industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?**

There are a few examples of institution-industry interactions. The Biochemistry Department as part of the ongoing DBT project developed a rapid diagnostic test kit for filarial IgG4 antibody in collaboration with Ubio Biotechnology pvt. Ltd., Kerala. The gene of the filarial antigen used in this test was identified and cloned and produced as recombinant antigen in our laboratory.

**3.7.5 Give details of the collaborative activities of the institution with the following:**

\* **Local bodies/ community**

In the field practice area of the institute, Self-help Groups (275), Kisan Vikas Manch (10) and Kishori Panchayat (89) have been formed. Department of Community Medicine also works with Panchayati Raj Institutions and Village Health Nutrition and Sanitation Committees. Monthly meetings of all of these bodies have been regularized and this is utilized for health education. We closely work with local NGOs for enhancing community-based health activities, e.g. diagnostic camps, cataracts surgeries or voluntary blood donation camps.

\* **State government / Central government /NGOs -**

The Institute works in close collaboration with the Government Health System.

- Faculty members have contributed towards development of operational guidelines for several programs; e.g. Rashtriya Bal Swasthya Karyakram, India Newborn Action Plan, Guidelines for Maternal Near Miss Review, Skills lab operational guidelines
- Nodal center for training of medical officers and master trainers in Emergency obstetric care under NRHM
- Center for training of health care personnel from various government facilities for Facility Based Newborn Care
- The Institute provides support to the District Health System in implementation of the national health programs through District Resource Group under NRHM and similar mechanisms for other national health programs.
- It has developed a model of decentralized health care delivery in its program area. Several components from the model developed in the field practice area have been accepted by the government health system at the district level.
- District Health Plan under NRHM for two districts; Wardha and Jalna in Maharashtra was developed by Department of Community Medicine
- Department of Community Medicine acts as the Secretariat of Voluntary Health Association of Maharashtra. Through this, it networks with the NGOs working in health sector in Maharashtra like Prevention of Parent to child transmission of HIV under MSACS, counseling, testing and also providing antiretroviral therapy,

\* **National bodies –**

Department of Community Medicine	<ul style="list-style-type: none"> <li>● Ministry of Health and Family Welfare, Government of India</li> <li>● Ayush, Government of India</li> <li>● Central TB Division ,Govt of India, New Delhi</li> <li>● Government of Maharashtra</li> <li>● Public Health Foundation of India</li> <li>● National Institute of Health and Family Welfare</li> <li>● National Institute of Public Cooperation and Child Development (NIPCCD)</li> <li>● National Centre for Disease Control</li> <li>● IndiaCLEN (India Clinical Epidemiology Network)</li> <li>● Indian Council of Medical Research</li> <li>● CMC, Vellore.</li> <li>● National Reference Centre for Leptospirosis, Andaman &amp; Nicobar Islands, India</li> <li>● Voluntary Health Association of India</li> <li>● Voluntary Health Association of Maharashtra</li> </ul>
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	<ul style="list-style-type: none"> <li>• Achutha Menon Center for Health Sciences Studies; Trivandrum</li> </ul>
Department of Anatomy	<ul style="list-style-type: none"> <li>• Indira Gandhi Government Medical College, Nagpur</li> </ul>
Department of Biochemistry	<ul style="list-style-type: none"> <li>• Department of Biotechnology</li> <li>• Department of Science and Technology</li> <li>• Council of Scientific and Industrial Research</li> <li>• Anna University, Chennai</li> <li>• BHU, Varanasi</li> <li>• AIIMS, New Delhi</li> <li>• UICT, Mumbai</li> <li>• Sant Gadge Baba Amravati University</li> </ul>
Department of Pathology	<ul style="list-style-type: none"> <li>• ICMR-National Cancer Registry Programme</li> <li>• Labs for Life, MOHFW and CDC Atlanta</li> </ul>
Department of Medicine	<ul style="list-style-type: none"> <li>• Indian Cardiovascular Research and Advocacy Group, St. John's Research Institute, Bangalore</li> <li>• Indira Gandhi National Open University</li> </ul>
Department of Obs & Gyn	<ul style="list-style-type: none"> <li>• Federation of Obstetrics and Gynecology Society of India (FOGSI)</li> </ul>
MGIMS	<ul style="list-style-type: none"> <li>• Lions' Club</li> <li>• Anandwan, Warora</li> <li>• Local NGOs working in Wardha: Bajaj Foundation, Dharamitra; Nehru Yuva Kendra; National Bank for Agricultural Rural Development; Gram Mangal, Pune; Agricultural College; Gram Niketan, Pipari</li> </ul>

\* **International agencies –**

Department of Community Medicine	<ul style="list-style-type: none"> <li>• World Health Organization</li> <li>• United Nations Children's Fund</li> <li>• United Nations Population Fund</li> <li>• International School of Medicine, Ben Gurion University of Negev, Beer Sheva, Israel</li> <li>• Global Health through Education, Training and Services</li> <li>• Network Towards Unity for Health</li> <li>• Global Burden of Disease</li> </ul>
Department of Biochemistry	<ul style="list-style-type: none"> <li>• University of Illinois College of Medicine, Rockford. USA.</li> <li>• Mc Gill University, Canada.</li> </ul>
Department of Medicine	<ul style="list-style-type: none"> <li>• Population health research institute (PHRI)</li> <li>• McMaster University, Canada</li> </ul>

	<ul style="list-style-type: none"> <li>• Canadian Institute of Health Research, McGill University Canada</li> <li>• National-Heart-Lung-Blood Institute, National Institute of Health, United States</li> <li>• United Health Group</li> </ul>
Department of Obstetrics and Gynecology	<ul style="list-style-type: none"> <li>• Institute of Education, Medical Program, Maastricht University, The Netherlands</li> <li>• Amnisure Inc, USA</li> <li>• Berkeley University, USA</li> </ul>
Department of Pathology	<ul style="list-style-type: none"> <li>• International Agency for Research on Cancer (IARC), France</li> <li>• National Institutes for Health (NIH), Bethesda, USA</li> </ul>

List of the collaborative projects done by the Institute in the last 5 years is provided in **Annexure 3F**

\* **Service sector**

The Institute partners with the NGOs for its graduates rural placement scheme. As many as 80 NGOs from all over the country are partners in this initiative. The Institute partners with all the local NGOs working in field practice area in Maharashtra through Voluntary Health Association of Maharashtra. It also partners with the local non-government organizations working in Wardha.

\* **Any other (specify) –**

**Agriculture sector** - Guidance and assistance is provided in drip irrigation, micro-financing, women's Self-help groups, Kisan Vikas Manch in its field practice area. It partners with the academic institutions (Agricultural Colleges) as well as local NGOs working in agricultural sector (e.g. Dharamitra) to empower the Kisan Vikas Manch formed in these villages.

**3.7.6 Give details of the activities of the institution under public-private partnership.**

Kasturba Hospital and MGIMS are one of the best examples of public-private partnership working to the advantage of the public. The institute runs on funding from the Government of India (50%), Government of Maharashtra (25%) and the Kasturba Health Society (25%). The Mahatma Gandhi Institute of Medical Sciences (MGIMS) is an excellent exemplar of a 'not-for profit' hospital which combines the efficiency and missionary zeal of private voluntary sector, and the concern for access of services and high coverage, compliance to rules and equal opportunities in employment of the public sector. Despite its rural location, its reputation for affordable, quality health care attracts patients not only from Vidarbha, but also the adjacent states of

Chhatisgarh, Telangana and Andhra Pradesh. The hospital has all the amenities of a tertiary care hospital at prices which are affordable to rural patients.

We have implemented a low-cost drug initiative since 2010, which allows patients to buy drugs at affordable costs. This is done by procuring drugs at cheap prices by minimizing the 'supply chain effect' and overcoming the 'marketing effect'. Since 2003, we have been the first medical college to shun sponsorship from pharmaceutical companies in the organization of any academic meetings. Since the last four years, medical representatives have been banned from Kasturba Hospital to reduce their impact on patients' health spending.

At MGIMS, an advanced hospital information system allows easy access to health data and makes the entire process of registering patients, ordering tests, retrieving test results and generating discharge summaries more streamlined. This decreases laboratory turnaround times and reduces days of hospitalization and bills for patients. The health insurance scheme of the institute has won several accolades. A villager can insure his family by paying Rs 400 a year and in return, he gets 50% subsidy in OPD and indoor bills. In 2014-15, a total of 67409 families (263316 members) around Sevagram volunteered to obtain health insurance. Since 1998, we have a team of dedicated doctors who are providing quality health care to the impoverished and undernourished tribal folk in the Melghat. This project has been expanded further and a multispeciality hospital has been built in the resource-limited hilly terrains. Within the organization, several services have been outsourced to increase its efficiency further; e.g. biomedical waste management, sanitation, laundry and security services.

***3.7.7 Any other information regarding Research, Consultancy and Extension, which the institution would like to include.***



## **CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES**

### **4.1 Physical Facilities**

#### **4.1.1 How does the institution plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?**

Distribution of resource material is done according to the requirements of different departments. Each department is requested to furnish its requirements in the beginning of the academic year with a justification document. The request is put before management and accordingly the requests are fulfilled on case to case basis. The use of the new equipment purchased is monitored and its optimal utilization is asked for before the next budget is allocated.

#### **4.1.2 Does the institution have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.**

Yes. Every department is expected to submit a plan and budget for the next five years. The management asks for details and further explanation of any proposal submitted by department on development of infrastructure. On approval of such plans the budget is granted and the proposal is executed.

In the recent years, the following developments have taken place in infrastructure:

Clinical Forensic Medicine Unit: MGIMS has a distinction of developing nation's first Clinical Forensic Medicine Unit (CFMU). The CFMU has been established to work hand-in-hand with the accident and emergency centre in the casualty. The unit is headed by the Department of Forensic Medicine and Toxicology and handles all medico-legal cases under direct supervision of experts from the Department. The unit helps in training residents how to handle and report medicolegal cases.

New Medicine Building: In 2012, MGIMS added a new building which houses all the services provided by the Department of Medicine. The construction of the building was partly funded by Mrs Sarla Parekh, holding trustee of the Kasturba Health Society, in memory of her son and daughter in law who died in the 26/11 terror attacks in Mumbai. The state of the art construction spread over 70000 sq ft area, comprises of an outpatient department, four medical wards, a 26 bedded ICU, a 10-bed ICCU, facilities for endoscopy, hemodialysis, cath lab, and a well equipped conference and seminar room.

Centralized Skills lab and Simulation Training Centre: A centralized clinical skills laboratory has been set up since 2012-13. This not only fulfilled the MCI mandatory requirement but has also been utilized to teach and assess all levels of learners.

Now, MGIMS has established a much larger modern simulation lab to train doctors and paramedical staff in life saving skills. The project called by the acronym MIST, which stands for MGIMS Institute for Simulation Based Training. The project funded by KHS, has already procured mannequins to teach participants CPR during AHA accredited basic life support skills (BLS) and advanced cardiovascular life support skills (ACLS) courses, which are in line with the latest 2015 training guidelines of the American Heart Association (AHA). The lab also has a critical care simulation advanced mannequin which is first of its kind in whole of central India. The project is run by the Department of Anesthesia. In 2015-16, MIST-Sevagram conducted two AHA-accredited BLS and ACLS workshops and trained 42 participants.

Dr Sushila Nayar Hospital: As part of our extensions work in tribal areas, a 30-bed hospital for women and children in the tribal area of Utawali, Melghat in Amravati district has been functional since 2012. Now a new 50-bedded multi-specialty hospital has been constructed with a budget of about five crores. The Dr Sushila Nayar Hospital started functioning in its new building in Utawali from 4 Feb 2016.

Central Library: The Central Library at MGIMS has now acquired several modern additions. A 24X7 dedicated library server has been accommodated in the server room of the HIS. With this new facility, the library has gone digital and is tuned to deliver its vast e-resources to its users, who can access all its resources at their computer terminals or smart phones and other wifi enabled gadgets in the comfort of their rooms. The library management software was also upgraded to the latest version SLIM21. This software is designed and developed in modules to automate the library with features such as cataloguing, circulation, webOPAC, digital library, Dcoll module and smart card interface. This year, in addition to print journals, the library subscribed to 28 online journals with very high impact factors including The Lancet, The New England Journal of Medicine, the BMJ and the Annals of Internal Medicine.

New Operation Theatre Complex: In an attempt to modernize existing facilities, Kasturba Hospital has constructed a brand new state-of-the-art operation theatre (OT) complex, adjacent to the existing OT complex. This complex constructed over 15000 square feet, has facilities catering to all super-specialities and will double the number of existing operation theatres. The new OT complex features ten modular OT suites, an intensive care unit and pre-operative assessment ward with ten beds each, two recovery rooms and a medical store. Each of the ten suites in the new OT complex are equipped with individual control HEPA filters and laminar flow, anesthesia gas scavenging systems, central ceiling mounted gas and surgical pendants, antistatic and antibacterial flooring. Each OT suite has state-of-the-art double arm LED OT lights with integrated video camera arm with LED screen display. Each OT is equipped with state-of-the-art modern anesthesia workstations with integrated advanced ventilators, multi-para monitors with ability to measure invasive pressures and anesthesia gas concentrations as well as body warming blankets. The new OT complex adheres to all the safety norms including planning for bio-waste disposal and fire safety system. An integrated two way audio-video system with central pendant data information and storage facilities will relay live operations and anesthesia procedures to the central auditorium in the second floor of OT complex, where students can learn from watching live surgeries and interact with the anesthesia and surgical team.

Cardiac catheterization lab and intensive coronary care unit: In 2014, Kasturba Hospital added a cardiac catheterization lab to the facilities it offers to patients. A 5000 square feet cardiology block has been built on the south-east side of the first floor of the newly built Medicine complex. This block houses a ceiling-mounted cath lab used for detecting blocks and opening occluded coronary arteries by balloons and stents. In addition, a 10-bed intensive coronary care unit (ICCU) - equipped with pendants, central oxygen, central suction, central cardiac monitoring system, pacemakers, defibrillators, and a system to display radiologic images (PACS) and monitored by hospital information system (HIS) has also been added to the cath lab. The new angiography suite is equipped with sophisticated technology that produces high resolution images with the lowest dose of radiation possible.

MRI machine: A 1.5 Tesla 16 channel-S2 gradient system MRI machine was installed in Radiology Department in 2012. This machine enables color mapping of the functional areas of the brain, tactography, perfusion imaging etc and is of immense help in the evaluation of a wide spectrum of disorders.

Model Maternal and Child Health (MCH) wing: The Ministry of Health and Family Welfare, Govt of India approved the setting up of a 100 bedded model Maternal and Child Health (MCH) wing for comprehensive reproductive, maternal, newborn and child and adolescent health (RMNCH+A) at MGIMS Sevagram. The project proposal submitted through the Govt of Maharashtra has cost close to Rs 26 crores. This centre provides quality maternal and child health services and follows all the technical protocols including infection prevention. The 100 bedded MCH wing includes the outpatient department, antenatal and postnatal wards, operation theatres, sick newborn critical unit, labour rooms, obstetric intensive care units, skills labs and other such areas. The department of Obstetrics and Gynecology has moved into the new building in October 2016.

E-learning: To complement the classrooms, an e-learning platform was created in the institute by installing MOODLE as a virtual learning environment. Training of the faculty has been completed in 2015 to develop e-learning modules in respective departments. The MGIMS Classroom link has been developed on MGIMS website to offer interactive online courses to support the classroom, clinical and community based teaching.

Laboratory upgradation: The three laboratories of MGIMS in the Departments of Pathology, Biochemistry and Microbiology have been nominated under the “Labs for Life” project of CDC, NACO and Ministry of Health and Family Welfare (MOHFW). “Labs for Life” is a three year partnership initiative of the MOHFW and the US Centres for Disease Control and Prevention (CDC). It seeks to improve the quality of laboratory services, effectiveness and efficiency of public health laboratories under MOHFW. Through this collaborative effort, technical assistance will be provided to public health laboratories covering 10 districts from 6 states representing all five regions to enhance the capacity for quality diagnosis of communicable and non-communicable diseases in India, and strengthening the specimen referral and reporting system.

Dormitory in peripheral training centre: To resolve the space crunch, the institute has added a dormitory complex at Kasturba Rural Health Training Centre (KRHTC) Anji which can comfortably house 25 girls and boys each during their routine training in Reorientation of Medical Education (ROME) camp in Community Medicine.



New Hostels: Two new hostel blocks for undergraduate and postgraduate male students have been constructed to meet the demands of increased numbers of students. Each hostel block has 48 single rooms and is installed with all modern amenities like solar heaters, washing machines, television and wifi. The kitchens and dining rooms of the boys' and girls' hostels were completely renovated and redesigned. A new badminton court was also constructed between the two hostels.

Guest House: A new guest house with thirteen rooms has been constructed on campus to give the guests and examiners who come to MGIMS a comfortable stay. The existing rooms at P Nayar Guest House were also refurbished.

**4.1.3 Has the institution provided all its departments with facilities like office room, common room and separate rest rooms for women students and staff?**

Adequate rooms have been provided for all staff members, including office rooms. All senior faculty members have designated rooms in their corresponding departments. Junior faculty members and postgraduate students share common rooms in their departments. Adequate wash rooms for both genders are available in all the sections of the institute.

All students are provided single rooms in the hostels. No separate common rooms are provided for undergraduate students as the hostels on campus are just walking distance away from the hospital.

**4.1.4 How does the institution ensure that the infrastructure facilities are barrier free for providing easy access to college and hospital for the differently-abled persons?**

All corridors of the institute are spacious, well lit, non slippery and easy to access from the parking area. There are security personnel on duty for assistance. Information is available about mostly needed services and sections. Hospital area is provided with ramps all round. Attendant operated lift is available in the hospital. Wheelchairs can be accessed freely in casualty and OPDs.

**4.1.5 What special facilities are available on campus to promote students' interest in sports and cultural events/activities?**

As a part of holistic development, co-curricular and extracurricular activities are encouraged in institute. Students are motivated to participate in local, zonal, University and National level events. Over the years many students have won colours in many such events and competitions. The institute also

promotes cycling on campus. It provided interest free loans to the students and the faculty to buy bicycles which they use for commuting and endurance cycling.

The Institute provides the following facilities:

Open air auditorium with green rooms, rest rooms and sitting area for 1000 people

Closed auditorium with sitting area for 300 people

Sarojini Naidu Hall: Air conditioned, capacity around 120. .

Sport fields: Ample space has been provided in the campus for outdoor sports. Playing grounds/courts are available for badminton, cricket, football, hockey, athletics and basketball

Students' Council- as per university guidelines, a Students' Council is installed every year which comprises of

Dean as Chairperson of the Council.

One Officer Incharge of the council

One Director of Physical Education

Officer Incharges of Cultural, Sports, NSS, Research, Magazine and Literary activities.

Student Secretaries selected as per the norms of institute for above mentioned sections.

One Member each (Academic) from all undergraduate batches and Interns, who topped in recent University exam.

Two representatives of the girls with merit in different activities.

One General Secretary of Students, selected from above mentioned student members.

Constitutional reservations and rights are safeguarded during installation of Student's Council. The Council carries out several cultural, literary and sports activities. **Annexure 4A** provides details of these activities.

#### **4.1.6 What measures does the institution take to ensure campus safety and security?**

A separate section led by a security officer handles security. Security personnel man all areas of the institute and campus. CCTV coverage has also been provided in the institute and hospital.

Fire safety devices have been provided in all sections and all available safety measures are periodically checked by trained personnel. Fire training has been conducted periodically. Dr Rahul Narang looks after this section and fire safety guidelines are being drafted.

Strict disciplinary rules are obeyed during conduct of extra-curricular activities in the institute. Hostel wardens monitor timely return of students to the hostels at night. Additional staff is deployed for round the clock vigilance after the new batch of students join the campus to prevent untoward incidents of ragging.

#### **4.1.7 Facility of Animal House**

- **Is animal house maintained as per CPCSEA guidelines?**  
Yes.
- **Whether records of animal house are maintained for learning and research activities?**  
Yes.
- **Does the animal house have approval for breeding and selling experimental animals as per CPCSEA guidelines?**  
Yes. (See Annexure 4B).

#### **4.1.8 Provide the following details on the use of laboratories / museums as learning resources:**

- **Number:**  
The institute has several laboratories and museums

##### List of laboratories:

##### Student practical laboratories:

1. Dept of Anatomy- 2 labs
2. Dept of Physiology
3. Dept of Biochemistry
4. Dept of Pathology
5. Dept of Microbiology
6. Dept of Pharmacology
7. Dept of Forensic Medicine and Toxicology
8. Dept of Community Medicine

##### Specialized laboratories:

1. Cytogenetics laboratory: Dept of Anatomy
2. Histology laboratory: Dept of Anatomy
3. Clinical Physiology laboratory: Dept of Physiology
4. Hematology Laboratory: Dept of Physiology
5. Amphibian laboratory: Dept of Physiology
6. Reproductive Biology Laboratory: Dept of Physiology
7. Neurophysiology Laboratory: Dept of Physiology

8. Impedance Cardiovasography (ICVG) Laboratory: Dept of Physiology
9. Sleep Laboratory: Dept of Physiology
10. Postgraduate Students Laboratory: Dept of Biochemistry
11. Clinical biochemistry laboratory: Dept of Biochemistry
12. Research Laboratory: Department of Biochemistry
13. Central Research Laboratory: JBTDRC
14. Histopathology Laboratory: Dept of Pathology
15. Cytology Laboratory: Dept of Pathology
16. Hematology Laboratory: Dept of Pathology
17. Coagulation and Serology Laboratory: Dept of Pathology
18. Flow cytometry laboratory: Dept of Pathology
19. Immunohistochemistry laboratory: Dept of Pathology
20. Research laboratory: Dept of Pathology
21. Clinical Pathology Laboratory: Dept of Pathology
22. Blood grouping and Serology laboratory: Blood bank, Dept of Pathology
23. Blood transmissible diseases screening laboratory: Blood bank, Dept of Pathology
24. Component preparation laboratory: Blood bank, Dept of Pathology
25. Bacteriology Laboratory: Dept of Microbiology
26. Mycobacteriology Laboratory: Dept of Microbiology
27. Mycology Laboratory: Dept of Microbiology
28. Serology laboratory: Dept of Microbiology
29. Immunology Laboratory: Dept of Microbiology
30. Virology Laboratory: Dept of Microbiology
31. Parasitology Laboratory: Dept of Microbiology
32. Molecular biology laboratory: Dept of Microbiology
33. BSL3 Laboratory: Dept of Microbiology
34. Research Laboratory: Dept of Pharmacology
35. Pharmacy Laboratory: Dept of Pharmacology
36. Experimental Pharmacology Laboratory: Dept of Pharmacology
37. Clinical Pharmacology Laboratory: Dept of Pharmacology
38. Toxicology Laboratory: Dept of Forensic Medicine and Toxicology
39. Public Health Laboratory: Dept of Community Medicine
40. Common Collection Central Laboratory: OPD
41. Temporal bone dissection Laboratory: Dept of ENT
42. SICS and Phaco Web Lab: Dept of Ophthalmology

List of museums:

S. No.	Department	Exhibits/ Specimens	Seating capacity
1	Anatomy	Mounted specimens: 125 Anatomy Models: 33 Embryology models: 90 Anthropology models: 4 Comparative anatomy models: 16 Bones: 91 Radiographs, MRI and CT: 65	25
2	Pathology	Mounted specimens: 1250 Charts and diagrams: 100 Catalogues: 20	10
3	Microbiology	Specimens: 79 Charts: 63 Models: 6 Media: 14 Antigen: 13 History of Medicine charts Catalogues	25
4	Pharmacology	Specimens: 225 Charts: 47 Models: 90 History of Medicine: 30 Catalogues: 49	25
5	Forensic Medicine	Mounted specimens: 107 Wax Models: 15 Clay models: 10 Weapons: 37 Charts: 45 Prototype firearms: 2 Poisons: 63 Photographs: 37 X rays: 60	
6	Community Medicine	Charts: 42 Models: 51 Specimens: Catalogues: 30	

- **Maintenance and up-gradation:**

The maintenance of these museums is done in-house by the departmental faculty and staff. Artists are available in the departments of Anatomy, Pathology and Community

Medicine. Mr Dinesh Gudadhe, Mr Ashok Wahiwatkar and Mr Gunwant Mahalle look after the art section of the institute. They prepare charts, posters, banners, models and have acquired skills in designing charts and posters on computers. They help in poster displays in health exhibitions organized by the institute and maintain museums. Clinical specimens are added as they are received in the laboratories from the wards or operation theatres or autopsy rooms.

- **Descriptive catalogues in museums:**

These are available in all the museums for teaching purposes

- **Usage of the above by the UG/PG students:**

Undergraduate students go through practical teaching in the student laboratories. Timetable of practical teaching is already given in Annexure 2J. Specimens from the museums are used for teaching purposes regularly. Postgraduate students learn skills in the research laboratories and also perform their dissertation work in these labs.

#### **4.1.9 Dentistry**

- **Dental chairs in clinic – specialty wise**

- 3 – Oral Medicine and diagnosis, Orthodontics, Periodontics

- **Total dental chairs: 8**

- **Schedule of chairside teaching in clinics – specialty wise**

- 3<sup>rd</sup> MBBS students are posted in Dept of Dentistry in conjunction with their Surgery postings

- **Number of procedures in clinics per month and year:**

- 600/month; 7200/year

- **Mobile dental care unit:**

- At present not available, but plans to procure this in the future.

- **Facilities for dental and maxillofacial procedures:**

Root canal treatment  
Dental extraction under LA  
Third molar (wisdom tooth) surgery  
Dental trauma cases and management  
Oral prophylaxis, diagnosis and management of precancerous lesions and conditions and gum surgery  
Cosmetic dentistry including braces  
Minor OT and Prosthodontics

Patients accessing dental care can have state of the art ceramic crowns, bridges as well as zirconia crowns implants at a price they can afford.

The department also offers full mouth rehabilitation for partially edentulous patients and face mask for correcting face and jaw discrepancy.

- **Dental laboratories**  
One (Prosthodontics)

#### **4.1.10 Pharmacy:**

- **Pharmaceutical Science Laboratories**
- **Museum for drug formulations**
- **Machine room**
- **Herbarium / crude drug museum**
- **Balance room**
- **Chemical store**
- **Instrumentation facilities**
- **Pilot plant**
- **Computer aided laboratory**

Not applicable to MGIMS. These questions relate to a Pharmacy college.

However the Department of Pharmacology has a Pharmacy lab for undergraduate teaching and demonstrations as per university guidelines. The Department has a museum for drug formulations. Here drug formulations are displayed with information charts. A chemical store is available. A balance room is also available for measuring chemicals with dessicator.

#### **4.1.11 Yoga and Naturopathy**

- **Demonstration hall with teaching facility to cater to the needs of the students.**

Available. Area: 600 Sq.ft (30'X20') demonstration hall / spiritual Library is equipped with fair number of books and magazines on health & spirituality. In addition audio-visual facilities (LCD TV, LCD Projector and PA system) are also available.

