



The Implementation, Pros and cons of Foundation Course for MBBS 1st Year as per the New Curriculum- an Analytic Study

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Abstract

Introduction: Competency Based Medical Education was implemented by all medical colleges under the National Medical Council of India from August 2019. Foundation Course at the entry level and the longitudinal program envisaged in AETCOM module will help the students acquire necessary non cognitive competencies. This study was undertaken to evaluate the implementation of the Foundation course and find out its pros and cons from the student's perspective.

Material and Method: This qualitative research was carried out in the Medical Education Unit of HIMS Safedabad. 100 students were admitted in the year 2019 in the month of August (Batch 2019-20). The students were given a feedback form on day one. It was collected at the end of foundation course and the response of the students were categorized as positive, negative or equivocal and the percentage of each was calculated. On first day the students were also provided with a pretest containing 15 questions. Improvement in the post Test which was held at the end of the foundation course was seen. The attendance of students during the whole foundation course was also calculated to see if it is above 75%.

Observations & Results: There was an improvement of almost 12 % in the post test as compared to the pre test. The analysis of feedback from the students showed a largely positive response for all the elements of Foundation course except computer, yoga, recreation and stress management .84% of the Students had sufficient attendance.

Conclusion: The students supported the inclusion of foundation course however they wished that the duration of the same should be decreased to two weeks at most.

Keywords: CBME, Foundation course, Medical Education

Introduction

The revised Curriculum- Competency Based Medical Education was implemented by all medical colleges under the National Medical Council of India from August 2019(1). The National Eligibility Entrance test (NEET) which is the entry ticket for admission into Medical colleges' only tests the cognitive domains of the students for entry into these medical colleges. However the CBME program heavily relies

on various cognitive as well as non cognitive domains e.g.- Clinician, Leader, Communicator, Lifelong learner and Professional for its goal to create an Indian Medical Graduate(IMG). The emphasis on these roles clearly states their importance in the ultimate goal. Foundation Course at the entry level and the longitudinal program envisaged in AETCOM module will help the students acquire necessary non cognitive competencies(2)

The main objective of the foundation course is to accustom the students to the campus and make them familiar with the teaching program so that they adjust to the newer challenges and their transition into the undergraduate program is smooth. The duration of the foundation course is one month after admission and the teaching has to be done in pre-clinical departments.

The making of the time table itself was an arduous task as it required moving out of our comfort zone and doing something different, outsourcing -from the other Para clinical and clinical department as well as from the outside was required as the skills entailed in teaching of foundation course is multidisciplinary. The coordination of the timings with the faculty who were already busy with their own work and availability of venue was also a hindrance in the execution of the time table.

Material and Method

This qualitative research was carried out in the Medical Education Unit of HIMS Safedabad. 100 students were admitted in the year 2019 in the month of August (Batch 2019-20). The duration of the course was from 1st August to 31st August 2019. The schedule for the Foundation course was implemented after approval of the NMC and can be seen the college website (3)

On the first day the students were provided with a pre test containing 15 questions (Table-1). These questions were from all the different elements of the foundation course. The students were instructed to fill the form in fifteen minutes and submit the form back to the faculty in -charge. The cumulative response of the students was calculated. The same test paper was provided again (post – test) after the end of foundation course and the cumulative response of the students was calculated again. The improvement in the cumulative response was taken as an evidence of effectiveness of the Foundation course. (Table-2)

The students were also given a feedback form on day one (Table-3). The feedback form included all the elements of foundation course. The students were asked to subjectively respond to each of these elements as perceived by them. The form was collected from them at the end of the foundation course. The subjective response of the students were

grouped into three groups- positive, negative and equivocal and the percentage of each was calculated (Table-4)

The attendance of the students in the foundation course was also calculated to find out if they fulfilled the attendance criteria of 75 percent as mandated in the NMC. (Table-5).

Observations

There was an improvement of almost 12 % in the post test as compared to the pre test.(Table-1) The analysis of feedback from the students showed a largely positive response for all the elements of Foundation course except computer (31.14% responses being negative) and for yoga and recreational activity (12.09% response being negative).(Table-2) Attendance in the Foundation course as Required by the MCI is more than 75% .84% of the Students had sufficient attendance.(Table-3)

Discussion

At 12% , the quantitative increase in Pre/Post Test Result may be taken as a positive sign of effectiveness of the whole course as it contained important questions from all the elements of Foundation course like field visit, skill modules and professional development as can be seen the Table-1. Most of responses for various elements from the feedback form were positive except for computer, recreation, yoga and stress management. This negative response can be attributed to the non-availability of trained faculty appointed for these elements and dependence on unpaid guest faculty sometimes. Classes which were entrusted to the regular faculty were positively responded by the students. Similar results were also observed in other studies (5,6,7) The students responded more positively to the elements which they associated directly with being important for becoming a doctor. For stress management many were of the idea that since they hardly had any stress then there was no need of stress management. Ours being a private medical college most of the students are from well to do families who have studied in good schools and most of them already had basic knowledge about the use computer and other electronic media. As they were already well versed in MS word, Power point presentation and excel sheet etc; they found these

classes useless (5,6,7) However with a different backdrop of students these classes would have been very useful. Most of the students welcomed the idea of introduction of Foundation course but objected to its long duration. Most were of the view that its duration should be decreased to 2 weeks at the most.(5,6,7) Many also suggested the simultaneous running of 1st year classes as no exposure to any of these subjects lessened the enthusiasm with which they had joined the course. 84% of students had sufficient attendance, 16% students who had less attendance was either due to late joining or some kind of illness due to which they could not attend classes.

