Original Article

Determination of The Needs of Critically Ill Patients' Relatives in the Emergency Department

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Abstract
Aim: This study was carried out to determine the needs of the relatives of critically ill patients who admitted to emergency service and the factors affecting that.
Methods: This was a cross-sectional and descriptive study. It was conducted in the emergency service of a state hospital which was among the first 100 hospitals having the highest patient admissions in Turkey. The sample was composed of the relatives of 246 critically ill patients. The data were collected by data collection form that was prepared by the researchers and Turkish version of the Critical Care Family Needs Inventory for Emergency Departments (CCFNI-ED). Numbers, percentages, mean, standard deviation, correlation, t test, one way variance analysis (ANOVA), Tukey test and Kruskal Wallis test were used for the assessment of data.
Results: It was determined that organizational comfort (3.75±0.40) was prior in the order of the needs of critically ill patients' relatives; and it was followed by supporting process of the family members (3.67±0.46), communication with family members (3.58±0.41) and involvement of family members in the care in emergency department (3.47±0.49).
Conclusions: It was observed that the needs of critically ill patients' relatives in emergency department were in accordance with the basic needs of humans.

Key words: Emergency department, family needs, critically ill patient

Introduction

Demand for emergency services is increasing with the global change in healthcare services. Emergency departments are the places where patients requiring urgent intervention, injuries and patients at high risk are observed at the precise point between survival and death (Altindis & Unal,2017, Lukmanulhakim, Suryani, Anastasia, 2016). These units provide service to many patients having distinct problems. Especially with the increase in older population, admission rates to emergency departments have become quite high due to chronic diseases. Otherwise, many critically ill patients admit to emergency departments due to traffic accidents, injuries and poisonings (Fry et al., 2015). According to World Health Organization (WHO) data, more than 3400 people are dying everyday; and millions of people are injured or become disabled every year due to traffic accidents (WHO,2018). According to Turkish Ministry of Health data, most admissions were reported to be made to emergency departments with a ratio of 25.97% in the records of 100 hospitals that have taken the highest admissions

within the first 10 months of 2017. In Turkey, death rate due to acute MI was reported to be 42.92%; and it was reported to be 16.06% due to COPD based on 2016 data (T.C. Ministry of Health, 2017).

Critically ill patients are described as the patients who have one or more organ or system failures, who do not have stable vital functions in general or whose functions are kept stable by a supportive therapy and whose general condition is likely to worsen (Akkus, Cigsar, Gunal, 2018, Yildirim & Karaman Ozlu,2018). The goal of emergency healthcare is to make patients to benefit from treatment and care provided as to achieve desired health outcomes and to introduce a quality service that will increase satisfaction of the patients or their relatives. Main components of quality care are being effective, on time, productive, fair and patient-oriented (Altindis, Unal,2017, Kazan, Degermen, Yurtman, 2017, Korkmaz et al.,2016). Accordingly, relatives of critically ill patients seem to have an important role in maintaining quality care during providing service to the patients in emergency department. However, patients' relatives are also likely to be affected as the patients themselves in case of an acute disease or a sudden event. In the literature, the factors causing stress on the patients and their relatives in emergency department were reported to be the nature of disease as a sudden and unexpected condition and absence of a previous preparation process due to this, fear of death or becoming disabled, possible role changes, economic concerns and inability to know the environment of emergency department and healthcare staff (Korkmaz et al.,2016, Lukmanulhakim, Suryani, Anastasia, 2016). It is important to ensure relief of patients' relatives by resolving their concerns and to support them during mourning process in case of death. If such needs of critically ill patients' relatives are not considered and met, their compliance may be impaired and a state of crisis may emerge easily. In fact, it may even cause to experience violence (Bahar et al.,2015, Botes & Langley, 2016, Sucu, Cebeci, Karazeybek, 2009). In the literature, it has been reported that emergency department staff were exposed to violence at a ratio ranging between 60% and 70%; and the violence experienced was reported to be mostly verbal violence from the patients and their relatives (Botes & Langley, 2016). Determination of the needs of critically ill patients' relatives in the emergency department may provide emergency staff the opportunity to see the needs of patients' relatives, to focus on the needs based on priority and meet them (Yildirim & Karaman Ozlu, 2018, Sucu, Cebeci, Karazeybek, 2009). It was also reported that some difficulties were experienced in meeting the needs of both patients and their relatives with limited resources in developing countries (Fortunatti, 2014). In the literature, priority needs of the critically ill patients' relatives in the emergency department were often reported to be communication, and the other needs were organizational comfort, supporting process of the family members and involvement of family members in patient's care in emergency department (Fortunatti, 2014, Hsiao et al.,2017, Redley et al.,2003, Yildirim & Karaman Ozlu, 2018, Sucu, Cebeci, Karazeybek, 2009). It was shown in the previous studies that emergency department nurses had sufficient skills in initiating and maintaining communication (Redley et al,2003, Sucu Dag, Dicle, Firat, 2017). There are limited studies in Turkey regarding the determination of the needs of critically ill patients' relatives in emergency departments. Therefore, the needs of critically patients' relatives in emergency department were examined in this study.

