

## The Impact of Orientation Program for First M.B.B.S Students In The Transformation of Perceptual Learning into Experiential Learning –An Insight.

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### Abstract

**Introduction:** Students entering medical college have different backgrounds and expectations and need to be oriented towards Medical education. MCI has set clear regulations regarding the crucial foundation course to shape them into model doctors. In this context, Medical Education Unit of Osmania Medical College organized a week-long Orientation program for First M.B.B.S. students of 2014 batch.

**Objectives:** To assess the continued usefulness and relevance of Orientation in priming students to the multiple arenas of medical curriculum. To study the impact of the program in the transformation of perceptual learning into experiential learning in medical students.

**Methodology:** Orientation program was conducted for 190 incoming M.B.B.S. students of 2014 Batch and initial Student feedback obtained. After one and a half years, a Review Feedback was obtained from the same students, presently in Second year M.B.B.S, to assess the continued usefulness and relevance of the Orientation program for 5 randomly selected topics: a) Study skills b) Writing skills c) Use of Computers d) Mentoring and e) Communication skills.

**Results:** In the initial feedback, 88.10% of the students understood the program and felt that the skills taught can be implemented and 11.40% understood but felt the skills difficult to implement while 0.5% did not understand at all. The follow-up study after 18 months showed that students who initially perceived a difficulty in implementing the skills are now finding them to be useful and relevant: Communication Skills (98.9%) and Study skills (98.4%) were regarded as highly relevant, followed by Mentoring (94.25%), Writing skills (92.97%) and Use of Computers (91.20%).

**Conclusion:** This study makes it clear that there is a lasting impact of orientation program (as assessed by initial and review feedback) in acquainting students with multiple arenas of medical curriculum. It is the first decisive step in the long journey of medical education.

**Keywords:** Orientation program, First MBBS students, Student review feedback, Osmania Medical College, MCI Vision 2015.

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### I. Introduction

Students entering Medical college come from different backgrounds and have different expectations. They are plagued by personal fears of home sickness, peer pressure, ragging, language and other adjustment problems at 17-19 years of impressionable age. Rising above all these teething problems, there is a need to appreciate the nature of their chosen profession.

The practice of medicine is an art, not a trade, a calling, not a business- a calling in which your heart will be exercised equally with your head<sup>1</sup>. Keeping this noble sentiment in mind, a need for Orientation and Induction training has been perceived by Medical Educationists world-wide.

MCI has set clear regulations regarding the crucial foundation course to shape them into model doctors. 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".<sup>2</sup>The Foundation course should enable the student to acquire enhanced skills in: i) Language, ii) Interpersonal relationships, iii) Communication, iv) Learning including self-directed learning, v) Time management, vi) Stress management, vii) Use of information technology. And train the students to provide: i) First-aid ii) Basic life support.<sup>2</sup>

A further challenge perceived by the medical teachers is to inculcate the basic foundational requirements of professionalism in these early medical learners. It has been accepted 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.”<sup>3</sup> Previous studies have revealed that the majority of the students did not have prior knowledge except for language, internet skills and time management.<sup>4</sup>

In this scenario, Medical Education Unit of Osmania Medical College organized a weeklong Orientation for First M.B.B.S. students on Medical ethics, Importance of Communication skills and various other topics as proposed by MCI and then proceeded to evaluate its benefits and impact, both immediate and longterm from the students perspective.

## II. Objectives

To assess the continued relevance of Orientation and induction training for the Incoming First year M.B.B.S. students 2014 Batch in getting acquainted with multiple arenas of medical curriculum. To study the impact of First M.B.B.S Orientation program in the transformation of perceptual learning into experiential learning.

## III. Methodology

The study was conducted by the Medical Education Unit, Osmania Medical College after the approval of Institutional Ethics Committee. Orientation and induction training for the Incoming First year M.B.B.S. students 2014 Batch was organized under the guidance of Principal from 10.9.2014 to 16.9.2014. 190 students participated in the weeklong induction training. Medical Education Unit members acted as facilitators of the various sessions.

All the sessions were interactive and students played a pro-active role in them. In the Ice breaking session, they introduced themselves and spelt out their future aspirations. Some of them enthusiastically volunteered for Role play during the Communication skills session. This was enjoyed immensely by both the faculty and students.

