Suggestions to Close the Gap in Nursing Education: Nursing Students' Perspectives

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Abstract: Background: The nursing profession is composed of two main parts; the theoretical part which reflects the knowledge that is received in the class room and the practical part which focuses on improving the students' skills in the clinical area. The literature shows that there is a gap between these two parts.

Aims: The aim of this study was to identify suggestions and interventions to explore the students' perceptions about theory-practice gap in nursing education.

Method: An explorative qualitative design was adopted. Individual face-to-face semi-structured interviews with thirty (second, third and fourth year) nursing students who had taken at least two clinical courses were done.

Findings: The students have raised several ideas and suggestions to close the theory-practice gap in nursing education. Their statements and accounts were collected together and built five major themes: Open channels between theory and practice teachers, students need to be supported more, increasing the competency of clinical instructors, using different methods of education, and preparing and improving the clinical laboratories.

Conclusion: The qualitative design used in this study provided deep and rich novel data about the theory-practice gaps in nursing education in Jordan. This subject is examined for the first time in Jordan. Therefore, the information from this study could be useful for undergraduate students, nursing schools, nursing teachers and the stakeholders in Jordan.

Keywords: Theory-practice gap, nursing, education, Jordan.

INTRODUCTION

The nursing profession is composed of two main parts; the theoretical part which reflects the knowledge that is received in the class room and the practical part which focuses on improving the students' skills in the clinical area. The focus on both parts seems essential to produce high quality nurses. The theory part should provide the basis for understanding the reality of nursing [1, 2]. In the classrooms, nursing students are taught the theoretical basis for all procedures, diseases, interpersonal skills and requirements to be a nurse [3]. On the other side, the practical part provides nursing students with a mechanism to extend classroom learning into the nursing practice environment [4]. Several authors have suggested that education in the clinical environment participates in shaping the professional development of student nurses [5,6].

The literature shows that there is a gap between the theory of nursing education and the practice part [3,4,7,8]. Several reasons for this gap were reported in literature such as using abstraction meanings to explain some procedures in the clinical environment [9]. The subjectivity in defining nursing terms and theories and giving different meanings to these terms formed challenges for nursing students [10]. Students found it difficult to link what they learned in the class room with the facts they faced in the complex clinical environment. The development in nursing education and the moving toward higher education also increased the gap [4,11]. Other reasons were expected to increase this gap such as the complexity and the continuous change in the

clinical environment [1]. Therefore, it could be argued that even the very effective theoretical education in the schools could never match the complexity of the clinical situation [2, 12, 13].

The literature showed several suggestions to close the gap between theory and practice in nursing education. For instance, it was suggested to put learning in a context that makes it clearer to be understood by students [14]. This could be achieved by the integration of theoretical and practical knowledge. Giving real examples during lectures may reduce the feelings of mystery of students, as they start to put what they have been taught in the real situations.

Several authors have warned of the degree of keeping students away from the clinical environment for a long time [15, 16]. Focusing on theoretical learning and leaving students without direct patient contact makes students frustrated and disappointed [16]. Chesser-Smyth [17] explained that student nurses become more satisfied when gaining clinical skills. Students need these skills to be able to provide holistic care. Student nurses with previous experience would be familiar with the health care environment. They, therefore, will be able to recognize the theoretical input and demonstrate what they learn in the classroom [17].

Several studies explained the importance of supporting student nurses, especially in the clinical area [18, 19]. This support should be started in the school. However, students

need more support in the clinical area [2, 3]. Supporting student nurses may take several aspects. Providing good supervision is an important aspect of support needed by students. Landers [3] stated that the number of nursing teachers in the clinical area should be increased. They indicated that nursing teachers should spend more time in the clinical area to ensure student learning, linking theory to practice. Providing support also includes direct application of the theory learned in the classroom to practice [3]. More importantly, nursing teachers are required to adopt an advocacy role to enable the student to be understood and empowered [20].

The traditional way of learning should be always assessed and evaluated. It is important to examine students' learning needs. New modifications and creative strategies are always needed to improve the quality of learning. For instance, many universities in the UK have adopted the Project 2000 in the educational process for undergraduate student nurses [3]. This project aims to modify the teaching and learning methodologies, with greater emphasis on experiential and self-direct learning [21]. After ten years of implementing this project, conclusions drawn by the United Kingdom Central Council's (UKCC) Commission on Nurse and Midwifery Education (UKCC) [22] suggest that the decisions taken to implement Project 2000 reforms were the right solution.

