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Experiences of nursing students under the unprecedented abrupt online learning format forced by the national curfew due to COVID-19: A qualitative research study

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ABSTRACT

Background: The unprecedented abrupt shift to remote online learning (OL) within the context of the national lockdown due to the 2019 coronavirus disease (COVID-19) highlights the importance of addressing students' preparedness in managing their first experiences with OL.
Purpose: To investigate the experiences of undergraduate nursing students during their first uses of OL to increase the understanding of their encountered opportunities and challenges.
Design: A descriptive qualitative design guided by a phenomenological approach was used.
Methods: The study used a purposive sampling technique to recruit 18 undergraduate nursing students from two universities. Data were collected using two focus group discussions, and the discussions with participants were audio/video recorded through the online platform Zoom due to the national imposed curfew. Content analysis employed Colaizzi's steps to derive the themes/categories.
Results: The study revealed four themes: experience of helplessness, burdens, and burnout; the need for social and technical support to manage OL; the propensity to consider OL as a positive opportunity; and the deficiency of OL in fulfilling the educational outcomes of clinical courses.
Conclusions: Abrupt remote OL was a challenge to clinical encounters. This format was very stressful; however, it was also useful. The current study highlighted the need for further research on the effectiveness of remote OL platforms in regard to the achievement of the intended learning outcomes of clinical courses.

1. Introduction

On 30 January 2020, the WHO announced the outbreak of the 2019 coronavirus disease (COVID-19) to be an international public health emergency that required careful attention and implementation of specific strategies related to many issues, including but not limited to early detection, isolation, and treatment (WHO, 2020). On 18th March 2020, the Ministry of Higher Education in Jordan imposed a nationwide lockdown on academic institutions (The Jordan Times, 2020). Nursing educators were obliged to apply remote online teaching/learning (OT/L) since it was the only choice, although face-to-face education had prevailed throughout the previous years. Teaching approaches became more attuned to students' involvement in the pedagogical process while at home by using global OT/L platforms such as Microsoft Teams, Zoom, the e-learning platforms of their universities or Google Classroom. In this sense, remote OT/L encompasses changes in the role of the students such that they are no longer passive recipients of knowledge, in the responsibility of the teachers such that they are no longer in full control, and in the location of the learning process such that it occurs at home.

OT/L is related to Bloom's digital classification of progressive learning that spans two important levels of perception: lower-level thinking skills, which include remembering, comprehension and application, and higher-level skills, which include analysis, assessment, and creation (Sneed, 2016). Researchers noted that OL allows the delivery of challenging assignments that achieve higher level thinking skills if the e-learning management system (e.g., Blackboard or Moodle) and OL

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technology tools (e.g., YouTube and videos) are thoughtfully selected to illustrate the required course contents (Global Aviation Training, 2016; Manning et al., 2003; Sneed, 2016).

OT/L is also associated with Kolb's theory of experiential learning (Kolb et al., 1974), which emphasizes two continua of learning: the perception continuum extends between two forms of learning (i.e., feeling vs. thinking), and the processing continuum extends between two other forms of learning (i.e., watching vs. doing). OL emphasizes two settings: home as a place where the student engages in lower order thinking skills, such as knowing and comprehending, through listening to and watching video tutorials (i.e., the perception continuum), and online platform as a place where the student participates in learning activities that foster higher order thinking skills, such as analyzing through engagement in discussions with faculty members and other colleagues while reflecting on and synthesizing information (i.e., the processing continuum).

1.1. Literature review

Considerable evidence is available on OT/L in normal circumstances. A meta-analysis of 28 articles on health care students/learners (Hew and Lo, 2018) and 46 studies on students in health and nonhealth sciences (Chen et al., 2018) showed that OL significantly improves students' academic achievement. OL has also been shown to enhance learners' evidence-based practice competence (Park et al., 2020), self-efficacy in practice (Chu et al., 2019), inquisitiveness (Lee and Kim, 2018), and personal enrichment (Shorey et al., 2018); it is also meaningful to nurses as a method of continuing education but unsatisfactory due to distractions if delivered while at work (Stevens et al., 2020). OL allows students to acquire knowledge at their own pace and actively engage in discussions, debates and problem solving (Green and Schlairet, 2017; Lo and Hew, 2017).

