



Original Research Article

Perception of medical students towards the MCI recommended foundation course at a medical college in north Kerala

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ABSTRACT

Background: Orientation of first year medical students to their new environment is essential before initiation of academic sessions. The MCI has recommended a one month long Foundation course as part of the new Competency Based medical Education curriculum for the same in the Graduate medical regulations 2019 to be implemented in all medical colleges from 2019. The new medical curriculum was implemented in our institution from August 1st 2019 and a one month long foundation course was conducted for the first year students. This study was done to analyse the perceptions of the students to the new foundation course.

Methodology: A cross sectional study was conducted involving first year medical students attending the foundation course in our institution. Data collected by a semi structured questionnaire which the students were asked to complete at the end of each session taken. Data was analysed both quantitatively and qualitatively. Qualitative data collected through open ended questionnaires were coded into themes.

Results: 207 students participated in the study. Most of the students perceived that the foundation course has helped them familiarise with the institution, faculty and students. The skills module and the Community orientation module was perceived by the students as most interesting and helpful for their future academics.

Conclusion: The Foundation course was perceived as helpful by the students in orienting them to the basics of the profession for the future.

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1. Introduction

An orientation program for new entrants in any profession is essential for acclimatising them to their new environment whether it be a working or an academic environment. Medical educationalist worldwide have always advocated for an orientation program for the new medical entrants and globally academic institutions have been conducting orientation programs for students to enable them to familiarise with their new environment and academic programs.¹ Medical Colleges throughout India have also been conducting orientation programs for first year students on admission for the same purpose, but the duration of the program is variable^{2,3} ranging from a few days to 2weeks.

The Medical Council of India (MCI) recently revised the Medical Curriculum for the undergraduate Medical students of India making it Competency based.⁴ Several new concepts have been introduced in the revised curriculum and one of them was the introduction of the one month long foundation course for medical undergraduates before the commencement of the Phase I academic sessions.^{4,5}

The purpose of the foundation course is to sensitise the fresh medical students coming from diverse backgrounds with the required knowledge and skills that will assist them in acclimatising to the new professional environment which would be his for a life-long career in the medical profession. The MCI has prescribed a Foundation course module prepared by council nominated experts for the implementation of the foundation course throughout all Medical colleges in India which is available at the MCI website for all medical colleges to pursue and implement.⁵

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The foundation course module starts with i) a basic orientation module followed by modules in ii) Skill development, iii) Community orientation, iv) Professional development & Ethics v) Computer and language skills vi) sports and extra curricular activity.⁵ With the implementation of this foundation course module starting from August 1st 2019 medical institutions will be orienting the students to the new professional environment, enhance development of skills and provide opportunity for peer and faculty and student interactions.

Our institution is one of the largest institutions in the public sector in Kerala with an annual intake of 250 students. An orientation program for first years of one week duration is already in place for several years which is organised by the Medical Education Unit of the institution. Foundation course was implemented by our institution from the 1st of August 2019 for the entire month as specified by the MCI. Being the first year of its implementation it was essential to know the perceptions of the students regarding the foundation course and to assess if the objectives of the foundation course as envisaged by the MCI are being met.

1.1. Study design

Cross sectional study.

2. Methodology

The time table for the foundation course was developed by the Foundation course committee of our institution keeping in line with the MCI recommendations. Both internal as well external faculty to address various sessions were identified. Foundation course committee and Medical education unit coordinated the program. The parent teacher association of the institution handled the logistics for arrangement of the external faculty for the sessions. All the sessions were conducted using varied methods of teaching and learning like interactive lectures, group discussions, demonstrations, hands-on training, visits to various facilities, role plays and presentation by the students. A feedback was taken from the students for each session conducted using a semi-structured questionnaire. Apart from demographic details the students were asked to rate each session on a scale of 1-5 in terms of usefulness of each session. Open ended questions were asked seeking their perceptions regarding what they learnt or gained from each session. Open ended questions seeking perception of what more needs to be added for each session was also asked.

2.1. Sampling and sample size

At the commencement of the foundation course on 1st of August there were only 210 admissions against the total intake of 250 for our institution. 20 students joined on the 8th day of the foundation course and the rest during the

subsequent week. For the purpose of the study data collected from the initial sample of 210 was used to obtain a holistic feedback of the foundation course.