- **Diet Service Management Department**

Well established diet and nutrition section is available with biogas operated kitchen along with dining hall. It provides nutritious vegetarian naturopathy diet to the patients. Total area: 2131 Sq. ft.

- **Yoga cum multipurpose hall for meditation and prayer**  
 Available as follows:  
 Yoga hut in nature park with bamboo structure & profile sheets for yoga practice, meditation and prayer. Area: 1196 Sq. ft (26' x 46')  
 Pyramid Meditation Hall: in nature park for performing meditation. Area: 256 Sq ft (16' X 16')  
 Open air shed (shed with profile sheet): upstairs of Maitri Bhavan for yoga practice, meditation and prayer. Area: 1345.5 Sq ft (69' X 19.5')  
 Lawn: Lush green lawn for yoga practice, meditation and prayer. Area: 5700 Sq ft (60' X 95')
- **Solarium compatible for multimedia presentation**  
 Demonstration Hall/ Library available (mentioned above).
- **Mud Storage Unit**  
 Available as treatment unit and storage. Mud Therapy section: area: 115 Sq ft. (11.5' X 10'); Mud storage unit (mud processed & prepared for application) area: 231.2 Sq ft (17' X 13.6').
- **Outdoor Facilities - Walking track with reflexology segment**  
 Available as follows:  
 Accu-pebbles walk track with reflexology segment with serene nature park and herbal garden (225 acres) (Amla).  
 Labyrinth walk track for walking meditation
- **Swimming Pool**  
 Presently not available but proposed for future.
- **Naturopathy blocks**  
 Available as follows:  
 Separate treatment section for gents and ladies with separate unit for hydrotherapy (steam cabin-2) and steam Room, spinal bath & spray, hip bath, immersion, packs etc.), massage (Swedish, Ayurvedic), mud therapy (Local & General), thermolium (Sun/ Color therapy), douches etc.  
 Total Area: 1560 Sq ft.  
 For benefit of indoor and outdoor patients with health problems  
 a) OPD Complex with chambers for consultation & demonstration.  
 No. of Chambers: 4. Total Area: 564 sq.ft.



- b) Twenty four simple cottages (twin unit) with solar water heaters for indoor admission and treatment of obesity, hypertension, back pain, stress etc patients. Total Built up area - 10,380 Sq.ft. (Built up area per Twin unit - 692 Sq.ft).

#### **4.1.12 Homoeopathy:**

- **Museum and demonstration room (Homoeopathic Pharmacy Laboratory, Pathology Laboratory, Community Medicine, Homoeopathic Materia Medica, Organon of Medicine including History of Medicine)**
- **Repertory with Computer Laboratory and Demonstration Room.**  
Not applicable

#### **4.1.13 Nursing**

- **Nursing Foundation Laboratory**
- **Medical Surgical Laboratory**
- **Community Health Nursing Laboratory**
- **Maternal and Child Health Laboratory.**
- **Nutrition Laboratory**
- **Pre clinical Laboratories.**
- **Specimens, Models and Mannequins**

Not applicable to MGIMS. However Kasturba Nursing College has facilities of Nursing Foundation Laboratory, Medical Surgical Laboratory, Community health nursing laboratory, Maternal and Child health laboratory and Nutrition Laboratory. It also has a well equipped skills lab and IT lab

#### **4.1.14 Ayurveda:**

- \* Herbal Gardens
- \* Museum Herbarium
- \* Panchakarma Facility
- \* Eye Exercises Clinic
- \* Kshara Sutra and Agni Karma Setup
- \* Ayurveda Pharmacy

Not applicable. The institute has a Centre for Alternative Systems of Medicine.

#### **4.1.15 Does the institution have the following facilities? If so, indicate its special features, if any.**

- Meditation Hall: Yes, available with Yoga-Naturopathy section.
- Naturopathy blocks: Yes

Please see Section 4.1.11 for more details.

#### **4.1.16 Provide details of sophisticated equipments procured during the last four years.**

Major equipment procured during 2011-2015, costing above Rs. 5 Lakhs are listed in Annexure 4C

## **4.2 Clinical Learning Resources**

### **4.2.1 Teaching Hospital**

- **Year of establishment:**

Kasturba Hospital was established in 1944. Mahatma Gandhi Institute of Medical Sciences was established in 1969.

- **Hospital institution distance :**

The hospital and the medical college are in same campus in a shared building.

- **Whether owned by the college or affiliated to any other institution?**

Owned by college.

Both the hospital and the institute are run by Kasturba Health Society

- **Are the teaching hospitals and laboratories accredited by NABH, NABL or any other national or international accrediting agency?**

No.

However Kasturba Hospital was awarded 88.8% score and A1 grade when the NABH tool was applied by Rajiv Gandhi Jeevandayi Arogya Yojana, in 2015.

- **Number of beds :**

A total of 934 beds are available in Kasturba hospital. The total number of beds are as follows:

S No	Type	Number	Total
1	Teaching beds Medicine: 140 Ob/Gyn: 90 Surgery: 120 Pediatrics & Neonatology: 60 Orthopedics: 60	690	934

	Ophthalmology: 60 ENT: 30 Psychiatry: 30 Dermatology: 30 Neurosurgery: 10 Radiotherapy: 30		
2	Service beds	100	
3	ICU beds (Neonatal, Pediatric, Medical, Coronary, Burns)	62	
4	Private beds	32	
5	Dr Sushila Nayar Hospital, Utawali (Melghat)	50	

- **Number of specialty services :**  
18

1. Anatomy
2. Physiology
3. Biochemistry
4. Pathology
5. Pharmacology
6. Microbiology
7. Forensic Medicine and Toxicology
8. ENT
9. Ophthalmology
10. Community Medicine
11. Medicine
12. Surgery
13. Obstetrics and Gynecology
14. Orthopedics
15. Dermatology, Venereology and Leprosy
16. Radiology
17. Radiotherapy
18. Anesthesiology

- **Number of super-specialty services :**  
1 Neurosurgery.  
2. Cath lab

- **Number of beds in ICU / ICCU / PICU / NICU, etc.**

ICU (Medicine)	26 beds
ICCU (Medicine, cath lab)	10 beds
NICU	10 beds
PICU	8 beds
Surgery ICU/ Burns	8 beds

- **Number of operation theatres:**

At present we have 13 functional OTs. They are assigned to various departments as follows:

S No	Department	No. of OTs
1	Surgery	2
2	Obstetrics and Gynecology	2
3	ENT	2
4	Orthopedics	2
5	Ophthalmology	1
6	Neurosurgery	1
7	Laparoscopy	1
8	Emergency	1
9	Septic OT	1
	<b>Total</b>	<b>13</b>

- **Number of Diagnostic Service Departments:**

12

1. Pathology
2. Biochemistry
3. Microbiology
4. Radiology
5. Reproductive Biology Lab
6. Neurophysiology Lab
7. Cytogenetics Lab
8. Toxicology Lab
9. Endoscopy
10. ECG and Echocardiography
11. EEG Laboratory
12. Bone Densitometry (DEXA)
- 13.

**Annexure 4D-** Data of investigations in 2015-16

- **Clinical laboratories**

3

1. Clinical Pathology
2. Clinical Biochemistry
3. Clinical Microbiology

- **Service areas viz. laundry, kitchen, CSSD, Backup power supply, AC plant, Manifold Rooms, pharmacy services:**

**LAUNDRY:** The hospital laundry services have been outsourced to a private firm.

**KITCHEN:** The hospital kitchen provides dietary services and is supervised by a dietician. In 2015-16, the kitchen served 174898 meals (normal, salt restricted, diabetic, soft and liquid diets) to indoor patients. The kitchen also served 101282 meals to nursing students and guests.

**CSSD:** The hospital has its own central sterile service department. The Central Sterile Services Department is responsible for the processing and sterilization of instruments and medical devices required for operations and sterile procedures in the Operating Theatres, OPDs, Wards and Radiology Department etc.

For details on the physical layout, manpower, equipment, policies and procedures of CSSD, quality monitors and performance indicators, please see **Annexure 4E**.

**ENGINEERING AND MAINTENANCE DEPARTMENT:**

The sanctioned load for electricity is 705 KVA(1041 KW). Adequate generator facility (Load 320+125+200+200 KVA) is provided 24X7 in all clinical sections of the institute. Essential equipment have power backup. Uninterrupted supply has been safeguarded for 24 hours. Central cooling arrangements are available in the OT complex and ICUs. At other places AC or air cooling facility is provided as per requirements.

**MANIFOLD ROOMS:** There are five manifolds rooms in the institute: near new operation theatre complex, near Medicine building, near Gynecology department, near Pediatrics and Surgery wards and near Trauma Centre. A new manifold is coming up near the new MCH wing. These manifolds are the source of constant uninterrupted central oxygen supply, other medical gases and suction in operation theatres and ICUs. From manifolds which are located outside the facility, medical gases (nitrous oxide, CO<sub>2</sub>) are carried by medical grade alloy pipelines to the facility where they can be utilized. The manifolds near Medicine building, operation theatre and new MCH wing have 10 x 2 points. All manifolds have an emergency point too. All the

manifolds are handled by trained technicians. These manifolds also supply oxygen cylinders to areas where centralized oxygen supply is not available.

**PHARMACY SERVICES:** Two 24 x 7 pharmacies are available in the hospital which sell drugs at highly subsidized prices. They are manned by trained pharmacists. The pharmacy is licensed by FDA. The medicines are stored as per FDA recommendations. Sound inventory control practices are followed. All stock records are electronically maintained. Medicines which are lookalike and sound alike (LASA drugs) are stored separately in the medicine stores. Temperature of the refrigerators is recorded twice a day i.e in morning and in evening We have introduced computerized prescriber order entry (CPOE) to prescribe drugs.

More details are provided below in the separate section on Pharmacy Services.

- **Blood Bank services:**

Kasturba Blood Bank started functioning in the year 1970. In the year 1978 it was upgraded to the Regional Transfusion centre by the State Blood Transfusion Council (SBTC). It was one of the 8 blood banks in Maharashtra selected by NACO for assistance. The Component Unit was started in the year 2007.

The Blood Bank meets all requirements of whole blood and blood components for the entire hospital. All collections are voluntary and there is in-house facility of screening blood for five transfusion transmittable infections. The blood bank offers free services to patients of thalassemia.

Policy:

To ensure easily accessible and adequate supply of safe and quality blood and blood components collected / procured from voluntary donors in well-equipped premises, which is free from transfusion transmitted infections and is stored and transported under optimum conditions.

Transfusion under supervision of trained personnel for all who need it irrespective of their economic or social status through comprehensive, efficient and a total quality management approach.

The blood bank data for the last five years is as follows:

<b>Investigations</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
<b>Blood grouping and Rh typing</b>					
In patients	17345 x 2	15172 x 2	12665 x 2	14441 x 2	13814 x 2
In donors	6738 x 2	6635 x 2	6343 x 2	6426 x 2	6627 x 2
Subgrouping A1 and A2	1683	1697	1610	1551	1710
Blood bags collected	6738	6635	6342	6426	6627
Total screening tests	33704	32789	31794	32492	39654
<b>Total units issued</b>					
Whole blood	5700	5335	5267	5011	5310

	Packed red cells	776	1065	1078	1194	1000
	Platelet concentrate	622	478	397	622	459
	Fresh Frozen Plasma	780	1035	1119	851	1130
	Total Cross match	6476	6400	6345	6205	6510
	Blood donation camps	47	44	43	39	37
Blood issued to						
	Thalassemia patients	323	437	132	475	397
	SCD patients	137	224	178	178	194

See **Annexure 4F** for list of voluntary blood donation camps organized.

- **Ambulance services:**

24x7 ambulance services are provided by hospital at an affordable price. One specialized ambulance for trauma centre and three other ambulances are owned by Kasturba hospital. The ambulance can be asked for from this phone number: 07152-284341-55 (16 lines) : Ext. 229

Voluntary social organizations also cater to the need of local public with ambulance service.

### **Hospital Pharmacy services:**

Two 24/7 pharmacies opened in the hospital premises to ensure that our registered inpatients and outpatients can access drugs at affordable prices. On an average, our in-hospital pharmacy receives 2000 prescriptions every day- close to half a million prescriptions in 2015-16. . The hospital also opened another pharmacy in the Gandhi Memorial Leprosy Foundation premises in Wardha town- located 10 km from Sevagram.

Beginning 2010, we implemented a low-cost drug initiative at MGIMS aimed at providing appropriate and affordable drugs to our patients. We procured drugs at substantially cheap prices by inviting competitive quotations from drug distributors and used the electronic hospital information system to buy, stock and dispense drugs and surgical items.

We have introduced computerized prescriber order entry (CPOE) to prescribe drugs. We also created e-prescriptions on the iPad app, specially designed for this purpose. The electronic applications help doctors identify drugs by both their generic names, check for their availability in the drug store and display their prices- thus minimizing prescription errors and improving the quality of evidence-based therapies. We made doctors and public aware of the benefits of the initiative and banned all drug representatives from showcasing their products in the hospital. We encourage our residents to prescribe drugs by their generic names.

The low-cost drug initiative has substantially reduced the cost of medical treatment at Kasturba hospital, both in outpatient and inpatient setting. Patients with catastrophic illnesses as well as those with chronic diseases have found significant difference in the cost of medications they buy at MGIMS compared to the market pharmacies.

- **Drug poison information service:**

This service is provided by the Pharmacovigilance centre under adverse drug reactions.

- **Pharmacovigilance:**

The Pharmacovigilance centre in the Department of Pharmacology is a recognized regional centre sponsored by WHO and has been providing service for the last five years. PVPI Ghaziabad provides funding to run the centre. Reports of adverse drug reactions (ADR) are collected from Kasturba Hospital, private hospitals, practitioners and also from AVB Hospital associated with JN Medical College Sawangi and PDM Medical College Hospital Amravati. ADR data are uploaded by the regional centre. Basic information about drugs is provided by the centre to all medical and paramedical workers and citizens.

- **Mortuary, cold storage facility:**

The available mortuary chambers are as follows:

Forensic Medicine Department: capacity for storage of 8 bodies, (size 8'x8'x6') in fixed cabinets available on 24x7 basis, connected with casualty to keep bodies temporarily for autopsy or transportation purpose.

Department of Anatomy: capacity of storage of 10 bodies for teaching purposes, developed for temporary storage of donated bodies.

- **Does the teaching hospital display the services provided free of cost?**

Yes. Although the hospital requires the patients to pay user charges, several schemes the hospital runs ensure that poor patients either pay a small part of or no charges at all for the hospitalization. The Hospital provides services at affordable prices. About 70,000 families in the Wardha district buy an annual health assurance card (Rs 80 per person per year) that offers a benefit package of 50% subsidy on all hospital charges (registration, tests, IPD charges, and operations).

The hospital also participates in the following schemes started by the Government of Maharashtra that offer either fully free or partly free services:



- Rajiv Gandhi Jeevandayee Arogya Yojana: Cashless hospitalization for families below poverty lines (BPL): this scheme covers close to 900 catastrophic and life threatening illnesses.
- Ten percent of the beds of the hospital are reserved for patients belonging to indigenous section. Hundred percent free hospitalization
- Ten percent of the beds of the hospital are reserved for patients belonging to the weaker section. Patients pay 50% hospital charges.
- Jowar Insurance Scheme: Free treatment to the beneficiaries.

- **What is the mechanism for effective redressal of complaints made by patients?**

All patients admitted for more than three days in Kasturba Hospital are asked to provide a written feedback (Template attached- **Annexure 4G**). This feedback is collected by paramedical staff and any complaints are dealt with at their level. The Public Relation Officer of the institute identifies the common complaints, and shares them with the matron, the administrative officer and the Medical Superintendent. This feedback is also discussed in the monthly meeting with the ward incharges. If needed, the Unit incharges review the feedback and take necessary corrective measures. The Medical Superintendent is the final authority for redressal of such complaints.

- **Give four years statistics of inpatient and outpatient services provided.**

See **Annexure 4H**

- **Does the hospital display charges levied for the paid services?**

Yes, adequate display has been provided in registration area. These rates are also available on the MGIMS website.

- **Are the names of the faculty and their field of specialization displayed prominently in the hospital?**

Yes. This is displayed both in the registration area as well as on the website

- **Is pictorial representation of the various areas of the hospital displayed in a manner to be understood by illiterate patients?**

Yes. This has been provided in OPD registration area and also in the premises.

- **Is there a prominent display of ante-natal, mother and child health care facilities?**

Yes. This is done.

- **How does the hospital ensure dissemination of factual information regarding rights, responsibilities and the health care costs to patient and the relatives/attendants?**

Unit incharges of all departments ensure that all patients admitted under them and their care takers have been given relevant information of the condition of the patients, any intervention likely to be done with its expected outcome, progress and expected expenses during the stay in hospital. All medical staff in a unit and supporting nursing staff take responsibility as a team for discharging this duty. The unit members have empathy for the sufferings of the patient and ensure maintenance of strict confidentiality wherever necessary in the interest of the patient.

The Medical Superintendent keeps a constant watch on inpatient departments through computerized hospital information system (HIS) installed in all sections of the hospital and personally reviews the situation in scheduled meetings with unit incharges.

The Rajiv Gandhi Jeevodaya Arogya Yojana (RGJAY) is functional in hospital and provides relief to economically compromised patients in settling the unbearable cost of their remedies. Hospital preserves economic rights of all eligible patients enrolled under RGJAY.

- **How does the hospital ensure that proper informed consent is obtained?**

As per the standard operating procedures (SOP) for all minor/major operative or interventional procedures carried out in OPD or IPD, a proper written informed consent is taken. Residents and paramedical staff explain the procedure to the patients and relatives in the language they can understand.

- **Does the hospital have well-defined policies for prevention of hospital-acquired infections?**

There are well defined standard operating procedures (SOPs) for hospital infection prevention (See Annexure 4I). Training of all staff and hospital personnel is being conducted regularly by the Microbiology department.

- **Does the hospital have good clinical practice guidelines and standard operating procedures?**

Yes. All the clinical sections have departmental guidelines and SOPs to ensure state of the art consultancy and updated professional advice to the patients.

- **Does the hospital have effective systems for disposal of bio-hazardous waste?**

Collection, transport and disposal of biomedical waste (BMW) is done on contract basis. Segregation is done as per norms. Every fortnight, supervisory rounds are taken

and biomedical waste disposal report is submitted to the Medical Superintendent. (Details of these reports are available on the institute's website <<https://www.mgims.ac.in/index.php/hospital/bmw>>).

- **How does the hospital ensure the safety of the patients, students, doctors and other health care workers especially in emergency department, critical care unit and operation theatres? Are the safety measures displayed in the relevant areas?**

Vaccination is provided to all hospital staff for hepatitis B, tetanus and incidental infectious diseases. Biosafety measures are strictly followed during collection of samples, interventions and operative procedures. Needle destroyers and incinerators are available in all blood collection counters of OPD and IPD. Colour coded containers have been provided all over the campus for classified segregation and disposal of waste.

Adequate fire safety measures are available on campus. Access to emergency exit doors and power back up has been safeguarded in needy areas.

Security service is available round the clock.

All safety measures are adequately displayed at relevant places.

- **How are the Casualty services/Accident and Emergency Services organized and effectively managed?**

The Hospital Accident and Emergency Centre is provided with an experienced casualty medical officer (CMO) on a 24 hour basis. Clinical staff on duty is available in campus and resident doctors are available in duty rooms adjacent to casualty. Residents and interns perform emergency duties on shift basis. Their duty charts are intimated in advance to the Medical Superintendent.

Adequate first aid, life support, resuscitation measures and emergency medications are available in casualty. There are 20 beds in the casualty. Experts from clinical departments settle the emergencies in casualty and afterwards move such patients to the corresponding units or wards for further management as per the requirement of the case.

The Clinical Forensic Medicine Unit (CFMU) staff is also available round the clock in the casualty. They perform medicolegal examination and prepare necessary reports only after ensuring that adequate first aid and life support measures have been provided to patients who need to be registered with a medico-legal case (MLC).

- **Whether the hospital provides patient friendly help-desks at various places.**

Yes, provided in all major sections.

- **Does the hospital have medical insurance help desk?**

The health insurance scheme of the institute has won several accolades as it seeks to create health consciousness in the community. A villager can insure himself and his family by paying Rs 400 a year and in return he gets 50% subsidy in OPD and indoor bills. In 2015-16, 18807 families (86199 members) around Sevagram volunteered to obtain health insurance from this hospital. Similarly 40 villages were totally insured and 90201 rural people were insured under this scheme. No other medical institution has achieved this kind of coverage so consistently over the years and at so affordable a rate. **Annexure 4J** shows health insurance data for the last five years.

Help desk and registration counters are there in hospital to enroll new families for Insurance coverage in stipulated months of the year.

- **What are the other measures taken to make the hospital patient friendly?**

Information and guide maps are displayed on wall mounted sign boards in major languages understood by local patients- English, Hindi, Marathi and Telugu. Adequate facility of drinking water and wash rooms is provided in the hospital. 24 hour facility of canteen is available within hospital premises where tea, hot and cold beverages and light refreshments are available at reasonably low price.

- **How does the hospital achieve continuous quality improvement in patient care and safety?**

Records of hospital statistics are generated online at month end are shared with all staff. The Medical Superintendent of Kasturba Hospital holds meetings with the unit incharges periodically. The issues emerging out of staff suggestions, patient feedback or clinical meetings are resolved with combined efforts of the hospital staff. Management helps to solve such issues on priority basis.

All clinical departments follow standard operating procedures (SOP). The established norms are periodically reviewed and as per the need modified to provide most updated and professional healthcare facility.

- **What are the measures available for collecting feedback information from patients and for remedial actions based on such information?**

Suggestion boxes are put up at various places throughout the hospital for patients so that their suggestions, complaints and compliments can reach us easily. These boxes are opened every week and the issues that crop up from these suggestions are addressed in a timely manner in consultation with the Medical Superintendent.

For patients who have stayed in the hospital for more than 3 days in each ward every day, the nursing staff approaches and ask them for their genuine opinion about the hospital and fills a standard feedback form.

- **How does the institution ensure uniformity in treatment administered by the therapists?**

All departments in the hospital have prepared standard operating protocols (SOPs) for all procedures and systems. This ensures uniformity in treatment administered in all sections of the hospital.

- **Does the institution conduct any orientation training program for AYUSH-based para-medical staff?**

Not applicable

#### 4.2.2 What specific features have been included for clinical learning in the out-patient, bedside, community and other clinical teaching sites?

Adequate facilities exist in each clinical department for conducting clinical learning sessions regularly. All the departments and OPDs have designated rooms for clinical teaching equipped with adequate facility to conduct teaching-learning sessions. Seminar rooms are available for holding meetings and seminars.

Available resources for academic activities:

- Lecture theaters : 7
- Seminar rooms : 22
- Demonstration rooms : 22

Details of Lecture theatres:

	Anatomy	Physiology	Pathology	Community Medicine	Adhyayan Mandir	Sarojini Naidu Hall	Psychiatry
Arrangement of Seats	Gallery	Gallery	Gallery	Level	Level	Level	Gallery
Capacity	250	100	120	100	120	120	100
Lighting							
Ventilation	Air cooled	Air cooled	Air cooled	Air cooled		Air conditioned	Air conditioned
Audio-visual facilities	Black boards, Epidiascope, LCD projector	Black boards, LCD projector	Black boards, Epidiascope, LCD projector	Black & white boards, LCD projector	Black board	White boards Audio system, LCD projector	Black & white boards, LCD projector

Details of community teaching have already been provided in Section 2.3.1. The institute has well developed peripheral training centres at Anji, Bhidi and Talegaon. These have adequate teaching rooms and dormitories for students to stay during their peripheral community postings and camps

### 4.3 Library as a Learning Resource

#### 4.3.1 Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been implemented by the committee to render the library student/user friendly?

There is a library advisory committee comprising of nine members, including the Dean, Officer in Charge of library, Officer In-charge, Technical, Librarian, Faculty representing pre, para and clinical departments. The advisory committee reviews the working of library, takes decisions on policy matters, making the library more student friendly, annual expenditure, budget allocations for books to different departments and planning on future development.

Sr.No.	Name	Designation
1	Dr KR Patond, Dean, MGIMS	Chairperson
2	Dr MVR Reddy	Member
3	Dr PoonamVarma Shivkumar	Member
4	Dr Pradeep Deshmukh	Member
5	Dr Benhur Premendran	Member
6	Dr Sachin Pawar	Member
7	Dr Smita Singh	Officer In-charge, Library
8	Mrs Bhavana Kalantri	Officer In-charge (Technical)
9	Mr Vijay Vairagade	Librarian

The following measures have been taken to make the library student friendly:

The MUHS Digital Library is open access online for all users on the campus wifi. Digital Library of Maharashtra University of Health Sciences (MUHS) Nashik is available through <http://www.muhs.ac.in/dl/j.asp>

Various book bank schemes are available for the economically weak students under which text books are given to the students for their whole term. Details of the same are given in the table below:

Sr. No .	Scheme	Available Books	Since 2011 - 2016	
			Nos. of Beneficiaries	Nos. of Issued Books
1	MUHS Book Bank Scheme for Economically Backward Students	147	16	82
2	Social Welfare Dept., Govt. of India For SC/ST students those who are beneficiaries of Govt. of India Scholarship scheme and income of whose parents' are not exceeding Rs. 2,00,000/-	1429	19	90
3	Needy Students Library for all students	1030	35	128
4	Dr. Anand Karkhanis Book Bank Scheme for all students	180	28	124

Another useful initiative is the कमावा व शिका योजना (Earn & Learn Scheme) started recently from March 2016: Ms. Snehal Kawale, MBBS Student of 2012 batch was appointed under this scheme, initiated by Maharashtra University of Health Sciences (MUHS), Nashik since 2016. She works for two hours daily in the library and earn Rs. 50/- per hour which works out to Rs. 16,500/- per student for 8 months in an academic session. We hope to get more needy students enrolled in the scheme so that they can fund their studies.

The library staff is trained to help enhance the user experience and make the library more accessible.

Mr Vijay Vairagade attended five days Training course from 12-16 Oct 2015 on "IT Applications for Information Management in Medical Libraries" at National Institute of Health & Family Welfare New Delhi held at NIHFV, New Delhi

Mrs.V.Kamble attended a Workshop on Library Automation with Koha at Mahatma Gandhi Antarrashtriya Hindi Vishwvidyalaya Wardha On 9-10 Oct 2015.

