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Research Article

Evaluation of Satisfaction Level in Family-Centered Intensive Care Concept; A Single-Center Survey Study

Aile Merkezli Yoğun Bakım Konseptinde Memnuniyet Düzeyinin Değerlendirilmesi; Tek Merkezli Bir Anket Çalışması

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Abstract

Aim: In our study,it was aimed to determine and improve the quality of the intensive care unit(ICU) of our hospital by evaluating the satisfaction perception of patient relatives through a questionnaire.

Materials and Methods: The revised version of the questionnaire named FS-ICU-24 was applied to the patients relatives whose patients had been treated for at least 48 hours in Eskişehir Osmangazi University Anesthesia ICU.

Results: According to evaluation results of 79 questionnaires that fit the criteria of the study, it was seen that the satisfaction with the decision-making process of the patients with high satisfaction with care was also significantly higher ($p<0.01$). The lowest satisfaction was related to being involved in the decision-making process and being able to see their patients whenever they wanted. The highest satisfaction rate was in meeting the requests of relatives of patients by ICU staff.

Conclusion: The only thing that the relatives of patients who experience anxiety due to the fear of losing a family member want to see their patient impulsively.In our study,similar to the literature, the subject with the lowest satisfaction rate wasn't being able to see their patients when they wanted.We showed the importance of being able to respond to the expectations of patient relatives in accordance with the family-centered intensive care concept. We found that it is important for the relatives of the patients to feel that they participate in the decision-making process and that this seriously affects the satisfaction rates. We think that research should be done on how family members can be more involved in the decision-making process when planning quality improvement interventions for ICU.

Keywords: Intensive care unit, family satisfaction, questionnaire

Öz

Amaç: Çalışmamızda anket aracılığı ile hasta yakınlarının memnuniyet algısı değerlendirilerek hastanemiz yoğun bakım ünitesi(YBÜ) kalitesinin belirlenmesi ve geliştirilmesi amaçlanmıştır.

Materyal ve Metot: Eskişehir Osmangazi Üniversitesi Anestezi YBÜ'de hastası en az 48 saattir tedavi gören hasta yakınlarına FS-ICU-24 isimli anketin revize edilmiş hali uygulanmıştır.

Bulgular: Çalışmanın kriterlerine uyan 79 anketin değerlendirme sonuçlarına göre bakımla ilgili memnuniyeti yüksek olan hastaların karar alma sürecine dair memnuniyetleri de anlamlı olarak yüksek olduğu görülmüştür ($p<0.01$). En düşük memnuniyet karar alma sürecine dahil olma ve hastalarını istedikleri zaman görebilme ile ilgiliydi. En yüksek memnuniyet oranı YBÜ çalışanlarının hasta yakınları isteklerini karşılamasındaydı.

Sonuç: Bir aile bireyini kaybetme korkusu nedeniyle kaygı yaşayan hasta yakınlarının tek isteği hastasını dürtüsel olarak görmektir. Bizim çalışmamızda da literatür ile benzer olarak memnuniyet oranının düşük olduğu konulardan biri, hastalarını istedikleri zaman görememek olmuştur. Çalışmamızda aile merkezli yoğun bakım anlayışına uygun olarak hasta yakınlarının beklentilerine cevap verilebilmesinin önemini gösterdik. Hasta yakınlarının karar verme sürecine katıldıklarını hissetmelerinin önemli olduğunu ve bunun memnuniyet oranlarını ciddi şekilde etkilediğini bulduk. Yoğun bakım ünitelerinde kalite iyileştirme müdahaleleri planlanırken aile bireylerinin karar verme sürecine nasıl daha fazla dahil olabileceği konusunda araştırma yapılması gerektiğini düşünüyoruz.

Anahtar Kelimeler: Yoğun bakım ünitesi, hasta yakını memnuniyeti, anket

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INTRODUCTION

Evaluation of the quality of the health service has gained importance in this period when the health sector has become privatized and private health insurances have become widespread, as in every field in the world. Evaluating the quality and safety of health care and improving the service provided has been an important goal all over the world (1). The increase in the elderly population around the world and the increase in the socio-education level of the society have paralleled the increase in the number of patients in need of intensive care, and this has brought high costs (2,3).

