RESEARCH ARTICLE



Assessing the nurses' views on educational needs in patient education in 2016

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Abstract

Introduction: Educational needs assessment of nurses in patient education domain is a logical and principled educational strategy to promote their capabilities in order to maintain their knowledge, skills and attitude in providing quality healthcare services to patients. This study was aimed to evaluate the nurses' perspectives on educational needs in patient education at Imam Hosein hospital, affiliated to Shahid Beheshti University of Medical Sciences, in 2016.

Materials and Methods: In this descriptive-analytic study, 215 who were nurses working at Imam Hosein hospital were selected as participants of the study. Data were collected by two researcher-made questionnaires. The content validity of the questionnaires was measured by ten experts. Based on Lawshe's table, the CVI for all items was also greater than 0.8. The reliability and internal consistency were confirmed by Cronbach's alpha (0.945 and 0.967) and interclass correlation coefficient (ICC) (0.974 and 0.987). Data were analyzed by SPSS (Version 21) software.

Results: The first fourteen priorities of educational needs included familiarity with "advanced organizers" model, familiarity with "retention" model, familiarity with "checklist construction" (skill checklist) for the patient and family, familiarity with "mastery learning" model, familiarity with different assessments (diagnostic, formative, achievement), familiarity with constructing written exams for the patient and family, familiarity with constructing oral exams for the patient and family, knowledge of various types of assessment for the patient and family and using the results of assessment, knowledge of different levels of objectives in attitude domain, knowledge of different levels of objectives in psychomotor domain, knowledge of designing a ten-minute training lecture for the patient and family, knowledge of making appropriate relationship with a non-native patient and knowledge of different levels of objectives in cognitive domain.

Conclusion: The results showed that the knowledge and performance of nurses in patient education are facing challenges, so promoting the knowledge, attitude and performance of the treatment personnel in patient education can direct us to promote education in this domain.

Keywords: Training needs, nurses, patient education.

Introduction

The role of nurses in the current society has extensively changed and is not limited only to treatment activities, as it was in the past. This change makes the nurses to fulfill their duties in general dimensions. The role of nurse is multidimensional and is dependent upon considering the patient as a biosocial set in specific conditions that requires the use of various trainings. Training the personnel needs planning in order to be effective along with other activities to achieve the objectives of organization [1]. This is accomplished through educational planning, which needs to be done step by step. The first step of educational planning is determining (identification and prioritization) the educational needs, which, if planned and performed accurately, will be a significant step in making the education and consequently organization efficient [2].

Educational needs are one of the major inputs of an

education system, which is the principal basis of planning, implementation and assessment of the system activities. The learners in most of the times have to learn the materials that have no application in their career domain. This is because of two reasons: inaccuracy in needs assessment and absence of needs assessment during education process. Hence, the first barrier to efficacy of educational programs is their incompatibility with the needs of the audience and participants [1]. Analyzing the educational needs of the nurses, in addition to promoting their knowledge and providing better quality healthcare services, can assist the authorities of regular and in-service educational planning to design the educational programs based on the real needs of the personnel.

Planning without educational needs assessment does not help the learners to learn the materials related to their work, thereby wasting the time and money of both the patients and the country. Therefore, if the educational needs of the manpower are not assessed, their career development and maturity cannot be enhanced [2].

Nurses as one of the members of the health team are in direct contact with the patients and try to satisfy the needs of the patients in clinical environments and in society at macro level. They have numerous roles in providing the healthcare services such as education, research, counselling, support and coordination. In cooperation with other members of the health team, nurses require correct education based on the educational needs in order to provide optimum conditions to present quality educational and treatment services to patients [3]. Further, because the nurses greatly affect the patients' behavior and performance change, it is necessary to identify their educational needs to favorably continue the treatment process [4].

The philosophy of patient education is application of the learned knowledge and skills by the nurses to control and cope with the disease, which is an important aspect of improving quality care and an integral part of the patients' right and is implemented by the healthcare team, especially the nurses [5]. The role of nurses, as the key members of the health and treatment team, has been undergoing a dramatic change in the recent years, and this change is oriented from promotion of patient-centered health education to empowerment of patient self-care and health. Empowering the nurses by analyzing their educational needs facilitates the process of informing the patients and getting them involved in the decision-making process and reduces the hospitalization time and readmission to hospital, so it is quite important economically and socially [6]. In general, for every dollar spent on patient education, 3-4 dollars are saved in the costs. According to the statistics presented in the U.S., about 69-100 million dollars are spent annually on the problems associated with absence of education [5].

