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Bridging the theory-practice gap in Iranian emergency nursing education

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Original Article

Abstract

BACKGROUND: The theory-practice gap is one of the important challenges of treatment, health, and educational systems. It is affected by different factors like students, teachers, and the clinical environment. This gap has consequences for education, as well as the treatment and health services systems. Thus, it is necessary to find effective strategies to reduce it. Therefore, the present study was conducted with the aim to find strategies to reduce the theory-practice gap in emergency nursing education in the view of stakeholders.

METHODS: A qualitative research was conducted, including 18 semi-structured interviews and 3 focus group sessions with the stakeholders in a school of nursing and an educational hospital. Content analysis method was used to analyze the collected data.

RESULTS: The strategies to reduce the theory-practice gap in emergency nursing education were divided into 6 primary categories, 2 main categories and 1 theme of action to change. From among the 69 strategies presented to the focus groups, the participants acknowledged 28 strategies as practical and effective. Furthermore, the participants held that it was necessary to have reformative and developmental actions in line with care, supervision, evaluation, and educational processes in order to reduce the gap between theory and practice in emergency nursing education.

CONCLUSION: The theory-practice gap is affected by many different factors. Thus, the people involved must pay attention to every influential factor in order to reduce the consequences, and use effective cooperative strategies by taking into consideration the human resources, infrastructures, processes, and the administrative culture in faculty and clinical environments.

Keywords: Qualitative Research, Nursing Education, Emergency Department

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Introduction

The nursing profession is comprised of the two main domains of theoretical and practical; the first one represents knowledge, and the latter is focused on clinical skills.[1] By the late 20th century in the Western world, traditional nursing education at hospitals was transferred to universities which led to a theory-practice gap.[2] The literature showed that there is a clear gap between what is taught in the classroom and what the student nurses experience in the clinical area.[1] The gap has always been a crucial problem in nursing, and as experts believe, it is not presently getting its due attention.[3] The discrepancy between theoretical education and nurses' performance in clinical settings leads to the uselessness of their knowledge, prevention of scientific progress in theory, the prioritization of traditional common methods, decline in the quality of their work, and even resignation.[4] The reactions of students can be summed up as incompatibility with the clinical environment, anxiety, feeling of incapability, depression, and insecurity due to lack of proficiency,[5] and the newly graduated would experience transition shock.[6]

According to Iranian researchers, the reasons for this gap are dearth of philosophical thinking, mission, and written educational goals in Iran's nursing educational programs, ignorance of students' professional interests, shortage of relevance between theoretical and practical courses,

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development of a relative and mostly by-the-book knowledge in the students,[7] lack of balance between the proportion of theoretical and practical courses, insufficiency of appropriate facilities in hospitals, rarity of an active engagement of teachers and students of higher education in the clinical settings and their incapability due to lack of necessary theoretical and practical skills, and excess of routine-based approaches.[8] Hence, to find strategies to reduce the gap, Iranian nursing researchers, have focused on the assessment of problems in effective theoretical and practical teaching and training, assessment of different teaching methodologies and their cognitive, motivational, and behavioral outcomes in students' actions, assessment of instructors and clinical environment,[9] and the change in nursing programs and curriculums.[10]

However, the importance of society's expectations of the health system to provide services based on observation and scientific methods,[11] the need for analytical and creative nurses for clinical situations in complex health systems of the 21st century,[12] and nurses' passion to bridge the gap and provide high quality care[9] necessitates a local examination of the impacts of the gap and the strategies to reduce them based on the existing facilities. Thus, the researchers decided to use their clinical and educational experiences and conduct a study to find the strategies to reduce the theory-practice gap in emergency nursing education.

Materials and Methods

This qualitative study was conducted to find strategies to reduce the theory-practice gap in emergency nursing education. The qualitative method relies on the context and allows the researcher to take into consideration the daily lives of a group of people in different circumstances[13] in order to recognize their various behavioral aspects.[14] The multidimensional, unremitting nature of this method helped researchers recognize solutions to reduce the gap between theory and practice in emergency nursing education, which is a multi-factorial concept itself. This study was more than just a solution-seeking practice; it was concerned with how things occur, how people make sense of things, and how issues unfold in the real-world of the faculty and emergency department. By using this method, the research team can reach "deeper data" to find new solutions to decrease the gap, so the qualitative research becomes increasingly valuable.