### The schedule of the Orientation program is given below:-

Date	Topics
10.9.2014	1) Ethics and Human values. 2) Introduction to Pharmacology & Pathology Departments by their respective faculty.
11.9.2014	3) Motivation 4) Introduction to Microbiology & Forensic Medicine Departments by their respective faculty.
12.9.2014	5) Study skills 6) Writing skills
13.9.2014	7) Stress and Time Management 8) Anti-ragging measures 9) Ice breaking session
15.9.2014	10) Use of Computers 11)Mentoring
16.9.2014	12) Basic Life Support(BLS) 13)Effective communication skills with Role play

The students’ initial feedback was obtained during the program (on a daily basis) under the following parameters:

- 1) The topic was understood well and can be implemented
- 2) The topic was understood but difficult to implement
- 3) The topic cannot be understood

After one and a half years, a Review Feedback was obtained from the same students, presently in Second year M.B.B.S, to assess the continued usefulness and relevance of 5 topics, randomly selected from the Orientation program: a) Study skills b) Writing skills c) Use of Computers d) Mentoring e) Communication skills with Role play.

Their feedback was obtained under the following parameters:

- 1) Useful and relevant
- 2) Not useful and not relevant

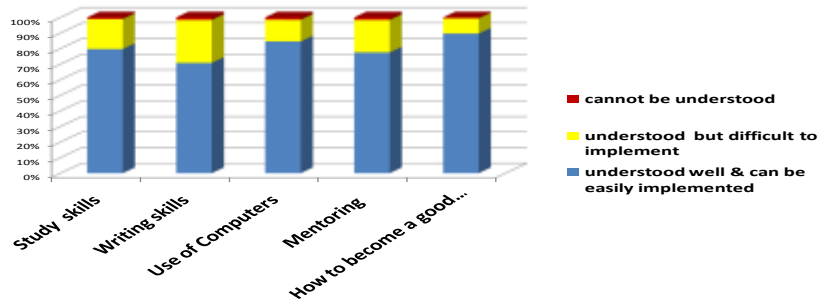
## IV. Results

In the 190 students who participated in the study, initial feedback results obtained for the program were as follows:

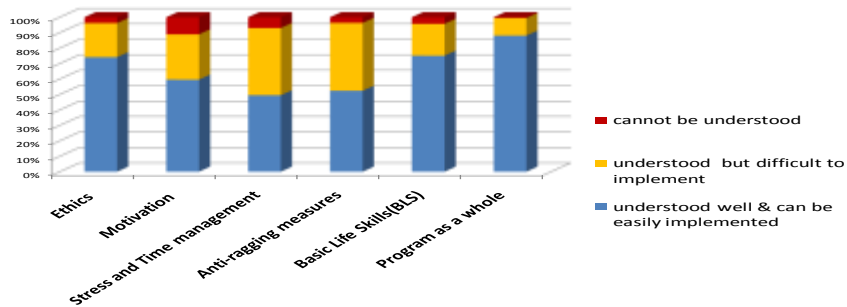
**Table1:** Initial Students’ feedback obtained during the Orientation program n-190

S.No	Topic	A understood well & can be easily implemented	B understood but difficult to implement	C cannot be understood
1	Ethics	74.20%	22%	3.84%
2	Motivation	59.60%	29.30%	11.10%
3	Study skills	79.70%	19.30%	1.0%
4	Writing skills	70.80%	27.60%	1.60%
5	Stress and Time management	49.50%	43.50%	7.0%
6	Anti-ragging measures	52.40%	43.90%	3.70%
7	Use of Computers	84.80%	14.0%	1.50%
8	Mentoring	77.50%	20.90%	1.60%
9	Basic Life Skills(BLS)	75.10%	20.60%	4.30%
10	Effective communication skills	89.60%	9.8%	0.6%
11	Program as a whole	88.10%	11.4%	0.5%