Mr Vijay Vairagade, Mrs. Vaishali Kamble, Ms. Mamta Raut participated in the "4<sup>th</sup> Developing Course with MOODLE" organized as part of E-learning initiative by Medical Education Unit, at Mahatma Gandhi Institute of Medical Sciences, Sevagram from 29 June to 27 July 2015

**Digitalization of Library (E-library):** Since, the last 3-4 years we have digitalized the library and made it accessible online to all members – faculty, students

and staff. For this purpose, the Central Library has initiated e-library facility with the help of WebOPAC (SLIM 21 Software) to access online medical databases, e-resources, e-journals, e-books, atlas, clinics, online newspapers of world directory, videos, MGIMS publications (theses, dissertations & articles) and can get borrowers details such as due dates of book, overdue and fines for all for faculty, post graduate, PhD Students, undergraduate and nursing students with the help of SLIM21 Library management software. Presently, e-library is linked with online databases-30, articles-79, thesis-246, e-books-40, e-journals (foreign)-28, videos-10.

In addition to this clinics, dictionaries, atlases, question papers, MUHS Syllabus for undergraduates & postgraduates, MGIMS Publications (MGIMS Official Website, Annual Reports, JMGIMS, MGIMS Bulletin, Hospital Statistical Bulletin, Sushruta, Sevamed, JBTDRC) and Google Map, World Newspapers directory, India Medical Times & Sevagram Ashram and are available through (HIS) - <http://172.16.1.20/w27/w27SimpleSearch.aspx>

In year 2016, library has subscribed 28 online high impact foreign journals for faculty, PhD, post graduates, under graduates and nursing students.

The Central Library has renewed UpToDate online subscription for faculty members and postgraduates students on the campus wifi. The subscription provides access to over 10000 topics in 22 specialties. These are written and edited by over 5000 world renowned physicians, authors etc. and are available through

<http://www.uptodate.com/contents/search>

Central Library has renewed DELNET (Developing Library Network) services which has e-resources, journals & books and are available through <http://delnet.nic.in> (Login- mhmngimsw)

Central Library has renewed e-journals package subscribed (IMedC) from DELNET (Developing Library Network) services a web based linking and search on internet based e-resources including e-journals, books, e-archives and are available through -

[http://infotrac.galegroup.com/itweb/gandhi\\_medical](http://infotrac.galegroup.com/itweb/gandhi_medical)

Working Hours: The Central Library & Reading Hall opens all days including Sundays & Holidays except national holidays.

User orientation: The Library had arranged a presentation cum orientation programme on SLIM21 online Catalogue on 19<sup>th</sup> August 2015 for MGIMS Faculty and all post graduate, undergraduate and nursing students with the help of our Institute Academy of Medical Sciences in Sarojini Naidu Hall. Demonstration of SLIM21 software namely “Electronic resources management



& search solutions” e-Resources, Library Software Database and digitized Thesis /Articles was done by Algorhythms Consultants Pvt. Ltd., Pune.”

**Other services**

- o Free Internet for all members; air conditioned section for internet users
- o Video / CD section
- o Reprints available on demand from National Medical Library
- o Access of old precious journals archiving & can access since 1969
- o Aesthetically pleasing reading room
- o Reading Room capacity for 200 - 250 students with duct cooling facility
- o Renovation of toilet block: modern well maintained, clean, hygienic for students
- o Photocopying facility available at subsidised cost s

**4.3.2 Provide details of the following:**

- **Total area of the library (in Sq. Mts.)**

Layout and floor area	
Central Library	257 sq. mt. (2776 sq. ft.)
Reading Rooms	960 sq. mt. (10342 sq. ft.)

- **Total seating capacity**

Seating capacity (Library + Reading Room)		
For UG	Inside - 15	Outside - 150
For PG	Inside - 24	
For Faculty/Staff	Inside - 20	

- **Working hours (on working days, on holidays, before examination, during examination, during vacation)**

Working hours for all days	
Central Library (2 shifts)	9 am to 5 pm & 2 pm to 10 pm
Reading room	9 am to 10 pm
On Sunday & all Holidays	

Central Library	10 am to 5 pm
Reading room	10 am to 10 pm

- **Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**
  - See **Annexure 4K** for floor plan and layout of library
- **Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection**
  - Yes

- **List of library staff with their qualifications:**

Sr No.	Names	Qualification	Categories
1	Prof. Dr. Smita Singh	MS, DNB (Ophthalmology),	Officer In-charge, Library
2	Mr. V.W. Vairagade	M. Lib. I. Sc	Librarian
3	Mrs. Vaishali Kamble	M. Lib. I. Sc	Assistant Librarian
4	Ms. Mamta Raut	M. Lib. I. Sc	Assistant Librarian
5	Ms. Anita Dhole	M. Lib. I. Sc	Documentalist
6	Mr. Abhay Udhan	M. Lib. I. Sc	Cataloguer
7	Mr. Vinit Patil	B.Com.	Clerk
8	Mrs. S.K. Sunar	-	Attendant
9	Mr. Chandu Bisan	-	Attendant
10	Mr. B. Tekam	-	Attendant
11	Smt. Reshma Khalil	-	Attendant

#### 4.3.3 Give details of the library holdings:

- **Print (books, back volumes, theses, journals)**

1	Books	28,127
	Text	9,067
	Reference	19,060
2	Journals	114
	Indian	45

	Foreign	71 (Print 47; Online 24)
	WHO Global Subscription Package	1,340
3	Journals with back Numbers	
	Indian	96
	Foreign	309
4	Bound Journals	J 17573
5	Theses	905
6	CDs	1349

- **Average number of books added during the last three years**
  - 400
- **Non Print (Microfiche, AV)**
  - Microfiche reader (available on demand)
- **Electronic (e-books, e-journals)**
  - e-books - 39
  - e-journals – 28
- **Special collections (e.g. text books, reference books, standards, patents)**
  - Atlas - 900
  - Fiction books - 4041
  - Clinics - 2147
  - Year Books - 609
  - Gandhi & Vinoba Collection - 2000
  - Donated books - 6517
- **Book bank**
  - MUHS Book Bank Scheme [Economically Backward Students] - 147
  - Social Welfare Dept., Govt. of India, for SC/ST students - 1429
  - Needy Students Library - 1030
  - Dr. Anand Karkhanis Book Bank Scheme – 18
- **Question bank**
  - Multiple Choice Questions (MCQs)- Available

**4.3.4 To what extent is ICT deployed in the library? Give details with regard to**

- **Library automation**

- We are using SLIM21 Library Management Software (developed by Algorithms Consultants Pvt. Ltd., Pune) for automation with the following modules
  1. Cataloguing System
  2. Circulation System
  3. Acquisition System
  4. Serial Control System
  5. Statistics

Ancillary Modules

1. WebOPAC
2. Current Awareness Service
3. Copy Cataloguing
4. Inventory Assistant IA21
5. dColl Module

- **Total number of computers for general access**

- 25 Computers

- **Total numbers of printers for general access**

3 Printers

- **Internet band width speed**      2mbps    10 mbps    1 GB

- **Institutional Repository**

- Available on MGIMS Website & in Library

- **Content management system for e-learning**

- Yes (We have managed content management system through WebOPAC with the help of SLIM 21 Software)

- **Participation in resource sharing networks/consortia (like INFLIBNET)**

- Yes
- Uptodate – 10000 topics 22 specialties
- DELNET– Journals 4832 & books – 367
- IMedC (Infotrac Medical Collection)
- MUHS Digital Library – 2074 e-resources

#### **4.3.5 Give details of specialized services provided by the library with regard to**

- **Manuscripts**
  - Computing & photocopying facility is available
- **Reference**
  - Yes (On request references are procured from National Medical Library, New Delhi)
- **Reprography / scanning**
  - Yes
- **Inter-library Loan Service**
  - No
- **Information Deployment and Notification**
  - Yes
- **OPACS**
  - Yes
- **Internet Access**
  - Yes
- **Downloads**
  - Yes
- **Printouts**
  - No
- **Reading list/ Bibliography compilation**
  - Yes
- **In-house/remote access to e-resources**
  - Yes (Through HIS)
- **User Orientation**
  - Yes
- **Assistance in searching databases**
  - Yes

- **INFLIBNET/HELINET**

- DELNET Available

**4.3.6 Provide details of the annual library budget and the amount spent for purchasing new books and journals.**

Amount spent on New books and journals in last 5 years:

S.No.	Year	(Amount in Rs)		
		Books	Journals	Total
1	2011-12	9,33,041.00	53,47,378.00	62,80,419.00
2	2012-13	9,58,908.00	50,35,634.00	59,94,542.00
3	2013-14	10,71,633.00	58,56,648.00	69,28,281.00
4	2014-15	5,85,955.00	63,12,872.00	68,98,827.00
5	2015-16	5,97,876.00	67,22,347.00	73,20,223.00

**4.3.7 What are the strategies used by the library to collect feedback from its users? How is the feedback analysed and used for the improvement of the library services?**

- Feedback Register maintained at the Books issuing counter and the feedback/complaints if any received are attended. Planned feedback is taken from students once in a while.

-

**4.3.8 List the efforts made towards the infrastructural development of the library in the last four years.**

- e-Library - Central Library has started an E-Library facility (Web OPAC) with the latest library management software. This is a flexible and dynamic way of using e-services of library. For access of online medical databases, e-resources, e-journals, e-books, atlases, clinics, MUHS syllabus, question papers, online newspapers of world directory, videos, MGIMS publications (theses, dissertations & articles) and can check own details such as due dates of book, overdue and fines. To access this e-library with the under mentioned URL through HIS wi-fi.

URL - <http://172.16.1.20/w27/>

- Duct Cooling of Central Library

The following new equipment has been procured

- Canon IR 2420L Digital Photocopier Machine -1
- Rack mount Server for SLIM 21 Software – 1
- dColl Module for SLIM 21 Software
- Hard Disks – 3

- Branded Computers – 14
- HP Laser Printer - 1
- Branded UPS - 10
- Receipt Printer - 1
- All-in-one Printer - 1
- CCTV Cameras – 6
- Air Conditioner – 1
- Desert Coolers – 3
- Water Purifiers – 2
- Computer tables – 5
- Computer revolving chairs – 5
- Poster Pin-up Boards - 15
- Visitor Chairs– 50
- Venetian Blinds –30

## **4.4 IT Infrastructure**

### **4.4.1 Does the institution have a comprehensive IT policy with regard to:**

- \* **IT Service Management** - Yes
- \* **Information Security** - Yes
- \* **Network Security** - Yes
- \* **Risk Management** - Yes
- \* **Software Asset Management** - No
- \* **Open Source Resources** - No
- \* **Green Computing** – No

### **4.4.2 How does the institution maintain and update the following services?**

- \* **Hospital Management Information System (HMIS)**  
The HIMS has a maintenance contract for updating applications.
- \* **Electronic Medical Records System (EMR)**  
EMR is in built in the application itself and gets automatically updated.
- \* **Digital diagnostic and imaging systems including PACS**  
Digital diagnostic and Imaging system is under annual maintenance contract with the vendor.

#### 4.4.3 Give details of the institution's computing facilities i.e., hardware and software.

\* **Number of systems with individual configurations**

320 desktop computers with minimum configuration - core i5 / 8GB / 1 TB

\* **Computer-student ratio**

The students In 2015 the E-learning subgroup of the Medical Education Unit (MEU) assessed the student preparedness for e-learning in terms of infrastructure and attitudes. Annexure shows that 49% of undergraduates had personal computers or laptops, while 43% had access to other computing devices (tablet or smart phones). Only 8% did not own any computing device.

All students have access to computers in

(a) Computer lab

(b) Library

(c) Computer lab in Bioinformatics Centre

The institute has facilitated the purchase of laptops and tablets to faculty and students through interest-free loans.

\* **Dedicated computing facilities**

All activities related to hospital and most of the college activities are covered under the application AHIMS. Most transactions are online and paperless.

\* **LAN facility**

LAN covers the entire campus.

\* **Wi-Fi facility**

Wi-Fi facility covers the entire campus: the hospital, college, hostels and all residential colonies. In addition, the Wi-Fi facility has also been extended to the urban health center located 8 km from Sevagram and two peripheral centers in Anji and Bhidi, located close to 30 km from Sevagram.

\* **Proprietary software**

A number of applications and interfaces have been developed in house:

1. AHIMS application
2. Central Forensic Medicine Unit application



3. Queue management
4. Electronic cell counter (Haematology) interface
5. Autoanalyzer (Clinical Biochemistry) interface
6. Time management application to track biometric data
7. Provident Fund

- \* **Number of nodes/ computers with internet facility**  
Around 200 nodes with internet facility

- \* **Any other (specify):**

**No-Q Card:** This is a card which seeks to minimize long hours of waiting in queues and thus help patients enjoy a hassle-free experience at our hospital. No-Q Card is a unique ATM-like card (with pre-deposited cash) that can be easily and effectively used at various counters across the hospital to save time. On an average, the No-Q card helps patients save 90 minutes whenever they revisit the hospital, get tested and buy drugs. The card has been designed to provide patients efficiency, security and flexibility of digital payments.

**Bedside Calls by SMS:** Residents and Clinicians can request a bedside consultation (routine or emergency) by using the electronic doctor desk of the Hospital Information System. Clinicians can identify the unit, consultant or resident on call, enter the diagnosis, and the reason for the call and also indicate if the call is urgent or routine. This system avoids delays in sending the call, tracing the doctor and saves time.

#### **4.4 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

Institute is teaming with C-DAC, Noida for writing a grant to the Department of Electronics and Information technology for funding of HIS, version II.

#### **4.4.5 Give details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching- learning and research.**

All faculty, students and administrative staff are connected on intramail through an mgims.ac.in ID. This has considerable reduced paper-work. All circulars and notices are posted through intramail for immediate information.

The library subscribes to UpToDate, which is an evidence based decision support system at the point of care with over 10000 topics in 22 specialities.

All faculty and students can access the latest clinical information at the bedside through campus wifi through their smartphones or tablets. This leads to informed decision making and use of evidence based medicine

Digital library and DELNET access to journals etc. provided by library. Digital library of MUHS Nashik provides access to around 2074 e-resources. Library subscribes to DELNET (IMEDC) Infotrac Medical Collection

**E-resources:**

- E-journals : 28
- E-books : 40
- Theses : 256
- Articles : 79
- Videos : 14
- Online databases : 29
- The MGIMS website has a special section called MGIMS Classroom, MOODLE has been installed as the Virtual Learning Environment (VLE). The first two phases of training faculty to use MOODLE are complete. Plans are afoot to use this VLE more extensively after the students and faculty are more comfortable with its use.

**4.4.6 What are the new technologies deployed by the institution in enhancing student learning and evaluation during the last four years and how do they meet new / future challenges?**

**E-learning:** MGIMS has harnessed technology to facilitate learning for students on and off the campus. We use the MOODLE e-learning platform to provide courses to students in the institute. This is a platform where students can get additional resources, submit their queries, discuss concepts and also review their classes. The platform also facilitates grading of the students. The students are able to use e-learning in campus and also in the field during their social service camp and village visits. The platform combines classroom and digital environment to enhance the learning and understanding of students. The MGIMS Classroom is hosted online along with the MGIMS website so that it is accessible to students irrespective to their location.

In the first phase, the core group was trained in MOODLE and how to design e-learning modules. In the second phase, around 100 faculty members were trained by the core team in four sessions each across four months. The Class of 2015 has just begun to use the e-learning platform to enter survey data obtained from the Social Service Camp.

**Use of Google Drives:** Since each student has a Google based MGIMS email ID, it is now possible to share documents, presentations and teaching

material by uploading them on Google drives. Each batch of students can be sent a group mail. Some teachers use it to share handouts and teaching material. Students use intramail to ask questions to teachers and give them feedback. Some departments have begun using this facility to send assignments to assess students.

**Video conferencing:** The online Big Blue Button application on MOODLE and Skype are being used to simultaneously share academic discussions between the Department of Community Medicine and the peripheral centres

**Wikispaces:** The faculty and students of the Department of Community Medicine use Wikispaces as a repository to share resources. The e-library developed by them is used by community medicine personnel all across the world and has received over 82000 hits from more than 10 countries.

**IPad application for point of care:** Patient information is available through HIS on tablets through an iPad application. This allows easy access to information, easy retrieval of patient information, investigation reports, and radiological images from HIS. Doctors can now show patients how their health parameters have changed with time and thus involve them in their own health care

#### **4.4.7 What are the IT facilities available to individual teachers for effective teaching and quality research?**

The campus is wifi enabled. All students and faculty who have registered their devices (laptops, tablets, smart phones) can access the internet through their individual passwords.

All lecture halls and classrooms are wifi enabled, and have facilities for LCD projection.

As explained above, access to clinical decision making support e-software UpToDate is available through the campus wifi

A legal version of Windows and Microsoft Office is available for every staff member

Online journal access is available to online versions of journals subscribed by the library. Access to the digital library of MUHS is also available

#### **4.4.8 Give details of ICT-enabled classrooms/learning spaces available within the institution. How are they utilized for enhancing the quality of teaching and learning?**

All lecture halls and classrooms are wifi enabled, and have facilities for LCD projection.

Details of intramail, videoconferencing, MOODLE, Google Drives, etc have been provided in the previous questions (4.4.5 and 4.4.6)

**4.4.9 How are the faculty assisted in preparing computer-aided teaching-learning materials? What are the facilities available in the institution for such initiatives?**

The institute has a photographer and three artists. Mr Dinesh Gudadhe, Mr Ashok Wahiwatkar and Mr Gunwant Mahalle look after the art section of the institute. Mr Satish Shingare looks after the photography section.

They prepare charts, posters, banners, models and have acquired skills in designing charts and posters on computers. They help in poster displays in health exhibitions organized by the institute and maintain museums.

They also illustrating health education material for the community. This year, a 40-page Parenting guide in Marathi was designed and illustrated for a Early childhood development project (10000 copies) and another book on Newborn Care titled 'Improving Health Care Seeking for Newborn Danger Signs in Rural Wardha' (500 copies).

They also help in taking clinical photographs for teaching purposes.

The MEU has started shooting teaching videos for students which will be uploaded on youtube and used for e-learning

**4.4.10 Does the institution have annual maintenance contract for the computers and its accessories?**

Yes, all servers, hardware, and applications are under the annual maintenance contract.

**4.4.11 Does the institution avail of the National Knowledge Network (NKN) connectivity? If so, what are the services availed of?**

Yes, a lease line of 1 GBPS

**4.4.12 Does the institution avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?**

All open resources such as Wikipedia are available through campus wifi. In addition the institution subscribes to other clinical decision making support tools like UptoDate, as well as e-journals through DELNET as explained in 4.4.5.

Access is available to all resources through a registered electronic device, through a password, through campus wifi.

**4.4.13 Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the institution.**

The institute budgets Rs 50,00,000/- each year for maintaining and covering recurring expenditure related to the IT.

**4.4.14 What plans have been envisioned for the transfer of teaching and learning from closed institution information network to open environment?**

The Medical Education Unit has future plans of expanding the faculty expertise to create their own videos, These will be uploaded on the internet so that students across the globe can access it. When faculty acquire enough expertise in conducting e-learning, we can eventually think of developing our own MOOCs on EdX or Coursera.

## **4.5 Maintenance of Campus Facilities**

**4.5.1 Does the institution have an estate office / designated officer for overseeing the maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.**

Yes. A designated post of Superintendent (Land and Building) exists. He looks after the estate of the institute. He works under the overall supervision of the Chief Administrative Officer and ensures that there is no encroachment of the land. If there are encroachments, he takes the help of the Assistant Security Officer to remove them.

The infrastructural facilities of the Institute are maintained by the Engineering and Maintenance Department (EMD). This is headed by Mr Kolhe. The EMD has two sections: (a) electrical and (b) civil inclusive of motor rewinding and welding unit. The EMD looks after the maintenance and repair of buildings, classrooms and laboratories throughout the year 24 x7. Adequate staff is appointed for maintenance. A well equipped workshop is available. Usually no external personnel are required, except for major constructions which are handed over to contractors after tenders are floated.

Campus specific initiatives which have been undertaken to improve the physical ambience:

- Gardens have been developed wherever vacant space was available in the campus. The whole campus is under green cover and no space is left open without tree cover except roads and lawns.
- Building painting and repair is undertaken once in 5 years for maintenance of the buildings.
- Pavement blocks and concreting is undertaken for maintenance of free open space which also doubles up as parking space when required. Parking sheds have been constructed at various places so that vehicles are not parked haphazardly.

- The main approach road to the college has been beautified by installing poles and chains. Bougainvillea plants have been planted all along the road.

**4.5.2 How are the infrastructure facilities, services and equipments maintained? Give details.**

When individual departments require any civil engineering or electrical work to be done, they send in their requests to the EMD, which immediately attends to the same. Any major repairs which require financial expenditure are first sanctioned by the Secretary of KHS and then attended to the EMD.

There are two Bio-Medical Engineers in the Equipment Maintenance Department who cater to all the repair calls of equipments. In case, they need the help of the Company Engineer, he is called. All equipment which are sensitive are covered under Annual Maintenance Contracts and Comprehensive maintenance contract. For other services, tenders are floated and annual rate contract is finalized with the service provider and trouble free service is ensured.

**4.5.3 Has the institution insured its equipments and buildings?**

Yes. All the buildings are insured for fire and earthquake damage every year.

*Any other information regarding Infrastructure and Learning Resources which the institution would like to include.*

## **CRITERION V: STUDENT SUPPORT AND PROGRESSION**

### **5.1 Student Mentoring and Support**

#### **5.1.1 Does the institution have a system for student support and mentoring? If yes, what are its structural and functional features?**

The institution does have Mentoring Cell in place.

##### **Structural Features of the Mentoring Cell**

- One faculty member is the Coordinator of the Mentoring Cell
- 5-6 Students are allotted to each mentor.
- Students of all years of MBBS are covered
- The mentors are preferably teachers from departments which the batches which are posted in that particular year.
- Informal mentor-mentee meetings are to be conducted in the third week of every month
- Quarterly meetings are conducted by the Mentoring Cell with all mentors.

##### **Functional Features of the Mentoring Cell:**

- Mentors are expected to interact informally with their mentees at least once every month. They are expected to explore student opinions about the quality of teaching, assessment etc. and to ask whether they have any grievances regarding their stay and experience at the hostel and at the institution.
- The mentors are expected to submit compiled feedback from mentees to the Dean and the coordinator of the Mentoring cell every quarter in a structured format (**Annexure 5A: Proforma of Feedback Form**)
- Feedback from these compiled proformas guides the discussion at the meeting
- Action taken based on this feedback is discussed with students and mentors by the Dean in his interactions with them (**Annexure 5B- Sample of compiled summary**).
- Mentoring is also provided outside this schedule as per the needs of the students
- Grievances, if any, are redressed or forwarded to the respective sections.
- Counseling support is provided on a one-to-one and small group basis.
- The Medical Education Unit conducted a Workshop on Mentoring for mentors on 7 March 2013 to address the common problems they faced during interaction. Dr Tejinder Singh, Director, CMCL-FAIMER Regional Institute, Ludhiana,

conducted the workshop. The programme of the Mentoring Workshop and the list of registrations is provided as **Annexure 5C**.

**5.1.2 Apart from classroom interaction, what are the provisions available for academic mentoring?**

- **Study Skills Workshop:** The Medical Education Unit has initiated Study skills workshops where students are taught topics like: How to remember; How to read, Cornell's note taking methods, time management, team learning etc. A complete schedule of the programme is provided as **Annexure 2D**.
- **Research mentoring:** MGIMS lays a lot of emphasis on undergraduate research. A large number of undergraduate students apply for ICMR-STs grants or short term research grants to MUHS to conduct research in their summer vacation. Previously in a series of workshops, mentor-mentee pairs of researchers were led through the steps of research. **Annexure 3X1** provides a list of undergraduates who have undertaken research, along with names of their guides
- **Informal academic mentoring:** All faculty and students have unique email IDs on the intramail. So it is possible for students to approach teachers. Teachers often get academic questions or requests for help on their emails. Some teachers have created groups on social media, especially Whatsapp to discuss topics of interest like in Community Medicine. There are some departments where students have been distributed among the faculty. Students are free to approach them for any academic concerns
- **Plans being made for launch of flipped classrooms on MOODLE:** The faculty have already been trained in how to create discussion forums on MOODLE and how to maintain e-etiquette and stimulate learning in phase 1 and 2. Faculty members have started making e-learning modules which are being reviewed for quality by MEU members. Using this form of blended learning, we will be able to interact better with students once e-learning is launched in the next phase

**5.1.3 Does the institution have any personal enhancement and development schemes such as career counseling, soft skills development, career-path-identification, and orientation to well-being for its students? Give details of such schemes.**



The following activities/ programmes are carried out by the institute for personal and professional development of its students:

- **Communication Skills Workshops:**
  - A workshop on Communication Skills is held for 1st MBBS students every year during the orientation camp. The faculty of the department of Anatomy, Biochemistry and Physiology conduct this workshop. The topics in this workshop include: Importance of communication; Barriers of communication; Writing communication skills; Verbal and non-verbal communication skills, Presentation skills; Interpersonal relations; Role of soft skills and etiquettes in communication. (**Annexure 5D**)
  - For MBBS students of clinical batches another day long Communication Skills workshop is organized by the Medical Education Unit. This deals with higher level topics like doctor-patient communication, breaking bad news, body language etc. Use of role plays and videos makes this workshop very interactive.
  - The MCI has released the outline of an AT-COM (Attitudes and Communication Skills) Module. Several MEU members have been trained in the AT-COM module at the MCI Regional Centre for Faculty Development. This module will be rolled out once MCI gives the go ahead.
  
- **Stress Management Workshop:** Mrs Neena Narula, Social psychologist and Dr Pravin Khairkar, Prof and Head, Psychiatry conduct separate workshops for students of I MBBS teaching them various aspects of mental well being and stress management. This is done during the orientation camp. Details of the student guidance and counseling centre are also shared during this period.
  
- **Spiritual Health:** On the recommendation of MUHS, we conduct a day long workshop on VIHASA (Values in Healthcare: A spiritual approach) for I MBBS students during the Orientation Camp. This workshop has elements of stress reduction, meditation and yoga with emphasis on spiritual, physical and mental well being.
  
- **Language classes:** For non-Maharashtrian students who wish to have classes in Marathi, Shri PV Bahulekar and Mr Girish Bhoware conduct classes in clinical Marathi. These classes are voluntary and are conducted if a group of students wishes to learn the language.
  
- **Career counseling and career path identification:**

While no formal schemes are available for this, informally students get a chance to interact with their peers and seniors to choose their area of superspecialization.

- Each year achievers in several specialities as well as alumni achievers visit the institute. There are formal talks held in the Academy of Medical Sciences which students attend.
- After silver jubilee alumni meets which are held in the last week of December each year, alumni visit hostels and interact informally with students and explain the intricacies of choosing different subjects for specialization
- We have a vibrant alumni group on Facebook and Whatsapp. An alumni achiever is interviewed each month and the interview is published on Facebook by an alumni coordinator (Dr Priya Mendiratta). Students are able to contact achievers of their choice and interact with them through the social media.
- **Values, ethics and attitude building:** During orientation camp, renowned Gandhians and reputed people from all walks of life interact with students and tell them the importance of building the right attitudes to be health professionals. In addition a Workshop on Bioethics is conducted by the Bioethics wing. Students perform shramdan, participate in yoga, all religion daily prayers, and learn to spin the charkha during the camp.

