



A STUDY ON IMPACT OF ORIENTATION PROGRAM AND FOUNDATION COURSE AT ENTRY LEVEL ON FIRST-YEAR MBBS STUDENTS

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ABSTRACT

Objectives: To assess the continued usefulness and relevance of Foundation Course in priming students to the multiple arenas of medical curriculum. To study the perception of medical ethics in the students who have enrolled in the new curriculum.

Methodology: Foundation Course was conducted for 250 incoming MBBS students of 2019 Batch and initial Student feedback obtained by a pre designed and pre validated anonymous questionnaire to assess the usefulness and relevance of the Foundation Course.

Results: In the feedback, most of the students understood the program and felt that the skills taught can be implemented. More than half of the students had a proper idea about the professionalism of being a doctor. A small part of the study population understood but felt the skills difficult to implement while a negligible portion did not understand at all.

Conclusion: This study makes it clear that there is a lasting impact of foundation course in acquainting students with multiple arenas of medical curriculum. It is the first decisive step in the long journey of medical education and should be a regular feature in the curriculum.

KEYWORDS : Orientation Program, Foundation Course, Medical Education, MCI Curriculum, Indian Medical Graduate

Orientation programs are designed and implemented by different academic institutions globally for students transitioning from high school to undergraduate course, with the objective of familiarizing the students with campus environment and academic programs, and help them in adjusting (Taylor BE et al, 1996). As per Devi JN et al. (2016), in India, students aged 17—19 years enter medical profession, with varied psychological characteristics such as fear of ragging, feeling of homesickness, peer pressure, parental pressures, language problems, and adjustments to hostel life and food. They come from different sociocultural backgrounds and have diverse expectations from the medical profession and after entering, they are expected to understand and appreciate the medical subjects. To facilitate this transition from school phase to a professional course, the Medical Council of India (MCI) has introduced a foundation course of 2 months in the "Regulations on Graduate Medical Education, 2012." According to the Medical Council of India Vision 2015, "Foundation course will be of 2 months duration after admission to prepare a student to study Medicine effectively. This period aims to orient students to national health scenarios, medical ethics, health economics, and learning communication skills, life support, computer learning, sociology and demographics, biohazard safety, environmental issues and community orientations". Furthermore, as it has been accepted by Stern DY (2006) that "Professionalism is a core competency of physicians. Clinical knowledge and skills (and their maintenance and improvement), good communication skills, and sound understanding of ethics constitute the foundation of professionalism. Rising from this foundation are behaviors and attributes of professionalism, accountability, altruism, excellence, and humanism, the capstone of which is professionalism." A previous study by Singh S et al. (2007) showed that most of the students do not have any preceding knowledge of the forthcoming professional demands except for a few internet, language, and time management skills. Hence, the Medical Education Unit (MEU) of Jagannath Gupta Institute of Medical Sciences and Hospital (JGIMSH), Budge Budge, West Bengal designed and evaluated a two week long

orientation and foundation program for the first-year MBBS students, batch 2019—2020, August 19—31, 2019 to orient the fresh batch of students about national health scenarios, medical ethics, learning skills and communication, life support, computer learning, sociology and demographics, biohazard safety, and community orientation. The purpose of the Foundation Course was to introduce students to all aspects of the medical education that is to be imparted to them during the next years. The Course Content included:

- i. Orienting the students to all aspects of the medical college environment;
- ii. Equipping students with certain basic, but important skills required for patient care;
- iii. Enhancing communication, language, computer and learning skills of the students;
- iv. Providing opportunity for peer and faculty interactions and an overall sensitisation to the various learning methodologies;

MATERIALS AND METHODS

Orientation program and Foundation Course was organized by the MEU, JGIMSH for the incoming first-year MBBS students of 2019-2020 batch. Prior approval for the study was obtained from the Institutional Ethics Committee of JGIMSH. 150 students voluntarily participated in this Two week long program held from August 18—31, 2019, and gave written informed consent for the same. The entire program consisted of lectures, small group discussions, hospital and Rural Health training Centre visits and this included group activities, interactive forum, role plays, and clinical bed-side demonstrations. The entire program was facilitated by 50 facilitators and they motivated students to participate actively. Students' feedback was obtained by a pre-designed and pre-validated anonymous questionnaire. The students evaluated the course on the following broad parameters: Content and Design; Facilitators Evaluation; Knowledge, Skills and Confidence before and after the course on Attitude, Ethics and Communication, Computer Efficacy, Hospital and Health Centre Visits. Statistical analysis of the collected data was performed using MS Excel 2017.

