

# Perception of Medical Faculties towards Early Clinical Exposure and MCI Vision 2015 Documents in Western Maharashtra

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## ABSTRACT

**Introduction:** The Medical Council of India (MCI) has advocated early clinical exposure for students in medical colleges. In its 'Vision-2015' document for further reforms in undergraduate medical education, the MCI underlined the need for clinical teaching from first year onwards in medical colleges.

**Aim:** Our aim was to collect and analyse perception of medical faculties towards early clinical exposure and MCI Vision 2015 and to study the awareness, depth and interest among medical faculties towards these changes.

**Materials and Methods:** We used 10-item self developed survey questionnaires, which was validated from experts in medical education. 10-item questionnaire was based on awareness, depth and interest among medical faculties towards early clinical exposure and MCI Vision 2015 documents released by MCI in 2011. Qualitative data was assessed using percentage scale.

We were approached to 182 preclinical medical faculties, however responses were received from 127 medical faculties from first year medical course subjects from six different college's viz. two from Deemed University, two from Government sector and two from private sector but affiliated to Maharashtra University of Health sciences, Nasik, India.

**Results:** A 94.48% faculty members were aware regarding MCI Vision 2015 documents released by MCI in 2011. Average 12% faculties could answer specific approach MCQs based on MCI Vision 2015 documents. However, 82.67% faculties agreed early clinical exposure will be definitely helpful if implemented in curriculum.

**Conclusion:** The present work underlines need of special coaching and attention towards this important issue in medical education.

**Keywords:** Medical education, Traditional teaching pattern

## INTRODUCTION

It is a traditional pattern to learn theory for two to three years before seeing it applied in practice followed in medical schools across India. Syllabus from medical colleges need to be regularly updated along with latest advances learning process in order to improve the attitude of medical students [1,2]. Syllabus needs to be updated and revised regularly. Early clinical exposure and its concomitants ensure well integrated knowledge of the basic sciences, clinical sciences and social functions [3]. The Medical Council of India (MCI) has advocated early clinical exposure for students in medical colleges. In its 'Vision-2015' document for further reforms in undergraduate medical education, the MCI underlined the need for clinical teaching from first year onwards in medical colleges. Medical faculties can play vital role in application of early clinical exposure based teaching [4]. In its vision 2015 MCI also underlines need of horizontal and vertical integration pattern in curriculum. Recently from 2015 MCI also added Medical Bioethics as new subject in medical curriculum. The subject is introduced in horizontal and vertical integration pattern. Most of the universities in India actively applied these changes. Early clinical exposure may be one route for it. With this background the present study was planned to study perception of medical faculties towards early clinical exposure and MCI Vision 2015 documents. Our aim was to collect and analyse perception of medical faculties towards early clinical exposure and MCI Vision 2015 and to study the awareness, depth and interest among medical faculties towards these changes.

## MATERIALS AND METHODS

The present survey based qualitative study was approved by Institutional Ethical Committee from university, Pravara Institute of Medical Sciences, Loni. A 10-item self developed survey questionnaires, which was validated from experts in medical education two professors from BJ Medical College, Pune and two associate professors from KN Medical College, Pune.

A 10-item questionnaire (Annexure 1) was based on awareness, depth and interest among medical faculties towards early clinical exposure and MCI Vision 2015 documents released by MCI in 2011. Qualitative data was assessed using percentage scale.

The questionnaires were distributed in six medical colleges in western Maharashtra restricted to only first year medical faculties. We were approached 182 preclinical medical faculties, however we received responses from 127 medical faculties from first year medical course subjects from six different college's viz. two from Deemed University, two from Government sector and two from private sector but affiliated to Maharashtra University of Health sciences, Nasik. The purpose of study, background, our aim & objectives were explained before inclusion in study. Prior informed written consent was obtained after explaining the procedure and purpose of study. In present study, sample size was determined by using Probability Proportionate Random Sampling (PPRS) technique with the help of expert statistician. In present study we decided 50% criteria using Probability Proportionate Random Sampling technique for sample size determination from Government colleges, Private colleges and Deemed university medical colleges. Hence we planned to collect results from 2 Government medical colleges, 2 private medical colleges and 2 Deemed university medical colleges from western Maharashtra. Sample size confirmation was done on the basis of total number of medical colleges in western Maharashtra out of which we decided 50% criteria using Probability Proportionate Random Sampling technique, henceforth we approached to six colleges.

We approached to faculties by direct visit and discuss the facts in personally. Three percent faculties conveyed updates by phone afterwards.

The collected responses were analysed.

