

Medical Students Expectations, Experiences and Use of E Learning Resources in Higher Education

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ABSTRACT

Introduction: E-learning, defined here as 'any learning that uses information and communication technologies is seen as one way to support the advancement of healthcare experts. The adaptability and availability of such modes of delivery are seen globally as advertising opportunities to meet key instruction plans counting lifelong learning and extending participation. Technology-enhanced learning in healthcare education ranges instructive to constructivist approaches. The student constructs new information through investigation of information and reference to involvement and understanding.

Objective: To study the expectation and experiences of medical students regarding use of e-learning resources in higher education

Study Design: Quantitative cross sectional

Settings: Bakhtawar Ameen medical & dental college, Multan

Duration: Six months i.e. 1st January 2022 to 30th June 2022

Data Collection Procedure: A pre validated questionnaire was used. Study was carried out at Bakhtawar Ameen medical & dental college, Multan. The total numbers of students were 300 who participated after taking the informed consent. The study was done by simple random sampling technique. All the medical undergraduate students of first to final years must be aged between 20-30 years age. Questionnaire consists of demographic profile, expectation and experiences of medical students regarding use of e-learning resources in higher education

Results: The total number of patients who participated in the study was 300 in which 140 (46%) were males and 160 (54%) were females. The undergraduate's student's age is in between 20-30 years. On inquiring about student's expectations and experiences about e learning all the parameters were rated high about e learning which shows the significance of study and p value is <0.1 Practical implication

Conclusion: In our study two viewpoints contribute strongly to learning accomplishments and course fulfillment: students' achievement objectives and the instructor. Students who considered gains in competencies are very special and hence experienced higher achievements. Besides, the results of our study emphasize the instructor's expertise and part as a counselor and facilitator in learning.

Keywords: E-learning, health care, higher education, nursing, student engagement, student experiences, technology-enhanced learning

INTRODUCTION

E-learning, defined here as 'any learning that uses information and communication technologies is seen as one way to support the advancement of healthcare experts. The adaptability and availability of such modes of delivery are seen globally as advertising opportunities to meet key instruction plans counting lifelong learning and extending participation. Technology-enhanced learning in healthcare education ranges instructive to constructivist approaches. The student constructs new information through investigation of information and reference to involvement and understanding^(1, 2).

The environment in which medical students learn nowadays is vastly different than it was 20 years prior when the Internet was not such a overwhelming tool in medical instruction. E-learning platforms are presently progressively utilized by medical schools around the world and comprise adaptive instructional exercises, varying media clips, and virtual models. These instructive media possess a few particular preferences over traditional instructional models of instruction, including the capacity to upgrade fabric in a convenient way to guarantee conveyance of the latest evidence-based substance to trainees. E-learning has been illustrated to be as compelling as conventional didacticism and can be utilized to foster self-directed learning. It energizes medical students to apply more noteworthy control over their learning by permitting adaptability over substance and pace. In such models, teachers can evaluate competencies impartially through online evaluations, empowering students to receive personalized criticism for self improvement^(3, 4).

E-learning will undoubtedly have a significant effect on the environment in which future medical students learn. The continuous move towards e-learning is seen as a catalyst for applying adult learning hypothesis, which is able see more medical teachers taking on the part of facilitator and assessor of competency. Most medical students see e-learning as enjoyable and successful but, interestingly, do not see it replacing conventional didactic methods. Undoubtedly, e-learning is frequently a complement to instructor-led strategies in a mixed approach. Studies on nursing and medical students have demonstrated that fulfillment is reliably higher in a mixed learning environment compared with a conventional lecture setting. In any case, this fulfillment is not correlated with test scores, where there is often no noteworthy contrast between the two pedagogic approaches. Further research is required to set up the part of blended learning in medical instruction^(5, 6).

