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Assessment of psycho-social needs of the family members of the patients hospitalized in ICU and CCU

Mahdieh Sarhadi[1], Ali Navidian[*2], Tayebeh Fasihi Harandy[3], Asqdoalah Keykhaei[1]

1.Department of Nursing, Zahedan University of Medical Sciences, Zahedan, Iran

**2. Pregnancy Health Research Center, Zahedan University of Medical Sciences, Zahedan, Iran*

3. Assistant Prof., Social Determinants of Health Research Center, Alborz University of Medical Sciences, Karaj, Iran

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ABSTRACT

Aims: Understanding and meeting physiological and social needs of the family members of the patients hospitalized in ICU is very important for the nurses. This study has been done with the aim of "investigating and comparing psycho-social needs of the family members of the patients hospitalized in ICU and CCU".

Methods: This descriptive - analytical comparison study was done on 100 first-degree family members of the patients hospitalized in ICU or CCU of Khatam-ol- Anbiya hospital in Zahedan in 2011. Data were collected by the questionnaire of surveying psycho-social needs of the patients hospitalized in critically care units and they were analyzed by using SPSS18 software, t-tests and Fisher's exact test.

Results: There was significant statistical difference between the two groups in some items such as; need for meeting and changing its times, family members should be accepted by the nurses , talking to the nurses about their feelings, understanding about critically care unit and participating in patient's treatment ($p<0.05$).

Conclusions: Creating more opportunities for meeting and also giving more information to the family members about patients' treatment procedure help in improvement of the psycho-social needs of the family members and reduction of mental reactions caused by them in critically care unit .

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1. Introduction

Family plays a vital role in taking care of their patients [1]. Family members are directly influenced by the family and they have special commitment to each other [2]. But there are some factors that can influence family's health suddenly.

Hospitalization of one of the members can make anxiety and mental problems in other members of the family. Especially when the patient is hospitalized in some stressful wards such as critically care unit or emergency unit, this anxiety is doubling [3]. Because the relatives are not prepared mentally for their patients to enter critically care units and many

* Correspondence Author: Ali Navidian
Pregnancy Health Research Center, Zahedan University of Medical Sciences, Zahedan, Iran. +98 5412442482
Email: alinavidian@gmail.com

of the admissions are unintentionally and in emergency conditions [4] and it can make severe anxiety in the family [5]. Since in the first days of the patients' hospitalization in intensive units, especially in ICU, emergency needs and psycho-social emergencies are appeared for the patients' family [6], and families are in whirlwind of lack of certainty, shock, disability and confusion [7].

More than one-third of the patients in critically care unit are under ventilator all over the world [8] and their families are under pressure of taking decision and choosing treatment [9], family members of these patients usually experience painful feelings and intensive grief before and after their dears' death [10].

Environment is a source of stress for the families [4]; because their patient is hospitalized in a ward that most of its patients are critically ill, need specialized care or they are close to death. Encountering this situation can cause family's increased grief and decreased hope and ability [11].

Gernovik et al. also believe that the first 24 hours of the patient's hospitalization in critically care unit is a severe and sudden crisis for the family members [12]; this crisis disrupts normal life and the role,in this situation they experience intensive fear, sadness, stress, anxiety, anger, tiredness and hopelessness. This crisis is increasing every day.all of these feelings can have bad effect on personal and social relationships and also taking decision in emergency situations, especially regarding the hospitalized patient[3]. Stressors experience by the family members increase many special needs in them [6].

Results of several studies show that in the traumatic syndrome, the family is defined as a predictable set of needs [5] all the care providers who work with these people also perceive that they need emotional support, kindness, honesty and understandable and timely exchange of information [13], among the most necessary responsibilities of the physicians in critically care units is having relationship with the patients and their families. Usually patients in critically care units are not able to participate in complicated discussions regarding; diagnosis, prognosis and treatment planning [14]. Responsibility is often transferred to the persons who have had close relationship with him/her. These alternatives may be the first-degree member of the family. Despite these concerns, families and other surrogates are often unaware and deprived of taking decision about clinical care of their dears in critically care unit [15]. Effective relationship and family's decision-taking improve clinical and mental satisfaction [16].