Several authors have stressed the importance of cooperation between education and practice sectors [3, 4]. This cooperation reflected in many shapes. The role of both preceptor and mentor was suggested by some authors to reduce the gap between theory and practice [3, 23]. Both the mentor and preceptor are clinical staff with supervision experience. The job of the mentor is mainly to support the students in the clinical area, while the preceptor works directly with the students [3]. Similarly, a position of lecturer-practitioner was suggested [3, 11] [17]. Lecturer-practitioners should have both clinical and teaching experiences, and should work with students in the classroom as well as the clinical area.

Nursing education in Jordan is among the best in Middle East [24]. This field has moved forward over the last four decades. There are more than 12 universities that produce registered nurses with a bachelor degree. Jordan export nurses to all the neighbor countries. The quality of the Jordanian nurses and the reputation of nursing education in Jordan form a challenge to the nursing schools and the stakeholder to maintain this high level of nursing education. It is known that most of the experienced nurses leave the Jordanian hospitals to work outside Jordan [25]. Most of them search to improve their economical conditions. This keeps the door opened for the newly graduated nurses to take the positions of these nurses. Therefore, more responsibilities will be produced on the novice nurses and many hospitals will depend on them. Therefore, it seems important to graduate nurses ready to work in the hospital field. This could be achieved by putting more effort on the clinical training of the nursing students as well as the effort put on the theoretical part. Moving from this point, the current study looking for the challenges faced the nursing education in Jordan. One of these challenges is the theory-

practice gap in nursing education. The aim of this study was to identify suggestions and interventions to explore the students' perceptions about theory-practice gap in nursing education.

METHODS

Participants:

The sample was derived from a population of one nursing school of a private university in Jordan. A purposive sample of 30 nursing students was recruited. Approximately, two third of the sample were female. The recruiting for students continued until the point of data saturation. This is when no new data seems to become apparent and the information is repeating itself [26]. The population targeted was students attending the Applied Science Private University who took clinical courses. The selected students had attended at least two clinical courses to ensure they would have a full understanding of the topic and enough clinical practice to compare to what is learned from theory. We excluded bridging students because most of these students have had working experience in the hospitals and it would be hard for them to relate to the theory-practice gap. The students' ages were between 19 and 24 years old with mean of 20.6 years.

Study Design:

This study is part of a bigger study that focused on all aspects surrounding the theory-practice gap in nursing education in Jordan. A qualitative design was adopted to identify practical steps to decrease the gap between theory and practice in nursing education. A few studies on the theory-practice gap in Jordan were conducted. Two studies [2, 27] were reviewed in this field. However, none of these studies directly searched in the reasons or the suggestions to close this gap. Therefore, using a qualitative approach was expected to provide deeper insights about the quality of nursing education in Jordan, and to highlight some suggestions and interventions to close the theory-practice gap in nursing education.

Qualitative researchers believe that reality is understood through people sharing experience and interaction with others [28]. Detailed data is gathered through open ended questions that provide direct quotations. The interviewer is an integral part of the investigation [29]. Qualitative research was expected to provide deeper understanding of people's experiences and the meanings that they give to interpret their human actions [28]. Therefore, qualitative research seems to be effective when there is a need for more understanding of social phenomena like theory-practice gap in nursing education. An individual, semi-structured, in-depth interview was selected as the method of data collection.

Two pilot interviews with nursing students were conducted before starting the process of data collection. Conducting these interviews before the actual interviews increased the interviewers' ability to interact with the interviewees. The interviewers also felt more confident to start the actual interviews and they attained better ability to stimulate the interviewees to express their accounts.

At the beginning of the interviews, each participant received explanation about the purpose of the study and the method

of data collection. The authors prepared in advance a series of open-ended questions to be asked based on a literature review in this field such as "could you tell me about your experience as a student nurse?", "What was your perception when you went to the clinical area for the first time?", "what were the shapes of support that you was received in clinical training?", "Do you have suggestions to decrease the theory-practice gap in nursing education?". The questions that were raised in the previous studies and the unexplained issues in these articles were included. Another source for the study question came from the experiences of authors. The emergent characteristic of the qualitative design [30] formed the third source for the interview schedule in the current study. In addition to these questions, the door was kept opened for any new emergent questions. Interviews ranged from 40 to 60 minutes. All the interviews were audio recorded.

