

Original article**Nursing students' perspectives regarding challenges of patient education in clinical settings***Badiyepymaiejahromi Z¹, Isfahani SS², Parandavar N³, Rahmanian A⁴***Abstract**

Background: Patient education is an important component of patient care. It includes all educational activities to help patients and their families in order to make informed decisions about the disease and learn self-care skills. This study was conducted to investigate nursing students' perspectives regarding the challenges of patient education in clinical settings. **Material and Methods:** This descriptive cross-sectional study was conducted on 78 third and fourth year nursing students of Jahrom University of Medical Sciences who were selected by census method. Data were collected through a valid and reliable questionnaire consisted of four parts. The first part was about demographic data, the second included 16 questions about importance of patient education, the third and fourth part contained 20 questions about challenges of patient education, 10 questions assessed barriers and 10 questions were about facilitators of patient education in clinical settings. **Results:** From the nursing students' perspective, the average importance of patient education was 4.36 ± 0.05 out of 5. The most important challenges regarding barriers of patient education were; lack of resources and educational tools, lack of enough time, inadequate knowledge and skills of the nurse, and lack of patient readiness both physically and psychologically. Also, the most important facilitators were; high skill and knowledge, having interest to education and phased implementation of patients' education with respect to the patients' condition. There was no relationship between academic year, sex and average grade with importance of patient education total score ($p=0>05$). **Conclusion:** Nursing managers and educational supervisors of hospitals need to pursue patients' education programs with rely on the standards developed at national and international accreditation programs as a major strategy and provide necessary resources and educational tools.

Keywords: Challenges of patient education; Barriers; Facilitators; Nursing students

Bangladesh Journal of Medical Science Vol. 15 No. 04 October'16

Introduction

Patient education is an important component of patient care. It includes all educational activities to help patients and their families in order to make informed decisions about the disease and learn self-care skills¹. Providing patients with enough information is a major factor in patient-centered care and determines the quality of care², and can increase patients' satisfaction and adaptation to their diseases and reduce their anxiety³.

In contemporary health care, patient education

is a patient's right and a health care provider's responsibility Patient education is a patient's right and should be a part of patient's care and treatment. The key to the success of the treatment is providing appropriate education to patients and attract their cooperation and efforts to achieve health. Therefore, the main strategy to improve public health is through promotion of public health literacy and in this way, patient education has greater priority¹.

Low health literacy has a negative impact on a patient's health status and use of the health care

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system. Patients with low health literacy levels cannot make decisions regarding their health care or follow instructions on medications and health maintenance behaviors. It is the health care provider's responsibility to ensure that patients with low health literacy levels are identified and measures are taken to ensure those patients understand their options and instructions⁴.

One of the concepts related to patient education is health literacy. Health literacy is the patient's capacity of obtaining, processing, and understanding basic healthcare information and making proper healthcare decisions accordingly. In other words, health literacy means creating health information and using it to facilitate healthcare-related measures⁵. Nursing teachers refer to the following as important interventions that can be exercised by nursing students to affect patients' health literacy: noticing the patient's language, enhancing the patient's understanding and encouraging the patient to participate in the treatment process⁶.

36 percent of the adults in the U.S. have low health literacy, and among them, the elderly, the minorities, non-English speakers, the undereducated and individuals with a low social or economical status are more likely to suffer from poor health literacy³. Patients with poor health literacy are less capable at fully understanding medical instructions, taking preventive measures and controlling their chronic diseases, and, consequently, visit their doctors and are hospitalized more^{7, 8}.

Since the number of people affected by chronic diseases is increasing, it is essential that healthcare personnel have the required knowledge and skills to help patients with poor health literacy. However, according to Edwadson, clinical nurses' performance of patient education is not satisfactory and they only educate patients informally and on an ad hoc basis and treat it as a less important undertaking⁹. In a study by Deccache et al., few of the patients stated that they had received enough information and counseling with regard to their health conditions¹⁰. Similarly, Weech's study shows that patients are not satisfied with their education¹¹.

In order to teach methods of patient education to nursing students, nursing teachers need to design educational strategies based on educational and clinical charters, as well as the results of related research and theories. In other words, the strategies for teaching patient education should be based on evidence as produced by research⁵. Since the best

way to analyze a problem is to start from the source, and nursing students, who provide care alongside nurses and teachers, are going to be tomorrow's nurses, it is necessary that their views on patient education be identified and studied. Thus, the present study aims to explore the barriers and facilitators of patient education in clinical environments from the viewpoint of nursing students.

