Article

Students Perspective of Clinical Online Training During COVID-19 Pandemic: A Descriptive Phenomenological Study

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Abstract

Purpose: COVID-19 pandemic induced an international alarm leading to a sudden transition to online learning, teaching. Clinical training in nursing has an important role to develop nursing students' skills, knowledge, and attitudes; but online learning was seen by students a challenging experience which compelled them to accept it for the sake of learning continuity. This study aimed to explored students' perspective of clinical online training during COVID-19 pandemic. **Methodology:** A mixed method research design, combining an explorative quantitative and phenomenological qualitative design was used with 21 nursing students, who participated in a questionnaire survey and an interview. Colaizzi's approach was used to analyze the interviews. **Findings and Results:** Data analysis yielded four themes: (a) Missing the real world of the clinical area; (b) falling into the dark side of the experience; (c) losing the confidence to be a competent nurse; and (d) the need for supporting hand. **Implications to theory and practice:** This study reiterated that clinical training was vital for nursing students and raised concern over the transition to online learning methods and challenges faced from students' perspective. The result of this study could be used as baseline data for nursing educators when planning clinical online education whether its duo to pandemic problems or other circumstances.

Keywords

COVID-19 Pandemic; Online education; Virtual training; Nursing students; Students' experience.

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The COVID-19 pandemic has made huge effects on human life worldwide, especially in health, economy, and education. Consequently, numerous measures have been taken by governments and organizations to prevent its spread, including restrictions on normal life, trade activities, and travel, and announcing curfew in countries and locking up cities and countries (Al-Balas et al., 2020; Anzai et al., 2020)). The education sector was heavily impacted by COVID-19 through closure of schools and universities to reduce face to face interaction and thus decrease viral spread. This sudden closure of educational institutions was both stressful and with very few options to continue teaching and learning. All universities including medical universities were shifted to online learning within days. Truly speaking, the unplanned transition from traditional to online learning changed the entire teaching mechanism of medical institutions in general, and of nursing schools, in particular, where delivering the courses to students was considered a primary objective (Al-Balas et al., 2020; Tanveer et al., 2020).

Medical graduates and particularly nursing students needed to get the exposure of online textbooks, modules with video lectures and computer-based exams. Online learning necessitated evolution in teaching modalities, such as blended learning or a "flipped classroom" model (Schwartzstein & Roberts, 2017; Williams, 2016). If implemented, the clinic-based teaching was going to be more synchronized and attuned to online learning models. It has always been claimed that online learning in medical or nursing education could lead to an easier and a greater access to information, especially in uncertain global situations such as pandemics (Mooney & Bligh, 1997). The current COVID-19 pandemic has reassured the belief of any educators that shifting to online learning would be a permanent trend in medical education.

This study is a response to the distressing changes that were emerging on the educational horizon, particularly in clinical reaching. Since most educational institutions lacked previous experience of similar crises, they were unable to predict what will shortly happen during the pandemic (Al-Balas et al., 2020; Aslan & Pekince, 2021; Duke & Osim, 2020). Online learning or distance education requires previous preparation in addition to mastering the use of technological programs and various computer applications (Al-Balas et al., 2020; Toquero, 2020). This study has examined university students' experience with online education during the pandemic, particularly, in nursing schools, from where the sample of the study was drawn. In this mixed research study, the main objective was to examine students' perspective of clinical online training during COVID-19 pandemic and to assess the effectiveness of the online teaching techniques often recommended in previous studies (Bediang et al., 2013; Dumanli Kadizade & Anilan, 2020; Greenhalgh, 2001). Many studies have investigated students' experience in clinical setting; however, no study has explored the experience of nursing students' regarding online clinical training during COVID-19 pandemic in Jordan. This study therefore aimed to fill this research gap and explore online clinical training as evident from the experience of nursing students during COVID-19 pandemic in Jordan. This study also aimed at determining nursing students' perceptions and satisfaction level regarding synchronous online learning methods implemented in courses during the ongoing Covid-19 pandemic and identify barriers that students faced in online learning.

