Views of nurses and patients' relatives on visits to intensive care patients

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Abstract: This study was conducted to determine the kind of visits nurses and patients' relatives demand to see in intensive care units; the reasons explaining their demands and the kind of feelings experienced by patients' relatives in the aftermath of visits. This is a descriptive study. The study was included 346 patient relatives and 103 nurses. Data were obtained with two separate questionnaires prepared exclusively for patient relatives and nurses and their responses. Nurses were preferred visits to be conducted via video camera or behind a glass wall (67.0%), patients' relatives were wanted to see their patients anytime they want (49.1%). 74.2% of patient relatives express that visits should be conducted to observe the condition of patient while 58.3% of patients state that visits should be conducted to alleviate pain, loneliness and anxiety levels of patients. The most of nurses claimed that intensive care units should be closed to visits pointed at the risks of infection (66.7%). The results of this study showed that the most of nurses were favored restricted visit whereas relatives of patients were preferred open visits
Keywords: : Intensive care, visit, Nurse, Patients' relatives.

1. Introduction

Intensive care units, where partially or fully lost organs or system functions are assisted till the etiology is eradicated, problems influential in the emergence of disease are treated and applications to assist the patient live are performed, are defined as special units practicing advance technology with trained and experienced healthcare professionals [1].

Intensive care units accept patients who, due to a severe disease, intoxication, trauma or surgery, fail to lead life because of severe complications and in need of several assistive invasive medical tools or as a consequence of major surgeries to minimize the risks of complications requiring to be continually monitored hemodynamically and requiring a medical treatment [2-5].

In intensive care units in which advanced technology and physical equipment are used, the system differ from the rest of hospital departments due to the risky condition of patients and the necessity of quality 24 hours of service; however as known that there are some conflicting views as regards visiting methods of hospitalized patients [3,4].

Due to the social isolation and disease-related anxiety the patient in an intensive care units need to see and touch his/her beloved ones. Likewise relatives of the patient demand to see the patient closely, touch, comfort the patient and provide psychological support. All these reasons drive the patient and his/her relatives to demand frequent visits to intensive care units. On the other hand nurses working diligently in these 24-hours high-quality units to create the best results for patients' health object to frequent visits due to infection risks which might in the end trigger the healing process of the patients, possibility of increased workloads, possibility of decreased control on patients, likelihood of patients to experience stress, lessened time to save for the care of patients and the likelihood to violate privacy of other patients [3,5-10].

Nonetheless since holistic patient care has been adopted in nursing applications recently, patient relatives are now more frequently welcomed to care units thus in intensive care units restricted or fully-open visits have been allowed [4,8]. Supporting this deduction several researches have manifested that visits play effective role in significantly decreasing

anxiety and stress levels of patients and relatives and contribute positively to the healing process of the patients [1,8].

The current study was conducted to identify the method of visits adopted by intensive care unit nurses and patient relatives, to demonstrate underlying reasons behind visits and feelings experienced by patient relatives upon visits.

2. Material and Methods

This descriptive study was conducted in one university and two public hospitals equipped with adult intensive care units.

In the sampling selection of patients' relatives, sampling method with definite research population was utilized. Towards the aim of determining quantity of sampling, number of patients discharged from intensive care units of university and public hospitals was retrieved from hospital records. According to these data, 1000 patients from intensive care units of university hospitals, 1014 patients from the first public hospital and 1059 patients from the second public hospital were discharged. In each hospital with definite population a=0.05 and p=q=0.5 were taken thus sampling volume was found as 341. To reach sampling volume, stratification per the number of beds in intensive care units was applied. Thus from university hospital total 121, from first public hospital 114, from second public hospital 114 individuals amounting to 349 patient relatives were included within sampling.

Within the context of sampling, first and second degree relatives and intimate friends of patients above 18 years of age, in stabile mental health, willing to participate in the study were included in the study.

In the identification of nurses no specific sampling method was utilized. Towards the aim of reaching the entire population out of 113 nurses at work and volunteering to participate in research, 103 nurses were included in sampling.

Data Collection

In the research, with the object of determining the views of patients' relatives and nurses on visits and the socio-demographic features of relatives and nurses two separate questionnaires were utilized for patients' relatives and nurses. In these forms of which pre-application were conducted with nurse and patient relative groups of 10 people, there are total 17 questions; nine close-ended, four open-ended and four semi-open semi-close ended questions directed towards patient relatives. For the nurses seven close-ended, six open-ended and three semi-open semi-close ended questions totaling to 16 questions were directed.

