

# PERCEPTION OF 1<sup>ST</sup> MBBS MEDICAL UNDERGRADUATES AND FACULTY TO CHANGES IN CURRICULUM AND TEACHING – LEARNING METHODS

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## ABSTRACT:

**BACK GROUND:** Government of India is now increasing the number of Medical Colleges and health care facilities. In such scenario, National Medical Council highest governing Medical body has brought revolutionary changes in under graduate medical curriculum like usage of various teaching-learning modalities like OSCE, OSPE, vertical and horizontal integration of medical subjects, short group teaching (SGT), flipped teaching methods etc. so as to improve the quality of the medical education to provide high quality health care providers.

**AIM AND OBJECTIVES:** To observe the perception of undergraduate medical students and faculty regarding new curriculum.

**MATERIALS AND METHODS:** Students and faculty were asked to respond to structured questionnaire based on 3-point LIKERT scale regarding their perception towards the new curriculum.

**RESULTS:** In our study new curriculum is student friendly as per 89% study population, 7% are in neutral opinion and 4% are in negative opinion. New curriculum gives better learning platform compared to traditional learning method as per 92% study population, 5% are in neutral opinion and 3% are negative towards it. About 95% of the study population felt that every student has chances of better opportunity to participate in blended learning methodology compared to old traditional method, 2% are neutral and 3% are in negative opinion.

**CONCLUSION:** Overall new curriculum has advantages of improving skill in an undergraduate medical student.

**KEY WORDS:** OSCE, AETCOM, OSPE, new curriculum

**1. INTRODUCTION:**

India is highly populous country in the world. The country is right now in the trend of development in the era of science, technology, and Medical practices, yet Doctor-patient ratio is not up to the mark. Only tip of iceberg is receiving prompt medical care. In this scenario, in order to meet the Doctor-patient ratio and rural population to get in contact with health care facilities, Government of India is now increasing the number of Medical Colleges and health care facilities. In such scenario, National Medical Council highest governing Medical body has brought revolutionary changes in under graduate medical curriculum like usage of various teaching-learning modalities like OSCE, OSPE, vertical and horizontal integration of medical subjects, short group teaching (SGT), flipped teaching methods etc so as to improve the quality of the medical education to provide high quality health care providers. So the present study is done to observe the perception of future doctors (front line warriors) for providing healthy nation towards the intervention of NMC in improving quality medical education.

Roll No.	Name of Student	Formative Assessment Theory			Continuous Internal assessment Theory						Total
		1st PCT Theory	2nd PCT Theory	Prelims Theory (Paper I & II)	Home Assignment	Continuous Class Test (LMS)	Self Directed Learning			Attendance Theory	
							Seminar	Museum study	Library assignments		
		100	100	200	15	30	15	15	15	10	500

Name of Institute :												
Department of Anatomy/Physiology/Biochemistry												
Faculty : MBBS		Year/Phase- I						Date : dd/mm/yyyy				
			Formative Assessment			Continuous Internal Assessment (Practical)						
S.No.	Roll No.	Name of Student	1st PCT Practical/First Ward Leaving Examination	2nd PCT Practical /Second Ward Leaving Examination	Prelims Practical	Log book (150)				Journal (Record book/ Portfolio)	Attendance (Practical)	Total
						Certifiable skill based competencies (Through OSPE/OSCE/Spot/Exercise/Other)	AETCOM competencies	SVL Lab activity	Research			

**AIM AND OBJECTIVES:**

1. To observe the perception of undergraduate medical students and faculty regarding new curriculum.
2. To observe the effectiveness of new teaching-learning modalities over traditional teaching methodologies.

**2. MATERIALS AND METHODS:**

Students and faculty were asked to respond to structured questionnaire based on 3-point LIKERT scale regarding their perception towards the new curriculum.