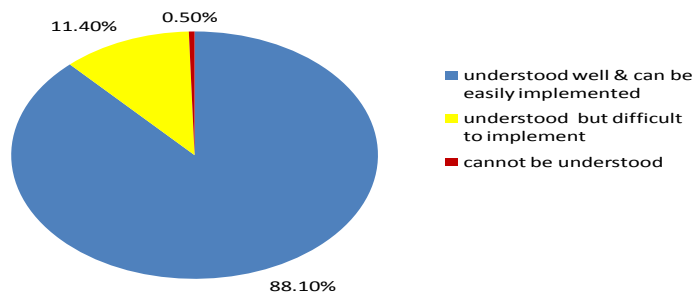
**Fig 1 . Component Bar diagram showing the response of students during initial feedback of the orientation program.**



**Fig 2 . Component Bar diagram showing the response of students during initial feedback of the orientation program.**



### Program as a whole



Out of 190 students who attended the orientation program, the percentage of students who understood the sessions and felt that they can be implemented was: Ethics – 74.2% ; Motivation- 59.6% ; Study skills – 79.7% ; Writing skills – 70.8 % ; Stress and time management – 49.5% ; Anti-ragging measures-52.4% ; Use of computers-84.5% ; Mentoring – 77.5% ; Basic life support – 75.1% ; Communication skills – 89.6% and the Program as whole – 88.1%

The percentage of students who understood the sessions but felt they are difficult to implement : Ethics – 22% ; Motivation- 29.3% ; Study skills – 19.3% ; Writing skills – 27.6 % ; Stress and time management – 43.5% ; Anti-ragging measures-43.9% ; Use of computers-14% ; Mentoring – 20.9% ; Basic life support – 20.6% ; Communication skills – 9.8% and the Program as whole – 11.4%

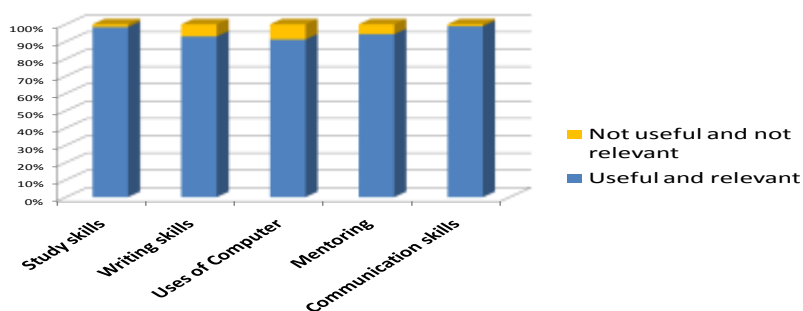
The percentage of students who did not understand the sessions : Ethics – 3.84% ; Motivation- 11.1% ; Study skills – 1% ; Writing skills – 1.6% ; Stress and time management – 7% ; Anti-ragging measures-3.7% ; Use of computers-1.5% ; Mentoring – 1.6% ; Basic life support – 4.3% ; Communication skills – 0.6% and Program as whole – 0.5%

The review feedback was taken to assess the continued usefulness and relevance of the orientation in day to day studies from the same students

**Table 2:** Students’ Review Feedback n=190

S No.	Topic	A Useful and relevant	B Not useful and not relevant
1	Study skills	98.40%	1.60%
2	Writing skills	92.97%	7.03%
3	Uses of Computer	91.20%	8.80%
4	Mentoring	94.25%	5.75%
5	Communication skills	98.90%	1.1%

**Fig 3 . Component Bar diagram showing the response of students during review feedback of the orientation program**



The percentage of students who found the topics useful and relevant were : Study skills 98.4% ; Writing skills 92.97% ; Use of computers 91.2% ; Mentoring 94.5% and Communication skills 98.9%

The percentage of students who did not find them useful and relevant were: Study skills 1.6% ; Writing skills 7.03% ; Use of computers 8.8% ; Mentoring 5.75% and Communication skills 1.1%.

Comments and suggestions given in the first orientation program were also noted and compared with the same in the review feedback.

