

Evaluation of the Current Challenges of Nursing Students about Online Nursing Education at the Middle Region in Iraq

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ABSTRACT

A descriptive study, using evaluation approach, is conducted to evaluate the current challenges about online nursing education at the Middle Region in Iraq from September 26, 2020, to April 10, 2021. The study is carried out at two Colleges of Nursing in Iraqi Universities. A sample of (80) undergraduate nursing students is recruited from the early stated colleges using the non-probability sampling approach to gather a convenient sample. The sample is comprised of (40) students from each college of nursing. A self-report questionnaire is developed from the literature, for the evaluation process. The results indicate that nearly two-fifths of the students experienced an apparent level of challenges, while only a limited number of participants evaluate online education as an effective model of education. The study concludes that there are differences between Colleges of Nursing relative to current challenges of online nursing education domains. Likewise, the study recommends that the implementation of online nursing education should be seriously monitored for the benefit of colleges, faculty members, and students.

Keywords: Evaluation, Nursing, Online education, Challenges, obstacles

Introduction

Nursing education reacts to a variety of challenges both locally and globally (Harerimana&Mtshali, 2020). According to the United Nations Development Program [UNDP] (2020), the global pandemic COVID-19 influenced every part of life and has the potential to have catastrophic economic, educational, social, and political consequences. So nursing education as any other field had been affected, many universities moved from face-to-face instruction to a virtual model to continue teaching, while adhering to COVID-19 precaution measures. Schools of nursing all around the world have also followed this strategy (Agu, Stewart, McFarlane-Stewart, & Rae, 2021). As a result, innovative instructional solutions have been implemented (Nikadambaeva, 2020). Universities found that online education is the most eligible substitute for campus teaching, this transition may be difficult for nursing students to adjust to this experience at first, but the regular practice may confirm benefits in the long term (Olugbenga, 2020). However, online nursing education is technologically reliant, and this reliance making it challenging in terms of use and accessibility (Anwar, Khan, & Sultan, 2020). The adoption of online education platforms has its challenges and obstacles. Time constraints and workload, which made teachers and students struggling, encouraged the responsible departments to seek alternative practices of a self-directed and custom-made learning experience (O'Doherty et al., 2018). Studies mentioned multiple issues and challenges reported by students when they trying to learn depending on online education. For instance, students from rural residencies demonstrated difficulties and problems with the internet access that enable them to engage in advanced learning strategies, others do not have desktops or laptops at home (Morin, 2020). Summarizing some challenges that experienced by Universities can include, the impossibility of teaching clinical and laboratory lessons via the internet, lack of technological devices and gadgets, lack of training for the students and instructors, lack of motivation regarding online education (Ali, 2016). Issues concerned with social and administrative aspects, education quality perspectives, and affordability issues (Anwar et al., 2020). Generally, online education is a valuable method to enhance the technological presence in nursing. In addition, by which an up-to-date health service could be administered to patients. Also, it assists nursing students to develop advanced practice skills in safe circumstances and mediums, using simulation strategies. This introducing online nursing education as one of the best models for teaching nurses (Nicholson, 2012).

Methodology

A descriptive study, using evaluation approach, is conducted to evaluate the current challenges about online nursing education at the Middle Region in Iraq from September 26, 2020, to April 10, 2021. The study is carried out at two Colleges of Nursing in Iraqi Universities. A sample of (80) undergraduate nursing students is recruited from the aforementioned colleges using the non-probability sampling approach to gather a convenient sample. The sample is comprised of (40) students from each college of nursing. A self-report questionnaire is developed from the literature, for evaluating the current challenges of online nursing education. The instrument consists of two parts, which include students' demographic data and the current challenges of online nursing education. A pilot study is conducted for the determination of the study instrument's internal consistency reliability and content validity. Data are collected using the developed self-report questionnaire from undergraduate nursing students out of early stated colleges. Online and paperwork styles are used as means for data collection. The collected data are analyzed through the application of the following approaches: Descriptive statistical data analysis approach and inferential statistical data analysis approach. Formal ethical approval for the study is obtained from the Scientific Research Ethical Committee in the College of Nursing, University of Baghdad. All participants have signed a consent form for their agreement to participate in the study.