Methods

Design: This was a cross-sectional and descriptive study.

Setting and Sample: This study was carried out in a state hospital which was located in Zonguldak city and which was among the first 100 hospitals having the highest rate of emergency department admissions in Turkey including 264.179 patients. The hospital was located in the city center and there was not a transportation problem. Emergency department was 3rd level, and provided service with a total of 26 observatory beds. Vigils were kept in the hospital in general surgery, anesthesia and internal medicine branches; and seven emergency specialists were working in the emergency department. Study data were collected between March 1, 2017 and May 30, 2017. Critically ill patients' relatives who got a treatment and care service in the emergency department within the last 24 hours, who were first degree relatives or just knew the patient, who were older than 18 years old, who could speak and understand Turkish, who did not have a disability in seeing and writing and who did not have any psychiatric problems were included in the study. The size of users' sample for finite populations considering an error rate of 5%, a confidence interval of 95% and an attribute level heterogeneity (p and q) of 50% provided a sample size including 245 patients. When probability and proportion of success are unknown, a conservative criterion has to be applied (P = q = 0.5) which maximizes the sample size. If the certainty of Zα is equal to 95%, then the coefficient is 1.96. Sample of the study was composed of the relatives of 246 critically ill patients who admitted to emergency department and approved to participate in the study.

Instruments: Data were collected by using **"Personal Information Form"** including characteristics of critically ill patients' relatives and Turkish version of Critical Care Family Needs Inventory for Emergency Departments (CCFNIED) for determining the needs of patients' relatives. Personal Information Form: In this form, age, sex, educational status of critically ill patients' relatives, their degree of proximity to the patients, patient's way of admitting to emergency

department and diagnosis of the patient were questioned.

Critical Care Family Needs Inventory for Emergency Departments (CCFNI-ED): This inventory was developed by Redley and Beanland in 1996. Validity and reliability study of its Turkish version was conducted by Sucu (2005), and confirmatory and exploratory factor analyses of the inventory was evaluated by Sucu et al. (2017) (Sucu Dag, Dicle, Firat,2017). The inventory included 4 subscales including communication with family members, involvement of family members in the care in emergency department, organizational comfort and supporting process of the family members, and a total of 40 items. Items were graded by 4-Likert type scaling; and average of each item and total item average of each subscale were graded between 1 (not important at all) and 4 (very important). It was indicated that cronbach alpha coefficients of the subscales were ranging between 0.68 and 0.87; and cronbach alpha coefficient of total scale was 0.91. Cronbach alpha coefficient of the scale was found to be 0.90 for this current study.

Data Collection: Data of the study were collected by the researchers and 3th year nursing students by using face-to-face interviewing with patients' relatives who have admitted to the hospital within the last 24 hours. The questionnaires were given to the patients' relatives in the waiting room of emergency department at a time when they were feeling themselves comfortable; and it lasted for nearly 5-10 minutes to complete them.

Data Analysis: Data were analyzed by "SPSS for Windows 16.0" software package program. Number, percentage, mean, standard deviation, correlation, t test, one way variance analysis (anova), Tukey test and Kruskal Wallis test were used to assess data.

