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Iranian Nurses' Perspective of Barriers to Patient Education in Intensive Care Unit: A Qualitative Study

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Abstract

Background: During their life, people are constantly moving between health and disease. No doubt, health status is associated with health literacy and attitudes of individuals. Patient education commences early in hospital and continues until full recovery of the patient. Also, it provides appropriate information to patients by which they can acquire a healthier status.

Objectives: This study aimed to investigate Iranian nurses' perspective from barriers to patient education in intensive care unit. Materials and Methods: In this qualitative study, 25 nurses were recruited using purposeful sampling. Data were gathered using semi-structural interviews. Moreover, data were transcribed verbatim and analyzed using the content analysis method.

Results: Five main barriers were identified as barriers to patient education including nursing personnel shortages, lack of adequate knowledge and motivation, inadequate facilities, ineffective communication, and insufficient supervision and control.

Conclusions: The necessity and importance of patient education and the role of nurses in intensive care unit is undeniable. Regarding the importance of the issue, the barriers to effective patient education should be addressed. The barriers, then, should be diminished using appropriate measurements

Keywords: Barriers, Nurses, Patient Education, Qualitative Method

1. Background

During their life, people are constantly moving between health and disease. No doubt, health status is associated with health literacy and attitudes of individuals. Patient education commences early in hospital and continues until full recovery of patient. Also, it provides appropriate information to patients by which they can acquire a healthier status (1-4).

Illness and hospitalization might be new experiences to patients that need help and training. Patients need information to have proper self-care activities. This shapes the concept of patient education (5-7).

Many education experts have defined patient educa-

tion as any communication with patients which provides health information about diagnosis and treatment, selfcare activities related to diagnosis and therapeutic care, medications and their side effects, and issues such as quitting smoking, and community resources available for patients and their families. It should be noticed that some believe that patient education is not limited to these issues (8) because each disease will be created different educational needs that are new emerging needs and wanted new education. In this line, cardiovascular diseases are the most important events; different pharmacological and nonpharmacological interventions (9-11) can be effective and useful for hospital and nonhospital periods.

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The philosophy of patient education is that patients apply information and skills learned (12). Nurses, as members of medical care team that are directly in contact with patients and spend a lot of time with them, have a key role in the patient education program. Nurses can also evaluate quality of the educations (13).

Increasing patients' awareness towards prescribed medications, medication-food interactions, diet, and symptoms which patients should aware nurses from (14) are some responsibilities of nurses, which aimed to help and assist patients to maintain their independency in performing self-care (15). In this regards, the goal of patient education should include educational and health factors, influencing factors in patient readiness for cooperation in the nursing process, treatment, rehabilitation, self-control, reducing fear and anxiety, improving patients' ability to cope with his health problems, and self-care, because the basis of an effective patient education is participation and cooperation of patients (16-18).

Research studies have shown that the amount of productivity of nurses is so much related to the extent of their responses to educational needs of their patients (19-21). Since, nurses contain more than 70 percent of medical care team members, have more access to patients and their families and spend more time with patients, they have more opportunity to provide education and evaluate it (20).

There are several other reasons for patient education including health promotion, priority of prevention, shorter stay in hospital, probability of spending recovery period at home, ensuring continuity of care, improving health care, rehabilitation of elderly, necessity to management of chronic diseases (22-25).

Ensuring quality of nursing care and patients' safety is a main challenge for nurses and nursing management. Various studies have shown significant relationships between educational degrees and employment duration of nurses with patients' mortality rates, disability rates, and unexpected events, incidence of infection, bed sores, and length of hospital stay, incidence of complications, patient dissatisfaction and the amount of considering ethical issues (18, 26-28). It is essential for nurses to be efficiently provided with the principles and techniques of teaching and learning processes for their educational role (28).