The participants in this study were theoretical and clinical instructors of a nursing board in the School of Nursing and Midwifery at Isfahan University of Medical Sciences, Iran, students, nurses, and physicians of the emergency department of an affiliate educational hospital with 100 beds and about 150 nurses, and some of the executive managers in both administrations. The clinical instructors were 2 board members and 4 postgraduate nursing students, 2 of whom had been working in the emergency department.

In addition to willingness to participate, the inclusion criteria for the study were at least a bachelor's degree and 1 year of service in the emergency department in rotational shifts for nurses, attendance in emergency education for nursing students, and at least 1 year of cooperation as an instructor in the emergency department board for clinical instructors. Those who did not want to participate, had stopped working in the emergency department, or had stopped studying nursing (for students) were excluded from the research project.

Isfahan University Ethics Committee has approved this research. Moreover, to adhere to ethical principles in this study, the researchers obtained the oral consent of the head-nurse and nursing instructors upon entry to the department, provided the participants with an introduction and explanation on the aims of the study before the interviews and focus groups, obtained informed consent from the interviewees for audio recordings, assured the interviewees that their participation would have no effects on their jobs, and used codes instead of their names in all related documents of the study. In order to improve the quality of service, the results of the study were also sent to the Committee for Quality Improvement and Certification, the Emergency Services Improvement Committee, and the Teaching Council of the Faculty. The ninth university ethics committee and research council approved the performance of this study.

Data collection started with 18 semi-structured interviews in December 2016 and lasted for 7 months followed by 3 focus groups in 2 months. The most important feature of focus group is the interaction between the members which incites them to produce deep, accountable data.[15] All of the participants were selected through purposive sampling in order to obtain maximum variation and the views of those with expertise in this certain area.

During the interviews, the researchers paid attention to the participants' tone and body language, and wrote the asserted points. If necessary, a shorter interview could be held for further elaborations.

Table 1. The selection criteria for strategies and their definitions

Criteria	Definition
Focus on the problem	Its implementation will be the most effective in reducing the theory-practice gap, in emergency nursing education.
Practicality in terms of time and cost	The chosen strategy will be performed in the shortest possible amount of time and with the least cost.
Measurability	There is a practical method for measuring the existing and future situation, for example, questionnaires or checklists.
Effectiveness	Considering all of the existing aspects and potentials, the strategy is the most effective in reducing the gap.

The interviews were continued until data saturation. Some of the questions asked were: "In your opinion, what is your role in the reduction of the theory-practice gap?" and "What do you suggest for its reduction?"

Since the implementation of all the suggested strategies was not possible financially, the researchers (S, I, and A) and the stakeholders decided to hold focus groups to choose practical and effective strategies. By considering the most common selection criteria, nature of the obstacles, and existing strategies, and after the unanimous vote of the participants, the 4 criteria of focus on the problem, practicality in terms of time and cost, measurability, and effectiveness were determined (Table 1). A 9-point Likert scale was used to prioritize the strategies in the two committees of the faculty and the emergency department; scores of 1-3 show the least importance and scores of 7-9 represent the highest priority for the reduction of the gap. The emergency department committee had 12 members and the faculty committee had 10.

It was possible that the decisions of these two committees would not cover all the conditions in both the faculty and emergency departments; thus, a committee of chief directors including executive managers of the faculty and emergency department was formed. Strategies allowed in the committee of chief directors had the average scores of 7-9 in the 4 criteria. In this committee, 5 experts categorized the strategies of reducing the theory-practice gap into 5 priorities from 1-5. The omitted strategies had a score of less than 3.5. All steps of the study were summarized in a vertical chevron list (Figure 1).