In the beginning mortality, length of stay and functional status of patients were considered as quality determinants in intensive care units, and later on, the satisfaction of patients and their relatives in intensive care units began to be evaluated (4,5). As a result of the studies, it has been seen that the measurement of satisfaction plays a key role in the evaluation of quality (5-7).

Intensive care patients are high-risk patients and if their conscious abilities are considered, the information given and the decisions taken are generally made together with the relatives of the patients. For this reason, the patient and the patient's relatives should always be considered as a whole in the intensive care unit. Meeting the needs of patients' relatives is a necessity of the family-centered intensive care concept, and it is our duty to inform them, to see their patients, to relieve their stress and anxiety (8-10).

The aim of our study is to measure the satisfaction level of the relatives of the patients treated in the anesthesia intensive care unit, to evaluate the intensive care perception of the relatives of the patients in the light of the results obtained, and to find answers to the changes that will increase the satisfaction of the relatives of the patients in the intensive care unit. It is aimed to determine the issues that the relatives of the patients care about the most, to develop the concept of family-centered intensive care and to increase the level of satisfaction.

MATERIAL AND METHOD

Study design and settings

The study was carried out with the permission of Eskişehir Osmangazi University Faculty of Medicine Non-Interventional Clinical Researchs Ethics Committee (Date: 18.09.2018 Decision No: 14). All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Relatives of patients whose patients were hospitalized for at least 48 hours between September 2018 and September 2019 were included in the study after the approval of the ethics committee in our hospital Anesthesia ICU.

There are many questionnaires that evaluate the satisfaction of patient relatives, and the questionnaire that we will use was selected by literature research. The power of the "Family Satisfaction in Intensive Care Unit (FS-ICU 34/24) questionnaire" developed by Heyland et al. has been demonstrated in many multicenter studies (3,9,11). While creating the questionnaire for our study, this questionnaire named FS-ICU 34/24 was used and the Turkish version of the questionnaire was revised for the purposes of our study.

Data collection

The prepared questionnaires were administered to one or more relatives of each patient, after obtaining the consent of the relatives, on the third or later days of the patients' hospitalization in the intensive care unit.

The questions were reviewed together and any points they did not understand were clarified. After completing the questionnaire, it was requested to be delivered to us on the same day or in the following days. From the relatives of the patients hospitalized; Those who did not want to fill out the questionnaire, whose native language was not Turkish, whose patient was in the intensive care unit for ≤48 hours, who did not submit the questionnaire and who answered less than half of the questions, were excluded from the study.

Between September 2018 and September 2019, the number of patients hospitalized in our anesthesia intensive care unit was 412, and the number of patient relatives who did not want to participate in the survey was 182. The relatives of patients whose native language was not Turkish (n:13), the patient was in the intensive care unit for ≤48 hours (n:163), and 27 questionnaires in which less than half of the questions were answered were excluded from the study. The number of patient relatives who took the questionnaire but did not submit was 32. As a result, 79 patient relatives questionnaires were analyzed. The flowchart is shown in Figure 1.

The questionnaire was analyzed in two main parts: satisfaction with care (1st part-14 questions) and family satisfaction with decision-making process (2nd part-10 questions). In our study, it was requested to evaluate the questionnaire questions in the scale section according to a 5-point evaluation scale. (1;poor, 2;partially good, 3;good, 4;very good, 5;excellent.) The satisfaction averages of the answers given to the questions were grouped as the 1st part, the 2nd part and the general satisfaction average in the intensive care unit.

Data analyses

Descriptive values of the scales were given as mean±standard deviation and median (Q1 – Q3), and frequency distributions were given as frequency tables. In the descriptive presentation of the answers of the scale, each subsection (satisfaction with care, family satisfaction with decision-making process) was evaluated between 1 and 5, and the degrees of satisfaction were analyzed by

converting the Likert scale to scores between 0 and 100.

