

Ambiguities Regarding Online Course of Medical Sciences from Faculty's Perspectives

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ABSTRACT

Objective: To evaluate the ambiguities regarding online course of medical sciences from the faculty point of view at Al-Tibri medical college and hospital Karachi.

Study Design: Cross sectional study

Place and Duration of Study: This study was conducted at the Al-Tibri medical college and hospital Karachi from February 2020 to June 2020.

Materials and Methods: Both genders of basic and clinical sciences were included by non-probability convenient sampling. The faculty was asked to fill the questionnaire. For that a valid questionnaire was adopted, that is based on various questions related with ambiguities of faculty members during online classes.

Results: Out of total 50 faculty members (lecturer, assistance professor, associate professor and professor), 58.7% were male and 41.3 females. Most common barriers in Personal obstacles to faculty members' participation in online education were Anxiety regarding excessive workload and insufficient time for other academic activities (68%) in basic and (72%) clinical faculty. Attitudinal and Contextual obstacles to faculty members' participation in online education were facing are anxiety regarding online teaching because of direct proportional effect on quality of education that is due to lack of direct interaction with students (62%) agreed basic (72%) clinical faculty.

Conclusion: In present study it was noticed that high percentage of faculty was concerns regarding deficiencies of important equipment like software, internet sources) and inadequate information in online teaching. Thus to implement on new educational environment, need support and training regarding online teaching.

Key Words: Online teaching, Barriers, Ambiguities

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INTRODUCTION

There are wide varieties of pedagogical tactics in medical sciences. The practice of medical education includes traditional as well as other techniques like media which hire online teaching methodologies and electronic learning styles¹. In terms of Electronic (e) learning styles or online learning styles includes the technology of electronic devices and media that have been utilized to teach the students.

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In this method both facilitators as well students should have online facility so they both communicate with each other². Though, online teaching is not that easy and has many challenges with cumulative time limits and strains faced by teachers and students, not only that but to give a modified, better experience regarding self-directed learning, discovery of new techniques is necessary³. Since past decade the demand of online teaching is increasing, in spite of this faculty participation in online teaching in relation to progress in the demand for online teaching is significantly low. The percentage of faculty with course development or online teaching without any experience is around 80%⁴. This is because of difficulty in time management and workload, limited resources along with outdated technology, insufficient reimbursement for instruction and inadequate correlation with students are certain barriers faced by faculty during online teaching⁵. There are many other factors like traditional and pedagogical barriers that play an important role. The costs of organization faced by faculty are higher. It is because of more expense in online courses than courses completed face to face along with that it acquires more effort to be done. For development and management of online teaching requires more time that increases the workload too. Additionally, nonexistence of student teacher relationship results in diminishing the social interaction

that develops in classroom. In online teaching students cheating cannot be controlled effectively and its quality also diminished compared with traditional method because on various phases it becomes difficult to convey the concept efficiently results in decline of learning outcome. These are some factors included in pedagogical barriers. The infrastructure is also very important in online classes, unavailability of electricity on most of occasions, lack of Wi-Fi services cause's hindrances⁶. In addition to that unapproachability of gadgets like laptops, software quality or desktops, absence of skills in operating computers declines the confidence, poor vision in integration are also some of the factors face by faculty⁷.

MATERIALS AND METHODS

This study includes 50 faculty members who worked in Al-Tibri medical college and hospital Karachi. This cross sectional study was held between February 2020 to June 2020. Ethical approval has been taken from the concerned ethical committee. Both genders were incorporated by means non-probability convenient sampling method. In this study the faculty members of clinical as well as basic sciences were included. In order to conduct the research a questionnaire was given to all faculty members who have been go through online teaching method due to corona pandemic. The questionnaire was made of various questions based on Personal, attitudinal and contextual barriers faced by faculty in online teaching. The data was allayed through SPSS version 20.0 and results were mentioned in the form of frequency and percentage, the Chi-Square test was applied and the level of significance was expressed as $P < 0.05$.

RESULTS

The total 50 faculty members of both sexes were included. The frequency and percentage of gender of basic and clinical faculty members mentioned in table

1. By designation of faculty members included lecturer, assistance professor, associate professor and professor included and their frequency is shown in figure 1.

Table No.1: Showing Frequency and Percentage (%) of Gender distribution of faculty members' participation in online courses

Frequency and Percentage (%) of Gender distribution		
Gender	Basic Medical Sciences	Clinical Sciences
Male	13(52%)	11(44%)
Female	12(48%)	14(56%)
Total	25(100%)	25(100%)

The faculty of basic and clinical sciences was facing personal obstacles while conducting the online classes. Their results were mentioned in frequency and percentage is shown in table 2. The faculty of basic and clinical sciences was facing attitudinal and contextual obstacles while conducting the online classes. And results were mentioned in frequency and percentage is shown in table 3.