Sample Recruitment:

The purpose of this study was to obtain rich and deep information about the theory-practice gap in nursing education in Jordan. To achieve this goal, the participants should talk freely without pressure about this subject. This was expected to be achieved by recruiting three post-graduate students to do the interviews. All these students were received good training and preparation to do the interviews. Interviews by students was expected to decrease the pressure on the study participants, especially when critiquing the teachers or the educational plan in their school.

To recruit the study sample, face-to-face invitation was done by the volunteered students to most of students who met the inclusion criteria. Brief explanation about the study objectives and the data collection was provided. Invitations were also done by preparing a poster which were put on all the advertisement boards in the school. In both invitation methods, the contact details for the study authors were provided. All students who met the inclusion criteria and accepted to take part of the current study were invited to be interviewed. Each participant was given a consent form to be signed at the beginning of the interview.

Ethics:

Ethical approval was obtained from the school of nursing in the Applied Science Private University. Each participant had the right to decide voluntarily whether to participate in a study, without risking any penalty or prejudicial treatment and to terminate their participation at any time. All participants were informed that their responses would be treated confidentially, and anonymously. Each participant was asked to fill in a consent form before each interview. This form was accompanied by an information sheet. All data was kept in a locked file and access to identifying information is restricted to us. Names used in this paper are pseudonyms. Each participant was asked to sign a consent form and was told that they could change their minds during the research and can withdraw and withhold information at anytime. The names and identity of the participants should not be revealed as a result of data collection, analysis, and reporting in the research study [31]. This ethical principle was maintained by having a confidentiality pledge being a part of the content for our consent form. This pledge was a promise that all information given was to be kept confidential and to be used for research purposes only.

Data Analysis:

Braun and Clarke's [32] technique of thematic analysis was utilized to analyse our data. Interviews were transcribed verbatim by one of the authors. The initial data analysis and coding were carried out by one of the authors. Separately, two of the authors reviewed the transcriptions and produced their own codes. Both interpretation of the data analysis was largely consistent. The first phase of data analysis was familiarisation with the data. This was achieved by active listening to the interviews and self-transcription by one of the authors. The second step includes generating initial codes. All transcripts were entered into the NVivo software. All interviews were carefully read and examined line-by-line. We always asked ourselves "what did this person want me to understand by saying this?" The third phase includes searching for themes. In the early stages, the process of coding was not organised. All respondents' sentences, phrases, and texts were assigned one or more codes. These codes were transferred into the free nodes in NVivo. With the progress of time, and with the increase in the number of codes, more analytical codes were developed. As the analysis developed the codes were grouped together in a 'tree' structure (tree nodes in NVivo software), to facilitate the process of analysis, developing themes and theory building. The fourth phase includes reviewing the themes. Once all the data had been entered, the codes were refined. The aim was to reduce their number, eliminate duplication, and permit the development of more sophisticated analytical categories. As this process continued, new links between codes became apparent. The fifth phase includes defining and naming the themes. At this step, five themes were assigned. The final phase of data analysis includes producing the report. This phase formed the starting point of writing our results section.

RESULTS

The findings of the current study were expected to shed some light on the nursing education in Jordan. Unsurprisingly, most of the students in the current study showed that there is a huge gap between the classroom theoretical contents and what they found in the complex clinical environment. This study was particularly focused on identifying the suggestions and intervention to decrease the theory-practice gaps in nursing education. The statements of students were collected and built into four major themes: Open channels between theory and practice teachers, students need to be supported more, increasing the competency of clinical instructors, and preparing and improving the laboratories

Open channels between theory and practice teachers:

The students showed the importance of opening channels of communication between the teachers in the classroom and the instructors in the clinical settings. This was expected to produce synchronisation between what is given in the theory and the material given in the practice. By opening these channels of communication, the theory teachers could coordinate with the clinical instructors to focus on specific subjects in the clinical setting. The clinical instructors could ask that students be assigned to specific cases in the hospital. For example, after attending a lecture about

diabetes mellitus in the classroom, the clinical instructor would ask the students to focus on diabetic patients and they try to link the information that was taken in theory with the clinical cases. This process could also be implemented visa-versa by discussing those viewed in the clinical training in the classroom.

