



## FOUNDATION COURSE- THE NEED OF THE HOUR IN INDIAN MEDICAL CURRICULUM

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**ABSTRACT** The governing body for medical universities and colleges, the Medical Council of India (MCI) rolled out a new competency based medical education (CBME) curriculum from the academic session 2019 onwards. One of the major changes envisaged was the introduction of "Foundation Course". Being a novel concept for learners as well as facilitators, subsequent feedbacks are essential. Thus the objective of the study is to present a feedback report of the various modules of the course and develop modifications for future implementation. The study was undertaken on 150 students enrolled in the undergraduate medical course for the academic session. The responses of pre-designed feedback questionnaire were graded on a psychometric scale for analysis. A positive qualitative response of highest degree was observed in majority of the items of the feedback questionnaire. The course is the need of the hour taking into consideration the changing trends in the community.

**KEYWORDS :** curriculum, foundation course, orientation, competency

### INTRODUCTION:

The Medical Council of India (MCI) changed the traditional MBBS curriculum to a novel concept of competency based medical education (CBME) (MCI, 2018). This was introduced to signify the role of health care systems and its delivery in the country, to help students to learn and prioritize various national policies and enhance their skills so as to produce an efficient physician of first contact (Revised GME, 2012). It was made mandatory for all medical colleges and universities to roll out the course from the academic session 2019 onwards. Of all the major changes envisaged in the curriculum, to start with, every institute is to conduct a month long foundation course in which elements targeted towards students mental health, attitude and good communication are introduced (MCI, Foundation course, 2019). The health care system, role of alternate health systems, patient safety and biohazards, professional attitude and ethics were introduced to bring about a holistic development in the students. The complete course was divided into various structured modules, as shown in table 1.

**Table 1: Modules of Foundation course**

s.no	Subjects/Content	Teaching hours
1	Orientation	30
2	Skills module	35
3	Field visits to community centre	8
4	Introduction to AETCOM module & professional development	40
5	Sports and extra-curricular activities	22
6	Enhancement of language & computer skills	40
	<b>Total</b>	175

(MCI, Foundation course, 2019).

These changes are incorporated to bring about a smooth transition of students from school environment to a more self-directed learning in a medical college. It is to prepare a learner with better exemplary outputs of being an Indian Medical Graduate as per the prescribed regulations. (Revised GME, 2012). The various modules introduced, cater not only to scholastic but co-scholastic aptitudes of the students. It incorporates the concepts oriented towards enhancing skills of leadership, stress and time management, professional development including ethics and ethical practices. With these sections incorporated, the students get a summarized outlay of complete five and a half years of medical life with orientation towards hospital set-up, how to effectively undertake patient interaction and acquire certain basic skills expected of them at this basic level of academic ladder.

At Heritage Institute of Medical Sciences (HIMS), Varanasi, the course was also introduced for the academic session 2019-2020 and was conducted under the stringent supervision of the medical education unit (MEU) of the college. Pre-preparations with regard to faculty training (MCI, CISP, 2019) and time table schedules were done, for smooth conduction of the course to bring about effective execution

and desired outputs. The four week long course was conducted in the month of August. At the end of the course a feedback form and short interactive viva of the learners was taken by course co-ordinators and facilitators to gather information about the compliance as well as executional aspects of the course and also to assess the academic acceptance of students towards the course.

The objective of present paper is to outlay the feedback reports obtained from the students and bring about non-effective areas which may be changed in further years for a more effective and better execution of the course. This will also help to extrapolate suggestions which may be shared with higher administrative bodies for modulation in the course content.

### MATERIALS AND METHOD:

Total of 150 students enrolled at HIMS, Varanasi was explained about the design and objectives of the study and informed consent was taken before start of the study. All the students were admitted with respect to their academic results obtained in the National eligibility entrance test. The foundation course at HIMS was designed as per MCI guidelines by the course co-ordinators for complete 175 hours. The outlay of the course schedule was as follows:

- A four week long schedule was planned by the MEU in association with pre-clinical departments of the institute.
- During the course classes were taken by pre-clinical, para-clinical, clinical teachers and also included sections for enhancement of communication and language skills for which special teachers were appointed by the institute.
- The students were divided into smaller groups where hospital, community, language, computer or extra-curricular activities were scheduled and the didactic lectures were reduced to mere 25% per day. Various components of the course were as envisaged by the MCI and within stipulated time frames.
- The faculties' incharge of various sections were pre-defined and introduced to the students at the outset of the course, to bridge the communication gap.
- Student volunteers were appointed for each small groups to inculcate the leadership skills
- Compulsory 75% attendance of the students was a pre-requisite to provide response to the provided questionnaire.