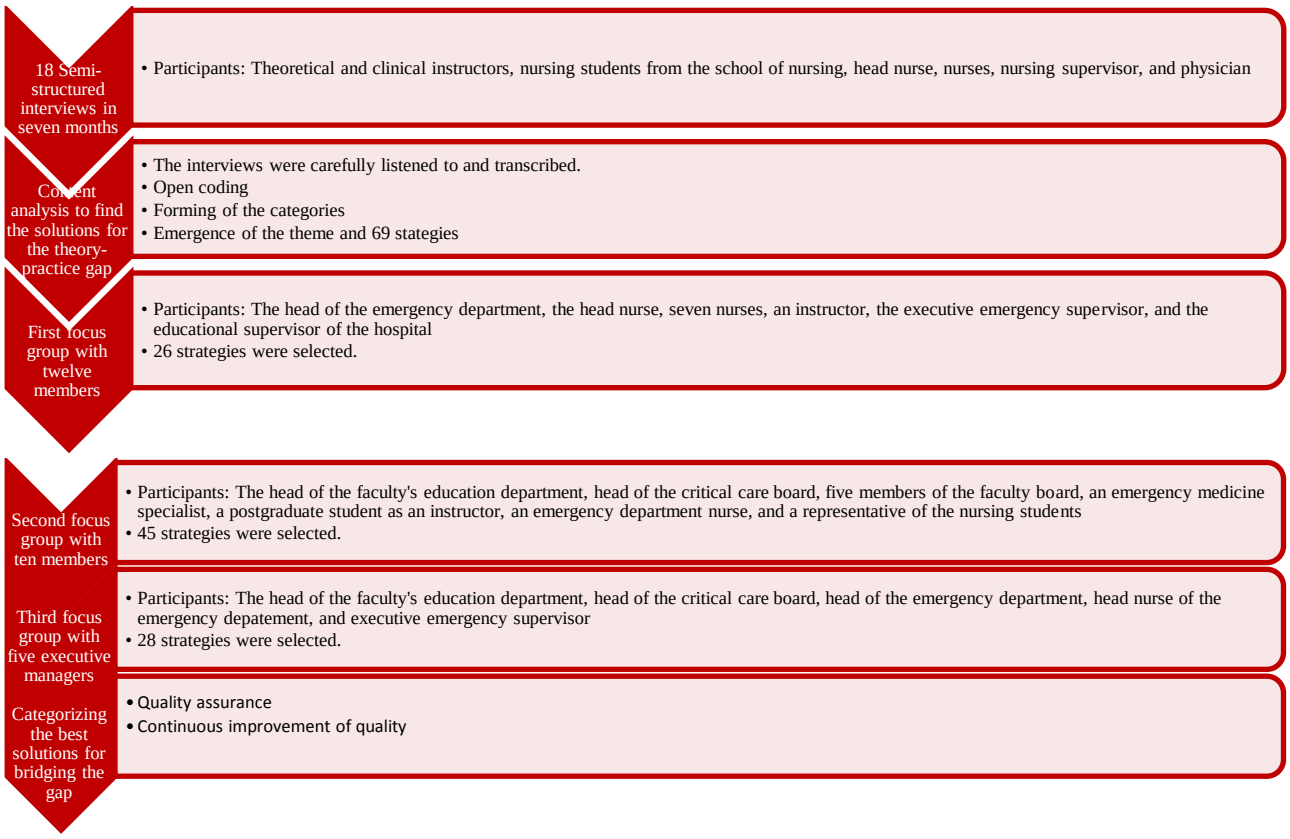

Figure 1. 6 steps to find the best solution to decrease the theory-practice gap in emergency nursing education

Table 2. A summary of the categories and themes

Themes	Main categories	Primary categories
Action for change	Quality assurance	Educational processes reform
		Care processes reform
		Supervision and evaluation processes reform
	Continuous improvement of quality	Development of educational processes
		Development of care processes
		Development of supervision and evaluation processes

To analyze the data from the interviews, the inductive content analysis method of Elo and Kyngas, which included the 3 steps of open coding, creating categories, and abstraction, was used.[16] The interviews were carefully listened to and transcribed word by word. To get the main idea of the texts, they were read fast, then, read again, this time with extra care to highlight the important sentences. At this point, open coding was executed. Similar codes were put together and formed categories. Finally, 6 primary categories, 2 main categories, and 1 theme were recognized by abstraction.

To improve the validity and integrity of the data, experienced colleagues in qualitative research were asked to control them, the participants were also carefully described, and supplementary comments were heard from experienced educational liaisons, the participants were diversely chosen, the transcribed interviews were shown to the participants, the comments of the quality improvement committee members were heard, and meetings were held with faculty and hospital members as well as chief directors. The researchers tried to achieve validity by careful description of the data collection process and data analysis methodology. Furthermore, the raw written data including the interviews and notes from focus groups were saved and carefully documented for verification in order to improve the validity.

