

**Original article**

**A Study of the Barriers and Facilitators of Patient Education from the Viewpoint of Nursing Students at Jahrom College of Nursing**

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**Abstract:**

**Objective:** Patient education is the process of enhancing patients' knowledge and skills in order to encourage the required attitude and behaviors for maintaining or improving their health. This study aims to explore the barriers and facilitators of patient education in clinical environments from the viewpoint of nursing students. **Materials and Method:** 78 senior and junior nursing students at Jahrom University of Medical Sciences formed the participants of this descriptive-cross-sectional study. The participants were selected based on the census method. The questionnaire used to collect data included questions about students' demography, barriers (10 questions), and facilitators (10 questions) in patient education. **Results:** The most important barriers to patient education were lack of appropriate educational facilities ( $4.34 \pm 0.99$ ), time limitation ( $4.31 \pm 1.10$ ), and nurses' inadequate knowledge and skills ( $4.29 \pm 0.59$ ). The most important facilitators were enhancing the knowledge and skills of educator ( $4.49 \pm 0.50$ ), raising the interest of the educator ( $4.44 \pm 0.74$ ), and implementing of the education step-by-step ( $4.40 \pm 0.49$ ). **Conclusion:** Patient education is an important part of patient care thus nursing teachers should be encouraged to incorporate patient education in the curriculum as part of the introduction of diseases, and stress such issues as evaluation of patients' health literacy, familiarity with educational tools, and methods of enabling patients.

**Key words:** patient education; nursing students; barriers; facilitators

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**Introduction:**

Patient education is the process of enhancing patients' knowledge and skills in order to encourage the required attitude and behaviors for maintaining or improving their health. Such education includes all the educational activities that are meant for patients—treatment, hygiene, clinical health improvement—and are intended to encourage self-care and reduce mortality and the side effects of treatments<sup>1</sup>. As one of the major indexes of patient-centered care, patient education affects the effectiveness and quality of care<sup>2</sup>, and can increase patients' satisfaction and adaptation to their diseases and reduce their anxiety<sup>3,4</sup>.

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 measures<sup>5</sup>. 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 process<sup>6</sup>.

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 literacy<sup>3</sup>. 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<sup>7,8</sup>.

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 Edwadsen, clinical nurses' performance of patient education is not satisfactory and they only educate patients informally and on an ad hoc basis

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and treat it as a less important undertaking <sup>9</sup>. In a study by Deccache at al., few of the patients stated that they had received enough information and counseling with regard to their health conditions <sup>10</sup>. Similarly, Weech's study shows that patients are not satisfied with their education <sup>11</sup>.

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 research <sup>5</sup>. 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

Table 1. Mean, standard deviation and prioritize barriers of patient education from the perspective of nursing students

barriers	Mean ± SD	Priority
lack of appropriate educational facilities	4.34±0.99	1
time limitation	4.31±1.10	2
inadequate knowledge and skills	4.29±0.59	3
patients' lack of physical and emotional preparation	4.26±0.67	4
lack of a proper environment for patient education	4.22±0.76	5
Lack of trust between patient and provider education	4.18±0.85	6
discontinuity of nurses collaboration in patient education	3.85±1.06	7
discontinuity of patient education in different shift work	3.77±1.06	8
Patient education is not a priority compared to other nursing duties	3.64±0.99	9
Shortage of nurses	3.61±1.25	10

Table 2. Mean, standard deviation and prioritize facilitators of patient education from the perspective of nurses

Facilitators	Mean ± SD	Priority
enhancing the knowledge and skills of educator	4.49±0.50	1
raising the interest of the educator	4.45±0.74	2
implementing of the education step-by-step	4.40±0.49	3
raising participation of Patient in teaching and learning	4.35±0.73	4
Considering one or two nurses dedicated to patient education.	4.32±0.75	5
More importance to the evaluation of patient education	4.30±0.79	6
Use Educational assistance devices	4.27±0.73	7
Planning based on suitable time and place of education	4.22±0.87	8
Considering information pamphlet guide to teach a specific topic	4.20±0.71	9
greater emphasis of teachers and administrators on patient education	4.17±1.00	10

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 tool used in the study was the patient education questionnaire designed by Taheri et al.<sup>12</sup>. The questionnaire consists of three parts: demographic information, the barriers (10 items), and the facilitators (10 items). Based on the Likert scale, each item was scored from 5 to 1, with 5 being the most important. 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 statistics—e.g. frequency, mean, standard deviation—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,  $21.66 \pm 1.44$  and  $16.09 \pm 1.21$ . The majority of the students were female (60.3%). From the students' viewpoint, the most important barriers to patient education were: lack of appropriate educational facilities ( $4.34 \pm 0.99$ ), time limitation ( $4.31 \pm 1.10$ ), nurses' inadequate knowledge and skills ( $4.29 \pm 0.59$ ), and patients' physical and psychological unreadiness ( $4.26 \pm 0.67$ ). On the other hand, the most important facilitators were enhancing the knowledge and skills of educator ( $4.49 \pm 0.50$ ), raising the interest of the educator ( $4.44 \pm 0.74$ ), and implementing of the education step-by-step ( $4.40 \pm 0.49$ ).

### **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 education<sup>13</sup>.

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-mail<sup>1</sup>. Communication tools of different kinds can enhance patients' understanding of their problems; however, organized, planned, and interactive efforts can increase the efficiency of such education<sup>14</sup>.

Time limitation has been referred to as a major barrier to patient education in other studies<sup>15-17</sup>, 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 facilitator<sup>18</sup>. 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 education<sup>13</sup>.

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<sup>12, 19-21</sup>. 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 education<sup>22</sup>. Likewise, Namdari finds the educators' insufficient knowledge, skills, and interest to be the main barriers to patient education<sup>23</sup>. 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 environments<sup>21</sup>.

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 case<sup>24</sup>. Other studies have similarly referred to psychological disorders and lack of physical preparation on the part of patients as major obstacles to patient education<sup>12, 22, 25-29</sup>. 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 lives<sup>1</sup>. 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 education<sup>30</sup>.

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 education<sup>31</sup>. 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<sup>32, 33</sup>. 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?<sup>1</sup>. 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 education<sup>34</sup>. At the same time, nurses mention that patient education does not lead to job promotion<sup>22, 35</sup>. 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 evaluated<sup>36</sup>. 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:**

Being an important part of healthcare, patient education should be conducted through effective strategies. Nurses who educate patients need to have the required skills for evaluating patients' educational needs and deciding what kind of education to present. Patient education is not simply the transference of information and making patients act according to instructions: ineffective education is wasting both the educator's and the patient's time. The results of the study show that nursing teachers should be encouraged to incorporate patient education in the curriculum as part of the introduction of diseases, and stress such issues as evaluation of patients' health literacy, familiarity with educational tools, and methods of enabling patients.

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**Conflict of interest:** None

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