ONLINE LEARNING DURING THE COVID-19 PANDEMIC: SATISFACTION OF MEDICAL STUDENTS FROM INTERNATIONAL MEDICAL UNIVERSITY

INTERNATIONAL MEDICAL UNIVERSITY MALAYSIA

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INTRODUCTION

- Many changes were made to education while shifting to online learning during the Covid-19 pandemic.
- Previous international studies were executed in this regard with different circumstances. However, it is essential to understand the Malaysian medical education context to implement relevant interventions.
  - Saudi Arabia → High students' satisfaction rate; presumably due to the previous usage of the dedicated platform; Blackboard and having effective enablers in general. (1, 2)
  - Jordan → Low students' satisfaction rate; as they used a new unfamiliar platform. (1, 3)
  - Australia → Simulated learning environments were more effective for learning via online tutorials and virtual patients . (4)
  - UK → Low satisfaction rate, students did not find e-learning motivational nor engaging and effective as traditional method. (2, 5)
  - Canada → Barriers faced were lack of infrastructure and technology and poor internet connectivity. (6)

RESEARCH QUESTION:

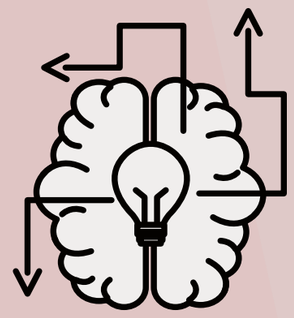
Are medical students satisfied with online learning during the COVID-19 pandemic?

OBJECTIVES

1. To determine the satisfaction of medical students with online learning.
2. To determine the ideal approach with online learning for clinical teaching.
3. To describe the barriers and benefits of online learning in medical education.
4. To assess the enablers affecting the satisfaction of IMU students from their perspectives.

METHODOLOGY

- Study design: Cross-sectional study.
- Study population: IMU medical students (pre-clinical, clinical).
- Sampling method: Universal sampling (questionnaire).
- Study instruments: Online questionnaire, based on a pre-existing one used for a study in the UK. (5)



STATISTICS/ FIGURES/ TABLES

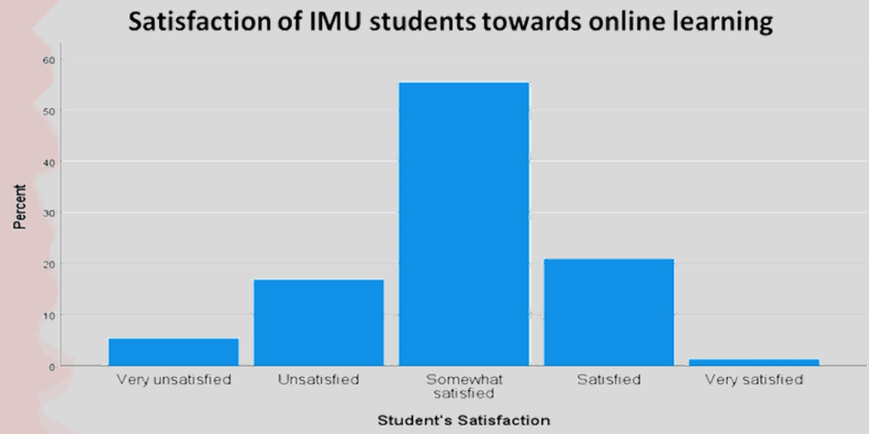


Figure 1: Percentages of responses on the satisfaction of medical students towards online learning

RESULTS AND DISCUSSION

1. Majority (63.5%) disagreed that online learning has successfully replaced their usual clinical teachings (refer figure 4); due to:
   a. Unable to apply relevant skills in a clinical setting (e.g. hospitals).
   b. Unable to learn practical skills online (refer figure 3).
   c. Challenging to master technique properly online.
   d. However a study in Australia found online tutorials and virtual patients useful. (4)

2. Overall negative perception toward online learning; due to:
   a. Infrastructure of online teachings not interactive enough (refer figure 2).
   b. Sudden change to a system.
   - Study in Saudi - high satisfaction due to pre-existing hybrid curriculum. (1)
   - Study in Jordan - poor satisfaction due to new platform being used. (1, 3)

3. Benefits:
   1. Learning at one's own pace (21.2%).
   2. Learning flexibility (20%).
   3. Saved costs and reduced time travelling (19.7%).

4. Barriers:
   1. Poor internet connection (22.3%) - Main barrier, in line with a study done in Canada. (6)
   2. These students may reside in rural areas, and/or hail from lower-income backgrounds.

Overall:

1. Majority of IMU students (55.4%) were somewhat satisfied with online learning (refer figure 1).
2. A nationwide study in UK - students were dissatisfied. (2, 5)
3. No significant correlation between the different demographics of students and the overall satisfaction of students toward online learning.