Technologies that span different levels of the ladder include the virtual learning environment (VLE). Broadly utilize in some subjects such as nursing and social sciences. VLEs give a repository work and permit space for online interactions between students and staff. Assessments in health care have suggested, in any case, that VLE use is restricted to content creation and material delivery. This position exists as the improvement of the VLE has been technologically, rather than educationally driven. This feedback is leveled at the selection of numerous unused technologies in medical and other fields, where highlights can be consolidated into educational delivery without thought for the potential advantage to learning. Web 2.0 technologies give modern

openings for learning, however a later report recommends their use in higher education is patchy^(7, 8). Medical students and health professionals have e-resources and can get through their college or hospital libraries, they also preferred and seek knowledge for their education and research work.^{13,14,15,16,17,18,19}

These advances incorporate social networking destinations, wikis, podcasts and weblogs (blogs). Web 2.0 applications allow users to not as it were recover data but to utilize the network as a stage to form and claim the data. Many students associated and communicate through social networking destinations, such as Facebook and My Space. Wikis are based on the thought that different clients can include and alter the content of a web-based information resource. Wikipedia and is maybe the leading known, in spite of the fact that wikis can be used in local settings with authorized access to specific learning communities. Podcasts are computerized sound records downloaded to MP3 players for example. They are often utilized to broadcast sections of lectures and Weblogs or blogs are a web diary or occasions record, being utilized as portion of structured learning and assessment^(9, 10).

MATERIAL AND METHODS

A pre validated questionnaire was used. Study was carried out at Bakhtawar Ameen medical & dental college, Multan. The total numbers of students were 300 who participated after taking the informed consent. The study was done by simple random sampling technique. Detailed information was given to students about the current research. Confidentiality of the participants was prioritized. Inclusion criteria include (1) all the students who included in this study must be aged between 20-30 years age (2) All medical undergraduate students of first to final year MBBS. The individuals who excluded from the study didn't giving consent and meet the inclusion criteria.

RESULTS

The total number of patients who participated in the study was 300 in which 140 (46%) were males and 160 (54%) were females. The undergraduate's student's age is in between 20-30 years.

On inquiring about student's expectations about e learning (85%) were in favour of usability of the platform. (90%) were in the opinion of clear and organized structure of the course and learning material. 75% were in the favour of easy and fast exchange of information and knowledge with peer students. 78% said that fast feedback from the instructor. 86% said that counseling and support of learning from the facilitator and 88% in regard of easy and fast accessibility of the instructor. 90% in view of students that support of cooperative learning and group work with other course participants. 78% were in favour of flexibility of time and place. 92% were in favour of maintaining learning and motivation and lastly 90% students in favour of acquiring knowledge and new skills in the subject.

Table 1: Demographic profile & Baseline Measures

| No. | Variable | Mean + SD % N=300 |
|-----|-------------|----------------------|
| 1 | Gender | |
| | Male | 140 |
| | Female | 160 |
| 2 | Age (Years) | 25.50 + 4.50 |

On the other hand students experience about e learning (90%) was in favour of course itself and the learning material were clear and well structured. (85%) were in the opinion of learning environment is user friendly. 25% were in the favour of often have to deal with technical problems (e.g., errors of the software, slow access to the internet). 88% said that my instructor has a high level of expertise in the implementation of e-learning courses. 93% said that my instructor gives fast feedback via e-mail, chat, newsgroups and/or other communication facilities and 91% in regard of online communication tools facilitate establishing new contact with other students. 95% in view of students that learning environment offers

opportunities to increase my knowledge. 92% were in favour to find it difficult to motivate myself and to maintain my learning motivation in the course. 84% students in favour of acquiring skills on how to apply the knowledge and lastly 86% were in favour of acquiring skills in using the internet for scientific practice. P value is significant i.e. (p <.01)

Table 2: Students Expectations n=300

| No. | Variable | %age | Mean | SD |
|-----|---|------|------|------|
| 1 | Usability of the platform | 85% | 4.54 | 0.78 |
| 2 | A clear and organized structure of the course and learning material | 90% | 4.67 | 0.89 |
| 3 | Easy and fast exchange of information and knowledge with peer students | 75% | 4.60 | 0.79 |
| 4 | Fast feedback from the instructor | 78% | 4.58 | 0.92 |
| 5 | Counseling and support of learning by the instructor | 86% | 4.55 | 0.88 |
| 6 | Easy and fast accessibility of the instructor | 88% | 4.62 | 0.85 |
| 7 | Support of cooperative learning and group work with other course participants | 90% | 4.52 | 0.88 |
| 8 | Flexibility of learning with regard to time and place | 78% | 4.40 | 0.98 |
| 9 | Support for maintaining learning motivation | 92% | 4.39 | 0.99 |
| 10 | Acquiring knowledge and skills in the subject matter | 90% | 4.44 | 1.02 |