Well, I think that there should be communication between our teachers in the school with the instructors in the practice. They both should have an idea about what is going on in the other part. (Student 12)

More interestingly, more than two third of students suggested that theory teachers and clinical instructors should be the same persons. This was thought to strengthen the link between the material given in theory and the material covered in practice. By doing this, the teacher will present a lecture about a subject in the classroom and in the next day will go to the clinical area and explain the same material on real cases. This may also increase flexibility in the educational process. Depending on the available cases in the clinical area, the nursing teachers could modify their lectures timetable. This would produce harmony between the content of education in the classroom and the material given in the practice area.

I suggest if they were the same person it would be better because they will organize between topics given in theory and what is taken in practice in clinical area and they will help us to understand what we learn. (Student 25).

Students need to be supported more:

More than half of the students thought that they did not receive good support in the clinical area. Many of them showed the importance of providing this support, especially in the very early practical courses such as the medical-surgical clinical course. Some of these students said that they were left alone on their first day in hospital. Some students felt that the clinical instructors were not qualified enough to recognize their needs at that time. The instructors did not know how to deal with students and how to be supportive for them. Some explained that their instructors were busy completing some routine managerial issues decreasing the time left for students.

I remembered the first days in my training in medical-surgical. The instructor was very busy in many managerial businesses. Our instructor did not support us. I believe that they did not recognize our needs at that time. It was not easy to be left alone while you were in need for any help and support. (Students 18)

The students explained the importance of being supported during their training. Some students indicated that this support should be started from the school before going to the clinical area. This was expected to be achieved by classroom instructions and general advices about the clinical settings. While a few students stated that they received explanation about what they will see in the clinical area, many of them thought that this explanation was not enough. These students explained that the training in the classrooms and the laboratories on dolls was completely different from the real complex clinical environment.

Yes, we received training in the laboratory in the first year. We also attended four day course in laboratory before each clinical course. However, this was not enough. To be honest, the reality is completely different. In the hospitals, we deal with patients suffering. Some of these patients die and others screaming ... it is not the same. I think we should be prepared more. We need more support. (Student 22)

Some students had complained of the method of communication from their clinical instructors. They explained that every one of them are a unique person with special personal characteristics. It was suggested that the instructors should consider the difference between students. For example, some students did not have the courage to talk with patients and some others needed more time to adapt to the new environment and the staff in the clinical setting. These students were blamed inappropriately in front of their colleagues and sometimes in front of the staff or the patient in the department. Therefore, many of the students suggested the need for improving the instructors' communication skills.

I just think the clinical instructors should be more open-minded and understanding, not as narrow-minded as they sometimes are. (Students 5)

Well, they do not consider the differences between us ... We are not the same. For me, I prefer to have discussion directly with my instructor. I am sure that many of them would like to do this, but they have no time because of the numbers. One instructor with twenty students is not enough. (Student 1)

Increasing the competency of clinical instructors:

In most of the Jordanian nursing schools, there is no condition to have clinical nursing experience to work as a nursing teacher or clinical instructor. Some of nursing teachers and clinical instructors have not any experience in hospitals or clinical settings. Therefore, they depend purely on books and their education to teach the nursing students. This may be interpreted that clinical instructors need to be familiar with the clinical environment. These students explained that clinical instructors focus only on grades and marks. Some of them also stated that the paper-work and assignments were the main interest of most of the clinical instructors. More interestingly, some of the students felt that there were no differences between the material given in theory and their clinical training.

You feel sometimes that they do not know what is going on. I think that some of them had never been in a hospital before. I believe that having good clinical experience will facilitate their job as clinical instructors. This will be also good for us as students. (Student 19)

Interestingly, most of the students appreciated the importance of having clinical experiences to be a successful instructor. Some students talked frankly about real examples from their experiences. They found that the instructors with previous experiences in the clinical settings were more supportive for them. These instructors also facilitated their learning because they knew exactly what to focus on and how to break the ice between the students and the clinical environment. The clinical instructors with clinical

experience had no tension and they interacted easily with patients and staff in the clinical areas. This interaction reflected positively on the communication between these instructors and the students in the practice modules.

I remembered while I was in the medical-surgical clinical module. We had two instructors ... they had very good experience in different departments in hospitals. They were skillful and they had good knowledge. This helped us so much ... They also had good relationships with the staff in the wards and they were talking easily with patients. They were like role model for us. (Student 14).