Nurses in Iran, learn patient education skills within a two credit course at university entitled "Patient education". The aim of the course is to teach theories, procedures and types of learning methods and instrumental technology. However, the course is usually held on inappropriate and no emphasize is done on patient education. The researchers as instructors have been witnessed the numerous patient education procedures that have been partially implemented and the training provided was not consis-

tent with the patient's and the families' educational level.

It should be noted that patient education is a main priority and standard of care during hospitalization and discharge. The main barriers to implement patient education are reported as lack of time and manpower resources, inadequate knowledge and skills of nurses about methods and principles of patient education, inadequate supervision on patient education process, and lack of incentives for nurses in implementing patient education programs, lack of facilities and equipments in wards, lack of perceived necessity for patient education in management, lack of timely payments to nurses, inappropriate cultural issues in both nurses and patients, inappropriate physical condition in patients for education (1, 2, 5, 14, 16). Barriers to patient education are factors that limit the ability of nurse or medical team members (28).

Several studies are conducted in Iran to assess patient education programs. In a study it has been reported that the most cited barriers from the perspectives of nurses include lack of appropriate educational environments (97.5%), shortages of nursing personnel (95.5%), funding deficits (92.5%), and lack of enough attention and support from management to patient education (82.1%), perspectives of administrators to teach patients (82.1%) (29). In other studies, these barriers have been reported alike (1, 2, 5, 28).

Necessity of patient education and considering required facilities such as trained personnel, assigning appropriate time and place are clearly accepted. Physicians and nurses should try to reduce the barriers using various innovative ways of education and at the end, they have to be ensured that patients have got appropriate understanding (30, 31). Providing education for both patients and their families is a main responsibility of medical team members, especially nurses (30).

Inadequate implementation of patient education shows that there may be other barriers to patient education that is not mentioned yet.

2. Objectives

The present study aimed to investigate barriers to patient education from perspectives of working nurses in educational hospitals of Shahid Beheshti University of Medical Sciences and Tehran University of Medical Sciences in 2014.

3. Patients and Methods

A qualitative study with conventional content analysis approach was designed to gather perspectives of nurses

on barriers to patient education in educational hospitals at Shahid Beheshti University of Medical Sciences, Tehran University of Medical Sciences, Baqiyatallah University of Medical Sciences, Iran University of Medical Sciences, Hamadan University of Medical Sciences, Mashhad University of Medical Sciences, Alborz University of Medical Sciences in 2014. This approach permits the researcher to describe and explain the data and develop the dominant and major themes of the participants' experiences. The specific procedure of qualitative content analysis used in the present study was established on methods described by Sandelowski (32).

3.1. Ethical Issues

Official permission was obtained from the hospital in where the study was carried out. The participants were informed of the aim and procedure of the study. Anonymity and confidentiality were ensured. Informed consent forms were completed and signed by the participants. The researchers confirm that the nurses have read this manuscript and given their permission for it to be published in patient education and counseling.

3.2. Sampling

A purposeful sampling was used to recruit 25 nurses to the study. The participants were from different disciplines including matron (n = 1), excellent advisor for nursing affairs (n = 1), supervisors (n = 7), head nurses (n = 8), and nurses (n = 8). All the participants had worked for 7 - 30 years. The sampling was established on a maximum variant approach in terms of sex, level of education, and age. This sampling strategy enabled the researchers to capture a large range of views and experiences (32). The participants aged 29 - 50 years (mean = 36.48) and the duration of employment ranged 7-30 years (mean = 13).

3.3. Data Collection

The in-depth interviews were conducted in a private room. Each interview lasted 45 - 60 minutes. The interviews were commenced with a general open-ended question and then continued with complementary queries. We tried to motivate the participants to talk more about their views by asking probe questions. Data gathering and analysis were carried on simultaneously in order to develop themes connected to the actuality of the barriers to patient education from view point of nurses. Once the themes were recognized and data saturation was obtained, the interviews were terminated.

