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Psychological reactions of family members of patients in intensive care unit in Iran

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ABSTRACT

Studies suggest that family members of patients in the ICU and true negative changes in your life as stress, physical, emotional - psychological and social experience. Members' stress has increased over time, eventually resulting in impaired function and role of the family. This alone can cause severe fouling in distress within the family system. Therefore, this study compared stress, anxiety and depression in family members of patients hospitalized in intensive CCU, ICU in Iran. This descriptive - analytical comparison. On 200 first-degree family members of the patients admitted to the ICU CCU, ICU hospital Anbiya, Zahedan in 2014. Stress and depression DASS questionnaire collected data using SPSS software and parametric t-test and chi-square test was used for statistical analysis. Our findings in the study of stress, anxiety and depression in family members of ICU patients in ICU, CCU showed. ICU hospitalized patients, family stress, anxiety and depression in family members of patients with more than hospitalized in CCU experience. When a patient is admitted in intensive care unit, patients and family members should be treated with respect and make a decision that impacts the physiological and psychological symptoms in family members. Members often stress, anxiety and depression so it seems the nurses support patients and families through health communication properly and assist them in the discharge of feelings and emotions, to create hope in families and reduce their stress levels.

Keywords: stress, anxiety, depression, critical care, family

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INTRODUCTION

Family as the first and fundamental social institute has its specific role, culture, and structure. It is the founder of its members' physical, cultural, spiritual, mental, and social health [1]. Obviously challenges that a family member is facing will affect the whole family. Illness is a challenging factor that create crisis in families [2]. Crisis disturbs the balance of family normal life [1]. Illness affects both patient and their family [3]. Difficult illnesses often happen in a short while without prior warning [4]. With the rapid advances in technology Intensive Care Units [ICU] were developed in hospitals in 1960 as a special department of a hospital or health care facility that provides intensive treatment medicine cater to patients with severe and life-threatening illnesses and injuries [4]. Every year 20% of mortality in the U.S. happens in ICUs. This negative impression may influence the family negatively by increasing the stress and the risk of psychological and physical problems [5]. Patients with life-threatening conditions need intensive care. This stressful period creates too much emotional stress for the patient's family [1]. In the first days of hospitalization in ICU, families experience urgent needs, social-psychological anxiety, as well as emotional and cognitive tensions [4]. When the life of patient is threatened, families experience an extremely tensional situation where they need to make decision on the treatment. This leads to emergence of psychological and physical symptoms in patient's family members among which stress, anxiety, and depression are the commonest ones. Such symptoms, in turn, may influence the well-being of the family [4]. Post-event stress, anxiety, and stress disorders are common psychological effects in families with a sick member. Anxiety, depression, and Post-Traumatic Stress Disorder [PTSD] are reported as the commonest mental health conditions in families who experience hospitalization or loss of a family member in ICUs. According to the most important longitudinal study in France, 90 days after discharging or the death of a patient, 33% of patients' family members showed an average or high risk of PTSD. This increased to 80% in family members who had been involved in final decisions of treatment. The risk is significantly higher in women, family members who had no opportunity to visit the patient before his death, and those who were given incomplete or not easily-understandable information about the patient [7]. Stressful factors include vague information, unknown diagnosis, fear of the loss of the patient, financial problems, disturbed daily schedule, and unfamiliarity with the ICU environment and principles [4]. Fear of losing the patient, unknown outcome, emotional chaos, financial worries, change of role, unfamiliarity with the principles of hospitals and ICU, and inevitable distance from family members are some sources of stress for the family [4,8].

Horn and Tesh [2001] studies the condition of families with a member hospitalized in ICU in a health care facility in Southern America. Their findings show that 60% of family members experience changes in reactions, behavior, lifestyle, daily schedule, regular meal habits, and sleep patterns [9].

Pang and Suen [2008] studied the stressful factors in ICU and showed that "fear of death" is the most important factor creating stress and anxiety in patients. Pressure on family members to confirm the treatment method and accepting its risks, pain, and the duration of hospitalization in ICU were reported as other stressful factors. [10]. Frederickson [1989] showed that anxiety in patient's family member in positively related with caring from a coronary patient [11]. Findings of a qualitative study by Titler et al. [] on 15 family members of patients showed that having a family member hospitalized in ICU is a critical thread to family members mental condition. It may cause severe emotional conditions, vulnerability, fear, and anxiety. It also creates disorder and change in members relationships that results in tension [12].

Findings show that patient's spouse experiences fear, anxiety, and depression. They are suffering from stressful thought of losing their partner and destroying family. Previous studies show that 50% of patient's family members show such symptoms as depression, melancholia, suicide, sluggishness, depression, and anxiety [5,7].