The unprecedented OT/L within the COVID-19 pandemic, which has abruptly suspended teachers' and students' face-to-face contacts, is a point of concern in this study. The literature has studied abrupt OL in relation to students' experiences (Ramos-Morcillo et al., 2020), perspectives (Khalil et al., 2020) and acceptance (Al-Okaily et al., 2020; Rizun and Strzelecki, 2020) and its impacts on clinical education (Mishra et al., 2020). These studies have reported favorable yet challenging results. For example, while abrupt distance OL has been recognized as effective in optimizing the delivery of medical education (Khalil et al., 2020; Rose, 2020), it also includes several issues due to context confinement (Ramos-Morcillo et al., 2020), the poor utility of online tools and the quality of the content delivery (Khalil et al., 2020). The perceived ease of use of technology has been shown to be a predicting factor for students' acceptance of shifting to distance OL (Al-Okaily et al., 2020; Rizun and Strzelecki, 2020).

In this study, the unprecedented abrupt distance OL is viewed as context dependent. The sudden switch to remote OL was neither forecasted nor delicately planned. The lack of previous studies prompted the current researchers' concern with the preparedness of baccalaureate nursing students in managing remote OL. The results of this study may assist academics in improving students' online learning experiences.

1.2. Aim of the study

The aim is to explore and understand the first experience of Jordanian undergraduate nursing students with OL when the education system in Jordan had to switch abruptly to remote learning because of the COVID-19 pandemic.

2. Methods

2.1. Study design

A descriptive qualitative design guided by a phenomenological approach was used. This design is appropriate since the purpose is to gain a deeper understanding of the participants' perspectives regarding a specific phenomenon (Creswell, 2013).

2.2. Settings

The study was conducted at two nursing schools: one public and one private. The school of nursing at the public university was established in 1972. It provides three programs: baccalaureate, master's, and Ph.D. The school of nursing at the private university was established in 2006 and has two programs: baccalaureate and master's. Both schools used the credit system approach and follow similar core and nursing specialty courses with few differences related to optional courses. In both schools, each theory specialized nursing course is taught concurrently with its related clinical course, and the clinical training for most courses is conducted at hospitals with few maternal-child health centers and community settings such as homes and schools. During the imposed curfew, both schools utilized an online teaching approach that included detailed video instructions on how to access website platforms such as Zoom or Microsoft Teams through the universities' Moodle accounts. The students in both schools were studying theoretical and clinical courses, including basic, core, specialized, and university required courses. All courses, including the clinical courses, were taught using online approaches with videos, simulations, and case study applications.

2.3. Participants

We invited the students to participate in the study using the websites of both nursing schools, and the contact information of the principal investigator and the aim of the study were posted with the invitation. Interested students were asked to contact the principal investigator. We received 60 responses from the students at the public university and 23 responses from the students at the private university. We selected a purposive sample of 20 students (2 of whom declined) from different academic levels with different genders who were studying different types of courses to ensure diverse experiences (Creswell, 2013). The inclusion criteria were undergraduate nursing students enrolled during the second semester of the 2019–2020 academic year; students in their first, second, third, and fourth years (to ensure a range and diversity of experiences and perspectives to understand the online learning experience) and students who were learning online. The exclusion criteria were students not registered for the second semester or unwilling to be audio recorded during the focus group session.

2.4. Data collection

The researchers developed an interview guide based on an extensive literature review. The guide consists of general engagement questions, an explanation of the study aim, questions related to students' demographic background, and open-ended questions to allow the participants to explain their experiences with OL in detail. The guide was validated by an expert on qualitative approaches to ensure that the questions met the study aims.

As a consequence of the nationally imposed curfew, we conducted the focus group sessions using online platforms. The two focus group discussions were conducted in April: one with ten participants and the other with eight participants. This data collection method is efficient in generating large amounts of information from the required numbers of participants in a short time. Jayasekara, 2012 indicated that focus groups are an effective method to collect data for several issues, including beliefs, values, and opinions.

To ensure consistency, the same two members of the research team conducted the two focus groups: one was the moderator, and one was the note-taker. Each focus group session encompassed an introduction to the research topic, completing consent forms, a discussion of the confidentiality of the information, a clear explanation of the group

discussion process, defining the topic to be discussed, and a conclusion. Probing questions were used whenever appropriate. The focus group discussions were conducted in the Arabic language and audio recorded. The audio recordings were transcribed and translated into English and translated back to the Arabic language, following the WHO guidelines; the results were compared to recorded notes to ensure the trustworthiness of the data. The duration of each focus group was approximately 2 h.