**3. RESULTS:**

S.NO	QUESTIONNAIRE	POSITIVE	NEUTRAL	NEGATIVE
1	Is new curriculum student friendly?	89	7	4
2	Does new curriculum gives a better learning platform compared to traditional learning method?	92	5	3
3	Is every student getting better opportunity to participate in blended learning methodology compared to old traditional method?	95	2	3
4	Are the resources available adequate?	68	10	22
5	Will it help in professional development?	84	11	6
6	Will it promote student centered learning?	94	3	3
7	Will it improve critical thinking in students?	89	6	5
8	Will it help in better retaining of knowledge compared to traditional old teaching-learning methods?	93	5	2
9	Will it help in standardization of goals and objectives?	88	9	3
10	Will it help in better teacher-student relationship?	92	7	1
11	Are the students getting stressed out by new curriculum?	95	1	4

**4. DISCUSSION:**

Indian Medical Education has been deep rooted since decades following traditional teaching – learning methods. India is a major stake holder in providing Health Care Professionals annually. Right now we are in transition of internationalisation of Indian Medicine which is not possible through existing traditional medical curriculum. So NMC has implemented new undergraduate medical curriculum which includes OSCE-objective structure clinical examination & OSPE-objective structured practical examination, which involves demonstration of clinical skills in a standardised medical scenario by students.

Eg of OSPE: Q1. Focus the given slide under high power lens of microscope provided.

Sr.	Checklist	Marks
1	Check for the light source. (Yes/No)	1
2	Use the screw of the mechanical stage to bring the slide on the central aperture (Yes/No )	1
3	Correct use of the objective lens (High power (40X)	1
4	Correct adjustment of the condenser position for High power (40X) lens	1
5	Whether or not looks from the side of the microscope while lowering the optical tube. (Yes/No)	1

EG of OSCE: Demonstrate that fatigue is a temporary phenomenon.

Question	Mark
a) Observe whether the examiner is giving proper instructions to the subject. (Ask the subject to sit comfortably on the stool and hold vertical rod with fingers.	0.5
b) Move the cuffs inwards to hold the wrist firmly	0.5
c) Put a suitable weight usually about 2-3 kgs on the weight stand and adjust the strip of paper and writing pencil properly.	1
d) Set the metronome ticking at the rate of 120/minute	0.5
e) Put the middle finger in the sling or hook attached to the string and ask the subject to pull the weight at the rate of 60 per minute till index finger is fatigued	1
f) Observe the duration in seconds	0.5
g) After waiting for 30 second ask the subject to pull the weight as before if the subject is able to do it, it will indicate that fatigue is a temporary phenomenon	1

**ADVANTAGES OF OSCE&OSPE:** This requires the use of various teaching modalities like direct interaction of medical undergraduates with patients, i.e. history taking and clinical examination, follow up, counselling, use of mannequins, computerised case base scenario etc. This help in assessment of student skill by a standardized uniform technique and also students get feedback on their clinical skills and practical skills, which helps in monitoring them continual academic improvement. This helps the students to notify their strengths and weakness in the curriculum.

**INTRODUCTION OF SEMINARS, MODULE PREPARATION, HOME ASSIGNMENTS IN NEW CURRICULUM:** Seminars for the medical students involve active participation of students and active learning of that particular topic. Even the stage fear is lost by the students on presenting seminars in front of large group. It also has its own disadvantages that it is time consuming and already MBBS syllabus is vast and requires lot of preparation. Home assignments help in active learning of the subject post –college hours.

**NOW A DAYS THE NEW CURRICULUM HAS SHIFTED CLASS ROOM CENTERED LEARNING TO STUDENT CENTERED LEARNING:**

**ADVANTAGES:** The students are divided and allocated to faculty as mentor-mentee groups, where the mentor constantly interacts the students and takes a keen eye on academics of mentee. Small group teaching also offers a flatfom for student teacher –interaction and promotes student centered learning. The faculty will interact with the students and guide them in acquiring proper skills in the subject, there by promoting student-teacher relationship and student centered learning.

**AECTOM MODULES IN NEW CURRICULUM:** In the undergraduate new curriculum AETCOM has been introduced whose fundamental principle is change in person’s attitude can change his/her behaviour. Hence attitude, communication and bioethics are integrated in medical curriculum, which inspire medical teachers to make it more meaningful (1).