Taking care of patients' family members is of critical important, studies show that, however, they are receiving enough attention [6]. Therefore, technical evaluations and interference seem to be required for patients' family members. This due to the impact of anxiety on family's capacity in understanding the situation and given information by doctors, keeping effectiveness patterns in family, effective usage of coping skills, and providing positive support to the patient [8]. Hence, retaining family performance and cohesion is of great importance [6]. Family has an undeniable impact on patient's condition and their response to treatment. In other words, family acts as a buffer against patient's anxiety and a valuable source of care and strength to the patient. When family is experiencing high levels of stress and anxiety, they may not be able to help the patient.

Increased anxiety in family members is spontaneously associated with lack of trust in hospital staff, lack of coordination in the treatment regime, and short-temperedeness. Patient's family members can moderate the stressful condition of the whole family by controlling emotions and coping with the current situation. That such moderations ad changes are of any use or result in any consequences depends on the type of the interventions from health care specialists and family reaction to the traumatic event [8].

METHODOLOGY

The current descriptive-analytic paper studies and compares the psychological reactions of a patient's family member who is catering in ICU or CCU. Our population consists of immediate family members of patients in ICU and CCU which were selected using convenience sampling. The size of sample population was determined according to the previous studies. 200 participants were included the population: 100 family members of patients in ICU and 100 family members of those in CCU. Participants were synchronized with respect to such variables as age, gender, education, occupation, and relationship with the patient. Written informed consent was obtained from participants.

Required data was gathered in three sections: (1) demographic information of patients hospitalized in ICU or CCU, (2) demographic information of patients family members, and (3) a short questionnaire of Depression Anxiety Stress Scale (DASS) on the basis of Likert scale (not at all-very much). Data was analyzed using SPSS Software, T-test, and Chi square.

Findings

Studying demographic data showed that 69% of sample population was males and 31% was female. 57% of immediate family members of patients in ICU and 53% of family members of patients in CCU had high school diploma or higher education degrees. 34% of immediate family members of patients in ICU and 32% of family members of patients in CCU were self-employed. 45% of immediate family members of patients in ICU and 36% of family members of patients in CCU were patients' child. Approximately 72% of patients' family members were living with the patients and 69% were married. Participation of family members in treatment decisions was 100% for patients in ICU and 96% in CCU. Considering the synchronization between the groups, there was no significant statistical difference between the groups with respect to age, gender, education, occupation, relationship with the patient, and marital status. Due to participation of ICU patients' family members in choosing the treatment type, there was a significant difference between the groups. The age range of participants was 13-78 for ICU group (average age= 14.63±35.45) and 14-80 for CCU group (average age= 16.99±38.59). In fact, there was no significant difference between the groups. With respect to the duration of hospitalization the shortest duration was 2 days and the longest was 42 days. The average duration was 7.2±9.97 in ICU and 2.53±6.17 in CCU with the shortest duration of 1day and the longest duration of 15 days in CCU, which showed a significant difference between the groups of study. Average age of patients in ICU was 16.24±49.76 with the youngest patient of 13 and the oldest of 85. 58% of patients in ICU were males and 42% were females. Average age of patients in CCU was 11.77±52.38 with the youngest patient of 30 and the oldest of 80. 59% of patients in ICU were males and 41% were females. The commonest reason for hospitalization in ICU and CCU was traumatic brain injury (29%) anf heart attack (32%) respectively. Demographic information for both groups is shown in Table1 and Table 2. With respect to psychological reactions of family members of patients in ICU and CCU it should be noted that the average score of anxiety, stress, and depression were 5.11±19.10, 4.73±20.55, and 5.26±18.61 respectively for ICU group and 5.52±16.05, 5.43±17.02, and 5.10±15.63 for CCU group. T-test results show that there is a significant difference between the groups with respect to psychological reactions (Table 2).

Table 1: Relative and absolute frequency distribution in two groups on the basis of demographic features

Unit/demographic variables		ICU		CCU		T-test Result
		Number	percentage	Number	percentage	
Gender	Male	69	69	69	69	P=1
	Female	31	31	31	31	
	Total	100	100	100	100	
Education	Illiterate	12	12	19	19	P=0.39
	Diploma	31	31	28	28	

	Higher education	53	53	57	57	
	Total	100	100	100	100	
Occupation	Civil Servant	26	26	23	23	P=0.98
	Retired	6	6	8	8	
	Housekeeper	14	14	16	16	
	Self-employed	34	34	32	32	
	Student	11	11	11	11	
	Unemployed	9	9	10	10	
	Total	100	100	100	100	
Relationship with patient	Spouse	29	29	31	31	P=0.25
	Chile	45	45	36	36	
	Father	7	7	7	7	
	Mother	0	0	4	4	
	Sibling	19	19	22	22	
	Total	100	100	100	100	
Living with patient	Yes	72	72	71	71	P=0.87
	No	28	28	29	29	
	Total	100	100	100	100	
Involvement in decision-making	Yes	100	100	96	96	P=0.04
	No	0	0	4	4	
	Total	100	100	100	100	
Marital status	Yes	68	68	69	69	P=0.87
	No	32	32	31	31	
	Total	100	100	100	100	