RESULTS

Table 1: Feedback of students on content and design of the foundation course (n = 141)

Parameters	Strongly Disagree	Disagree	Agree	Strongly Agree
Relevant	1	5	37	98
Comprehensive	0	6	58	76
Easy to understand	1	3	36	101

Table 1 shows feedback of students on content and design of the foundation course. Out of 150 students, 141 responded with the feedback, whereas 9 did not respond. 96% (n=135) students found the program relevant, 95% (n=134) students found the program comprehensive, while 97% (n=137) students found the orientation program easy to understand.

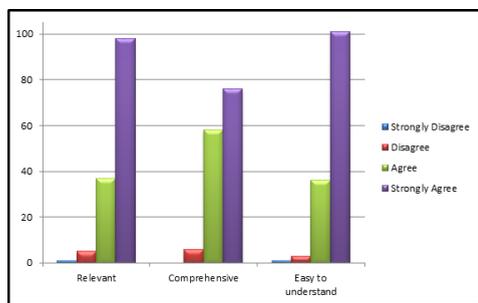


Fig. 1: Feedback of students on content and design of the Foundation Course

Table 3: Feedback of Students on Knowledge, Skills and Confidence on different Competencies

Competence	Related To Course	Poor	Fair	Good	Excellent
Orientation with Departments, Facilitators, Facilities, Course work (n = 146)	Before	47	57	34	8
	After	3	7	87	49
Learning about Healthcare delivery system (n=137)	Before	53	55	25	4
	After	1	6	75	55
Learning about Attitude, Ethics, Professional development and Communication skills (n=138)	Before	23	57	41	17
	After	0	7	65	66
Language and Skill development (n=135)	Before	37	54	34	10
	After	1	3	65	66
Computer skills in Medical Education (n=127)	Before	18	34	47	28
	After	3	16	66	42
Importance of Sports and Entertainment during Medical education (n=136)	Before	27	42	52	15
	After	13	19	64	40

Table 3 compares the students' response on Knowledge, Skills and Confidence on different competencies, before and after the program. Before the Course, only 28.7% (n=42) students had a good or excellent knowledge while 71.2% (n=104) had poor or fair knowledge about orientation with Departments, Facilitators, Facilities, Course work. However, after the Program, these were converted to 87% (n=136) and 13% (n=10) respectively. With the usage of grading, the students perception provided mean values of 2.1(Before the course) and 3.3 (After the course) respectively. When Skills and Confidence on learning about Healthcare delivery system is compared before and after the program, it is observed that before the Course, just 21% (n=29) students had a good or excellent knowledge while 79% (n=108) had poor or fair knowledge in this area. However, after the Program, these were converted to 95% (n=130) and 5% (n=7) respectively. With the usage of grading, the students perception provided mean values of 1.9(Before the course) and 3.3 (After the course) respectively. If students' response on Knowledge, Skills and Confidence on learning about Attitude, Ethics and Professional development and Communication skills is compared before and after the program, it is observed that before the Course, 42% (n=58) students had a good or excellent knowledge while 58% (n=80) had poor or fair knowledge about these areas. However, after the Program, these were converted to 95% (n=131) and 5% (n=7)

Table 2: Feedback of students on Teachers/ Facilitators (n = 141)

Parameters	Strongly Disagree	Disagree	Agree	Strongly Agree
Knowledgeable	1	1	12	127
Well - prepared	1	4	29	106
Responsive to questions	2	2	25	111
Punctual	1	3	37	99
Good Communication Skills	1	2	36	101

Table 2 shows feedback of students on Teachers/Facilitators, where 141 students responded with feedback. 98.5% (n=139) students stated that the facilitators were Knowledgeable, 96% (n=135) students found the teachers were well prepared for the program, 97% (n=136) students stated that their queries were responded, 97% (n=136) students found the teachers were punctual and 98% (n=137) students found that facilitators had good communication skills.