Results

Table 1

Overall Evaluation of Current Challenges of Online Nursing Education in Middle Region of Iraq

Poor (74-123.3)	Fair (123.4-171.6)	Good (172.7-222)
34(42.5%)	43(53.75%)	3(3.75%)

Table 2

Mean of Scores on Items of Learning, Understanding and Comprehension Domain at Colleges of Nursing in Middle Region of Iraq

List	Learning, Understanding, and Comprehension Domain	Always	Some times	Never	M.S	E.
1	I learn easily with online education.	6	44	30	1.7	Low
2	I get a benefit from what I learned in online education courses.	9	36	35	1.7	Low
3	The assignments help acquire a better understanding of course content.	12	49	19	1.91	Low
4	The tests in the online class are directly related to assignments, discussions, and other planned activities.	23	44	13	2.13	High
5	Online education increases the quality of knowledge attained.	7	30	43	1.55	Low
6	Online education will provide me with better learning opportunities than traditional means of learning.	7	21	52	1.44	Low
7	I can manage my study time efficiently to complete assignments on time.	16	42	22	1.93	Low
8	Online education provides an opportunity for students to review educational materials at any time without being restricted by the time of the lecture.	30	34	16	2.18	High
9	I learn best when class material is presented in a variety of formats (lectures, videos, podcasts, online discussion/ conferencing).	17	46	17	2.0	Moderate
10	I feel comfortable reading a textbook or articles on a computer screen than a physical textbook or paper.	5	20	55	1.38	Low
11	I have the chance to work with my peers during online education.	14	42	24	1.88	Low
12	Student responsibilities (being prepared, participation, group	18	39	23	1.94	Low

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13	projects, etc.) are well defined in online education. I believe that using online education technologies will improve my learning performance.	10	37	33	1.71	Low
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MS: Mean of Scores, E.: Evaluation, Low: MS < 2, Moderate: MS = 2, High: MS > 2

Table 3

Mean of Scores on Items of Software and Online education Tools Domain at Colleges of Nursing in Middle Region of Iraq

List	Software and Online education Tools Domain	Always	Some times	Never	M.S	E.
1	I am comfortable and proficient at creating, saving, locating, downloading, surfing the Internet, conducting searches, setting bookmarks, and opening different types of files on a computer.	22	42	16	2.08	High
2	I am willing to use e-mail and other online tools to ask my classmates and instructors questions.	43	25	12	2.39	High
3	I can confidently write and format documents using a word processing program.	29	31	20	2.11	High
4	I have access to a webcam and microphone for simple multimedia participation.	19	18	43	1.7	Low
5	It will be easy for me to become skillful in the use of online education tools.	22	38	20	2.03	High
6	I prefer using a computer to prepare my lessons.	12	27	41	1.64	Low
7	Supporting learners in an online education environment is very easy.	12	51	17	1.94	Low
8	It is easy to get help when facing computer problems.	22	37	21	2.01	High

MS: Mean of Scores, E.: Evaluation, Low: MS < 2, High: MS > 2

Table 4

Mean of Scores on Items of Instructors' Skills and Experiences Domain at Colleges of Nursing in Middle Region of Iraq

List	Instructors' Skills and Experiences Domain	Always	Some times	Never	M.S	E.
1	The instructor expresses ideas clearly.	10	57	13	1.96	Low
2	Encourages students to feel free to ask questions.	24	42	14	2.13	High
3	Carefully answers questions raised by students.	21	50	9	1.95	Low
4	Treats students with respect when communicating with various electronic means of communication.	40	29	11	2.36	High
5	Uses various teaching methods and techniques that helped me understand the practical applications of the course content.	13	40	27	1.83	Low
6	The instructor is helpful and collaborates with the students.	25	48	7	2.23	High
7	Feedback and evaluation of papers, tests, and other assignments are given promptly.	19	40	21	1.98	Low
8	The instructor is well organized and prepared.	16	51	13	2.04	High
9	Competent with computer use during the course.	22	42	16	2.08	High
10	Accessible and available during the online education course.	19	45	16	2.04	High
11	Communicated important due dates/time frames for learning activities.	22	40	18	2.05	High
12	Define and apply clear grading scales.	25	38	17	2.1	High
13	Provide accurate, complete, clear, and accessible content.	12	54	14	1.98	Low
14	Offer multiple opportunities for interaction among learners, between learners and the instructor, and between learners and content.	12	55	13	1.99	Low
15	Integrate face-to-face interactions and participation in social networks.	18	46	16	2.03	High

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16	Provides detailed instructions and guidelines for completing assignments and discussions.	16	45	19	1.96	Low
17	Course objectives in online education are provided at the beginning of the course and clearly described.	26	40	14	2.15	High
MS: Mean of Scores, E.: Evaluation, Low: MS < 2, High: MS > 2						

