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Mansoura-Manchester Medical Students' Perception of Online Learning During Covid-19 Pandemic

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Abstract: **As one of the strategies adopted to combat the spread of Covid-19, The Egyptian Ministry of Higher Education endorsed implementation of online learning in the Egyptian universities. Therefore, the current study aimed to explore the perception of the medical students in Mansoura – Manchester program towards the current practices of online learning mode during lockdown of the universities due to Covid-19 pandemic. Online questionnaire has been distributed to all students through April to June 2020 and 224 responses have been obtained and analysed. Results showed variable responses from the students. Some responses appreciated the convenience and flexible time (39.9%) of online learning with the advantage of getting instant feedback (5.4%) while others see it has not suitable at all for (0.44%) teaching medicine. Some responses find it harder to be motivated during the online mode (20.5%) and there is less social interaction (11.6%) while others prefer it as it gives more chance to shy students to express (14.3%). Some see it requires more budget for internet plan (6.3%) while others see it more cost saving because they saved the transportation fees (10.3%). It can be concluded that most of students are open to practice online learning and objectively gave positive recommendations that can be explained by and related to the dramatic sudden shift to this mode of learning due to Covid-19 pandemic. It is recommended to assess the students' feedback after a longer duration of experience and to take in consideration the social and personal variations among the students.**

Keywords: **Mansoura-Manshester, Egypt, online learning, covid-19.**

1. INTRODUCTION

During COVID-19 pandemic, all the educational institutions were closed following the movement control orders practiced in all countries. All universities faced the problem of having to practice the online teaching that required them to have ready established online university system, ready skilful lecturers and students to adapt to this type of learning (**Kumar, 2019)**. Online learning involves the implementation of technology to direct, design and deliver the learning content, and to facilitate two-way communication between students and faculty (**Thanji and Vasantha, 2016**). It can include whiteboards, visit rooms, surveys, tests, conversation gatherings and studies that permit educators and learners to communicate on the web and offer course content one next to the other. These can offer beneficial and helpful approaches to accomplish learning objectives. The used platform may be Microsoft Teams, Google meet, Edmodo and Moodle (**Barbera and Clara, 2012)**

alongside the applications for video conferencing such as Zoom, Skype for business, WebEx and Adobe connect etc. that enable the technologies to expand traditional classrooms into virtual classrooms. Subsequently lectures can be attended live or recorded to the students **(Zhang et al., 2020)**.

Previous studies showed high student satisfaction with online learning modalities at Dow University of Health Sciences, Karachi (**Jawaid and Ashraf, 2012)** and Lahore Medical and Dental College (**Iqbal et al., 2016)**. Also, in Khyber Pakhtunkhwa, good technology access, online skills, and preparedness for online discussions were reported among participants along the medical sector (**Sethi et al., 2019).** While other students felt less engaged and more distracted during the online sessions (**Attardi et al., 2016**), that was related to the absence of hands-on activities and the lacking of self-discipline among some students (**Attardi et al., 2016 and Dabbagh, 2007).** This can explain why some students prefer face-to-face learning sessions (**Attardi et al., 2016 and Mahoney, 2005).**

With the increase in use of online learning during COVID-19, it is necessary to assess its effectiveness from different prespectives (**Schwartz et al., 2020).** As one of the strategies adopted to combat the spread of Covid-19, The Egyptian Ministry of Higher Education endorsed implementation of online learning in the Egyptian universities. Therefore, the current study aimed to explore the perception of students to online learning and the current practices of online learning mode among the MBBCh students in Mansoura – Manchester program during lockdown of the universities during Covid-19 pandemic.