#### **5.1.4 Does the institution have facilities for psychosocial counseling for students?**

Yes. The institution has a Students' Guidance and Counseling Centre for psychosocial counseling of students.

- "Students Guidance and Counseling Centre" has been set-up in the Department of Community Medicine in collaboration with Department of Psychiatry in order to help provide guidance and counseling to Under-graduate and Post-graduate Medical Students. **Annexure 5E** provides names of team members
- It has become functional since 1st September 2014. The timings of the centre are as follows:
  - Monday to Friday: 3pm to 5pm
  - Saturday and Sunday: Team members contactable on mobile
- A psycho-social cell also operates in the General OPD of the Hospital building on the ground floor during OPD hours. This facility can be used by students as well as patients.
- Students were informed about this in the following ways:
  - An e-mail intimation
  - A circular which has been posted in all hostel rooms
  - During their orientation program, information about this cell is given to them during the "Values in Education: Spiritual approach" session.
- Cases come by themselves or are referred by the Psychiatry Department.

- Types of cases seen:
  - Depression/ Suicidal tendencies
  - Stress
  - Home-sickness/ adjustment problems
  - Not getting along with peers
  - Low motivation/ concentration
  - Self-confidence/ self-esteem issues
- Modus Operandi:
  - All the information is kept confidential.
  - In certain situations, however, health care providers or in some cases professional staff of Kasturba Hospital are contacted in order to establish a *Circle of Care* and provide coordinated services. In these circumstances only such information is shared as is necessary for assessment or treatment.
  - Confidentiality is breached in cases of:
    - Intention of self-harm
    - Intention of harming others

**5.1.5 Does the institution provide assistance to students for obtaining educational loans from banks and other financial institutions?**

Yes. Students apply to banks for educational loans. The institute provides them with an expenditure certificate mentioning the total fees which they would have to pay for the entire MBBS course to facilitate obtaining educational loans from banks.

**5.1.6 Does the institution publish its updated prospectus and handbook annually? If yes, what are the main issues / activities / information included / provided to students through these documents? Is there a provision for online access?**

- **Prospectus:** The Institute publishes its updated graduate and postgraduate prospectus and handbooks annually. The prospectus can be purchased by prospective applicants to the course through the admission cell. For postgraduate admissions, the entire process has been made online. For undergraduate students, while payment of the form is done online, the remaining process is handled manually by the admission cell. (**Annexure 2A and 2B**)
- **Academic Calendar:** This is published every year and disseminated to students. It is also available on the institute website. (**Annexure 2F**)
  - It contains details of the people at the helm of administration, faculty and administrative staff. Important phone numbers are provided

- It outlines the institute’s code of conduct. Strict warnings about prevention of ragging are published. Rules and regulations applicable at the institute and hostel are written. Details of punishment in case rules are flouted are mentioned. Details of permissible leave and procedure for applying for leave are mentioned.
- In addition course information details are available for UGs, PGs and interns. The academic calendar is published with timetable for each year and clinical postings. Details of permissible leave, fees and security deposits to be paid in each semester, awards and prizes for academic and co-curricular achievement are described. Details of institutional holidays, major activities like details of vacation, dates of examination, college day, etc are given. Details of library opening times and book issue procedure are available. For students interested in pursuing research, details of institutional ethics committees and animal ethics committees are available.
- **MGIMS website (www.mgims.ac.in):** Contains all relevant information for the admission and application process in addition to giving a detailed overview of the institute, its activities, its departments, its schemes
- All relevant information is displayed on **notice boards** in front of the Library and in the hostels.

**5.1.7 Specify the type and number of institution scholarships / freeships given to the students during the last four years. Was financial aid given to them on time? Give details. (in a tabular form)**

Yes, the institution provides financial aid to students in time. The following financial aid was provided to students in the past five years

Year	Number of students	Amount (in Rs)
2011-12	9	1,94,823/-
2012-13	5	99,000/-
2013-14	11	1,53,000/-
2014-15	7	1,87,570/-
2015-16	4	95,461/-

The institution also provides financial aid to the needy students from Student Welfare Fund. Government scholarships are available for backward students as per rules.

**5.1.8 What percentage of students receive financial assistance from state government, central government and other national agencies?**

Details of scholarships provided are given below:

<b>CATEGORY Scholarship/ Freeship</b>	<b>No. of Students</b>	<b>Amount distributed to the students* (In Rupees)</b>
<b>Year 2011-12</b>		
SC	24	6,66,405
ST	11	3,30,450
VJNT	17	4,89,975
OBC	33	9,27,245
<b>TOTAL</b>	<b>85</b>	<b>24,14,075</b>
<b>Year 2012-13</b>		
SC	29	10,71,895
ST	9	5,17,595
VJNT	24	9,32,720
OBC	46	16,67,980
<b>TOTAL</b>	<b>108</b>	<b>41,90,190</b>
<b>Year 2013-14</b>		
SC	29	13,00,645
ST	10	4,94,260
VJNT	26	12,42,530
OBC	35	15,46,925
<b>TOTAL</b>	<b>100</b>	<b>45,84,360</b>
<b>Year 2014-15</b>		
SC	28	16,34,210
ST	0	0
VJNT	24	12,91,470
OBC	17	9,49,305
<b>TOTAL</b>	<b>69</b>	<b>38,74,985</b>
<b>Year 2015-16</b>		
SC	30	13,49,381
ST	10	6,82,900
VJNT	24	12,62,935
OBC	43	25,19,788
<b>TOTAL</b>	<b>107</b>	<b>58,15,004</b>

\*Received from Social Welfare Office, Wardha/ ITDP Office, Nagpur

**5.1.9 Does the institution have an International Student Cell to attract foreign students and cater to their needs?**

Yes. MGIMS has an International Student Cell. It caters to exchange students who visit the institute for various purposes. Dr Vijayshri Deotale, Prof & Head, Dept. of Microbiology is the co-ordinator for foreign students.

- MGIMS has an MOU with Maastricht University, Netherlands and Ben Gurion University, Beer Sheva, Negev, Israel
- Students from these two universities come every year for their elective postings during internship in the Departments of Community Medicine, Pediatrics and Obstetrics and Gynecology for a duration of 6 weeks.
- In the past, students from Jakarta University, Indonesia; Charite University, Berlin and other foreign students have also visited the institute.
- The following is a table giving the number of overseas students who have received training at MGIMS in the past 5 years:

<b>Year</b>	<b>Number of Foreign Students</b>
2011	6
2012	Nil
2013	7
2014	6
2015	14

#### **5.1.10 What types of support services are available for:**

##### **Overseas students**

- A needs assessment of the academic and infrastructural requirements for the stay of these students was first done by the faculty of these foreign universities. In discussion with them arrangements are made for: (a) the security and comfortable stay and (b) enhanced learning opportunities to be provided to them
- Students from Maastricht University, Netherlands; University of Sardinia, Italy and the Ben Gurion University, Negev, Israel have undertaken elective postings with us in the departments of Community Medicine, Pediatrics and Obstetrics and Gynecology
- During their stay:
  - Training is undertaken by the respective departments depending on the initial needs assessment and interests
- Hostel / Canteen/ Laundry/ Library facilities are provided on a payment basis.

- Special and comfortable rooms with attached toilets are provided to them in the hostel
- Transport is provided at nominal charges
- Free internet is provided.
- Gymnasium, TV, Magazine facility provided free of cost.
- Suitable diet is provided in the hostels

#### **Physically challenged / differently-abled students**

- UG/PG seats are reserved for differently abled students as described in Section 2.1.5
- Some of them are provided freeships

#### **SC/ST, OBC and economically weaker sections**

- Freeships are provided to SC, ST students as per Government Rules. (Details provided earlier in Section 5.1.8)
- UG & PG seats are reserved for SC, ST students as described earlier in Section 2.1.5

#### **Students participating in various competitions/conferences in India and abroad**

- The institute pays expenditure related to travel, lodging and boarding if students participate in University tournaments. Upon selection in the University team, MUHS pays for these expenses.

#### **Health centre, health insurance etc.**

- Insurance is done for all medical students from first year for free health checkup and therapy.
- Free treatment and medications are made available to the students.
- Gymnasium facility is available in the students' hostels
- Arogyadham is a Centre for Yoga and Naturopathy which caters to the spiritual needs and preventive aspects of health.
- Cycles for health initiative has been started- Interest free loans are being provided to students to buy cycles of their choice to promote a healthy lifestyle.

#### **Skill development (spoken English, computer literacy, etc.) :**

##### **Computer literacy:**

- Yes, the students are trained in acquiring computer skills
- Students are trained in how to use computer based applications and internet based statistical systems for research work

- Students are taught to search literature in Essential National Health research Workshops (3<sup>rd</sup> semester students) and in Research Methodology Workshops (postgraduates)
- Operational knowledge about HIS (Hospital Information System) is given to interns during Internship Orientation Programme
- Sixth semester students are provided training in “data management through computers” as a part of curriculum during ROME Camp. Students also analyze data collected by themselves on various issues of public health importance on computers using EPI INFO 6 software.
- First year students are oriented to online learning since 2015, just before the social service camp. They are also taught to enter information related to their adopted families into online data bases. Analysis of the same is demonstrated.
- Interest free loans have been provided to buy laptops and tablets at discounted prices. Computers with Internet facilities are also available in the library, Bioinformatics Centre and computer labs.
- Free Wi-Fi is available to all students on the campus through protected passwords on registered devices.
- Postgraduate students in clinical branches are exposed to the use of medicolegal software developed by the Clinical Forensic Medicine Unit

#### **Verbal and non-verbal communication skills:**

- Details of Marathi language classes have been provided in section 5.1.3
- Details of communication skills workshops have been provided in section 5.1.3

#### **Soft skills development**

- Details of sessions on attitude building, ethics, professionalism, leadership, stress management, spiritual health, etc which are conducted in orientation camp, social service camp etc have been provided earlier in section 5.1.3

#### **Performance enhancement for slow learners :**

- The Medical Education unit has constituted a Subgroup for Personal and Professional Development. The MEU organized a workshop on Developing Good Study Skills. Details of this have been provided in section 5.1.2. This activity shall be conducted repeatedly annually or biannually as per demands of students.
- In addition academic mentoring is carried out by individual departments for students who consistently perform poorly in their internal assessment examinations.



**Exposure of students to other institutions of higher learning/ corporates/business houses, etc.:**

- The Department of Community Medicine sends 2-3 interns and postgraduates to the Global Summer Programme in Israel. They are given a fellowship for the travel and stay.
- MD Medicine postgraduates are posted for two months to be trained in Neurology or Cardiology at Care Hospital Hyderabad or CMC Vellore
- From 2010, the Psychiatry Department sends postgraduate students to NIMHANS for four weeks training and observership in Child Psychiatry
- From 2012-13, to train in Neuropsychiatry, postgraduates enrolled in MD Psychiatry are sent to PGIMER Chandigarh for a month.

**Publication of student magazines, newsletters:**

The **Students' Magazine "Sushruta"** is published every year with four sections, English, Hindi, Marathi and Clinical section. It is edited by the students. Online version is also uploaded on <https://www.mgims.ac.in/index.php/research/in-house-publication>

**MGIMS Bulletin** is a half yearly newsletter which is published by MGIMS. All faculty, student and alumni activities are showcased and disseminated through this. Online version is also uploaded on <https://www.mgims.ac.in/index.php/research/in-house-publication>

**5.1.11 Does the institution provide guidance and/or conduct coaching classes for students appearing for competitive examinations (such as USMLE, PLAB, GPAT, NCLEX, CGFNS, IELTS)? If yes, what is the outcome?**

No. Most students pursue post-graduation after a minimum of one year of rural service at MGIMS itself, so the preference for other competitive exams and jobs was uncommon, until the confusion of NEET came up. Efforts to take up coaching are individual and the institution does not support this.

The list of students who have qualified for various competitive examinations since 2011 are provided in **Annexure 5F**.

**5.1.12 Mention the policies of the institution for enhancing student participation in sports and extracurricular activities through strategies / schemes such as**

- \* **additional academic support and academic flexibility in examinations**
  - \* **special dietary requirements, sports uniform and materials**
  - \* **any other (specify)**
- Students are informed about all co-curricular and sports competitions and tournaments (AIU, State, MUHS and others) by notices and circulars. This is also done on campus intramail. The various sections of the Students' Council (Literary Society, Sports Section, Cultural Society etc) nominate participants in case of increased interest shown by students based on preliminary trials
  - Students are given attendance and academic flexibility when they participate in University tournaments
  - Coaching of student players for all games. Our Physical Training Instructor, Mr GP Bhoware serves on various committees in MUHS and provides them with necessary coaching and equipment. Grounds are maintained for different sports such as: basketball, badminton, football and cricket
  - Sports kits, uniforms and equipment are provided to the all players for practice and competitions. Dietary requirements of athletes are taken care of by the Sports department.
  - MGIMS pays expenditure related to travel, lodging and boarding if students participate in University tournaments.
  - The policies of the Institution for enhancing students participation are:
    - Students who represent the university in sports tournaments awarded with additional five marks in the final year examination
    - Students who are selected in University trials for tournaments are awarded medals and felicitated on the Annual Day and on the annual sports day.
  - The MUHS guidelines permit grant of additional marks to the aggregate of final degree examination to students who have
    - Successfully completed 2 years of NSS activities (120 hours) and a 7 day NSS special activity camp
    - Participated in Krida Mahotsav or any inter-university, state or national sports meet
    - Participated in Indradhanushya or elocution/ dramatics at any inter-university, state or national level
    - Participated in Avishkar or Anveshan or other research activities at any inter-university, state or national level (**Annexure 5G**)

**5.1.13 Does the institution have an institutionalized mechanism for student placement? What are the services provided to help students identify job**

**opportunities, prepare themselves for interviews, and develop entrepreneurship skills?**

The Institute has made it mandatory for all graduates to serve for two years in the villages after internship under its Rural Placement Scheme. They serve in

- Around 80 NGOs approved by institute or
- Primary Health Centers or
- Rural Health Centers of Government of Maharashtra or Government of India

A one-year rural posting is a pre-requisite and an eligibility criterion for post graduation in MGIMS.

- The institute makes efforts to identify the NGOs which are rendering health care in rural areas. NGOs are updated based on the feedback received by our graduates, regular inspections which look at quality of supervision and patient load to give our graduates adequate experience and exposure (**Annexure 3Z- List of approved NGOs**).
- A separate committee looks after rural placement. Students apply for the NGOs of their choice and the committee makes allotments on basis of merit (University marks) of the students.
- Until 2015, 24 batches (1155 students) have been posted to over 80 centres across India

**5.1.14 How does the institution provide an enriched academic ambience for advanced learners?**

- Meritorious students are encouraged to undertake research projects during summer vacations. Faculty guides mentor these students. Details are provided in Section 3.4.11

**5.1.15 What percentage of students drop-out annually? Has any study been conducted to ascertain the reasons and take remedial measures?**

There have been no dropouts over the past five years. Factors which facilitate students to complete the course successfully are:

- Fee structure similar to that of Maharashtra Government,
- Congenial academic environment
- Ragging free atmosphere
- One-to-one interaction of faculty with slow learners
- Psychological support through student guidance and counseling centre
- Opportunities for overall development
- Regular parental briefings in case of poor performance

**5.1.16 Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).**

Not applicable

**5.1.17 Does the institution have a registered Alumni Association? If yes, what are its activities and contributions to the development of the institution?**

Yes, the institution has a registered Alumni Association (reg. no. MAH/12/2013) **Annexure 5H**

- Its current office bearers are as follows:

Officer Incharge	: Dr SP Kalantri
Co - officer Incharge	: Dr AM Mehendale
President	: Dr M Jain
Secretary	: Dr A Bang
  
- Activities:
  - A complete electronic database of alumni is maintained
  - Every year, the batch celebrating its Silver Jubilee year has its Silver Jubilee programme on the campus in the last week of December. The programme includes a get together of the alumni with their teacher, felicitation of teachers. The Institute hosts lunch and their stay on the campus.
  - The Association encourages alumni to contribute academically and financially towards the development of the institution and its programmes
  - Some batches have gone back to their adopted villages and contributed to village development schemes
  - A vibrant alumni group on social media interacts with undergraduates and gives them career guidance
  
- Apart from the annual meeting, the office bearers meet frequently and plan various activities
- Alumni support for the following:
  - Career guidance of students
  - Deliver talks and lectures at the institute
  - Financial support of students who come from disadvantaged backgrounds
  - Enhancing the academic learning environment
- Alumni are encouraged to give feedback about the institute infrastructure and course (**Annexure 5I**)
- Many alumni have been working since several years in the institute as faculty. They help in the keeping the links alive with alumni

5.1.18 List a few prominent alumni of the institution.

<b>Name</b>	<b>Present position</b>
Dr Vikas Bhatia	Dean, AIIMS, Bhubneswar
Dr Surekha Kishore	Dean, AIIMS, Rishikesh
Dr Ashutosh Raghuvanshi	Managing Director, Vice Chairman and Group CEO, Narayana Health
Prof P Kaliraj	Former Vice Chancellor, Anna University, Chennai
Dr Mandeep Mehra	Professor of Medicine, Harvard Medical School
Dr Parthak Proadhan	Professor, University of Arkansas for Medical Sciences
Dr Sadhana Bose	Dept of Medical Education, Curtin University, Australia
Dr Saranya Sridhar	Rhodes Scholar, Oxford University
Dr KK Aggarwal	Cardiologist, Moolchand Medicity, New Delhi
Dr Adapa Karthik	Topped All India Civil Services Examination in 2008. Joined IAS, Punjab cadre
Dr Sherin Varkey	UNICEF Afghanistan Chief of Health
Dr Jaishree Sharad	Vice President, Dermatology Society of India
Dr Pratik Pandharipande	Chief, Division of Anesthesiology, Critical Care, Vanderbilt University, Nashville
Dr Mridul Panditrao	Dean (Academic affairs), Adesh Institute of Medical Sciences and Research, Adesh University
Dr Prakash Punjabi	Cardiothoracic surgeon, Hammersmith Hospital, UK
Dr Priya Mendiratta	Geriatrician, Donald W Reynolds Institute of

Aging, UAMS, USA

Dr Chentha Vasu

Associate Professor, Microbiology and Immunology & Director of Translational and Transplantation Immunology, Department of Surgery, Hollings Cancer Center, HO-612A College of Medicine, USA

Dr Suneela Garg

Vice Dean, Director-Professor and Head, Community Medicine, Maulana Azad Medical College, Delhi

### **5.1.19 In what ways does the institution respond to alumni requirements?**

Alumni usually get in touch with us for obtaining testimonials, certificates, transcripts, or confirming their degrees. The Dean's Office responds to their emails and promptly sends them these documents.

### **5.1.20 Does the institution have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?**

Yes, the Institute has a Grievance Redressal cell to redress the students' problems.

#### **Students' Grievance Redressal Committee**

The following are the members of the Students' Grievance Redressal Committee:

Dr KR Patond, Dean, MGIMS

Dr AK Shukla, Professor & Head, Dept of Ophthalmology

Dr AM Mehendale, Professor & Head, Dept of Community Medicine

Dr MVR Reddy, Professor & Head, Dept of Biochemistry

- Nature of Grievances reported:
  - Hostel issues
  - Inter-student conflicts
  - Teacher-student conflicts
  - Attendance issues
  - Disciplinary issues
  
- The function of Grievance redressal committee
  - To receive and analyze grievances from the students
  - To identify the realities of the grievances by committee meetings

- To take necessary steps for remediation/ resolution and bring it to the knowledge of the management.
- The main goal is rectify all kinds of grievances confidentially

### **Internship Monitoring and Grievance Committee**

A separate committee looks after grievances of Interns. The committee members include:

Chairman : Dr KR Patond, Dean, MGIMS  
 Members : Prof and Heads, Departments of Medicine, Surgery, Ob/Gyn, Pediatrics, Orthopedics, ENT, Ophthalmology, Pathology, Community Medicine

- The function of this committee is to
  - Monitor internship programme and attendance
  - To receive and analyze grievances from the students
  - To decide on requests for transfers of interns to other colleges
  - To conduct internship orientation programme

### **Internal Assessment Grievance Committee**

The following are the members of the Internal Assessment Grievance Committee which has been constituted according to University Guidelines:

Dr KR Patond, Dean, MGIMS  
 Dr AK Shukla, Professor & Head, Dept of Ophthalmology  
 Dr AM Mehendale, Professor & Head, Dept of Community Medicine  
 Dr MVR Reddy, Professor & Head, Dept of Biochemistry

The committee looks at specific grievances related to internal assessment. It also decides whether re-examination should be conducted for a student who was absent for internal assessment exam on a case to case basis.

### **5.1.21 Does the institution promote a gender-sensitive environment by (i) conducting gender related programs (ii) establishing a cell and mechanism to deal with issues related to sexual harassment? Give details.**

The institute makes all efforts to promote a gender-sensitive environment by the following means:

- Ensuring gender equality and absence of discrimination on grounds of gender

- Promoting equal opportunities for women faculty and students to participate in all activities in patient care, teaching and research. Women have occupied all top positions include Director, Dean , Secretary, Medical Superintendent and Students' Council General Secretary at MGIMS
- By conducting programmes to sensitize students and faculty about need to prevent discrimination based on gender : Gender mainstreaming workshops have been organized in the past
- Engendering faculty and staff attitudes and behaviours

The concepts of gender equity are incorporated in the curriculum of students by the following methods:

- Orientation camp: Sensitization to gender
- Social Service Camp: Workshops on “how to say no”; concept of gender in health
- ROME Camp: case discussions on gender as a social determinant of health

The institute conducts the following women empowerment programmes in the community (e.g. Womens' self help groups and Kishori Panchayats or adolescent girls' groups) and these are learning grounds for students:

A Committee has been constituted to look into complaints related to Sexual Harrassment. The following are members of this Cell for Prevention of Sexual Harrassment in the workplace:

Chairperson	: Dr Sucheta Tidke- Professor & Head, Dept of Anesthesia
Members	: Mr Vinayak Sable, NGO member
	Dr Anupama Gupta, Professor, Dept of Pathology
	Dr SA Tayade, Professor, Dept of Ob/Gyn
	Dr Sonia Jain, Professor, Dept of Skin and VD
	Dr IL Khandekar, Professor, Dept of Forensic Medicine
	Mrs AN Gangane, CAO (Member Secretary)

Two cases of this nature were reported between 2011-2016

**5.1.22 Is there an anti-ragging committee? How many instances, if any, have been reported during the last four years and what action has been taken in these cases?**

MGIMS has an Anti-Ragging committee. MGIMS calls for a zero-tolerance policy towards ragging. It follows measures mentioned in the Maharashtra Prohibition of Ragging Act (1999), recommendations of Raghavan committee (2006) constituted by



the Supreme Court, and guidelines issued by the Medical Council of India (2009) to root out the menace of ragging in medical institutions.

The constitution of the current **Anti-Ragging committee** is as follows:

- Dr KR Patond, Dean
- Dr AK Shukla, Chairperson, Anti-ragging Committee; Professor & Head, Dept of Ophthalmology
- Dr PV Shivkumar, Professor & Head, Department of Obstetrics and Gynecology
- Dr Vijayshri Deotale, Professor & Head, Department of Microbiology
- Dr Smita Singh, Professor, Department of Ophthalmology
- Dr AM Tarnekar, Professor, Department of Anatomy
- Dr Anupama Gupta, Professor, Department of Pathology
- Dr Sonia Jain, Professor, Department of Dermatology
- Dr Manish Jain, Professor, Department of Pediatrics
- Dr Chetna Maliye, Professor, Department of Community Medicine
- Dr Ranjana Kale, Professor, Department of Pharmacology
- Dr VB Shivkumar, Professor, Department of Pathology
- Mrs Lata Mehta, Warden, JN Girls' Hostel
- Mr Pravin Bhusari, Department of Community Medicine  
Mrs. Alka Kakde, Department of Community Medicine

External Members:

- Police Inspector, Sevagram Tel. No. 07152– 260330
- Civil Administration Nominee
- Mrs Sandhya K Ingole, Parent representative
- Mrs Savita Fulzele, Parent representative
- Students Representative (Two)
- Mr. Harish Joshi, Non-teaching representative, MGIMS, Sevagram

**Anti-Ragging Squad**

- Dr AK Shukla, Chairperson, Anti-ragging Committee, Professor & Head, Department of Ophthalmology
- Dr AM Mehendale, Professor & Head, Department of Community Medicine
- Dr PV Shivkumar, Professor & Head, Department of Obstetrics and Gynecology
- Dr Anupama Gupta, Professor, Department of Pathology

- Dr Smita Singh, Professor, Department of Ophthalmology
- Dr AM Tarnekar, Professor, Department of Anatomy
- Dr VB Shivkumar, Warden, JN Boys' Hostel; Professor, Department of Pathology
- Mrs. Lata Mehta, Lady Superintendent, JN Girls' Hostel

Toll free number 1800-233-0002

MGIMS has several measures- before, during and after the process of admission -for strict enforcement of anti-ragging measures.

- The punishable ingredients of ragging are clearly spelt out in a document signed by the medical students and their parents soon after admission.
- The document emphasizes that ragging is a cognizable offence under the law and students indulging in ragging can be severely punished. These punishments are in the form of suspension, withholding scholarships or results, withdrawal of financial assistance, mentioning this act on their migration or transfer certificates, debarring from participation in events, cancellation of admission, rustication, expulsion, a public apology and a fine.
- A printed leaflet detailing when and to whom one has to turn for information, help and guidance for various purposes, keeping in view the needs of new entrants, along with the addresses and telephone numbers of such persons, is given to freshers at the time of admissions.
- The management, the dean and the teachers personally interact with the students and take them in confidence by apprising them of their right as well as obligation to fight against ragging.
- New students are encouraged to report any instance of ragging without fear.
- This information is displayed campus wide- in the hostels, canteens, corridors and all notice boards.
- When new students are admitted to the institute, they are housed in a safe and secure block, guarded by a resident warden.
- Anti-ragging squads periodically round hostels and canteens to ensure that the freshers are not mentally, emotionally or physically abused. An anti-ragging committee meets periodically to ensure that the campus is ragging free.
- A vigilance committee, composed of medical teachers, keeps a keen vigil in the ragging prone zones to prevent its occurrence and recurrence.
- The institute has also formed mentoring cells comprising of senior students and faculty members where students are encouraged to confide any act of ragging. Freshers also know that they can call members of the anti-ragging committee at any time, should they face uneasy situations.