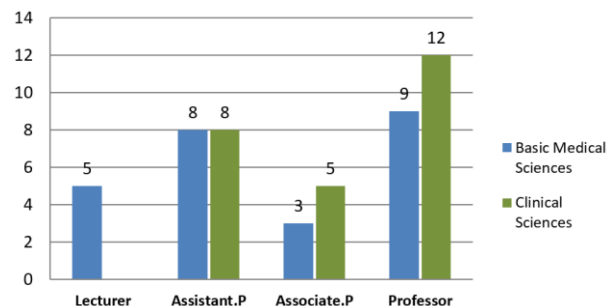


Figure No.1: Bar Chart showing frequency of faculty members according to designation

Table No.2. Showing personal barriers for faculty members' participation in online courses

		Basic Medical Sciences			Clinical Sciences			P-Value
	Personal obstacles to faculty members' participation in online education	Agree	Neutral	Disagree	Agree	Neutral	Disagree	
1	Insufficient awareness about online teaching	11(44%)	4(16%)	10(40%)	15(60%)	3(12%)	7(28%)	0.525
2	Unawareness about online teaching environment	15(60%)	2(8%)	8(32%)	16(64%)	2(8%)	7(28%)	0.952
3	Insufficient knowledge about the planning of online course	13(52%)	1(4%)	11(44%)	16(64%)	2(8%)	7(28%)	0.465
4	Anxiety regarding excessive workload	16(64%)	3(12%)	6(24%)	19(76%)	1(4%)	5(20%)	0.510
5	Anxiety regarding insufficient time for other academic activities	17(68%)	2(8%)	6(24%)	18(72%)	2(8%)	20(80%)	0.942
6	Insufficient computer skills	13(52%)	2(8%)	10(40%)	15(60%)	2(8%)	8(32%)	0.833
7	Reluctant to learn an essential skills for online teaching	2(8%)	1(4%)	22(88%)	3(12%)	2(8%)	20(80%)	0.730
8	Reluctant to adopt the new educational technique	2(8%)	5(20%)	18(72%)	4(16%)	2(8%)	19(76%)	0.372

Table No.3: Showing Attitudinal and Contextual barriers for faculty members' participation in online courses

	Attitudinal and Contextual obstacles to faculty members' participation in online education	Basic Medical Sciences			Clinical Sciences			P-Value
		Agree	Neutral	Disagree	Agree	Neutral	Disagree	
9	Anxiety regarding online teaching that might be effect the quality of an education	18(72%)	1(4%)	6(24%)	16(64%)	2(8%)	7(28%)	0.768
10	Anxiety regarding lacking of interaction between the students and facilitators during online course	16(64%)	3(12%)	6(24%)	18(72%)	1(4%)	6(24%)	0.572
11	Ambiguity about the quality of software provided by the institute	19(76%)	1(4%)	5(20%)	22(88%)	1(4%)	2(8%)	0.471
12	Anxiety about the loss of control over teaching	13(52%)	5(20%)	7(28%)	14(56%)	4(16%)	7(28%)	0.929
13	Ambiguity regarding hardware and software equipment provided by the institute for the conduction of online course	19(76%)	3(12%)	3(12%)	17(68%)	4(16%)	4(16%)	0.820
14	Ambiguity about the technical support during online course	15(60%)	5(20%)	5(20%)	16(64%)	3(12%)	6(24%)	0.732
15	Anxiety about the lacking of peer-collaboration during online teaching	14(56%)	4(16%)	7(28%)	16(64%)	4(16%)	5(20%)	0.792

DISCUSSION

In this study it was revealed that many factors cause hindrances in online teaching. The outcomes observed in present study describe the peripheral circumstantial barriers that have been playing crucial role in online teaching system. This was really discouraging for the faculty members who have participate in online classes. They were facing problems due lack of tools like software, weak internet sources and electricity issues. Many faculty members due to insufficient skills of using computers faced difficulties. The inadequate activities of administrators concerning educators' direction have been professed as the utmost projecting obstacles for faculty members becoming the part of online teaching. These findings were in accordance with the study done by an Iranian author who has noticed the external and internal contextual inhibitors faced during academic activities⁸. Many challenges are also created for faculty in terms of infrastructure of technology⁹. In present study it was noticed that insufficient knowledge regarding awareness of online teaching methodology as well its environment creates anxiety among faculty members of clinical as well basic side with the percentage of (60%) basic and clinical (64%). Another study also revealed that in developing countries these factors are more commonly seen. They have also mentioned that inadequate information of planning the course outline for online system increase the workload among faculty members¹⁰. In present study it was also noticed that faculty of basic and clinical sciences were facing anxiety regarding online teaching because of direct proportional effect on quality of education that is due to lack of direct interaction with

students. Its percentage was (62%) agreed basic (72%) clinical faculty. The recent study reported that in online session the healthy discussion declined, not only that but collaboration and weakness in responsiveness of all queries creates issues along with that cultural issues also noticed¹¹. Another study found the obstacles in Massive Open Online Courses in teaching and learning. This study also emphasizes on technology issues, how to organize the system, the motivation and internet sources¹². In comparison with this in current study it was observed that faculty was facing ambiguities regarding hardware and software equipment provided by the institute for the conduction of online course with percentage of (76%) basic and (68%) clinical. Several researches have recognized essential findings regarding electronic learning system. The management and analysis of critical success factors (CSFs) of electronic learning has also been established. That might help out in constructing the new policies of education and generating the electronic learning system effectively¹³.

CONCLUSION

In present study it was noticed that high percentage of faculty was concerns regarding deficiencies of important equipment like software, internet sources) and inadequate information in online teaching. Thus to implement on new educational environment, need support and training regarding online teaching.

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