Table 5

Mean of Scores on Items of Class Discussion and Student-Faculty Communication Domain at Colleges of Nursing in Middle Region of Iraq

List	Class Discussion and Student-Faculty Communication Domain	Always	Some times	Never	M.S	E.
1	The frequency of student and instructor interactions is adequate.	8	54	18	1.88	Low
2	I feel comfortable participating in online course discussions.	20	42	18	2.03	High
3	The face-to-face method is more learner-centered than the online education methods.	45	29	6	2.49	High
4	There is more interaction between all involved parties in online courses compared to a traditional face-to-face class.	14	34	32	1.78	Low
5	Communicating through e-mails is comfortable.	19	30	31	1.85	Low
6	I am comfortable interacting with others in online communication.	20	33	27	1.91	Low
7	Online education allows me to communicate with students and instructors at different times.	30	40	10	2.25	High

MS: Mean of Scores, E.: Evaluation, Low: MS < 2, High: MS > 2**Table 6**

Mean of scores on Items of Course Design and Content Material Domain at Colleges of Nursing in Middle Region of Iraq

List	Course Design and Content Material Domain	Always	Some times	Never	M.S	E.
1	The content is organized and easy to follow.	22	36	22	2.1	High
2	All the images and texts in the online courses are visible.	31	34	15	2.2	High
3	Any sounds in the course are audible.	14	47	19	1.94	Low
4	Adequate resources and materials for this online course are easily accessible during the course.	21	43	16	2.06	High
5	All documents (e.g., pdf, doc, and ppt) are accessible via screen readers. (This includes tables and graphs).	32	39	9	2.29	High
6	Educational videos are an essential part of Online education.	46	25	9	2.46	High
7	Video/audio files can be captioned.	30	40	10	2.25	High
8	The course contains various assessment methods (e.g. discussion, assignments (individual or group), and quizzes).	16	51	13	2.2	High
9	There is a course schedule that shows activities and due dates.	22	44	14	2.1	High

MS: Mean of Scores, E.: Evaluation, Low: MS < 2, High: MS > 2**Table 7**

Mean of Scores for Items of Psychosocial Circumstances Domain at Colleges of Nursing in Middle Region of Iraq

List	Psycho-social Circumstances domain	Always	Some Times	Never	M.S	E.
1	The test(s) in the online course is accurate and fair.	5	42	33	1.65	Low
2	Online education treats class members equitably and respectfully.	31	37	12	2.24	High
3	Online education decreases learners' social isolation.	12	39	29	1.79	Low
4	Learning through online education is interesting.	9	29	42	1.59	Low
5	I am comfortable with online learning technology.	17	26	37	1.75	Low

6	I am comfortable working and learning independently.	24	34	22	2.03	High
7	I am satisfied with my final grades in the online course.	21	35	24	1.96	Low
8	Conducting the course via the Internet make it easier than other traditional nursing courses I have taken.	19	36	25	1.93	Low
9	I get support and assistance throughout the online education process.	14	46	20	1.93	Low
10	The level of test anxiety in the electronic test is less compared to the traditional test inside university halls.	29	36	15	2.18	High
11	Online education is less expensive for students than in traditional education.	38	29	13	2.31	High

MS: Mean of Scores, E.: Evaluation, Low: MS < 2, High: MS > 2

Discussion

The overall finding of the Middle Region shows that nearly two-fifths of the students experienced arecognizable level of the current challenges of online nursing education, while only a limited number of participants evaluate online education as an effective model for learning (Table 1). The vast majority of the students commented on discrepancies with respect to the learning, understanding, and comprehension domain. The students stated (10) of (13) questions as low, with regard to the learning benefits and easiness in online education, and the effectiveness of the assignments in learning and understanding concerning the online content. While, they reported the items of tests and quizzes are relevant to the assignments and other pre-planned activities, and the possibility of studying educational materials freely without constraints, as high. Additionally, they mentioned the possibility of a better learning experience when the content presented in various formats, as moderate (Table 2).

Apart from this, a research mentioned by Hampton et al. (2017) addressed students' learning performance has drawn attention to that the students in an online course achieved better grades than in the traditional course and they experienced higher understanding pertaining to the curriculum materials, in conclusion, it is believed that the students learn better with the online format. According to the review of Ali et al. (2020), one-third of the students in a specific study reported that they prefer reading texts and educational content via the use of computers, and this method is considered easy and comfortable. Also, the participated students claimed that they are unable to comprehend and cognize the lectures completely without face-to-face interaction with peers and teachers.