2. METHODOLOGY

Descriptive study for the MBBS students' perception to online learning experience during Covid-19 pandemic. The study targeted the MBBS students in Mansoura-Manchester program. An online questionnaire was conducted using a semi-structured questionnaire with a non-probability snowball sampling technique. The online questionnaire in google form (https://docs.google.com/forms/d/1QYZu79Bdg-oYadIDoo-f7g74o773oX7vmInACIpvhug/prefill) was conducted through April to June 2020. The responses were collected during that period of time. Convenience sampling was adopted in this study because it was found to be the most appropriate during the time of COVID-19 pandemic while there is movement control order and so the study reliance on volunteers and this sampling method is documented to be satisfactory in such situations **(Sears 1986; Diamond, 2000; Sudman and Wansink 2002).** A message was posted on Whatsapp and Facebook group of the students. This message briefly introduces the background, purpose, procedure, voluntary nature of participation, anonymity and confidentiality statement, precautions for filling in the questionnaire, as well as the link of the online questionnaire. The results were presented as descriptive statistics and significance of the studied relations were obtained by processing the collected data in SPSS ver 23.

3. RESULTS

Study participants were all from M-M program, all aged 18-25 years old, 99 males (44.2%) and 125 females (55.8%) from different years of study; Year 1 (27), Year 2 (41), Year 3 (46), Year 4 (0), Year 5 (123) and Year 6 (6).

Figure (1) is showing the type of classes that were delivered online for the students. Different modes of teaching had been delivered online to the students; PBL (97.8%), lectures (76.3%), quizzes (46%), interactive lectures (33.5%), case-based learning (25.4%), clinical skill – video assisted learning (24.1%) and others as seminar, tutorial and self-directed learning.

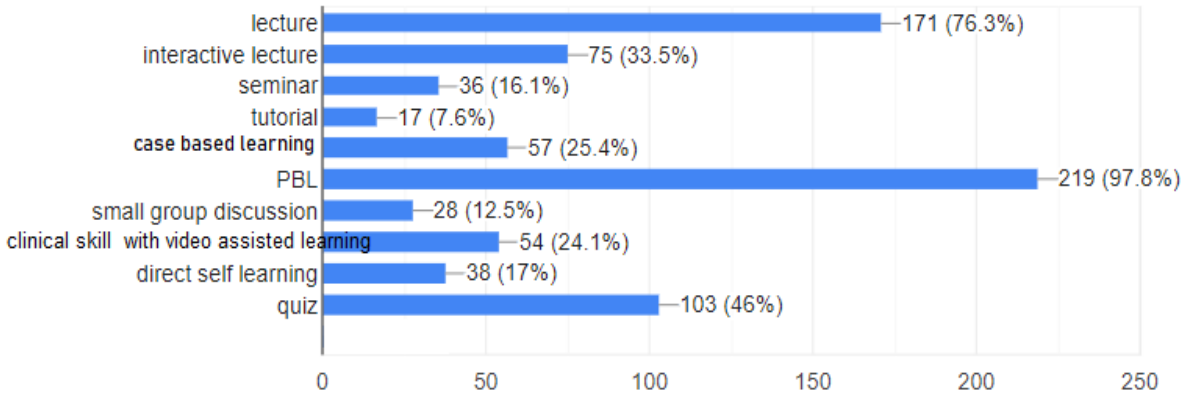

Figure (1): The types of classes delivered online for the study participants.

Table (1): Students' responses regarding the online sessions

Students' response regarding the online session (224 respondents)	Very true	Moderately true	Somehow true	Little true	Not true
The discussion was deep and comprehensive	21 (9.4%)	72 (32.1%)	60 (26.8%)	38 (17.0%)	33 (14.7%)
I remember all the details and ideas in the discussion	19 (8.5%)	61 (27.2%)	68 (30.4%)	31 (13.8%)	45 (20.1%)
We discussed much longer and used more resources than face to face	55 (24.6%)	49 (21.9%)	62 (27.7%)	30 (13.4%)	28 (12.5%)
The time allocated for the discussion is enough	40 (17.9%)	59 (26.3%)	46 (20.5%)	39 (17.4%)	40 (17.9%)
The resources and materials used during the session were enough	32 (14.3%)	53 (23.7%)	45 (20.1%)	36 (16.1%)	58 (25.9%)
I learnt more in this setting	18 (8.0%)	43 (19.2%)	39 (17.4%)	38 (17.0%)	86 (38.4%)
I learnt better in online session	16 (7.1%)	43 (19.2%)	37 (16.5%)	36 (16.1%)	92 (41.1%)
It promotes more participation and interaction	20 (8.9%)	37 (16.5%)	45 (20.1%)	39 (17.4%)	83 (37.1%)