Results

The results of this study were summarized in identifying the strategies to reduce the gap and choosing practical, effective strategies.

The researchers conducted 18 interviews and 3 focus groups with average time of 63 minutes and 90 minutes, respectively. Analysis of the data from the study showed that the strategies to reduce the theory-practice gap in emergency nursing education could be divided into 6 primary categories, 2 main categories, and 1 theme including action for change. Table 2 provides a summary of the categories and themes.

Action for change: In the participants' views, the suggested strategies were a starting point for change and movement forward in order to reduce the gap; the aforementioned strategies were summed up as quality assurance and continuous improvement of quality. The category of quality assurance included strategies that were then exerted in the faculty and emergency departments, but were not effective enough. Thus, reforming them was essential to quality assurance. The participants' new strategies were also introduced as the continuous improvement of quality programs because, by implementing them, the people involved in the process could actually witness the action to improve.

Quality assurance: The participants believed that the existing educational, care, supervision, and evaluation processes for quality assurance needed a reform. Their suggested strategies were using experienced instructors more in the emergency department and clinical examples during theoretical education, scrutinizing the clinical instructors' selection more, providing emergency teachings based on existing clinical processes, supporting the students during care, and holding teaching methodology workshops for instructors. One interviewee said: 'Instructors should be selected correctly. Most of the time, they have no other choice. We have untrained personnel and we have to get them to work. We are short on personnel. I think we should have a better instructor selection program' (P3).

To keep emergency department nurses' clinical skills and knowledge up to date, the greater familiarization of instructors with care processes, greater supervision on the performance of departments' nurses, bonuses for educational personnel, greater attention to effective refresher courses for nurses, use of intra-department education to empower the nurses, and greater scrutiny in the selection of emergency department nurses were suggested for care processes. On nurses' education, one participant commented: 'They hold a class and explain everything in a rush. People do not learn. To work with the ventilator, I have to explain some tips repeatedly, so that they learn gradually' (P1).

For quality assurance in supervision and evaluation processes, participants suggested more accurate use of the logbook, students' self-evaluation at the beginning of the training course, the instructor's higher supervision to sustain the educational criteria in the hospital as well as acknowledgment of the problems, and more use of nurses' supervisory role over the students. One participant's view about the logbook was that 'It should not be just for ticking items. The instructor has to have enough time to complete the logbook as the student does a procedure' (P4).

Continuous improvement of quality: Strategies for continuous improvement of quality referred to developmental strategies that had not been implemented in the hospital and faculty, and in the participants' views must be used in educational, care, supervision, and evaluation processes. Some suggested strategies for educational processes development were to hold nursing students' theoretical classes in the hospital, students' presence in the Morbidity and Mortality Review Committee, to assess students' needs before the training course to work more on the weaknesses, to have plans to teach how to work with the important care equipment on the first day, to hold a one-day workshop before the training course or to give students the emergency cares and skills' pamphlets, and to use clinical teachers as members of hospitals' committees. A participant commented: 'Students should be in the Morbidity and Mortality Review Committee. This way they understand the gravity of the situation. They will know, then, how important the care is' (P5).

New strategies for care processes were to make hospitalization information directly accessible to students and teachers, to allocate a place for educational purposes in the emergency department, and to enact a process through which the emergency nursing board would be informed of the changes in the department, including the rules, guidelines, and even equipment. A participant said: 'There must be a place with the monitor and defibrillator machine, where students can work with them first hand, but unfortunately the current situation will not allow that. The problem is the lack of a class in the emergency department' (P4).

The participants also believed that in order to develop the supervision and evaluation processes, the faculty was required to take theory and practice exams for students to begin their courses, and use postgraduate students to assess students' problems and oversee the educational issues in the hospital. One of the participants remarked: 'There must be an entrance exam for the training course, and their entry grade must be high, so that anybody with any grade cannot attend the course' (P7).

