Research Article

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Perception of medical teachers towards existing graduate medical education regulations 1997

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ABSTRACT

Background: The Medical Council of India (MCI) published "regulations on graduate medical education, 1997". No study is available on perception of medical teachers about these regulations. It was planned to study perception of Medical teachers at Government Medical College, Nagpur towards Medical Council of India's Graduate Medical Education Regulations (GMER) 1997.

Methods: Cross sectional study was conducted among 150 teachers working at GMC, Nagpur, from July 2014 to January 2015. Data was collected using validated self-administered questionnaire using likert scale. Data was entered in excel sheet and percentage were calculated.

Results: More than 75 percent teachers agreed with eligibility criteria for admission to MBBS, duration of MBBS and internship, phase wise distribution of subjects of MBBS, curriculum designed for respective subjects of MBBS. More than 70 percent of teachers were satisfied with existing system of internal assessment and were of opinion that Attendance should be given weightage for internal assessment. About 28 percent teachers said continuation of multiple choice questions in theory examination should be stopped. About 32 percent teachers said previous pattern with 50% weightage to theory and practical each and no internal assessment examination was better. Many teachers suggested changes to the curriculum and gave opinion about MCI Regulations.

Conclusions: Majority of the teachers agree with eligibility criteria of MBBS admission, duration of MBBS and internship, phase wise distribution and curriculum designed for respective subjects and are satisfied with existing system of internal assessment. Teachers opine that curriculum should be clinically oriented, applied and should cover practical aspects.

Keywords: GMER 1997, MCI, Medical teachers

INTRODUCTION

The Medical Council of India was established in 1934 under the Indian Medical Council Act, 1933, now repealed, with the main function of establishing uniform standards of higher qualifications in medicine and recognition of medical qualifications in India and abroad. It was felt that the provisions of Indian Medical Council Act were not adequate to meet with the challenges posed

by the very fast development and the progress of medical education in the country. In 1956, the old Act was repealed and a new one was enacted. This was further modified in 1964, 1993 and 2001. 1,2

"Regulations on graduate medical education, 1997" were published in Part-III section four of the gazette of India on 17th May 1997.³ Maharashtra University of Health Sciences, Nashik has accepted it and implemented the

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same in its affiliated colleges from 1999.⁴ There are many changes in relation to phase distribution, timing of examination, curriculum and pattern of examinations including internal assessment examination in these regulations.

No study is available about opinion or perception of Medical teachers towards these regulations. Therefore the aim was to study perception of Medical teachers in Govt. Medical College, Nagpur towards Medical Council of India's Graduate Medical Education Regulations 1997 related to students, teacher, teaching and learning.

METHODS

Present descriptive cross-sectional study was planned among Teachers at Government Medical College, Nagpur from July 2014 to January 2015. Approval from Institutional Ethics committee was obtained (vide letter No. 526 /EC/Pharmacy/GMC/NGP Dated 14th August 2014).

Latest Department wise list of all teachers working in Govt. Medical College, Nagpur was obtained from Dean office. A feedback questionnaire was prepared on the following areas in the regulations,

- Phase distribution and timing of the examination.
- Subject wise curriculum.
- Examination pattern including internal assessment examination.

The questionnaire was based on five point likert scale. The questionnaire was distributed to few experts for validation and necessary corrections were made. Validated feedback questionnaire, consent form along with rationale and objectives of the study were distributed to teachers through Professor and Head of the Department. Out of the 274 medical teachers who were invited to participate in the study, only 150 teachers have consented to participate. Thus, total sample size was 150. Data collected was entered in excel sheet. Percentage was calculated.

RESULTS

Out of 20 departments at GMC, Nagpur 16 responded. Department of Medicine, Orthopedics, Radio-Diagnosis and Radio-Therapy have not participated in this study. Thus, out of 274 teachers from all departments only 216 remained eligible. Of these 150 participated (response rate: 69.4%). Maximum response rate was from departments of ENT (100%) and pulmonary medicine (100%) whereas it was least in obstetrics and gynecology (31.5%) and anesthesiology (33.3%).

Maximum participants i.e. 70 (46.67%) had undergraduate teaching experience of 6 to 15 years. There

were 33 (22%) participants with more than 20 years of experience.