3.4. Data Analysis:

Each interview was recorded and transcribed verbatim and then analyzed using the conventional content analvsis method (32). Two researchers independently recognized and classified codes for the data. Then, the codes were compared. In areas where the researchers did not come in a conclusion, definitions were explained and discussions lasted until consensus was achieved. Regarding trustworthiness, credibility was founded through member checking, peer checking, and prolonged engagement. Member checking was done by asking the respondents to ascertain the preliminary findings from the earlier interviews. The rigor of the study was improved by asking five participants to compare the results of the study with their own experiences. Four expert supervisors and three other doctoral students of nursing conducted the peer checking. Prolonged engagement with the participants within the research field helped the first author to gain the participants trust and a better understanding of the research fields. Maximum variation of sampling also increased the conformability and credibility of the data. The researchers ensured the depth of the content and its authenticity by thoroughly recognizing different and novel data. The analysis was completed by recognizing a number of themes that appeared to explain the barriers to patient education from view point of the nurses.

4. Results

During the data analysis, five main themes were emerged: 1) Nursing personnel shortages; 2) Lack of adequate motivation and knowledge; 3) Inadequate facilities for patient education; 4) Ineffective communication; and 5) Insufficient control and supervision. The following narratives describe each theme by using frequent elements of descriptive words and quotations to broaden and pass on the meaning of each theme.

4.1. Theme 1: Nursing Personnel Shortages

Participants in the study expressed a wide range of issues related to personnel shortages in various aspects of clinical and educational domains. Most cases expressed in this area were lack of time, shortages of nurses, the obstacles that waste effective time, tedious work load, absenteeism, launching new wards, inappropriate planning in dividing staff, leaving work without informing others, cumbersome patients, delegating more than two works simultaneously, lack of the patient delivery system, lack of the uniform and coordinated system for implementing routine works.

The followings are some semantic expressions that are related to nursing personnel shortages theme:

The matron with 25 years of experience:

"This is not the standard of nurse/patient ratio. We have never been witnessed of the optimal nurse/patient ratio".

The third supervisor with 17 years of experience:

"It is proven to me that we don't even do anything for this problem. I mean that we don't get help for extra works from other personnel".

The first supervisor with nine years of experience:

"We have no time even for our official works such as giving medications to patients".

The fifth nurse with seven years of experience:

"I really have not good feeling because I have no time to educate my patients. I wish I could do my works along with education".

The first nurse with eight years of experience:

"How can I educate my patients; while I could not do half of my daily works".

4.2. Theme Two: Lack of Adequate Motivation and Knowledge in Nurses

Another theme that was identified as an obstacle to patient education in this study was lack of motivation and adequate knowledge in nurses to educate patients. Regarding the issue, nurses, themselves, can be barriers to or facilitators for patient education. In the process of educating patients, especially patients with chronic diseases who are hospitalized for a long time, scientific and practical abilities of nurses appear. Moreover, incompetent nurses who have knowledgeable patients do not like to speak with them because they fear that their patients remind their mistakes. It should be noticed that physicians in our community are respected and their recommendations are fully accepted by patients and their families. On the other hand, nurses and their roles and competences are not wellknown by the society. Most individuals, even educated people are not familiar with the scientific qualifications of nurses and consider nurses as individuals having just technical skills such as injection and dressing. Some people do not even know that nurses have academic degrees. The most expressed issues were: insufficient attention to the syllabus of the university course and ineffective curriculums, inadequate attention to the final exams, lack of comprehensive final exam for work permit, lack of practical contents in lessons taught, incongruent needs of patients and their families with the theories taught in schools, insufficient attention to the importance of education process and its continuous, inadequate follow-ups of implementation of the patient education program either in educational or in real environments, employing amateur instructors in clinical education, lack of intention to interests and abilities of faculty staff to teach various courses, discussing very simple and superficial concepts without attention to date subjects, lack of trust to nurses by patients, patients' willing to ask their questions from doctors, prioritizing other tasks and actions more than patient education. The followings are some semantic expressions that are related to lack of adequate motivation and knowledge theme:

The matron with 25 years of experience:

"Most of these insufficiencies are related to the course outlines. The nurse who has been graduated 17 years ago ..., well, many changes have been occurred during these years and the patients' educational needs are not matched with the nurses' information".