Literature review

Evolution of Clinical training and online education

The history of clinical training in nursing began in United States, in 1884 by Florence Nightingale, as a pioneer of modern nursing, create and established the hospital's training school (Nightingale & McDonald, 2001). As the world progressed into the 20th century, nurse training moved from hospitals to accredited schools. This shift helped to standardize nurse training and improve patients caring framework. Nowadays, nurses must receive specific training and certificate. The educational organizations have taken over the training role as soon as health-care institutions were satisfied. This organized training has helped to improve quality of healthcare for all patients and confirming the nursing profession as a long-standing practice (Elfaki et al., 2019).

Online education has been defined as a type of educational instruction that is provided through the internet to students using their computers. Early in 1970's the online education was being developed, using very simple methods of computer networking. The technology enhanced throughout the 1980's, and online education initiated to be widespread among companies and government institutions for training of staffs. In the 1990's, the online education became popular as same line with the Internet itself (Simpson & Anderson, 2012). However, in recent times online learning requires the use of computer technology to deliver training (Mehmet, 2020; Shanahan, 2008), particularly in medical or nursing profession, for the effective construction of knowledge and

to enhance individual experience, practice, and knowledge of the medical and nursing students (Letterie, 2003)).

Students view online education as a new type of experience that promises for a longer retention of their learning experience. Studies have argued both good and bad effects of virtual learning experienced by students through online methods (Elfaki et al., 2019). For instance, Internet connection has been a big barrier faced by students, especially in developing and low-income nations (Birimkulova et al., 2020; Toquero, 2020). A few other students emphasized upon the need to show commitment and discipline when online learning is opted (Shenoy et al., 2020). A few other challenges mentioned by students included physical exhaustion, long time consuming assignments, and inevitability of stable internet connection (Allo, 2020; Breetzke et al., 2020).

Impact of online education on students' achievement

Student Achievement is defined as a measure of the academic content that a student learns within a specified time frame. For each educational level there are specific standards or goals that educators must teach to their students to ensure their achievement and satisfaction (Rose, 2020). With reference to students' satisfaction and achievement with online education, several studies have found online learning appropriate, flexible and beneficial and that students had positive experience for the elective courses rather than for core courses (Lu et al., 2009; Makin & Bowers, 2020; Moradimokhles & Hwang, 2020; Salavrakos, 2020). Additionally, majority of students preferred online education during COVID-19 pandemic and expressed the positive impact on their performance reflected on their higher scores (Allo, 2020; Shenoy et al., 2020). Conversely, students classified their experience in online education either positive or negative based on instructors and course materials through accessibility, efforts to deliver clear small content, and ability to apply discussion section for students and sufficient support (Braun & Clarke, 2006).

Nursing clinical training during COVID-19 pandemic

Clinical training in nursing has an important role to develop nursing students' skills, knowledge and attitudes. It equips students with exceptional learning opportunities to bridge theory and skills within clinical settings (Nabolsi et al., 2012). Such training mixes both theoretical and practical learning experiences and offers essential competencies required for providing quality nursing care (Lawal et al., 2016). Clinical training for students in health colleges constitutes approximately 60-70% of the courses and students gain the skills, competencies and knowledge necessary within a complex clinical learning atmosphere to practice their applied professions efficiently after graduation (Greenhalgh, 2001; Lawal et al., 2016).

Studies have described students' experience in their clinical training specially nursing students (Faraji et al., 2019; Gemuhay et al., 2019). These studies have highlighted factors affecting nursing students during their clinical courses, narrated by students themselves through their lived experiences. These studies have also discussed improving factors such as effective supervision, evaluation, providing high quality care based on research and scientific development (Gemuhay et al., 2019), and inhibiting factors such as insufficient resources, lack of supervision, absenteeism from clinical, inappropriate communication, and inadequate knowledge and competencies (Faraji et al., 2019). During COVID-19 pandemic, several measures have been taken by health schools to replace practical training in hospitals. These measures varied between universities and included simulation, using available virtual cases, modifying academic calendar, and involving students in telehealth environment (Al-Balas et al., 2020; Gallagher & Schleyer, 2020; Greenhalgh, 2001). Online education had certainly constituted a barrier for students to acquire professional skills and competencies to be implemented hand-in-hand in clinical settings, which put a burden on clinical instructors in following-up and evaluation (Gallagher & Schleyer, 2020).