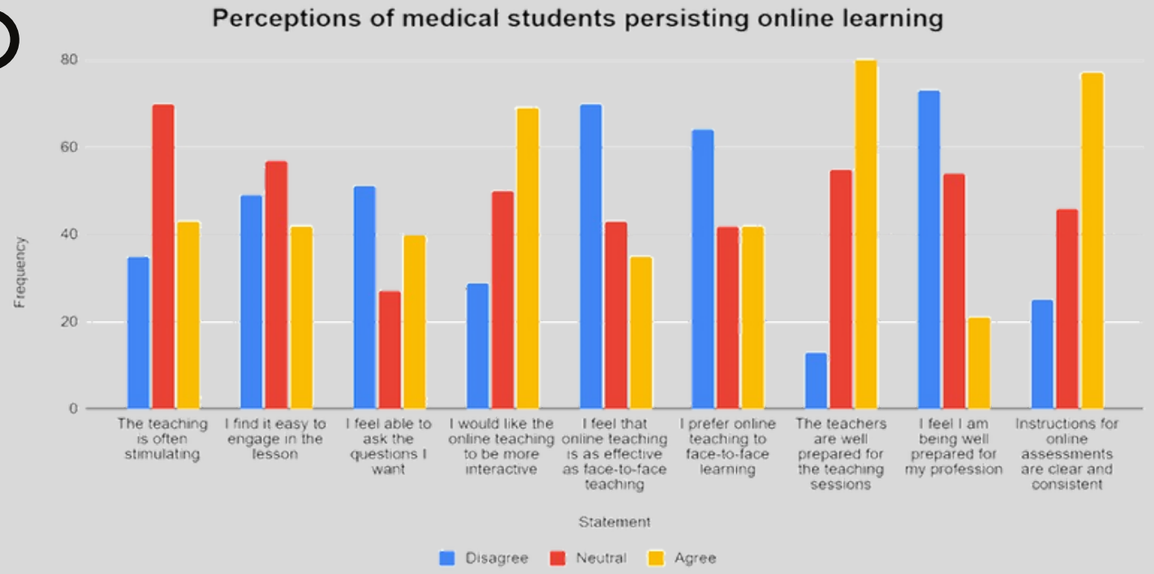


Figure 2: Frequency of various responses on perceptions of medical students persisting online learning

Figure 3: Percentages of students' responses on whether medical students feel they are able to learn practical skills through online learning

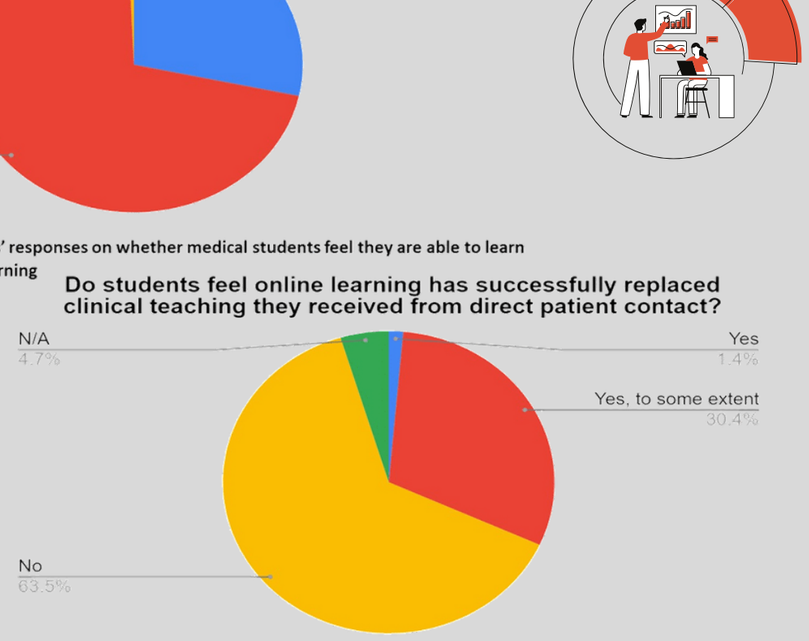


Figure 4: Percentages of students' responses on whether online learning has successfully replaced clinical teachings

CONCLUSION

- Majority were somewhat satisfied with online learning.
- Online learning has not successfully replaced their usual clinical teaching.
- No correlation between all demographic variables and students' satisfaction.

LIMITATIONS:

- Small sample size (148 students).
- Sample bias - majority were from pre-clinical years.
- Time constraint - only two days for data collection.

RECOMMENDATIONS:

- Adapting interactive online teaching by using flipped classroom or online formative quizzes.
- Use of telemedicine.

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References