The excellent advisor for nursing affairs with 30 years of experience:

"Unfortunately, there is no comprehensive system to evaluate faculty and instructors who attend the clinics. They assess patients very superficially and without exact assessment".

The second supervisor with 28 years of experience;

"Many times, we have nothing to say; because we have not received appropriate education. Sometimes we cannot speak more than five minutes about a specific issue. Patients see this".

The first head nurse with eight years of experience:

"The low knowledge of nurses is sometimes due to patients' unwillingness. Sometimes, nurses want to educate patient, but patients don't accept, because patents don't accept educations from nursing system".

The seventh head nurse with 24 years education:

"Patients don't pay attention to the contents taught by nurses and in spite of receiving education, act base on their own experiences and beliefs".

The forth nurse with 20 years of experience:

"A major barrier in educating patients is nurses themselves. You see, we have a lot of problems in our work. Moreover, with the negative perspective others have about nursing, we have no eager to do innovative works".

The eighth nurse with 11 years of work experience:

"I taught a patient to breathe properly for about one hour. I don't know why, I forgot to record the intake and output of the patient. At the time of patient delivery, they reproached me and didn't notice that the patient was breathing properly".

4.3. Theme 3: Inadequate Facilities for Patient Education

Another major theme, inadequate facilities for patient education, was a challenging and dyadic concept with different opinions; because some participants did not believe in using instrumental technologies to enhance patients'

knowledge. They thought that there was no reason to spend funds in this regard. However, interestingly, nurses dealing directly with patients expressed that the use of instrumental technologies had a significant effect on increasing the effectiveness of educational processes. Moreover, some participants expressed that the effectiveness of various instruments are different. The most cited issues in this regard were lack of appropriate educational facilities, defect in medical equipment, and lack of a responsible and accountable individual for keeping the equipments and providing them timely, unfamiliarity of personnel on functions of the instrumental equipment, and systems' inability to provide temporary means for patients to practice. The followings are some semantic expressions that are related to inadequate facilities for the patient education theme:

The excellent advisor for nursing affairs with 30 years of experience:

"There is no necessity to allocate funds for this purpose. Staff should learn to train patients properly with the available facilities".

The sixth supervisor with 13 years of experience:

"There are two visions to this issue. There are equipments for nursing care and facilities for patient education. The second ones are usually in the cupboards that no one knows where the key is. We have also problems regarding the first ones that interfere indirectly".

The third head nurse with nine years of experience:

"These facilities from wheelchair to handling patients to educational instruments like projector should be available".

The forth head nurse with 15 years of work experience:

"Many times I wanted to show the correct insulin injection, but I had no device. If you had audio-visual facilities, it was much better".

The sixth nurse with 13 years of experience:

"Perhaps may be they never had educational sessions themselves. I interact with patients who undergo ventilation by papers. Well, it was much better if whiteboards were available".

The third nurse with 10 years of experience:

"The equipment can be helpful. For example, in the previous shift, the perfuzers were damaged. So, I had to use micro-sets for injecting medications to three patients. It took about two hours. If I neglected, patients' pressure would dropped. So, I had to work slowly. I had time for patient education".

4.4. Theme 4: Ineffective Communication

An important barrier to patient education was the way of communicating with patients. Ethnic diversity, different traditions and dialects caused problems for health care team members in communicating with patients and families. Moreover, using medical terms by physicians and nurses could be an important barrier in this regard. If patients understand the subject, they feel free to ask questions and have a proper communication. The most stated cases in this regard were lack of enough attention to the importance of communication with patients, patient dissatisfaction from the way nurses communicates with them, lack of communication skill in staff, inadequate personnel and patients' understanding of appropriate communication methods and their different dialects. The followings are some semantic expressions that are related to ineffective communication:

The matron with 25 years of experience:

"A patient may like to get information by speaking with nurse but the other may like to read a pamphlet. Different ways should be applied to different patients".