Questionnaire forms were completed with patients' relatives during visit hours and with nurses during work hours via face-to-face interviews. Each interview with patient relatives was lasted 30 minutes and each interview with nurses was lasted 15 minutes.

Data Analysis

Data were computerized and analyzed using SPSS, version 16 software. Descriptive statistics such as frequencies, percentages, arithmetic means and standard deviation (SD) were used. Thereafter, a comparison was done between demographic features and views on the method of visit using chi-square tests. p-values < 0.05 were considered statistically significant.

Ethical Consideration

Written approvals were taken from Hospital Management and University Ethics Board and verbal approvals from intensive care nurses and patient relatives. Nurses and patients' relatives were informed that information taken during research would be exclusively used for research objectives that they would not be affected negatively from research results and they would be anonymous.

3. Results

A. Demographic Features of Sampling

Of study participating nurses, 36.9% are from age group 26-30 (29±4.59), 85.4% are women, 58.3% are married, 34.0% are, at the same ratio, two-year degree and university graduates. 52.4% of nurses work in university hospital, 23.3% in coronary and 21.4% in surgical intensive care unit, 55.4% work in intensive care unit for 1-3 years (4±3.62), 53.4% work 8-16 hours in a day (15±7.67) and 65.1% work 41-57 hours (48±9.90) in a week.

Of the research patients 31.8% are hospitalized in coronary, 20.2% in general surgery, 18.8% in neurology and 18.0% in anesthesia intensive care unit. 23.4% of patients are from 62-71 age group, 22.8% are from 52-61 age group and 22.6% are from 72-81 age group. 68.6% of patients have been in intensive care unit for 1-5 days (6.9±11.4). Of all these patient relatives, 29.2% are from 48-57 age groups (43.5 ±12.6), 52% are women, 54.3% are elementary education graduates and 67.3% are first degree relatives.

B. Views on the Methods of Visit

Of the participating nurses 67.0% claim that visits should be performed via video camera or behind glass walls, 57.3% state that visit method should be selected according to the condition of patient, 25.2%

suggest that visits should not exceed 5 minutes a day, 8.7% agree that visits should be banned all together (Table 1).

Table 1. Views of Nurses (n=103)

	n*	%**
Visits should entirely be closed.	9	8.7
Visits should be performed via camera or behind window.	69	67.0
Visitors should see patients whenever they like.	1	1.0
Visits should be arranged according to patients' condition.	59	57.3
Visits should be 5 min/day.	26	25.2
Visits should be 10 min/day.	2	1.9
Visits should be 15 min/day.	9	8.7
Visits should be 10 min per 2 h/day.	5	4.9

** Responded more than once. ** Percentages were calculated using (n=103).*

As a comparison is drawn between demographic features of nurses and their views on the method of visits it was detected that university nurses are, compared to nurses in other hospitals, more supportive of (52.2%) visits via video camera or behind glass walls (χ^2=5.98;p=0.05). Nurses working 58-74 hours in a week state that visits should be performed 2 hours a day for a length of 10 minutes and this statement is significantly different in statistical terms(χ^2= 8.32 p=0.01). As regards other demographic features of nurses and their views on visit methods, no statistically significant difference could be detected (p>0.05).
Nurses reported that visitors to intensive care units should be first degree relatives alone (99.0%)
Of all the patient relatives 49.1% express to see their patients anytime, 46.5% demand to see 5 minutes in a day, 27.0% via video camera (Table 2).
Between demographic features of patients' relatives and their views on the methods of visit, no statistically significant difference could be detected. Yet it were designated that elementary education graduates want to see their relatives whenever they want (59.0%), almost all female relatives demand to visit their patients 10 minutes every 4 hours. All patient relatives between ages 28-37 demand to visit their patients 10 minutes every 8 hours, those between ages 48-57 (37.2%) demand to see the patients via video camera or behind glass walls, those between ages 38-47 (36.8%) demand 10 minutes of visit during the day. First degree relatives of patients hospitalized 1-5 days in the unit report that visits should under no circumstances be allowed. Relatives of patients in neurology intensive care unit (32.6%) report that visits should be via video camera or behind glass walls, relatives of patients in coronary intensive care unit (28.2%) report that visits should be anytime during the day, relatives of patients in anesthesia or general surgery intensive care unit (50.0%) report that visits should be 10 minutes every 8 hours. Relatives (50.0%) of patients between ages 62-71 and 82-91 as well as relatives (50.0%) of patients who were hospitalized in intensive care unit before report that visits should be 10 minutes every 8 hours.

