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Studying the Obstacles to Establishing a System of Free Visiting in the ICU of Subordinating Educational Hospitals of Iranian Medical Sciences University

Vahid Shojaeimotlagh^{1*}, Sousan Valizadeh², Hadi Hasankhani², Aram Feizi³ and Azim Azizi⁴

¹Ph.D candidate of Nursing Education, Medical and Surgical Department, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran

²Associate Professor, Medical and Surgical Department, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran

³Associate Professor, Medical and Surgical Department, Faculty of Nursing and Midwifery, Urmia University of Medical Sciences, Urmia, Iran

⁴Assistant Professor, Medical and Surgical Department, Faculty of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamadan, Iran

*Corresponding Email: v4sh4m@gmail.com

ABSTRACT

Visiting in ICU have always been quite restricted and limited. This restriction and separation from family on one side and encountering an unknown environment and fear of the unknown increases the fear on the other side. It will turn into a crisis for the patient and his family and causes severe concern and turmoil for them. However, there is no reason to restrict visitings in the ICU nowadays and the effectiveness of such visitings has become quite clear. The majority of therapeutic institutes still have a restricted visiting system. The present research seeks to study the obstacles to establishing a free visiting system according to health service providers from four aspects of attitude, knowledge, physical obstacles and cultural obstacles. This is a qualitative and descriptive research with three groups of participants including nurses, doctors and managers working in the subordinating hospitals of Iranian Medical Sciences University. Cluster sampling method was used for hospitals and simple random sampling was used in the ICU of hospitals while convenient sampling method was used for doctors and nurses in each unit. The last group included all the managers of that hospital. Each group answered a questionnaire with 40 questions designed in Likert scale whose validity and credibility was quite clear. Then, the resulting information was analyzed using SPSS16.0/win. the total number of participants from 21 hospitals and 86 units was 1008 people. The average age of the participants was 35 years old and some 66.7 % of them were female. The average working period in ICU was 60.47 months. Shortage of space and lack of separate beds were among the most important physical obstacles while unawareness of the procedure of disease and failing to control the emotions were among the most important cultural obstacles. Considering the negative attitude of the personnel and their limited awareness of the advantages of free visitings, training them and increasing their awareness of the advantages of free visitings are the most important strategies to change their attitude and make them accept this innovation. Considering the negative attitude of therapeutic personnel and their limited awareness of the advantages of free visitings, training them and enhancing their awareness of the advantages of free visitings are the most important strategies which can be utilized to change their attitude and make them accept innovations.

Keywords: Restricted Visiting, Free Visiting, Attitude, Likert.

INTRODUCTION

ICU is the place where patients in the worst condition are examined and treated by the most capable personnel under the best conditions with the most equipped tools available. In other words, ICU is the place where the highest level of constant care and treatment of patient is made possible. Those really critically ill patients who are in a critical and serious conditions can look after themselves and the vital systems of their bodies are usually disrupted. Such patients are kept in ICU [1]. Every year, more than 5 million people are admitted in ICU throughout the US and 10 to 20% of them pass away. Of all these patients, only 25% of them are capable of communicating and taking part in the process of decision making to attain therapeutic goals. In the other cases, it is the family members who assist the therapeutic team in making the most important decisions. Thus, they are referred to as members of therapeutic team [2]. However, the family needs to handle a serious crisis as they are facing an accident or a completely unknown situation and a critical disease for one of the family members. This crisis threatens the individual, interpersonal, and social integrity of family and puts the family in turmoil. Many scholars of social sciences have described family as an integrated social system whose integrity may be challenged by disease. As family and family life are important parts of every individual's health and matter for patient, they need to be considered as important as the patients in planning for nursing and medical interventions [3]. Establishing a free visit system in hospitals has many advantages: enhancing the satisfaction level of patient based upon her needs and demands, accelerating the process of patient's recovery, reducing tensions for patient and his family, paving the way for training the patient and his family, establishing a better communication system between the patient and medical personnel and improving the nursing care [4-6]. Considering modern nursing attitudes and moving towards interactive nursing theories, other aspects of life seem to be much more important than its biological aspect. Mental, spiritual, social, cultural, and political aspects of life are some other aspects demanding sufficient levels of attention. Thus, health needs to be defined by all these words. However, 2 decades after paying attention to the necessity of removing restrictions from visiting patients and considering the needs of patient and his family, no trace of such a success can be seen [7]. There might be several obstacles to accomplishing the system of free visits in hospitals. All these problems including those associated with attitude, awareness, physical structures and cultural structures need to be studied. The present research seeks to study and determine all the obstacles to establishing a free visit system in the ICU of subordinating therapeutic and health centers of Iranian Medical Sciences University according to health service provider in 2010.