It should be noted that nurses achieve favorable healthcare objectives when they proceed to do patient education in line with correct care based on nursing realizations and sufficient skills acquired through educational needs assessment [6]. To accomplish the requirements of patient education, in addition to the use of open communicative styles, it is necessary to identify the barriers to and motives of patient education from the viewpoint of the people involved in the education process and to analyze the educational needs of the trained personnel [5].

The results of Rostami showed that employment, education, employment sector, working shift, gender, age and additional shifts of nurses were correlated with some barriers to patient education [7]. Alhani et al. reported that nursing authorities' knowledge of the nurses' educational and clinical needs in patient education and significance

of more knowledge in creating motivation facilitate the revision, organization and needs-based planning in in-service programs, distant learning, etc. [8]. To this end, attention to regular training in the nursing profession seems necessary. Thus, competent and trained personnel are required to create the required motivation in the people in order to provide more effective services and coordination among the healthcare and treatment team members, thereby making the team more dynamic. Therefore, proper training of staff based on the real needs in order to improve the performance has a dramatic impact on the efficiency of personnel and providing quality services [9].

Despite the significance of patient education, nurses neglect their educational role. In addition, evidence is indicative of the patients' little awareness of their disease and self-care [10]. Some researchers believe applying facilitating factors lead to success in patient education. Age, economic status and patient anxiety are some barriers to patient education [11]. Most importantly, nurses' inadequate knowledge about their roles and lack of information about diseases, staff shortages and lack of appropriate place and time are other barriers to patient education among nurses [12].

It has been documented that patients suffer from numerous problems such as daily activities, insecurity and anxiety, emotional problems and, lack of knowledge about drugs and diet after discharge from hospital [13]. Since insufficient patient education is one of the major factors involved in the weakness, control, rehospitalization and other complications after discharge, it is necessary to plan to empower the nurses to play their roles properly [14]. Numerous models have been proposed for planning among which the six-stage model is more common. This model consists of: 1- identification of problems and general needs assessment, 2- needs analysis of the target learners, 3- designing the general and specific measurable objectives, 4- determining educational strategies, 5- implementation of program and 6- assessment of program and feedback.

As observed, to design a patient education program for the nurses, the existing problem should be identified, followed by general needs assessment. Then, specific needs assessment of the target learners should be performed [15]. Therefore, it is necessary in the first stage to consider the nurses' opinions in this domain and in the second stage, the target learners' (nurses) needs should be taken into account.

Hence, considering the major problems associated with the education system of hospitals and healthcare centers in Iran with regard to patient education, and because of the urgent need of the country to improve the quality of services and promote the capabilities of the health systems, to reduce the costs, to increase satisfaction with medical services, to appreciate the clients and to enhance the health, dynamicity and stability of society, the present study was conducted to evaluate the perspectives of nurses about their educational needs in the realm of patient education in the clinical wards of Imam Hosein hospital, affiliated to Shahid Beheshti University.

The results of this study can be used in regular nursing educational programs, and authorities of in-service training programs, by identifying the educational needs of nurses, can design training courses in appropriate time with proper duration based on the needs of the learners. In nursing services domain, the findings of this study can be used in regular educational planning, and nurses can gain sufficient information where they need and play their best role in healthcare and management. The results of this study can also draw the attention of the nursing managers to this point that use of educational needs assessments and planning accordingly will provide the nurses and other personnel with useful information, and they can get the required trainings without a high cost and too much time, based on the needs of each ward and hospital. This study was an attempt to analyze the educational needs of nurses at Imam Hosein hospital in Tehran, Iran.

Methods

The study population of this descriptive-analytical study comprised of the nurses working at Imam Hosein hospital. To determine the samples size, five samples were considered for each question, totaling 215 samples eventually. Data were collected by two researcher-made questionnaires, including patient education assessment questionnaire (general questionnaire) and nurses' educational needs assessment scale (specific questionnaire).