Table 2. Views of Relatives (n=159)

	n *	%**
Visits should be done via camera.	43	27.0
Visits should be done whenever possible.	78	49.1
Visits should be done for 10 min every 12 h.	12	7.5
Visits should be done for 10 min every 4 h.	5	3.1
Visits should be done for 10 min every 8 h.	2	1.3
For 5 min/day.	74	46.5
For 10 min/day.	19	11.9
For 2 min/day.	4	2.5

** Responded more than one. ** Percentages were calculated using (n=159).*

C. *Views on Visits*

The reasons of visit methods adopted by nurses are; 58.3% at equal ratios claim that visits alleviate pain, lonesome and anxiety levels of patients and second reason is that visits might trigger infections (45.6%) and patients feel more comforted and joyful (43.7%) (Table 3).
As the views of nurses on visit methods and reasons are compared, no statistically significant difference could be detected. Nonetheless a majority of nurses reporting that visits should be banned pointed at infection (66.7%) and arguments with patient relatives (55.6%) as reasons. Nurses reporting that visits should be via video camera or behind glass walls pointed that this method alleviated patients' anxiety level (59.4%) and 46.4% at equal ratios infection and patient's feeling of comfort and joy. Of the nurses reporting that visits should be set according to the condition of patient, 66.1% pointed that this visit method alleviated pain and loneliness in patients, 59.3% pointed that this visit method alleviated anxiety level of patients. Of the nurses favoring 5 minutes of visit (57.7%) pointed that this visit method alleviated anxiety level of patients,

nurses favoring 15 minutes of visit pointed that this visit method alleviated pain and loneliness in patients (66.7%).

As a comparison is drawn between demographic features and views of nurses on visit methods, it was detected that reasons stated by two-year degree nurses differ statistically significantly than the other nurses. As these reasons are examined it has been found out that the most selected reasons are the likelihood that family members/friends might avoid frequent visits (69.2%) (χ^2=8.83;p=0.01), the likelihood that privacy of patient might be violated (61.5%) (χ^2=5.96;p=0.05), the likelihood that workload might increase (60.7%) (χ^2=13.07;p=0.00), the likelihood that time saved for patient care might diminish (60%) (χ^2=11.43; p=0.00).

Compared to nurses in other institutions, nurses employed in the first public hospital expressed in a statistically significant level that the likelihood that family members / friends might avoid frequent visits (69.2%) (χ^2=10.31;p=0.00), the likelihood that privacy of patient might be violated (65.5%) (χ^2=5.96; p=0.05) are the top reasons. Compared to nurses in other institutions, nurses employed in the second public hospital expressed in a statistically significant level that patient relatives might intervene with medical treatments (60%) (χ^2=15.10; p=0.00), stress level on patient and relatives due to applied medical procedures might enhance (58.8%) (χ^2 =7.86; p=0.02) and workload might increase (50%) (χ^2= 8.9; p=0.01). University nurses reported that pain and lonesome of patients might be alleviated (58.3%), visits might enable the patients to identify correctly people, place and time (57.5%) and alleviate anxiety level (56.7%). Obtained results were not statistically significant (p>0.05).

As a comparison is drawn between employment length and reasons explaining a specific visit method, it has been detected that only the reasons pointed by 1-3 years of nurses differed statistically significantly. Of all the reasons, the primary one is that patients' connection with relatives might assist them to cope with diseases (65.8%) (χ^2= 9.22; p=0.05), that visits might alleviate anxiety level of patients (48.3%) (χ^2 =12.21; p=0.01) and lastly, visit method might tire the patient (36.0%) (χ^2 =14.74; p=0.05).

As weekly working hours and reasons of visit method are compared a statistically significant differentiation was detected. Accordingly nurses working 24-40 hours in a week (30%) reported that it might alleviate patients' anxiety level (χ^2=10.28; p=0.00), nurses working 41-57 hours a week reported that relative of the patient might be filled with negative feelings upon visit thus initiate arguments with unit personnel (89.3%) (χ^2=9.99;p=0.00), that patients' relatives might cause infections for patients (83%) (χ^2=13.17;p=0.01).

As reasons pointed out by nurses on the methods of visits are contrasted with the other demographic features, no statistically significant differentiation could be detected (p>0.05).

