

STUDENTS' PERCEPTION OF FOUNDATION COURSE – A NEW EXPERIENCE IN MBBS CURRICULUM IN INDIA

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ABSTRACT

Background: As per the new curriculum by MCI, a one month foundation course has been introduced across the country. This will help a MBBS student to acclimatize the new learning environment in the medical college which is far different from high school. At the end of this foundation course this study was carried out with the aim to evaluate the perception of the students regarding the knowledge and importance of foundation course. **Material and Methods:** A cross sectional study was conducted by MEU, SVS Medical College, Mahabubnagar (TS). A predesigned, pre tested questionnaire was given to the students before and after the completion of one month of foundation course and were asked to rate the perception of knowledge and importance of the modules on the likert scale of 1 to 5 on various modules given by MCI. The data was analyzed by using SPSS 20.0 version. **Results:** A total of 66 students participated in this study. The mean scores of the perception of knowledge and importance of the various topics included in different module before the foundation course were 1.0 to 1.33 and 1.0 to 1.58 respectively but after the foundation course the mean scores increased to 3.3 to 3.5 and 3.8 to 4.3 respectively. The overall rating for the foundation course was 4.19 ± 0.61 . **Conclusion:** The improved scores in students' perception of knowledge and importance of various modules in foundation course on the likert scale and overall rating for the foundation course indicate that feedback response of newly admitted students was very satisfactory and encouraging.

Keywords: Likert scale, MBBS, MCI, Orientation, Perception, Skill

INTRODUCTION

Students enter a new environment in medical college at around 17-18 years of age directly from school which could be challenging because Students who enter MBBS course usually are from different educational environment which . Many students who practice rote learning may find difficulty in coping MBBS curriculum. Also there are language barriers and cultural differences among the students which may lead to behavioural and attitudinal problem once they are into medical profession. (1) Conducting some sort of orientation programme for newly admitted students would help overcome such problems, which done is most of the professional

colleges in our country. This is done with the intention of acclimatizing students to a college environment and familiarizing them to the different teaching-learning methods. (2)

It is important for every medical college to train these students in different aspects like professionalism, learning methodology, computer skills before the start of MBBS course. The students also require training in interpersonal relationship which will help them to maintain a positive working culture with the team at hospital or Community health centres. All these training should be vigorous enough and focused.

After many years of research, MCI has come to a conclusion that, to achieve this goal a one month dedicated course has to be made mandatory at the beginning of MBBS course in all the medical colleges and named it as 'Foundation Course'. All the colleges have started to implement foundation course across the country. This will help a MBBS student to acclimatize the new learning environment in the medical college which is far different from high school.

The objectives of the Foundation Course include:

- 1) Orienting the students to all aspects of the medical college environment.
- 2) Equipping them with certain basic, but important, skills required for patient care and enhancing their communication, language, computer and learning skills.
- 3) Providing opportunity for peer and faculty interactions and an overall sensitization to the various learning methodologies. (3)

At the end of this foundation course this study was carried out with the aim to evaluate the perception of the students regarding the knowledge and importance of foundation course.

MATERIAL AND METHODS

Present study was conducted by Medical Education Unit, SVS Medical College, Mahabubnagar, TS in the month of August 2019. We have conducted this foundation course from 1st August to 31 August 2019 at SVS Medical College. More than 10-15 faculties were included to train these students in various modules. All the modules were delivered by interactive lectures, small group discussions, role plays and activity based learning methods. The importance of social responsibility in medical practice was introduced to them in the form of visits to the Primary and urban health centers followed by an exercise in reflective writing and group discussions about their experiences. An exhaustive training was given on computer skills using hands on training with respect to Microsoft word, excel and PowerPoint presentation. A session on how to search for online resources was also included in computer training module. All the 100 students who were admitted to the MBBS course were included in the study. Institutional Ethics Committee (IEC) clearance was taken before the start of the study. It was a cross sectional study design which was done by pre/post test. Before starting the study consent was taken from all the participants and the purpose of study was explained. A pre-designed, pre tested

questionnaire was given to the students before and after the completion of one month of foundation course. They were also given orientation on how to answer the questionnaire. The questions pertaining to the knowledge and importance of all the topics in various modules as given in MCI document were included in the study. The various modules as given by MCI for including them in foundation course is given in table 1. (3) The students were asked to rate the perception of their knowledge and importance of the modules on the likert scale of 1 to 5. Likert scales are validated method to measure attitudes or self assessment of Knowledge frequently used in medical education at the end of training or educational intervention. (4) The students' rating of the perception of knowledge was as follows 1) No knowledge, 2) Basic knowledge, 3) Sufficient knowledge, 4) Advanced knowledge, 5) Highly knowledgeable. The students' rating of the perception of importance was as follows 1) Not important, 2) Little important, 3) Important, 4) Very important, 5) Extremely important.