Conclusion

The inclusion of Foundation course in the new curriculum is an acceptance of the lacuna which

existed in the old curriculum. Directly introducing the fresh students to the grind of medical subjects without any time to make them conversant with the new atmosphere a little harsh on them. The foundation course is a novel and crucial addition to the MBBS curriculum. It prepares the students to the new ways of teaching and learning, modifying their learning style from pedagogy to andragogy. Most of the students acknowledge the usefulness of various elements of foundation course and appreciated the inclusion of this course in under graduate medical curriculum. However the duration of the course and usefulness of certain elements like computer and stress management were doubtful to the students. Though there has been initial hiccups this new idea needs a chance to show its true colours and uncover its relevance.

Pre Test / Post Test Analysis (Table-1)

S.N.	Data	Pre Test	Post Test
1	Number of Students appeared	66	86
2	Total Marks -	66x15=990	86x15=1290
3	Marks Obtained	701	1066
4	Average % of Marks Obtained	70.80%	82.64%
5	Improvement in score	12%	

Analysis of Feedback form(Table-2)

S.N.	Elements	Positive	Negative	Equivocal
1	Orientation Module	87	0	1
2	Departments Tour & Campus Tour	86	0	1
3	First Aid	89	0	0
4	Basic life support	85	0	0
5	Waste management	83	0	3
6	Universal precaution	76	1	0
7	Immunizations	84	2	1
8	Hand washing & Sanitation	85	0	0
9	Research opportunity and Post MBBS opportunity	80	0	5
10	Hospital Visit	82	2	0

11	Community visit	84	0	2
12	Blood bank visit	85	0	0
13	History of Medicine	69	2	11
14	Language enhancement	48	2	6
15	Computer skills enhancement	39	19	3
16	Recreation, Yoga & Sports& Stress management	69	11	11
17	Healthcare system & its delivery	85	0	2
18	Professional development	87	0	1

Attendance analysis (Table -3)

S.N.	Attendance	Percentage of students
1	Required by the MCI	75%
2	Students with sufficient attendance	84%
3	Students with less attendance	16%

PRE-TEST/POST-TEST Sample (Fig-1)

1. What are the benefits of regular yoga practices?
 - a. Part of personal spiritual path
 - b. Mind-body practice
 - c. a & b
 - d. Physical exercise
 - e. All of these
2. What should be the optimum sleep duration for a healthy young adult?
 - a. 4-5 hours
 - b. 5-6 hours
 - c. 6-8 hours
 - d. 8-10 hours
 - e. Need based
3. When a patient comes to a hospital for general health check-up, he should visit first-
 - a. Outpatient department
 - b. Pharmacy
 - c. Registration counter

- d. Doctor's duty room
- e. Casualty/ emergency
4. What should be your first response when you witness a serious patient after a road accident?
 - a. Call police
 - b. Call doctor
 - c. Start giving basic life support at road side
 - d. Leave the site without getting noticed
 - e. Call a local politician
5. Who do you think can donate blood?
 - a. Diabetic patient
 - b. Pregnant woman
 - c. 15 year old healthy adolescent
 - d. Person who had donated blood 5 months back
 - e. Patient suffering from jaundice
6. All of the following tests should be done before blood transfusion EXCEPT
 - a. Test for HIV
 - b. Test for Hepatitis B
 - c. Test for syphilis
 - d. Test for Hepatitis A & E
 - e. Test for malaria
7. What should be the color of disposal bag for paper waste?
 - a. Red
 - b. Black
 - c. Yellow
 - d. Blue
 - e. No need of any color coding
8. How stress shows its ill effects on academic performance?
 - a. Increased absenteeism
 - b. Inability to concentrate on studies
 - c. a & b
 - d. Sleep disturbance
 - e. All of the above
9. Which of the following is NOT a vaccine preventable disease?
 - a. Influenza

- b. Polio
 - c. Tuberculosis
 - d. Hepatitis B
 - e. HIV
10. Which of the following methods are NOT stress relievers?
- a. Smoking and alcohol
 - b. Vacation with family and friends
 - c. Music and movies
 - d. Yoga and Pranayam
 - e. Sports and aerobic exercise
11. First aid kit must contain
- a. Disinfectants and bandages
 - b. Sedative drugs
 - c. Multivitamin tablets
 - d. Stethoscope and BP instrument
 - e. Oral polio vaccine
12. What are the qualities required to become an Indian Medical Graduate?
- a. Good communicator
 - b. Team member/leader
 - c. Lifelong learner
 - d. Professional
 - e. All of the above
13. Healthcare workers are exposed to germs on their hands by doing the following:
- a. Pulling patients up in bed
 - b. Taking a blood pressure or pulse
 - c. Touching a patients hand
 - d. Touching equipment like bedside rails, over-bed tables, IV pumps
 - e. All of the above
14. A primary health center in a plain area covers population of-
- a. 3000
 - b. 10000
 - c. 30000
 - d. 100000
 - e. 300000