Some studies regarding family needs showed that understanding family needs are totally the same by the nurses and families, however in a study which had been done by Max Well et al. (2007) , it was seen that although nurses and families agree on most of the needs, nurses have not considered family's needs. He also showed that family members whose needs are met are more satisfied with nursing cares. It causes reduction of stress and increases ability in participating in taking care of the patient and it facilitates patient's improvement. So it seems that measuring family's needs provide valuable information for improvement of understanding, satisfaction and decision taking of the families [15].

Information show that providing accurate information by nurses for the family members is counted as one of the most effective tools of relationship and it is the basis of successful interventions in encountering critical conditions of the families of the patients hospitalized in critically care unit [15, 17]. If nursing cares should be provided comprehensively and with high quality, nurses and ICU staff should not only notice patients but also they should notice psycho-social needs of the family and it shows inevitable and unique role of the nurses in identifying and meeting patient's families' needs as a client [1], but in most of the situations, psycho-social needs of the family members are not considered by the nurses and health staff as it should be [18]. Correct and scientific measurement of psycho-social needs

of the family members of the patients hospitalized in critically care unit is the first step for avoiding emergence of little attention in taking care of the patients which is unintentionally or uninformed in most of the cases. This study had been done with the aim of investigating and comparing psycho-social needs of the family members of the patients hospitalized in ICU and CCU.

2. Methods

This is a descriptive-analytic study that investigates and compares psycho-social needs of the family members of the patients hospitalized in CCU and ICU. Family members of the patients hospitalized in ICU and CCU of Khatam-ol-anbia educational hospital of Zahedan Medical Sciences University in 2011 are the study population and they have been chosen by convenience sampling. Required sample size was determined according to the last studies and totally 200 hundred people entered the study, in this way that one hundred of the family members of the patients hospitalized in ICU and one hundred of the family members of the patients hospitalized in CCU were matched as a group in terms of variables such as: age, gender, educational level, job and relationship with the patient, they were entered the study after taking informed consent. Inclusion criteria included: being at least fifteen years old, having at least literacy of reading and writing, having causal or proportional relationship with the patient and having patient's health, supportive and emotional responsibility.

Data collection tool in this study was a questionnaire that was adjusted in three parts. The first part was demographic features of the patients hospitalized in critically care unit , the second part was demographic features of these patients' family members and the third part was a part taken from a questionnaire with 25 questions which was adjusted for the first time by Multer et al. in 1987 for investigating patients' family's needs [2]; this questionnaire investigate areas such as achieving information, guarantee, affinity, support and comfort [7]. The participant determined their answers in Likert scale (not important, less important,

Table 1: absolute and relative frequency distribution of the patients' clinical and individual features in ICU and CCU

Kind of demographic variables		ICU		CCU		Test result
		number	percent	number	percent	
gender	male	58	58	59	59	p=0.88
	female	42	42	41	41	
Patient's situation	Conscious	15	15	0	0	❋p<0.001
	Confusion	18	18	0	0	
	Coma	67	67	0	0	
	Absolute rest	0	0	69	69	
	Relative rest	0	0	31	31	
Severity of disease	Critically ill	36	36	17	17	❋p<0.002
	ill	34	34	29	29	
	bad	14	14	21	21	
	Relatively good	14	14	22	22	
	Good	2	2	11	11	
Having surgeries	Yes	51	51	0	0	❋p<0.001
	No	49	49	100	100	
Kind of disease	Multi trauma	28	28	0	0	❋p<0.001
	Respiratory problems	15	15	0	0	
	Internal	28	28	0	0	
	Brain problems	29	29	0	0	
	Angina	0	0	18	18	
	Myocardial infarction	0	0	32	32	
	Coronary artery atherosclerosis	0	0	17	17	
	Heart failure	0	0	30	30	

important, and very important). Score of 1 to 4 was considered for every one of the answers [2].