1. Do you know about MCI Vision 2015? Y/N
2. Sources from where you read about MCI Vision 2015 :

- A. Internet  
 B. MCI website  
 C. Newspaper  
 D. Staff members  
 E. Other source? Specify:  
 .....
3. Do you read MCI Vision 2015 document PDF file available at MCI website? Y/N
4. MCI Vision 2015 document file contains ..... pages  
 A. 40  
 B. 50  
 C. 60  
 D. 74
5. MCI vision document file published by MCI on  
 A. March 2011  
 B. June 2012  
 C. March 2013  
 D. June 2009
6. Proposed Foundation course duration for MBBS Course will be .....  
 A. One Month  
 B. Two Months  
 C. Three Months  
 D. Fifteen days
7. Early clinical exposure (ECE) has following goals except:  
 A. Focus on common problems in OPD  
 B. Allows flexible learning options  
 C. Training of trainers  
 D. Expertise in disease management
8. The following modifications have been made in the existing curricula to accommodate the aspirations of the defined goals and competencies except:  
 A. Integration of principles of Family Medicine  
 B. Greater emphasis on group based directed learning  
 C. Encouragement of learner centric approaches  
 D. Acquisition and certification of essential skills
9. NEET pattern has been explained in MCI Vision 2015? Y/N
10. Early clinical exposure is really useful? Y/N

#### —Annexure 1: [10 item questionnaire]

## RESULTS

We received responses from 127 out of 182 (69.78%) faculty members to whom we contacted. Other faculties were not responded either these not interested to communicate or says this pattern may not be useful. [Table/Fig-1] shows 94.48% faculty members were aware regarding MCI Vision 2015 documents released by MCI in 2011. They received this information from various sources like internet (96%), MCI website (24%), newspaper (04%), staff members (42%) etc. However, only 18% faculties read these documents with keen interest. Average only 12% faculties could answered specific approach MCQs based on MCI Vision 2015 documents. However, 82.67% faculties agreed early clinical exposure will be definitely helpful if implemented in curriculum.

## DISCUSSION

Medical council of India has initiated changes in the curriculum as part of its vision 2015 documents [5]. The suggestion of integrated curriculum and early clinical exposure is one of most important issue. Currently almost all medical colleges in our country follows

S.No.	Questionnaire item details	Results ( Number of faculties attend correct answer)	Results (%)
1	(1-3) General information	120	94.48%
2	4- Test MCQ	15	11.81%
3	5- Test MCQ	15	11.81%
4	6- Test MCQ	78	61.41%
5	7- Test MCQ	22	17.32%
6	9- Test MCQ	70	55.11%
7	(10) General information	105	82.67%

[Table/Fig-1]: A 10-point questionnaire results received on the basis of perception of medical faculties.

traditional pattern. Hence there is need to change mindset of our medical faculties. There is need to analyse the problems concerned with conventional teaching [5]. Faculty is the core factor in implementation of early clinical exposure and integration of curriculum for better results. Recently in 2015 MCI also added Medical Bioethics as new subject in medical curriculum. The subject is introduced in horizontal and vertical integration pattern. Most of the universities in India actively applied these changes. The MCI underlined need of early clinical exposure and ethics practices in view of present scenario in current clinical practices in our society. The main objective behind it is to familiarize the medical students with patients from their early training. Hence the students can develop ethical approaches and professional skills.

In present study we noticed that though 94.48% medical faculties are aware about early clinical exposure and MCI vision 2015 documents but only average 12% faculties has read and depth knowledge about it.

Early clinical exposure and integrated teaching pattern is already implemented in various worldwide medical schools. As part of a complex curriculum intervention early clinical experience helped recruit residents to rural primary care in the US [6]. Many countries need urgently to recruit health professionals to deliver primary care to underserved populations. In Indian scenario it is an urge to produce healthcare professionals with predefined view and expertise in rural set up. The globalization of education and health care and India's upcoming potential as a destination of choice for quality based education and health care has brought the issue into focus. Many faculties of medicine now include module using early clinical exposure (ECE) to introduce medical students to important topics in medicine [7].

Such practices are being encouraged by various bodies, organizations at institutional level such as the UK General Medical Council, many medical schools are "vertically integrating" [8,9]. Early practical experience could orient medical curriculums towards the social context of practice, and strengthen students' affective and cognitive learning.

Traditional medical curricula have been based on the model of teaching that kept medical students in classrooms and laboratory settings for the first year of their education, with an introduction to clinical medicine coming abruptly. The rapid pace of change in health care and medicine is giving rise to corresponding rapid changes in the content and process of medical education. The traditional structure of medical education created an almost impenetrable wall between the so-called preclinical basic sciences years and the clerkship years [10]. Changes in health care have led to experimentation by medical colleges in education pattern, with the introduction of clinical experience from first year collaborating with traditional pattern [11]. Though early clinical exposure, and the accompanying knowledge and skills development, does not replace the basic and clinical sciences, but also enriches and contextualises that learning and offers a wider variety of teaching and learning methods [12].