In Jordan, since the beginning of COVID-19 pandemic, universities had begun switching over to online education. The University of Jordan made a swift transition to online mode of learning and cancelled all other physical and face-to-face activities. Several workshops and training were organized online by the Accreditation and Quality Assurance Center for faculty members to train them in the use of different online applications such as Microsoft Teams and E-Learning. In the school of nursing, this situation was more challenging because practical training constituted approximately 60-70% of the courses. Efforts were made to replace physical and practical experience with virtual learning instead of doing them in clinical settings. Different platforms and applications were used including Microsoft Teams, Zoom, and E-learning to deliver course materials, lectures, assignments and evaluation. Simulation videos were used to train students on different nursing skills. Despite all the efforts, however, the nursing skills were still inapplicable in online education (Al-Balas et al., 2020; Rose,

2020).

Methods

Research Design

A descriptive, mixed research study was carried out with an explorative quantitative and a phenomenological qualitative approach. Giving the novelty of this study's phenomenon, a mixed research approach was the most appropriate approach for its understanding as such methodology focused on human experience in naturalistic settings. Furthermore, while the quantitative approach helped to understand the extent of nursing students' perception and their satisfaction levels, the phenomenological qualitative approach attempted to set assumptions about human feelings, experiences, and responses to a specific condition, and helped understand thought, perception, imagination, emotion, and memory (LoBiondo-Wood & Haber, 2002).

Sample

Data were collected using purposive sampling technique. Students were approached if they were full-time university students, registered in one or two online clinical training courses at undergraduate nursing program at the time of the study and during the COVID-19 pandemic. Each participant was invited to an office allocated for research purpose at School of Nursing, the teaching university in Jordan, maintaining safety measures and guidelines imposed by the University during COVID-19 pandemic. Saturation was reached after conducting one-to-one in-depth interviews with 21 participants. For collecting the quantitative data, a questionnaire was also distributed to the informants.

Instrument and Procedure

Data were collected using a questionnaire and semi-structured interviews based on literature review. Both questionnaire and the interview instruments contained open-ended questions which prompted participants to tell their narratives. There were questions such as "Could you please describe your experience in online clinical training courses during COVID-19 pandemic?". After each participant had signed the informed consent, a questionnaire was given to fill up to each of the participant. Then, the interviewer started the interview by asking the participant to complete a socio-demographic data sheet and initiating a short conversation on a general topic. The interviewer also asked for clarifications and prompted the participants frequently during the interviews, until they had no more to tell. Each interview lasted between 45-60 minutes. Since the phenomenon of online clinical training experience in Jordan had not been examined before this study, explanation of the meaning of nursing students was the focus of this study. Initially, the researchers assumed an individual phenomenological reflection. They asked themselves about their assumptions about the phenomenon of online clinical training during COVID-19 pandemic: experience of nursing students, and how these might affect what and how they conducted their study.

The ethical approval was also obtained from the Scientific Research Committee of the same university. Participant's anonymity and confidentiality were guaranteed by using numeric codes instead of participants' names on all documents during data collection and analysis. Each participant received an informed consent form via email, explaining the aim and merit of the study, and stating that participation in the study was voluntary and risk-free. By signing the informed consent form, the participant was recruited to the study sample. Further, the interviewer discussed any concern with participants and suggested appropriate follow up if necessary. Any identifying information was removed, and data collectively presented.

Data Analysis

Data was analyzed according to Colaizzi (1978) methodology, who mainly defined and explained the approach of data analysis used in quantitative and qualitative studies, for identifying meaningful information and organize them into themes or categories. This included the seven steps method: familiarization, identifying significant statements, formulating meanings, clustering themes, developing an exhaustive description, producing the fundamental structure, seeking verification of the fundamental structure. The recorded interviews were transcribed and then coded. The coding and themes generated were discussed by the researchers for confirmation. Finally, participants were asked whether the themes captured their experience and provided feedback on the findings.

Results

Data were collected from 21 participants who had a mean age of 20.5 years. Although participants had similar

educational background, they were from different academic years, family backgrounds, and lived stories. Table 1 presents participants' demographic characteristics.