The content validity of the questionnaires were confirmed by ten faculty members and educational supervisors who were expert in patient education. In addition to the face validity, the content validity of the researcher-made questionnaires was evaluated by CVI and CVR. The CVR, based on Lawshe's table, was compared with the value 0.62, which was higher than this level for all items. The CVI for all items was more than 0.8. The reliability and internal consistency of the tools were evaluated by Cronbach's alpha and interclass consistency coefficient (ICC) (0.945 and 0.967), respectively. To determine the reliability of the questionnaires by test-retest method, 20 participants completed the questionnaires in two periods with two weeks interval, and ICC was reported.

Having taken permission from the management of Imam Hosein hospital, the questionnaires were distributed among the nurses in clinical departments. First, the researcher submitted the patient education assessment questionnaire to the nurses, followed by nurses' educational needs assessment scale. The questionnaires were completed by the nurses, and the obtained data were fed into SPSS software. The obtained data were then ordered and classified in tertiles (high tertile, moderate tertile and low tertile). Finally, based on the mean responses of nurses to the general and specific questionnaires, the low tertile was introduced as priorities of educational needs and the high tertile was reported as the factors affecting patient education. Study was approved by the ethical committee of Shahied Beheshti University of Medical Sciences (No: 9202) in 10 Jun 2016.

It is noteworthy that quantitative variables were reported by mean and standard deviation, or median and range, and qualitative variables were reported as frequency and percentage. To determine each domain of the questionnaires, exploratory factor analysis with main components and orthogonal rotation were performed. Bartlett's test was used to analyze the adequacy of sample size and to perform factor analysis.

The number of factors was determined by pebble graph. To assign questions to the factors, the cutting point 0.3 was considered for the factor load, and Cronbach's alpha was calculated for each factor. Chi-square test was used to compare the qualitative variables. Data were analyzed by SPSS (Version 21) at significance level 0.05.

Results

The results indicated that the first fourteen priorities of educational needs based on the mean responses to the items of questionnaires included familiarity with "advanced organizers", familiarity with "remembering" model, familiarity with making skill checklist for the patient and family, familiarity with "mastery learning" model, familiarity with assessments (diagnostic, formative, achievement), familiarity with constructing written tests for the patient/ family, familiarity with constructing oral tests for the patient/ family, knowledge of different assessments for the patient/ family and use of the assessment results, knowledge of different levels of objectives in attitude domain, knowledge of different levels of objectives in psychomotor domain, knowledge of different levels of objectives in cognitive domain, familiarity with designing a ten-minute educational lecture for the patient/family and familiarity with making appropriate relationship with patients with different languages.

Moreover, based on the nurses' responses, the factors involved in and barriers to patient education included nursing staff's shortage of time, too many responsibilities of nurses in the ward, time-consuming tasks of nurses like patient care, writing report, etc., assigning responsibilities to non-professional nurses, patient's illiteracy and low literacy,

absence of a constant companion with patients (number of companions and frequent displacements), absence of appreciation by the managers, nurses' dissatisfaction with working hours, shift, salary, benefits, etc., unfavorable general condition of patient (pain, etc.), patient's poor culture in understanding the materials, patient's age, absence of special rotating patient education nurse, shortage of educational resources and tools (manpower, budget, etc.) and patient's disinterest in behavior change (resistance to training).

Several reasons can be mentioned for these results: first,

extensive and global changes in all organizations, second, dynamic and developing nature of nursing career, which is necessary to be updated and third, the nature of education, as nurses like many other careers, neglect the necessary capacities and delicacies in performing their roles owing to various reasons, and merely education can fill this gap.

Considering the abovementioned problems and current status, it is necessary to take this issue into account by providing the required facilities, skilled manpower, time and place and educational planning in order to solve this critical problem.

Table 1: Description of responses to nurses' educational needs assessment questionnaire.