Ethical Consideration: Written consents were taken from Bulent Ecevit University Human Research Ethics Committee (date: 12.23.2016, protocol no: 178) and from the Head Physician of the hospital in order to conduct the study. An authorization was obtained from the authors of the inventory through email for the use of its Turkish version. All patients' relatives were informed about the aim of the study and that data would be used for scientific-purpose; and all participants in the study provided verbal consent.

Results

Mean age of the patients' relatives included in the study was 39.85±14.32 years old; 49.6% were women; 50.4% were men; 33.7% have graduated from elementary school; 29.7% from secondary school, 13.4% from high school and 23.2% from university. When degree of their proximity to the patient was examined, it was seen that 26.4% were spouses, 26% were children, 21.5% were parents and 26% were other relatives. When the time that patients' relatives came to the emergency department was investigated, it was identified that 87.4% came together with the patient and 12.6% came after the patient. The ways of coming to emergency department were found to be stretcher in 32.5%, wheelchair in 12.2% and personal car in 55.3%. Medical diagnoses of the patients were cardiovascular system diseases in 36.6%, respiratory system diseases in 10.6%, traumas-accidents in 13.4%, neurological disorders in 7.7%, gastrointestinal system diseases in 9.3% and other problems such as endocrine system diseases, poisoning and hematological disorders in 22.4% (Table 1).Mean scores of the subscales detecting needs of critically ill patients' relatives in emergency department were 3.58±0.41 for communication with family members, 3.47±0.49 for family members participation in the care in emergency department, 3.75±0.40 for organizational comfort and 3.67±0.46 for supporting process of the family members. Total mean score of the scale was found to be 3.60±0.39 (Table 2). The first three statements that had the highest scores in the scale were detected to be answering the questions honestly (3.84±0.45), trusting that comfort of the relative was provided (3.82±0.47), and providing information about the outcomes (3.81±0.50). The comparison/correlation of total scale score and subscale scores were evaluated based on some characteristics of the patients' relatives. It was found that there was not a significant correlation between age and scale scores ($p>0.05$). Based on the education level of the patients' relatives, total scale and subscale scores of the ones who were university graduates were found to be significantly lower than the other groups. It was also found that there were not statistically significant differences between total scale and subscale scores based on sex, degree of proximity to the patient, time of the admittance of patients' relatives to emergency department, patients' way of admitting to the hospital and diagnosis of the patient (Table 3).

Discussion

In this study, priority ranking of the needs of critically ill patients' relatives in emergency department was like organization comfort, supporting process of the family members, communication with family members and involvement of family members in the care in emergency department, respectively. Organizational comfort is a factor reflecting system and structural comfort of the institution. It is required to configure technical equipment, physical and environmental conditions appropriately due to quality standards in the emergency departments. These priority needs of the patients' relatives can be provided by these elements that can be easily standardized when requested by the hospital and local managements. However, highly important tasks are not only assigned for hospital managements and Ministry of Health, but also for every part of the society regarding human and employee factor (Almaze & Beer, 2017, Kazan, Degermen, Yurtman, 2017). Emergency department included in the study

was a 3rd level emergency department, and was accepting an average of 900 patients daily. Besides, it was providing service in accordance with the legislation and quality management system requirements of the hospital. In the study by Kazan et al (2017), it was found that factors such as "physical environment, information, cost, quality, trust, procedure, transportation and speed" had a strong and positive correlation between themselves in the evaluation of performance effect of internal and external clients as a result of technological advances in hospital services (Kazan, Degermen, Yurtman, 2017). In this study, need for organizational comfort was at the forefront, and it was considered to be a reflection of its relationship with the other factors such as supporting, communication and transportation.