The questionnaire was a semi-closed type quantified on the Likert scale. Likert scales are frequently used in medical education to quantify measures of knowledge and applied at the end of educational course (Gail M et al 2013).

The data was obtained from 110 students as 40 students were not willing to participate in the study. The anonymity of the students was maintained. The components of the feedback questionnaire included following questions:

1. were the changes envisaged by the MCI introduced at the outset (orientation towards new competency based curriculum)

2. adequate course content within stipulated time frame was covered (as stated in table 1)
3. whether locations(for conduction of activities) were well defined
4. adequate exposure to hospital setting with clear information towards objective to learn(pre-designed check lists were provided to students regarding each activity with clear description of objectives to be dealt)
5. adequate community visits (to villages and health centres)
6. appropriate language and communication skills delivered (role plays ,debates and English comprehension classes were taken)
7. adequate computer information provided with hands-on training (tasks related to word format, excel and power-point presentations were assigned to the students)
8. appropriate ethical information provided (module of ethical aspects was dealt with respect to videos, lectures, case scenario etc)
9. adequate sports and extra-curricular activities provided (included both outdoor and indoor games, yoga and fitness classes)
10. Were newer teaching methodologies and techniques introduced by the facilitators

(Activity based learning, case-scenarios etc)

The data obtained was transferred onto an excel format for statistical analysis and the responses were converted into quantified numbers as strongly agree =1, agree =2, neutral or uncertain = 3, disagree=4 and strongly disagree = 5 (Gail M, 2013). Microsoft excels 2010 and social and preventive statistical software (SPSS) 20.0 was used to arrange the data as per the objectives of the study. For interpretation, total numbers of responses as per the Likert scale were computed and t-test was used to compare between the genders. The mean score of each item was calculated and any item with a mean score of <2 was considered effective while a score of ≥2 suggests a negative feedback for that respective item.

The mean scores as per the genders and for total sample for each item of the questionnaire are represented in table 2.

ITEM	Mean Score ± SD Girls	Mean Score ± SD Boys	Mean Score± SD Total	P Value (For Genders)
were the changes envisaged by the MCI introduced at the outset	1.20±0.41	1.26±0.68	1.23±0.54	>0.05 NS
adequate course content within stipulated time frame was covered	1.62±0.65	1.33±0.47	1.50±0.60	>0.05 NS
whether locations were well defined	1.59±0.75	1.46±0.66	1.54±0.71	>0.05 NS
adequate exposure to hospital setting with clear information towards objective to learn	1.53±0.67	1.33±0.67	1.45±0.67	>0.05 NS
adequate community visits	1.62±0.68	1.54±0.83	1.61±0.74	>0.05 NS
appropriate language and communication skills delivered	1.58±0.68	1.54±0.78	1.56±0.72	>0.05 NS
adequate computer information provided with hands-on training	<b>2.06±0.88</b>	1.78±0.94	1.95±0.92	>0.05 NS
appropriate ethical information provided	1.25±0.53	1.20±0.40	1.23±0.48	>0.05 NS
adequate sports and extra-curricular activities provided	1.44±0.56	1.48±0.62	1.45±0.58	>0.05 NS
were newer teaching methodologies and techniques introduced by the facilitators	1.53±0.67	1.26±0.49	1.42±0.61	>0.05 NS

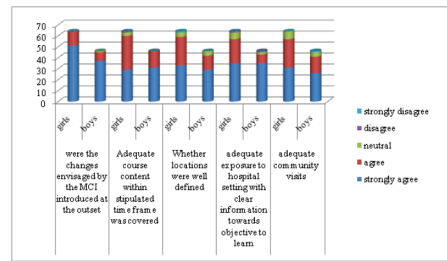
\*SD=standard deviation, NS=non-significant