Prioritization	Item	Question	High	Low	No	Mean
13	15	Can you communicate with your patient if you don't speak the same language?	(27/4) 59	(23/3) 50	(2/8) 6	2/99
14	21	Do you know different levels of objectives in cognitive domain?	(27/4) 59	(20/9) 45	(1/4) 3	3/04
10	22	Do you know different levels of objectives in psychomotor domain?	(17/7) 38	(17/2) 37	(2/8) 6	2/95
9	23	Do you know different levels of objectives in attitude domain?	(20) 43	(22/8) 49	(2/3) 5	2/93
1	29	Are you familiar with advanced organizers?	(18/1) 39	(24/7) 53	(8/8) 19	2/76
12	30	Can you design a 10-minute educational lecture for the patient/family?	(26) 56	(21/9) 47	(3/7) 8	2/97
4	31	Are you familiar with mastery learning?	(19/5) 42	(21/9) 47	(7) 15	2/84
2	33	Are familiar with remembering model?	(22/8) 49	(21/9) 47	(10/2) 22	2/80
5	38	Are you familiar with different assessments (diagnostic, formative, achievement)?	(18/1) 39	(18/1) 39	(7/4) 16	2/85
8	39	Dou you know different types of patient/family assessment?	(20/5) 44	(18/6) 40	(5/1) 11	2/92
6	40	Do you know the structure of written tests for the patient/family?	(20) 43	(18/6) 40	(7) 15	2/87
3	41	Do you know the structure of skill checklist for the patient/family?	(17/7) 38	(19/1) 41	(8/8) 19	2/81
7	42	Do you know the conditions of oral tests for the patient/family?	(22/8) 49	(17/2) 37	(7/9) 17	2/90
11	43	Do you know what to do with the results of patient/family assessment?	(23/7) 51	(12/1) 26	(7/9) 17	2/95

According to the results of [Table 1], (ten priorities of educational needs based on the nurses' mean responses, their mean being of low tertile, included the items)

(are you familiar with advanced organizers" model) (are you familiar with remembering model)

(Do you know the structure of skill checklist for the patient/family?)

(Are you familiar with mastery learning?)

(Are you familiar with different assessments (diagnostic, formative, achievement?)

(Do you know the structure of written tests for the patient/

family?)

(Do you know the conditions of oral tests for the patient/family?)

(Dou you know different types of patient/family assessment?)

(Do you know different levels of objectives in attitude domain?)

(Do you know different levels of objectives in psychomotor domain?)

Table 2: Description of responses patient education assessment questionnaire.

