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The Effective Factors in Patient Education from the Perspective of Nurses Working in Critical Ward

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ABSTRACT

Patient education is a dynamic process composed of a series of formal and informal activities from admission to discharge. Patient education improves patient attitudes and knowledge for better care. Purpose: The present study was an attempt to investigate the factors influencing patient's special education based on nurses' view point. Methods: In this cross-sectional descriptive-analytic study, 150 nurses working in critical ward were examined in 2013. Required data were collected using questionnaire. The collected data were analyzed using descriptive and analytical statistic (frequency, mean, standard deviation and chi-square test) through SPSS software. Result: In investigating motivating factors in patient education, interest in work (71/7%), Knowledge (68/9%) and work ethics (80%); in investigating inhibiting factors, lack of time (70/8%), in sufficient staff (51/9%); and in investigating facilitating factors, appointing one or two nurses to conduct training (62/3%) and available more educational resources for patient education (62%) gained the highest score. Moreover, there was a relation between employment status and inhibiting factors ($P = 0.001$) and facilitating factors ($P = 0.003$), work experience and facilitating factors ($P = 0.002$) and inhibiting factors ($P = 0.04$), and age and inhibiting factors ($P = 0.001$). Conclusions: Patient education is of main tasks of nurses and health care that reduces anxiety, cost, length of stay, and the increase of patients' satisfaction. Therefore, health care providers are expected to provide patients and their families with complete information about disease, its complications, treatment, and care; and providing sufficient time for training and using adequate personnel and training facilities are important steps to be taken in this regard.

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INTRODUCTION

Patient education is a dynamic process composed of a series of formal and informal activities from admission to discharge. Patient education improves patient attitudes and knowledge for better care [1 & 2].

The purpose of patient education is to help patients improve their quality of life, achieve the maximum physical and mental growth, and foster self-confidence. Patient education, in fact, includes health educational factors emphasizing on preparing patients cooperation in the process of nursing, treatment and rehabilitation, self-control, and increasing patients' ability to adjust with health problems. In patient education, the cooperation and participation of patients are necessary [2].

It should be noted that patient education is regarded as one of the most important care preferences and standards during all periods of admission and discharge [3].

Patient education is of the main rights of patients and main criteria of authorizing health care services providing organizations, causing the decrease of anxiety, cost, admission duration, complications, the improvement of care quality, and the increase of patients' satisfaction [2 & 3].

As the previously reported studies revealed, patient education is not effectively performed in health care centers [4]. According to the existing evidences, patients are provided with low information about their disease and treatment. As Weech (2003) reported, patients were not satisfied with received educations [5].

Accordingly, health care providers are expected to provide patients and their families with complete information [6].

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Patient education is one of main interventions of nurses [2]. With respect to the fact that nurses have more access to patients and their families and compared to other members of health team, they spend much more time to patients and accordingly, they have more opportunity to provide patient education [7].

Various studies showed the important role of nurses in patient education such that various factors including disease prevention, patient improvement, pain reduction (relief), adjustment to chronic disease, shortening admission period, relapse reduction, quality of life improvement, anxiety reduction, disease implications reduction, and the increase of patients' participation in care program are considered as the necessity of patient education [8 & 9]. Lack of patient education causes patients to make mistake in caring themselves such that they may harm themselves sometimes. In America, a cost of about 69 to 100 million dollars is annually spent to solve treatment problems due to lack of patient education [10].

There are many studies conducted on the relation of nurses' performance with patient education and the barriers nurses face with in this regard [11].

In a study conducted by Demir *et al.*, nurses considered communication problems, time shortage and disability to perform team work as some of the barriers they face in patient education [12].

To present an effective education, in addition to considering patients' conditions, educational facilities and aids play an important role [13]. Lack of facilities and information about the way of educating patients is one of the barriers of patient education. It is always believed that belief influences the performance and behavior [14]. If nurses consider themselves as a teacher, they will be more eager to present education to patients and their families [15]. In their study, Marcum *et al.*, introduced three factors facilitating education as allocating time for patient education, educational brochures and access to further educational resources [15]. Since patient education, as a professional activity, requires a high motivation, lack of motivation in nurses is regarded as one of the most important inhibiting factor in patient education.

It should be noted that patient education is of the most important care preferences and standards during all periods of admission, discharge and independency in self-care. The role of nurses in implementing this fact is of high importance; they should use any opportunity to provide patients and their families with education through learning effective patient education techniques to improve the health level of community. Therefore, the present study attempts to determine the important and basic factors influencing patient education from critical ward nurses' point of view.