**DISCUSSION:**

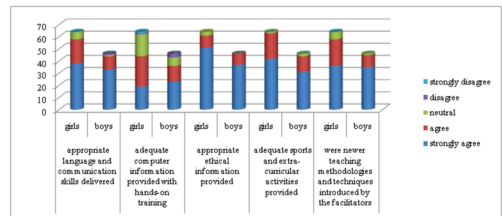
The changing global trends of the community at large were a pre-requisite for MCI to roll out a new CBME curriculum built upon the lacunas of the traditional pattern of curriculum (MCI,2018). The traditional curriculum based on knowledge has been in practice since last more than two decades but the changing academic environment and attitudes of the students towards education generated the need for conversion to a competency based pattern (Frank Jr ,2010) ( GMC, 2003).The newly stated curriculum caters towards mental health and communication skills of the students and provides adequate channels to improve health delivery systems in the community. The one biggest change in the curriculum was the introduction of a month long Foundation course which is perceived to enhance various co-scholastic aptitudes of the undergraduate students. It will be instrumental for MBBS students to adapt to the requirements of the community and update them towards the recent trends of the health sector-nationally and globally. The basis behind this change was that the pre-entrance tests for entry into any medical college take into consideration only scholastic aptitudes of the students, but otherwise students differ in their abilities for non-scholastic aptitudes (Suman. S, 2007). The new CBME curriculum takes into consideration both scholastic as well as non-scholastic aptitudes of students. Hence to bridge the gap between individual students, students are primed in this foundation course to bring them all at a common baseline platform before actual start of academic schedules. Team building, leadership and communication skills are culminated within students and various parts of medical ethics; like respect to cadavers and patients,

**RESULTS:**

The response rate was 73.34% with 46 (41.82%) male and 64 (58.18%) females. As the minimum age requisite is 18 years, the mean age of the sample was 18.9 years. The gender distribution at 95% confidence interval was statistically insignificant with p>0.05. The response representation of 1-5 items of questionnaire are represented as graph 1 and for next 6-10 items is represented as graph 2.



**Graph1: Response representation for items 1-5 of the questionnaire**



**Graph 2: Response representation for items 6-10 of the questionnaire**

confidentiality etc is taught extensively. The difference of social, cultural and economic status of the all students is expected to be erased from this common point onwards and helps to achieve a physician of first contact which will benefit the society at large (Suman. S, 2007).

Based on the requirements of the course, the medical education unit at HIMS judiciously planned and executed the course from the present academic year for undergraduate medical students of 2019 batch. The course being a newer modality demanded a strong feedback system so that various weaker areas of the course can be defined. This would help to generate a better designed module for the upcoming academic sessions. The results suggest a well-designed course plan as responses for majority of the items were agree or strongly agree, few negative responses obtained were statistically insignificant. The responses were insignificant between genders and suggest the validity of questionnaire for different genders. Any specific comment mentioned by the students was also taken into consideration during analysis. Invariably, a comment on time frame was mentioned as majority demand it to be of shorter duration and addition of more basic skill competency. The extra-curricular activities were well applauded and most enjoyed by the students. These were the activities which most of the students had masked while their preparation for the pre-entrance test. Special note on leadership and interpersonal classes was highlighted in many feedback forms. As is evident from the result section, computer classes were better claimed by the boys and mean score for girls was >2. Though the results was insignificant between genders , this probably shows otherwise better technology orientation of males than females

(OnomeN, 2014). All these suggest challenges for the facilitators and will help them make necessary changes as per the need of the students.

A similar study conducted in Sri Ramachandra Medical College and Research Institute also highlights a positive feedback of students towards the new foundation course (Srimathi,T,2014). Mittal et al in their study on 100 students also signifies the positive implications of the students towards the foundation course but their study but dealt with 2<sup>nd</sup> professional students who are already acclimitized to the college environment (Mittal R, 2013). In another study by Mahajan et al pre and post analysis of students was done with respect to various skill modules of the course. This better highlighted the growth of the students in various sections (MahajanR, 2015). Their study focussed more on orientation part of the foundation course.

As this was a new experience even for the facilitators the feedback provided us with sufficient data to analyse the planning, execution and challenges offered by the course. From these feedback reports it was evident that students are more for practical and knowledge acquisition rather than rote learning as many a times was practised with the old curriculum. This also suggests that the complete full phase I curriculum if judiciously planned by every college would be able to bring about considerable change in the skill acquisition of the students and enhance their learning and professional acumen.

#### CONCLUSION:

The present study highlights important conclusions- that foundation course is very much the need of the hour and HIMS Varanasi in collaboration with its MEU was able to execute it efficiently and effectively. The smaller areas of improvement as mentioned in results would be taken care off in the subsequent years to come.

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