2.5. Data analysis

We used Colaizzi's phenomenological method (Speziale and Carpenter, 2007) to analyze the qualitative data generated from the focus group discussions regarding students' experiences with OL based on their perspectives. Two researchers (N.M. & Z.A.) independently reviewed and transcribed the audio recordings to text immediately after the completion of each focus group. To gain a sense of participants' descriptions of their educational experiences with online learning, the study authors read the transcribed data in detail word for word several times to obtain students' perceptions of the OL experience by eliciting students' personal reflections on the process. The transcript was analyzed manually by the researchers (N.M. & Z.A.) who coded significant words, statements, or phrases related to the nursing students' OL experiences. A color-coded system was used to highlight significant statements to perform the preliminary analysis. Then, the two authors organized the significant statements into meaningful units that clustered the categorizing codes into themes and integrated the obtained themes related to the students' experiences into an in-depth description of the online learning phenomenon. After the themes were extracted, a discussion session with all research authors was held to reach a consensus on the extracted themes. We analyzed the data simultaneously with the data collection. The themes were presented to six of the participants to ensure their accuracy compared to their statements on their own experiences with OL. The participants reported the findings to be true and that the findings represented an accurate reflection of their experiences.

2.6. Ethical considerations

Approval to conduct this research was gained from the institutional review board of each university (PMs.19.13 and 1–30/2019/2020). Confidentiality, privacy, and participants' well-being and human rights were safeguarded throughout the study. To maintain confidentiality, participants were given tags with numbers that were used by the note-taker when writing the transcriptions. Informed consent was obtained at the beginning of the study. Participants were told that they were free to withdraw from the study at any time and were encouraged to ask questions, offer queries, and express uncertainties. All records and participant information were kept confidential in a locked filing cabinet, and all electronic data were password protected.

3. Results

The study participants included 18 students (10 students were studying at the public university, and 8 students were studying at the private university). The students included 14 females and four males aged 19 to 23 years. In addition, 15 were single, and three were married. Regarding the students' level of education, three were in their first year, five were in their second year, six were in their third year, and four were in their fourth year. Only four students had attended training on OL and had earlier experiences with distance education. A combination of the following platforms was used to facilitate the OL of the participants: E-learning (12 students), Microsoft Team (seven students), Zoom (16 students), Skype (seven students), WhatsApp (15 students), YouTube (eight students), and Facebook (11 students). During the current semester, the students' course load ranged from three to six courses. The courses taken by the students and facilitated by the OL were theoretical, clinical, basic, and core nursing courses and university required courses.

The findings included four themes: experience of helplessness, burdens, and burnout; the need for social and technical support to manage OL; the propensity to consider OL as a positive opportunity; and the deficiency of OL in fulfilling the educational outcomes of clinical courses.

3.1. Experience of helplessness, burdens, and burnout

As a result of the COVID-19 crisis and the sudden lockdown in the country, there was an abrupt shift to OL that provoked several emotional responses among students. All students expressed fear and worries of the unknown regarding the pandemic and their education. Educational worries varied according to their year of study. Fourth-year students reported fear of losing the semester and delaying their graduation; one of the potential graduates wished that she were still a beginner so that her future would not be endangered. First-year students having to manage their worries as a beginner in the program and the change in the learning strategies that will be deployed raised fears of failing the semester.

Many students were overwhelmed by using e-technology and self-study. Most study participants reported having poor skills in using OL technology. A student said, "*I don't know how to use emails, so how will I be able to manage the online learning?*" (S10). A few who had experience in blended learning (hybrid) courses felt that total remote OL was horrifying, leading them to consider dropping the semester. One student said the following:

> *When I learned my university switched to online teaching, I was horrified. I will not succeed. I have difficulty using technology, and how will I manage all my learning? I thought of dropping the course, but I cannot afford it financially.* (S.5)