Reliability and validity of this questionnaire was investigated before by Maki and Bowman in a panel and in two separated situations among 51 family members of the patients hospitalized in internal and surgical critically unit. Content validity of this project was confirmed. Reliability of this tool was estimated 70% by using retest method [2, 19]. Also in Iran, validity and reliability of this questionnaire was investigated by Abaszadeh et al. in 2001. they also used content validity for investigating validity and retest for investigating reliability in their studies. Achieved data were analyzed by using $SPSS_{18}$ software and by the help of t-tests and exact Fisher-test.

3. Results

Number of men and women in two groups were approximately the same and most of them were men. 57% of the patients' family members in ICU and 53% of the patients' family members in CCU were diploma or higher than that. 34% of the patients' family members in ICU and 32% of the patients'' family members in CCU had free job. 45% of the patients' family embers in ICU and 36% of the family members in CCU were the patient's children. members in CCU were the patient's children. Almost about 72% of the family members in both groups were living with the patients and almost 69% of the family members in both groups were married.

The amount of participation of the hospitalized patients' family members in taking decision about patients' treatment in ICU and CCU were

Table 2: Relative and absolute frequency distribution of individual features of CCU and ICU patients' family members

Kind of demographic features		ICU		CCU		Test result
		Number	Percent	Number	Percent	
Gender	male	69	69	69	69	p=0.98
	female	31	31	31	31	
	Total	100	100	100	100	
Education level	Illiterate	12	12	19	19	p=0.39
	Under diploma	31	31	28	28	
	Diploma and higher	57	57	53	53	
	Total	100	100	100	100	
job	Employee	26	26	23	23	p=0.98
	Retired	6	6	8	8	
	Housewife	14	14	16	16	
	Free job	34	34	32	32	
	Student	11	11	11	11	
	Unemployed	9	9	10	10	
	Total	100	100	100	100	
Relationship with the patient	Spouse	29	29	31	31	p=0.25
	Child	45	45	36	36	
	Father	7	7	7	7	
	Mother	0	0	4	4	
	Sister or brother	19	19	22	22	
	Total	100	100	100	100	
Living with the patient	Yes	72	72	71	71	p=0.87
	No	28	28	29	29	
	Total	100	100	100	100	
Taking decision for treatment	Yes	100	100	96	96	❋p<0.04
	No	0	0	4	4	
	Total	100	100	100	100	
Marital status	Married	68	68	69	69	
	Single	32	32	31	31	p=0.87
	Total	100	100	100	100	

100% and 96% respectively. Considering the formed matching, there was no statistical significant difference between groups regarding variables of age, education level, job, relationship with the patient and marital status ($p>0.05$). it is while due to higher participation of the family members of the patients hospitalized in ICU in treatment decision-taking, there was significant difference in both groups statistically ($p<0.05$).

The age of the study samples in the group of family members of the patients hospitalized in ICU was at least 15 and at most 78 years ole and the mean age in this group was 35.45±14.63 and in the group of the family members hospitalized in CCU, the age was at least 15 and at most 80 years old and the mean age in this group was 38.59±16.99. There was no significant difference between two groups statistically ($p>0.05$).

In terms of time duration of hospitalization, the minimum time of hospitalization in ICU was three days and the maximum time was 45 days and on mean the time of patients' hospitalization in this ward was 9.97±7.2 and in CCU the minimum time of hospitalization was three days and the maximum one was fifteen days and on the mean this time in this group was 6.17±2.53, that there was significant difference between two groups statistically ($p<0.05$).

In terms of age, the minimum age of the patients hospitalized in ICU was 13 and the maximum age was 85 years old and the age mean in this group was 49.76±16.24. 58% of the patients hospitalized in this ward were female and 42% were male. The minimum age of the patients hospitalized in CCU was 30 and the maximum age 80 years old and the age mean in this group was 52.38±11.77. 59% of the patients hospitalized in this ward were male and 41% were female. The most of patients' hospitalization in ICU with 29% of the cases was due to traumatic brain and the most of the patients' hospitalization in CCU (32%) was due to myocardial infarction (table 2).