Methodology:

The present project was a cross-sectional descriptive-analytic study. In this study, the statistical population included 150 nurses working in critical ward were examined in 2013. The statistical sample was selected using convenient sampling method. Required data were collected using questionnaire. After presenting an introduction about the researcher and the research objectives, the questionnaires were distributed among research units. After completing, the questionnaires were returned to the researcher.

The applied questionnaire consisted of two parts; the first part included demographic information and the second part entailed 25 Likert scale-based items (9 motivational factors related items, 9 inhibiting factor related items and 6 facilitating factors related items of patient education). To determine the questionnaire validity, content validity was considered and to evaluate its reliability, Cronbach's alpha was used, indicating a good level of reliability (0.84).

The collected data were analyzed using descriptive statistic (frequency, mean, standard deviation and chi-square test) and referential statistics (X^2) through SPSS software.

To investigate the factors influencing patient education, the questionnaire items were scored 1 to 3 (1 for low item, 2 to average item and 3 to high item). To analyze the obtained data, the score obtained from motivational factors and inhibiting factors were divided into three classes of weak (9-14), average (15-20) and good (21-27) and the score related to facilitating factors was divided into weak (7-11), average (12-16) and good (17-21).

To examine the relation between the quantitative variables (age, experience, post, and employment status) and motivational, inhibiting and facilitating factors, Chi-square test was used.

Findings:

The results obtained from the study regarding demographic characteristics revealed that most of the investigated units were female and 58.5% of them were in the age group of 25-29; 89.6% of the sample was nursing expert, 45.3% was arbitrary and 72% of them had a work experience less than 5 years.

Mean and standard deviation of motivational factors related items, inhibiting factors related items and facilitating factors related items were (3.81 and 21.7), (4.48 and 17.8) and (4.48 and 17.1), respectively. Totally, in investigating total score of motivational factors in patient education, 1.9% of the scores were weak, 34% was average and 64.2% was good; in investigating inhibiting factors, 21.7% was weak, 52.8% was average and 25.5% was good; in investigating facilitating factors also, 2.8% was weak, 33% of average and 64.2% was good.

In investigating various motivational factors in patient education, interest in work (71/7%), Knowledge (68/9%) and work ethics (80%); in investigating inhibiting factors, lack of time (70/8%), in sufficient staff (51/9%); and in investigating facilitating factors, taking one or two nurses to conduct training(62/3%) and available more educational resources for patient education(62%) gained the highest score.

Moreover, there was a relation between employment status and inhibiting factors ($P = 0.001$) and facilitating factors ($P = 0.003$), work experience and facilitating factors ($P = 0.002$) and inhibiting factors ($P = 0.04$), and age and inhibiting factors ($P = 0.001$).

Table 1: Motivational Factors in Patient Education.

Row	Factors	Low		Average		High	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Wage and salary	45	42/5	24	22/6	37	34/9
2	Facilities	22	20/8	44	41/5	40	37/7
3	Job security	14	13/2	48	38/7	51	48/1
4	Supervision	14	13/2	46	43/4	46	43/4
5	Recognition and appreciation	22	20/8	34	32/1	50	47/2
6	Interest to work	1	0/9	29	27/4	76	71/7
7	Occupational advancement and promotion	4	3/8	39	36/8	63	59/4
8	Awareness	4	3/8	29	27/4	73	68/9
9	Work conscience	2	1/9	16	15/1	88	83

Table 2: Inhibiting Factors in Patient Education.

Row	Factors	Low		Average		High	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Inadequate personnel	21	19/8	30	28/3	55	51/9
2	Time shortage	17	16	13/2	14	75	70/8
3	Lack of appropriate educational instruments	15	14/2	61	57/5	30	28/3
4	Lack of specialized information	40	37/7	49	46/2	17	16
5	Not preferring patient education to other nursing task	42	39/6	47	44/3	17	16
6	Inappropriate environment for patient education	31	29/2	48	45/3	27	25/5
7	Not accepting education by patient	25	23/6	30	28/3	51	48/1
8	Lack of interest to perform patient education	67	63/2	20	18/9	19	17/9
9	Lack of responsibility against patient education	70	66	16	15/1	20	18/9

Table 3: Facilitating Factors in Patient Education.