In the evaluation of the differences between the groups, t-test for 2-group variables with normal distribution, one-way analysis of variance test for 3 and more groups; Mann Whitney U test was used for the 2-group variables that did not conform to the normal distribution, and the Kruskal Wallis H test was used for the 3 or more groups. Shaphiro Wilk's test was used as normality test. Analyzes were made in IBM SPSS Statistics 21.0 package program. The criterion value of $p<0.05$ was accepted as the statistical significance level.

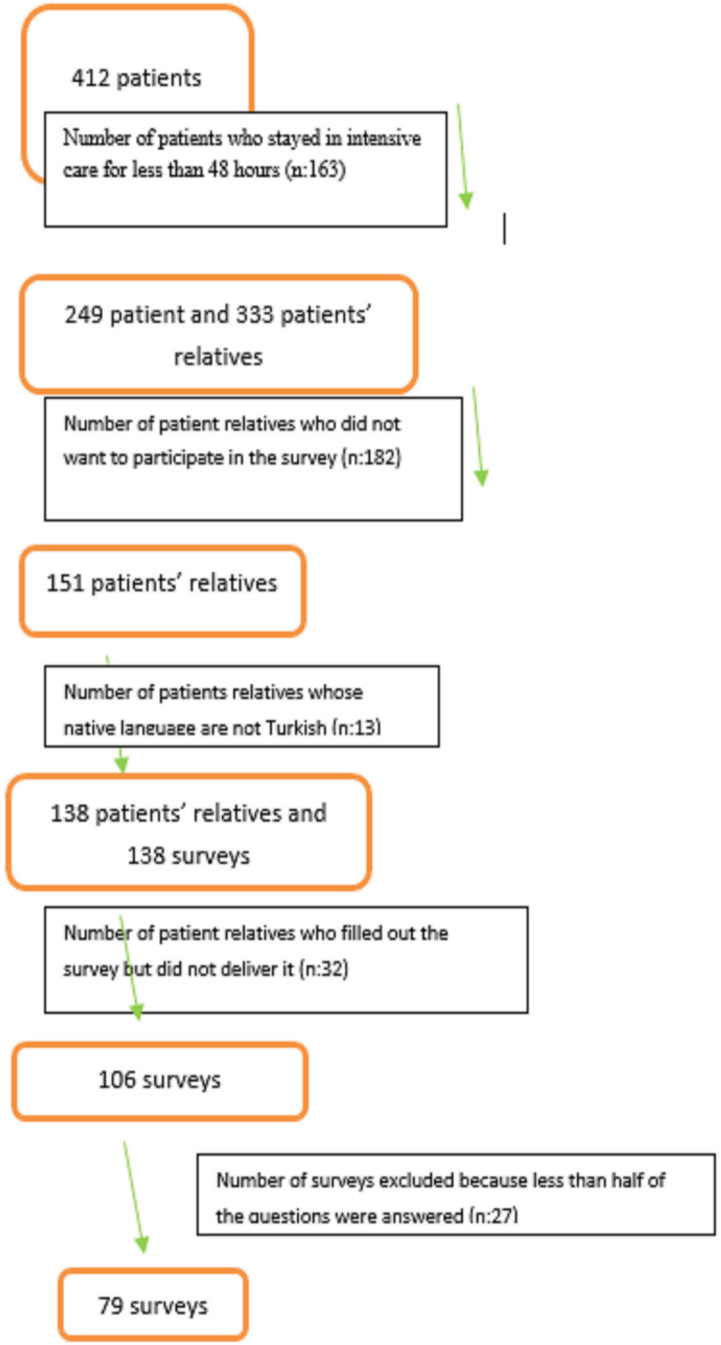

Figure 1. The flowchart of inclusion and exclusion criteria

RESULTS

A total of 79 questionnaires were included in the study. Since patients relatives did not answer all the questions completely, there are questions where the total number of answers to the questions is below 79. 57.3% of the patients' relatives who filled out the questionnaire were male. (p=0.248). 53.8% of the patients' relatives had previously been treated in another intensive care unit.(p=0.572). Demographic data and characteristics of patient relatives are shown in Table 1 (Table 1).