Materials and Methods

This is a descriptive-cross-sectional study. The study population consisted of the entire senior and junior nursing students (85 students) at the nursing college of Jahrom University of Medical Sciences in 2014. Due to the small size of the population, a census was conducted and 78 questionnaires were completed. First- and second-year students were excluded because they were new in the clinical environments, had not been trained in some wards and were not familiar with problems related to patient education. Inclusion criteria were willingness to participate and being a third- or fourth-year student.

Once the research project was approved by the Research Department and the Ethics Committee at Jahrom University of Medical Sciences, the dean of the college of nursing was presented with the introduction papers. With the permission of the teacher, at the end of one of the classes, the objectives of the study were explained to the students by the co-researcher who did not have a part in the students' education. Next, the questionnaires were distributed and the students were asked to complete them.

The questionnaire used in the study was the patient education questionnaire designed by Taheri et al.¹². It consists of four parts: The first part was about demographic data, the second included 16 questions about importance of patient education, the third and fourth part contained 20 questions about challenges of patient education, 10 questions assessed barriers and 10 questions were about facilitators of patient education in clinical settings. The reliability of the questionnaire was verified by the retest method: the barriers and the facilitators had the reliabilities of 0.75 and 0.78, respectively.

For ethical considerations, the researcher explained the objectives to the subjects and assured them that their information would be treated as confidential. Also, the questionnaires were nameless and the researcher had the students' conscious consent for participation in the study.

Data were entered into SPSS version 16.0. Descriptive and analytic statistics were used to analyze the data.

Level of significance was set at 0.05.

Results

78 of the 85 distributed questionnaires were completed and handed in. The average age and average grade of the participating students were, respectively, 21.66 ± 1.44 and 16.09 ± 1.21 . The majority of the students were female (60.3%) and fourth year (55%).

From the students' perspective the average importance of patient education was 4.36 ± 0.05 out of 5.

Also, the most important barriers to patient education were: lack of resources and educational tools (4.34 ± 0.99), lack of enough time (4.31 ± 1.10), inadequate knowledge and skills of the nurse (4.29 ± 0.59), and lack of patient readiness both physically and psychologically (4.26 ± 0.67).

On the other hand, the most important facilitators were high skill and knowledge (4.49 ± 0.50), having interest to education (4.44 ± 0.74), and phased implementation of patients' education (4.40 ± 0.49) with respect to the patient's condition.

In this study the relationship between other variables such as academic year, sex and average grade were not statistically significant regarding the importance of patient education (Table 1).

Table 1. Correlations between characteristics of nursing students and importance of patient education total score

importance of patient education		variables
P-value		
0.23	-0.16	Academic year
0.508	0.04	Sex
0.61	0.07	Average grade

Discussion

According to the nursing students, insufficient educational tools and resources and time limitation are the most significant barriers to patient education. Likewise, Mardanian Dehkordi et al. found insufficient staff, time limitation, and inadequate educational tools and resources to be the three factors inhibiting patient education¹³.

Among the educational materials that can be used alongside oral instructions are printed materials, such as books, pamphlets, and newsletters, as well as multimedia products, such as videos, web-pages, and computer programs. Face-to-face education, computer-assisted education, telephone-based education, and newsletters can be used to reinforce patient education. For instance, newsletters containing

information about the causes and symptoms of diseases, medications, diets and exercise can be sent out to patients weekly or monthly through e-mail¹. Communication tools of different kinds can enhance patients' understanding of their problems; however, organized, planned, and interactive efforts can increase the efficiency of such education¹⁴.

Time limitation has been referred to as a major barrier to patient education in other studies¹⁵⁻¹⁷, which is in accordance with the findings of the present study. According to Dehghani et al., in view of the increase in nurses' workload, the appointing certain nurses for patient education can act as a facilitator¹⁸. Also, it is necessary that the number of personnel be enough, or one or two nurses be appointed to educate patients and clarify the responsibilities of the medical team with respect to patient education¹³.

Inadequate knowledge and skills on the part of nurses is another major barrier to patient education. This finding is in agreement with the results of other similar studies^{12, 19-21}. Similarly, Aghakhani et al. cite the following as important barriers to patient education: nurses' inadequate knowledge about the importance of patient education, the belief that such education has little influence on the quality of treatment, and nurses' lack of interest in undertaking patient education²². Likewise, Namdari finds the educators' insufficient knowledge, skills, and interest to be the main barriers to patient education²³. Vahedian Azimi et al. mention that nurses' inadequate academic knowledge is the direct result of the education they receive at colleges: colleges play an important role in the education of nurses and can facilitate the implementation of patient education in clinical environments²¹.