Most of the teachers 140 (93.33%) agreed on the present eligibility criteria for admission to MBBS. Majority of them, 126 (84%) agreed upon current duration of MBBS and internship. Among 20 participants who disagreed upon current duration of MBBS and Internship 18 (12.66%) suggested changes. Most of them suggested decrease in duration of MBBS to four years, few of them suggested reduction of internship duration to six months. While some of the teachers suggested increase in the duration of MBBS course. Relatively greater proportion of teachers disagreed upon the current duration of phases 58 (38.67%). Many of them suggested that previous pattern of three semesters in each phase was better. Seventeen teachers opined that the duration of second phase should be reduced to two semesters. While some commented that Phase-I to be increased to three semesters or should be at least complete calendar year considering late admissions. Majority of the teachers 113 (75.33%) agreed upon the phase wise distribution of the subjects and current curriculum for respective subjects. Many of the teachers suggested some changes to the current curriculum (Table 1).

Most of the participants agreed upon existing system of internal assessment for MBBS i.e. 116 (77.33%). Similar finding was noted for weightage of 20% marks for internal assessment 110 (73.33%) and number of internal assessment examinations 111 (74%) (Table 2).

Majority of the teachers were in favour of continuing internal assessment examinations in future 117 (78%); one of the teachers was of the opinion that only Prelim examination should be considered for internal assessment. Very few opined that internal assessment should be abolished as it is misused in private colleges.

About role of internal assessment examination in improvement of academic performance of students, 112 (74.67%) responded definitely yes and yes. When asked about role of internal assessment examinations in preventing students from attending regular classes mixed responses were obtained i.e. 53 (35.33%) responded definitely yes and yes and 73 (48.66%) responded no and definitely no.

Majority of the participants responded that there should be weightage for attendance in internal assessment 105 (70%). Regarding percentage weightage for attendance in internal assessment, it opinion varied widely amongst teachers ranging from 0 to 100% (Table 3).

Teachers were asked opinion regarding pattern of university examination. Majority of the participants fully agreed and agreed on criteria of 75% attendance for appearing in university examination 133 (88.66%).

Table 1: Perception of medical teachers regarding phase distribution, timing of examination and curriculum for respective subject.

Domain	Response							
	Fully agree	Agree	Uncertain	Disagree	Completely disagree	No response	Total	
Eligibility criteria for	54	86	1	7	00	2	150	
admission to MBBS	(36.00)	(57.33)	(0.67)	(4.67)	(00)	(1.33)	(100)	
Duration of MBBS a	nd 52	74	4	18	2	00	150	
internship	(34.67)	(49.33)	(2.67)	(12.00)	(1.33)	(00)	(100)	
Duration of phases of	f 27	54	5	47	11	6	150	
MBBS.	(18.00)	(36.00)	(3.33)	(31.33)	(7.33)	(4.00)	(100)	
Phase wise distribution	on 38	75	11	22	2	2	150	
of subjects of MBBS	. (25.33)	(50)	(7.33)	(14.67)	(1.33)	(1.33)	(100)	
Curriculum designed for respective subject of MBBS	')'1	86 (57.33)	4 (2.67)	28 (18.67)	2 (1.33)	3 (2.00)	150 (100)	

Table 2: Perception about pattern of internal assessment examination.

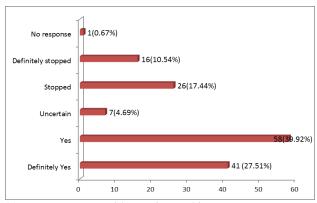
	Responses								
Domain	Fully agree	Agree	Uncertain	Disagree	Completely disagree	No response	Total		
Existing system of interr	nal 39	77	10	18	6	0	150		
assessment for MBBS	(26.00)	(51.33)	(6.67)	(12.00)	(4.00)	(0)	(100)		
Weightage of 20% mark	s 33	77	7	20	7	6	150		
for internal assessment	(22.00)	(51.33)	(4.67)	(13.33)	(4.67)	(4.00)	(100)		
Number of internal	31	80	9	19	5	6	150		
assessment examinations	(20.67)	(53.33)	(6.00)	(12.67)	(3.33)	(4.00)	(100)		

Table 3: Perception about pattern of internal assessment examination.