Most of the students indicated that nursing is different from other disciplines. They explained that education in nursing should be different from the education in other disciplines. It was not acceptable by several students that nursing teachers explaining the diseases in purely scientific ways without giving real examples. The students suggested presenting real life case studies in classroom lectures, and then discuss these cases with considerations to all issues that may influence them. Using this method of education may to give more life to the scientific terms and the theoretical content.

I prefer if they present real cases from the hospitals. Instead of providing a lecture about hypertension and giving detailed information about this subject, the lecturer can present a real hypertensive cases that were taken from the hospitals. We could then discuss the predisposing factors for hypertension for specific cases. We can also see how this disease influenced on patients' functional health patterns. (Student 23)

There were other students suggested to add more input from the students in the classrooms. These students suggested dividing the class into small groups. Each one of these groups should be given an assignment to take care of patients with specific clinical conditions. For example, one group could be asked to focus on patients with coronary artery diseases and another group to focus on pulmonary conditions. When the time for these lectures comes, these groups will be asked to share with all students in the class their the case studies that had seen in the clinical settings.

Using more audiovisual materials in the theoretical lectures was expected to help nursing students to understand the complexity of several health conditions. For instance, nursing teachers may use a real or animation movie to explain how to do cardiac catheterization. One student said that she could not understand the possibility of inserting a catheter tube into the coronary arteries and putting in a stent. Explaining these procedures in a theoretical lecture was appropriate and easy from the views of the nursing teachers. However, according to this student, most students in that lecture had no idea about the reality of cardiac catheterization and these procedures. Interestingly, this student understood this procedure by going to the internet and watching a film about this procedure.

For our teacher, everything was easy. The thing for them like calculating two and two ... but for us, the situation was completely different. We used our imagination to understand. I remember that I went to the internet to understand how somebody could insert a catheter through femoral artery to reach the coronary artery and put stent there. It was not easy for us to understand like these procedures. (Student 11)

Preparing and improving the laboratories:

Most of the students appreciated the roles of their teachers and clinical instructors in teaching them about the reality of nursing profession. These students explained that they took several practical modules in laboratories. More importantly, the students indicated that they spent two weeks of the fourteen weeks that specified for each practical module in the laboratory. The students admitted the importance of attending these laboratories in preparing them to the clinical environment. However, there are several students explained that the laboratories in their school and those in most of the Jordanian nursing schools were not equipped enough to prepare nursing students for the real complex clinical environment. The students showed the need for better and more advanced equipment in their labs. One female student talked about the physical examination course in specific and said that it was so hard for her to learn all the abnormalities and memorize them when she didn't see them. She also said that she thought it was a waste of time for them to practice on dolls when they wouldn't learn the normal things either.

I just felt that our practice for theory is sometimes useless, like physical exam, our dolls and equipment need some updating. (Student 7)

Some students in the current study presented more specific suggestions to improve the labs in their school. These students had seen specific programs on television about simulation labs. Training in these labs was expected to close the gap between theory and practice in nursing education. One student, for example, had been in a nursing school in the United State while she was visiting her sister. She explained:

I saw these amazing labs that were set up in the United States for nursing students. I wish we had them here to facilitate leaning for us. The dolls would talk and make noises and you actually feel like you were dealing with a real patient. (Student 5).

DISCUSSION

The findings of the current study could be transferrable to other regions with similar conditions. Reviewing the body of literature shows that this subject was examined in several studies [3, 23, 33]. The current study added more information about this subject and raised some suggestions and interventions in systematic way to decrease the gaps between theory and practice in nursing education. These suggestions were produced from nursing students who talked about their experiences. These students are the most important component in the nursing education process. Therefore, their reflections and opinions are important to develop the process of nursing education.

Most of the students in the current study showed the need for more communication and coordination between theory teachers and clinical instructors. This was also raised in literature [13, 19, 34]. Myall, Levett-Jones, & Lathlean [35] indicated that the cooperation between theory and practice is

not adequate. This might be resulted from the difficulty of transferring the theoretical knowledge into clinical complex area [2, 13, 36]. The theory part of nursing education usually presents the ideal knowledge and information about clinical conditions. This may lead many students to be shocked when examining their ideal expectations and knowledge with real practice setting [37, 38]. This may increase the gap between theory and practice in nursing education. Therefore, the findings of the current study and results of several articles [2, 37, 39] suggest opening more channels of communication between theory teachers and clinical instructors.