Table 1. Characteristics of the patients' relatives of critically ill patients in emergency department

Characteristics	**X±SD**	
Age	39.85±14.32	
	n	**%**
Gender		
Women	122	49.6
Men	124	50.4
Education level		
Elementary school	83	33.7
Seconder school	73	29.7
High school	33	13.4
University	57	23.2
Relationship with the patient		
Spouse	65	26.4
Children	64	26.0
Parent	53	21.5
Relatives	64	26.0
State of coming to the emergency department		
With the patient	215	87.4
After the patient	31	12.6
State of coming of the patient to the emergency department		
Stretcher	80 30	32.5
Wheelchair	136	12.2
Personal vehicle		55.3
Diagnosis of the patient		
Cardiovascular system diseases	90	36.6
Respiratory system diseases	26	10.6
Traumas-accidents	33	13.4
Neurological diseases	19	7.7
Gastrointestinal system diseases	23	9.3
Other	55	22.4

Table 2. Mean scores of the Critical Care Family Needs Inventory- Emergency Departments (CCFNI-ED)

Subscales	Min	Max	X ± SD
Communication with family members	2.00	4.00	3.58±0.41
Family member participation in ED care	2.00	4.00	3.47±0.49
Organizational comforts	2.00	4.00	3.75±0.40
Family member support processes	2.00	4.00	3.67±0.46
Total score	2.00	4.00	3.60±0.39

Table 3. Comparison of Mean Scale Scores based on some characteristics of Patients' Relatives *p<0.05

Characteristics	Mean scores of Subscales				Total score
	Communication with family members X±SD	Family member participation in ED care X±SD	Organizational comforts X±SD	Family member support processes X±SD	X ± SD
Age 39.85±14.32	3.58±0.41	3.47±0.49	3.75±0.40	3.67±0.46	3.60±0.39
r p	0.09 0.12	0.01 0.09	0.10 0.10	0.10 0.11	0.11 0.06
Gender					
Women	3.62±0.40	3.55±0.48	3.78±0.38	3.68±0.45	3.64±0.38
Men	3.55±0.43	3.38±0.49	3.73±0.41	3.66±0.47	3.55±0.40
t p	0.03 0.86	0.05 0.82	1.48 0.22	0.28 0.59	0.40 0.52
Education level					
Elementary school	3.67±0.40	3.60±0.48	3.79±0.38	3.74±0.44	3.68±0.40
Seconder school	3.58±0.41	3.44±0.47	3.72±0.43	3.65±0.48	3.57±0.40
High school	3.72±0.29	3.53±0.41	3.89±0.19	3.84±0.23	3.71±0.25
University	3.39±0.44	3.27±0.51	3.64±0.44	3.51±0.50	3.43±0.40
F p	6.77 0.00*	5.51 0.00*	3.13 0.02*	4.51 0.00*	6.12 0.00*
Relationship with the patient					
Spouse	3.55±0.45	3.41±0.54	3.66±0.46	3.56±0.54	3.53±0.45
Children	3.56±0.40	3.42±0.50	3.76±0.43	3.66±0.43	3.57±0.39
Parent	3.59±0.39	3.49±0.46	3.76±0.37	3.70±0.47	3.61±0.38
Relatives	3.63±0.41	3.57±0.45	3.83±0.28	3.77±0.34	3.68±0.33
F p	0.49 0.68	1.40 0.24	2.03 0.10	2.49 0.06	1.69 0.16
State of coming to the emergency department					
With the patient	3.59±0.42	3.48±0.49	3.75±0.40	3.67±0.46	3.60±0.40
After the patient	3.57±0.35	3.41±0.48	3.74±0.35	3.70±0.43	3.57±0.36
t p	0.19 0.84	0.72 0.47	0.14 0.88	-0.30 0.76	0.33 0.73
State of coming of the patient to the emergency department					
Stretcher	3.53±0.47	3.40±0.51	3.71±0.46	3.64±0.52	3.54±0.45
Wheelchair	3.73±0.34	3.63±0.49	3.81±0.21	3.72±0.38	3.71±0.32
Personal vehicle	3.59±0.39	3.47±0.47	3.76±0.39	3.68±0.43	3.60±0.37
F p	2.51 0.08	2.43 0.09	0.83 0.43	0.40 0.66	2.00 0.13
Diagnosis of the patient					
Cardiovascular diseases	3.62±0.37	3.45±0.44	3.79±0.35	3.70±0.43	3.61±0.35
Respiratory diseases	3.58±0.42	3.48±0.44	3.80±0.24	3.65±0.33	3.61±0.27
Traumas-accidents	3.59±0.36	3.50±0.47	3.75±0.44	3.77±0.33	3.63±0.37
Neurological diseases	3.61±0.36	3.49±0.52	3.83±0.28	3.73±0.27	3.64±0.33
Gastrointestinal diseases	3.59±0.43	3.58±0.43	3.76±0.37	3.55±0.55	3.62±0.38
Other	3.51±0.52	3.42±0.61	3.64±0.53	3.61±0.60	3.53±0.54
X^2_{K-W} p	0.59 0.98	2.23 0.81	4.21 0.51	3.76 0.58	1.46 0.91