MATERIALS AND METHODS

This is a quantitative research conducted in accordance with descriptive methods. The attitudes and awareness of nurses, doctors and top managers of free visits and their advantages were measured and they were asked to talk about the social, cultural, structural and physical factors associated with ICU which prevent free visit.

The research population in this research includes all those nurses working in ICU and CCU and all those doctors residing in ICU and top managers (fixed educational and clinical supervisors, nursing services managers, and head of hospital) in all the subordinating hospitals of Iranian Medical Sciences University. The hospitals of Iran were first clustered into different provinces. Then some clusters were selected through random sampling and selection. The hospitals were also selected randomly inside clusters. As many as 21 hospitals were chosen. The ICU's of these hospitals were also randomly sampled. Finally, 82 units were selected. Convenient sampling method was used to select the nurses and doctors in each unit, while census was used to select the group of top managers in each hospital. Finally, 768 nurses, 96 doctors residing in ICU and 144 top managers including supervisors, nursing services managers, and heads of hospitals were selected to take part in the research if they wished.

Content validity and face validity were observed in developing the questionnaires. On the other hand, Cronbach's alpha was used to determine stability as the questionnaire was composed of several sub-scales.

The data collection tool was an author-made questionnaire consisting of several parts: the first part included 8 questions about demographic information such as age, gender, marital status, and work background. The second part included 5 questions covering the general goals reported descriptively. The third part was composed of 20 questions dealing with the attitude of nurse, doctors and top managers toward free visits. These questions sought to measure attitude and each one included 5 alternatives: completely agree, agree, no idea, disagree, completely disagree in Likert's scale. The maximum and minimum scores for these questions were 100 and 20 respectively. These scores showed people's attitude and the following values were defined for them: weak for below 33, average for 33 to 66, and good for 66 to 100. The 4th part consisted of 5 questions dealing with the obstacles of physical structures in ICU

in the opinion of health service providers. These results were reported descriptively. The 5th part consisted of 5 questions dealing with the cultural obstacles to establishing a free visit system in ICU in the opinion of health service providers. The results of this part were also reported descriptively. The 6th part consisted of 10 double-choice questions dealing with the knowledge level of nurses, doctors and managers working in ICU of free visits. Each correct answer had 2 scores, while no score was given to wrong answers. The highest and lowest scores were 20 and 0 respectively. Total scores were defined in the forms of rankings (weak, average, good). Cronbach's alpha was used to measure the unidimensionality of attitudes, believes, etc.

After collecting data, SPSS 16 was used for the statistical analysis of raw information. Considering the goals of this project, descriptive statistics methods such as calculation of average, mean, and SD were used to report the demographic information and the level of awareness and attitude in various demographic subgroups.

RESULTS

The following Cronbach's alpha values were achieved in different parts: 77% for the third part of the questions, 82% for the fourth part, 85% for the fifth part, and 60% for the sixth part. According to the questionnaires designed, the average age of all the participants was 35 years old with a standard deviation of 6.7 years. The youngest and the oldest ages among the participants were 27 and 49 respectively.