For eg: NMC has inculcated AETCOM modules like what does it mean to be patient? This gives insight for a fresher to interact with patients understand their feeling as patients, interact with emotional component, sometimes it is said “ITS NOT THE MEDICINE THAT HEALS, BUT IT IS THE DOCTOR’S WORDS AND PASSINATE CARE THAT HEAL”so AETCOM module is a manifestation of this realization that endeavours to strike a balance between the five identified roles of an ‘Indian Medical Graduate (IMG)’ viz; Clinician, Leader

& Member of health care team, Communicator, Life- long learner and Professional; right from the 1st professional year of training. It also plays a role in development of interpersonal communication.

**MODULE PREPARATION:** It is introduced in new medical curriculum to assess the skills of students and creates interest in learning...LEARNING BY DOING which is playing a key role in pre-clinical subjects making much more interest.

**FLIPPED TEACHING METHODOLOGY** is one new teaching-learning methodology introduced in new competency based medical curriculum that helps the students to have the ppt on lms or online lecture, so that the students can go through the topic prior to class room lecture and this helps the students to concentrate on areas where they didn't understand properly. This helps them to acquire deep rooted knowledge in the subject.

The new curriculum has introduced faculty-development programmes in each medical college where the medical college teachers are trained to acquired teaching& practical skills and improves creative ability among faculty when they were exposed to variety of platforms but major drawback only a few faculties are getting chance to do ACME workshops and all.

As a part of monitoring of new MBBS curriculum, NMC nodal and regional centres are set and college Medical education units are set up in every college to monitor variety of teaching learning techniques that are implemented in college.

#### **DISADVANTAGES**

New curriculum demands increased teacher to student's ratio, yet the existing faculty in many medical colleges are not up to NMC criteria. This results in over burdening of existing faculty and overall decrease in quality time spent in research by faculty. Hence there is utmost need to prioritise faculty vacant and to fill the deficiency as per NMC norms.

In our study new curriculum is student friendly as per 89% study population, 7% are in neutral opinion and 4% are in negative opinion. New curriculum gives better learning platform compared to traditional learning method as per 92% study population, 5% are in neutral opinion and 3% are negative towards it. About 95% of the study population felt that every student has chances of better opportunity to participate in blended learning methodology compared to old traditional method, 2% are neutral and 3% are in negative opinion. The resources available are adequate as per 68% study population, 10% are in neutral opinion and 22% are not satisfied about the resources available.84% of the study population felt that new curriculum will help in professional development, 11% are in neutral and 6% are in negative opinion. 94% felt that the new curriculum will promote student centered learning, 3% are neutral and 3% are in negative opinion of the same. Majority are in the positive opinion (89%) that new curriculum improves critical thinking, 93% are in positive opinion that new curriculum teaching-learning methods helps in better retaining of knowledge compared to traditional old-teaching methods.88% are in positive opinion that new curriculum plays a vital role in standardisation of goals and objectives. New curriculum has a key component of building student-teacher relationship as per 92% of the study population.95% are in opinion that students will be stressed out by new curriculum because they need to show skills in multiple aspects in a limited time period.

The major limitation of our study is lack of proper SVL lab facilities, lack of proper aetcom Competencies assessment, proper assessment of library assignments, research assignments platform for students.

#### **5. CONCLUSION:**

Overall new curriculum has advantages of improving skill in an undergraduate medical students. But majority of colleges lack required infrastructure for proper implementation. It is

putting a heavy burden on faculty and before implementation of new curriculum vast majority of workshops should be conducted to faculty for proper understanding and implementation of the new curriculum. Increasing the faculty strength, manpower and prioritising research should be given first bench mark by the policy makers for successful implementation of new mbbs curriculum to undergraduate's students. Regular monitoring of each departmental activity whether is it meeting as per NMC norms should be done for ensuring proper implementation of new curriculum. Declaration of patient consent: Patient's consent not required as patient's identity is not disclosed or compromised.

**CONFLICT OF INTEREST: NIL**

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