The questionnaire was delivered to all the participants by online tool using Google forms to their emails. Responses were collected and analyzed using SPSS version 20.0.

RESULTS

Out of the 100 students included in the study only 66 participated and remaining 34 students could not participate because of transfer to other college in various phases of counselling. The responses collected are shown in table 2 to table 6.

Table 2 shows the students' perception of knowledge and importance of the orientation module before and after the foundation course. The mean scores of the knowledge and importance of the topics included in module were 1.18 ± 0.400 and 1.19 ± 0.396 respectively before the foundation course but afterwards the scores increased to 3.3 ± 1.11 and 3.8 ± 0.951 respectively.

Similarly, table 3 shows the students' perception of knowledge and importance of the skill module before and after the foundation course. The mean scores of both the knowledge and importance of the topics included in module were 1.1 ± 0.314 and 1.1 ± 0.301 before the foundation course but afterwards the scores increased to 3.43 ± 1.125 and 4.09 ± 0.931 respectively.

Table 4 shows the students' perception of knowledge and importance of the community orientation module before and after the foundation course. The

mean scores of both the knowledge and importance of the topics included in module were 1 ± 0.000 before the foundation course but after wards the scores increased to 3.42 ± 1.116 and 3.99 ± 0.95 respectively.

Table 5 shows the students' perception of knowledge and importance of the Professional Development and Ethics Module (P & E) module before and after the foundation course. The mean scores of both the knowledge and importance of the topics included in module were 1 ± 0.000 before the foundation course but after wards the scores increased to 3.31 ± 1.116 and 3.87 ± 0.986 respectively.

Finally, Table 6 shows the students' perception of knowledge and importance of the language and computer skill Module before and after the foundation course. The mean scores of the knowledge and importance of the topics included in module were 1.33 ± 0.230 and 1.58 ± 0.291 respectively before the foundation course but after wards the scores increased to 3.57 ± 1.12 and 4.04 ± 0.845 respectively.

There was a statistically significant difference between pre and post mean score of perception of knowledge and importance at 5% level of significance ($p < 0.05$).

The overall rating for the foundation course was 4.19 ± 0.61 .

Major responses regarding the suggestions on the conduct of foundation course emerging from open ended responses were

- It was nice to have such a foundation course.
- Providing more basic knowledge and skills
- I think it was perfect. No changes required
- Facilitators made this foundation course more interesting

DISCUSSION

The goal of foundation course is to help the incoming fresh class of MBBS students get oriented to the curricular programme, the study environment and introduce them to some of the essential aspects of medicine that fall outside the purview of the core medical science disciplines, including language and communication skills, ethics and professionalism and leadership and computer skills. (5).

After analyzing the results, we found that there was a statistically significant difference between pre and

post mean score of perception of knowledge and importance at 5% level of significance ($p < 0.05$).

Prior to the foundation course, most of the students responded that neither they had any prior knowledge nor they felt importance for the topics covered in all the modules except for the computer skill like Microsoft word, excel, PowerPoint presentation and online resources for which the knowledge scores and importance scores were 2.00 ± 0.36 and 3.00 ± 0.39 respectively. This could be because most of the students get exposed to computer training in their intermediate course and using smart phones regularly.

After thorough literature search, we did not find any such study on the recently conducted (in the month of August - 2019) foundation course as per MCI directives. But there were some studies similar to foundation course conducted few years back. These studies were not fully fledged one month course as suggested by MCI but included some of the topics like orientation programme, computer language training, professionalism etc.

In one such study conducted by Suman s et al (1), similar result was seen with respect to computer skills that are almost 50% of the respondents had prior knowledge on use of library and internet. But contrary to our results, himanshu et al observed that quite a few numbers of students had prior knowledge on professionalism and ethics (24 out of 97), time management (50 out of 97), English proficiency (54 out of 97). This may be because of regional variation and exposure during their intermediate study. One more study conducted by Mittal R et al (6), suggested that there was greater extent of knowledge gain in topics like professional etiquettes and ethics, communication and behavioural skills, community health care, time management and stress management. These results are quite similar with our study in which we also saw improved scores in most of the modules. In one of the study conducted in Punjab, (7) almost 67% of students responded that they were satisfied with the foundation course and they included even faculty to know their perspective. In our study the satisfaction by the students was measured on likert scale and the mean scores were 4.19. We are planning to take up a separate study to know the faculties' perception on the newly introduced foundation course in the near future.