According to table 3, psycho-social needs of calling the family when there is a problem for the patient (100%) to be informed about the measures that are doing for the patient (99%), to be sure about providing adequate care for the patient (98%), education for discharge and after that (98%) and having information regarding the procedure treatment of the disease (98%) respectively had the highest priority and importance from the patients' family members' point of view and in contrary, access to telephone (48%), changing meeting times according to the family's need (84%), the possibility of patients' friends and relatives' meeting (85%), talking to the nurse regarding emotions (86%) and opportunity for regular meeting (86%) respectively had the least priority and importance.

Things such as education for discharge and after that, to be sure about providing adequate care for the patient (98%), to be informed about the procedure of the treatment (96%), calling the family when there is a problem for the patient (98%) and to be informed about the measures that are doing for the patient (96%) respectively had the highest percentage of priority and importance from the hospitalized patients' family members' point of view and in contrary, access to telephone (44%), opportunity for regular meeting (48%),patients' relatives and friends' meeting (51%), changing times of meeting according to the family's need (54%), introduction of nurses and caregivers to the family members (57%) respectively had the least percentage of priority and importance.

In investigating and comparing psycho-social needs of the family members of the patients hospitalized in CCU and ICU, it was cleared that the family members in these wards in cases such as: need of meeting and changing its times, achieving more information from the physicians and nurses about patient's condition and critically care unit, being educated by nurses about the things that they have to do beside the patient's bed and also the family's acceptance by the treatment staff, talking about their emotions, giving hope about their patient's

improvement, also introduction of the people who help patient's family in providing care were different with each other and there was significant difference between two groups

Table 3: absolute and relative frequency distribution of answering to the choices of the questionnaire about psycho-social needs in family members' point of view of the patients hospitalized in ICU and CCU

Type of ward	ICU				CCU				Test result
	Not important		Very important		Not important		Very important		
Psycho-social needs	N	P	N	P	N	P	N	P	
Patient's family should be sure that adequate care is provided for their patient.	2	2	98	98	2	2	98	98	p=0.98
The nurse should explain the measures which should be done by the family after patient's discharge.	2	2	98	98	1	1	99	99	p=0.56
Patient's family should know about their patient's treatment.	2	2	98	98	2	2	98	98	p=0.98
When the patient's family is out of the hospital and there is a problem for their patient, somebody should call them.	0	0	100	100	2	2	98	98	p=0.15
Patient's family members should be informed about the exact time of meeting.	6	6	94	94	6	6	94	94	P=0.96
The nurse should answer to the family's questions honestly.	5	5	95	95	6	6	94	94	p=0.75
A special person in the hospital should answer patient's family needs.	5	5	95	95	10	10	90	90	p=0.17
If it is necessary to transport a patient to another ward, the patient's family should be aware before.	13	13	87	87	14	14	86	86	p=0.83
There should be the possibility of patient's family daily speaking with the physician.	7	7	93	93	16	16	84	84	❋p< 0.04
Improvement stages of the patient should be explained for the patient's family.	9	9	91	91	6	6	94	94	p=0.42
There should be access to telephone for the patient's family.	52	52	48	48	56	56	44	44	p=0.57
There should be the possibility of frequent meeting for the family.	14	14	86	86	52	52	48	48	❋p<0.001
The nurse makes the patient's family hopeful about their patient's improvement.	6	6	94	94	28	28	72	72	❋p<0.001
The family should be educated by a nurse about the things that they have to do beside the patient's bed.	6	6	94	94	17	17	83	83	❋p<0.001
Somebody should talk to the family about the probability of a critically ill patient's death.	8	8	92	92	12	12	88	88	p=0.34
Patient's family should be able to help nurses in physical care of their patient.	8	8	92	92	14	14	86	86	p=0.17
Patient's family should be able to ask nurses about their patient every day.	6	6	94	94	15	15	85	85	❋p<0.03
Patient's family should be informed about treatment measures which are doing for their patient's improvement.	1	1	99	99	4	4	96	96	P=0.17
Patients' family should be accepted by nurses.	9	9	91	91	21	21	79	79	❋ p<0.01
Hospital and ICU environment should be explained for the patient's family by a nurse.	12	12	88	88	25	25	75	75	❋ p<0.01
Patients' family should be able to talk about their emotions to the nurses.	14	14	86	86	40	40	60	60	❋p<0.001
There should be the possibility of patient's relatives and friends' meeting.	15	15	85	85	49	49	51	51	❋p<0.001
Those who help patient's family in taking care should be introduced to the patient's family.	7	7	93	93	43	43	57	57	❋p<0.001
Expressions which are using in the ward and are not understandable for the patient's family should be explained for them by a nurse.	9	9	91	91	14	14	86	86	p=0.26
In necessary times, when the family needs, meeting times should be changed.	16	16	84	84	46	46	54	54	❋p<0.001