1tems 5 9 16 19	Question Lack of educational resources and tools (manpower, budget, etc.) Absence of proper appreciation by the authorities (written financial) Absence of rotating patient education nurse	Very much Num- %/ber (28/8) 62 (38/6)83 (28/8)62	Much %/Number (32/6)70 (30/2) 65	Moderate %/Number (31/2)67 (22/3)48	Low %/Number (7)15	No effect %/Number (5) 1
5 9 16	Lack of educational resources and tools (manpower, budget, etc.) Absence of proper appreciation by the authorities (written financial) Absence of rotating patient education nurse	%/ber (28/8) 62 (38/6)83	(32/6)70	(31/2)67	(7)15	
9	(manpower, budget, etc.) Absence of proper appreciation by the authorities (written financial) Absence of rotating patient education nurse	(38/6)83				(5) 1
16	thorities (written financial) Absence of rotating patient education nurse		(30/2) 65	(22/3)48		
	••	(28/8)62		(==,0):0	(8/8)19	(0) 0
19	T 11111 Cd 1		(33/5)72	(26) 56	(9/8) 21	(1/9) 4
	Too many responsibilities of the ward nurses	108 (50/2)	(27) 58	(18/6) 40	(4/2) 9	(0) 0
20	Shortage of time for the nursing personnel	109 (50/7)	(30/2)65	(15/8)34	(3/3) 7	(0) 0
25	Time-consuming nursing tasks like patient care, report writing, etc.	94 (43/7)	(31/6) 68	(20/5) 44	(3/7) 8	(5) 1
26	Nurses' dissatisfaction with working hours, shift, salary, benefits, etc.	80 (37/2)	(29/3) 63	(23/7) 51	(9/3) 20	(5)1
27	Assigning responsibilities to non-professional nurses	(37/2)80	(33) 71	(22/8)49	(6/5) 14	(5) 1
33	Absence of constant companion for the patients who need companion (number of companions and frequent displacement)	52 (24/2)	(44/7) 96	(22/3) 48	(7) 15	(1/9) 4
34	Patient's disinterest in behavior change (resistance to training)	(16/3) 35	(42/3) 91	(29/8)64	(11/2) 24	(5) 1
36	Unfavorable general conditions of patient (.(pain, etc	42 (19/5)	(45/1) 97	(28/8) 62	(5/6) 12	(9) 2
38	Patient's poor culture in understanding the materials	(26/5) 57	(38/1) 82	(27/4) 59	(7) 15	(9) 2
40	Illiteracy and low literacy	55 (25/6)	(43/7) 94	(23/7) 51	(6) 13	(9) 2
41	Patient's age	(19/5) 42	(44/7) 96	(28/4) 61	(7) 15	(5) 1
	25 26 27 33 34 36 38 40	Time-consuming nursing tasks like patient care, report writing, etc. Nurses' dissatisfaction with working hours, shift, salary, benefits, etc. Assigning responsibilities to non-professional nurses Absence of constant companion for the patients who need companion (number of companions and frequent displacement) Patient's disinterest in behavior change (resistance to training) Unfavorable general conditions of patient (.(pain, etc) Patient's poor culture in understanding the materials Illiteracy and low literacy	20 Shortage of time for the nursing personnel (50/7) 25 Time-consuming nursing tasks like patient care, report writing, etc. 94 (43/7) 26 Nurses' dissatisfaction with working hours, shift, salary, benefits, etc. (37/2) 27 Assigning responsibilities to non-professional nurses (37/2)80 33 Absence of constant companion for the patients who need companion (number of companions and frequent displacement) 34 Patient's disinterest in behavior change (resistance to training) (16/3) 35 36 Unfavorable general conditions of patient (.(pain, etc (19/5))) 38 Patient's poor culture in understanding the materials (26/5) 57 40 Illiteracy and low literacy 55 (25/6)	Shortage of time for the nursing personnel 109 (50/7) (30/2)65 Time-consuming nursing tasks like patient care, report writing, etc. 94 (43/7) (31/6) 68 Nurses' dissatisfaction with working hours, shift, salary, benefits, etc. (29/3) 63 Assigning responsibilities to non-professional nurses (37/2)80 (33) 71 Absence of constant companion for the patients who need companion (number of companions and frequent displacement) Patient's disinterest in behavior change (resistance to training) (16/3) 35 (42/3) 91 Unfavorable general conditions of patient (.(pain, etc (19/5) (45/1) 97) Patient's poor culture in understanding the materials (26/5) 57 (38/1) 82 Illiteracy and low literacy 55 (25/6) (43/7) 94	20 Shortage of time for the nursing personnel (50/7) (30/2)65 (15/8)34 (20/5) 44 (25/6) Time-consuming nursing tasks like patient care, report writing, etc. (43/7) (31/6) 68 (20/5) 44 (43/7) (31/6) 68 (20/5) 44 (43/7) (31/6) 68 (20/5) 44 (25/6) 45 (25/6) (29/3) 63 (23/7) 51 (22/8) 49 (29/3) 63 (23/7) 51 (22/8) 49 (22/8) 49 (22/8) 49 (22/8) 49 (22/8) 49 (22/8) 49 (22/8) 49 (22/8) 48 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 49 (23/8) 40 (23/8) 40 Illiteracy and low literacy (26/5) 57 (38/1) 82 (27/4) 59 (23/7) 51	20 Shortage of time for the nursing personnel

According to [Table 2], the priorities of responses to questionnaire items were as follows: item

(Shortage of time for the nursing personnel)

(Too many responsibilities of the ward nurses)

(Time-consuming nursing tasks like patient care, report writing, etc.)

(Assigning responsibilities to non-professional nurses) (Illiteracy and low literacy)

(Absence of constant companion for the patients who need companion (number of companions and frequent displacement)

(Absence of proper appreciation by the authorities (written financial)

(Nurses' dissatisfaction with working hours, shift, salary, benefits, etc.)