The findings of the present study are in agreement with the findings of several studies that nursing students need to be supported in clinical training [2, 18, 23, 40]. Most of the students explained that there is a need for more support during the initial period of clinical training. This may be due to several factors such as lack of clinical experience, unfamiliar with place, complex clinical cases, fear of doing something wrong and the worry of being evaluated by their teachers [23, 41]. Therefore, clinical instructors and theory teachers should be aware of the importance of the stage of nursing students' education. They should increase students' confidence [42] by creating a nurturing and supportive environment [43]. Increasing the knowledge and skills of nursing students was expected to decrease students' level of stress [44]. Other suggestions such as providing regular feedback regarding students' performance and listening to students reflections were also raised in literature [2, 45].

Interestingly, Nabolsi et al. [2] qualitatively examined the experience of Jordanian nursing students in their clinical training. They interviewed thirty nursing students at bachelor level. It was reported that there was a deficiency of supporting students in the clinical area. The current study also conducted in Jordan and produced similar findings. This may explain the reactions of many students and their focusing on the importance of providing more support from nursing teachers and instructors for students especially in their initial period of training. Providing this support was expected to improve students' satisfaction and to increase students' enthusiasm and retention in profession [46, 47].

A very important point was raised by several students regarding the qualifications of clinical instructors. Many of the students explained that their instructors were qualified and they had good certificates in nursing. However, some students thought that clinical instructors were not able to communicate with them and they did not understand their needs. This might be resulted from the complexity of the clinical training which consists of integrating cognitive affective and psychomotor skills [2, 48]. It was indicated that competent instructors are able to ease the process of education in clinical settings and they have effective communication skills [49]. Therefore, clinical instructors should meet specific criteria to do their job perfectly. For example, clinical instructors in the United Kingdom should achieve national standards such as requirements for training, annual updating, local registering, review and maintenance of qualifications [50]. However, this is not the case in all countries. In Jordan, for example, there are no national standards for clinical instructors. Many universities do not

have a condition for their instructors to have clinical experience. Many of these instructors had never been in a training about how to deal with nursing students. This may decrease their ability to effectively supervise and guide nursing students in the clinical settings.

It was indicated by several students that there is a need for modifying the ways of education in their school and in the clinical training. Pure scientific lectures were the main method that was used by most of the school teachers in the theory part of students' education. The students suggested to add more real examples to their lectures such as real case studies. They also suggested using more real audiovisual resources. This could be achieved by developing of *practice theory* [23]. This means to prepare the theory lectures depending on real cases that derived from the practice. Using this technique would decrease the gap between theory and practice and could be more realistic for the students.

Most of the students did not ignore the role of lab training in preparing them for the real clinical training. However, most of them thought that this was not enough. Some of them heard about the newly developed simulation labs where the students feel that they are in a real clinical setting. Training on dolls without responses was easier for students. They explained that they were shocked when they came to the reality. For example, taking blood sample from a doll is much easier that taking a sample from a patient suffering and in pain. McCallum [51] showed the role of learning through simulation in developing nursing students' clinical experience and in preparing them to behave in the real clinical settings. Training students through simulation result is some advantages such as providing planned training, allowing for crisis intervention and teaching of team work, and giving more chance for discussion and reflection on training [52].

CONCLUSION

This study described the students' experiences in the theory and clinical settings. Several reasons were raised regarding theory-practice gaps in nursing education. The students suggested some solutions to decrease the gaps between the theory and the practice. They suggested that the teacher in the theory and the practice should be the same person. A link between what was learned in theory with practice was suggested. This could be achieved when the students go to the clinical setting and the instructors have to show a case that is related to what they took in the theory.

The qualitative design used in this study provided deep and rich data about the theory-practice gaps in nursing education in Jordan. The students' experiences and the possible interventions for these gaps were deeply discussed. Additionally, up to our knowledge, this subject is examined for the first time in Jordan. Therefore, the information raised in this study could be useful for the undergraduate students, the nursing schools, the nursing teachers and the stakeholders in Jordan. The findings of this study could be also transferred to be useful to other countries with similar Jordanian conditions.

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