VIA MEDICA

ORIGINAL AND CLINICAL ARTICLES

Anaesthesiology Intensive Therapy
2012, vol. 44, no 3, 145–149
ISSN 1642–5758
www.ait.viamedica.pl

Emotional reactions and needs of family members of ICU patients

Lucyna Płaszewska-Żywko[1], Dorota Gazda[2]

[1]Department of Clinical Nursing, Faculty of Health Sciences, Collegium Medicum, Jagiellonian University of Cracow
[2]Department of Anaesthesiology and Intensive Therapy, „Silesian Hospital" Health Care Centre, Cieszyn

ABSTRACT

Introduction. The aim of the study was to determine emotional reactions and needs of families of ICU patients.
Methods. The study group included 60 relatives of ICU patients, aged 18–80 years. The diagnostic questionnaire-based survey was conducted. The questionnaire contained questions regarding demographic data, emotions and needs as well as the Courtauld Emotional Control Scale (CECS).
Results. The major emotions of patients` families on ICU admission were anxiety, uncertainty, fear, depression, and nervousness (particularly among parents and adult offsprings). On second-third day of hospitalisation, the emotions became less severe ($P < 0.001$). The anxiety-related emotional reactions were better controlled by men ($P < 0.01$); most women experienced stronger negative emotions ($P < 0.05$) and their needs to receive information and to be involved in patient care were expressed more.
Conclusions. Negative emotions of ICU patients` relatives were highly intense, especially amongst parents and adult children. Women were characterised by higher levels of emotions and needs compared to men.

Key words: hospitalization, intensive care unit; hospitalization, emotions, needs; intensive therapy unit, patient's family

Anaesthesiology Intensive Therapy 2012, vol. 44, no 3, 145–149

INTRODUCTION

A severe disease and hospitalisation are the source of strong stress for patients and their families. The family members of patients treated in intensive care units (ICUs) experience many negative emotions, e.g. fear, anxiety, frustration, uncertainty, sense of guilt, anger and irritation. All these emotions are attributable to life-threatening conditions of close relatives, rapid disease onset, severe states of patients and long-term hospitalization [1]. Struggling with such difficult situations can lead to undesirable mental consequences, such as depression or posttraumatic stress disorder [2, 3], which is likely to affect the relations in the family and necessitate some role changes [4]. The efforts of the team of ICU doctors and nurses primarily focus on saving the patient's life and the needs of family members are often neglected. It is worth remembering that families also require support as stress they experience can be even stronger than that of patients. The recent literature data regarding the needs of patients` families are scarce [3, 4, 5, 6]. According to some available reports, the needs in question are underestimated by the ICU personnel [7, 8]. In Poland, studies on the above issues are lacking.

Therefore, the objective of the present study was to analyse the problem and assess the emotional reactions and needs of families of ICU patients.

METHODS

The diagnostic questionnaire-based survey was approved by the Bioethics Committee.

The study group included 60 relatives of ICU patients. The questionnaire consisted of questions concerning demographic data of respondents, emotions they experienced and their needs. The questions were scored according to a 5-point Likert scale. The subjective control of anger, anxiety and depression in difficult situations was evaluated using the courtauld emotional control scale (CECS) [9]. Questionnaires were completed anonymously on day 2–3 of ICU treatment. Additionally, emotions experienced by family members on patient's admission to ICUs were analysed. Needs were divided into two groups: those regarding access to information about the relative and involvement in care.

STATISTICAL ANALYSIS

The data were statistically analysed using SPSS for Windows 14.0. The results were presented as a mean ± standard deviation ($\bar{x} \pm SD$). The Mann-Whitney U test, Kruskal-Wallis test and Spearman rank correlation coefficient were used for comparisons. $P < 0.05$ was considered as statistically significant.

RESULTS

The largest group of respondents consisted of mothers and fathers of patients (33.3%) followed by spouses (23.3%), siblings (18.3%), adult children (6.7%), and other relatives (18.4%). Prior to hospitalization, the majority of participants (58.3%) lived together with patients. Amongst the respondents, 40% had secondary education, 31.7% — higher education and the remaining ones — incomplete secondary education. The age ranged from 18 to 80 years (mean 43.9 ± 15.5). Female respondents constituted the majority of the study population (68.3%).

On admission to ICUs, the commonest emotions experienced by relatives of patients included anxiety, uncertainty, fear, depression, and nervousness. The severity of almost all of the above emotions decreased on day 2–3 of ICU stay, compared to the ICU admission day (Table 1).

Negative emotions, particularly depression ($P < 0.01$) and nervousness ($P < 0.05$), were most strongly experienced by parents and adult children of patients. There was no correlation between living together with patients and the type or severity of emotions. Compared to men, women declared stronger fear ($P < 0.05$), depression ($P = 0.01$) and nervousness ($P = 0.02$) on ICU admission as well as stronger fear on day 2–3 ($P = 0.026$). The younger the respondents were, the stronger the depression level on admission of their relatives to ICU was ($r = -0.26$; $P < 0.05$).