Table 3. Views of Nurses on the Reasons of Visits (n=103)

	n*	%**
Enables the patients to identify correctly people, place and time.	40	38.8
Alleviates pain and lonesome of patients.	60	58.3
Alleviates anxiety level of patients.	60	58.3
Increases anxiety level of patients.	23	22.3
Patients feel more comforted and joyful.	45	43.7
Enables the patients to cope with disease.	38	36.9
Increases workload.	28	27.2
Source of infection.	47	45.6
Diminishes the time saved for care.	18	17.5
Patient relatives intervene with medical treatments.	25	24.3
Enhances stress level on patient and relatives due to applied medical procedures.	17	16.5
Privacy of patient is violated.	13	12.6
Triggers negative changes in patient's vital indications.	18	17.5
Visit tires the patient.	25	24.3
Family members/ friends avoid visiting frequently.	13	12.6
Relative of the patient is filled with negative feelings upon visit thus initiate arguments with unit personnel.	28	27.2

** More than one response has been provided. ** Percentages are taken per n (103).*

A majority of relatives favored visits to monitor condition of patient (74.2%), to be near to the patient in intensive care unit (52.8%), to contribute to healing process (51.6%) and to take care (37.1%) (Figure 1).

As demographic features of patients' relatives and their reasons of visit are compared it surfaces that women wanted to contribute to the care of patient (66.1%), men wanted to spend time with the patient (41.7%), of the patient relatives between 38-47 age group (39.0%) and elementary education graduates

(62.7%) the key reason is to contribute to the care of patient, first degree relatives indicated their desire to accompany the patient in his/her last days (83.3%), to spend time with the patient (75.0%) and to contribute to the care of patient (69.0%). Of the relatives of patients between ages 72-81 the primary reason is to accompany the patient in his/her last days (37.5%), of the relatives of patients between ages 62-71 the reason is to contribute to the healing process (32.9%) and monitor the condition of patient (28.0%). It was also determined that those patient relatives whose patients were not hospitalized in intensive care unit before wanted to visit their patients for no particular reasons. No statistically significant difference could be detected between obtained findings.

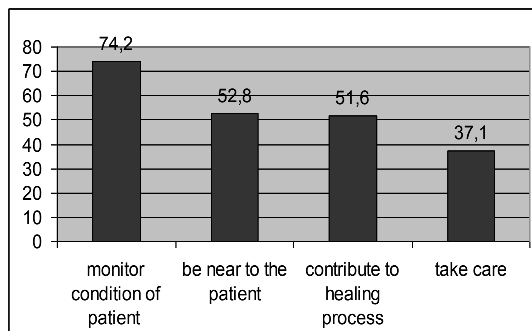

Figure 1. The Causes to Visit of Patient Relatives

D. Feelings on Visit

65.8% of patient relatives reported to have felt relieved upon visiting their patient in intensive care unit, 24.8% of patient relatives reported to have wept and 21.4% of patient relatives reported to have felt worried (Table 4).

Table 4. Feelings of Patients' relatives upon Visit (n=117)

	n *	% **
I felt happy.	50	14.5
I felt relieved.	77	65.8
I wept.	29	24.8
I got scared.	23	19.7
I got worried.	25	21.4
I got uneasy.	23	19.7
I got furious.	13	11.1
I got sad.	22	18.8

** More than one response has been provided. ** Percentages are taken per n (117).*

4. Discussions

Critically ill patients are, compared to patients in other departments, monitored more closely, hospitalized longer time and demonstrate higher rates of mortality - morbidity. Accordingly in intensive care units where there is a tight and restricted space of life visits of relatives bear utmost value for the patients [9]. This study shall, by putting forth the views of intensive care unit nurses and relatives of patients on visits, contribute to setting visit policies on intensive care units.

Amid a majority of nurses included within the scope of research prevalent view has been to conduct visits via video camera or behind glass walls and 5 minutes a day based on the condition of patients. In a statistically significant level university nurses favored visits via video camera or behind glass walls. This result is reasonably attributed to the visit protocol of hospital. Nonetheless the fact that other methods are also proportionally high demonstrate that as a consequence of establishing empathy, nurses act in violation to hospital policy. In Turkey a research by Sabuncu et al. [11] has shown that nurses report that restricted time of visit is the best method and the time limit agreed most is 5 minutes though there are also some conflicting views. Parallel to the finding of current research, in international studies too it has been put forth that restricted ratios of visits are acceptable in intensive care units 77%-99.6 % and the approximate time of visits for relatives is daily 30-168 minutes (1-8.5 minutes per hour) [1,12-15].

On the other hand patient relatives wanted a visit method that allowed visits anytime of the day or minimum 5 minutes in a day. In a different study it was determined that relatives whose patients are hospitalized in intensive care unit expressed their desire to visit their patients (48.5%) frequently during the day [15].