The fifth supervisor with 16 years of experience:

"Despite having effective communication skills, nurses don't communicate. For example Mrs. A. M. had contention with her patient in the first night, so she couldn't have a proper communication till the patient was discharged".

The fifth head nurse with seven years of experience:

"There is a delicate point. As a head nurse, I always emphasize on the importance of effective communication. I say that if cardiac patients learn how to care themselves only for one minute, it may prevent readmissions".

The sixth head nurse with 26 years of experience:

"This should also be noted that that's good if you create a two-way trust. I have a patient that after seven years now we are friends with each other. The communication is a piece of art".

The second nurse with 22 years of experience:

"When you have intimacy, patients make some requests that are impossible for you to do and this prevents a proper communications".

The second nurse with 22 years of experience:

"Two years ago, when my patient was discharged, I cried two days for her, because I had established emotional relationship with her (during the interview she began to cry)".

4.5. Theme 5: Insufficient Control and Supervision

Controlling and monitoring are eyes of organizations. Considering the importance of proper patient education and disadvantages of incorrect educations, proper rules and regulations should be provided to supervising patient education processes. Unfortunately, this issue was inconsistent in many cases with what the study participants expressed. Many participants believed that controlling and supervision should be valued by all levels of

nursing staff. Moreover, the majority of the participants stated that evaluation of patient education programs are not conducted correctly, and managers and officials evaluate nurses regardless of their patient education activity. Most cases expressed in this area were lack of systematic follow-up and disciplinary supervision, lack of recording system to report the educational activities, insufficient attention to the importance of patient education. Here are some statements regarding insufficient supervision and control theme:

The excellent advisor for nursing affairs with 30 years of experience:

"Hospital management gives too little attention to the patient education program. Even two years ago there was a debate if the patient education is nurses' responsibility or the general practitioners".

The second nurse with 22 years of experience:

"Our assessment problem is that the patient education program is not considered in hospitals planning and budgeting. Nevertheless, appropriate supervision should be done".

The seventh supervisor with 11 years of experience:

"We have no guidelines and assessment models for patient education program. Certainly, the assessments are carried out based on the desire. The experiences are different".

The eighth head nurse with 16 years of experience:

"Patient education is a part of nursing responsibilities, but I have not ever seen that a nurse was asked for not doing her work. We, ourselves, monitor this issue; however it is not systematic and regular. Well, for a work that there is no payment and no asking why nurses do that".

The sixth nurse with 13 years of experience:

"No one asks you what you are doing for your patient in the shift. The supervisors don't ask how many patients you educated. They just ask how many patients are there and have you any to discharge".

5. Discussion

In the present study, a wide range of barriers to patient education was recognized. Certainly, considering those barriers and trying to solve them can provide effective training to patients and their families. An overview of the categories and themes derived from this study shows that there was a clear contrast in the way of patient education and implementation processes in the real and in verbal statements of participants. The theme that might best be able to describe this is the personnel shortages that were expressed as the first theme in this study. The

necessity of patient education was expressed by all participants. However, patient education is not fully implemented due to lack of an appropriate nurse/patient ratio. Kalisch et al. reported that nursing staff shortages caused inappropriate clinical nursing care. They have identified three reasons for severe shortage of nursing staff: 1) Lack of a proper nurse/patient ratio; 2) Shifts which are faced with a shortage of manpower because of absence due to illness; 3) Heavy work (such as high number of patient acceptance and discharge) (33). Many studies have noted the disproportion in the number of patients to nurses and its consequences. A study has shown that eight patients per nurse is a minimum of personnel, however this ratio may result in increasing death rates; while a ratio of four patients to one nurse is optimal and decrease mortality rates. The researchers pointed out that fewer ratios were cost effective and shortened the duration of hospital stay (2, 34). This report which is inconsistent with other findings has more economic considerations and does not mention the quality of nursing care.