2.2. Data analysis

The quantitative variables were summarised using mean and standard deviation. The responses of the open ended questions were enumerated and similar responses were combined to yield themes and coded accordingly. The data was compiled using Microsoft Excel Spreadsheet and analysis was done using Statistical Package for Social Sciences (SPSS) statistical package version 17.

2.3. Ethical concerns

Student anonymity was ensured. Consent was obtained from the students after informing them regarding the purpose of the data collection.

3. Results

Of the 210 students included in the study 207 returned the filled questionnaire (response rate 98.5%). The mean age of the students was 19 (+1.2) yrs. Males comprised 53% of the total students. Most of the students hailed from a rural background (58%). 62% of the students has secured admission on their second attempt at the entrance examination and only 18% managed to secure admission in the first attempt.

3.1. Orientation module

The orientation module was covered in the first week of the foundation course covering the areas specified in the MCI foundation course module (Table 1). As per the feedback of the students obtained the orientation module introduced them to the campus and the various facilities available in the campus. They also were introduced to some of the faculty of the institution. Since the initial introduction by the Principal took place in the presence of the parents, they were also sensitized to the institutional vision and mission. Most of the students were in awe and felt proud to be part of the institution. The small group discussions held to introduce the students to the roles of a doctor and to probe into why they chose this profession was met with enthusiastic response. Many of the students felt that they learned a lot from other students experiences and were able to perceive new roles which a doctor plays in addition to clinical care like the administrative responsibilities and social responsibility of the profession. In addition to the sessions prescribed by the MCI we had two additional sessions one was on “Career pathways “and the second was an “Ice breaking session” for the students. The session on Career pathways focused on career options available after the undergraduate course and other non medical career

options. This session was well received by the students as a small percentage of the students (10%) had revealed that medicine was not their first choice and had joined by compulsion from family. The ice breaking session was very interactive with the students introducing themselves and their hobbies. The session helped the students identify other students with similar interests as their own, students coming from the same geographical area or students from the same background etc

3.2. Skills module

The skills module was the most well appreciated module by the students. This may have been due the hands on training received during the course of the module. Most of the students were excited to perform the Basic Life Support (BLS) and first aid procedures. Many were of the opinion that the time allotted for the skills module was insufficient (Table 2). They were assured that they would get more opportunities in their curriculum to practice First aid and BLS on manikins during their course. The session on Immunisation was an eye opener for the students as they were now able to appreciate the reason why they were asked to get the mandatory immunisations (varicella, Hepatitis B, MMR) at the time of admission. According to the students the session also helped them realize the importance of immunization in view of the recent outbreaks of Vaccine Preventable Diseases being reported from Kerala. A few of the students who were unimmunized or partially immunised came forward and they were directed to the appropriate clinics and ensured that immunization was completed.

3.3. Community orientation module

The experiences afforded by this module was recognized by the students as can be seen from their feedback (Table 3). The students were asked to visit a Primary Health Centre/ Urban Health Center near their home. They were given an initial orientation regarding the health care system and the profoma to be filled at the PHC was discussed. Students residing in urban areas visited urban health centers. The experience provided a first hand experience for the students regarding the health system. A feedback and discussion after the visit was experiential learning session according to the students. Many of them were not aware of the services provided by the PHC in their area. They also mentioned that they could observe the doctor performing multiple roles in the PHC. The warm reception they received at the PHC when they introduced themselves as students from our institution made them aware of the reputation of their institution. Many of them reported that they got a feel of the respect that this profession affords from the community.

The interaction with patients and community was done in two sessions – one in the community when the students were asked to visit 10 households near their home. The

profoma for the same was also discussed prior to the visit. Majority of the students gave a positive feedback regarding the house visits. They interacted with subjects who were suffering a wide range of illnesses in the community from Non communicable diseases to bedridden patients who were on palliative care. The students perceived the importance of communication skills for not only interviewing patients but communicating with other members of the family. Even the negative experiences shared by the patients instilled the concept of empathy and care in the students. A few students did experience non cooperation and distrust from the members of certain households especially in urban areas.