	Responses							
Domain	Definitely Yes	Yes	Uncertain	No / Stopped*	Definitely No/ Definitely stopped*	No Response	Total	
Continuation of internal assessment examination in future	48 (32.00)	69 (46.00)	8 (5.33)	11* (7.33)	11* (7.34)	3 (2.00)	150 (100)	
Role of internal assessment examination in improvement of academic performance of students.	42 (28.00)	70 (46.67)	14 (9.33)	22 (14.67)	1 (0.67)	1 (0.67)	150 (100)	
Role of internal assessment examinations in preventing students from attending regular classes	7 (4.67)	46 (30.67)	22 (14.67)	68 (45.33)	5 (3.33)	2 (1.33)	150 (100)	
Weightage for attendance in internal assessment.	42 (28)	63 (42)	12 (8)	23 (15.33)	8 (5.33)	2 (1.33)	150 (100)	

Regarding continuation of practice of multiple choice questions in theory examination, 99 (66.44%) responded

definitely yes and yes; whereas 42 (28%) responded as stopped and definitely stopped (Figure 1).



*1 response was yes with negative markings.

Figure 1: Opinion about continuation of practice of multiple choice questions in theory examination (n=149*).

It was observed that as the duration of experience increases, opinion about discontinuation of MCQs in theory examination increased. It was 13.16% among those having experience upto five years; while it was 39.39% among the teachers whose experience was more than 20 years. This shows that majority of senior teachers were not in favour of continuation of MCQs in Theory Examination.

Participants were asked if previous pattern with 50% weightage to theory and practical each and no internal assessment examination was better. Majority of the responses were in negation, i.e. No 71 (47.33%) and definitely No 11 (7.33%) (Figure 2).

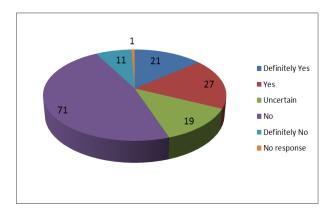


Figure 2: Opinion about the pattern of examination before implementation of MCI regulations 1997.

More than half of the study participants 78 (52.00%) responded to have knowledge about MCI Graduate medical education regulations (Figure 3).

Teachers were asked open ended question on opinion about MCI regulations. Most of the teachers opined that they are poorly implemented and there should be strict enforcement even in Government Colleges.

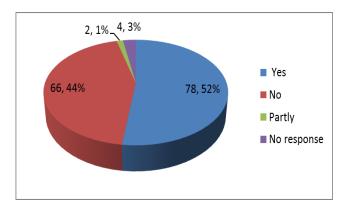


Figure 3: Knowledge about MCI Graduate medical education regulations 1997.

DISCUSSION

Study about Perception of Medical Teachers towards existing Graduate Medical Education regulations 1997 was conducted among Medical teachers of Government Medical College, Nagpur. Graduate medical curriculum is oriented towards training students to undertake the responsibilities of a physician of first contact who is capable of looking after the preventive, promotive, curative & rehabilitative aspect of medicine.³

Medical Council of India published Vision 2015 document in 2011, in view of this background this study will be more useful as Vision 2015 has recommended many changes in undergraduate curriculum.⁵

Response rate was only 69.4 percent. Also, departments of Medicine, orthopedics, radio-diagnosis and radio-therapy did not participate in this study. Therefore the contribution of important departments involved in undergraduate teaching towards the study results is lacking.

More than 75 percent teachers agreed with eligibility criteria for admission to MBBS, duration of MBBS and internship, Phase wise distribution of subjects of MBBS; however about 40 percent teachers disagreed with duration of phases of MBBS. Most of the disagreement was on the Phase I and II.

Though majority of the teachers agreed upon the current curriculum for respective subjects, many of them suggested some changes.

Anaesthesia- Airway management and basic life support to be included. More clinically oriented exams should be there.

Anatomy - More clear guidelines regarding what is must know, what is desirable to know for students should be given.

Biochemistry - Certain practical syllabus- qualitative test (few) are to be withdrawn from syllabus because they are

not in use practically now a days. Newer investigations and techniques should be incorporated.

Forensic Medicine and Toxicology (FMT) - There should be clinically oriented teaching in FMT, along with clinical postings for students covering practical aspects. Marks should be allotted to Autopsy in examinations. This finding is supported by an article by Sharma BR et al wherein they have stated that According to the MCI 'regulations on graduate medical education, 1997, the medical student at the end of undergraduate program should be able to become an exemplary citizen by observation of medical ethics and fulfilling social and professional obligations, so as to respond to the national aspirations. However, the important fact that the undergraduate training should be directed to the type of problems, which every doctor may face in practice when he/she qualifies, has been overlooked.

Microbiology - More stress should be upon clinical and applied Microbiology including immunology.

Pathology – Tests currently used should be included in the syllabus. Update syllabus frequently relating to current practice.

Pharmacology Pharmacology practical should be removed and instead of that clinic oriented practicals should be incorporated.