Additionally patient relatives reported their desire to visit less frequently and via video camera or behind glass walls the patients in neurology intensive care unit in which the patients are more problematic in terms of general medical condition and communication. On the other hand they expressed their desire to visit more frequently the patients in coronary intensive care unit where the patients are more open to communication and easily oriented to the environment. In coronary intensive care units, patients are hospitalized shorter than patients in neurology intensive care unit and relatives of patients feel more burdened with the fear of losing their patients, since their patients are oriented to the environment better they could be more supportive and alleviate their anxiety level might be some of the reasons accounting for their support towards visit. Compared to patients in other units patients in neurology intensive care unit are in a worse condition

with respect to physiological and mental functions the patients might avoid frequent visits by fear of worsening physiological condition of the patient and increase their anxiety and stress level. Livesay et al. [13] research on visits to neurology intensive care units underlined that parallel to the desire of patient relatives, nurses suggested to arrange visits to neurology intensive care units maximum 30 minutes a day.

In the research another valuable finding is that as the age of patient relatives and number of days spent in intensive care units increases, the frequency to visit patient decreases. It is of everyone's knowledge that health system in Turkey faces a new regulation each new day. Some of the possible explanations are that patients' relatives feel threatened to comply with complex treatment and care service procedures as their age gets older and socio-economic condition worsens, as the hospitalization extends, patients' relatives face challenges at business and social life and that since intensive care unit patients are mostly elderly people they are more prone to anxiety and that relatives might consider that death is imminent.

As the relatives prioritized to visit in intensive care units are examined it surfaces that nurses give priority to first degree visits of partners, mothers, fathers and kids. It has also been detected patient relatives give priority to partner visits and kids' visits but only in a smaller ratio. Conducted researches also emphasize that first degree relatives' bear great importance for patients [16]. There are conflicting views on kids' visits. Some researches grant restricted approval to kids' visits [17], some approve visits of children above age 7 [18], some approve above age 12 [19] while some researches underline the inappropriateness of kids' visits [1].

As the reasons of visits reported by nurses and patients' relatives are examined it can be detected that views of nurses vary with respect to their favorite visit method, graduated school, employed institution, length of employment and weekly working hours. Those who object to visits in intensive care unit point at the risks of infection, those who favor visits via video camera or behind glass walls claim that anxiety level of patient would be alleviated while in other forms of visits the common belief is that pain, lonesome feelings and anxiety level of patients would diminish. In a study conducted by Sabuncu et al. [11] similar to these findings it has been reported that visits might trigger infections. Two-year degree nurses employed in state hospitals hold the belief that family members might avoid frequent visits, privacy of patient might be violated, relatives of patients might intervene with medical treatments and workload might increase. Nurses employed in university hospitals, nurses with 1-3 years of employment and nurses working 24-40 hours in a week suggested that loneliness and pain feelings and anxiety levels of patients might be alleviated. In a variety of researches parallel findings have been obtained. Accordingly visits might provide positive effects and alleviate anxiety level of patients and family members, increase the comfort and joy [1,6,11,13,15,19,20]. Some negative effects are that visits might trigger infection, trigger negative changes in patient's vital indications, boost up anxiety and agitation level of the patient and relative, time saved for care by the nurse might be diminished [2,6,12,13,19,20-23].

As the views of patients' relatives on the reasons of visits are analyzed it has been detected that, though not statistically significantly, there is a differentiation with respect to the gender, educational level and age of the visitor, age of the patient and that they wanted visits to monitor frequently the condition of their patient, contribute to the care of patient, spend time with their patient and feel comfort after their visits (65.8%). The expressions of patients' relatives are significant since they manifest that, as also indicated in relevant literature, in the face of a condition perceived as sudden and unexpected their knowledge needs, emotional support and personal needs must be fulfilled and that visits might provide positive effects for the patients [7,15,22,24].

Conclusion and Recommendation

The findings of present research establish that a majority of nurses advocate restricted visit whereas relatives of patients demand open visits allowing visit patients anytime of the day and that the reasons accounting for their choices vary with respect to demographic features of the groups.

In the light of these findings;

To inform the relatives of patients hospitalized in intensive care unit on visit protocol of hospital, healthcare personnel should be assigned, brochures and booklets should be provided.

Upon the hospitalization of patients, relatives of patients should be enlightened elaborately on physical structuring of intensive care unit, furnishing, visit procedures and condition of patient by relevant healthcare personnel,

Visits to intensive care unit should be planned at times when personnel in the unit are less occupied ,

To prevent the negative effects of visit on patients, universal measures to protect healthcare personnel, patient and patient relatives should be taken.

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