Many students said that they felt threatened and anticipated even lower achievement because they had difficulty with face-to-face education and expected that OL would worsen their experiences. It took them time to adapt to the use of e-technology and to manage their time at home between attending online class sessions, studying, and tackling family responsibilities, especially the married female students. Half of the students reported that they had episodes of internet failure while attending classes, taking quizzes, or submitting assignments, which provoked feelings of helplessness and contributed to their dissatisfaction with the online experience. The majority confronted difficulties with the renewal of their subscription. As one student explained, "The *complete lockdown was abrupt. No shops were open. I could not renew my internet subscription*" (S1). One student had to ask neighbors to use their internet account. He said, "*Online learning places a financial burden due to the renewal of internet subscriptions. We had increased usage of the internet at home, and we had no cash money to buy*" (S6). Many stated they did not have a computer or a laptop, and those who did had to share it with siblings. Using smartphones was not always convenient; one student had to purchase a laptop as some lectures could not be viewed on a smart phone, which was an additional financial burden.

Married female students with children reported that they were struggling to manage their daily schedules at home. Some of them reported having time management problems and a lack of assistance from their partners, and they admitted that their children complained that they were spending more time at home on the computer rather than with them. The national lockdown prevented married students from sending their children to nurseries or to their mothers' homes as they did before the lockdown. One student said the following:

> *My relationship with my husband was very tense. He wanted me to drop the course. It was a stressful period. I had the burden of taking care of him and my kids, to study, do other tasks as a housewife, without any support from him.* (S9)

Students who were working at hospitals under emergency situations were unable to take days off to study. They chose to work night shifts in order to attend online classes during the day, which added extra stress and burdens on them.

3.2. A need for social and technical support to manage online learning

At the social level, most students reported that their families were supportive. However, few complained of the unsupportive reactions of their families. They noted that lack of concentration due to having family members around, particularly those having large families who were all present at home due to lockdown and live in small houses worsened the situation. One student said the following:

> *I was locked with my family members in a small house, and I didn't have a private space to study or attend online lectures. With all the noises around me, it was difficult for me to concentrate. I had to stay awake at night while my family was sleeping to be able to study. I was busy day and night; it was tiring.* (S3)

Furthermore, social distancing contributed to students' sense of social isolation; they missed their interactions with their peers and teachers. Most addressed their need for faculty cooperation and understanding of the difficult circumstances that hinder fulfilling the requirements of exhausting assignments, the failure of the internet and the Moodle system, and their home environments. All students complained of the large quantity of assignments and quizzes and poor coordination between faculty teaching the courses. They needed them to be available to discuss their worries and stressful issues.

At the technical level, all students reported that one of the important difficulties was taking quizzes or exams online. Many of them faced technical difficulties, and they were always worried about failing the exams. They indicated receiving support from their instructors and peers about how to use e-technology, such as instructional videos on Moodle and other internet sites, but it was not enough. As one student explained, "*The first two weeks I was helpless. I didn't know how to access the e-learning platform until my colleagues helped me step by step. It took me time to get used to it*" (S15).

The students believed that the university should provide a platform that can accommodate all users, facilitate the purchase of low-price laptops and internet subscriptions and ensure reliable internet connections. They reported that the system failed several times when uploading assignments and that losing their work and quizzes may jeopardize their grades. All the students recommended that the university should offer training courses on OL during the first year of their enrollment and assign specialized technicians to help them manage technical problems when needed. One student explained, "*When we had technical difficulties, we asked friends who had better technical skills for help, but the university should provide us with such technical support*" (S7).

3.3. The propensity to consider online learning as a positive opportunity

Several positive effects of OL were identified and categorized as educational and socioeconomic opportunities. At the educational level, students explained that OL was compulsory and not easy; however, it was a pleasant experience because it encouraged self-reliance and motivated them to develop their thinking and problem-solving skills. OL was an opportunity to learn how to manage learning needs effectively. All students reported that several strategies including recording PowerPoint presentations uploaded on Moodle and platforms such as Zoom and Microsoft Teams were used in online teaching. They viewed those strategies as very helpful and preferred the recorded lectures over the classroom lectures as they provided the opportunity to learn at their own pace and could watch it several times to comprehend the material. One student said,

> *Although this sudden change in the teaching method was unexpected and unusual, with all its difficulties, it has advantages, such as listening to the lecture whenever we want and being able to repeat it as many times as we want.* (S9)

Nevertheless, it was indicated that in face-to-face education, human communication enhances engagement in learning more than remote OL. As one student explained, "*It is good to listen to the lecture and watch videos, but we prefer to have face-to-face discussions*" (S4).