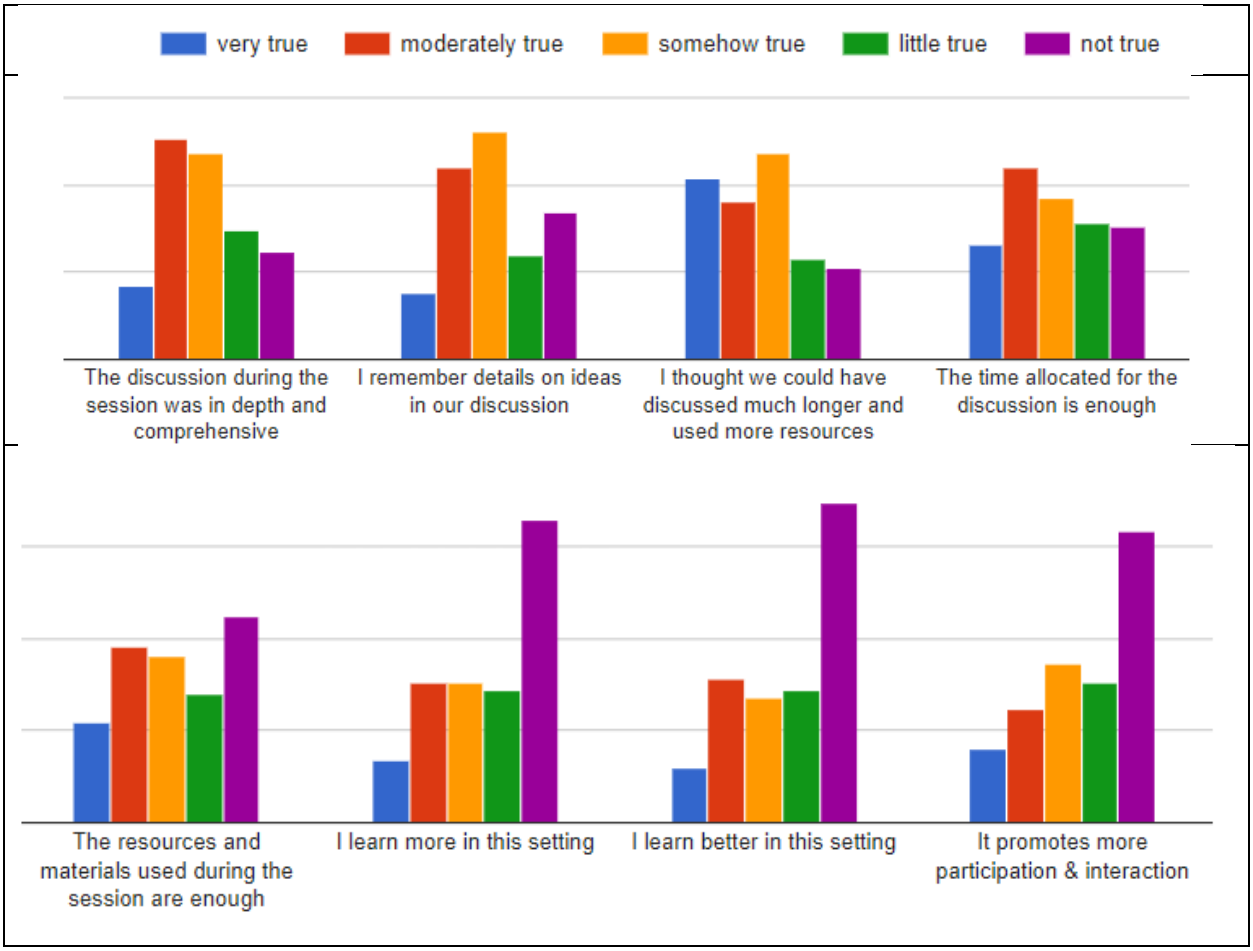

Figure 2: The Students' responses during the online learning sessions

The students' responses regarding their evaluation to the online sessions are shown in table 1 and figure 2, from which it can be stated that they see the discussion was deep and comprehensive (32.1%), remember all the details and ideas in the discussion (30.4%), discussed much longer and used more resources than face to face (27.7%) and consider the time allocated for the discussion is enough (26.3%). While only 14.3% see the resources and materials used during the session were enough, only 8% consider that they have learnt more in online session and 8.9% only agreed that online sessions can promote more participation and interaction.