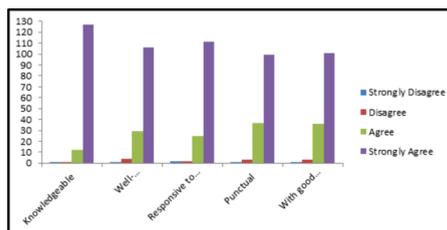


Fig.2: Feedback of students on Teachers/ Facilitators

respectively. With the usage of grading, the students perception provided mean values of 2.4(Before the course) and 3.4 (After the course) respectively. Regarding Language and Skill development it is observed that before the Course, 33% (n=44) students had a good or excellent knowledge while 67% (n=91) had poor or fair knowledge. However, after the Program, these were converted to 97% (n=131) and 3% (n=4) respectively. With the usage of grading, the students perception provided mean values of 2.1(Before the course) and 3.5 (After the course) respectively showing a significant improvement after the sessions. If Computer skills in Medical Education is compared before and after the program, it is seen that before the Course, 59% (n=75) students had a good or excellent knowledge while 41% (n=52) had poor or fair knowledge; which were converted to 85% (n=108) and 15% (n=19) respectively after the program. With the usage of grading, the students perception provided mean values of 2.7(Before the course) and 3.2 (After the course) respectively. Finally, regarding response on the importance of Sports and Entertainment during Medical education, while before the Course, 49% (n=67) students had a good or excellent knowledge and 51% (n=69) had poor or fair knowledge, after the Program, these were converted to 76% (n=104) and 24% (n=32) respectively. With the usage of grading, the students perception provided mean values of 2.4 (Before the course) and 3.0 (After the course).

DISCUSSION

Different Orientation Programs are implemented globally to acclimatize the students of an institution to the campus environment, familiarize them with the teaching programs, helping them to adapt to the academic challenges, and guide their transition from high school into undergraduate programs. In India, students get admission to a medical college based on their merit at the qualifying National Eligibility-Cum-Entrance Test Undergraduate examination as per the Indian Medical Council (Amendment) Act, 2016. An Indian Medical Graduate (IMG), as per MCI, should possess requisite knowledge, skills, attitudes, values and responsiveness, to enable him or her to function effectively as a physician of the community while being globally relevant. As medicine is a challenging profession that demands the study of a large volume of knowledge, acquisition of novel clinical skills, self-directed learning, ethical behaviour and professional attitudes, the MCI has suggested conducting a foundation course of 2 months for the first-year MBBS students with the aim of producing competent Indian Medical Graduates. This inspired the MEU faculties at JIMSH, Budge Budge, West Bengal to design, implement, and evaluate an Orientation Program and Foundation Course for 2019-2020 batch of first year MBBS students. The feedback was taken from them both before and after the Course, which was implemented by 50 facilitators. Several studies on Orientation training for First M.B.B.S students in India have concentrated on the assessment of the students' knowledge, attitudes and perceptions about selected subject areas immediately before and after the program. One such study by Shankar P et al. (2012) revealed that the median knowledge and attitudes scores increased after the program. In another study by Mittal R et al. (2013), the students were given a pre and post program test, which showed an improvement of 37.3% in the post test average over the pre-test one. The best pre-test performance was 75% while that in the post- test was 100%. A study by Mahajan R et al. (2015) evaluated the Orientation program from students' perspective and both faculty and students' perspectives, to recommend revised program.