No case has been reported to this committee in the last five years

**5.1.23 How does the institution elicit the cooperation of all its stakeholders to ensure the overall development of its students?**

- MGIMS has a long history of community engagement and mobilization. In its attempt to sensitize the students to the health issues of rural India, it seeks the help of the community. Each year a new village is adopted by the students of the new MBBS batch. Students are allotted 3-5 families which they follow up through the rest of their course. Students develop strong bonds with these families and they visit them even when they return for their silver jubilee alumni function 25 years later
- To organize the social service camp, the institute engages with community leaders. Space for the camp is usually provided in a school premises. The community workers help us to enlist the families and to get the cooperation of the villagers. In exchange for this the village is insured for the whole year. The jawar insurance scheme is also useful. Patients of the adopted village get 50% off on all admissions for that year. Daily general OPD and specialist visits are organized free of cost for the villagers during the camp duration.
- The district health system and the staff at the PHCs help us to teach the students about the various aspects of the health system during the ROME camp
- Several leading people from the community, including prominent Gandhians interact with students during the Orientation Camp and also throughout the years to teach them attitudes, values, ethics and professionalism.
- Alumni contribute to the academic improvement of the students by engaging with them, not only during their visits to the institute but also on online forums and on social media.
- Parents who are medical professionals often come to give invited talks to students in their areas of specialization at the Academy of Medical Sciences

**5.1.24 How does the institution ensure the participation of women students in intra- and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.**

Women get equal opportunities to participate in all sports activities. The Institution ensures the participation of women students by conducting separate inter-batch tournaments for women students. Many women students have represented the University at the State and all India level competitions. The list of women students who have represented the university in sports since 2011 are

NAME	BATCH	YEAR	GAME	EVENT
Ms. Sweta Morwal	2010	2011	Table Tennis	All India Uni
Ms. Aayushi Gupta	2010	2011	Table Tennis	All India Uni
Ms. Payal Fendar	2010	2011	Kho-kho	Kridamahotsav
Ms. Urmila Phad	2011	2012	Kho-kho	Kridamahotsav
Ms. Khushbu Choudhary	2011	2012	Volleyball	Kridamahotsav
Ms. Rutuja Kolhe	2011	2012	Basketball	Kridamahotsav
Ms. Shivani Kshirsagar	2012	2013	Swimming	All India Uni
Ms Isha Gandhi	2013	2014	Swimming	All India Uni
Ms. Apurva Bhagat	2013	2014	Kho-Kho	Kridamahotsav
Ms. Shiva Manwatkar	2013	2014	Swimming	All India Uni
Ms. Harshita Motwani	2014	2015	Kho-kho	Kridamahotsav

Women students have always participated in cultural activities both at institute and University levels. Please find a list of women award winners as **Annexure 5J**

**5.1.25 Does the institution enhance the student learning experience by providing for rotation from the teaching hospital to the community and district hospital during the internship period?**

Yes

- During internship, of the 2 months of community medicine posting, 1.5 months are devoted to posting in Urban/ Rural Health Training Centre. Here, a daily OPD is run by the interns along with the medical officer in-charge.
- Interns are also a part of the weekly Kiran Clinic
- Interns participate in community mobilization and deliver health education to the community
- They participate in School Health Education
- They help in the implementation of National Health Programmes and learn in the process (e.g. RMNCH+A, RNTCP, National Vector Borne Disease Control Programme)

**5.1.26 Does the institution have immunization policy for its students and staff?**

Yes, the institute has an immunization policy for students as well as staff. Besides, Hepatitis-B, Tetanus Toxoid and Rabies immunization are provided free of cost.

#### **5.1.27 Does the institution give thrust on students' growth in terms of:**

##### **Physical development:**

- The Institute has constructed a gymnasium for both boys and girl students to ensure their fitness. Every evening after the college hours all students who are interested in games and sports are encouraged to indulge in various sports activities like badminton, football, cricket, basketball and athletics on the play ground of the Institute and proper coaching is given by proper coaches and the Director of Physical Education.
- A new set of equipment have been ordered for girls' hostel gymnasium.
- A new building for boys' hostel gymnasium has been sanctioned for next year. A sum of Rs 30 lakhs has been sanctioned for the same.

##### **Emotional control:**

- Training on Emotional Intelligence was conducted for 2013 batch
- Mentor- mentee interactions help in emotional well being
- Student guidance and counseling centre deals with psychosocial issues

##### **Social dimension:**

- Details of the orientation camp, social service camp and ROME camp have already been provided in section 1.1.2. These are areas where we sensitize the students towards the impact of social determinants of poverty, education, social structure on health

##### **Spiritual growth**

- Details have already been provided in Section 5.1.3

## **5.2 Student Progression**

### **5.2.1 What is the student strength of the institution for the current academic year? Analyze the Program-wise data and provide the trends (UG to PG, PG to further studies) for the last four years.**

#### **Student Strength: UG**

<b>Admissions in the Year</b>	<b>Total admissions</b>
2011	65

2012	100
2013	100
2014	65
2015	96

### Student Strength: Postgraduates

Admissions in the Year	Students from MGIMS	Students from Other Colleges
2011	50	15
2012	42	22
2013	36	25
2014	38	29
2015	40	20
2016	42	10

#### 5.2.2 What is the number and percentage of students who appeared/qualified in examinations for Central / State services, Defense, Civil Services, etc.?

Exact data of students who appeared for the examination is not available.

However the following students have qualified for Civil Services examination:

1. Dr Priyanka Ala (IAS)
2. Dr Meena (IAS)
3. Dr Sangram Deshmukh (IRS)

#### 5.2.3 Provide category-wise details regarding the number of post graduate dissertations, Ph.D. and D.Sc. theses submitted/ accepted/ rejected in the last four years.

##### Post-Graduate (MD/MS Thesis):

Batch	Submitted In	Number of Submissions	Accepted	Rejected
2009	2011-12	44	All	Nil
2010	2012-13	49	All	Nil
2011	2013-14	51	All	Nil
2012	2014-15	44	All	Nil
2013	2014-15	56	All	Nil

### **PhD theses**

From 2011-2016, 3 students have submitted PhD theses (Dr Ruchi Kothari, Dr Jyoti Jain, Dr Kiran Bala Roshan Lal) and 5 students have submitted drafts (Dr Sachin Pawar, Dr Vinod Shende, Mr Vishal Khatri, Mr Nitin Amdare, Ms Sneha Hande) to the University.

#### **5.2.4 What is the percentage of graduates under AYUSH programs employed in the following?**

- \* **AYUSH departments/Hospitals,**
- \* **Multinational companies,**
- \* **Health clubs,**
- \* **Spas,**
- \* **Yoga wellness centers,**
- \* **Yoga studios**
- \* **Health clubs,**
- \* **Own Yoga cubes/studios?**

Not applicable.

### **5.3 Student Participation and Activities**

#### **5.3.1 List the range of sports, cultural and extracurricular activities available to students. Furnish the program calendar and provide details of students' participation.**

- Valedictory session at Orientation camp: New MBBS students get an opportunity to showcase their talent with extra-curricular activities.
- Fresher's Night: Organized for I MBBS students with collaboration of senior batch to informally welcome them and to discover latent talent of new batch
- Foundation Day: 12 September each year.
- Ganesh festival celebrations: Three day celebrations organized by Students' Council in college.
- Annual Social Gathering: Held in February. Includes art gallery exhibition, cultural evening, MGIMS orchestra
- Literary Society of the institute organizes –
  - Teacher's Day celebrations
  - Gandhi Jayanti & International Non-Violence Day: Elocution contest, Poster, Essay writing and Cartoon contests.
  - Tara Devi Memorial Intercollegiate Debate
  - Literary Day: Students organize and participate in various curricular activities like- Poetry competition, Quiz , etc.

- Dr Sushila Nayar PG Debate
- Quiz and essay competitions are organized at regional, state and national level.
- Sports Section organizes the following activities:
  - Sports Day organized for all teachers and students.
  - Interbatch tournaments for students
  - Students are encouraged to participate at inter-collegiate events, university, State and National level sports events. **(Details of students who have represented MGIMS at University level is available in Annexure 4A)**
  - The Maharashtra University of Health Sciences (MUHS), Nasik recognized our Institute for holding a Vidarbha Zone and Mega event Inter Zone Sports Tournaments of MUHS, Nashik. Vidarbha Zone tournament was organized from 10-11 Nov, 2015. A total of 22 colleges with 20 coaches and 293 players (boys -187 and girls - 106) participated in this tournament. 27 of our students were selected in the Vidarbha Zone team for the Inter Zonal Sports Tournament. MUHS Mega event i.e. Inter Zone Sports Tournament was organized on 14-15 Nov 2015. 756 students from these 6 zones participated along with 36 coaches and team managers, 25 selectors and 50 officials.
- Magazine Section: brings out Sushruta edited by undergraduates every year
- NSS Activities: NSS Regular Activities include the Red Ribbon Club which spreads awareness against HIV AIDS; tree plantation activity, andha shraddha nirmulan which fights against superstition. Students also learn about appropriate rural technology. Demonstration of smokeless *chullah* and Sarai Cooker is given to the students

**5.3.2 Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. during the last four years.**

Please see **Annexure 4A** for list of achievers for co-curricular, extra-curricular and cultural activities:

**5.3.3 Does the institution provide incentives for students who participate in national / regional levels in sports and cultural events?**



- Students who represent the University in Sports tournaments are awarded five additional marks in the final year examination. (Annexure 5N)
- They are felicitated and awarded medals in the institute's Annual Day function and on Annual Sports Day.
- Remaining incentives have already been mentioned in Section 5.1.12

**5.3.4 How does the institution involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/ materials brought out by the students during the last four academic sessions.**

- The Magazine Section of the Students' Council publishes the college magazine Sushruta every year. It is edited entirely by undergraduates. It has articles in English, Hindi and Marathi, as well as a clinical section
- Research Projects- Every year undergraduate students are mentored to apply for ICMR-STS studentships and MUHS short term research grants (**Annexure 3X1- list of undergraduate research projects**)
- A number of publications have also come out by postgraduates and undergraduates based on their research

**5.3.5 Does the institution have a Student Council or any other similar body? Give details on its constitution, activities and funding.**

Yes, the Institute does have a Students' Council.

**Procedure of formation of Students' Council:**

Every year the Students' Council is formed following the guidelines laid down by the MUHS Nashik.

1. Dean of the Institute is the Chairman of the Students' Council.
2. One teacher nominated by the Dean is the Officer Incharge of the Students' Council.

The following are made the members:

3. Programme Officer/ Officer Incharge of NSS is a member.
4. Director Sports/ Physical Education is a member.
5. Officer Incharge of cultural activities is a member.
6. The students' secretary is elected amongst student members other than the students of first year, Interns and PGs. In case the contestants do not want to have election, the student secretary is selected by the selection committee of the Students' council, under the Chairmanship of the Dean, based on the merit in academic, research and co-curricular activities.

7. One student of each class who has secured highest number of marks in the preceding annual examination is nominated as a member by the Dean.
8. One student who has shown outstanding performance in Sports activities is nominated as a member by the Dean.
9. One student who has shown outstanding performance in NSS activities is nominated as a member by the Dean.
10. One student who has shown outstanding performance in Cultural activities is nominated as a member by the Dean.
11. One student who has shown outstanding performance in Research or other extracurricular activities is nominated as a member by the Dean.
12. Two lady students who have shown outstanding performance in Sports, NSS and Cultural activities are nominated by the Dean NSS as members.
13. Two of the students from clause No. 7- 11, shall be from those having constitutional reservation.

**Annexure 4A** shows Student Council representatives of all years from 2011 onwards

#### **Activities of Students' Council**

- Representing student perspective to management
- Providing leadership to all student activities: Organizing annual day, quizzes, elocution, essay writing competitions, sports and cultural activities
- Bringing out college magazine
- Keeping faculty-student bond alive by celebrating Teachers' day
- Participating in NSS Special camps and regular activities
  - Breast feeding promotion
  - Tree plantation
  - Induction of new members in Red ribbon club
  - Volunteering to donate blood
  - World Health Day Celebrations

#### **Funding Details:**

The funding is done by the Institute. The Annual budget (in rupees) is as follows:

Foundation Day	Expenses borne by the Dean's Office
Annual Social gathering	150000
Ganesh Festival	50000
Introductory Freshers' Day	27000
Sports	80000

Magazine	75000
Literary programme	15000

**5.3.6 Give details of various academic and administrative bodies that have student representatives in them. Also provide details of their activities.**

**Students' representatives are part of the following committees:**

- Curriculum Committee
- Students Council
- Anti ragging committee
- Alumni Association
- MGIMS Bulletin Editorial Board

Details have been provided in the relevant sections where these are mentioned.

*Any other information regarding Student Support and Progression which the institution would like to include.*



## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

#### **6.1.1 State the vision and the mission of the institution.**

##### **Vision**

The vision of the institute is to develop a replicable model of community oriented medical education which is responsive to the changing needs of our country and is rooted in an ethos of professional excellence.

##### **Mission Statement:**

In the spirit of its Founder, the Mahatma Gandhi Institute of Medical Sciences, Sevagram is committed to pursuit of exemplary standards of professional excellence in medical education, research and clinical care by evolving a pattern of integrating value-based medical education with accessible and affordable health care, especially to underprivileged rural communities.

#### **6.1.2 Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future, etc.?**

Yes. The mission statement reiterates the MGIMS philosophy of producing doctors with high clinical competence who are well versed with Gandhian values and principles. MGIMS is conscious of the fact that medical education needs to maintain the right balance in the eternal triangle of 'quality, quantity and equity'. In its perennial quest to attain the perfect blend it never forgets that these three arms are not in conflict and equity cannot be kept in abeyance. Approach to medical education with the spotlight on rural community oriented education, makes the students and doctors sensitive to the felt needs of the people they would be serving in their future, and adhere to professional norms which include altruism, compassion, empathy, accountability, honesty and integrity.

#### **6.1.3 How is the leadership involved in:**

- **developing E-Governance strategies for the institution?**

The following e-governance strategies have made the systems more efficient:

- *Improved communication:* MGIMS has a wireless broadband internet connectivity that offers a high-speed wireless network to the students and staff of the campus at

speeds of up to 1 GBPS. With over 25 kms of fibre optic/ local area network cable backbone structure, the campus gets a high speed internet facility.

- *Paper-less circulars and notices:* All faculty, students and staff have unique mgims.ac.in email IDs with a Google based facility. Both these features enable quick communication between all stakeholders through intramail. Circulars and notices no longer need to be sent manually to all departments. Urgent messages are communicated on email and it has changed the work culture of MGIMS.
- *Efficient management information system for record keeping of employees and students:* The Hospital Information System (HIS) has made administrative tasks more efficient and transparent by installing 20 different modules. These are – Insurance, Registration, OPD Management, Emergency Services, Central Admission, Investigations, Pharmacy, Blood Bank, Central Inquiry, Patient Medical Record, OT, Billing, Inpatient Management, Transport, Students Management, General Store, Diet – Kitchen, Personnel Information system, Payroll System, Accounts Management System. The modules involved in MIS are for following activities -
  - All employees service details including leave records are linked electronically to accounts section (payroll)
  - All employee salary increments are automated, and the system is in place to keep a record of promotions, and out-of-turn increments. Once such decisions are taken in the personal management system, these automatically update the accounts and payroll services.
  - All student details, such as year of joining, academic qualifications on enrolment etc are electronic
  - All tuition fees, transcript, and form details are also electronic and flow through the student information system.
  - The record of student attendance is maintained electronically on an offline system. The marks obtained in different subjects as part of internal assessment are communicated to the health university as an electronic file.
- *Automation of inventory and stock management:* The HIS has specific modules for automating the routine workflow of hospital pharmacy, e-prescriptions, purchase, inventory management and distribution of various drugs, sutures and surgical items to outpatient pharmacy, inpatient pharmacy, wards and operating rooms in the entire hospital. The system ensures that the pharmacies are well-stocked. We have created transparency, better monitoring and complete control over the drug distribution in the hospital.

- *Automation in accounts section:* The HIS provides general ledger, accounts payable, accounts receivable, fixed asset, and cash management solutions enabling a current, consolidated, and fast view of the financial status of the organization at any point in time. Payments received from patients, and payments paid to vendors, salaries are electronically generated, tuition and hostel fees now take an electronic route and all transactions can be tracked and easily posted to the General Ledger system to reflect their effect on accounts and financial reports.

- **ensuring the organization's management system development, implementation and continuous improvement?**

The management takes a pro-active role in academic, logistic and financial planning for the entire year, and ensuring timely implementation of the same. Administrative and financial audits are regularly conducted. Workload of staff is regularly monitored. The management ensures equitable distribution of resources amongst all departments based on requirements of growth, development and performance and makes necessary budgetary allocations.

- **interacting with its stakeholders?**

The Dean is the head of academic affairs, and interacts with the students, faculty and parents. The Secretary of the Kasturba Health Society looks after all other management issues with KHS employees, i.e. both teaching and non-teaching staff. The Medical Superintendent looks after the day-to-day running of the hospital and deals with concerns of the patients and clinicians. Between them, they interact with all the relevant stakeholders, including all important community representatives. The President of the KHS oversees all these roles and also handles financial responsibilities.

- **reinforcing a culture of excellence?**

The leadership expects excellence in academics, service and research. Departments are encouraged to strive to be among the best in the country. They are expected to present short term and long term plans for improvement. These are presented to the management, which looks into the justification of budget allocations and makes decisions. Despite being located in a rural area, Kasturba Hospital and MGIMS are at par with the best hospitals in the country with state-of-the-art facilities. Faculty who demonstrate excellence in their work are allowed study leave to train in specialized areas, and come back and develop these facilities in MGIMS. The management is approachable to students and employees alike and regularly interacts with them in formal and informal ways.

- **identifying organizational needs and striving to fulfill them?**

The administration is responsive to the needs of its stakeholders. It interacts and gathers feedback from students, faculty and staff through formal and informal means. Based on requirements of patients, efforts are continuously made to expand services provided to patients, improve quality and efficiency of patient care, purchase new equipment or construct new infrastructure.

In view of the institute's philosophy to provide outreach services, KHS has expanded its services to the tribal belt of Amravati. A new Dr Sushila Nayar Hospital is now functional in the Utawali area of Melghat, which is prone to malnutrition and high neonatal mortality.

**6.1.4 Were any of the top leadership positions of the institution vacant for more than a year? If so, state the reasons.**

No

**6.1.5 Does the institution ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?**

Yes

**6.1.6 Does the institution promote a culture of participative management? If yes, indicate the levels of participative management.**

The management of MGIMS Sevagram works closely with the faculty for overall development of the institute. Attempts are made to decentralize decision making to make it faster and more efficient. The institution involves all the departments in institutional planning. Every department submits its short term, intermediate term and long term plans for departmental improvement after discussion with the faculty members within their department. The infrastructural, equipment, ICT, academic and financial needs are presented and discussed with the administration. A budget and plan document is created and a time frame is agreed upon.

Faculty members take on various institutional responsibilities. This is a two-way process and is done by the means of various committees formed. An alphabetically arranged list of all these committees with the committee members is provided as **Annexure 6A**.

**6.1.7 Give details of the academic and administrative leadership provided by the university to its affiliated colleges / constituent units and the support and encouragement given to them to become autonomous.**

Not applicable. We submit academic audits to MUHS annually.



**6.1.8 Have any provisions been incorporated / introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges?**

Not applicable

**6.1.9 How does the institution groom leadership at various levels? Give details.**

- *Decentralization and delegation:* Faculty members are expected to take up administrative roles besides their clinical work. Most faculty take on different institutional administrative responsibilities and serve on several committees as has been detailed in **Annexure 6A**.
- During leave of absence of senior staff and during vacations when half the staff is on leave, the second line learns to take on clinical and administrative leadership roles for short durations. This prepares them for their future roles.
- *Specialization:* Faculty members are encouraged to specialize in different subareas and develop speciality areas in the institute. E.g. Some faculty have received study leave to develop expertise in critical care or trained in specialized areas like reproductive physiology, sleep medicine, flow cytometry. These areas are being developed by these faculty
- *Leadership training of students:* Students are trained to take on leadership and organizational roles in different capacities in the Students' Council. Earlier, in July 2012, undergraduate students organized a National Research Conference for undergraduates called MEDICON. The conference was entirely organized by undergraduates with minimum faculty support and was a great show (**Annexure 6B**). Next year, students will organize a National Bioethics Conference for undergraduates.
- *White Coat Army:* A group of undergraduate students have formed the White Coat Army. This team of undergraduate medical students of 2012, 2013 and 2014 batch of MGIMS conducts campaigns to spread awareness about the hazards of alcohol and tobacco abuse in their free time. In July 2015, Dr Dharav Shah, Assistant Professor, Dept of Psychiatry guided them on how to conduct health education talks and counsel people who were addicted to these vices. The initial team of 29 students conducted 22 awareness talks in August 2015 and succeeded reaching out to 1147 patients admitted in the hospital wards and their relatives. Sessions were also held for the new entrants to the MBBS course in an attempt to teach them how to deal with peer pressure and how to reverse it positively. Further continuing this work, the White Coat Army also conducted surveys on the efficacy of alcohol

ban implementation in the nearby villages and suburbs. The team has also visited villages Ekurli and Padegaon for their campaign. The team has now reached out to more than 2300 people and tried to unhook people from cigarette smoking, bidi smoking, use of chewing tobacco and alcoholism. (**Annexure 2E**)

**6.1.10 Has the institution evolved a knowledge management strategy which encompasses the following aspects such as access to**

- \* **Information Technology,**
- \* **National Knowledge Network (NKN),**
- \* **Data Bank**
- \* **Other open access resources along with effective intranet facilities with unrestricted access to learners. If yes, give details.**

Yes.

*Campus high speed wi-fi:* MGIMS has a wireless broadband internet connectivity that offers a high-speed wireless network to the students and staff of the campus. The wireless network service allows students and faculty the freedom to make use of Wi-Fi enabled devices to connect to the Internet without needing to plug in a cable with connections at speeds of up to 1 GBPS. Students, interns, residents, faculty, administrative staff and paramedics enjoy being electronically connected with the world-wide-web, anytime, anywhere on campus.

*Campus intramail:* All faculty, students and staff have a unique mgims.ac.in email IDs with a Google based facility. Both these features enable quick communication between all stakeholders through intramail.

*Hospital Information System:* The HIS keeps track of different things and MIS has been integrated in to it. It has 20 modules. These are – Insurance, Registration, OPD Management, Emergency Services, Central Admission, Investigations, Pharmacy, Blood Bank, Central Inquiry, Patient Medical Record, OT, Billing, Inpatient Management, Transport, Students Management, General Store, Diet – Kitchen, Personnel Information system, Payroll System, Accounts Management System.

*UpToDate:* In 2012, MGIMS bought an annual campus wide subscription of UpToDate®, an evidence-based, physician-authored clinical knowledge resource which clinicians trust to make the right point-of-care decisions. Medical students, residents, faculty and researchers at MGIMS now use UpToDate in diverse locations - in their classrooms, in the post-graduate teaching sessions, at the point of care in the hospital wards and intensive care units and even in the crowded outpatient departments. The evidence-based electronic source of information helps doctors to use the most appropriate screening test, order the most reliable diagnostic test, choose the

best option for their patients, compare and contrast the two modes of therapy and predict the outcomes of their patients.

*DELNET:* In order to promote resource sharing among libraries through the development of a network of libraries, DELNET was adopted in MGIMS. DELNET offers access to about three million books and other documents through a number of union catalogues, union lists and other databases that are accessible through the internet.

*E-Learning:* The web-based MGIMS Classroom is an initiative to enhance the learning experience of students at MGIMS utilizing the immense potential of information technology using MOODLE as a virtual learning environment. Details already provided in Section 2.3.9 and **Annexure 2N**.

#### **6.1.11 How are the following values reflected in the functioning of the institution?**

- **Contributing to national development**
- The Report of the Task Force on Medical Education of the National Rural Health Mission spells out the need to draw upon MGIMS Sevagram's initiatives and experience in curriculum innovation and rural placement of its graduates. It suggests launching a participatory exercise with MGIMS and other like-minded institutions, so that national guidelines can be formulated. Several visionary and innovative education strategies which started from the Institute, such as the village adoption scheme, social service camp and rural placement scheme have now been adopted by the government.
- The various departments and faculty participate in several National Health Programmes such as Universal Immunization Programme, Revised National Tuberculosis Programme, National Leprosy Elimination Programme, Integrated Disease Surveillance Programme, Integrated Child Development Services, National Cancer Control Programme, National Health Mission, Adolescent Health Programme, National Vector Borne Disease Control Programme and Emergency Obstetrics Care. Details are provided in **Annexure 6C**
- Faculty have been invited as consultants and experts to various international and national governmental and non-governmental bodies to help them to frame policies or guidelines. **Annexure 2T** provides details of the same.
- Kasturba Hospital also carries out many national and state level schemes like:

*Rajiv Gandhi Jeevandayee Yojana (RGJAY):* In November 2013, Kasturba Hospital was identified as a key hospital in Vidarbha to run Rajiv Gandhi Jeevandayee Yojana (RGJAY). The main objective of the scheme is to improve access of Below Poverty Line (BPL) and Above Poverty Line (APL) families to quality medical care for identified specialty services requiring hospitalization for surgeries and therapies or consultations through an identified Network of health care providers. The scheme entails around 971 surgeries/therapies/procedures along with 121 follow up packages in following 30 identified specialized categories. The major beneficiaries of the scheme are patients with cancer, those seeking emergency healthcare because of traumatic accidents and seriously ill patients with life threatening catastrophic medical, pediatric and surgical illnesses. Over two years, more than 6000 patients with a spectrum of illnesses have availed themselves of the benefits of RGJAY.

*Janani Suraksha Yojana (JSY):* This is a safe motherhood intervention under the National Rural Health Mission (NRHM) being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. Kasturba Hospital is empanelled for JSY benefits according to guidelines. JSY is a 100% centrally sponsored scheme which integrates cash assistance with delivery and post-delivery care. During 2015-15, 831 women have benefitted from this scheme

*Cataract Blindness Control Wardha District (CBCWD):* The community outreach programme also known as the CBCWD has been developed as a model in eye care. Under this project daily screening eye camps have been conducted door to door in all the villages of 8 blocks of Wardha district covering a population aged > 50 years. Screening for blindness and operable cataract is conducted door-to-door. Blind register is prepared at the village level. In 2015-16, 31706 villagers have been screened by doctors at their door steps in 855 villages. Computerized data bank is maintained to keep records pertaining to all patients screened and operated for follow-up. In the current year, 4247 cataract surgeries were performed. In 4237 patients, IOL implantation was done and in 10 patients conventional cataract surgery was performed. Visual acuity of 31,706 persons (aged > 50 years) was tested by trained paramedical workers and 14108 villagers who had visual acuity <6/60 was examined by eye specialists at their door steps. 4701 patients were referred to Kasturba Hospital and of these 4312 patients were provided free transport facility.