Regarding the advantage and disadvantage of online learning from the students' perspective, the students' responses varied from agreement for the advantage to those seeing it has no advantage at all and is not suitable for teaching medical topics. 39.9% agreed it offer convenience and flexibility in time and offer an instant feedback to the student (5.4%), 21.1% like online learning because it let them learn in their own preferences. The most frequent drawback was related to technical problems (29.5%) and lack of motivation (20.5%)

Table (2): Students' responses regarding the advantage and disadvantage of online sessions

Students' response regarding the advantages of online learning	
Very convenience and flexible time	89 (39.9%)
Learning in my own way	47 (21.1%)
Easier for shy students to participate	32 (14.3%)
Cost saving because there is no transportation	23 (10.3%)
I can get instant feedback	12 (5.4%)
I like to study with myself more	2 (0.9%)
No advantages	2 (0.9%)
No medicine from home	1 (0.44%)
It saves a lot of time and effort wasted in transportation, unnecessary activities and silly lectures with some unqualified lecturers.	1 (0.44%)
Less interruptions by Arabic language within lectures, help me to focus more.	1 (0.44%)
Staying at home which actually makes us lazy	1 (0.44%)
It is not suitable for our field	1 (0.44%)
can save the lectures and get it back any time	1 (0.44%)
I do not like it , I m distracted. I need to interact with friends and colleagues.	1 (0.44%)
Students' response regarding the disadvantages of online learning	
Technical issues	66 (29.5%)
Harder to be motivated	46 (20.5%)
Less social interaction	26 (11.6%)
Requires more budget for internet plan	14 (6.3%)
Increased distraction during the class	13 (5.8%)
Academic dishonesty	7 (3.1%)
It causes more eye strain	7 (3.1%)
All the above	13 (5.2%)
Not enough time for clinical matters at all, not convenient for our curriculum that need face to face interaction and practical practice	1 (0.44%)
Technical issues are harder to motivate, I love only PBL online, I do not like prerecorded lectures	1 (0.44%)
Live lectures present a more valuable option than prerecorded ones, or at least should add time for students' questions	1 (0.44%)
It is an inefficient way of learning because the student is extremely demotivated and distracted. It does not feel like real learning. There is a lot of academic dishonesty. The student is not satisfied nor academically fulfilled.	1 (0.44%)
Some lecturers just read from the slides which is not convenient. Zoom is limited to 40 min., there should be a better platform	1 (0.44%)
The information discussed in the lecture is very weak and questions are very hard	1 (0.44%)
Corona has psychological effects	1 (0.44%)
Not suitable for our curriculum. Clinical setting needs more illustrations	1 (0.44%)

4. DISCUSSION

The current research studies the current practices of online learning mode among the medical students in Mansoura – Manchester program during lockdown of the universities because of Covid-19 pandemic. Students at Mansoura Manchester medical program stated that classes were delivered online with different modes of teaching; PBL (97.8%), lectures (76.3%), quizzes (46%), interactive lectures (33.5%), case-based learning (25.4%), clinical skill – video assisted learning (24.1%)

and others as seminar, tutorial and self-directed learning using different platforms. Most of them agreed that they see the discussion was deep and comprehensive (32.1%), remember all the details and ideas in the discussion (30.4%), discussed much longer and used more resources than face to face (27.7%) and consider the time allocated for the discussion is enough (26.3%). While only 14.3% see the resources and materials used during the session were enough, only 8% consider that they have learnt more in online session and 8.9% only agreed that online sessions can promote more participation and interaction. Previous researches showed that regular two-way feedback helps enhance self-efficacy and motivation (**Wang and Wu, 2008)**. Effective learning is dependent on the interaction between facilitator, learner and study material along with emotional and social support **(Bernard et al., 2009 and Kruger and Dunning, 1999).**