Concerning the information about distribution of workplace of 1008 participants in the research, 480 were in ICU, 384 were in CCU and 144 were top managers of hospitals. 336 participants were male and 672 were female. The shortest and longest periods of working in ICU were 5 and 132 months respectively. The average length of job background of those working in ICU was 60 months.

The absolute and relative frequency of participants' agreement with establishment of free visit system in ICU was asked through this question "To what extent do you agree with establishing a free visit system?" As the results indicated, 91% of all participants were in favor of this system.

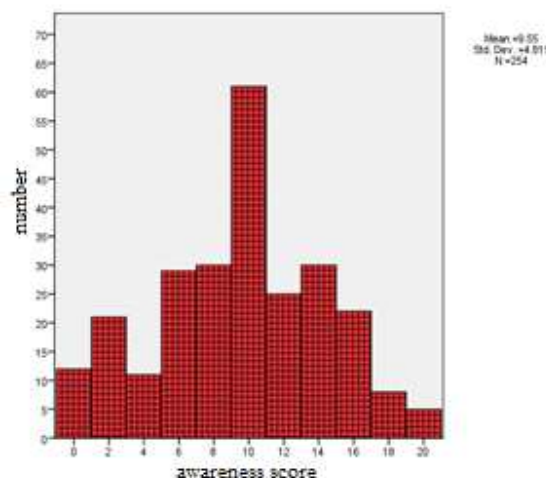


Figure 1: the absolute frequency distribution of the scores of nurses' knowledge of advantages of free visits in ICU

As for the absolute and relative frequency distributions of the interest groups associated with establishing free visit system in ICU, participants were asked to answer this question: "What do you think is the most influential group in establishing a system of free visits?" The participants (41.1%) considered nurses and their consent as key factors in establishing the free visits system. On the other hand, asking the question "Which groups do you think will benefit the most by establishing a free visit system?" and analyzing it pointed to the fact that participants believed family and relatives (69.9%) of the patient would benefit the most, while the least benefit would be for doctors (1.5%). The research population also believed that nurses (48.2%) and patients (48.8%) would experience the most disadvantage of this system.

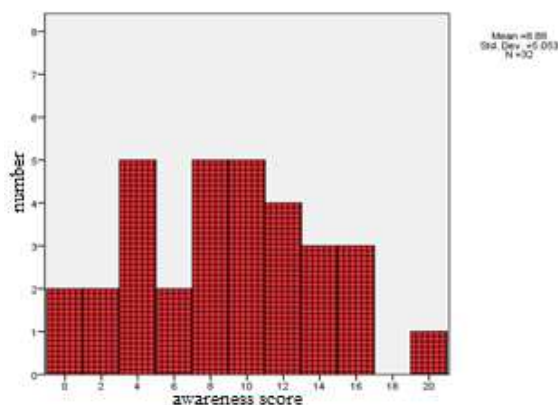


Figure 2: the absolute frequency distribution of the scores of doctors' knowledge of advantages of free visits in ICU

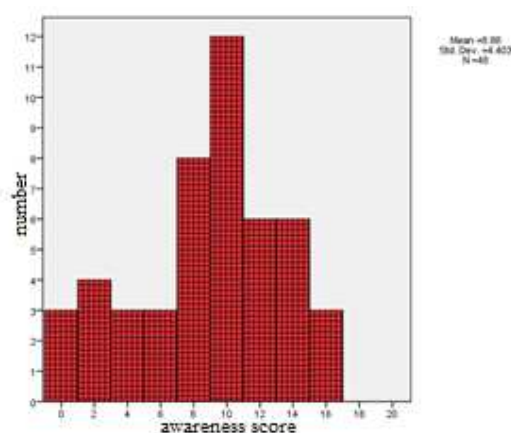


Figure 3: the absolute frequency distribution of the scores of managers' knowledge of advantages of free visits in ICU