Most of the students showed an impartial level of current challenges of online nursing education for the software and online education toolsdomain, and an equal proportion (one quarter) of deprived and worthy levels of the challenges. This might be explained by students' remarking on the following items as high, the proficiency in using computer and file management skills; the capability of writing and formatting documents with the utilization of a word processing software; and the expected acquirement of skills regarding the use of technological tools in learning. Besides, students mentioned as low each of webcam and microphone access for video conferencing or live lectures, preferring the use of computer for assignment accomplishment, and the easiness of supporting students in the online environment (Table 3).

Mainly, the findings of the present study come in contrast with the observations of (Coopasami et al., 2017), who declared that students did not have the required technological skills and readiness that authorize them to enroll in online courses. Nevertheless, Mehrdad et al. (2011) manifested that the students are capable to utilize the essential software that enabled them to continue the online course, and they mentioned that the website that is used for the online course is user-friendly.

In the Middle Region, less than two-thirds of the students have experienced challenges about instructors' skills and experiences as a domain of online nursing education. As they stated as low multiple items specifically the instructors' ability to express clear ideas, and answering students' questions carefully. In contrast, students stated as high the remaining questions, which are about encouraging class members to ask questions, and respectfully treating students (Table 4).

Subsequently, different findings of this domain are confirmed by Ali et al. (2020), who stated that teachers announced exam dates and other deadlines with the respect of giving the students sufficient time needed for studying and preparation, as well the exam's questions are related to what the teacher has discussed and explained of the content during the online classes. Consistent with another research wrote in the aforementioned study, systematic feedback is reported as a stimulating factor for the students that can motivate them to learn better and by which they monitor their performance. In this perspective, many researchers observed the association between students' satisfaction and course rubrics, syllabuses, and the prompt feedback conveyed by teachers (Carless, 2015).

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Additionally, the results depict that the participants suggest an intermediate level of challenges about class discussion and student-faculty communication as a domain of online nursing education. The mean scores showed that students mentioned (3) of (7) items as high concerning the comfortable participation in online course discussions, and communication flexibility. While the other items are mentioned as low, that of the frequency of student-teacher communication, and the interaction level between the classroom parts (Table 5).

In this perspective, the current study's result is confirmed by the findings of Langegard et al. (2021) who reported that the majority of the participated students experienced positive views regarding traditional in-campus education, and they showed a high degree of preference regarding this method. While only one-third of the students stated that they are comfortable with online education, the researcher has drawn attention to that the basic cause of this phenomenon is related to the social interaction and the nature of online communication in online nursing courses, as the students demonstrated a remarkable decline in all the aspects of learning after the latest adoption of online nursing education.

Most of the students have experienced contradictions about course design and content materials, and they rated only one item of this domain as low, which about sound quality and audibility. Whereas, the other items rated as high including content arrangement and fluency, and the importance of video files in online courses (Table 6).

Closely related to the findings of this domain, Ali et al. (2020) reported that the students evaluated the course material of images, PowerPoint presentations, videos, audios, etc. as of high clarity and quality, and this helped them in creating a more interactive and learning assistive environment. Further, Southard, Meddaugh, & France-Harris (2015) highlighted that video files are a central item in online education, and play a role in attracting students' attention considering the educational materials, and can enhance the sense of importance regarding the course.

Findings of the psychosocial circumstances as a domain of online nursing education indicate that most of the students have experienced reasonable struggles. The Students mentioned (4) of (11) items as high including the equality and respectfulness that nursing students gain in online education, and anxiety levels during online nursing courses. The other items marked as low, including online test accuracy, students' sense of social isolation, and students' satisfaction regarding the final grades (Table 7).

Parallel with the present study, many researchers underlined that online courses are cost-effective for the students and universities (Akimanimpaye&Fakude, 2015). As well as online education recognized as a self-directed approach that helps students learn independently (Harerimana&Mtshali, 2020). However, students' satisfaction is defined to be one of the features of online programs, and this characteristic is highly correlated with students' technological skills (Mehrdad et al., 2011), furthermore, female nursing students experienced higher levels of satisfaction with online nursing education than males (Akimanimpaye&Fakude, 2015).

Conclusion

The study concludes that there are differences between Colleges of Nursing relative to the current challenges of online nursing education domains. Moreover, the vast majority of students showed difficulties with online nursing education at all levels, and the overall evaluation indicates that only a limited number of participants appraise online nursing education as an active model for learning.

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