Students' intentions to adopt mobile learning depend on the attitude towards mobile learning, perceived usefulness, availability of resources and perceived ease of use **(Attalla et al., 2012).** Similar results were observed among Malaysian medical students with the conclusion that most medical students have higher intention to adopt mobile learning **(Attalla et al., 2020-a)** although they related some physical side effects with the use of cell phone (e.g., ear pain (52.4%), headache (79.5%), fatigue, anxiety or insomnia (57.8%), tremors and eye pain beside dry mouth (56.6%) and/or bad odour mouth (46.4%)) (**Attalla et al., 2020-b**), beside the physical and psychological effects recorded to be associated with online learning (**Tze et al., 2020)** that may hinder some of them to use it in learning and/or assessment.

The satisfaction of students during online learning depends on their ability to control the learning environment (**Wang et al., 2010 and Beale et al., 2014)** and to complete courses at their convenience (**Attardi et al., 2016).** However, it should not be assumed that students will change easily from face-to-face to online learning (**Brewer et al., 2001)** because this change should be gradual and accepted for both lecturers and students (**Mahoney et al., 2005).**

Regarding the advantage and disadvantage of online learning from the students' perspective. The Mansoura Manchester students' responses varied from agreement for the advantage to those seeing it has no advantage at all and is not suitable for teaching medical topics. 39.9% agreed it offer convenience and flexibility in time and offer an instant feedback to the student (5.4%), 21.1% like online learning because it let them learn in their own preferences. Time flexibility of online learning has been reported previously **(Keis et al., 2017)** and it was perceived as an element to enhance the self-directed learning, which is an important competency for promoting lifelong learning among health professionals. (**Kim and Jang, 2015), (Lucieer, 2016).** Stewart recommended thorough supervision of students and setting rules, counselling and disciplinary actions for online classes (**Stewart, 2008).**

The non-acceptance of online learning has been reported by both the faculty members and students due to inefficient teaching of psychomotor skills, limited resources, and lack of class discipline during online classes. However, online simulated patients or role plays can be used teach history taking, clinical reasoning and communication skills beside sharing recorded videos of laboratory and clinical skills (**Mukhtar et al., 2020).**

In the current research, students in Mansoura Manchester program consider that the most frequent drawback was related to technical problems (29.5%) and lack of motivation (20.5%).

Internet connectivity issues has been recorded by students in different countries and was found to negatively affects online learning and it is recommended that the governments and telecommunication companies should expand the 4G services (**Mukhtar et al., 2020).** Also, orientation and training of lecturers and students for using online learning were recommended **(Oliver and Herrington, 2001).**

It is recorded that the attention span during online learning is shorter than face to face sessions (**Bradbury, 2016).** This can be managed by increasing teacher-student interaction by the technique of flipped class and giving short lectures (**Mukhtar et al., 2020)** and meet the students' needs by allowing the accessibility of knowledge, strengthening the interaction between students and lecturers, and enhance more integration of theory and practice (**Zhang et al., 2020, Hua et al., 2017, Zhang and Li, 2019, Su et al., 2015).**

5. CONCLUSION

Mansoura Manchester medical students had practiced online learning in different modalities of learning through different platforms where they reported benefits including flexibility, convenience, having instant feedback with other advantages while limitations included the technical issues and lower motivation.

Limitations of the Study:

Mansoura Manchester Medical program has students from 22 different nationalities that may enhance the variability of the research outcome due to different backgrounds of the students.

The lecturers' attitude toward the sudden shift to online teaching during Covid-19 pandemic should be concurrently studied because some lecturers may have a negative attitude because they may do not receive enough time for training on different online teaching modalities or because faculty members are of different age groups and their negative attitude will certainly affect the students' response.

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