## V. Discussion

Colleges and universities worldwide develop and implement students’ orientation programs to acclimatize them to the campus environment, familiarize them with the teaching programs, helping them to adapt to the academic challenges, as they move from high school into undergraduate programs.<sup>4</sup>

As envisaged by the MCI, “Indian Medical Graduate” (IMG) should possess requisite knowledge, skills, attitudes, values and responsiveness, so that he or she may function appropriately and effectively as a physician of first contact of the community while being globally relevant.<sup>5</sup> One of the main roles required of the IMG is that of a good communicator- a Communicator with patients, families, colleagues and community.

In accordance to the MCI Vision 2015, a week-long orientation program was planned and executed by the Medical Education Unit members who acted as facilitators of the various interactive sessions.

Previous studies on Orientation training for First M.B.B.S students have concentrated on the assessment of the students' knowledge, attitudes and perceptions about selected subject areas immediately before and after the program. One study revealed that the median knowledge and attitudes scores increased after the program.<sup>6</sup>

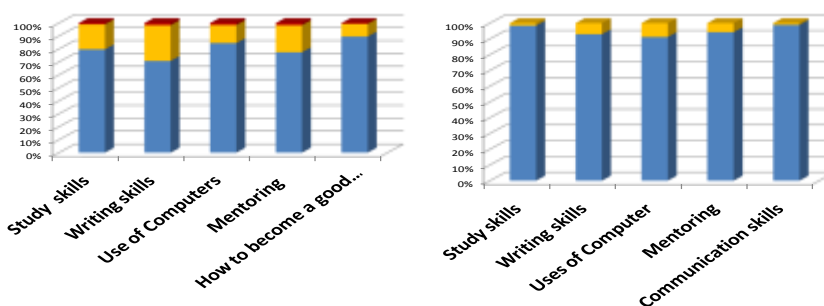
In another study in Hyderabad, the students were given a pre and post program test which was of objective type. There was an improvement of 37.3% in the post test average over the pre-test one. The best performance in the pre-test was 75% while that in the post- test was 100 % .<sup>7</sup>

Studies were also done to evaluate the Orientation program from students' perspective<sup>8</sup> and both faculty and students' perspectives,<sup>9</sup> to recommend revised program.<sup>9</sup> But not many studies were done to evaluate the long term effectiveness of Orientation program. In the present study, the actual internalization of the skills taught during the program, in day-to-day studies of medical students has been assessed. An insight has been provided on the impact of Orientation training in transforming perceptual learning (through the initial feedback-considered as first impressions) into experiential learning (through the review feedback-considered as actual practical application of the topics dealt with initially).

Medicine is a profession that requires not only the mastery of a large body of knowledge and the acquisition of clinical skills, but also high standards of behaviour and appropriate attitudes.<sup>10</sup> 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. A consensus is emerging that role modeling is an effective means of teaching professionalism.<sup>11</sup> In this context senior faculty and Medical Education Unit members acted as facilitators of the various interactive sessions, under the guidance of the Principal who herself was an active facilitator. Experience suggests that learners watch, embrace and mimic attitudes and behaviors of role models. For the medical student a "professionalism portfolio," can be created in this first contact program, the totality of which should represent the individual's professionalism.<sup>12</sup> These portfolios are very useful in gauging the students development through medical college. Portfolios can be used for formative assessment ( i.e.. feedback and action plans for improvement) and summative feedback ( eg.discipline individuals with unacceptable professional lapses). The data can also be used to reward exemplars.<sup>13</sup>

In this study, Communication Skills( 98.9) and Study skills (98.4) were highly rated followed closely by Mentoring, Writing skills and Use of Computers.

## Initial feedback vs Review feedback



The follow-up study shows that students who initially perceived a difficulty in implementing the skills are now finding them to be useful and relevant. Communication Skills( 98.9 %) and Study skills (98.4%) were highly rated followed by Mentoring (94.25%), Writing skills (92.97%) and Use of Computers(91.20%). Hence we conclude that there is a definite and lasting advantage of Orientation program for students entering MBBS course.

## VI. Limitations of the study

All the topics in the initial Orientation program could not be included in our Review feedback study. Regarding the students who failed to understand the Orientation topics (0.5% of students), further improvisations such as small-group learning, reflective learning and more individualized training could have been included. To reach out to the 0.5% of students who did not understand the program activities, it is suggested to conduct future Orientation programs by dividing students into small groups of 30-35 students for some sessions as it facilitates better individual learning.<sup>14</sup>

## VII. Conclusion

This study makes it clear that there is a definite and lasting advantage of orientation program for students entering the MBBS course. 99.5 % of the students understood the program and related activities in initial feedback.