Table 1: *Demographic Data of the Participants (N=21)*

Variable	n (%)
Age	
19-20	10(47.6)
21-25	11(52.4)
Mean age	20.5
Gender	
Male	11(52.4)
Female	10(47.6)
Academic years	
Second	5(23.8)
Third	9(42.9)
Fourth	7(33.3)
Previous enrolment in online learning	No (10) 47.62%
related to nursing curriculum	Yes (11) 52.4%
Family income	
>500	12(57.1)
≥500	9(42.9)
Internet connection recharge	
Monthly recharge	14(66.7)
Yearly recharge	7 (33.3)
Marital status	
Single	18(85.7)
Married	3(14.3)

The mean age of participants was 20.5 years (range: 19-25 years). As illustrated in Table 1, among the 21 students who completed their questionnaire, 10(47.6) were female. Other demographics are explained in Table 1. A total of 11 students (52.4%) declared their enrollment in at least one online learning course before or during the COVID-19 pandemic. Among the 21 respondents, all of them used smartphones as a single device in e-learning followed by computers, laptops, or desktops. Almost all students agreed that the delivery of educational material should use synchronous live streaming sessions as the major modality of teaching. Only a few students agreed to use prerecorded sessions or a mix of live and pre-recorded lessons. Students also opted for ZOOM, Microsoft Teams, WhatsApp groups, YouTube channels, Moodle, and Skype as learning platforms and applications to implement online learning.

Students also reported benefits as well as challenges of online learning. A total of 47.6% reported advantages such as timesaving, flexibility of time and pace, enhanced interaction with teachers and classmates (66.7%). The main challenges were the low quality of teaching reported by (52.4%) of respondents opining the lack of training and technical exposure to the instructors, poor interaction (47.6%) and bad internet streaming quality (33.3%). Table 2 summarizes benefits, drawbacks, and challenges of online education as reported by respondents.

Table 2:

		Number of students (%)
Benefits	Any time any pace	11(52.4)
	Flexibility of time	10(47.6)
	Longer Retention	7 (33.3)
	Learning enhancement	14(66.7)
Drawbacks &	instruction quality	11(52.4)
Challenges	Insufficient interaction with instructors	18(85.7)
	Poor interaction with classmates	10(47.6)
	Internet services (e.g., data packages, stable connection, etc.)	7 (33.3)

Non availability of devices and gadgets	5(23.8)
Too many educational applications	6 (30)

In the qualitative phase, following the phenomenological approach, discussions were recorded, transcribed verbatim, and analyzed by summarizing content analysis developed by (Kiger & Varpio, 2020; Mayring, 2003). This helped to condense the data into essential content in a systematic manner guided by sequential steps. A few themes were coded from the content analysis of the data. An inductive process was used for analysis and to assign a code for each meaningful sentence and then gather similar codes in overarching sub-themes. Finally, similar sub-themes were grouped together under a main theme reflecting its sub-themes.

all authors analyzed and coded by all authors. Two authors were assigned the task of making a preliminary analysis, while the other authors completed the coding process. In the end, the coding was reviewed and refined until a consensus was achieved among all authors, which led to a more representative coding scheme, sub-themes, and themes. All the themes showed the evidence of nursing students' lived experiences of online clinical training during COVID-19 pandemic. Four main themes emerged from participants' stories. These themes include missing the real world of the clinical area, falling into the dark side of the experience, losing the confidence to become a competent nurse, and the need for a supporting hand.

Theme 1: Missing the real world of the clinical area.

In general, participants reported being unsatisfied with online training experience. They expressed incomplete training and missing a lot of experiences with patients and healthcare providers. A student said: *"I think that the clinical training course was incomplete, we are not in the actual place that we should be."* Another student confirmed: *"I didn't work with patients directly; this is not clinical training".* Furthermore, participants expressed the importance of clinical skills during academic life in nursing, which was missing with online training. However, application of skills was replaced by videos and scientific websites, but participants expressed that it was insufficient to acquire the required skills. A student said: *"Showing videos to learn the required skills is insufficient, I miss hand application of skills".* Lacking serious and realistic clinical training is another complain concerning online training. A student stated: "*Simply, this was not realistic; online clinical training lacked the seriousness as the actual clinical training in designated places.*"