At the socioeconomic level, most students said staying and studying at home had several benefits such as spending more time with family and saving transportation money and other expenses that they used to spend when traveling to their university's campus. They reported being more physically comfortable and relaxed and sleeping better than before. As one student explained,

> *Staying at home saved me time and energy. I used to spend/waste several hours in transportation and felt stressed due to traffic jams and the long training hours at the hospital. Now I have more time and energy to spend on studying.* (S2)

3.4. The deficiency of online learning in fulfilling the educational outcomes of clinical courses

All students emphasized that theory but not clinical courses can be learned online. They added that learning skills online is not possible, and this would negatively affect their clinical readiness upon graduation. One student explained,

> *Although videos were used to learn technical skills and nursing procedures in clinical courses but without hands-on training, we cannot master these skills*
>
> (S11)

The expected graduates expressed dissatisfaction with their clinical competency. They indicated having intense worries regarding clinical courses and the achievement of intended clinical learning outcomes online. Students were anxious about missing the competencies usually gained in the last semester of the program through the clinical training course that provides them with semi-independent clinical training at the hospitals under the supervision of a mentor. One student explained the following:

> *This course is considered an opportunity to prepare us for the change in role from nursing students to registered nurses. In this course, we develop our clinical nursing competencies and confidence, and we gain clinical experience by working morning, evening and night shifts, which ensures that we are competent and safe practitioners.*
>
> (S5)

Missing this opportunity was disappointing to fourth year students. Another student said, "I went crazy because I was planning to learn more skills during the second rotation, and I lost this opportunity". Another student said,

> *We need to have the opportunity to develop our technical skills and practice the nursing skills that were planned in the clinical courses as stated in the intended learning outcomes, and the school should have to compensate for this loss.*
>
> (S10)

4. Discussion

The global health crisis represented by the COVID-19 pandemic has spread to all aspects of human life including the world of education

(Abidah et al., 2020; Chick et al., 2020). Crawford et al. (2020) studied the global first wave responses to the pandemic. They reported a diversity of responses by higher education institutions ranging from no response to rapid curriculum redevelopment for fully online offerings (Crawford et al., 2020). Similarly, the students in this study, who are accustomed to traditional learning/teaching and were in the middle of a semester, expressed a mixture of feelings regarding this sudden change. Fear of the unknown and uncertainty, helplessness, burdens and burnout at times were expressed by all the students in the current study. Similar emotions were reported by other studies conducted under normal conditions regarding e-learning becoming the main method of teaching (Kenny, 2002; Telford and Senior, 2017). Kenny (2002) reported the results of several studies indicating that fear, anxiety, frustration and feelings of intimidation were expressed by nursing students when they were confronted with using computers as part of their studies. She added that computer anxiety combined with a lack of skill, which was also reported by students in the current study, affects the learning of students who are exposed to OL (Kenny, 2002). According to Clark (2015), picking up a new learning approach and understanding course content at the same time is challenging and demanding for students. Tang et al. (2015) have also indicated that for students who are new to OL, the learning curve will be more drastic and they need time to adapt while more experienced students will have more positive learning experience. Raymond et al. (2016) also noted that even if the students were computer literate and had their own computers, it may be difficult for them to navigate and use programs and software. However, these feelings may have been aggravated by the COVID-19 pandemic and the resulting curfew as this situation is considered a crisis that poses significant psychological burdens on individuals (Chick et al., 2020).

Students in the current study indicated that they were able to overcome their senses of fear and uncertainty that they felt at the beginning of the experience with OL. Most of them described several advantages of OL, such as saving money and time traveling, spending more time with families, studying at their own pace, revising the sessions at their convenience and enjoying more rest and sleep. This experience also shaped their skills and personalities as they became more independent, and many of them indicated that e-learning provided them with the opportunity to develop their thinking and problem solving skills and motivated them to search and learn new techniques. Several other studies have reported similar opinions of students regarding distant learning (Button et al., 2014; Juniarta et al., 2018; Tang et al., 2015).