Table 3: Students Experience about e- learning n=300

| No. | Variable | %age | Mean | SD |
|-----|--|------|------|------|
| 1 | The course itself and the learning material were clear and well structured | 90% | 5.25 | 1.22 |
| 2 | The learning environment is user friendly | 85% | 5.11 | 1.02 |
| 3 | I often have to deal with technical problems (e.g., errors of the software, slow access to the internet) | 25% | 4.62 | 0.89 |
| 4 | My instructor has a high level of expertise in the implementation of e-learning courses | 88% | 5.34 | 1.28 |
| 5 | My instructor gives fast feedback via e-mail, chat, newsgroups and/or other communication facilities | 93% | 4.88 | 1.10 |
| 6 | The online communication tools facilitate establishing new contact with other students | 91% | 5.24 | 1.05 |
| 7 | The learning environment offers opportunities to increase my knowledge | 95% | 5.35 | 1.29 |
| 8 | I find it difficult to motivate myself and to maintain my learning motivation in the course | 92% | 4.65 | 0.78 |
| 9 | Acquiring skills on how to apply the knowledge | 84% | 5.40 | 1.35 |
| 10 | Acquiring skills in using the internet for scientific practice | 86% | 5.36 | 1.33 |

DISCUSSIONS

The results of the study contribute to an understanding of which characteristics of an e-learning course and learning behaviors are important for learning accomplishments and fulfillment. They can be seen as a depiction of students' encounters and offer recommendations of how to plan e-learning courses under the common conditions at colleges (e.g., the accessibility of as it were particular learning management systems, the need to offer courses to a expansive number of members, etc.)

In terms of expectancy-value theory of motivation, these results can be clarified by the esteem students join to picks up in competences. Students' evaluations of the significance of particular accomplishments reflect their dominance objectives and their wishes to become proficient in a region. Thus, students who join a high esteem to particular achievements are also likely to

contribute more effort in learning, to apply more elaborated data handling techniques, or to give more time to learning⁽¹¹⁾.

In expansion, the adaptability within the choice of learning techniques and the trade of information with peer students are emphatically related to learning achievements. Students who use openings in self-regulated and collaborative learning also experience higher learning achievements. These results include imperative considerations for the plan of e-learning courses. Accomplishment objectives proved to be more important than other course characteristics, e.g., the plan of the learning material or the user invitingness of the learning stage. Instructors should in this manner influence motivation and objectives by adjusting instruction appropriately, e.g., by making learning destinations transparent and by giving openings for self-regulated learning and self-tests to measure progress throughout the complete course⁽¹²⁾.

Students' assessments of learning encounters in four areas of instruction (course structure, interaction between educators and students, interaction with peer students, individual learning) and their connection to course results were explored. Our research emphasizes the role of the teachers and perspective which is frequently ignored in research on e-learning. In comparison to all other factors, the instructor's support in learning (and so the interaction between teachers and students) emphatically contributes to learning accomplishments and course satisfaction. In students' recognition, the instructor's counseling and support are particularly imperative for their development of information, the acquisition of media competence, and for fulfillment with a course.

Besides, students emphasize the instructor's skill within the execution of e-learning courses. Compared to classroom instruction, e-learning educates are confronted with additional assignments. They ought to create coherent and organized learning material that is moreover actually well planned (e.g., learning material with interactive media components or hypertext structures), give opportunities for online practice or self-tests for students and for online collaboration with peer students. Within the case of mixed learning, instructors have to optimally combine online and face-to-face learning sessions.

Other than the instructor's skill and support, as it were a number of factors demonstrated to be critical for students' recognitions of learning achievements and course fulfillment. These factors depict three areas in which instructors require proficient ability, the structure and coherence of the learning material and the course, the incitement of learning inspiration, and the help of collaborative learning.

Instructors may give structure and coherence by implies such as advance organizers, clear introductions of learning objectives, or a structure of the learning contents. Prior information of the subject matter must be calculated in this way permitting to progressively construct on what has as of now been learned by the students. Teaches also require information in how to stimulate students 'intrinsic or outward motivation, e.g., by implies such as giving opportunities for students to look for challenge, stimulating their interest, or permitting them choices in activities

CONCLUSION

In our study two viewpoints contribute strongly to learning accomplishments and course fulfillment: students' achievement objectives and the instructor. Students who considered gains in competencies are very special and hence experienced higher achievements. Besides, the results of our study emphasize the instructor's expertise and part as a counselor and facilitator in learning. The teachers do not become less critical in e-learning. On the contrary, student's experience the instructor's support and skill

as particularly imperative for the acquisition of information, aptitudes, and competencies for course satisfaction.

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