Stage Two: Selection of Effective and Practical Strategies: In the first stage, content analysis revealed 69 strategies. After 3 focus groups for 7 hours and based on the 4 criteria, the number of strategies were decreased. In doing so, 45 strategies from the faculty committee and 26 strategies from the emergency department committee received scores above 7. These 38 strategies were successfully approved by participants in the two committees; they were then presented to the committee of chief directors and only28 of them were recognized as practical and effective. The selected strategies are shown in tables 3, 4, and 5.

Discussion

This study was conducted to recognize the effective strategies to reduce the theory-practice gap in emergency nursing education. The participants in this study held that it was necessary to have reformative and developmental actions in line with care, supervision, evaluation, and educational processes in order to bridge the theory-practice gap in emergency nursing education.

Table 3. Some strategies in educational processes for quality assurance

Strategies	Primary categories	Main categories
Reviewing of theoretical content by students and holding a workshop before they go to the emergency department	Educational processes	Quality assurance
Providing an introductory pamphlet on the emergency department		
Providing clinical instructors and emergency nurses with updates on new equipment		
Holding regular, seasonal meetings between the emergency care board, the head nurse, and the head of the emergency department		
Using clinical experience and examples in teaching of theory		
Reforming the emergency training lesson plan		

Table 4. Some strategies in supervision and evaluation processes for quality assurance

Strategies	Primary categories	Main categories
Regular, accurate supervision of the faculty on trainings and students' presence Higher supervision of teachers on students' performance through keen observations and feedbacks, in case of teachers' absence Preceptors must oversee students' performance for more accordance with lesson plans Changes must be made in the structure of the logbook.	Supervision and evaluation processes	Quality assurance

The strategies suggested by the participants were a need-based reformation and improvement of educational processes, provision of necessary human resources and equipment, effective use of encouraging tools, and reformation of the presentation of theoretical and clinical education and selection of an appropriate time for it. As in the study by Beverley, the participants in this study believed the use of real-life events and scenarios would help students have a deeper understanding of patients' care and complex needs.[17] They believed that clinical settings were the best place to learn; however, the experience opportunities were not always available for every skill.[17] The participants in this study believed that some of the theory in emergencies must be taught by clinical teachers. There was even a talk about members of the board being 'transferable' between the faculty and the emergency department. This has also been asserted by Benner et al., who believe that, logically, learning in the class and clinical settings would merge effectively when the theoretical teachers also take the clinical courses, but due to the extreme shortage of nursing teachers, this does not often happen.[18] Some other researchers hold that theoretical teachers should maintain their clinical abilities through constant teaching in clinical settings or laboratories, having temporary responsibilities, keeping contact with the clinical settings, or participating in the clinical experiences. The clinical teachers should also have a copy of the contents and curriculum of the theoretical lessons, and they can be invited to attend theoretical classes.[19] To reduce the gap, it has always been asserted necessary to have open channels between theoretical and clinical instructors,[1] to engage teachers in clinical teaching, and to give joint appointments to theoretical teachers in clinical settings.[20] The use of experienced teachers or educating the existing ones was another suggested strategy; due to shortage of human resources, the committee of chief directors decided to hold classes for existing teachers accompanied by experienced ones to improve their competence. In some studies, the clinical coordinators introduced new clinical teachers to policies, procedures, evaluation methods, and lesson plans of theoretical and clinical courses; they also held joint meetings at the beginning and end of each semester.[19] The empowerment of efficient human resources in educating students was an effective and applicable strategy.

Reform in the emergency course plan and even nursing educational program with more focus on new educational approaches and the hidden educational program was among the suggested strategies by the participants. The emergency nursing program in Iran is not decentralized, so making changes in it is administratively impossible, but participants emphasized the need for reforms in the training course plan and its accordance with theoretical courses, as well as a daily lesson plan to improve students' and preceptors' awareness of the activities and goals of the training. This was another effective strategy mentioned by the participants.