- **Fostering global competencies among students**
- We believe in taking medical education out of the four walls of the classroom into their actual workplace- which is the community. Several of our curricular innovations in *community oriented medical education* such as orientation camp,

village adoption scheme, social service camp, ROME camp, and rural placement scheme (described earlier in Section 1.1.2) have been useful in training students in the real workplace.

- In tandem with the call by MCI and MUHS to move towards *competency based education*, we have begun focusing on the following elements:
  - Clearly defining academic milestones to be achieved by students at all levels. The updated MUHS curriculum provides a list of competencies to be achieved by students. Some courses such as MD Pathology have defined competencies to be achieved by postgraduates at the end of each year. These were discussed by the Board of Studies at MUHS and other institutes and subjects have also adopted these guidelines (**Annexure 6E: Competency document- MD Pathology**)
  - Skills training: MGIMS set a centralized skills laboratory in August 2012 under the Medical Education Unit. Sessions in the skills lab are scheduled into the main timetable. The lab has mannequins and simulators which provides students opportunities to hone their skills in basic and advanced life support in both adults and children. Students can learn and practice procedures such as suturing, venesection, catheterization and laparoscopy under supervision. In addition the lab has childbirth simulators, ECG simulators, heart sound simulators and several other models pertaining to different medical and surgical specialties. The room has seating space, blackboard and an LCD projector to conduct classes in small groups. The arrangement in the form of cubicles also allows the area to be used as stations in objective structured clinical examinations (OSCE).
  - *Faculty Development*: The MEU is training all faculty in Competency based Medical Education. In September 2014, we held workshops on competency based education, curriculum planning and community oriented medical education. The revised basic course in medical education technology has special sessions in this area. See Section 2.4.8 . Our MEU faculty have also been invited by MUHS, MCI and at the World Congress of Ayurveda to conduct training workshops on Competency Based Education.
  - Training in advanced *workplace based assessment* (WPBA) methods including mini-Clinical Evaluation Exercise and directly observed procedural skills (DOPS). Faculty in some departments have done educational projects and introduced WPBA on a pilot basis (**See Annexure 6F**).

- **Inculcating a sound value system among students**
- Value based education is accorded the highest priority. As explained previously in Section 1.3.6, emphasis on character and attitude building, ethics, Gandhian principles, professionalism are embedded in the MBBS curriculum at all levels.
- The village adoption scheme along with the subsequent monthly village visits provide an excellent platform for learning leadership skills through participation in community-based activities. Interactive sessions are conducted for students on leadership skills; including communication and counseling skills, advocacy and activism, working as a change agent, problem solving, team building, assertiveness etc. Through interaction with the family members, students develop good rapport with the family, empathy and communication skills. During the camp, students convince and mobilize families allotted to them to avail the benefit of screening and curative services provided through the camp. This helps them practice persuasive communication and negotiation skills. The students also get ample opportunities to interact with the community-based organizations and formal and informal leaders in the village. This enhances their understanding of the system in which they will work in the future. Group exercises during the fieldwork and classroom teaching also helps them learn team building, negotiation and conflict resolution. Group exercises also help students to identify their own strengths and weaknesses for the leadership skills and prepare a personal improvement plan.
- MGIMS is a non-capitation fee educational institution. It does not have any NRI quota and it charges the tuition fees for its undergraduate and postgraduate medical courses at par with government medical colleges. Close to 13,000 students compete for the 100 MBBS admissions. The method of selection of candidates for the medical courses in MGIMS satisfies the Triple Test laid down by the Supreme Court in various judgments, viz., transparency, merit and non-exploitative.
- **Promoting use of technology**
- The *Hospital Information System (HIS)* at MGIMS is a state-of-the-art, fully integrated hospital information system. The system provides the health workers in the hospital with a full suite of tools for registering patients, ordering tests, retrieving test results and generating electronic discharge summaries. This system captures, stores and retrieves all data related to half a million outpatients and 45,000 inpatients every year. Most laboratories are paperless now, and residents and consultants are able to access all test results, radiologic images- anytime anywhere. The system has close to 18 modules- all functioning – that capture data

from registration, insurance, admission counters, outpatient departments, labs (Pathology, Microbiology, Biochemistry and radiology), inpatient departments, blood bank, operating rooms, Pharmacy, Kitchen and discharge counter. A Picture Archival and Communication System (PACS) now enables doctors to access the radiology images (radiographs, CT images, MRI images and USG) on their desktops

- *iPads at the point of care*: The unique addition to the system allows doctors to access the patient data at the bedside. This application – specially designed and developed for MGIMS- has been introduced for the first time in India- no public or private hospital in the country is using iPads at the point of care. They can peep into the patients’ records, review past histories, and generate electronic discharge summaries using this system. The system has minimized human errors, increased the accuracy of data and improved patient outcomes.
- *E-learning*: The web-based MGIMS Classroom is an initiative to enhance the learning experience of students at MGIMS utilizing the immense potential of information technology. MGIMS Classroom use a MOODLE based virtual learning environment and offers interactive online classes developed by eminent teachers at MGIMS to support the classroom, clinical and community-based teaching of students.
- Also see Section 6.1.10 for more details
- **Quest for excellence**
- The institute constantly innovates and updates itself and tries to provide state-of-the-art infrastructure, teaching and research facilities to its stakeholders. It does not just follow guidelines, but leads the way in pioneering change. We understand the need to find the right balance in the eternal triangle of ‘quality, quantity and equity’.
- Our unique model of medical education has caught the eye of the governmental and non-governmental agencies. Our focus is not merely on increasing the numbers of doctors we produce, but on producing the kind of doctors who are relevant to the country’s needs. We provide quality medical education with a focus on community based medical education. Our doctors are sensitive to the needs of rural areas and are trained in the real workplace through our curricular innovations. Also, keeping in with the times, we are not averse to using technology to improving this training.

- Despite being located in a rural area, MGIMS provides top class affordable care to its patients. Our services are at par with any tertiary care institute, but at rates which are affordable to the underprivileged. Several of our schemes such as the Low Cost Drug Initiative (See Section 1.1.2 for details), which provides drugs at a fraction of the price available in the market, make it a popular choice for patients, not just from Maharashtra, but also from the adjacent states of Telangana, Andhra Pradesh and Chhatisgarh. Our radiotherapy services are sought after by cancer patients in all these areas.
- We encourage students and faculty to undertake research in diseases which are prevalent in the community. Adequate infrastructure, mentoring and financial support are available for people who are interested in pursuing research interests.

**6.1.12 Has the institution been indicted / given any adverse reports by National Regulatory bodies? If so, provide details.**

No.

**6.1.13 What are the projected budgetary provisions towards teaching, health care services, research, faculty development, etc.?**

The Mahatma Gandhi Institute of Medical College, Sevagram is designed to be an experimental model institute where medical education was reoriented to meet the needs of the rural areas. The expenditure of MGIMS is shared by the Govt of India, Govt of Maharashtra and the Kasturba Health Society in the proportion of 50:25:25. Each year, the Standing Finance Committee and the Governing Council decide budget allocations according to projected needs. All budgetary demands supported by justifications from departments are usually allowed.

## **6.2 Strategy Development and Deployment**

**6.2.1 Does the institution have a perspective plan for development? If yes, what aspects of the following are considered in the development of policies and strategies?**

Yes. The institute has a plan for development. All departments are expected to submit their vision documents for the future. The management looks at all these documents and decides which priority areas need to be considered immediately.

\* **Vision and mission**



Development aspects which are in alignment with the vision and mission of the institute and of national importance are given first priority. Extension activities, like community health, community based research and community oriented education are always preferred areas. E.g. The institute has approved construction of a new hospital in the tribal areas of Utawali, Melghat, in Amravati district. The construction of new buildings in the rural training centres of the institute in Anji and Bhidi. Research projects such as the ROTA virus project or the tuberculosis screening programme or Community led initiatives for child survival (CLICS) project or the multicentric Home based model for new born care project were always encouraged.

**\* Teaching and learning**

The institute supports all modern educational developments. It does not merely follow guidelines of the MUHS, but anticipates and plans in advance for student training and teaching.

*E-learning:* Recently the institute sanctioned around Rs 3.5 lakhs for training faculty in e-learning activities in its first phase. The infrastructural support for the same has already been granted.

*Simulation training:* The institute has developed a modern simulation lab to train doctors and paramedical staff in life saving skills. The project called by the acronym MIST, which stands for MGIMS Institute for Simulation Based Training. The project funded by KHS, has already procured mannequins to teach participants CPR during AHA accredited basic life support skills (BLS) and advanced cardiovascular life support skills (ACLS) courses, which are in line with the latest 2015 training guidelines of the American Heart Association (AHA). The lab also has a critical care simulation advanced mannequin which is first of its kind in whole of central India.

Further, the Director General of Health services (DGHS) and the Ministry of Health and Family Welfare (MOHFW) of the Govt of India have chosen MGIMS among the first five centres in India to build a centralized state-of-the-art simulation and skills lab under their National Emergency Life Support (NELS) programme. MOHFW has sanctioned Rs 2.68 crores for this project in order to renovate existing structures and establish state-of-the-art simulation and skills labs. MGIMS has already received Rs one crore which will be used to procure simulation mannequins for training. This will be functional next year.

*Faculty development:* The Medical Education Unit (MEU) has several faculty who are trained in health professional education. Faculty have been given study leave or partial funding to pursue Masters in Health Professions Education from foreign universities like Maastricht University or Keele University. The MEU has received financial

support for infrastructural development to conduct National Conference on Health Professions Education in 2014.

\* **Research and development**

The Institute encourages all departments to conduct research in areas of national importance such as communicable and non-communicable diseases. The Jammalal Bajaj Tropical Disease Centre (JBTDRC) receives up to Rs 6 lakhs per year for its basic research activities. Postgraduates receive up to Rs 25000 each for conducting research depending on the cost of the reagents and equipment required for their study.

\* **Community engagement / outreach activities**

Kasturba Hospital partners with communities to build, improve and sustain health care delivery and increase the health and well-being of those who live and work and these communities. Several community based screening and diagnostic camps - typically we examine close to 1,00,000 individuals each year- have improved the value of care. Over the years, we have consistently delivered more integrated, patient-centered care, and have reduced health care costs while improving outcomes.

Our ophthalmologists reach close to 70,000 individuals each year, and strive to bring eyesight back to anyone who needs it, regardless of his or her ability to pay — and do so with pre- and postoperative care that rivals the highest quality. Kasturba Hospital offers an integrated health care delivery system led by the Department of Community Medicine that includes the founding teaching hospital, two rural (Anji and Bhidi) and an urban community health center (Gandhi Memorial Leprosy Foundation, Wardha). We run a hospital located 265 km from Sevagram (in Utawali, Melghat), serving the tribal poor. Our team of obstetrician – gynecologists, pediatricians, anesthetists, medical officers, interns, nurses and other paramedics works 24/ 7 to offer preventive, promotive and curative services in the Melghat region of Maharashtra.

\* **Human resource planning and development**

The Local Management Committee, the Standing Finance Committee, the Governing Council and the Kasturba Health Society meet twice a year. The major decisions about growth and development of the institute are taken by the members of these committees. These committees review proposals, approve them and allocate budgets according to the vision of the institute.

\* **Industry interaction**

MGIMS has links with around 80 NGOs which work in rural areas. Each year, students who have completed their graduation are posted in these NGOs. This works in two ways: students get an opportunity to experience working in a rural area with

proper supervision and payment. In exchange, the NGOs get a regular supply for doctors for their hospitals. More details of the rural placement scheme have been provided in Section 1.1.2.

\* **Internationalization**

The Institute has signed MOUs with the Maastricht University and Ben Gurion University in Israel. Students from these universities regularly visit MGIMS for their elective postings. Since the last three years, a few students of MGIMS have been granted fellowships to visit Ben Gurion University in Israel.

**6.2.2 Describe the institution’s internal organizational structure (preferably through an organogram) and decision making processes and their effectiveness.**



## **Kasturba Health Society**

**Shri Dhiru S Mehta**  
**President**

Secretary, Government of India  
**Ministry of Health & Family Welfare,**  
**New Delhi**

**Shri PL Tapadiya**  
**Dr JM Dave**

Director General of Health Services  
**Government of India**

**Dr KV Desikan**

**Dr JL Gupta**

**Dr AB Vaidya**

**Dr Shyam Babhulkar**

**Dr VP Mishra**

**Shri TNV Ayyar**

**Shri BC Chhapparwal**

**Shri Jayant Kumar Banthia**

**Shri Shashank Manohar**

**Dr Skand Kumar Trivedi**

**Shri Vinit Parekh**

Secretary, Government of Maharashtra  
**Medical Education & Drugs Department,**  
**Mumbai**

Director of Medical Education & Research  
**Government of Maharashtra**

President  
**Zilla Parishad, Wardha**

**Dr BS Garg**  
**Secretary**

Secretary  
**Gandhi Smarak Nidhi, New Delhi**

All funds, assets and resources of Kasturba Health Society shall be used mostly for Kasturba Hospital, Sevagram to achieve following objectives:

To strive for a healthy and disease free society by:

- (a) Health education
- (b) Offering preventive and curative medical care that is accessible, and affordable
- (c) Encouraging need-based and community focused research
- (d) Offering health insurance
- (e) Cultivating medicinal flora
- (f) Running a dairy farm on modern scientific lines.

The functions of the Society are:

- To develop rapport, interact and join hands with like-minded people and institutions.
- To offer training to people and organizations to create similar mission statements to help them achieve their goals.
- To encourage people, non-government organizations and institutions to take up similar work. To lend them financial support to achieve the objectives.
- To promote Gandhian ideology and philosophy.

## Governing Council

Shri Dhiru S Mehta  
**Chairman**

Shri PL Tapadiya

Dr JM Dave

Dr JL Gupta

Secretary to Government of India  
**Ministry of Health & FW**

Director General of Health Services  
**Government of India**

Director (IF) Government of India  
**Ministry of Health & FW**

Secretary to Government of Maharashtra  
**Medical Education & Drugs**

Director of Medical Education and Research  
**Government of Maharashtra**

Dr BS Garg  
**Member Secretary**

The Governing Council shall:

- Function within the policy and framework laid down by Kasturba Health Society
- Meet at least twice a year
- Provide know-how to the management in financial and investment planning.
- Examine carefully accounts submitted by standing finance committee and recommend their acceptance to Kasturba Health Society, with suitable modifications, if need be.
- Reconsider proposals rejected by Kasturba Health Society and call a Joint meeting of the Council and Society to settle the issue.
- Have powers to sanction and approve budget proposals.
- Decide all expenditure proposals.
- Create class I/ II posts, appoint staff,
- Review decisions of SFC, LMC and Selection Committee.
- Lay down policy for admission as per academic council recommendations,
- Review the progress report, set new goals, and help institute achieve them.
- Make recommendations to the academic committee after reviewing progress report.
- Send progress report to Govt. of India, Govt. of Maharashtra and Kasturba Health Society.

## **Standing Finance Committee**

Shri Dhiru S Mehta  
**Chairman**

Director (ME) Government of India  
**Ministry of Health and Family Welfare**

Director (IF) Government of India  
**Ministry of Health & Family Welfare**

Secretary to Government of Maharashtra  
**Medical Education and Drugs**

Dr KR Patond  
**Member - Secretary**

The Standing Finance Committee shall consider:

- All financial matters of the institute.
- Annual accounts showing the receipts and expenditure of the institute together with the audit report.
- Budget estimates showing the receipts and expenditure of the institute.
- All proposals for the creation of new posts.
- All financial matters pertaining to the institute.
- All matters related to the invitation and acceptance of new building tenders.

### **Local Managing Committee**

Shri Dhiru S Mehta

**Chairman**

Shri PL Tapadiya

Dr KV Desikan

Shri Suresh Deshmukh

Adv PB Taori

Dr BS Garg

Dr Manish Jain

Dr Ajab Dhabarde

Dr PR Zopate

Shri AP Aote

Director General of Health Services,  
Government of India

Secretary to Government of Maharashtra,  
Medical Education & Drugs

Dr KR Patond

**Dean, Member - Secretary**

The Local Managing Committee shall:

- Function within the policy and framework laid down by Kasturba Health Society.
- Be responsible for academic activities of the institute and shall ensure excellence in academics.
- Help the institute develop new models of community - oriented teaching which focusses on problems relevant to rural community.
- Encourage extra-curricular activities in the institute and monitor the code of conduct of the institute.
- Make proposals for growth and development of the departments.
- Create new posts, and consider proposals for buying new equipment, expansion programmes and renovation / new construction
- Recommend laying off of faculty and students on disciplinary grounds according to rules.
- Review proposals made by sub-committees before submitting them to SFC and Governing Council.
- Prepare budget estimates for recurring expenditure.
- Prepare budget estimates for the next financial year.
- Submit an annual report which shall highlight performance of the institute in: education/health care, community and rural service, research and growth.

**6.2.3 Does the institution conduct regular meetings of its various Authorities and Statutory bodies? Provide details.**

Yes. Meetings of all these bodies which are mentioned in Section 6.2.2 are held twice a year. During these meetings decisions are taken by these bodies, regarding finance, infrastructure, faculty recruitment, performance evaluation of teaching and non-teaching staff, research and extension activities, linkages and examinations (Minutes of last two meetings of LMC attached as **Annexure 6G**)

**6.2.4 Does the institution have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?**

Yes. All departments are expected to present a report of their achievements each year to the management, with details of how they have done with respect to teaching, service and research. They are expected to present their plans of development for the future and justify their budget demands. Workloads of individual departments are also assessed through the statistical bulletin circulated each month. (**Annexure 6H**- Statistical Bulletin)

**6.2.5 Does the institution encourage its academic departments to function independently and autonomously and how does it ensure accountability?**

The management believes in decentralization of authority. Departmental heads are



authorized to take decisions based on guidelines. During monthly meeting the College Council, which is represented by all departmental heads and the Dean discuss all academic decisions of importance and review any problem areas. (**Annexure 6I**- Minutes of College Council)

**6.2.6 During the last four years, have there been any instances of court cases filed by and / or against the institution? What were the critical issues and verdicts of the courts on these issues?**

Yes. See **Annexure 6J** for list of these cases

**6.2.7 How does the institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?**

Yes. The Office of the Dean coordinates all academic and administrative processes pertaining to students and faculty. A decentralized process of grievance redressal is followed where the immediate head/ incharge takes decisions based on the issues concerned. E.g. Head of the Department resolves departmental issues, Hostel Wardens look after hostel complaints, personal issues to mentors etc. If required or unresolved the complaint can be taken to the higher authorities. Separate grievance committees exist for students, interns, internal assessment issues and complaints against women. All grievances are handled immediately depending on the gravity of the issue. Decisions taken are communicated to the complainant.

**6.2.8 Does the institution have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?**

The institute has a regular feedback process, where all students and faculty provide anonymous feedback to the institute. This system includes students in all years of medical training, interns, junior, mid-level as well as senior faculty. Feedback so received is reviewed in confidence, and in addition to quality assessment of various teaching-learning processes, a list of actionable processes is prepared. Based on this listing of actionable items, decisions for improvement are taken.

The institute has an Academic College Council, which regularly meets every second Thursday of every month. This academic council consists of all professors with Dean as Chairperson. Any member can put up an agenda of academic interest, which is then discussed by the council. This council is one of the means

of information flow to the management. In addition to above formal processes, head of the institute often holds meetings with various faculty members and is appraised of various institutional activities.

A mentor system in which mentors (faculty members) are allotted 6-8 students. They meet the students every alternate month on fourth Wednesday as per timetable and also at multiple unscheduled times singly or in groups. If the scheduled meeting is not possible on the specified day, then it occurs on a mutually convenient date. The mentors are provided with all requisite information about the pupil so that they can provide academic and personal guidance. The mentors report to the dean regularly about their interaction with students allotted to them. The Dean looks at the reports from mentors and provides feedback to mentors and if necessary also directly to students.

**6.2.9 Does the institution conduct performance audit of the various departments?**

The institute has a performance assessment mechanism in place for teaching faculty. This assessment consists of a self-appraisal which is filled by each faculty member annually, and is submitted to the Dean's office. These appraisals are collated and a report is prepared to fill any gaps. In addition all departments are required to provide quarterly reports, and annual assessment of their academic and research output and students' feedback also.

**6.2.10 What mechanisms have been evolved by the institution to identify the developmental needs of its affiliated / constituent institutions?**

Not applicable

**6.2.11 Does the institution and hospital have their own updated websites? If so, is the information regarding faculty and their areas of specialization, days of availability, timings, consultation charges available on the website?**

Yes the institute has its own website – [www.mgims.ac.in](http://www.mgims.ac.in) which carries updated information.

**6.2.12 What are the feedback mechanisms and documentations to evaluate the outcomes of these exercises?**

Feedback obtained from the students and the faculty are acted upon in the decision making process. A consolidated report of all the feedback is made,

discussed in the appropriate forum (department/ College Council) and the specific suggestions are classified into actionable categories such as (a) done, (b) being done,(c) clarification is required, (d) cannot be done. These categories are implemented in a manner as indicated by individual names.

### **6.3 Faculty Empowerment Strategies**

#### **6.3.1 What efforts have been made to enhance the professional development of teaching and non-teaching staff? What is the impact of Continuing Professional Development Programs in enhancing the competencies of the university faculty?**

The institute is actively supports professional development of the faculty. This is achieved by the following means:

- Research funds are available to conduct short research projects in the institute. There is a seed amount of Rs 10 lakhs for the same. Specific projects which have been approved by the Institutional Ethics Committee can be submitted to the research committee with a budgetary request. Research committee evaluates the budgetary requirements and approves the funding. Typically requests upto Rs 25,000 have been sanctioned in the previous years.
- If a faculty member is making an oral or a poster presentation at a national level conference or attends a training workshop, the institute provides for 15 special leaves, travel allowance by 2<sup>nd</sup> AC, conference registration fees and accommodation expenses for presenting the paper or chairing the session. This facility can be availed once every year.
- Special leave and partial reimbursement of travel expenses is provided to faculty to present papers in international academic meetings, conferences or workshops once in every three years.
- Deputation or study leave is permitted depending on performance to pursue higher studies or train in a specialized area.

#### **6.3.2 What is the outcome of the review of various appraisal methods used by the institution? List the important decisions.**

These incentives have worked in our favour. Faculty who have been given a chance to grow in their speciality areas have conventionally stayed on and developed the facility after they have come back.

We had permitted two faculty to train in critical care. They have returned and improved the quality of intensive care offered in the institute. Similarly, faculty have come back with more networking when they have worked with national and international agencies. This networking has helped us in expanding research interests and successfully applying for major research or infrastructural grants.

**6.3.3 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have benefitted from these schemes in the last four years? Give details.**

The welfare measures for the staff and faculty include the following:

- Residential accommodation on campus for teaching and non-teaching staff
- Payment of salaries according to government pay scales
- Provision of free medical diagnostic and consultation, and an employee health insurance scheme which provides for free inpatient care and controlled outpatient medications for employee and their families.
- For faculty, provision of special leave, travel, accommodation and conference fee reimbursement for one conference every year, international every three years (See **Annexure 3N** for details of reimbursement)
- Provision of special leave for task force meetings
- Study leave for faculty for specialized training or fellowships etc.
- Loan facility
- House Rent Allowance
- Group Insurance Scheme
- Laptop scheme: Interest free loans have been given by institute for purchase of laptops and iPads
- Workers Welfare fund: The hospital operates a worker welfare fund in which each employee deposits Rs 20 per month. The money is used to pay hospital bills for illnesses which needed to be treated elsewhere

**6.3.4 What are the measures taken by the institution for attracting and retaining eminent faculty?**

The institute strives to provide an atmosphere of academic excellence, independence, and has efficient decision-making mechanisms, which help retain faculty. People at all levels of management are easily approachable to all faculty members. The following features help in attracting and retaining faculty:

- (a) Government pay scales are given to faculty

- (b) The institute has a merit based personal promotion scheme
- (c) Good residential accommodation is available. In the past, land and loan from Provident Fund has been provided by KHS to faculty to construct residences
- (d) Faculty prefer working in MGIMS to government colleges as the job does not entail transfers to other places
- (e) The management permits faculty to train in specialized areas by sending them on deputation or giving them study leave, on signing a bond to work for the institute after completion of their training.
- (f) Couples are usually encouraged to apply. Spouses of faculty are also given placement in the institute depending on their qualifications
- (g) KHS runs a school, Kasturba Vidya Mandir, on campus. It allows children of employees to get good education. Several spouses of employees also teach in the school.

**6.3.5 Has the institution conducted a gender audit during the last four years? If yes, mention a few salient findings.**

Although a formal gender audit has not been conducted, gender analysis shows that:

- Women have occupied all top positions in the institute including President, Secretary, Dean and Medical Superintendent in the past.
- At the moment, the Heads of Departments of four departments (Ob/Gyn, Medicine, Anesthesia and Microbiology) are women.
- Almost equal number of girls and boys join the undergraduate course each year.

**6.3.6 Does the institution conduct any gender sensitization programs for its faculty?**

No special gender sensitization programmes have been held for faculty. The institute has however formulated a grievances redressal forum against gender bias and sexual harassment.

After commencement of the academic year, special gender sensitization classes are conducted to focus on mutual cooperation among male and female students. Classes on issues of gender sensitization are held during the social service camp for students and they are taught how to be assertive.

**6.3.7 How does the institution train its support staff in better communication skills with patients?**

The hospital, every two months, conducts a meeting with all ward-in-charges who are explained how to communicate with patients. We explain that they must empathize with their patients to know what is hurting them (sickness, lack of money, unfamiliar environment, fear of doctors and paramedics, uncertainty about future) etc. The ward incharges in turn during their interactions with the nurses, orderlies and paramedics pass on these messages and ensure that the patients are treated with the respect that they richly deserve.

**6.3.8 Whether the research interests of teaching faculty are displayed in the respective departments?**

Yes. These are displayed by respective departments.

**6.3.9 Do faculty members mentor junior faculty and students?**

Yes. A structured mentoring system exists for students details of which have already been provided in Section 5.1.1. Mentors (faculty members) are allotted 6-8 students. They meet the students every alternate month on fourth Wednesday and also at multiple unscheduled times singly or in groups. If the scheduled meeting is not possible on the specified day, then it occurs on a mutually convenient date. The mentors are provided with all requisite information about the pupil so that they can provide academic and personal guidance. The mentors report to the dean regularly about their interaction with students allotted to them. The Dean looks at the reports from mentors and provides feedback to mentors and if necessary also directly to students.

Mentoring of junior faculty occurs informally in the departments. Senior colleagues teach them in the workplace. Most junior faculty are involved in different administrative roles in the institution. A gradual transition of roles occurs as faculty members grow senior. The second line of faculty is trained through mentoring within departments.

**6.3.10 Does the institution offer incentives for faculty empowerment?**

Yes the institute has following incentives for faculty who excel in their fields of work.