Interaction with patients in the wards of the medical college was also done. Students also visited the Outpatient department and Emergency Area. Here in addition to interacting with the patients they could also observe the doctor patient interactions and interactions among the health care staff. The students felt that these visits greatly emphasized the necessity of empathy, communication skills and caring attitude towards the patients among medical professionals.

3.4. Professional development and ethics module

Even though the basic concept of Medical Ethics were discussed and case studies were discussed to reinforce the concept many students found it hard to understand the concept of ethics (Table 4). This maybe as they have had no clinical exposure as of present. Reinforcement of the concept of ethics during the second year and regular sessions after that including the internship period is essential.

The time management and stress management sessions were well appreciated. The students were of the opinion that regular sessions on stress management is essential throughout the course.

The sessions on different learning styles was also well appreciated especially the interaction by senior students on the importance of continued learning, timeliness of submission of assignments and records and keep away from distractions and prioritise academics

3.5. Enhancement of language and computer skill

Orientation to communication skills was done which was followed by role play by the students in small groups on a given situation. Only 4 students were from out of state requiring local language orientation. Most of the students were already oriented to computer skills and only 20% were not versed with the basic soft wares. Nevertheless a session addressing the basic soft wares like MS word, MS Excel, MS Power point etc was taken and students were asked to make a power point presentation in small groups. The discussion following the presentation focused on requisites for a PPT presentation and dos and don't, s.

Table 1: Perceptions regarding the orientation module

S. No.	Sessions	Mean Score (+SD)	TL Method used	Themes derived from perceptions of students
1	Introduction to the institution, campus and facilities	4(0.7)	<ul style="list-style-type: none"> • Address by Principal for students & parents • Address by Heads of different departments • Visit of campus facilities • Icebreaking session for students 	<ul style="list-style-type: none"> • Got a idea regarding the prestigious institution and proud to be a part of it • Am in awe of the institution • Got to know various faculty • Icebreaking session helped to know other students, their hobbies
2	Role of Doctor in society	4(0.8)	<ul style="list-style-type: none"> • Small group discussion • Presentation of points discussed in SGD • Poster making and presentation 	<ul style="list-style-type: none"> • Group discussion helped know about others perspectives and thoughts • Learnt from others experiences
3	History of Medicine	3.5(0.8)	Lecture, Video, Quiz	Interesting to know about history
4	IMG Roles	4(0.8)	<ul style="list-style-type: none"> • HODs of Phase I subjects addressed the students 	<ul style="list-style-type: none"> • New information regarding roles of IMG
	Overview of MBBS Program	4(0.8)	<ul style="list-style-type: none"> • Large group session 	<ul style="list-style-type: none"> • Got an idea regarding the new curriculum
	Career pathways	4(0.7)	<ul style="list-style-type: none"> • Interactive large group discussion. Real life stories and experiences 	<ul style="list-style-type: none"> • Realised there is a lot to study • Got to know various options which can be pursued after MBBS • Sharing of real life stories of Doctors pursuing different fields
5	Principles of family practice	4.1(0,8)	Interactive large group session by HOD, Dept Family Medicine	<ul style="list-style-type: none"> • Roles and the need for family physician • Know the bane of too much specialisation

Table 2: Perceptions regarding the skills module

S No.	Sessions	Mean Score (SD)	TL method used	Perceptions of students
1	First Aid	4.8(0.2)	<ul style="list-style-type: none"> • Interactive large group session 	<ul style="list-style-type: none"> • Interesting hands on experience
2	Basic Life Support (Both sessions taken together by same faculty team)		<ul style="list-style-type: none"> • Video demonstration • Hands on training at the skills lab 	<ul style="list-style-type: none"> • More time needed • Disaster preparedness may also be included
3	Universal precautions	4.1(0.9)	<ul style="list-style-type: none"> • Interactive large group lecture 	<ul style="list-style-type: none"> • Became aware of infection control practices
4	Waste management (Both sessions taken together by same faculty team)		<ul style="list-style-type: none"> • Video demonstration • Hands on training in basic infection control measures 	<ul style="list-style-type: none"> • Demonstration and hands on experiences were good
5	Immunisation	4.(0.8)	<ul style="list-style-type: none"> • Interactive large group discussion. • Video demonstration • Experience sharing of VPD outbreaks 	<ul style="list-style-type: none"> • Realised the importance of getting vaccinated • Video and experience sharing was very interesting • Realised that few among us are not vaccinated, it was a motivation for them