Table 1: The frequency and percentage of the obstacles associated with physical structure of ICU in the opinion of health services providers

Items Questions	Completely agree (number) (percentage)	Agree (number) (percentage)	No idea (number) (percentage)	Disagree (number) (percentage)	Completely disagree (number) (percentage)	Mean	SD
Increasing the number of beds in ICU will make it difficult to manage the unit during free visit	468 46.7%	429 42.8%	42 4.2%	63 6.3%	0 0%	4.30	0.82
Separating beds from one another and placing each in a separate room aids establishment of free visit system	318 31.7%	297 29.6%	288 28.7%	57 5.7%	42 4.2%	3.79	1.08
Lack of enough equipments such as shoes, gown, mask, etc. impedes establishment of free visit system	45 4.5%	384 38.8%	345 34.4%	129 12.9%	99 9.9%	3.15	1.03
Unstandardized physical structures in ICU is a major cause of the inefficiency of free visit system	402 40.1%	516 51.5%	39 3.9%	45 4.5%	0 0%	4.24	0.74
Shortage of the space reserved for each bed in ICU may prevent establishing the free visit system	261 26%	483 48.2%	168 16.8%	57 5.7%	33 3.3%	3.88	0.97

The average score of nurses in benefits of free visit test was 9.55 which points to an average level of knowledge.

The lowest and highest scores are 0 and 20 respectively and the scores for these three groups were put in three categories: 0 to 7 (weak), 8 to 14 (average), and 15 to 20 (excellent) (Fig. 1).

Meanwhile, the score of doctor's knowledge of the advantages of free visit was 8.88 which is an average level of knowledge (Fig. 2).

The average score of managers' knowledge of the advantages of free visit was 8.88 which is an average level of knowledge (Fig. 3).

Table 2: The frequency and percentage of the cultural obstacles ICU in the opinion of health services providers

Items Questions	Completely agree (number) (percentage)	Agree (number) (percentage)	No idea (number) (percentage)	Disagree (number) (percentage)	Completely disagree (number) (percentage)	Mean	SD
Visitors' pity and uncontrolled expression of emotions may influence the personnel and other patients	384 38.3%	450 44.9%	168 16.8%	0 0%	0 0%	4.22	0.71
Lack of awareness of disease and the process of disease may act as an effective factor and cause anger in family and create contention with personnel	444 44.3%	501 50%	57 5.7%	0 0%	0 0%	4.39	0.59
Presence of a guide or consultant in the hospital to train families about how to visit patients can solve the problem.	162 16.2%	543 54.2%	297 29.6%	0 0%	0 0%	4.87	0.66
Visits and how they are accomplished need to be in line with the culture of that society	498 49.7%	438 43.7%	9 0.9%	57 5.7%	0 0%	4.37	0.77
Families do not observe the principles of visiting	720 71.9%	168 16.8%	72 7.2%	42 4.2%	0 0%	4.56	0.80

Studying the attitude of statistical society pointed to the fact that the average attitude scores of nurses, doctors and managers toward free visit were 52.76, 51, and 50.94. All these scores fall within the category average attitude.