Table 5. Some strategies in educational, supervision, and evaluation processes for continuous quality improvement

Strategies	Primary categories	Main categories
Assessment of needs by teachers on the first day of training Use of daily lesson plans for emergency trainings New instructors accompanied by experienced ones for the few first days	Educational processes	Continuous quality improvement
Annual surveys on activities in the logbook from students' views Preceptors' right to complete and sign the logbook		Supervision and evaluation processes

In some researchers' views, students will be less stressed and more efficient in service, if the course plan designing team took into account the potential influence of the hidden lesson plan and introduced students to the challenges of decision making in nursing. In addition, the faculty must lead its current educational and learning models towards self-guidance approaches based on problem-solving.[21] Others suggested a revision in lesson plans, presentation of clinic points in teaching theory, and a quest for new course plans.[22] Students, according to the participants in this study, can improve their clinical qualifications through getting feedbacks from clinical teachers and preceptors. As a matter of fact, students learn in clinical situations, when they understand what is right or wrong; this would be possible through clinical nurses' feedbacks to students.[23] A good relationship with the preceptor, to get feedback and learn without deadline pressure, to talk about the expectations, experiences, and goals of students, and preceptors' responsibility for planning, guidance, support, and innovation of learning activities are all deemed important in the works of some researchers on learning processes.[24] At the time of this study, there were 6 preceptors in the emergency department, actively participating in students' education. Considering the high number of training courses, 6 preceptors were not enough. Students, in some cases during the afternoon and night shifts, worked alongside nurses who were not aware of the responsibilities and duties of a preceptor. Their presence, however, was often facilitating, according to the students.

Some researchers have suggested the use of the clinical teaching associate model in teaching students for its improvement in students' clinical outcomes and nurses' increased sense of satisfaction.[25] One of the themes in the study by Beverley was the role of nurses as preceptors which was, according to the students, facilitating in clinical settings, since they could share their experiences.[17] On the contrary, students in some cases received less support and sympathy from their own preceptor.[26] In other studies, students had considered the non-restrictive atmosphere and feedbacks by encouraging preceptors as a positive experience.[15] The allocation of resources and cooperation between the faculty and the hospital was, one of the suggestions to reduce the theory-practice gap. The nurses' capabilities were used to teach and improve students' skills; by creating a unique clinical learning environment and supporting the students, their competence and confidence was enhanced.[6,27] When students, as learners, are treated like members of the team and valuable people, they feel empowered in the clinical settings; this will affect their learning and their consistency in following the educational programs.[28] Ajani and Moez have categorized the strategies to reduce the gap into 3 main sets; reconstruction of resources, redesigning the education, and a change in rules. For reconstruction of resources, it has been suggested to clarify the responsibilities of students, nurses, and nurse assistants. This means that students should not be considered the providers of nursing services, because they have particular educational goals to achieve in the clinical settings. The redesigning of the education is based on the change in the concept of 'everybody can be a teacher' and asserts the necessity of students' learning from elite, qualified teachers. Replacement of rules basically refers to the temporary use of university professors in the hospital.[21]

Most of the selected strategies, as can be seen in table 3, focused on educational processes, in doing so, the participants tried to reform and improve the activities related to the theoretical sector in order to reduce the gap. In addition to educational issues, there were yet other factors involved in the formation of the gap.

The participants' suggested strategies to reform and improve the care processes, emphasized on knowledge-based care, replacement of routine-based care with standards, and the use of qualified nurses to teach and provide care in the emergency department. The formulation of guidelines and executional procedures was one of the strategies to reduce the gap. One of the themes from the study by Bvumbwe was observation-based nursing performance. Furthermore, the academic-clinical partnership method provided teachers and nurses in the clinical settings with opportunities to research, leading to the promotion of a learning culture, and this results in the increased use of observations in the clinical settings.[27] To increase the effectiveness of nurses' education, the participants also emphasized the education within the department, instead of the usual group classes. Ansari et al. believe that despite its importance and obligatory nature, education has a small impact on nurses' performance. Thus, it is necessary to focus on other managerial and pre-professional factors.[29] The nursing teachers can also share their experimental knowledge to ensure that nurses have up-to-date, verified, and valid knowledge.[3] The most reported

method for learning about preceptorship, in one study, was training and workshop. Increased educational experiences of participants led to increased knowledge about the position of a preceptor.[30] Finally, focus on constant education of nurses, was among other suggested strategies by some researchers. These programs can help nurses keep up with the existing changes in the health care system.[21]