In the present study by Chatterjee Anant et al, feedback of students on content and design of the foundation course reveals that 96% (n=135) students found the program relevant, 95% (n=134) students found the program comprehensive, while 97% (n=137) students found the orientation program easy to understand. 98.5% (n=139) students stated that the facilitators were Knowledgeable, 96% (n=135) students found the teachers were well prepared for the program, 97% (n=136) students stated that their queries were responded, 97% (n=136) students found the teachers were punctual and 98% (n=137) students found that facilitators had good communication skills. A comparison of students' response on Knowledge, Skills and Confidence on different competencies before and after the Orientation Program showed a drastic improvement. Before the Course, only 28.7% (n=42) students had a good or excellent knowledge about the Departments, Facilitators, Facilities, Course work while 71.2% (n=104) had poor or fair knowledge. However, after the Program, these were converted to 87% (n=136) and 13% (n=10) respectively. The awareness created in students with respect to place (learning environment and facility), teaching schedules and timetables, personnel (faculty, staff and mentors) indicates a tremendous improvement after attending the sessions. When the findings on learning about Healthcare delivery system is compared before and after the program, there is an improvement in good or excellent knowledge from 21% (n=29) (before Course) to 95% (n=130) (after Course) while poor or fair knowledge in this area dropped from 79% (n=108) (before Course) to only 5% (n=7) (after Course). The feedback on the field visits to the Rural Health Training Centre provided a strong orientation to the health care delivery system. When the students' response

on learning about Attitude, Ethics and Professional development and Communication skills are compared before and after the program, it is seen that while only 42% (n=58) students had a good or excellent knowledge before the course, it improved to 95% (n=131) after the course. At the same time, poor or fair knowledge about these areas dropped from 58% (n=80) (before Course) to only 5% (n=7) (after Course). This finding indicates students' marked improvement on values, behaviour, ethics, communication and personality development after the program. Before the Course, only 33% (n=44) students had a good or excellent knowledge about Language and Skill development, which got improved to 97% (n=131) after the Course completion. Before the Course, 59% (n=75) students had good or excellent knowledge about Computer skills in Medical Education, which got improved to 85% (n=108) after the program was concluded. This finding shows that even before the course, many students were familiar with computer skills. 49% (n=67) students had a good or excellent knowledge on the importance of Sports and Entertainment during Medical education before the course, which was further improved to 76% (n=104) after conducting the course, which indicates that the students were familiar with the importance of extra-curricular activities mainly physical, even prior to the course. All these findings in the present study are similar to other similar studies conducted in Indian scenario (David MA, 2013; Shankar PR, 2014; Srimathi T, 2014; Patel J et al, 2017) and this reflects the utility and necessity of such Orientation Programs in the current context of MBBS education.

It has been suggested by Cruess SR et al. (2008) that role modeling is an effective means of teaching professionalism. In the current Orientation Program, senior faculty and Medical Education Unit members acted as facilitators for various interactive sessions. It has been observed that learners watch, embrace and mimic attitudes and behaviors of role models. It is found to be more effective to teach and assess professionalism in early medical learners who have just entered medical school with huge expectations and ideals, as observed by Stern DY (2006). Hence, it can be summarized that there is a definite and lasting advantage of a structured foundation course, which can help alleviate students' anxieties and guide them to cope with forthcoming professional requirements.

CONCLUSION

This study makes it clear that there is a definite and lasting advantage of orientation program for students entering the MBBS course. The data indicates that there was remarkable improvement after the students attended the entire course, showing that there is an actual internalization of the skills taught during the program. The cognitive, affective and communication competencies of the students were adequately addressed during the Foundation Course. Apart from the academic areas, computer ability, sports and team spirit as well as personality, attitude and ethics were also dealt with. The interactive and responsive sessions of the program were highly appreciated by majority of the students who recommended further such programs every year on a regular basis. Many studies suggest that teaching of scientific research competencies should start early in undergraduate medical education and continue throughout the pre-clinical and clinical years as it helps in the research-oriented career in their future. To summarize, orientation will help in improving the students to cope with multiple demands of medical education and to ensure that they develop into well-rounded personalities and outstanding in the community.

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