Furthermore, possible gender-related differences in control of emotions were analysed, especially of negative emotions. It was demonstrated that male respondents better controlled their behaviour and anxiety-related emotional reactions than women did ($P < 0.01$). The degree of anger and depression control was comparable. The better-educated participants controlled all the negative emotions to a higher degree compared to the remaining ones ($r = 0.34$; $P < 0.05$). The control of emotions was not correlated with age.

The results revealed the correlation between the closeness of kinship and needs of families to be informed about methods of treatment or nursing care and to be involved in such activities. Those needs were found to be stronger amongst children and parents as compared to spouses and siblings; nevertheless, the level of needs was high in the entire population (Table 2, 3).

Moreover, living with patients was not related to the level of family needs. However, women were found to have higher needs regarding information about the progress in treatment ($P < 0.001$), methods of therapy ($P < 0.001$), nursing activities ($P < 0.001$), involvement in nursing care ($P = 0.015$), and transfer of the patient to another ward ($P = 0.014$). There was no significant correlation between the age and education vs. individual needs.

DISCUSSION

The study findings demonstrated that severe diseases requiring ICU treatment induced strong stressful emotions in family members of patients. During the ICU stay, the patient's relatives experienced many negative emotions, e.g. anxiety, uncertainty, helplessness, fear, depression, and nervousness. The emotions were particularly strong on admission to ICU, which is confirmed by other studies [3, 4, 6, 10]. Generally, female respondents reported stronger fear, depression and nervousness than men, which could be associated with their more open expression of feelings, lower control of negative emotions and predominance in the study population. This observation is consistent with the data published by Canadian authors who observed higher

Table 1. Levels of negative emotions of patients` relatives on ICU admission and on day 2–3

Emotions	On admission ($\bar{x} \pm SD$)	Day 2–3 ($\bar{x} \pm SD$)	P value
Rage	1.53 ± 1.14	1.25 ± 0.70	0.008
Anxiety	3.88 ± 1.19	2.70 ± 1.23	P < 0.001
Anger	1.65 ± 1.23	1.37 ± 0.88	0.058
Uncertainty	4.10 ± 1.00	3.17 ± 1.09	P < 0.001
Helplessness	3.97 ± 1.23	3.15 ± 1.27	P < 0.001
Fear	4.13 ± 0.98	2.93 ± 1.12	P < 0.001
Depression	3.97 ± 1.10	3.12 ± 1.08	P < 0.001
Nervousness	4.08 ± 1.20	2.25 ± 1.22	P < 0.001

*Emotions were assessed according to the 5-degree Likert scale: 1 — lack of emotions, 2 — slight intensity, 3 — medium intensity, 4 — high intensity, 5 — extremely high intensity

Table 2. Kinship with patients vs. needs to obtain information according to the 5-degree Likert scale

Need	Kinship	$\bar{x} \pm SD$	P value
To have questions answered	H/W	4.50 ± 0.94	0.364
	F/M	4.90 ± 0.31	
	S/D	5.00 ± 0.00	
	B/S	4.91 ± 0.30	
	O	4.91 ± 0.30	
To know the expected outcome	H/W	4.43 ± 1.09	0.371
	F/M	4.85 ± 0.37	
	S/D	5.00 ± 0.00	
	B/S	4.55 ± 0.69	
	O	4.73 ± 0.47	
To know facts regarding patient's improvement	H/W	4.64 ± 0.50	0.148
	F/M	4.90 ± 0.31	
	S/D	5.00 ± 0.00	
	B/S	4.55 ± 0.52	
	O	4.64 ± 0.67	
To be informed about the patient's condition by phone	H/W	3.57 ± 1.02	0.089
	F/M	3.75 ± 1.45	
	S/D	5.00 ± 0.00	
	B/S	3.27 ± 1.35	
	O	3.55 ± 1.04	
To know the methods of treatment	H/W	3.71 ± 0.91	0.004
	F/M	4.55 ± 0.69	
	S/D	5.00 ± 0.00	
	B/S	3.91 ± 0.70	
	O	3.91 ± 0.83	
To know the nursing care procedures	H/W	3.36 ± 0.84	0.022
	F/M	4.25 ± 1.07	
	S/D	4.25 ± 0.50	
	B/S	3.27 ± 1.27	
	O	3.91 ± 1.14	
To be provided with the 24-hour information	H/W	3.64 ± 1.22	0.294
	F/M	4.15 ± 1.14	
	S/D	4.75 ± 0.50	
	B/S	3.55 ± 1.29	
	O	3.91 ± 1.04	
To be informed about the transfer to another ward	H/W	4.64 ± 0.84	0.053
	F/M	4.95 ± 0.22	
	S/D	5.00 ± 0.00	
	B/S	4.36 ± 0.81	
	O	4.45 ± 0.93	

H/W — husband/wife; F/M — father/mother; S/D — son/daughter; B/S — brother/sister; O — others; emotions were assessed according to the 5-degree Likert scale: 1 — definitely no need, 2 — rather not, 3 — no opinion, 4 — rather yes, 5 — definitely yes