Considering the satisfaction rates, the mean satisfaction with patient care was 74.1±16.3 (very good), the mean satisfaction with the decision-making process was 64.3±12.7 (very good), and the mean overall satisfaction was 69.2 (very good) in the intensive care unit. (p=0.387) (Table 2)

The highest satisfaction rate was in meeting the requests of the relatives of the patients by the intensive care workers. (81.4±18.8). The lowest satisfaction rate was related to 'involvement' in the decision-making process (41.7±22.4). Relatives of patients with high satisfaction with care were also significantly more satisfied with the decision-making process regarding their patients' care (p<0.001). Satisfaction scores according to the questions of the departments are given in Tables 3 and 4.

When the questionnaires included in the study are evaluated; It was seen that the satisfaction level of the relatives of the patients was not significantly related to the education level of the patient's relative, the age of the patient, or whether he had a patient followed in the intensive care unit before.

Table 1. Distribution of demographic characteristics of patient relatives

		N	%	p
Gender	Female	32	42.7	0.248
	Male	43	57.3	
The degree of proximity	Parents	8	10.3	<0.001
	Wife/husband	8	10.3	
	Brother/sister	5	6.4	
	Child	43	55.1	
	Others	14	17.9	
Presence of relatives previously hospitalized in intensive care	Yes	36	46.2	0.572
	No	42	53.8	
Cohabitation with the patient	Yes	41	51.9	0.822
	No	38	48.1	
Frequency of meeting with the patient by the relative who does not live with the patient	More than once a week	20	52.6	<0.001
	Once a week	6	15.8	
	Once a month	8	21.1	
	Once a year	4	10.5	
Living place	In the city where the hospital is located	50	63.3	0.024
	Out of city	29	36.7	
Level of education	No read and write	1	1.3	0.500
	Primary education	21	26.6	
	High school	21	26.6	
	University	36	45.6	
Number of patient visits	None	1	1.3	0.002
	1-3	24	32.0	
	4-6	14	18.7	
	7-10	9	12.0	
	>10	27	36.0	
Time of patient visit	1-3 min	2	2.7	<0.001
	4-6 min	26	35.1	
	7-10 min	15	20.3	
	10-15	18	24.3	
	>15 min	13	17.6	

Table 2. Distribution of scores calculated from sections

	Mean±SD	p
Satisfaction with patient care	74.1±16.3	
Family satisfaction with the decision-making process	64.3±12.7	0.387
Overall satisfaction rate	69.2	
Mann-Whitney U		

Table 3. Satisfaction with patient care

Questions	Mean±SD
Evaluation of behavior towards the patient	79.7±17.4
Symptom management- pain	78.8±18.8
Symptom management-dyspnea	76.7±20.4
Symptom management-agitation	78.7±21.1
Evaluation of behavior towards the patient relatives	81.4±18.8
Emotional support to the patient	70.7±24.0
Coordination of care	76.2±17.7
Interest of intensive care unit staff to patient relatives	80.0±20.4
Skills and competence of intensive care unit nurses	77.2±18.0
Frequency of informing intensive care nurses	68.4±24.6
Skills and competence of intensive care unit doctors	80.0±20.0
Physical conditions of the intensive care unit	68.1±23.9
Physical conditions of patient relatives waiting area	57.2±24.5
Level and adequacy of health care	74.9±19.0

Table 4. Family satisfaction in the decision-making process regarding the care of critically ill patients

Questions	Mean±SD
Frequency of communication with intensive care unit doctors	65.6±25.2
Ease of obtaining information	68.7±24.3
Understanding of knowledge	74.7±21.0
Accuracy of information	74.9±19.5
Completeness of information	72.9±21.5
Consistency of information	72.5±21.3
Sense of involvement in the decision-making process	41.7±22.4
Sense of support in the decision-making process	46.4±17.6
Feeling of control over patient care	52.7±20.7
Time adequacy in the decision-making process	85.8±9.15

DISCUSSION

In our study, we showed the importance of being able to respond to the expectations of patient relatives in accordance with the family-centered intensive care concept in parallel with the literature. We found that it is important for the relatives of the patients to feel that they participate in the decision-making process and that this seriously affects the satisfaction rates.