- Personal promotion based on performance and output
- Permission to take sabbatical/ study leave on signing a bond to pursue further higher studies or go for fellowships
- Financial support to develop their area of expertise or specialization in the institute

**6.4 Financial Management and Resource Mobilization**

**6.4.1 What is the institutional mechanism available to monitor the effective and efficient use of financial resources?**

Since the inception of this institute, the budgeted expenditure of the institute is shared between three stakeholders. The Govt. of India contributes to 50% of the expenditure, the Govt. of Maharashtra contributes to 25% of the expenditure, and Kasturba Health Society contributes to the remaining 25% of the expenditure.

The Standing Finance Committee approves the budget of the institute. The details of the composition and functions of the Standing Committee are already mentioned in Section 6.2.2.

The accounts of MGIMS are regularly audited by a chartered accountant appointed by members of the Kasturba Health Society. Audit reports are regularly placed before the Standing Finance Committee, the Governing Council and members of Kasturba Health Society for approval. These meetings are held twice a year.

**6.4.2 Does the institution have a mechanism for internal and external audit? Give details.**

Yes. The institute's accounts are audited regularly. M/s KK Mankeshwar & Sons, a chartered accountant firm of 80 years standing conducts these audits. Our accounts are also subject to audit by the Comptroller and Auditor General (CAG). Besides these, once in a while, auditors from the Govt of India and Govt of Maharashtra also visit us for audits.

**6.4.3 Are the institution's accounts audited regularly? Have there been any audit objections, if so, how were they addressed?**

Yes, the institute's accounts are regularly audited. Any audit queries raised by auditors are replied to their satisfaction.

**6.4.4 Provide the audited statement of accounts with details of expenses for academic, research and administrative activities of the last four years.**

All these documents are available and will be made available to the NAAC inspection team during the onsite visits.

**6.4.5 Narrate the efforts taken by the institution for resource mobilization.**

As stated above, Kasturba Health Society contributes to 25% of the total annual expenditure. KHS raises this amount through donations from philanthropic

organizations. Some examples of the substantial donations that we have received in the last few years are:

- (a) Donation from Mrs Sarla Parekh to construct new Medicine Block: 1.8 crores
- (b) Donation from Mrs Sarla Parekh to set up Cath Lab: 5 crores
- (c) Donation from Shri Brihad Bharatiya Samaj for Utawali Project and Sushila Nayar Hospital in Melghat: 5 crores
- (d) Donation from Satya Sai Baba for Rural poor students: Rs 51 lakhs
- (e) Lions Club International Foundation : USD 166332

In addition, special grants have been received from the Government of India and Govt of Maharashtra for infrastructural development. E.g.:

- Maternal and Child Health Wing : Rs 20 crores
- Tertiary Cancer Centre : Rs 8.1 crores
- Oncology Wing Fund : Rs 5.5 crores

**6.4.6 Is there any provision for the institution to create a corpus fund? If yes, give details.**

Over the years Kasturba Health Society has built up a corpus of over 100 crores. This fund is used to meet the expenses.

**6.4.7 What are the free / subsidized services provided to the patients in the hospital?**

Kasturba Hospital provides very subsidized health care facilities for patients of society. The Hospital provides services at affordable prices. The hospital charges a registration fee of Rs 10 and a revisit fee of Rs five for the outpatients. Each day stay in the ward costs Rs 50- this includes their breakfast, lunch and dinner. There are no consultant fees; nor are there fees for nursing.

About 70,000 families in the Wardha district buy an annual health assurance card (Rs 80 per person per year) that offers a benefit package of 50% subsidy on all hospital charges (registration, tests, IPD charges, and operations).

The hospital also participates in the following schemes started by the Government of Maharashtra that offer either fully free or partly free services:

- Rajiv Gandhi Jeevandayee Yojana: Cashless hospitalization for families below poverty lines (BPL): this scheme covers close to 900 catastrophic and life threatening illnesses.
- Ten percent of the beds of the hospital are reserved for patients belonging to indigent sections. Hundred percent free hospitalization
- Ten percent of the beds of the hospital are reserved for patients belonging to the weaker section. Patients pay 50% hospital charges.



- Jowar Insurance Scheme: Free treatment to the beneficiaries.
- The hospital also arranges or participates in the diagnostic camps for the patients and offers them highly subsidized treatment.

The hospital also operates a worker welfare fund in which each employee deposits Rs 20 per month. The money is used to pay hospital bills for illnesses which needed to be treated elsewhere.

**6.4.8 Does the institutions receive fund from philanthropic organizations / individuals towards patient care? If yes, give details.**

Yes. As mentioned in Section 6.4.5, several philanthropic organizations provide us funds to enhance infrastructure and buy equipment.

**6.4.9 Do patients from other states / abroad come for treatment, reflecting the unique quality health care provided by the institution?**

Although this hospital is situated in rural Maharashtra, it receives patients from the neighboring states- Andhra Pradesh, Telangana, Chhatisgarh and Madhya Pradesh, as it is well connected on the rail route and has a reputation for providing good service at affordable costs. Since we have an advanced radiotherapy centre, patients of cancer often prefer to come here rather than travel to Mumbai for their treatment.

## **6.5 Internal Quality Assurance System**

**6.5.1 Does the institution conduct regular academic and administrative audits? If yes, give details.**

Yes. Regular academic and administrative audits are done

- The IQAC plays the role of the nodal agency which coordinates the collation of data for an annual academic and administrative audit.
- The Documentation Unit is given the task of compiling this data into an Annual Report. All data regarding academics, research and service are compiled by the Documentation Unit and published as the Annual Report of the Institute. PDF versions of all the Annual Reports are available on the website under the NAAC section (<https://www.mgims.ac.in/index.php/academics/naac>)
- The Annual Report is laid before all members of the Local Managing Committee, Governing Council and the Kasturba Health Society during their annual meetings held in August-September of each year, where it is discussed and approved.

- These reports help in budgeting, decision making, performance monitoring and planning for the future. Plans are made to improve academic performance, expand infrastructure, enhance research output and improve quality of hospital based patient care and community health services based on this information.
- The Academic Audit reports are also submitted to the MUHS each year.
- Besides this, the Local Managing Committee discusses the local issues that need to be addressed. It makes proposals for growth and development of the departments; creation of new posts, and considers proposals for buying new equipment, expansion programmes and renovation / new construction
- The Institute monitors performance of individual departments through periodic meetings and review of their reports.
- Both internal and external financial audit of the institutional accounts are conducted annually

**6.5.2 Based on the recommendations of the Academic Audit, what specific follow up measures have been taken by the institution to improve its academic and administrative performance?**

All decision making, planning and budgeting for the future takes place on the basis of the review of the academic and administrative performance. Some of the specific measures taken by the institute to improve its academic and administrative performance have been:

- Decentralization of responsibilities through formation of different committees
- Use of information technology in almost all sections to make documentation, monitoring and retrieval of data easier. At the moment, all patient data, student information, accounts information, stock keeping, personnel information etc is all available on electronic databases
- Clearly defined transparent policies and rules for most processes: promotion, leave, reimbursement etc.
- Expansion of extension activities to tribal areas of Melghat
- Planning for introduction of e-learning
- More patient friendly measures in Kasturba Hospital: No Q card, Low cost drug initiative, installation of HIS, new buildings for Medicine and MCH wing, New operation theatres

**6.5.3 Is there a central unit within the institution to review the teaching-learning process in an ongoing manner? Give details of its structure, methodologies of operations and outcome?**

Yes. The efficient teaching-learning process is reviewed and monitored at several different levels.

- Selection of faculty: Highest quality standards are maintained during selection of teachers for the institute. This is done through a process of face-to-face interviews, as well as through previous experience in teaching, research and service. An important facet of this selection process is an assessment of how well a prospective teacher will be able to measure up to the mission and objectives of the institute.
- Periodic monitoring of curriculum and actual teaching: The curriculum committee monitors the teaching schedules as mandated by the university and as driven by the needs of the institute. The entire process of functioning of the committee has been elaborated in Section 1.1.3. Individual departmental heads take the lead in monitoring how their syllabus and course is being taught.
- Faculty development: The institute has a vibrant Medical Education Unit which trains and supports faculty in pedagogy. Further ample opportunities are provided to teachers to train in specialized areas through specialized workshops and conferences. The management also supports training by providing special leave, study leave and deputation.

#### **6.5.4 How has IQAC contributed to institutionalizing quality assurance strategies and processes?**

The terms of reference to the IQAC are to facilitate quality assurance strategies in the institute by:

- Setting benchmarks for quality in education, research and service
- Facilitating the creation of a learner-centric environment, conducive to imparting quality education.
- Reviewing and acting on feedback received from students, parents and other stakeholders.
- Monitoring and promoting the quality in education, research and service
- Documenting various programmes and activities of the Institute.
- Acting as a nodal agency for coordinating quality related activities and dissemination of information on quality.
- Preparation of annual quality assurance report based on assessment criteria developed by NAAC in prescribed format.
- Pre and post accreditation quality assessment, sustenance and enhancement endeavors.

This has been done by slowly educating faculty about the need to develop processes, document their work and coercing them to submit reports of their work. Compiling this data and preparation of the Annual Reports by the Documentation Unit has been a major contribution. It has helped in performance monitoring and decision making.

Documentation has specially worked as the peer pressure of performing better than colleagues has given faculty an impetus to strive towards excellence. Further, defining criteria for excellence and adding these criteria to the personal promotion scheme has worked as an incentive.

The IQAC has acted a bridge between the students, faculty and management. Collating feedback and sharing it with concerned stakeholders has helped in making pertinent changes such improving infrastructure, expanding activities, adding manpower or formulating more clear policies. It has initiated open discussion and allowed transparency in administration.

**6.5.5 How many decisions of the IQAC have been placed before the statutory authorities of the institution for implementation?**

All the major decisions of IQAC are placed before the management for information, approval and for follow-up action. Some of the major decisions taken by the IQAC in the last four years are:

<p>1. Since campus is now wifi enabled, all staff and students have individual intramail IDs and students are comfortable with use of the internet, the next logical step is to initiate e-learning to complement classroom, clinical and community-based teaching</p>	<ul style="list-style-type: none"> <li>- MGIMS website upgraded. MGIMS Classroom added to it</li> <li>- MOODLE installed as the virtual learning platform</li> <li>- First batch of teachers trains themselves through MOOC run by MOODLE.org</li> <li>- Core group constituted: The E-learning subgroup under Medical Education Unit is first trained in use of MOODLE in Phase one through four sessions each across one month</li> <li>- In phase two these faculty trained all faculty in the pedagogy of blended learning and making e-learning modules</li> </ul>
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2. To provide affordable super-speciality facilities on campus	<ul style="list-style-type: none"> <li>- State-of-the-art cardiac catheterization lab and intensive coronary care unit added to Kasturba Hospital</li> </ul>
3. To audit facilities for patient care using the NABH audit tool	<ul style="list-style-type: none"> <li>- Kasturba Hospital awarded A1 grade in a six monthly assessment carried out by the empanelment committee for the Rajiv Gandhi Jeevandayee Aarogya Yojana</li> </ul>
4. Host National Conference in Health Professions Education (NCHPE 2014)	<ul style="list-style-type: none"> <li>- NCHPE 2014 was conducted from 24-27 September 2014 by the MEU.</li> <li>- The theme of the conference was Socially responsive health professions education: Forging partnerships between academic institutions and the healthcare delivery system</li> <li>- Nine workshops on medical education related themes conducted</li> <li>- Around 300 delegates participated</li> </ul>
5. Improve skills training	<ul style="list-style-type: none"> <li>- Dept of Pediatrics becomes IAP accredited CPR training centre</li> <li>- Workshops conducted in basic and advanced life support skills as well as in pediatrics</li> <li>- Advanced Simulation Centre started with government grant</li> </ul>
6. Improve extension activities in tribal areas	<ul style="list-style-type: none"> <li>- MGIMS has extended patient care services to Gandhi Memorial Leprosy Foundation</li> <li>- Sushila Nayar Hospital constructed in Utawali, Melghat which is a tribal belt in Amravati which is known for malnutrition related neonatal deaths</li> </ul>
7. Creating benchmarks for faculty development	<ul style="list-style-type: none"> <li>- Criteria for personal promotion scheme of the institute defined, circulated and implemented.</li> <li>- These include publications, participation in funded research,</li> </ul>

	mentoring, monitoring of workload, participation in institutional and extra-institutional academic and administrative activities
8. To encourage mentoring	- Mentoring cell developed. Mentor-mentee pairs defined. Teachers trained in mentoring activities
9. To register alumni association	- Alumni association is now a registered body
10. To develop student support mechanism	- Student guidance and counseling centre established

**6.5.6 Are external members represented in the IQAC? If so, mention the significant contribution made by such members.**

Some members of the Kasturba Health Society are included. They provide insight into the budgeting and planning aspect of infrastructure development as they have a bird's eye view of the overall functioning of the KHS. (**Annexure 6J-Composition of IQAC**)

**6.5.7 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?**

Student performance of each batch is regularly monitored through their internal assessment and university examination results. Mentors also monitor the growth of students (See Section 5.1.1 for details of the mentoring programme). Students from disadvantaged sections of society are given support both academically through book bank schemes (see section 4.3.1) and monetarily (details of these have already been provided in Sections 5.1.5, 5.1.7 and 5.1.8)

**6.5.8 Are there effective mechanisms to conduct regular clinical audit of the teaching hospital? Give details.**

Clinical audit is being done in certain areas like in use of blood and blood components and about drug susceptibility patterns and antibiotic resistance.

Blood bank audit was carried out using the tool kit comprising of checklists developed by Directorate General of Health Services, Dhaka, WHO. These checklists related to the following aspects (See **Annexure 6K**) :

- Reviewing Quality system
- Reviewing the Quality Control System
- Monitoring basic facilities
- Checklists to assess laboratory performance on blood transfusion
- Ensuring ideal donor screening
- Checking records on Blood transfusion activities
- Donor records
- Activities done in the blood transfusion unit
- Monitoring of Procedural practices
- Monitoring of Blood Transfusion management Activities
- Monitoring of the Status of the supplied major equipment and instrument
- Installation of equipment
- Comprehensive performance monitoring checklist for a Blood bank.

Analysis of reasons for discarding blood and blood components was done (**Annexure L**). Details of blood and component utilization as well as unnecessary transfusions carried out by different departments were shared with clinicians.

The Department of Microbiology tracks trends in drug susceptibility patterns and antibiotic resistance and plays a major role in controlling the antibiotic resistance in the hospital by generating and sharing this data with clinicians. It also suggests mechanisms to counter this.

The latest analysis shared with clinicians revealed that in 2015, organisms had become more resistant to antibiotics as compared to 2014 (See **Annexure 6M**). Suggested interventions to decrease the infection rate in our hospital were: promoting hand washing to avoid cross infection, wearing gloves while attending to patients, using aseptic precautions while inserting catheters and frequent change of disinfectant solutions. Along with this the data suggested that indwelling catheters should be cared for and care needed to be taken that catheters were not in situ for long periods of time; the need to check for surgical site infections in post operative patients and the need to use preoperative single dose of antibiotic one hour before incisions were made.

**6.5.9 Has the institution or hospital been accredited by any other national / international body?**

No.

In 2011, MGIMS was awarded A grade by the National Assessment and Accreditation Council (NAAC)

**6.5.10 Does the hospital have institutional and individual insurance schemes to cover indemnity claims?**

Yes

*Any other information regarding Governance, Leadership and Management which the institution would like to include.*



## **CRITERIA VII: INNOVATIONS AND BEST PRACTICES**

### **7.1 Environment Consciousness**

#### **7.1.1 Does the institution conduct a Green Audit of its campus?**

Though the institute has not commissioned a green audit, in 2014, a faculty member's child, Mr Dev Narang, a student of Std.9 conducted a very impressive environmental audit of MGIMS campus as his school project.

The comprehensive report titled "*Carbon Footprints of a Large Campus: How MGIMS Sevagram has been able to reduce them?*" was submitted to the Department of Organismic and Evolutionary Biology, Harvard University and has received appreciation from Dr Eric Chivian, the Founder and Director Emeritus, Center for Health and the Global Environment, Harvard Medical School. Dev conducted this case study with inputs from Mr Sunil Kolhe who heads the Engineering and Maintenance Department at KHS.

The action research project was conducted with two objectives-

- 1) to study the effect of various measures taken by MGIMS to reduce its carbon footprints and
- 2) to assess the knowledge, attitude and practices (KAP) of residents of MGIMS campus with respect to offsetting their own carbon footprints.

The study involved data collection through site visits, personal interviews, online survey of the teaching staff using Survey Monkey software and house to house survey of non-teaching staff residing in the campus.

Some of the main findings of this report are:

1. The annual carbon footprints generated by MGIMS in the year 2014 were 428.4 tons. The organization offsets and reduces 1026 tons of CO<sub>2</sub> by implementing various measures such as planting a large number of trees and replacing the old electrical appliances with energy efficient ones.
2. The residents of MGIMS campus had knowledge and attitude about reducing their carbon footprints by various methods, such as saving electricity, low use of fuel operated vehicles in the campus, walking, planting and preserving trees etc. They also practiced use of energy efficient appliances and using them whenever required.

(For the complete report see **Annexure 7A**)

**7.1.2 What are the initiatives taken by the institution to make the campus eco-friendly?**

**\* Energy conservation-**

- Maharashtra faces severe drought and power shortages in summer. During peak summer, circulars are sent out from the Secretary Office to all households with appeals and specific directives on how to conserve electricity and water. (**Annexure 7 B** is a copy of the circular which is sent out to everyone)
- Rounds are also taken by designated personnel in order to switch off electrical equipment every day in the evening time in order to conserve energy.

In May 2013, a major decision was taken by management to replace old tube lights and fans of the hospital, medical college and offices with new energy efficient ones. The reason for changing the appliances was that the institute is a government funded body and not a purely government body. Thus the charges of electricity recovered by MSEDCL (Maharashtra State Electricity Distribution Company Limited) are at commercial rates which costs Rs. 11 to 11.80 /units. Looking to this aspect in mind, the management took a decision to change lights, fans, street lights, halogen lights etc to save power. 25 tons of CO<sub>2</sub> was saved per month that can amount to 300 tons per annum.

**Effect of replacement of old electrical appliances with energy efficient appliances (From Dev Narang’s study)**

<b>Old appliances</b>	<b>Electric consumption in June 2013</b>	<b>New Appliances</b>	<b>Electric consumption in June 2014</b>	<b>Reduction in electricity</b>
Tube lights 60W	2,96, 020 kWh	T5 Tube lights 28W 5000 in number	2, 68, 250 kWh	<b>27,770 kWh</b>
C/F 120W	Rs 24,31, 340	C/F 5 Star 50W 1902 in number	Rs 20, 99, 480	Rs 3,31,860
Sodium lamp 250W		Star rated Air Conditioner,		
Halogen lamp 500-1000W		LED street light, flood light		
The old Ceiling fans, tube light		are other measures that have been		

fittings & sodium vapour fitting sold to scrap vendor		implemented.		
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- **Fuel saving using lesser number of bus trips:** For many years, Kasturba Vidya Mandir, a school in the MGIMS campus had its school bus parked at Sevagram and everyday it used to go to Wardha to bring children and drop them back. Now the management has decided to park it in the Urban Health Center, Wardha and thus the bus has to make only a single trip. The effective reduction in CO2 emission by this intervention comes out to be 30kg/month or 360kg/annum.
- The institute promotes cycling for a healthy lifestyle. Cycle melas have been held, talks on cycling have been organized in the Academy of Medical Sciences and KHS has agreed to give interest free loans to buy cycles. Faculty and students are urged to ride bicycles to work or walk rather than bring vehicles.
- \* **Use of renewable energy**
  - Composting is done through remains of plants and is converted into rich nutrient food for the garden section.
- \* **Water harvesting-**
  - Water is used very sparingly and personnel are deployed for daily rounds in order to check for leaking taps and taps left open by patients.
  - The gardens are watered through drip irrigation, thereby saving ample amount of water which is half the quantity of that which would have been used otherwise.
  - The institute recycles water which is used to maintain gardens.
  - All the waste water of the campus is also treated in the oxidation pond and is then collected in a pond which helps in increasing the ground water level. The water from this Oxidation pond is checked by the Maharashtra Pollution Control Board in order to check for its quality and they have recommended the water to be used for gardening. Accordingly, a pipeline has been installed in order to use this water is used for agriculture of KHS' Agriculture section.
  - The institute does not procure water from the government or Gram Panchayat sources, but sustains itself through the water from its own wells.
- \* **Solar panels**

- As part of its steps to become environment friendly, MGIMS has installed solar water heaters in all the hostels in order to save energy.
- Solar panels have also been installed in residents' hostels, and also in the KHS peripheral training centres at Anji and Bhidi.

**\* Efforts for carbon neutrality**

Details of replacement of electrical appliances to more energy efficient ones have already been provided in Annexure 7A and as response to section 7.1.1.

MGIMS encourages tree plantation activity and has ample green cover. Approximately, 22,000 trees have been planted – both commercial as well as non-commercial in addition to the existing approximately 10,000 trees.

**Offsetting Carbon Footprints by trees (From Dev Narang's report)**

<b>Number of Trees</b>	<b>Average CO<sub>2</sub> offsetting per tree</b>	<b>Total CO<sub>2</sub> offsetting/year</b>
32,000	48 pounds ~ 22kg	7,04,000 kg
		704 tons

Since construction activity keeps going on in MGIMS due to increasing expansion of its infrastructure, it becomes imperative to cut trees to clear land for construction. In such cases, it is policy of the Institute to plant 10 times more trees, while the government guidelines are to plant double the number. Recently to build Maternal and Child Health Building, the Institute had to cut down 100 trees. To compensate for this deforestation, 1000 trees were planted.

**\* Plantation - Botanical or Medicinal significance**

Details of botanical tree plantation have been given in the previous question. In 2002, around 220 acres of wasteland situated behind the Institute was developed into Arogyadham with Herbal Garden (Aonla – medicinal plants), with the help of Jain Charities through JISL. Water was brought by a 5-6 km pipeline from Pawnsar river. Presently medicinal plants such as Aonla, Ritha, Karanj, Neem are grown

**\* Bio-hazardous waste management**

Collection, transport and disposal of biomedical waste (BMW) is outsourced and done on contractual basis. The Maharashtra Pollution Control Board has authorized an agency named M/s Superb Hygienics & Disposals Ltd. for disposing all Hospital waste as per the norms of the Maharashtra Pollution Control Board. All the waste is disposed off through this agency. Segregation is

done as per norms. Every fortnight, supervisory rounds are taken and BMW disposal report is submitted to the Medical Superintendent (Details are available on our website <<https://www.mgims.ac.in/index.php/hospital/bmw>>).

\* **E-waste management**

No policy exists for this yet

\* **Effluent treatment and recycling plant**

The effluent water is treated at the Effluent Treatment Plant which is constructed near the Laundry of Kasturba Hospital, Sevagram. It has a capacity of storing 30,000 litres and has 5000 litres HDPE Neutralizer, 5000 litre filter nutch for treating the effluent water.

\* **Recognition / certification for environment friendliness**

The Institute campus is green and lush with trees and plants. The garden section maintains the gardens and lawns and ensures beautification of the campus. Tree plantation is encouraged both for commercial and non-commercial purposes.

\* **Any other (specify)**

A new paper plant has just been started to recycle the waste paper and old hospital linen to make fresh recycled paper. The waste cloth and waste paper generated from the campus is used in the Handmade paper unit of the Mahila Mandal which makes files and other useful stationery in its unit. MGIMS recycles its paper and cloth waste to make file covers. The plastic and glass waste is also recycled.

**7.1.3 How does the institution ensure that robust infection control and radiation safety measures are effectively implemented on campus?**

**INFECTION CONTROL**

Infection control is a good indicator of the practices being followed in day to day services. Details of infection control have been given already in Section 4.2.1. The Hospital Infection Control Committee comprises of the Medical Superintendent (Chairman), Head of Microbiology Department (Convenor) and the Matron (Infection Control Nurse). Clinicians are members of the Committee. The Infection Control Committee at MGIMS has laid out well defined standard operating procedures (SOPs) for hospital infection prevention (See **Annexure 4I** for complete training manual). The Committee conducts regular meetings with clinicians and ward nurses. One of the major tasks of the committee is to organize training programmes for hospital personnel for the prevention of infection in the hospital.

Recently, on 10-11 Aug 2016, the Department of Microbiology in collaboration with the Department of Community Medicine had organized a training programme under the Labs.for Life project on Hospital Infection Control and Biomedical Waste Management for nurses and hospital attendants. These personnel were trained on the following aspects: importance of hand hygiene, spill management, surface disinfection, importance of Personal Protective Equipment, new guidelines of Hospital biomedical waste Management. A total of 150 participants were present on 10 Aug and 170 participants attended the repeat session on 11 Aug 2016 .

#### RADIATION SAFETY MEASURES

- Our institute follows the radiation safety guidelines prescribed by the Atomic Energy Regulatory Board (AERB) of India. All radiation emitting equipment ( i.e. X-ray machines and CT scan) are registered with AERB.
- Personnel Monitoring Service (TLD badge) is used to record the radiation doses received by individuals working in radiology and radiotherapy departments.
- Radiation safety information is displayed for patients in both the departments.
- Radiation protection programmes are conducted by Radiological Safety Officer (RSO) at least once in every year for radiation workers.
- Dose records are maintained for every individual by RSO and action is taken in case of any over-exposure.
- Periodic quality assurance programmes are conducted for radiation generating equipment and the record of results is maintained.
- Radiation protection survey is carried out at periodic intervals of time to ensure that the dose limits are controlled for radiation workers as well as general public.
- Radiation installations are so constructed to keep the radiation level as low as possible (ALARA).
- Radiation safety status report of Radiation installation is used to send to Atomic Energy Regulatory Board (AERB), Mumbai for every year.
- Radiation safety measures are implemented as per AERB regulation and following on updates in case of any.

#### **7.1.4 Has the institution been audited / accredited by any other agency such as NABL, NABH, etc.?**

No

## **7.2 Innovations**

### **7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the institution.**

#### **Low Cost Drug Initiative**

The aim of the low-cost drug initiative at MGIMS is to provide appropriate and affordable drugs to our patients.

Beginning 2010, we implemented a low-cost drug initiative at MGIMS aimed at providing appropriate and affordable drugs to our patients. This initiative to reduce the cost of drugs to the patient was made possible by first minimizing the 'supply chain effect' and then by overcoming the 'marketing effect'. We did this by using a multi-pronged strategy. We involved healthcare workers in making a list of essential drugs and surgical items and deleted from the list as many "me too" and irrational drugs as was feasible in our setting. We procured drugs at substantially cheap prices by inviting competitive quotations from drug distributors and used the electronic hospital information system to buy, stock and dispense drugs and surgical items.

There are huge differences between the costs of drugs available in the market depending on their brand. The costs of drugs in the market are unreasonably high. The market, obviously, keeps the drug for which they getting the highest commission. This results in unaffordability of drugs by poor patients which may in turn force them to opt out of taking the drugs altogether.