Theme 2: Falling into the dark side of the experience

Participants experienced mixed feelings of stressors and undefined fears. Stress was also related to confusing messages and constantly changing decisions from the university administration regarding the nature of training and exams. A student said: "*Online clinical training course put me in stress all the time, stress related to assignments and conflicting messages from the instructors and administrators, and because of my exams. What will happen if the exam did not open or something wrong happened, what will be my outcome?".* The feeling of stress was associated with undefined fears. Participants reported fears of unknown related to the lockdown, failure of the internet connection, the new methods of evaluation, and the clinical outcome. A student expressed: *"This experience provoked many fears as we all see is darkness and vagueness, we fear of the ban in case of lockdown, feared of evaluation and grades, exams and final grades".* Another student expressed fear of internet connection failure during the exam and commented: *"Fear of interrupted internet connection during the exam is one of my major fears".*

Moreover, participants reported being loaded and stressed from difficult and unclear assignments during online training. They had to complete many assignments in a short period of time. A student commented: *"I am stressed because I did not understand the required assignments in some clinical courses. I mean; we were submitting them without understanding, the assignments were more difficult than the given information".* Furthermore, participants expressed losing passion, motivation, and self-confidence. Consequently, they developed a feeling of anger and anxiety. A student shared that: *"When I feel that I lost a lot of things, I become nervous. This is against my nature; I was not like that before".* Additionally, many participants expressed a feeling

of frustration and losing motivation to study and work. They felt that online training is part of the unusual circumstances occurred due to COVID-19 pandemic and is a kind of misfortune. A student commented: *"This is a frustrating situation; it is an unusual new experience that we fell in"*.

Theme 3: Losing the confidence to be a competent nurse

Participants indicated that shifting to online education had unusual influences on their competencies in clinical training. Most of them agreed that they lost their competencies in online education, and there was no real training in actual clinical settings. A student said: *"I should apply the skills by my hands, but I did not, my competencies were lost"*. Educational performance and achievements are often linked to accomplishing the desired goals, especially in clinical courses, and this was precisely what most participants expressed as they were unable to achieve through online training. They expressed dissatisfaction with their achievement, performance, and outcomes and -described their performance as poor and incomplete. This feeling appeared by a student who commented: *"I am not satisfied with my clinical training performance. I did not achieve most of the desired goals"*. Being in doubt concerning future qualifications as professional nurses is another concern. participants were worried about their plans and fitting in the labor market because they understand the importance of clinical training they missed during online training. One student expressed: *"I felt that we had not fulfilled all our right to training so that we would become professionals when we got acquainted with the labor market, I mean; I am supposed to be ready for the job market"*.

Theme 4: The need for supporting hands

Participants divided instructors of online clinical training into two categories; instructors who were cooperative and provided constant help; and instructors who were uncooperative and who overloaded students with assignments. In general, instructors were highly supportive and did their best to motivate and encourage students to work and learn during this unusual experience, which was highly appreciated by the students. A student reported: *"Teachers and instructors were motivating us to learn, they let us feel that there is nothing to be afraid of, I mean, they were reassuring us"*. Other participants expressed the lack of effective communication with their instructors during online training. A student reported: *"Teachers did not have enough effective communication and this made me feel lost and afraid."* Some of the participants expressed inadequate feedback from the instructors. A student reported: *"I really missed the follow-up and feedback that was present in clinical settings"*.

Conversely, many participants reported that they had adequate follow up and feedback from their instructors. A student reported: *"Teachers were always following our performance, guiding us and giving us feedback"*. Some students stated that most of the instructors were incompetent in teaching online courses and had used incomprehensive teaching methods, while others stated they were competent. A student reported: *"Teachers were good at using smart applications and technology, but some teachers had weaknesses in communicating the information to us. They were sending us videos with American accents, so how can I understand that"*.