15. Which of the following are the signs of airway obstruction during basic life support (BLS)?
- a. Poor air exchange
 - b. High pitched noise during breathing
 - c. Inability to speak
 - d. a & b
 - e. All of the above

Feedback Form sample (Fig-2)

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FEED BACK FORM FOR STUDENTS

FOUNDATION COURSE: 01st August to 31st August, 2019
XI BATCH

ORIENTATION MODULE

IMPRESSIONS
It was good and very interactive session.

QUERY
no

SUGGESTIONS
I think parents should also have been part in interactions

DEPARTMENTAL TOUR / CAMPUS TOUR

IMPRESSIONS
It was very effective and good. We got to know about our departments very well.

QUERY
no

SUGGESTIONS
no

IMPRESSIONS
no

QUERY
no

SUGGESTIONS
no

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SKILL MODULES

IMPRESSIONS

1. FIRST AID DATE: 16/01/19
It was a good session. we got to know about different emergencies and how to deal with them.

2. BASIC LIFE SUPPORT DATE: 14/01/19
S.P.R. It was a very helpful and new session. The very first time we learn about it.

3. WASTE MANAGEMENT DATE: 19/01/19
It was also a very good session. we got to learn about disposing waste. Disposal waste in eff. etc.

4. UNIVERSAL PRECAUTION DATE: _____

5. IMMUNIZATION DATE: 20/01/19
It was a very interactive session. we learn about many vaccines.

6. HAND WASHING & SANITATION DATE: 12/01/19
It was very imp and good. The very first time I came to know about the correct steps of hand wash.

7. RESEARCH OPPORTUNITIES & POSTER PRESENTATION DATE: _____

IMPRESSIONS
unfortunately I was absent in this session.

HOSPITAL VISIT DATE: 10/01/19

IMPRESSIONS
It was very good and helpful. we got to know about different units, OPD, I.P. etc in the hospital.

QUERY
no

SUGGESTIONS
I think it should be there for some more days because it is very imp.

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COMMUNITY VISIT: DATE: 8/9/19
IMPRESSION: It was very good. We visited RHTC.

QUERY: No.

SUGGESTIONS: I think rather than visiting only RHTC we should have gone to villages and create awareness among them.

BLOOD BANK VISIT: DATE: 9/10/19
IMPRESSION: It was very good and helpful. We learn how to donate blood and what all test and machines are there.

QUERY: There is no such query.

SUGGESTIONS: Everything was good but if it will be more effective if we have seen blood donation.

OTHERS:

HISTORY OF MEDICINE
IMPRESSION: It was very boring and for me it was useless.

QUERY: No.

SUGGESTIONS: Please don't include this session from next year.

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HEALTH CARE SYSTEM AND ITS DELIVERY, NATIONAL HEALTH PRIORITIES AND POLICIES: DATE: _____
IMPRESSION: _____

QUERY: _____

SUGGESTIONS: _____

LANGUAGE ENHANCEMENT SKILL MODULE
IMPRESSIONS: I think it was not very helpful and needed for me.

QUERY: _____

SUGGESTIONS: I think it should be present for only those students who have ^{academic problem in} hindi language.

COMPUTER SKILL MODULE
IMPRESSIONS: It was very boring and moreover useless session for me.

QUERY: _____

SUGGESTIONS: It should not be present from next year.

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RECREATIONAL ACTIVITIES: YOGA, STRESS MANAGEMENT, HEALTHY LIVING AND EXTRA CURRICULAR

IMPRESSIONS: There was yoga class but only for one day. Sports sessions were okay.

QUERY: Yoga sessions were not proper.

SUGGESTIONS: Please pay attention on yoga session as it was not there as per schedule.

PROFESSIONAL DEVELOPMENT INCLUDING ETHICS (AETCOM)

IMPRESSIONS (RELATED TO CONCEPT OF PROFESSIONALISM, TEAM WORK, GROUP LEARNING AND DYNAMICS, SELF DIRECTED LEARNING AND COLLABORATIVE LEARNING)

AETCOM was good and interactive but little bit boring. But the teachers and students were very interactive. It was a helpful session.

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QUESTIONNAIRE:

1. Was the schedule followed as uploaded on the website? Yes/No / Partially
2. Presence of sessions which were assisted by seniors. Yes/No
3. Presence of interactive session Adequate/Less/None
4. Organization of Group Activities Adequate/Less/None
5. Case scenarios and video based sessions Adequate/Less/None

ANY OTHER SUGGESTIONS
I think the tenure of foundation course should be little less. 1 month is very much atleast I hope there should be any one lecture class because it will maintain the consistency in our studies otherwise we have a feeling that we are actually wasting our time.

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