CONCLUSION

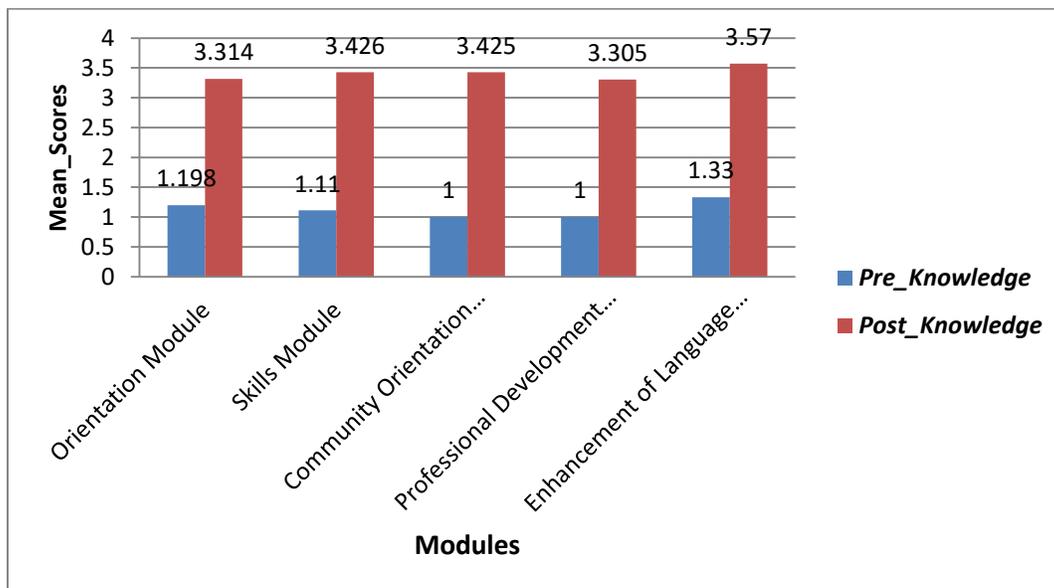
The overall rating for the foundation course conducted by Medical Education Unit of SVS Medical College was very satisfactory and encouraging. The newly introduced structured foundation course by MCI would help students to cope with the vast areas of knowledge and skills including professionalism and ethics required in the new Competency Based Medical Education (CBME).

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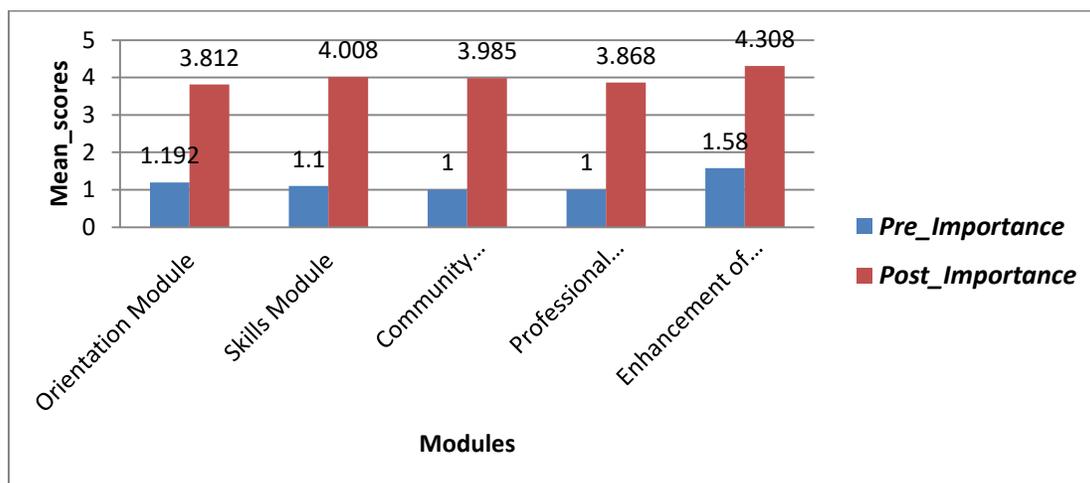
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Graph 1: Bar diagram showing perception of knowledge levels of various modules before and after the foundation course



Graph 2: Bar diagram showing perception of importance of various modules before and after the foundation course