Most of the students in the current study had significant concerns regarding the achievement of the competencies and intended learning outcomes of the clinical courses. They indicated that although several platforms and strategies including instructional videos, simulations and case studies were used, they were worried about not attaining the skills they need to practice. In other words, remote OL did not contribute to students' sense of psychological safety in their clinical performance. Dost et al. (2020) indicated that the lack of immediate feedback may lead to the concern that online teaching may compromise the clinical competence and confidence of students. However, Goh and Sandars (2020) visualized that medical students can be remotely coached with real-time mobile video tools and apps and considered this to be a positive effect of the COVID-19 pandemic. In addition, the evidence derived from the review of McCutcheon et al. (2015) suggests that using online learning to teach clinical skills is as effective as traditional learning in developing the nursing competencies needed for safe practice. However, Dost et al. (2020) noted that students often do not feel completely prepared for their profession.

Students in the current study reported other issues related to information technology resources, problems and stress. Some indicated they did not have their own computers at home; if they did have this resource at home, then they had to share the computers with other siblings and family members who are school students or work from home. Others indicated the financial burden of internet expenses, and many were frustrated by the weak and interrupted connectivity, which made it difficult for them to attend sessions, take quizzes or upload files and assignments. These problems were also reported in the literature (Lo and Hew, 2017; Raymond et al., 2016; Sentiment, 2020; Tang et al., 2015; Wang, 2016). According to Tang et al. (2015), technical issues frustrate students and restrain their learning. However, the perception of being unsupported was considered more of an issue than the actual technical difficulty (Hart, 2012).

Hart (2012) indicated that there is almost a consensus in the literature that communication with instructors and peers and family support are important to overcome barriers to learning. Communication and support motivate students' persistence to learn and to succeed in an online course despite hardships. However, the absence of family support may hinder students' learning (Wang, 2016). Fortunately, most students in the current study reported that their families were supportive. However, some reported distractions due to noise and unconducive learning environments. Three of the female students were married and reported slight conflicts with their spouses who seemed to be unsupportive. This, however, may not be related only to online learning per say; it may also be related to the curfew. The pandemic poses significant psychological burdens on individuals, and spouses may be worried about physical health and consider it to be the most significant concern (Chick et al., 2020).

Social theories highly emphasize the importance of peers' interactions and the interaction between students and their teachers as central to students' learning and achievement (Lawson, 2011); the pandemic has forced social distancing, and universities have closed. In the current situation, physical presence is missing, and the interactions are mainly through electronic platforms due to social distancing and the closure of universities. The students were missing their classmates and "good old university days". Students value their interactions with friends and teachers as being very important for their learning; although they use social media, this is not fulfilling for them. Similar feelings were reported in the literature (Hart, 2012; Raymond et al., 2016). Raymond et al. (2016) indicated that one reason to dislike online learning is the absence of face-to-face, real-life contact with other students and lecturers.

Finally, the students in the current study mentioned several suggestions to improve online learning so that it would be more satisfying for them. They demanded that the university should provide a platform that can accommodate the expected number of users to make it easier to upload assignments and answer quizzes. They also requested training courses on the use of e-learning in the first year of their studies. Additionally, they requested specialized technicians to provide technical support for them when needed. These recommendations, however, are not unique to the students in the current study. Several studies have listed similar recommendations (Juniarta et al., 2018; Lo and Hew, 2017; Raymond et al., 2016; Telford and Senior, 2017).

5. Conclusions

Based on the results, it can be concluded that Jordanian undergraduate nursing students consider the experience of using "remote online" learning to be challenging but beneficial. Students' concerns regarding their clinical competencies implied that they were concerned with their safe practice and hence patient safety. Students favored hands-on experiences to ensure proficiency in clinical nursing courses. Moreover, simulations, video sessions and other interactive e-learning materials can have positive impacts on students' learning experiences. Technical support and students' orientation to online learning are important to achieve educational goals.

Considering that education before COVID-19 is now history, this study has many implications for nursing education and research. Nursing educators need to be prepared for online teaching and for creating environments that foster teaching and learning and develop effective and efficient means of communication, especially between the students themselves. Nursing students should receive ongoing education

and support on nursing informatics to be able to progress and be equipped with the lifelong learning skills required to provide safe evidence-based care. It is also recommended that hospitals are aware of this situation when recruiting this batch of graduates who pass the licensure exams and consider it when planning orientation programs to ensure patient safety. Further research is recommended in the areas of students' behaviors and faculty and student relationships derived from the analysis of the conversations recorded on the OL platforms. Policies governing online learning should ensure the preparedness of all nursing schools for this specific type of education and the training of nursing students to guarantee the development of all required competencies for the provision of high-quality and safe nursing care.

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