Supporting process of the family members reflects the support that is provided for patients' relatives by the staff working in the emergency department. Maintenance of the care for critically ill patients in the emergency service requires a patient and family-centered approach (Almaze & Beer, 2017). Maintenance and achievement of the needs of both patients and their relatives effectively are highly difficult (Carlson et al, 2015). There is a requirement for corporate policies, rules and standards in the achievement of this (Barreto et al, 2017). Being a relative of a critically ill patient in the emergency department may cause to experience anxiety, denial, depression, fatigue, weakness and fears such as losing beloved ones (Almaze & Beer, 2017, Carlson et al, 2015). Undertaking a social responsibility by the relatives of critically ill patients as a reflection of close relationships is a known fact in traditional Turkish society. Decreasing the burden of this social responsibility can be provided by supporting patients' relatives and meeting their needs. Moreover, meeting the needs of patients' relatives not only decreases the burden of social responsibility and stress/anxiety, it also make valuable contribution to clinical decision-making process and patient care (Carlson et al,2015). As seen in this study, it was also reported in the literature that supporting process of the family members was a significant requirement (Akkus, Cigsar, Gunal,2018, Karaman Ozlu, 2018). Communication with the family members includes sharing information between family members and healthcare staff, and understanding these information. Maintenance of effective communication is mostly considered as the center of healthcare service (Aydın & Sahin, 2016). In the literature, there are some studies showing that communication with family members is the most important requirement (Akkus, Cigsar, Gunal,2018, Karaman Ozlu, 2018).In the study by Hsiao et al, communication was reported to be the priority need for both nurses and family members (Hsiao, et al., 2017). According to the results of a qualitative study, priority needs of the families that admitted to emergency service were found to be communication elements such as making explanation and showing intimacy (Botes & Langley, 2016). Also in this study, communication was determined to be a need in the third place. Maintenance of communication with the family members helps to decrease anxiety of them as well as supporting medical practices (Aydın & Sahin, 2016). It was reported that support of family members is highly important in issues such as effective use of time, reaching right information and pain management during emergency intervention especially to older patients having a cognitive failure (Fry et al.,2015, Fry et al.,2014). On the contrary, there may be some difficulties for the healthcare staff in initiating and maintaining a communication with patients and relatives from distinct cultures during emergency situations (Paavilainen et al.,2017). It has been reported that satisfaction level of patients' relatives regarding communication was low (Botes & Langley, 2016). Patients' relatives are required in order to provide safe, productive and quality care in emergency department, and communication is highly important in starting and maintaining this (Fry et al., 2015, Fry et al., 2014).The subscale of involvement of family members in the care in emergency department reflects the requests of family members to be together with their critically ill patients and to involve in their care. As in this study, the needs of patients' relatives as involving in the care were often found to be at the last place in the literature (Akkus, Cigsar, Gunal, 2018, Botes & Langley, 2016, Yildirim & Karaman Ozlu,2018). In the study by Sucu, it was indicated that the need of patients' relatives to involve in care was priority (Sucu, Cebeci, Karazeybek, 2009). Resuscitation can be given as the most striking example of the involvement of patients' relatives in the care in emergency department. Resuscitation is the most critical intervention performed in emergency department. Evidences, that were presented based on the report by ENA regarding the presence of a family member as an observer even during this intervention, were as follows**:** there were less evidences showing that it caused a damage to patients' relatives or healthcare team; there were some evidences showing that it was attributed to cultural basis; there were some evidences towards having support from healthcare professionals to make explanations to family members and to provide their comfort, and it was required to introduce an option and to have a written institutional policy for the involvement of patients' relatives (Emergency Nurses Association, 2012). In recent studies, it was reported that presence of the family member as an observer during resuscitation would help mourning process with the thought that everything was done, facilitate acceptance, provide guidance, facilitate understanding within the family; and on the contrary, might increase stress and anxiety as perceived obstacles, be a traumatic experience, cause a feeling of uncertainty and lead to a possibility to experience a fear of prosecution (Porter, Cooper, Sellick, 2014, Porter et al., 2017). Therefore, a supportive team is necessarily required for the involvement of patients' relatives in the care (Johnson, 2017, Porter, Cooper, Sellick, 2014). In a study performed in North Africa, it was reported that most of the emergency department nurses accepted the importance of family involvement in patient care and nurses had the necessary skills for including family members in the care (Almaze & Beer, 2017). In many hospitals in Turkey, patients' relatives are not allowed to involve in resuscitation and invasive procedures. In this current study, it was determined that there was not a correlation between the needs of the critically ill patients' relatives and their age; and there was not a significant difference based on sex, degree of proximity to the patient, their time of admittance to the emergency department, patients' way of admitting