Row	Factors	Low		Average		High	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Appointing one or two nurses for patient education in each shift	14	13/2	26	24/5	66	62/3
2	Considering a time for patient education	11	10/4	30	28/3	65	61/3
3	Providing informational sheets to educate a certain subject	7	6/6	36	34	63	59/4
4	Providing further educational resources for patient education	1	0.9	34	32/1	71	62
5	Presenting seminar regarding educational strategies of patient education	7	6/6	46	43/4	53	50
6	Emphasizing on patient education as a preference by managers	10	4/9	54	50/9	42	39/6
7	Allocating a place for patient education	22	20/8	43	40/6	41	38/7

Table 4: The Relation between Factors Influencing Patient Education and Demographic Variables.

Factors	Demographic Variable	Test	P-value
Motivational factors	Age	Chi-square	0.6
	Work experience	Chi-square	0.2
	Post	Chi-square	0.4
	Employment status	Chi-square	0.5
Inhibiting factors	Age	Chi-square	0.001
	Work experience	Chi-square	0.15
	Post	Chi-square	0.04
	Employment status	Chi-square	0.001
Facilitating factors	Age	Chi-square	0.08
	Work experience	Chi-square	0.38
	Post	Chi-square	0.002
	Employment status	Chi-square	0.003

Discussion and Conclusion:

During the recent decades, the general attitude towards presenting necessary information to remove education needs has been changed and the members of health-care team are expected to provide patients and

their families with complete information about disease, its complications, treatment, and care in order that patients can actively and independently play role in the decision making related their status.

Currently, health affairs planners emphasize that prevention is better than cure. Therefore, all health-care employees, particularly nurses who are the greatest group with the most contact with patients, are obliged to present patient education with respect to their learning needs.

Investigating the problems of patient education, this study attempted to identify motivational, inhibiting and facilitating factors.

According to the studied nurses, conscience work is of the most important motivational factors in patient education.

Regarding patient education, taking motivational factors of nurses into consideration is of high importance since one of the important objectives of health-care services providers is to improve the quality of patients' life which can be achieved through education. As Farahani *et al.*, revealed, lack of motivation in nurses for patient education is one of the most important causes of ineffective patient education [16].

In this study, the nurses referred to the importance of appointing one or two nurses in patient education specific shift. In the study conducted by Ghorbani, nurses claimed that they had not adequate time to present education with respect to the high nursing work volume and low number of nurses relative to the work volume [17].

Availability and organizing educational materials is one of important facilitating factor in patient education. In the present work, the nurses believed that further accessible educational facilities facilitate patient education. This finding is consistent with the finding reported by Ghorbani.

According to the study conducted by Stoop, paper educational materials should be replaced with computer and internet-based educational program [18].

The nurses asserted that patient education can be better performed by considering a time for education. The reported studies emphasized that nurses are responsible in their educational role compared to other members of health-care team. However, they did not allocate adequate time to patient education and preferred usual nursing cares [15 & 17].

In this research, the nurses considered lack of sufficient time to present education as an inhibiting factor in patient education.

According to the studies performed by Marcum, nurses introduced time shortage to present educational barriers to patients as one of the causes of not performing patient education [15]. Klein-Fedyshin *et al.*, suggested using video tapes and other audio-visual sources to prevent wasting time [19].

With respect to the results obtained from the research, the nurses considered lack of human labor force as another barrier for patient education. In the study done by Marcum, lack of enough personnel and high work volume was introduced as the second and third barriers [15].

The nurses also considered lack of accepting education by the patients as another barrier for patient education.

In accepting education presented by the nurses, educational level and the intensity of disease is effective. Marcum introduced three inhibiting factor in patient education such as time shortage, inadequate number of personnel and lack of accepting education by patient. He also considered three facilitating factors in education such as considering a time for education, providing informational sheets for educating a specific subject and providing further educational resources for patient education [15].

The nurses, in the present research, considered time shortage to present education as an inhibiting factor in patient education.

In the study of Marcum, nurses considered time shortage as a barrier to present education and a cause of performing patient education [15]. Klein-Fedyshin *et al.*, also stated that nurses face with inadequate time for patient education in admission wards [19].

Most of educations presented to patients are face to face and with respect to its time-consuming nature, this educational method may be useful for accelerating to present education to patients through other educational methods such as education in group form. Educating in group form can save time and be led to more useful results.

Based on the present research findings and with respect to the importance of patient education as one of the main tasks of nurses in caring patients, managers and officials should take effective actions to improve the quality of patients' life and accelerate treatment trend by providing necessary facilities and equipments and supplying human labor force to improve motivational factors in nurses and facilitating patient education as well as preventing inhibiting factors.

According to the research findings, it is recommended to well performsuch a critical fact by forming specialized patient education committee, passing complementary educational courses by nurses, supplying skillful human force in education, using appropriate equipments, and using educational aids.

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