Community Medicine – Chapter on environment should be framed in clinically relevant sense. Syllabus in first phase should be incorporated in phase two. Topics like sociology, ethics, CPA should be covered in subsequent semesters. Community medicine teaching should start from second MBBS. Syllabus should be more practical oriented, skill based, applied and more focused on community activities.

Pulmonary medicine- Should be given adequate posting.

Thus, most of the teachers opined that curriculum should be clinically oriented, applied and should cover practical aspects. Supportive to this opinion, Tayade et al studied impact of early clinical exposure on First M.B.B.S. students and found that early clinical exposure was better learning methodology than traditional teaching for medical students in Indian Scenario. Patel B et al, studied "attitude of perception of faculties towards teaching evidence based medicine to pre-clinical & paraclinical medical students". They found that, 83% of faculties agreed that they are interested in more learning and improving skills necessary to incorporate Evidence based medicine into their discipline.

More than 70 percent of teachers were satisfied with existing system of internal assessment. About 70 percent of teachers were of opinion that Attendance should be given weightage for calculation of internal assessment marks. About 28 percent teachers felt that continuation of

practice of multiple choice questions in theory examination should be stopped. It was observed that as the duration of experience increases, opinion about discontinuation of MCQs in theory examination also increases About 32 percent teachers felt that previous pattern with 50% weightage to theory and practical each and no internal assessment examination was better.

Strikingly, only 78 (52%) responded to have knowledge about MCI Graduate medical education regulations. Though they had knowledge about its components many were unaware that they are implemented through this regulation.

Teachers were asked open ended question on opinion about MCI regulations. Most of the teachers opined that they are poorly implemented and there should be strict enforcement even in Government Colleges. Other important opinions of the teachers were,

Student- teacher ratio should be improved. There should be practical orientation to the subject.

Teaching style can be improved by use of newer technology like power point. Many studies conducted on the perception of students for use of different teaching methods indicate the similar finding. ⁹⁻¹¹

Teachers opined that, copy of regulations should be available in every department. Curriculum should be prepared, checked and reviewed by subject expertise and amended if necessary time to time. MCI should develop online networking for (24x7) access. There should be effort to reduce the MBBS course duration to four years to reduce overall time for beginning the carrier. This can be done by clubbing up Physiology and Biochemistry as per older curriculum. Reducing the portion from common study areas like PSM, paediatrics, and medicine and avoiding repetition of topics. To include anaesthesia (in the name of emergency medicine) for improving emergency skills at UG level at some stage in final year.

Many said that conduction of PG entrance exam after final MBBS exam will definitely improve the quality of MBBS graduates as well as skills of interns.

Overall majority of teachers were satisfied with existing system of graduate medical education regulations.

Study had a few limitations like departments like medicine, orthopaedics, radio-diagnosis and radio-therapy have not participated in this study. Overall response rate among the Medical teachers was only 69.4 percent. Therefore perception of about 30 percent of teachers could not be recorded.

Thus, majority of the teachers agree with eligibility criteria for admission to MBBS, Duration of MBBS and internship, Phase wise distribution of subjects of MBBS and Curriculum designed for respective subjects of

MBBS. Most of the teachers opine that curriculum should be clinically oriented, applied and should cover practical aspects. Majority of the teachers are satisfied with existing system of internal assessment for MBBS and are of the opinion to continue it in future. Few teachers however opine that internal assessment examinations prevent students from attending regular classes. Majority of the senior teachers are not in favour of continuation of MCQs in Theory Examination and feel that previous pattern with 50% weightage to theory and practical each and no internal assessment examination was better. Teachers have given important suggestions for improvement of curriculum of their respective subject and about MCI Regulations.

CONCLUSION

Majority of the teachers agree with eligibility criteria of MBBS admission, duration of Mbbs and internship, phase wise distribution and curriculum designed for respective subjects and are satisfied with existing system of internal assessment. Teachers opine that curriculum should be clinically oriented, applied and should cover practical aspects.

Recommendations

Therefore it is recommended that, attendance of the students should be given weightage in calculation of internal assessment marks so that student will attend the classes on regular basis. MCI should rethink about duration of phases of MBBS course as about 40 percent teachers disagreed with existing duration of Phases of MBBS course. Subject wise curriculum should be framed in such a way that it should be clinically and practically oriented. Teachers should be informed about MCI Graduate Medical Education Regulations as only 52 percent teachers knew about these regulations.

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