Discussion

This study described nursing students' online clinical training experience during COVID-19 pandemic. This study was conducted when clinical training had become online due to COVID-19 pandemic. Four major themes were found: (a) Missing the real world of the clinical area; (b) falling into the dark side of the experience; (c) losing the confidence to be a competent nurse; and (d) the need for supporting hand, and the following section will compare the results of this study with other studies worldwide. The major focus was on evaluating nursing students' experiences in online learning, which was a sudden transition in Jordanian nursing schools. The findings revealed that online learning had already emerged as a new method of teaching to continue the nursing education despite the pandemic. In this study, we explored student's opinions toward major challenges they faced during their new experience of learning, limitations, faculty staff performance, overall satisfaction as well as future perspectives.

Traditional (i.e. face to face) teaching is considered a prerequisite educational approach in nursing education (Al-Balas et al., 2020); though traditional teaching methods had faced increasing challenges because of the increase in clinical demands (Moberg & Whitcomb, 1999; Shachar & Neumann, 2003). In Jordan, as the findings revealed, online learning has been reported to provide easier and more effective access to a wider variety and greater quantity of information, allowing a personalized approach to learning. Now students had more control over the educational

content, learning sequence and time, which is in line with previous studies (Gómez-Trigueros et al., 2019; Greenhalgh, 2001; Mooney & Bligh, 1997; Shachar & Neumann, 2003). Nursing students also commented on the advantage of online learning to be easier and faster in distributing and absorbing the educational content in comparison with printed books and material. Other advantages included saving time and flexibility of pace and time agreed by a majority of students which is also consistent with past studies (Ghanizadeh et al., 2018).

A few students commented on the challenges of inline learning in nursing education such as lack of adequate technology/infrastructure: trained instructors and trainers, and insufficient internet access, and poor quality of internet services. These barriers affected both learners and faculty members. a few of the respondents even observed the reluctance and avoidance of educators to engage in new technologies and applications because of their limited knowledge or lacking proper training in these fields This is in line with the studies like (Bediang et al., 2013).

Missing the real world of the clinical area.

Clinical training is a vital requirement for the health science degrees includes nursing, which must be developed in a clinical setting. The clinical training in healthcare settings cannot be replaced, and it is important to all students (Aslan & Pekince, 2021). Since due to COVID-19 pandemic, there was a rapid unplanned switch to online clinical training, it affected clinical training quality as most students missed clinical training skills, direct contact and real patient's care. Students lost interaction with patients and healthcare providers and lost the reality and seriousness of clinical training. These results are in line with (Morin, 2020; Rose, 2020) who studied online training of nursing students in Spain during COVID-19 pandemic and found them missing clinical training and that clinical training skills cannot be replaced. Moreover, Morin (2020) found the transition to online clinical training in nursing schools to challenge quality and reality of clinical training. However, alternative strategies were provided by the schools including simulation labs and videos to achieve maximum benefit. The simulation lab may substitute clinical training in actual settings and facilitates play as moderator between theory and clinical domain, but should not be used as an alternative to clinical training (Sullivan et al., 2019).

The results demonstrated a deeper insight into the experience toward nursing students' online training during COVID-19 pandemic. It acknowledged that strict health precautions during the pandemic can lead to negative psychological consequences such as stress, anger, depression and insomnia (Brooks et al., 2020). Similarly, the participants described feelings of stress, anger, and undefined fear from the unknown not only about health precautions, but also from online clinical training during COVID-19 pandemic. Nursing students shared the same feelings of the unknown toward online training in many countries including Croatia, Turkey and Spain (Aslan & Pekince, 2021; Houlden & Veletsianos, 2020; Lobiondo & Haber, 2002). Furthermore, students expressed their fear and stress of methods of evaluation and outcomes of online training courses (Letterie, 2003; Lu et al., 2009).

Additionally, students reported losing passion and motivation, and being frustrated regarding online training, which induced significant consequences including becoming less self-confident. This was supported by Abuhammad (2020) from Saudi Arabia who found students from health colleges during pandemics to have less motivation and passion, decreased concentration, and avoid learning activities. Moreover, Aslan and Pekince (2021) found Turkish nursing students to have moderate to high stress level during COVİD-19 pandemic, and that students became less self-confident, which negatively affected their academic achievement.

All students reported challenges encountered during their online training including technical barriers from internet connection and loaded assignments. A comparison with studies conducted in Jordan (Al-Balas et al., 2020) and Spain (Rose, 2020) revealed that students expressed living with poor internet connection and difficult and loaded tasks in clinical training.