N=Number
P=Percent

statistically regarding the above issues ($p<0.05$).

4. Discussion

Family's nursing in intensive cares in addition to helping the family is counted as helping to the patient too. But patient is often the only focus of nurse's attention [20]. Family's participation is not always possible and the patient's family is away of the patient , one of these cases is hospitalization in critically care unit that due to structure and quality of these wards, the presence of the family members are prohibited and the meetings are severely limited [21]. Although family members of these patients hospitalized in CCU and ICU consider psycho-social needs important, these needs are different in terms of prioritization.

In the ICU patients' family members' point of view, the most important need of the family is calling the family when there is a problem, while this need is in the fourth priority of the CCU patients' family members. The second priority in the ICU patients' family members' point of view is having information about the measures which are doing for the patient, while it was the fifth priority of the CCU patients' family members. Family members of the patients hospitalized in ICU and CCU are different in achieving information from the treatment staff. The difference between two groups is because of that ICU patients' family members are encountered with more complicated equipment and facilities and it is natural that achieving more information about patient's condition is more important and valuable in compare with another group. There are several studies regarding need for information and communication. In a qualitative research, Nelson et al. achieved that families of the patients that need long-term mechanical ventilation and tracheostomy should be informed about disease and treatment, what is going to happen in the future, treatment severity, potential complications and alternative treatment [12].

Multer says that access to information about medical conditions of the patient and the quality of relationship with health care staff are needs with high priority for these patients and meeting these needs of the family members is the primary responsibility of critically care physicians and nurses [7], in consistent with these findings, study of Souderstorm et al. (2009) which was done regarding family adaptation in critically care unit also showed that information is necessary for the adaptation of the family members of a critically ill patient and disability in receiving support and information without ambiguity may leads to family's incompatibility during patient's stay in critically care unit and after discharge [4].

The third priority from the family's point of view of the patients in ICU was being sure about providing adequate care for the patient while this need was in the second priority in the CCU patients' family members' point of view . Certainty about the patient's condition helps in reducing family's concern and anxiety and also trust to care providers [4]. Also in the studies of Multer and Hamp, this need is in the highest level of the family's needs too [2].

In the patient's family's point of view, the most important needs of these families is to be sure about patient's adequate care. It can be because of that, usually there is less meetings in these wards [2]. In a study which was done by Lee and Lao (2003) in Hong Kong about family members of the patients hospitalized in ICU , the results showed that these people ranked need of certainty in a high priority; these findings were repeated by Ale Hasan (2004) with larger sample size in Jordanian families, also in a study which was done by Verhaeghe et al. (2005) results showed that need of certainty is more common among the family members of the patients suffering from trauma and patients with neurological disorders [4]. Findings of these studies are in consistent with the findings of the present study.