DISCUSSION

Considering the definition of attitude and some of its specifications, the attitudes are manifested in one's behavior [8]. Human's behavior is a sign of his attitudes and it can be interpreted as his preparedness to carry out a task in a specific and special way. As there is a mutual correlation between attitude and behavior, changing one may change the other. One of the theories indicating the correlation between believes, attitudes and behavior is proposed by Fishbeyn and Ajzen. Their view and attitude points to the fact that actors' behaviors depend upon the attitudes and norms associated with behavior [9]. In a research titled "Policies of free visit system in ICU of New England: strategies for improvement", Kirokov claims the negative attitude of nurses to free visit as the most important obstacle to accomplishing this system. Based on the results achieved in his group interview with nurses, he thinks free visit depends mainly upon the consent of nurses. Nurses' safety and the possibility of nursing mistakes are some other factors that nurses name as a reason for their disagreement with this system even though free visits are known to be a critical need of patient and his family [10]. However, Simpson has not considered free visits as an obstacle to providing nursing services. He believes that intervention of visitors in therapeutic cares is quite natural and helps reduce tension and stress in family and increases family's trust in therapeutic team [11]. On the other hand, physical obstacles, shortage of space and equipment and appropriate structural basis in ICU are some of the most important obstacles to establishing free visits system. In her interview with the concentration group of health service providers, Melisa has also received many answers concerning the shortage of space [12]. Further to the above-said facts, one of the important obstacles that many key figures use as an excuse to block such a system is the high possibility and chance of infection and microbial contamination. The participants in our research also pointed to shortage of enough equipments such as shoes, gown, mask, etc. as problematic factors for controlling contaminations. However, Fomigali et al studied levels of bacterial and fungal contamination in the air and on surfaces in two units with free and restricted visits and no significant difference was observed. The cumulative occurrence of pneumonia, urinary tract infections and sepsis in comparison group had no significant difference with what was observed in control group after synchronization of age, gender and length of hospitalization [12]. Further to physical obstacles, there are also cultural obstacles impeding the successful implementation of free visit system. Kirkov, Henman and Carlson consider free visit as an important factor in decreasing the tension and increasing levels of hope in family [10]. The participants in this research believe that only in certain situations when the patient's family is really nervous and feels and urgent need to visit his patient, free visit can be considered a necessity because tension, anxiety and depression among the families of those hospitalized in ICU is inevitable [10].

The current research points to the fact that 79% of the participants had no information about stabilization of physiological variables such as blood pressure, heart beat and intracranial pressure as a result of free visit. However, the research conducted by Fomigali pointed to the fact that free visits stabilize changes in blood pressure and heart beat [13]. Prince found higher intracranial pressure among patients with no visitors compared to those who had visitors [14]. Reduction of cardiovascular complications as noted above is quite clear in the researches conducted by Ramsi, Marco and Pluright [10].

The goal of nursing researches is to utilize their results to solve problems, improve caring consequences, reduce costs, enhance the quality of services and promote public health. Keeping this in mind, the results of present research can be used for various purposes such as nursing services management, nursing education and nursing researches. Keeping in mind the results achieved from the current state of visit in ICU, the attitude of personnel to it and their views of the obstacles to establishing a free visits system in hospitals can help top managers of hospitals make new decisions concerning the policies and rules associated with the system of visits in ICU. As the policies and rules of visit are among the important social factors affecting the attitude of nurses and their interaction with visitors and keeping in mind the fact that nurses are the most important controller of ICU, top managers can use nurses as key factors to remove the limitations of the current visit system. Planning to educate families on how the patients are hospitalized in ICU, the equipments used in this unit, the treatments assigned to that patient, the necessity of having a quiet environment in the hospital while providing cares and doctor's visit and when they are allowed to visit their patient can help improve how they visit patients and result in further cooperation of those families with personnel. The results achieved in this research may pave the way for other researches associated with the system of visiting patients in ICU. Using the results of this research and further researches can help the family of patients and hospital personnel to take more effective measures in providing service and care to patients and accelerate the process of patient's recovery, shorten the period of hospitalization and reduce the costs.

CONCLUSION

Based on the theory of Ajzen and Fishbin and innovation publication model of Rojers, attitude is the most important reason that results in certain behaviors. Considering the negative attitude of hospital's personnel and their little awareness of advantages of free visits, educating them and enhancing their knowledge concerning the advantages of free visit is the most important strategy which can be used to change the attitude and accept innovations. Concerning the physical obstacles, lack of space, the large number of beds and the ensuing difficulty of managing the unit and the probability of encroaching the privacy of patient are the problems pointed to by participants. As for the cultural obstacles, the stress and anxiety of family can be greatly reduced and subdued with the presence and guidance of an expert and a psychologist.

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