Losing the confidence to be a competent nurse

All students had started their university life with specific styles of learning and wished to continue with it. COVID-19 had forced universities to introduce a new learning methodology, which resulted in a feeling of uncertainty, less security and discomfort (Pather et al., 2020). With new teaching methods in online clinical training, students studied with less confidence, fearing to be less competent in clinical settings due to loss of actual training. This incompetence may lead to unachieved goals and objectives and, consequently, they would have unsatisfied and poor outcomes. Students also expected this situation to affect the prospects of their degree, work, and plans for future expectations. This is in line with a Croatian study where nursing students missed goals

and objectives accomplishment in online education during COVID-19 pandemic. Additionally, most of them expressed their lack of self-confidence to provide efficient nursing care due to their lack of clinical training switched to online training, which induced assumptions that they had a weaker ability to practice nursing as a future profession. This result is in line with (Aslan & Pekince, 2021; Pather et al., 2020) who found that changing clinical training to online may negatively affect future nursing profession.

The need for supporting hands

The participants of the research in general praised the motivation and cooperation of instructors during this pandemic, which reflected the support and valuable feedback which instructors and educational institutions provided to nursing students. A similar view was expressed by nursing students in Korea (Colaizzi, 1978; Finch et al., 2003; Park et al., 2016) who also appreciated receiving useful and adequate feedback and follow up from instructors. Conversely, some students reported that instructors were uncooperative and did not provide sufficient feedback, and the communication with them was difficult. This is expected during such unexpected circumstance as (Khalil et al., 2020) found that Saudi students expressed lack of verbal and non-verbal communication, feedback, and follow-up from instructors after transition to online education. However, in the current study, participants agreed that most faculty members were proficient in using technology and applications platform during the transition to online education. This is consistent with a study conducted by Houlden and Veletsianos (2020), which revealed that many international universities offered examples of successful adoption of online educational technology products. Conversely, some students expressed that some instructors lacked the competence and skills in using modern technologies for online training. This is in line with (Moralista & Oducado, 2020) who found the majority of the Philippine faculty members to have moderate computer proficiency and did not receive educational training online, which indicates the need for training them on using online teaching methodologies.

Conclusion

Online learning has rapidly grown for all levels of education in schools, colleges, and universities. Due to the advancements in technologies and use of social media for learning, most students prefer a blended approach in teaching, that is, a mixture of online and offline learning methods. They opined that online learning posed major challenges in acquiring adequate clinical medical skills. They also mentioned a few barriers such as lack of technical and infrastructural resources, financial barriers, and inadequate trained and skilled staff which were great challenges in the successful implementation of online learning in nursing education.

The current study is one of the first studies on clinical nursing education through online learning in Jordan. A need was felt to conduct a study of this type because the application of the new online education systems for clinical training in nursing had created challenges for students including problems such as fear, stress, and anxiety in acquiring skills, as well as a need for support and technological challenges. This study revealed that clinical training was vital for nursing students and identified some of the students' needs during COVID-19 pandemic. It expressed the need to develop a teaching strategy in nursing clinical fields that may resolve the challenges from students' perspective. However, this study did not present such issues from the perspective of clinical instructors. This calls for further study to investigate clinical training to reflect on different aspects of online clinical training including online communication and interaction, relationship between students and instructors, instructors' and students' responsibility, online evaluation, and adequacy of feedback and follow up to improve quality of online training. Accordingly, the result of this study can be used as baseline data for nursing educators when planning clinical online education whether its duo to pandemic problems or other circumstances.

A major limitation for this study was the inability to measure educational outcomes linked to online learning and comparing them with offline learning. Future studies may address issues like comparison of educational outcomes in both online and offline methods. Studies may also be conducted to measure faculty

members' perceptions and opinions towards online learning. Another limitation is that the findings of this study cannot be generalized because it was conducted in only one nursing college, in clinical environment. Although four core themes emerged from the study, there can be still more potential strengths in proving the effectiveness of online learning modules it is recommended that along with online learning, nursing clinical skills can be developed through a synchronized learning which can blend meaningfully the online with offline methods.

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