Table 2: Average Scores of psychological reaction in ICU and CCU groups

Unit/demographic variables	ICU	CCU	T-test Result
	SD±average	SD±average	
Depression	5.26±18.61	5.10±15.63	P<0.001
Anxiety	5.11±19.10	5.52±16.05	P<0.001
stress	473±20.55	5.43±17.02	P<0.001

DISCUSSION

Seeing a beloved one in a life-threatening and severe condition surrounded by high-technology pieces of equipment in ICU or CCU sections are factors that increase mental and psychological tension in family members. In such a condition family members forget the fundamental needs of the family and focus on the patient and their condition [13].

Our findings from studying the psychological reactions of patients' family members in both groups show that the level of stress in family members of patients in ICU is significantly higher than those of patients in CCU. To explain the difference we suggest that hospitalization of a family member is extremely stressful which results in changes in family members' roles and family structure. It is always accompanied by emotional reactions such as anxiety. Puchardo et al. () studied the condition of 544 family members of hospitalized patients and showed that 57.5% of families had anxiety, from which 82.7% were patients' spouses who participated in decision making about the patient's condition and treatment [4]. It is believed that there are several factors in creating anxiety in patient's family members including the type of disease, the relationship of patient and the family member, patient's responsibility in the family, and patient's current condition [12]. Lee et al. () state that some unfulfilled needs in family can cause to anxiety in patient's family members [3]. Nurses' role in decreasing anxiety in patient's family member is of great importance. As prevention is always easier and cheaper than treatment, preventive actions against anxiety have an important role [12].

Our findings from studying the psychological reactions of patients' family members in both groups show that the level of stress in family members of patients in ICU is significantly higher than those of patients in CCU. Previous studies show that family of a patient hospitalized in ICU experiences the negative consequences and changes in their life. This lead to an increase in stress and anxiety which eventually can result in disorder in the role and performance of family members [4,14]. Rodriguez and Gregorio (2005)

studied the psychological adjustment in family members of patients hospitalized in intensive care unit and stated that family members show the post-traumatic stress and anxiety in the form of discontent, anxiety, feeling guilty, humility, and feeling of being useless [10]. Chui and Chan (2007) showed that female family members of patients hospitalized in ICU and those who do not have access to educational facilities experience high level of stress. Puntillo (2009) reported the same results. His findings show that patients' spouse and children are highly likely to show PTSD. Other reported risk factors were low level education, unexpected admission of patients to ICU, and incomplete information about patient's condition [10]. Azollai et al. () showed that 70% of family members of patients hospitalized in ICU show post-traumatic event syndrome and 65% show post-traumatic anxiety and depression [15]. Siyahkali et al. stated that such stressful factors as a chronic or refractory disease or hospitalization of a family member may lead families to crisis and create depression in members. Hospitalized patients in ICU or CCU are normally in severe life-threatening conditions. This builds up sadness and depression and leaves the family hopeless and vulnerable [9]. Another study in HongKong showed that 70% of families with a patient in ICU show high levels of stress in the form of change in sleeping patterns, diet, thinking process, energy, roles, and responsibilities [4]. ICU environment creates tension and stress in patient and his family members. Too much noise and light, hectic activities, and physical disorder are very common in ICU. Findings of a qualitative study showed that participants explain their impression of ICU environment as unfamiliar, frightening, confusing, and dangerous which tell them the patient is in a severe condition. In contrast, some studies sound that equipped environment of ICU is interesting for participants. Fridh et al (2009) showed that family members of a patient who is in a life-threatening condition do not understand monitoring of technical equipment [10].

Kaplan and soudak (2007) stated that depression is directly related to traumatic events and stress [9]. Most patients in ICU are having trauma or injured in accidents, they are normally younger than patients in CCU [16], it is quite expectable that their families experience stress, anxiety, and depression in comparison to families of patients in CCU.

CONCLUSION

Families experience psychological helplessness when a member is hospitalized in ICU. Hospitalization of a family member builds up stress in patients and his family members. As a result of hospitalization of a member, family feels the stability and cohesion of the family threatened. This leads to emergence of a variety of emotions in members. The role of nurses is another important factor in prevention of stress and depression in family members. Helping family to cope with anxiety, increasing family resources, and retaining strong points of family are examples of supportive factors. Nurses' responsibilities as caregivers are to help patients to fight the stress and create a sense of healthiness in patients.

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