The fourth priority in the ICU patients' family's point of view was having education about the measures that the family should do after

patients' discharge, while it was in the first priority for the CCU patient's family. Findings of the present study are in consistent with the findings of the study of Abaszadeh et al. Patients who are hospitalized in ICU have long recovery period and specific treatment diet that they need to be followed-up for a long time after their discharge and families of these patients like to know what measures they should do for him/her after discharge [2].

The fifth priority in the approach of the ICU patients' family is having information regarding patient's treatment procedure; while it was the third priority in the CCU patients' family's point of view. Family members of the patients hospitalized in ICU like to be aware of patient's condition, the way of treatment, the prognosis and the risk of disease. Lack of information about the patient's condition, facing unanswered questions and uncertainty of the future may cause crisis for the family [22, 4].

Although family members of the patients hospitalized in ICU and CCU put less priority for all the items related to the family members and friends' meeting and changing the meeting times, family members of ICU patients gave higher scores in compare with the family members of CCU patients, they also gave higher scores to the things that they have to do beside the patient's bed. In investigating statistical tests, it was also cleared that there is significant difference between two groups statistically. Studies show that the members of the family want to be involved in taking care of the patient. So it is logical that the patient's family members need to meet the patient for participation, support and protection of the patient and it helps the family member to cope with the conditions [10]. Studies also show that family meetings facilitate communication between health care providers and patients' families in ICU [16], it is while in all the educational hospitals in Iran, meeting restriction is performed, among its reasons is this believe of nurses that the presence of the family members increases risk of infection, interrupts patients' rest and causes physiological changes such as tachycardia, arrhythmia, hypertension and anxiety in the patients [21].

Nursing studies have shown that presence of the family besides patient's death helps in reducing family and patient's anxiety. In a study which had been done by Fridh et al. (2009), it is mentioned that when the relatives are aware of the seriousness of the situation, they state the need of being close to the dying person. Even when the patient is unconscious, the relatives try to communicate with the him/her and they believe that he/she is aware of their presence [4]. In a study which was done in France by making restriction of meeting in ICU, it was shown that these restrictions lead to the family's dissatisfaction [6],so difference in these two groups can be due to further deterioration of the patient, being younger and more restriction of meetings in ICU.

Results of the present study show that the groups are different with each other regarding achieving information about ICU. Findings of this study are in consistent with the study of Egnebergur and Nelmoz, in a qualitative study (2007) regarding experience of hospitalized critically ill patients' family, they showed that the participants found the environment unfamiliar, scary and confusing and they found their patient attached to complicated and threatening equipment; in another study which was done by Fridh, Forsberg and Bergbom (2009), results showed that family members of the patients hospitalized in critically care unit do not understand medical monitoring, technical equipment and facilities [4].

Findings of the present study show that the groups are different regarding items such as: family members' acceptance by nurses and talking about their emotions with the treatment staff. It is may be because of that nurses need technological advanced equipment for providing intensive cares for the patients in critical conditions and they know that the critically ill patients' situations are changing any time and it may deteriorates, so they spend much time for controlling the patient's

situation. But it should not be forgotten that nurses often ignore critically care units patients' family members' emotions unintentionally. Nurses' support of the patients' family through appropriate treatment communications and helping them for expressing their emotions cause hope in the family and reduces stress [6].

5. Conclusions

Totally, patients' family members' point of view in critically care units with a little difference in terms of prioritization showed that the most important needs in their view is being ensure of the way of patient's care (quality and quantity), to be informed of the procedure of patient's treatment and also to be educated about post discharge measures and the least important needs from their point of view include: facilities, appropriate physical environment and opportunity and quantity and quality of meetings. If patients' treatment and care needs are attended in critically care units which is in high priority in their family's point of view and the feedback is given to the family, in addition to the their trust and confidence, they are going to be calm and relax and resolve some problems such as: the need for physical presence and insisting for more meetings, frequent questions and telephones to the wards which sometimes cause problems for the hospital and also critically care units .

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