(Unfavorable general conditions of patient (pain, etc.)

(Patient's poor culture in understanding the materials)

(Patient's age- Absence of rotating patient education nurse)

(Lack of educational resources and tools (manpower, budget, etc.)

Discussion

The results of educational needs assessment with regard to patient education indicated that the priorities of educational needs based on the mean responses to the questionnaire items included unfamiliarity with "advanced organizers", unfamiliarity with "remembering" model, unfamiliarity with constructing skill checklist for the patient/family, unfamiliarity with "mastery learning" model, unfamiliarity with assessments (diagnostic, formative, achievement), unfamiliarity with constructing written tests for the patient/family, unfamiliarity with constructing oral tests for the patient/family, lack of knowledge of different assessments for the patient/family and use of the assessment results, lack of knowledge of different levels of objectives in attitude domain, lack of knowledge of different levels of objectives in psychomotor domain, unfamiliarity with

designing a ten-minute educational lecture for the patient/ family, unfamiliarity with making appropriate relationship with patients with different languages and lack of knowledge of different levels of objectives in cognitive domain.

Amin-Al-Roaya et al. conducted a study in 2011 to determine the educational needs of nurses working in psychiatric departments. Their results showed the highest educational needs of nurses were in three domains of knowledge of diseases, nursing care and pharmaceutical and non-pharmaceutical cares [22].

Abbaszadeh et al. reported crisis management, infection control, stress management, communicative skills, decision-making method, problem solving and time management as the educational needs. Further, using Delphi technique to determine the regular professional training of nurses, Gibson reported management and patient education as the educational needs of nurses. Carol introduced communicative skills as the educational need of the nurses [1,21].

In 2010, Salmin et al. conducted a study in Tokyo, Japan to analyze the challenges of nursing education from the European perspective. Their results showed nursing education should be based on evidence-based nursing in theory and in practice. Elizabeth Hartman carried out a study in 2014 to evaluate the health knowledge and self-efficacy of the nurses based on learning theory in nursing programs. The obtained findings indicated that the nurses in control group lacked the required knowledge and skill to identify the educational needs and to improve the patients' abilities. A conspicuous gap was observed in the knowledge of patient education. These results were in line with the findings of the present study. However, it should be noted that analysis of specific educational needs of nurses in this study was not the same as that of other studies. The results of the current study showed that considering the educational needs obtained and significance of this subject, it is necessary to perform more comprehensive studies in this domain in order to solve the problems by more accurate and comprehensive planning.

Vafaei and Shidfar carried out a study in 2008 to assess the presentation of patient education services and involved organizational factors at university hospitals of Mashhad, Iran. Their findings showed the nurses did not play a significant role in this regard due to lack of time, too much work and lack of emphasis by their managers. Kendal et al. found that nurses did not consider a significant role for themselves in patient education. Moreover, Vafaei concluded that the managers of healthcare centers ignored the educational activities of their personnel. Furthermore [23].

Borhani reported the effect of coordination between the views of the nurses and nursing managers on the importance of barriers to patient education and found the most important barriers to patient education from the perspective of the nurses and managers were barriers related to nurses, barriers related to environment and barriers related to the patient. In addition [20].

Vahedian Azimi et al. conducted a study in 2011 and analyzed the nurses' clinical problems in patient education. They found absence of special nurses for patient education, heterogeneity of cultural, social and mental status of the patient, family and nurse, and nurse's lack of knowledge and scientific information as barriers to patient education, respectively [8].

Dehghani et al. performed a study in 2013 to evaluate the obstacles ahead of patient education in clinical cares from the viewpoint of nurses. The results showed the nurses believed in the management domain, lack of time, disproportionate number of patients and nurses, lack of credit for nurse for patient education were the most important barriers to patient education. In the personal care domain, lack of patient education planning in the daily activities of nurses as a duty, non-periodization of education in nursing job description and absence of valuing (material and spiritual) education were the most significant barriers to patient education, respectively. As for the patient and companion, unknown role of nurses as the trainers on the part of the patients and society, lack of physical and mental readiness of patient while training and lack of patient cooperation in training were ranked the most important obstacles to patient education, respectively, confirming the results of the present study.