to the hospital and diagnoses of the patients. In the study by Akkus et al, it was determined that the needs of organizational comfort and supporting process of the family members were higher among the ones who were siblings of the patients (Akkus, Cigsar, Gunal, 2018).In this study, it was found that total scale and subscale scores of the relatives who were university graduates were significantly lower than the other groups. Factors affecting quality in healthcare sector are generally addressed as accessibility, safety, suitability, technical quality and medical effectiveness (Kazan, Degermen, Yurtman, 2017). These results suggested that patients' relatives who were university graduates were provided quality service and their needs were met; thus, their need scores were lower.

Limitations: This study was conducted in a single hospital. Conduction of such a study in more than one hospital and comparison of the results will be guiding for the evaluation of the quality of healthcare service.

Conclusions: At the end of this study, it was found that the needs of critically ill patients' relatives who admitted to emergency department were comfort, support, communication and involvement in the care, respectively. It was seen that needs of patients' relatives were in accordance with the basic needs of all humans. The need for involving in the care was ranked as the last, and this was suggested to be a reflection of trust to healthcare staff. It is seen that there is a need for studies that may reveal the relationship between other factors such as social change, supporting, communication, trust, cost and quality which may play a role in shaping the needs of patients' relatives in an institution providing service based on quality elements. Meeting the needs of patients' relatives promotes the quality of healthcare service by increasing satisfaction. Meeting the needs, that are considered as significant by the family members, increases their trust to healthcare staff and service, and contributes to the improvement in the goal of healthcare success.

Acknowledgements : The authors wish to thank Esra Ozturk, Ezgi Bayraktar, Gokce Akdeniz, Dilber Melek Gullu, Mustafa Pakeloglu, Nesrin Eski and Nurten Ayan for their help in gathering data, and all of the family members who participated in this study

References

Akkus Y, Cigsar G, Gunal E. (2018). Identıfyıng the needs of relatıves of crıtıcal patıents who admıts emergency department of Kafkas Unıversıty Faculty of Medıcıne. Turkish Science-Research Foundation.11(1):39-51.

Almaze JPB & Beer J. (2017). Patient- and family-centred care practices of emergency nurses in emergency departments in the Durban area, KwaZulu-Natal, South Africa. S Afr J Crit Care. 33(2):59-65.

Altindis S & Unal O. (2017). Situation of Turkey About Emergency Service Quality Standards. J Biotec and Strat Heal Res, 2:51-59.

Aydın BO & Sahin E. (2016). A model offer for solvıng the communıcatıon problems at a level of the patıent and the patıent's relatıves at a hospıtal. Jour of Soc Sci Res. 6(15):64-94.

Bahar A, Sahin S, Akkaya Z, Alkayis M. (2015). Investigation of Effects of Exposure to Violence and Affecting Factors on Job Satisfaction of Emergency Nurses. Journal of Psychiatric Nursing, 6(2): 57-64.

Barreto MS, Arruda GO, Garcia-Vivar C, Marcon SS. (2017). Family centered care in emergency departments: perception of brazilian nurses and doctors. Esc Anna Nery, 21(2):1-7.