The preceptors who participated in this study had experienced problems such as high number of working shifts, shortage of time to teach the students due to emergency department pressures, and the feeling of disrespect from others. Their love for teaching and their hope for promotion, however, helped them tolerate those problems with more ease. Parallel to this issue, some researchers believe that, due to their multiple roles, preceptors must be given more attention, so that they can provide an appropriate environment for the students.[15] In other studies, the joint partnership of the hospital and the faculty created an opportunity for the people involved in the process to show their capacities. Clinical preceptors' capacity for research is improved when they work with students; this also leads to the professional development of nurses.[27] To facilitate the participation of students in care services, participants believed that there should be better communication between students and other service providers like nurses and supervisors. The suggested strategies for this were meetings with emergency nurses to understand how to deal with students, assistance in teaching, and clarification of students' limits of activity. In other studies, one of the suggested strategies was the improvement of respectful communication between people involved in the process in both the faculty and clinical environment. This way, the attitude of nurses towards students would improve, and common values and interests would form a mutual respect and trust. This kind of communication is possible through the concerns of executive managers and decision makers of parties, joint meetings, development of commitment, sharing knowledge, and respect for all the members.[27] Students, in other studies, wanted to have more support[1] and emphasized that presence in the clinic as an active member helped them trust their knowledge and skills and feel more like nurses.[17] In the meantime, the heavy work load of the staff and supervision of different preceptors brought about a stressful experience for students.[24]

Although the suggested strategies of this matter were given high scores in the hospital committee, they were not approved as the final effective strategies by the committees of the faculty and chief directors. This shows that nurses have always tried to find an opportunity to express their most crucial issues. A realistic attitude towards the nursing condition in Iran, though its problems in some cases are universal, would reveal that at the present situation and without taking into consideration the necessary infra-structures, implementation of some strategies is impossible. For example, it is not currently possible to increase the number of emergency nurses according to domestic standards, to set particular criteria for the hiring of emergency nurses by chief directors of nursing, to formulate and implement treatment and care guidelines in the emergency department, and to include bonuses and benefits for nurses who teach, like fewer shifts or patients to attend in a working shift. Conclusively, the disallowance of all care processes strategies is evidence enough that the theory-practice gap in the clinical settings is still existent; thus, it requires nurses' and chief directors' attention.

The participants' suggested strategies to reform and improve supervision and evaluation processes, and emphasized faculty's supervision on the quality of training courses and regular attendance of students, presence of an educational colleague in case of teachers' absence, and modification of the logbook. Alavi and Irajpour suggested the expansion of evaluation approaches to all clinical qualification dimensions, which would be the result of an effective interaction between clinical teachers, students, physical and sociocultural environment of education, and clinical evaluation.[31] Some researchers believe that supervision on students must be based on their personal performances of each skill, and the feedbacks must be combined with inquisitive questions on students' logic about skills and activities they present in different care situations for a patient.[32] Some of the overruled strategies for this section were written self-evaluations by students, formulation of a program to have supervision on students in evening and night shifts, an entrance exam of theory and practical items for training courses, higher teachers' supervision for completion of the logbook, and the use of 360 degrees method to evaluate students' performance in the emergency training course. The study also showed that supervision and evaluation were challenging for the management and influential on the theory-practice gap; it was still problematic to implement cooperative strategies to reduce the gap.

The present study has relied only on qualitative methodology of data collection and is, therefore, restrictive. A more quantitative methodology of data collection should be undertaken in the future to provide a wider perspective on the present study. The sample for the present study comprised of 18 interviewees and 22 participants in focus groups that is only a very small proportion of all the stakeholders. Consequently, the researchers suggested sharing the strategies with more stakeholders to create an environment conducive to effective stakeholder interaction and more practical solutions.

Conclusion

The results of this study showed that to bridge the theory-practice gap in emergency nursing education, it was important to consider all the influential factors such as students, human resources of the faculty and the hospital, the facilities and equipment, culture, and the administrative processes. Thus, practical, effective strategies were compatible with processes, equipment, existing hardware and software capabilities, and even the governing administrative culture in the hospital and the faculty environment, and were also accepted by the people involved in the process. In conclusion, the use of cooperative methods and a concern for the existing conditions and infrastructure is necessary to recognize, implement, and evaluate such strategies.

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Conflict of Interests

Authors have no conflict of interests.

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