It is noteworthy that considering the results obtained from the questionnaires, many factors mentioned by the nurses cannot be associated with environment and society since they are self-reports, and nurses need to make an attempt to do away with these problems by making changes in their performance in clinical environments. They should also proceed to perform patient education based on the motivational mechanisms and necessary measures taken by the concerned authorities as well as correct trainings for the extracted educational needs.

Conclusion

In neurosurgery, obstetrics & gynecology, ophthalmology, internal, gastroenterology, neurology, infectious diseases, emergency, pediatrics and dialysis wards and special care units, the highest educational needs were familiarity with patients' barriers to learning and controlling these barriers, keeping the patient active during education and getting feedback from the patient, designing a ten-minute educational lecture, familiarity with advanced organizers model, familiarity with mastery learning model, familiarity with remembering model, familiarity with objectives of patient/family assessment, familiarity with different types

of patient assessment and using them, constructing written tests, constructing skill checklist and constructing oral tests for the patient/family.

In radiotherapy and other wards, the educational needs of nurses included non-verbal communicative skills, familiarity with different interview techniques, familiarity with responding the patient's challenging questions, communication with patients speaking other languages and the elderly, and familiarity with proper behavior in dealing with different beliefs and values of the patients.

The results of patient education assessment questionnaire showed the highest mean score among various domains for the evaluation of factors related to the implementation of nursing education and the lowest mean score for evaluation of factors affecting the educational role of the nurse. The highest correlation and interaction were observed between analysis of factors related to law-abidingness and educational environment and analysis of factors affecting the educational role of the nurse. Also, there was a significantly linear correlation among all domains of the questionnaire.

In surgery, neurosurgery, obstetrics & gynecology, orthopedics, ophthalmology, internal, gastroenterology, neurology, infectious, emergency, pediatrics and dialysis wards as well as special care units and other wards, the most influential factors in patient education based on the nurses' viewpoints were ward manager's ignorance of patient education (lack of attention and support by the senior managers), inadequate supervision by the authorities on correct implementation of patient education, lack of knowledge about the principles of patient education, insufficient knowledge about the diseases of hospitalized patients, lack of knowledge of patient education, shortage of manpower from the opposite sex for patient education, absence of appropriate therapeutic relationship between the nurse and patient, lack of necessary effort for education due to minimized importance of education, absence of responsibility for patient education, lack of motivation for patient education, disinterest in the nursing profession, ignoring different educational needs of patients and incompatibility of the education content with the patients' personal needs.

In pediatrics ward, the factors affecting patient education included unrecognized role of nurses as trainers by the patients, distrust in the nurse and the prescribed treatment and its effect in accepting education from the treatment team, effect of patient anxiety in relation to diagnosis, test results, entering the operation room, unfavorable general conditions of patient (like pain, etc.), lack of motivation and interest in learning and teaching on the part of the patient (depression, etc.), patient's disinterest in behavior change (resistance to education), absence of a regular companion for patients in

need (number of companions and frequent displacement) and interference of the patient's companion in education.

In radiotherapy department, the factors mostly affecting patient education were poor culture of patient in understanding the materials, illiteracy or low literacy of patient, patient's age, patient's inability in making communications, presence of sensual disorders like hearing, visual and tactile problems, and patients' lack of knowledge about their rights.

It was also found that the nurse role in patient education had the highest correlation with establishing therapeutic relationship with the patient and the lowest correlation with writing the learning objectives. The maximum mean score was reported for the nurse role in patient education and the minimum mean score was found for patient education technique.

The results of this study showed that the knowledge and performance of nurses in patient education were facing a challenge. Enhancing the knowledge and creating appropriate attitude and performance and continuing behavior among the medical staff regarding patient education will contribute to development of education in this domain. Attention to nurses' education and promotion of their skills can prevent the disastrous outcomes threatening the patients, providing the personnel with peace in patient care and helping them in doing their tasks. Further, the findings indicated that nurses need correct training based on educational needs assessment in order to promote the quality of services in patient education. Moreover, the factors involved in and barriers to patient education should be taken into consideration.

Conflicts of Interest

There are no conflicts to declare.

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