Botes ML & Langley G. (2016). The needs of families accompanying injured patients into the emergency department in a tertiary hospital in Gauteng. Curationis, 39(1):1-7.

Carlson EB, Spain DA, Muhtadie L, McDade-Montez L, Macia KS. (2015). Care and caring in the ıcu: family members' distress and perceptions about staff skills, communication, and emotional support. J Crit Care. 30(3): 557-561.

Emergency Nurses Association. (2012). Clinical Practice Guideline: Family Presence During Invasive Procedures and Resuscitatio. Guideline.

Fortunatti CFP. (2014). Most important needs of family members of critical patients in light of the critical care family needs ınventory. Inv Educ Enferm, 32:2,:306-16.

Fry M, Chenoweth L, MacGregor C, Arendts G. (2015). Emergency nurses perceptions of the role of family/carers in caring for cognitively impaired older persons in pain: A descriptive qualitative study. International Journal of Nursing Studies, 52:1323-1331

Fry M, Gallagher R, Chenoweth L, Stein-Parbury J. (2014). Nurses' experiences and expectations of family and carers of older patients in the emergency department. Int Emerg Nurs, 22:31-36.

Hsiao PR, Redley B, Hsiao YC, Lin CC, Han CY, Lin HR. (2017). Family needs of critically ill patients in the emergency department. Inter Emerg Nurs, 30:3-8.

Johnson C. (2017). A literature review examining the barriers to the implementation of family witnessed resuscitation in the Emergency Department. Int Emerg Nurs, 30:31-35.

Kazan H, Degermen HA, Yurtman GG. (2017). The effect of total qualıty management on performance evaluatıon of ınternal and external customers Jour of Manag and Econ Res. 15(1):43-65.

Korkmaz T, Balaban B, Onder H, Sarıcil F. (2016). The effect of patient qualifications and number of patient accompanist on patient's satisfaction. Turk Jour of Tr & Emerg Surg, 16: 93-97.

Lukmanulhakim L, Suryani S, Anastasia A. (2016) The relationship between communication of nurses and level of anxiety of patient's family in emergency room dr. Dradjat Prawiranegara hospital, Serang Banten, Indonesia. Inter Jour of Res in Med Sc. 4:12, 5456-62.

Paavilainen E, Mikkola R, Salminen-Tuomaala M, Leikkola P. (2017). Counseling patients and family members in out-of-hospital emergency situations: a survey for emergency staff. BMC Nursing, 16(11)2-8.

Porter JE, Cooper SJ, Sellick K. (2014). Family presence during resuscitation (FPDR): Perceived benefits, barriers and enablers to implementation and practice. Int Emerg Nurs, 22:69-74.

Porter JE, Miller N, Giannis A, Coombs N, (2017). Family Presence During Resuscitation (FPDR): Observational case studies of emergency personnel in Victoria, Australia. Int Emerg Nurs, 33:37-42.

Redley B, LeVasseur SA, Peters G, Bethune E. (2003). Families' needs in emergency departments: instrument development. JAdv Nurs, 43:606-15.

Sucu Dag G, Dicle A, Firat MZ, (2017). Psychometric properties of the critical care family needs inventory-emergency department. Applied Nursing Research, 33:113-120.

Sucu G, Cebeci F, Karazeybek E. (2009). The needs of the critical patients' relatives in the emergency department and how they are met. Turk Jour l of Trau & Emerg Surg,15(5):473-481.

T.C. Ministry of Health General Directorate of Public Hospitals Department of Statistics, Analysis, Reporting and Strategic Management. 2017.

Topacoglu H, Karcioglu O, Ozucelik N, Ozsarac M, Degerli V, Sarikaya S, et al. (2004). Analysis of factors affecting satisfaction in the emergency department: a survey of 1019 patients. Adv Ther, 21:380-8.

World Health Organization. Violence and Injury Prevention. (2018). http://www.who.int/violence_injury_prevention/road_traffic/en/. accessed 6/3/2019.

Yildirim T, Karaman Ozlu Z, (2018). Needs of critically ıll patients' relatives in emergency departments. Nurs Midwif Stud,7: 33-8

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