The Harvard Medical School-Cambridge Integrated Clerkship (HMS-CIC) is a redesign of the principal clinical year to foster students' learning from close and continuous contact with cohorts of patients in the disciplines of internal medicine, neurology, obstetrics-gynaecology, paediatrics, and psychiatry. Surgery and radiology are also being taught in longitudinal approaches of teaching and thus incorporating early clinical exposure. Students also actively participate in weekly case based scenario, thus experiences early clinical exposure from their first year of teaching [13]. In different countries medical education set up was found different from two weeks to one year with one hour duration daily to whole day schedule. The faculties from worldwide are serious regarding context of this value added issue [3].

The introduction of different material based learning aids including computer based various softwares, use of LCD projectors, internet and telecommunications has the potential of changing the face of medical education [12-14]. Faculties should efficiently use these aids for improvement in learning approaches.

Early clinical exposure will be more challenging and interesting in rural set up [15]. It is reasonable to conclude, however, that early experience has a strong impact and future potential to change attitude of medical students. In present survey we tried to collect data concern with awareness, depth and interest among medical faculties towards these changes through early clinical exposure. In our study about 30% faculties were not interested and these supports only towards traditional teaching pattern. As first step MCI has introduced medical bioethics in curriculum in horizontal and vertical integration path [16,17]. ECE will be an important area of future scope. It is our urge to Indian medical faculties to broaden their views towards teaching pattern. Our knowledge may not be changes our attitude but our experience will definitely change our attitude.

## STUDY LIMITATIONS

This study covers the perceptions of medical faculties only from western Maharashtra; hence we could not label it as National survey. There is need to conduct such survey on large scale covering and comparing various states from India.

## CONCLUSION

The present work underlines need of special coaching and attention towards this important issue in medical education.

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## REFERENCES

- [1] Littlewood S, Ypinazar V, Margolis SA, Scherpbier A et al. Early practical experience and the social responsiveness of clinical education: systematic review. *BMJ*. 2005;331:387.
- [2] Harden RM. Integrated teaching—what do we mean? A proposed taxonomy. *Med Educ*. 1998;32:2167.
- [3] Newble DI, Entwistle NJ. Learning styles and approaches: implications for medical education. *Medical Education*. 1986;20(3):162-75.
- [4] MCI Booklet; Vision 2015 downloaded from www.mci.org on 21 June 2013.
- [5] Deepak KK. Integrating teaching: A Less Trodden Path. *Indian Journal of Physiology and Pharmacology*. 2014;58(3):189-91.
- [6] Murray E. Challenges in educational research. *Med Educ*. 2002;36:1102.
- [7] Tomar SS, Akheel M. Craniofacial and head injury management: A residents perspective. *Archives of craniofacial sc*. 2013;1(2):19-21.
- [8] Basak O, Yaphe J, Spiegel W, Wilm S, Carelli F, Metsemakers JF. Early clinical exposure in medical curricula across Europe: an overview. *Eur J Gen Pract*. 2009;15(1):4-10. doi: 10.1080/13814780902745930.
- [9] Tayade MC, Bhimani N, Kulkarni NB, Dandekar KN. The impact of Early Clinical Exposure on First M.B.B.S. Students. *International J of Healthcare and Biomedical Research*. 2014;2(4):176-81.
- [10] Dornan T, Bundy C. What can experience add to early medical education? Consensus survey. *BMJ*. 2004;329:8347.
- [11] Dornan T, Littlewood S, Margolis SA, Scherpbier A, Spencer J, Ypinazar V. How can experience in clinical and community settings contribute to early medical education? A BEME systematic review. *Medical Teacher*. 2006;28(1):3-18.
- [12] Ogur B, Hirsh D, Krupat E, Bor D. The Harvard Medical School-Cambridge integrated clerkship: an innovative model of clinical education. *Acad Med*. 2007;82(4):397-404.
- [13] Tayade MC, Kulkarni NB. The Interface of Technology and Medical Education in India: Current Trends and Scope. *Indian Journal of Basic & Applied Medical Research*. 2011;1(1):8-12.
- [14] Harden RM, Hart IR. An international virtual medical school: the future for medical education? *Medical teacher*. 2002;24(3):261-67.
- [15] Tayade MC, Karandikar PM. Role of Data Mining Techniques in Healthcare sector in India. *Sch J App Med Sci*. 2013;1(3):158-60.
- [16] Vaz R, Gona O. Undergraduate education in rural primary health care: evaluation of a first-year field attachment. *Med Educ*. 1992;26:2734.
- [17] Tayade Motilal C, Latti Ramchandra G. Bioethics education in Preclinical medical curriculum: Review. *International J of Healthcare and Biomedical Research*. 2015;3(04):8-12.

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