In this study, low motivation and knowledge of the nurses and the role of nursing schools in this major barrier to patient education was expressed. Insufficient scientific vigor of nurses can directly be associated with the nursing schools programs. The nursing schools have an important role in the patient education training and proper educational programs can reduce the gap between theory and practice in clinical care settings. The main problem of patient education in clinical settings arises from nursing schools. As long as the training of nursing students is the same, the problem will remain. The educations are provided very superficially and the students and instructors are afraid of practicing clinically (1). Regarding low motivation in nurses, the researchers found that lack of attention to clinical conditions of nurses (lack of sufficient time and personnel, proper work habits, willingness to learn new skills) can be an essential influencing factor. Nurses as individuals who supply the needs of patients have their own needs, which should be essentially met. The result will be relative preparedness of nurses which can have favorable effect on patients' conditions in different situations.

The other theme expressed in this study was the importance of adequate facilities and how to use them in the process of educating patients. According to Stoop and et al. replacement of computerized systems with traditional forms of training was not influential due to low literacy and low concentration of patients. They recommended that it was better to provide those systems along with the pamphlets, movies, etc. as complementary methods (34). It is worthy to notice that patient education should be based on clients' needs and conditions not the interests of staff. For example, elderly learn better through visual aids

than audio devices. Some are willing to learn through attending in classes than using audiovisual devices (35, 36). This emphasizes the need for patient assessment in order to provide educational methods.

In recent decades, general public attitudes tend to implementing patient education and providing necessary knowledge by health care team members to patients and their families by which patients are able to make decisions on their disease (37-41). This can be accomplished through effective interaction and communication with patients. Various research studies have shown that physician/patient relationship plays an important role in patients' satisfactions, patients follow ups, treatment processes, early recoveries, reduced costs of hospitalizations and treatments, and the clinical competences (40). It can be stated that one reason for weakness in this area is lack of appropriate courses to teach communication skills in nursing program which result in ineffective communication (41) and led to even requests outside of the scope and power of nurses. The vital role of effective communication should be noticed by which patients feel free in expressing their needs and asking their questions. This situation makes listening and learning the subjects taught by nurses to be simple (39). Informing patients on their right to receive comprehensive training emphasizes on patientcentered education and central concept of patient empowerment. It is believed that patient empowerment and patient-centered approaches are integrated parts of patient education (40). Having good communication skills and being sensitive to the needs of patients are preconditions of covering this concept (8, 15).

Regarding control and supervision, it is believed that a care system without regular monitoring could not have effective productivity. However, establishment of a rigid and autocratic system can be most powerful barrier to patient education. The problem is lack of a regular monitoring system and protocol consistent with the specific needs of wards. It should be noticed that different conditions of patients and personnel should be considered and based on these conditions and rules and regulations of organizations, the patient education protocol should be provided. This issue is noticed in a study conducted by Khademalhoseini et al. as two independent themes of factors related to good management by instructors (discipline, monitoring tasks, student's satisfactions and devoting enough time) and factors related to the mismanagement by instructors (lack of accurate evaluation and low satisfaction of students) (42).

5.1. Conclusion

It is concluded that introducing patient education to nursing staff as competent personnel to provide patient education in correct processes and supporting provided by doctors and managers can largely be helpful to resolve barriers to this important issue. The nursing program planning officials should consider the barriers to patient education in order to provide resolution to increase quality and effectiveness of educational programs in hospitals and nursing schools.

5.2. Practice Implications

Due to the need and determine barriers to patient education, improvement and promotion of scientific motivational communicational skills in different environments can solve this problem as a master key and improve this basic need. The three-fold skills mentioned can effectively have an important role in reducing, modifying and even removing five main barriers to patient education including nursing personnel shortages, lack of adequate motivation and knowledge, inadequate facilities for patient education, ineffective communication, and insufficient control and supervision. Also, improving these skills can be undertaken with minimal financial and human costs that in this regard play a significant role in increasing its operational.

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Footnotes

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