Another significant barrier to patient education is patients' physical and psychological unreadiness. Due to physical disorders and the resultant anxiety, patients may not be ready for education, or even realize the importance of education in their case²⁴. Other studies have similarly referred to psychological disorders and lack of physical preparation on the part of patients as major obstacles to patient education^{12, 22, 25-29}. It should be noted that at the time of diagnosis, most patients are not prepared for education: being diagnosed with a disease is the beginning of a crisis for most people. The best time for education is when patients are in stable conditions and have begun to adapt to their new lives¹. In his study, Beagley refers to literacy, culture, language and physiological factors as barriers to presentation of information by care providers, and mentions that nurses must

consider the fact that different people have different learning styles and evaluate patients' needs and level of preparation before they start patient education³⁰.

On the other hand, increasing nurses' knowledge and skills was referred to as the most important facilitator of patient education. Lupon believes that nurses with a better academic knowledge are more successful at patient education³¹. Some nursing teachers believe that having the following skills is essential to patient education: being able to prepare patients for healthcare and interaction with care providers, screening patients with poor health literacy, evaluating the educational pamphlets and scripts, making interventions to increase patients' health literacy, and evaluating patients' learning results^{32,33}. Also, it is important that patient education influence patients' attitudes and beliefs about learning, education, and their treatment. Decision-makers need to ask themselves the following questions: does the patient have a part in the learning process or is he /she merely a learner who is being treated? Does the interaction between the patient and the nurse concern the patient's needs and beliefs or is it a one-sided communication based on standard tools?¹. Thus, nursing teachers' familiarity with recent advances in patient education and practical approaches to performing it is essential to nursing students' acquisition of the required knowledge and skills for patient education.

Raising interest in educating nurses was found to be another important facilitator. Similarly, Moridi et al. conclude that interesting nurses in patient education and encouraging patients to learn and participate can facilitate such education³⁴. At the same time, nurses mention that patient education does not lead to job promotion^{22, 35}. With regard to nursing education, teachers' disregard for patient education programs and the absence of a systematic program for the evaluation of nursing students' implementation of patient education during their training and trial courses can inhibit the development of patient education. Therefore, teachers' consideration of the educating role of students during their training and managers' consideration and evaluation of the educating role of new nurses at the beginning of their careers can motivate nurses to educate their patients as best as they can.

The results show that a step-by-step implementation of patient education is another factor that can facilitate such education. For effective education, first

the patient's needs should be identified; then, based on his/her needs, educational background, culture, available facilities, and length of hospitalization, an education plan should be developed, prioritized, implemented and evaluated³⁶. Moreover, due to the vastness of the information that has to be communicated and changes in patients' conditions and treatments that may occur over time, most patients are in need of frequent education. Due to the limitation of the study environment to one academic center, the transferability of the results is limited. Therefore, more studies of nursing students and nurses in other hospitals seem necessary. It is also suggested that qualitative studies be conducted to complement the available quantitative research and identify and analyze the issues related to patient education more profoundly. Moreover, teachers' views on the barriers to and facilitators of patient education should be studied.

Conclusion

From the nursing students' perspective, the most important challenges regarding barriers of patient education were; lack of resources and educational tools, lack of enough time, inadequate knowledge and skills of the nurse, and lack of patient readiness both physically and psychologically. Also, the most important facilitators were; high skill and knowledge, having interest to education and phased implementation of patient's education with respect to the patient's condition. Also, by reducing the workload encourage nurses to consider enough time for patients education and with implementing in-service training improve knowledge and skills of nurses and familiarize them with different types of training methods. Nursing educators should also integrate patient education as a basic structure within the curriculum meanwhile teaching topics and in this way increase the skills, knowledge and interest of nursing students and empower them in patient education.

Acknowledgement

This paper presents the results of a research project approved by the Jahrom University of Medical Sciences, Ethics Committee code of JUMS. REC.1391.006. Hereby, the authors give their thanks to all nursing students who participated in the study, and appreciate the help of the Vice-Chancellor of Jahrom University of Medical Sciences who arranged for financial support of this project.

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