Table 3: Perceptions regarding the community orientation module

S No.	Sessions	Mean Score (SD)	Teaching learning methods	Perceptions of students
1	National Health Goals and policies Health Care systems	4(0.7)	<ul style="list-style-type: none"> • Interactive large group discussion • Visit to PHC with a profoma to be filled 	<ul style="list-style-type: none"> • Were oriented to the current health system • Visit to the PHC was a great experience which helped reinforce the health care system • Realised that PHC provides a lot of services free of cost • Able to see the various roles of the doctor
2	Interaction with patients, families, communities	4.8(0.2)	<ul style="list-style-type: none"> • House visits with questionnaire • Visit to wards in the hospital 	<ul style="list-style-type: none"> • Field visits to households was a great experience • Came to understand the common health problems in community • Ward visits and household visits helped us interact with patients • Realised that communication skills are not easy and needs to be developed

Table 4: Perceptions regarding the professional development and ethics module

S. No.	Sessions	Mean Score (SD)	TL methods used	Perceptions
1	Concept of professionalism and Ethics	4(0.8)	<ul style="list-style-type: none"> • Interactive large group lecture 	<ul style="list-style-type: none"> • Aware of the principles of ethics to be followed
2	Professional behaviour and altruistic behaviour		<ul style="list-style-type: none"> • Discussion of case scenarios related to ethics • Facilitated Small group discussion 	<ul style="list-style-type: none"> • Case studies used for discussion were thought provoking • Had some problem understanding the concept
3	Disability competencies	4.1(0.8)	<ul style="list-style-type: none"> • Interactive session • Experience sharing by person with disability 	<ul style="list-style-type: none"> • Were sensitised to how to approach a person with disability • Experience sharing by a faculty who was disabled reinforced the idea of seeing things from their perspective
4	Stress management	3.9(0.8)	<ul style="list-style-type: none"> • Interactive large group discussion • Demonstration of relaxation techniques 	<ul style="list-style-type: none"> • Sensitised to the different ways in which stress can be managed • Demonstration of stress relieving excersises • More frequent sessions required
5	Time management	3.9(0.8)	<ul style="list-style-type: none"> • Large group discussion • Demonstration 	<ul style="list-style-type: none"> • Tips given by faculty were helpful • Demonstration of few ways of time management helpful
6	Learning	4.2(0.9)	<ul style="list-style-type: none"> • Interactive large group discussions. Experience sharing • Interactive large group discussion with experience sharing and helpful tips by Seniors 	<ul style="list-style-type: none"> • Identified Different types of learners and different ways of learning • Interactive session with peers was informative • Realised importance of being regular in academics, logbook maintenance etc

Table 5: Perceptions regarding the language and computer skill module

S No.	Sessions	Mean Score (SD)	TL methods	Perceptions
1	Communication skills	4(0.8)	<ul style="list-style-type: none"> • Interactive large group session. Video demonstration • Role play by students for given situation 	<ul style="list-style-type: none"> • Realised that communication plays a very important role in patient care • The role plays helped reinforce the importance of good communication skill
2	Computer skills	4.1(0.8)	<ul style="list-style-type: none"> • Large group session • Small group demonstration • Presentation by students and feedback by faculty 	<ul style="list-style-type: none"> • Introduction to some programs like PPT, MS word and MS Excel were informative • Got a chance to make a PPT presentation and showcase it in large group which was very informative • More time need to be allotted for computer skills

The students found this feedback session very informative as many of them were already making ppt presentations but were not aware of the rules to be followed (Table 5) as the presentations were developed in a group, group members shared their knowledge showing the power of peer education.

3.6. Sports and physical education

These sessions were handled by the Physical Education department of our institution. Students received a sensitization regarding the facilities available in the institution. They were rotated in small groups in various activities like Yoga, aerobics, athletics, football, cricket etc so that they could choose which areas to pursue according their interests. These sessions received the most positive feedback. As per the students' feedback, these sessions helped them to work as a team and improve their leadership skills.