We made doctors and public aware of the benefits of the initiative and banned all drug representatives from showcasing their products in the hospital. We encourage our residents to prescribe drugs by their generic names.

Two 24 x 7 pharmacies are opened in the hospital premises to ensure that our registered inpatients and outpatients can access these drugs at affordable prices. We introduced computerized prescriber order entry (CPOE) to prescribe drugs. We also created e-prescriptions on the iPad app, specially designed for this purpose. The electronic applications help doctors identify drugs by both their generic names, check for their availability in the drug store and display their prices- thus minimizing prescription errors and improving the quality of evidence-based therapies.

Patients with catastrophic illnesses as well as those with chronic diseases have found significant difference in the cost of medications they buy at MGIMS compared to the market pharmacies. The low-cost drug initiative has substantially

reduced the cost of medical treatment at Kasturba hospital, both in outpatient and inpatient setting.

- Atorvastatin, a cholesterol reducing medication, for instance, sells at the medical store for Rs 7.60 per 10 tablets instead of Rs 78, MRP price printed on the brand-named leader.
- Similarly, Piperacillin Tazobactam, an antibiotic that doctors choose to treat their seriously ill patients with sepsis costs Rs 132 as against the market price of Rs 450.
- Ceftriaxone 1 g injection used to treat infections is available in the medical store for Rs 19.20 compared to Rs 48 that popular brands command.
- Patients with coronary heart disease, high-cholesterol levels, high-blood pressure and diabetes can have these four disorders treated with five evidence-based drugs (aspirin 75 mg, atorvastatin 10 mg, enalapril 5 mg, amlodipine 5 mg and metformin 1 g) for Rs 145 per month- less than Rs 5 per day.

During the year 2015, a total of 5,73,295 patients have been benefitted by this low-cost drug initiative. We believe that this initiative has reduced the out of pocket expenditure on drugs and has reduced the healthcare costs.

### **Kasturba Hospital introduces No-Q Card**

No-Q Card, as the name suggests, is a card which seeks to minimize long hours of waiting in queues and thus help patients enjoy a hassle-free experience at our hospital. No-Q Card is a unique ATM-like card (with pre-deposited cash) that can be easily and effectively used at various counters across the hospital to save time. On an average, the No-Q card helps patients save 90 minutes whenever they revisit the hospital, get tested and buy drugs. The card has been designed to provide patients efficiency, security and flexibility of digital payments.

At Kasturba Hospital patients have the option of getting a No-Q card made after presenting proofs of their identity and their mobile numbers. The card displays the CR number, card number, and his name. Patients can load money onto the card and once the money on the card runs out, they can recharge the card. The card guarantees them triple benefits. Patients can directly visit an OPD without standing at the registration counter for re-registering the visit. The visiting charges will automatically be deducted when the patient produces his card, and the visit is stamped at the OPD counter. They can directly go to the collection centers or the radiology department and get their tests done, without standing in the queue in the billing.



## **7.3 Best Practices**

**7.3.1 Give details of any two best practices that have contributed to better academic and administrative functioning of the institution.**

### **BEST PRACTICES AT MGIMS SEVAGRAM COMMUNITY MOBILIZATION FOR HEALTH ACTION**

#### **OBJECTIVES OF THE PRACTICE**

The Institute's Department of Community Medicine, MGIMS, Sevagram engages in community mobilization with the following objectives:

- To mobilize and empower community networks (with focus on women) for leadership in health
- To create platform for community dialogue in health
- To catalyze partnership between health and ICDS sector on one hand and Panchayati Raj Institutions, Village Health Nutrition and Sanitation Committees and other Community-based Organizations on the other hand for health gains

#### **THE CONTEXT**

Community Participation is a process by which people are enabled to become actively and genuinely involved in defining the issues of concern to them, in making decisions about factors that affect their lives, in formulating and implementing policies, in planning, developing and delivering services and in taking action to achieve change. It is an active two-way process that may be initiated and sustained both by individuals and community and by local authorities, health authorities and other local organizations.

A high level of community participation is very important for any programme to succeed. Under NRHM, several strategies were included to get a high degree of community participation in health. However, implementation of these strategies has been extremely poor in most of the states of India.

The Department of Community Medicine at MGIMS, Sevagram, is working with community-based organizations in more than 80 villages in Wardha district for almost two decades and has developed a model of community mobilization for health action.

#### **THE PRACTICE**

Over the last two decades, in the field practice area of MGIMS, Sevagram, a strong community network has been developed. The process of development of community network started with community mobilization and formation of community-based organizations. In an average-sized village a minimum of 3-4 women's self-help groups (SHGs), one 'Kisan Vikas Manch' (KVM - Farmer's Development Association) and one 'Kishori Panchayat' (KP - Adolescent Girls Forum) was constituted. These community-based organizations were oriented on health issues in the rural areas through discussion held during their monthly meetings. Later, Village Co-ordination Committee (VCCs) was constituted in every village by including representatives from each of these community-based organizations, Gram Panchayat, village informal leaders and frontline workers from health and ICDS.

The community-based program operated through the Village Co-ordination Committees (VCCs), thus constituted. These village committees entered into an agreement under this project where the VCC will ensure provision of essential maternal and child health services to the villagers, while MGIMS, Sevagram took responsibility to build capacity of these committees and develop tools and techniques for community-based activities to be done by the committees. With strong and sustained capacity-building in form of regular handholding for more than a year, the VCCs could take charge of community-based activities at village level. In most of the program villages, the VCCs participated in assessment of community health needs, developed village health plan, implemented the activities decided in coordination with other stakeholders, and monitored the community-based health activities in their respective villages. The community networks were especially effective in disseminating health messages in the village and for creating new social norms.

When guidelines for formation of Village Health Nutrition and Sanitation Committees (VHNSC) were issued by Government of Maharashtra under NRHM, we engaged with them and worked to build their capacity. Currently, we are working in more than 80 villages in Wardha. There are total 275 Self Help Groups and 89 Kishori Panchayats functional in the three PHC areas adopted by the department of Community Medicine. We also conduct Kiran clinics (Community owned health clinics) in 26 villages.

## **EVIDENCE OF SUCCESS**

The following table shows the changes observed endline and compares it with baseline level:

**Table: Change in MCH indicators from baseline to final estimate after implementation of CLICS (Community-led Initiatives for Child Survival)**

<b>Indicators</b>	<b>Baseline Estimate 2004</b>	<b>Final Estimate 2008</b>
% mothers of <1s receiving ANC package (at least 3 visits, 2 TT, consumed 100 IFA tablets)	<b>11.6%</b>	<b>58.9%</b>
% of husbands aware of at least 3 pregnancy danger signs	<b>13.2%</b>	<b>42.2%</b>
% mother of <1s delivered in health facility	<b>72.8%</b>	<b>90.7%</b>
% children <3s with at least 36 months interval after previous surviving child	<b>29.3%</b>	<b>49%</b>
% of children born Low Birth Weight	<b>29.4%</b>	<b>25%</b>
% mothers of <1s initiating breastfeeding within 1 hour:		
- knowledge/awareness	<b>0.6%</b>	<b>68%</b>
- practice	<b>0.9%</b>	<b>67.9%</b>
% mothers of <1s knowing at least 3 newborn danger signs	<b>11.3%</b>	<b>94.2%</b>
% of children (12-23 months) fully immunized	<b>62.4%</b>	<b>98%</b>
% of children (12-35 months) received Vitamin A dose in last 6 months	<b>53.6%</b>	<b>98</b>
% mothers of <3s knowing at least 2 signs of childhood illness requiring treatment	<b>29.5%</b>	<b>98.5%</b>
% of <3s suffering from diarrhea in last 2 weeks who received ORS/HAF	<b>6.8%</b>	<b>62.2%</b>
% of <3s -3 SD from the median weight for age	<b>22%</b>	<b>11.6%</b>

We also assessed maturity of Village Health Nutrition and Sanitation Committee using institutional maturity index specially designed for this purpose; it changed from first phase to the next phase. It changed from 58 to 77.

Several innovative activities have been initiated by the community-based organizations in every village of the program area.

#### **PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED**

Some of the challenges, we encountered in the process are:

- To bring people together from different socio-economic groups
- Community groups require a lot of initial “hand holding”
- Difficult to introduce health as a priority in their lives
- Bringing on board health department, ICDS and PRI is challenging

- Sustaining the motivation and enthusiasm of community-based organization in absence of funding support

While we were developing this program, we required a trained community organizer (a social worker) for every 4-5 villages. We also required provision for capacity building of community-based organization. For sustaining these activities, a social worker for 10-15 villages may do. However, what is more important is the community contribution of resources, mainly in terms of their time and interest.

### **Notes**

We acknowledge the support provided under various projects from Aga Khan Foundation (India), Aga Khan Foundation (USA) and USAID from 2000 to 2009. These supports were critical in developing the model of community mobilization for health action. After completion of Community-led Initiatives for Child Survival Program, MGIMS, Sevagram has made provision to sustain several elements of the initial program. Staff support under Phase III clinical trial on Bovine-Human Rotavirus Reassortant Pentavalent Vaccine (BRV-PV) from SIIL and PATH Vaccine Solutions and ICMR Advance Center for Community-based Research in Maternal, Newborn and Child Health been of great help.

## **BEST PRACTICES AT MGIMS SEVAGRAM HEALTH INSURANCE SCHEME**

### **OBJECTIVES OF THE PRACTICE**

MGIMS Sevagram's unique health insurance scheme creates health consciousness in community by making people responsible for their own health and the health of their community. It gives more strength to the Gram Sabha, makes it accountable for village health and forces it to take decisions for village development. It also provides health care facilities at doorsteps and arranges for hospitalization of those who need it. The scheme avoids charity and creates awareness of human rights.

### **THE CONTEXT**

When people fall ill, accessing health care leads to unexpected expenses. This invariably disturbs the entire budget of the household, more so in people who belong to the low socioeconomic strata of society. This out-of-pocket expenditure is worrisome to underprivileged families who often do not have so much cash in times of emergency. Using the concept of risk pooling, the MGIMS Health

Insurance Scheme allow individuals and entire villages to insure their health on an annual basis.

### **THE PRACTICE**

There are two main types of health insurance schemes that are carried out in the hospital – The Health Insurance Scheme and the Jowar Health Assurance Scheme. The main objectives of these two schemes are to create health consciousness in the community.

**Health Insurance Scheme:** An individual can insure himself and his family by paying Rs 400 a year and in return he gets 50% subsidy in OPD and indoor bills. In the month of December each year, these insurance cards are made and families need to show these cards during registration throughout the next annual year to avail subsidies on all bills.

**The Jowar Health Assurance Scheme:** Here each participating village is made responsible to pay a payment with the rest of the health expense being covered by the hospital with financial support from the central and state governments. This co-payment (hardly 10% of total amount spent on them) was in the form of a common fund created by the villager by collecting Jowar (sorghum) during the annual December harvest time. Each family in the village contributes based on the size of the individual families land holding. Thus families contribute according to their capacity but receives services according to their needs. The collected harvest is then sold to generate a fund which is then used to provide health assurance for the villagers by strengthening primary care services within the village, and also by subsidizing tertiary level health care for all the participants. This micro-finance health insurance scheme allows individual villages to get the benefit of universal health coverage. For a mere 10% equity it allows these villages to gain access to additional public health resources from the central and state government through Kasturba Hospital who picked up the additional 90% of the health care expenses.

### **EVIDENCE OF SUCCESS**

The health insurance scheme of the institute has won several accolades as it seeks to create health consciousness in the community. This scheme fulfills the very basic tenets of health care delivery.

In 2015-16, a total of 78830 health insurance cards were sold for 302158 members. 18807 families (86199 members) around Sevagram volunteered to obtain health insurance from this hospital. Forty villages were also insured (90210 individuals). The Jowar Health Assurance Scheme has succeeded in creating an environment of active self-participation in health care decision making by the villagers and made it accessible and affordable by linking it to existing

governmental resources. In 2015-16, 3561 families which comprised of 16519 individuals were enrolled in this scheme.

**PROBLEMS ENCOUNTERED AND RESOURCE REQUIRED**

Implementing this scheme requires the trust of the villagers. A sustained interaction with them and community mobilization is important to make this scheme work

*Any other information regarding Innovations and Best Practices which the institution would like to include.*

**Other best practice documents in the NAAC format are attached as Annexures:**

- ROME camp (Annexure 7C)
- Social Service camp (Annexure 7D)
- Orientation camp (Annexure 7E)
- Low Cost Drug Initiative (Annexure 1R)
- Clinical Forensic Medicine Unit (Annexure 1Q)
- Hospital Information System (Annexure IT)

## **POST ACCREDITATION INITIATIVES**

The major institutional features that define Mahatma Gandhi Institute of Medical Sciences, Sevagram are as follows:

1. The institution believes in producing health professionals with a sound community orientation in tune with Gandhian philosophy. The institute has developed a model of community oriented medical education which is based on the changing needs of the country.
2. Kasturba Hospital and Mahatma Gandhi Institute of Medical Sciences (MGIMS) are one of the best examples of public-private partnership working to the advantage of the public. The institute runs on funding from the Government of India (50%), Government of Maharashtra (25%) and the Kasturba Health Society (25%). The MGIMS is an excellent exemplar of a 'not-for profit' hospital which combines the efficiency and missionary zeal of private voluntary sector, and the concern for access of services and high coverage, compliance to rules and equal opportunities in employment of the public sector.

Summarized below are the initiatives taken by the institute after the first accreditation visit of NAAC in 2011.

### **CURRICULAR ASPECTS**

1. MGIMS follows the curriculum of its affiliating university Maharashtra University of Health Sciences (MUHS), Nashik and Medical Council of India
2. The institute is well represented by its faculty in MUHS. One faculty member is in the Management Council and Academic Council of MUHS. He was appointed as Acting Pro- Vice Chancellor of MUHS for a few months. Two faculty members are in the Faculty of Medicine in the University. Eight members are on the MUHS Board of Studies and they represent our feedback to MUHS.
3. At least 15 faculty members have been invited as experts or consultants to design or review different curricula at national, international, and University levels
4. The institute offers courses in MBBS, 19 MCI recognized PG degrees and 9 diplomas as well as PhD in 9 disciplines
5. Several new programmes have been launched to impart skills to students: neonatal resuscitation and BLS and ACLS workshops, communication skills

- workshop, good study skills workshop, bioethics module, research methodology workshop etc.
6. Feedback is regularly collected from students and analyzed. These inputs are used for improvement of academic systems and infrastructure.

## **TEACHING, LEARNING AND EVALUATION**

1. The institute has changed its admission process from 2016. Now all admissions are done based on NEET scores as per the Supreme Court guidelines.
2. MCI has given permission to increase the number of MBBS seats per year from 65 to 100.
3. All students are required to complete 2 years rural service before they are eligible to apply to the postgraduate course
4. Orientation programmes are in place for new MBBS students, interns and postgraduate students when they join these courses.
5. Good clinical material and adequate learning resources are available.
6. The institute has a vibrant Medical Education Unit and carries out several faculty development activities. Around 10 faculty members have done advanced courses in medical education including Masters and FAIMER Fellowships and are used as master trainers.
7. Training in basic medical education technology has been made mandatory for all teachers All postgraduate teachers have to attend Research Methodology Workshop to be eligible to be guides.
8. The institute has introduced new workshops on developing good study skills, bioethics, VIHASA (values in health care- a spiritual approach) and communication skills for undergraduate students.
9. The institute has started an e-learning initiative. At the moment it is in phase two where most faculty have been trained in using MOODLE platform. The Medical Education Unit is involved in reviewing the e-learning modules which are being prepared by teachers
10. Teachers have started preparing lesson plans and teachers' portfolios have been introduced
11. Newer methods such as problem based learning, case based learning, reflective writing and skills training using mannequins have been introduced in several departments. MGIMS Institute of Simulation Training conducts AHA accredited BLS and ACLS courses.
12. Students of I MBBS have been given time in the teaching schedule for self directed learning based on their feedback
13. Several amendments to the assessment system have been brought about due to improvements in the university- double evaluation, CCTV installation, online transfer of marks, development of question banks in MUHS etc



14. Training as well as assessment of students in the community is a unique feature of MGIMS

## **RESEARCH, CONSULTANCY AND EXTENSION**

1. Undergraduate students are encouraged to take up research projects under ICMR-STS scheme or MUHS funded research schemes. A new award for best undergraduate research has been initiated by the institute. The institute has also agreed to grant Rs 3 lakhs per year to fund undergraduate student projects which do not receive external funding from this year.
2. The Institute has a provision of seed fund of Rs. 10 lakhs every year to provide financial support to the research projects of postgraduate students. Over Rs. 21 lakhs were sanctioned for 96 PG students through this scheme during 2011-16
3. Funded research: Between 2011-16, 85 research grants worth Rs 25.18 crores were sanctioned for research projects by various national and international agencies in various departments of the institute.
4. A total of 773 papers were published in peer reviewed journals in the last five years.
5. Faculty members have been providing expert advice and consultancy to several national and international agencies.
6. MGIMS Academy of Medical Sciences and the Journal of MGIMS are two avenues for dissemination of scientific work
7. Strong linkages with the community allow us to teach and train our graduates in the field beyond the walls of a medical college, carry our community oriented teaching innovations and conduct extension work in the community
8. Community Mobilization: Community-based programs have been consistently implemented to enhance health care services. The institute has adopted three primary health centres and developed a model of decentralized healthcare delivery at village level through Community-based Organizations and the Panchayati Raj Institutions. It has formed 275 Self-help groups, 10 Kisan Vikas Manch and 89 Kishori Panchayats in the adopted villages
9. The institute has started a 50 bedded Dr Sushila Nayar Hospital in Utawali in the tribal area of Melghat in the Amravati district. The area is prone to malnutrition related deaths among Korku adivasi tribes. The multi-specialty hospital has been constructed with a budget of about five crores and started functioning in its new building from Feb 2016.
10. The institute's faculty participate in radio talks on health issues on a programme called Seva bhaav
11. In November 2013, Kasturba Hospital was identified as a key hospital in Vidarbha to run Rajiv Gandhi Jeevandayi Arogya Yojana. This health

- package has been implemented throughout the state of Maharashtra. The main objective of the scheme is to improve health access of Below Poverty Line (BPL) and Above Poverty Line (APL) patients.
12. Queen Elizabeth Diamond Jubilee Trust through Indian Institute of Public Health , Hyderabad has sanctioned a grant of Rs 2 Crores to implement project on Screening for Diabetic Retinopathy in Wardha District as a pilot project in Maharashtra state

## **INFRASTRUCTURE AND LEARNING RESOURCES**

1. Large scale infrastructural changes have occurred since the 2011 visit. Kasturba Hospital has increased its bed strength to 934 beds: 690 teaching beds, 100 service beds, 32 private rooms and 62 beds in different intensive care units and 50 beds in Utwali
2. In 2012, MGIMS added a new modern building which houses all the services provided by the Department of Medicine. The state of the art construction spread over 70000 sq ft area, comprises of an outpatient department, triage facility, medical wards, a 26 bedded ICU, facilities for endoscopy, hemodialysis, cath lab, a pharmacy, prayer room and a well equipped conference and seminar room with all modern amenities.
3. In 2014, the MOHFW, Govt of India, under the aegis of National Health Mission approved the setting up of a model MCH wing for comprehensive reproductive, maternal, newborn and child and adolescent health (RMNCH+A) at MGIMS Sevagram.. The MCH wing has beds for Obstetrics and Gynecology and Pediatrics and Neonatology. It includes the outpatient department, antenatal and postnatal wards, high dependency units, operation theatres, sick newborn critical unit, labour rooms, obstetric intensive care units, skills labs and other such areas. The project costs over 26 crores.
4. MGIMS has a distinction of developing nation's first Clinical Forensic Medicine Unit (CFMU). The CFMU has been established to work hand-in-hand with the accident and emergency centre in the casualty. The unit is headed by the Department of Forensic Medicine and Toxicology and handles all medico-legal cases under direct supervision of experts from the Department.
5. The Institute's radiotherapy department has installed state-of-the-art equipment for treatment of cancer patients including advanced dual energy linear accelerator with intensity modulated radiotherapy (IMRT) with 3D conformal radiotherapy (CRT) with multiple electron beam, simulator, and HDR brachytherapy
6. Kasturba Hospital has constructed a brand new state-of-the-art operation theatre (OT) complex, adjacent to the existing OT complex. This complex

- constructed over 15000 square feet, has facilities catering to all super-specialities and will double the number of existing operation theatres. The new OT complex features ten modular OT suites, an intensive care unit and pre-operative assessment ward with ten beds each, two recovery rooms and a medical store.
7. In 2014, Kasturba Hospital added a cardiac catheterization lab to the facilities it offers to patients. A 5000 square feet cardiology block has been built on the first floor of the newly built Medicine complex
  8. The three laboratories of MGIMS in the Departments of Pathology, Biochemistry and Microbiology have been nominated under the “Labs for Life” project of CDC, NACO and Ministry of Health and Family Welfare (MOHFW) to improve the quality of laboratory services, effectiveness and efficiency of public health laboratories under MOHFW.
  9. The Govt of India has sanctioned a Rs 2 crore project for National Emergency Life Support Training centre and construction is almost complete
  10. The institute has an advanced Hospital Information System. Faculty and students can access patient information through a special app on their iPads at the bedside. The system also has facility for Picture Archiving and Communication System (PACS) which allows clinicians to look at radiological images from their computers
  11. The entire campus (including hostels, faculty residences and peripheral health centres) is connected through high speed wifi.
  12. A 24x7 dedicated library server has been accommodated in the server room of the HIS. The library management software was also upgraded to the latest version SLIM21. This software is designed to automate the library with features such as cataloguing, circulation, webOPAC, digital library, Dcoll module and smart card interface. The library subscribes to a large number of journals. Several open access resources such as UpToDate and journals are available through the DELNET network through the campus wifi.
  13. No-Q Card is a unique ATM-like card (with pre-deposited cash) that can be easily and effectively used at various counters across the hospital to save time. On an average, the No-Q card helps patients save 90 minutes whenever they revisit the hospital, get tested and buy drugs.
  14. Residents and clinicians can request a bedside consultation (routine or emergency) by using the electronic doctor desk of the Hospital Information System.
  15. CCTV coverage has been provided in the institute and hospital. Fire safety devices have been provided in all sections and fire training has been conducted periodically.

## **STUDENT SUPPORT AND PROGRESSION**

1. The activities of the mentoring cell have been streamlined and made more structured
2. Students guidance and counseling centre has been started
3. Book bank schemes are available for poor and disadvantaged students. Poor and needy students are supported financially through government schemes and alumni contributions.
4. A group of undergraduate students called the White Coat Army has taken the initiative to spread awareness about tobacco and alcohol addiction to relatives and patients in the hospital and the community. They have covered over 1000 people. They also conduct sessions for first year students on how to handle peer pressure and say no.
5. Students Grievance Redressal Cells are in place
6. Two new hostel blocks for undergraduate and postgraduate male students have been constructed to meet the demands of increased numbers of students.
7. The Students' Council is very active and conducts several activities all through the year.
8. A complete electronic database of alumni has been created. The Alumni association has been registered. Alumni are active on the social network and create bonds with the present students. Alumni have also returned to their adopted villages and contributed towards village development activities

## **LEADERSHIP AND GOVERNANCE**

1. The management and leadership align their policies with the vision and mission of the institute
2. Kasturba Health Society contributes to 25% of the total annual expenditure. KHS raises this amount through donations from philanthropic organizations and resource mobilization through its stakeholders
3. The functioning of the institute is decentralized and several institutional committees comprising of faculty, non teaching staff and students look after different aspects of governance and administration
4. Efforts are on to implement e-governance strategies and making functioning more efficient. Most sections including students section, accounts section, personnel section etc are linked through the hospital information system. Every faculty and student has an email ID using the mgims.ac.in intramail. Communication has become paperless
5. The Internal Quality Assurance Cell (IQAC) has been established. It collates feedback from students, faculty, parents and alumni. It also monitors quality through its inputs to the curriculum committee and departments

6. Besides constitutional reservation, seats are reserved for the differently abled, women candidates, students from rural areas
7. The institute has a mechanism for merit based personal promotion scheme. It permits faculty to engage in advanced training and return and establish specialty areas. Reimbursement or international and national travel to conferences has been raised.
8. The Parent Teacher Association has been registered

## **INNOVATIONS AND BEST PRACTICES**

1. The institute promotes environmental friendly initiatives: tree plantation, water harvesting, solar panel installation, recycling of paper and fabric, effluent treatment and recycling plant. The institute promotes health lifestyle through cycling. Interest free loans are available to purchase cycles
2. The curriculum tries to foster global competencies to its students with its unique curricular innovations such as: Orientation camp in Gandhi ashram, village adoption scheme and social service camp, ROME camp and rural placement scheme
3. The health insurance scheme of the institute has won several accolades as it seeks to create health consciousness in the community. A villager can insure himself and his family by paying Rs 400 a year and in return he gets 50% subsidy in OPD and indoor bills. In 2015-16, 18807 families (86199 members) around Sevagram volunteered to obtain health insurance from this hospital. Similarly 40 villages were totally insured and 90201 rural people were insured under this scheme.
4. Over the last five years, the institute implemented a low-cost drug initiative which aims to provide appropriate and affordable drugs to patients. We have introduced computerized prescriber order entry (CPOE) to prescribe drugs. We also created e-prescriptions on the iPad app, specially designed for this purpose.



**EVALUATIVE REPORTS  
OF  
DEPARTMENTS  
(Submitted as separate document)  
Also available on**

**[https://www.mgims.ac.in/files/NAAC/departmental\\_profiles.pdf](https://www.mgims.ac.in/files/NAAC/departmental_profiles.pdf)**

**ANNEXURES**  
**(Submitted as separate document)**  
**Also uploaded section-wise on**  
**<https://www.mgims.ac.in/index.php/academics/naac>**





# MAHATMA GANDHI INSTITUTE OF MEDICAL SCIENCES

Sevagram : Wardha (Dist.) - 442 102, MAHARASHTRA STATE

**Dr. K. R. Patond**  
Dean

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## Declaration by the Head of the Institution

I certify that that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

 16.9.16

Dr KR Patond  
Dean, MGIMS

Signature of the Head of the institution with seal

Place: Sewagram

Date: 15-9-2016



# MAHATMA GANDHI INSTITUTE OF MEDICAL SCIENCES

Sevagram : Wardha (Dist.) - 442 102, MAHARASHTRA STATE

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## Certificate of Compliance

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that the Mahatma Gandhi Institute of Medical Sciences, Sevagram fulfils all norms

1. Stipulated by the affiliating University (Maharashtra University of Health Sciences, Nashik) and/or
2. Regulatory Council/Body [MCI] and
3. The affiliation and recognition is valid as on date.

In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

**Date:** 15 Sep 2016

**Place:** Sevagram

 16.9.16

**Dr KR Patond**  
Dean, MGIMS

(Name and Signature with Office seal)