Table 1: Various modules included in foundation course*

SN	Modules	Topics
1	Orientation Module	1A. Introduction to institution / campus / facilities 1B. Role of doctors in the society 1C. History of Medicine and alternate systems 1D. IMG roles / overview MBBS curriculum, various career pathways 1E. Principles of family practice
2	Skill module	2A. First Aid 2B. BLS 2C. Universal precautions 2D. Waste management 2E. Immunization 2F. Documentation
3	Community orientation module	3A. National Health goals and policies/ health Care systems/ community health 3B. Interactions with patients and families, Communities
4	Professional Development and Ethics Module (P&E)	4A. Concept of Professionalism and Ethics 4B. White coat Ceremony 4C. Professional behaviour and altruistic behaviour 4D. Working in a health care team 4E. Disability competencies 4F. Cultural competence 4G. Stress management 4H. Time management 4I. Interpersonal relationship 4J. Learning (SDL, Learning pedagogue and collaborative learning)
5	Enhancement of Language and Computer Skills Module	5B. Local Language training 5C. English Language training 5D. Computer Skills training (Word, excel, PowerPoint and Online resources)
6	Sports and extracurricular activities	

Source -* Old.mciindia.org [Internet].Medical Council of India 2010.

Available from <https://old.mciindia.org/UG-Curriculum/FOUNDATION-COURSE-MBBS-17.07.2019.pdf>

Table 2: Responses to the orientation module before and after the foundation course

SN	Topics	Knowledge		Importance	
		Before	After	Before	After
1	Introduction to institution / campus / facilities	1.00±0	3.28±1.17	1.00±0	3.81±0.87
2	Role of doctors in the society	1.33±0.47	3.71±0.98	1.36±0.48	4.19±0.82
3	History of Medicine and alternate systems	1.00±0	3.13±1.13	1.00±0	3.75±0.96
4	IMG roles / overview MBBS curriculum / various career pathways	1.33±0.47	3.24±1.13	1.30±0.46	3.80±0.97
5	Principles of family practice	1.33±0.47	3.21±1.05	1.30±0.46	3.51±1.01

All values are Mean±SD on a likert scale of 1 to 5

Table 3: Responses to the Skill module before and after the foundation course

SN	Topics	Knowledge		Importance	
		Before	After	Before	After
1	First Aid	1.33±0.47	3.50±1.11	1.33±0.46	4.04±0.87
2	Basic Life Support (BLS)	1.33±0.47	3.50±1.06	1.33±0.46	3.92±0.98
3	Universal precautions	1.00±0	3.50±1.21	1.00±0	3.97±0.92
4	Waste management	1.00±0	3.42±1.11	1.00±0	4.07±0.99
5	Immunization	1.00±0	3.45±1.13	1.00±0	4.12±0.88
6	Documentation	1.00±0	3.19±1.11	1.00±0	3.93±0.94

All values are Mean±SD on a likert scale of 1 to 5

Table 4: Responses to the community orientation module before and after the foundation course

SN	Topics	Knowledge		Importance	
		Before	After	Before	After
1	National Health goals and policies/ health Care systems/ community health	1.00±0	3.35±1.11	1.00±0	3.96±0.93
2	Interactions with patients and families, Communities.	1.00±0	3.50±1.12	1.00±0	4.01±1.0

All values are Mean±SD on a likert scale of 1 to 5

Table 5: Responses to the Professional Development and Ethics Module (P & E) module before and after the foundation course

SN	Topics	Knowledge		Importance	
		Before	After	Before	After
1	Concept of professionalism and ethics	1.00±0	3.40±1.10	1.00±0	4.01±0.88
2	White coat ceremony	1.00±0	2.57±1.39	1.00±0	3.36±1.09
3	Professional behaviour and altruistic behaviour	1.00±0	3.33±1.16	1.00±0	3.95±0.95
4	Working in a health care team	1.00±0	3.47±1.13	1.00±0	4.04±0.93
5	Disability competency	1.00±0	3.57±1.11	1.00±0	4.07±0.89
6	Cultural competency	1.00±0	2.93±1.20	1.00±0	3.47±1.01
7	Stress management	1.00±0	3.22±1.17	1.00±0	3.78±1.17
8	Time management	1.00±0	3.48±1.04	1.00±0	4.04±0.96
9	Interpersonal relationship	1.00±0	3.56±1.08	1.00±0	3.98±0.96
10	Learning (SDL, Learning pedagogue and collaborative learning)	1.00±0	3.52±1.01	1.00±0	3.98±0.92

All values are Mean±SD on a likert scale of 1 to 5

Table 6: Responses to the language and computer skill module before and after the foundation course

SN	Topics	Knowledge		Importance	
		Before	After	Before	After
1	Communicate with patients and families	1.00±0	3.70±1.07	1.00±0	4.26±0.75
2	Local language training	1.00±0	3.59±1.13	1.00±0	4.00±0.94
3	English language training	1.33±0.47	3.43±1.12	1.33±0.47	3.94±0.90
4	Computer skill training (Word, excel, PowerPoint and Online resources)	2.00±0.36	3.56±1.03	3.00±0.39	3.96±0.95

All values are Mean±SD on a likert scale of 1 to 5

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