In our study, the number of questionnaires filled in according to the number of patients was found to be quite low. In our study, we attributed this situation to the fact that the patients' relatives did not want to fill in because their patients were still receiving treatment, as in other studies (12,13).

It is known that the satisfaction of the relatives in the intensive care unit can be affected by many parameters such as the expectation level of the relatives, information sharing and communication, intensive care infrastructure and physical conditions (4,14). In many survey studies measuring the level of satisfaction in intensive care, the results show similar characteristics. While there are studies like our study that found the evaluation of the care and treatment of patients to be more satisfied, there are also studies where satisfaction is higher in the decision-making process (15).

The satisfaction rate obtained from the care and treatment department of the patients was found to be successful by us. (Satisfaction with patient care: 74.1±16.3). From the answers given, it can be concluded that the relatives of the patients think that their patients are cared for, that their treatment is complete, that the knowledge and skills of the doctors and other personnel are good. Erdal et al. also attributed the high results to the same reasons (4).

In our study, it was seen that the mean satisfaction score of the decision-making process regarding the patient was 64.3±12.7. In their study, Heyland et al. observed that the satisfaction rate of the relatives of the patients was high in questions about the decision-making process (11). They attributed this to the fact that the relationship between the doctor and the patient's relatives is strong, that the concerns of the relatives of the patients are resolved and their questions are answered in sufficient time, and that sufficient time is provided for the relatives of the patients to reach a decision. In our study, the feeling of being involved in the decision-making process, the feeling of support in the decision-making process, and the feeling of control over patient care were the sections with the lowest scores in our questionnaire, and their satisfaction scores were 41.7±22.4, 46.4±17.6, 52.7±20.7, respectively. This showed us that we should be more careful about including the relatives of the patients in the process.

In the studies, the subject with the lowest satisfaction rate was that they could not see their patients when they wanted. The only thing that the relatives of patients who experience anxiety due to the fear of losing a family member want to see their patient impulsively (16,17). Jensen et al. investigated the factors affecting family satisfaction in intensive care, and examined two countries, Denmark and the Netherlands. The satisfaction rate was found to be significantly lower in the Netherlands than Denmark, where the intensive care treatment protocol is almost exactly the same, and they attributed this to the strict visitation policies of the Netherlands (18). Family and kinship relations especially in Turkish culture are pretty close and important. In Turkish society, individuals try to keep their morale high by seeing the patient frequently, and they believe in the healing effect of keeping the patient's morale high (19). In our study, this situation was similar to the literature, and the fact that they could not see their patients when they wanted was one of the issues with the lowest satisfaction rate.

Considering the studies conducted, it has been determined that the relatives of patients all over the world are weak or moderately satisfied with the waiting rooms of the intensive care units. (5,20). The satisfaction rate of the physical conditions of the waiting area is 57.2±24.5 and it has a low rate. It is thought that the low satisfaction with the waiting room is due to the fact that our waiting room is close to our intensive care unit and does not have sufficient physical conditions. In addition, this result was interpreted as the necessity of improving the waiting room conditions.

Limitations of the study

The most important limitation of our study is the low number of patient relatives surveys. A comprehensive survey with a larger number of patients is planned in our new intensive care building, whose construction has been completed.

CONCLUSION

In our study, we found that it is important for patients' relatives to feel that they participate in the decision-making process, and how seriously this affects their satisfaction rates. We think that research should be done on how family members can be more involved in the decision-making process when planning quality improvement interventions for intensive care units.

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Conflict of Interest: *The authors declare that they have no competing interest.*

Ethical approval: *The study was carried out with the permission of Eskişehir Osmangazi University Faculty of Medicine Non-Interventional Clinical Researchs Ethics Committee (Date: 18.09.2018 Decision No: 14).*

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