The follow-up study shows that more than 90% of students still relate to the program activities, finding them to be useful and relevant. Thus there is an actual internalization of the skills taught during the program. Communication Skills( 98.9%) and Study skills (98.4%) were highly useful and relevant followed closely by Mentoring(94.25%), Writing skills(92.97%) and Use of Computers(91.20%).The interactive and responsive sessions of the program were highly appreciated by the majority of students who recommended further such programs every year on a regular basis.In this context, problem-based learning needs to be incorporated as studies have shown that PBL is more effective than lectures in teaching medical ethics to students.<sup>15</sup>

It has also been proposed by some studies 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.<sup>16</sup> Presently Research Methodology is introduced and taught only at Post graduate level.

In conclusion, orientation will help in priming students to cope with the multiple demands of medical education In the long run it will bring about the "harmonious development of the head, heart and hand" to shape a model doctor as an effective health care provider.

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## References

- [1]. Osler W. An address on the master-word in medicine.Br Med J 1903;2:1196-200.Full Text
- [2]. Medical Council of India (homepage on the internet). Vision 2015. Available from [http://www.mciindia.org/tools/announcement/MCI\\_booklet.pdf](http://www.mciindia.org/tools/announcement/MCI_booklet.pdf).
- [3]. Arnold L.Stern DT. What is Medical Professionalism? In: SternDT,ed, Measuring Medical Professionalism . NewYork, NY: Oxford University Press;2006:15-37.
- [4]. Singh Suman. Foundation course for MBBS at entry level: Experience at an Indian medical school. South East Asian journal of Medical education. 2007;1(1):33-37
- [5]. Medical Council of India- Regulations on Undergraduate Medical Education 2012
- [6]. Shankar P, Karki B, Thapa T, Singh N. Orientation Program for first year undergraduate medical students: knowledge, attitudes and perceptions, Education in Medicine Journal, 2012; 4(1): e57-63. DOI:10.5959/eimj.v4i1.1
- [7]. Anthony David M. Foundational Orientation Program for Medical students. Education in Medicine Journal;2013: volume 5, Issue 2, p140
- [8]. Mittal R, Mahajan R, Mittal N. Foundation programme: A student's perspective. Int J Appl Basic Med Res. 2013 Jan-June ; 3(1) ; 52- 54
- [9]. Rajiv Mahajan , Kapil Gupta. Evaluation of orientation program for fresh MBBS entrants: Faculty and Students' perspective. Int J Appl Basic Med Res. 2015 Aug; 5(Suppl 1): S50-S53.
- [10]. Ravi Shankar P. Medical Student Attitudes Towards and Perception of the Basic Sciences in a Medical College in Western Nepal: Journal of the International Association of Medical Science
- [11]. Cruess SR, Cruess RL, Steinert Y. Role Modelling – making the most of a powerful teaching strategy.BMJ 2008; 336:718-21 Full Text
- [12]. Paul S, Mueller, Teaching and Assessing Professionalism in Medical Learners and Practicing Physicians: Rambam Maimonides Medical Journal/ [www.rmmj.org.il](http://www.rmmj.org.il), April 2015 ; Volume 6, Issue 2:1-13
- [13]. Stern DY. A Framework for Measuring Professionalism. In: Stern DT, ed. Measuring Medical Professionalism. New York, NY: Oxford University Press: 2006: 3-13.
- [14]. Srimathi T. A study on Students' feedback on the Foundation Course in First year M.B.B.S. Curriculum: Int J of Med Res Health Sci. 2014;3(3):575-579
- [15]. AlKabba. Teaching and evaluation methods of medical ethics in the Saudi public medical colleges: cross-sectional questionnaire study. BMC Medical Education 2013;13:122
- [16]. Ahmed Abu-Zaid and Khaled Alkattan. Integration of scientific research training into undergraduate medical education: A reminder call .Med Educ Online 2013, 18: 228-32 .