4. Discussion

Many colleges conduct an orientation program prior to initiation of the academic sessions for the MBBS students but these programs are for short duration lasting one week or less. A literature search for foundation course for MBBS students yielded very few publications. Moreover no publications were obtained on the MCI recommended one month long foundation course. Since this was the first time that a month long foundation course was being conducted the perception of the students was obtained through open ended questions and themes were derived from the qualitative data.

The major objective of the foundation course is to acclimatize the students to their new surroundings and this was adequately met by the end of the course as the students were familiar with the various facilities in the campus and the faculty. The opportunity to interact with their peers and within a short period of one month they

were familiar with their batch mates even in huge group of 250 students. Studies conducted elsewhere also show that the students have a positive attitude towards the orientation programs and foundation courses conducted and perceived the orientation program helped them get familiar to the campus.^{6,7}

Most of the orientation programs done elsewhere also show that students appreciate skills training including communication skills^{3,6} and BLS⁶ as has been observed in our study. Hands on experiences are more realistic and give a real life experience for the students generating interest in their course. The community orientation sessions connected the students to the community and gave them a look into the lives of patients and their backgrounds which is lacking in the clinical setting.

Sessions on time management and stress management prepare students for the demanding road ahead and so do learning skills as has been observed by Jagathy Devi et al.³ In our program peer education for these topics was very much appreciated.

Some of the sessions like the session on ethics even though not much appreciated by students will help them later and they will realize its importance later as seen by the study conducted in Hyderabad³ where a follow up done one year later showed that more students perceived the importance of sessions taken during the orientation program.

Sports and games was a new addition for the foundation course which has not been addressed in any of the orientation programs conducted in various colleges. Its heartening to see that MCI not only recommends sports during the foundation course but has specified hours allotted to sports even after commencement of academic sessions. This not only provides an opportunity for the students to pursue their hobbies and passion but also acts as a de-stresser in their hectic academic schedule.

Working in a team and learning from peers and experiential learning were all some of the activities which were perceived by the students as having a positive impact on them during the foundation course. Small group discussions and presentations based on self directed learning were also well appreciated more than large group sessions.

The huge number of students in our institution has always been an obstacle for the facilitators during training sessions. The large number of students always mean more faculty requirement and infrastructure in addition to more time allotment especially since the MCI is now giving more thrust to small group learning. An increase in the faculty strength in medical colleges would be welcome decision keeping this in view.

5. Conclusion

The one month long foundation course conducted as per MCI norms has been successful in familiarizing the students with their new environment. It serves the role of a precursor for their academic sessions for the coming months. Students have perceived the importance of the concept of team work and peer learning which form a major part of the course and which will help them in their academic program. A follow up of the same students at the end of first year is needed to realize the impact of the foundation course.

6. Source of Funding

None.

7. Conflict of Interest

None.

References

1. Taylor BE, Massy WF. Strategic Indicators for Higher Education: Vital Benchmarks and Information to Help You Evaluate and Improve Your Institution's Performance. Princeton, NJ: Peterson's; 1996.
2. Mahajan R, Gupta K. Evaluation of orientation program for fresh MBBS entrants: Faculty and students' perspectives. *Int J App Basic Med Res.* 2015;5:50–3.
3. Devi NJ, Kumari AS, Murty DS. The Impact of Orientation Program for First M.B.B.S Students In The Transformation of Perceptual Learning into Experiential Learning -An Insight. *J Dent Med Sci.* 2016;15(6):40–5.
4. Medical Council of India .Curriculum Implementation Support Program of the Competency based undergraduate medical education curriculum 2019.
5. Medical Council of India. Curriculum Implementation Support Program of the Competency based undergraduate medical education curriculum; 2019.
6. Srimathi T. A study on students feedback on the foundation course in first year mbbs curriculum. *Int J Med Res Health Sci.* 2014;3(3):575–9.
7. Patel J, Akhani P. A study of perception of first-year MBBS students toward orientation program and foundation course at entry level. *Natl J Physiol Pharm Pharmacol.* 2017;7(9):920–3.

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