

ONLINE PRECLINICAL AND CLINICAL TEACHING; CHALLENGES VS OPPORTUNITIES

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The traditional structure of medical education has certainly been disrupted by Covid-19 pandemic. Professional undergraduate medical teaching has drastically shifted to online mode utilizing novel teaching methodologies which need to be adopted much earlier to teach “adult learners”¹. Prolonged crisis, transition to online teaching and novel ways of student assessment have serious implications on academic performance and psychological well-being of medical students. Although online teaching is convenient, fixable, easily accessible, time efficient and available to a wider population, creation of conducive learning environment is compromised due to social isolation, lack of motivation, absence of physical interaction with the instructor and immediate feedback². Disruption of teaching

and training lead to additional stress, anxiety and depression among medical students³.

Training medical students particularly in preclinical and clinical phase is the biggest challenge due to lack of hands-on training and interaction with patients. In clinical years, face-to-face clinical training is compulsory to develop required competencies to practice medicine. Evaluation of technology-based teaching modalities is necessary for effectiveness and sustainability of its utilization in preclinical and clinical years⁴. For this purpose, students of HITEC-IMS provide feedback after completion of each academic block and necessary modifications are done to improve teaching and training. After receiving borderline

Table 1: Factors causing unsatisfaction with online teaching among students.

DOMAIN	REASONS	%
Balance Between Instruction & Practical Objectives	MIT included lectures only	29.2%
	Didactic lectures/No interaction	46.3%
	Skills related learning objectives not covered	24.3%
Stimulation of Interest	Monotonous lectures	31.7%
	Lecture handouts not shared beforehand	31.7%
	Poor network connection on faculty side	21.9%
	No videos/links shared for further reading	14.6%
Relevance of Provided Learning Material	Couldn't view lecture videos again	12.1%
	Learning objectives not covered in session	14.7%
	Lecture handouts/ PPTs not shared	70.4%
Improvement in Clinical Skills	Novel teaching strategies for skills not used	30.1%
	Lectures were used to teach skills	69.9%
Effectiveness of Mode of Assessment	Infrequent assessments	78%
	Online teaching assessed through on campus examination	58.5%
Overall satisfaction	Pre-clinical	75.6%
	Clinical	31.1%

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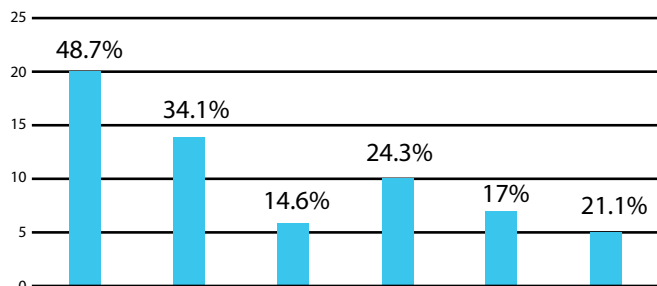
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satisfactory feedback from 4th year MBBS students in August 2021, reasons of unsatisfaction with online preclinical and clinical teaching were explored along with their psychological wellbeing. Domains having borderline satisfaction levels (45%-55% satisfaction) from feedback proforma were selected for exploration of attributes. An interactive session was planned with students to discuss the possible factors in first stage. On the basis of identified responses, a google form was developed and was distributed among class in stage two. For psychological

Unmanageable Workload



1. Consecutive lectures (3-4)/day
2. Long duration of lectures
3. Content out of course taught
4. No off on Saturdays
5. Lectures taken in evening
6. Repetition of lectures

Figure 1: Reasons of unmanageable workload during online teaching.

Perceived Stress

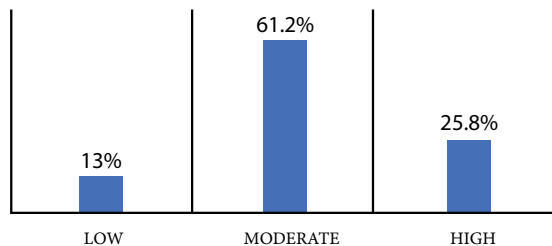


Figure 2: Perceived Stress scores of medical students.

assessment Perceived Stress Scale, General Help Seeking Questionnaire and Meaning in Life Questionnaire were used.

MENTAL HEALTH OF MEDICAL STUDENTS

Student who scored moderate to high on perceived stress scale were less likely to take help from a friend, teacher or health professional, which may perpetuate the stress on one hand and lead to a more negative/stressful appraisal of the current situation and consequently, low scores on the block feedback.

Meaning in life is positively related to well-being, help seeking and help-giving behavior and negatively related to perceived stress, anxiety and depression. Students who scored high on Meaning in life questionnaire had relatively less scores on the perceived stress scale <mild to moderate> and showed more willingness in their intention to seek help even if their scores on perceived stress scale were in moderate range which depicts the positive correlation of high scores in this questionnaire to general wellbeing, help seeking and help-giving behavior and negative correlation to perceived stress, anxiety and depression.

Virtual online teaching is an essential alternative in current situation of COVID-19. It is crucial to focus on modalities to improve clinical skills of graduating students to equip them with competencies of effective care provider, critical thinker, lifelong learner, communicator and collaborator and problem solver. Adaptation of innovative online teaching strategies is ineffective without prior training of faculty. Students’ mental well-being is of critical importance. Early detection and intervention strategies should be implemented in order to help future physicians go through this challenging period and be better prepared for next large-scale crises.

AUTHORS’ CONTRIBUTION

Aashi Ahmed: Development of questionnaire, Data Collection, Data Analysis, Write-up.

Sundas Fatima: Development of questionnaire, Data Collection, Data Analysis.

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