Table 3. Kinship and needs to participate in care

Need	Kinship	$\bar{x} \pm SD$	P value
To be assured that the best possible care is provided	H/W	4.71 ± 0.61	0.533
	F/M	4.95 ± 0.22	
	S/D	5.00 ± 0.00	
	B/S	4.91 ± 0.30	
	O	4.91 ± 0.30	
To feel there is hope for improvement	H/W	4.50 ± 0.85	0.060
	F/M	4.90 ± 0.31	
	S/D	5.00 ± 0.00	
	B/S	4.45 ± 0.52	
	O	4.64 ± 0.50	
To participate in care	H/W	2.36 ± 1.22	0.016
	F/M	3.65 ± 1.31	
	S/D	3.75 ± 0.96	
	B/S	2.27 ± 1.35	
	O	3.09 ± 1.22	
To visit every day	H/W	4.71 ± 0.61	0.126
	F/M	4.95 ± 0.22	
	S/D	4.50 ± 0.58	
	B/S	4.45 ± 0.93	
	O	4.55 ± 0.69	

H/W — husband/wife; F/M — father/mother; S/D — son/daughter; B/S — brother/sister; O — others; emotions were assessed according to the 5-degree Likert scale: 1 — definitely no need, 2 — rather not, 3 — no opinion, 4 — rather yes, 5 — definitely yes

levels of disease- and ICU hospitalisation-related anxiety in women compared to men [10]. However, this issue requires further studies.

All respondents demonstrated high needs to have access to information, particularly about prognosis, progress in treatment, methods of management and nursing care. They expressed wishes to visit their relatives in ICUs and to obtain telephone information about the patient's health condition. Moreover, the certainty that the best and competent care is provided as well as hope for recovery were found extremely strong.

Our findings are comparable with those reported by other researchers. It was demonstrated that the families of mechanically ventilated patients most commonly expected information about the patients` health conditions and treatment, prognosis, potential complications and further management after discharge [11]. The importance of being provided with honest and reliable information about the patient's state was demonstrated in some earlier studies [12, 13, 14, 15, 16, 17]. According to some published data, the information provided to the families was insufficient [7, 12]. The authors of other studies suggested that families of ICU patients involved in educational programmes showed better understanding of issues related to diagnosis and treatment of their relatives. The relatives receiving emotional support experienced less severe anxiety, anger and depression [18]. Moreover, some studies revealed the impact of effective communication of ICU personnel with families on the satisfaction with patient's care [12, 19, 20]. It should be remembered that the patient's family could be a relevant element of the care provided. Families characterised by normal interpersonal relations are the source of emotional support for patients and the link with the out-hospital setting; they understand their relatives` needs and can provide the staff with important information, which eventually contributes to better care. Noteworthy, family members are often involved in care of patients; this was demonstrated in the present study and in another study conducted in Gdańsk, showing that 87% of family members of ICU patients were willing to participate in the organised care of their relatives [21].

The above results reveal the importance of proper care of and support for families of ICU patients, which involves ICU visits, continuous access to information (telephone numbers), and involvement in simple nursing procedures, if possible, once the family individual expectations have been determined. Proper communication, emotional support, reliable and understandable information provided by physicians and nurses (according to their competences) appear to be of utmost importance [22].

CONCLUSIONS

1. The dominant emotions experienced by patients` relatives on ICU admission included anxiety, uncertainty, helplessness, depression and nervousness. In general, the intensity of such emotions decreased on hospitalisation day 2–3.
2. Parents and adult children of ICU patients experienced stronger negative emotions and needs than the remaining relatives.
3. Female respondents declared stronger negative emotions related to ICU stay and had higher needs to be informed about the treatment and possible involvement in the care provided.

References:

1. *Foss KR, Tenholder MF:* Expectations and needs of persons with family members in an intensive care unit as opposed to a general ward. *South Med J* 1993, 86: 380–384.
2. *Paparrigopoulos T, Melissaki A, Efthymiou A, et al*.: Short-term psychological impact on family members of intensive care unit patients. J Psychosom Res 2006; 61: 719–722.
3. *Pochard F, Darmon M, Fassier T, et al*.: Symptoms of anxiety and depression in family members of intensive care unit patients before discharge or death: a prospective multicenter study. J Crit Care 2005; 20: 90–96.
4. *Titler MG, Cohen MZ, Craft MJ*: Impact of adult critical care hospitalization: perceptions of patients, spouses, children, and nurses. Heart Lung 1991; 20: 174–182.
5. *Coulter MA:* The needs of family members of patients in intensive care units. *Int Care Nurs* 1989; 5: 4–10.
6. *Kinrade T, Jackson AC, Tomnay JE:* The psychosocial needs of families during critical illness: comparison of nurses' amd family perspective. Austr J Adv Nurs 2009; 27: 82–88.
7. *Kleinpell RM, Powers MJ*: Needs of family members of intensive care unit patients. Appl Nurs Res 1992; 5: 2–8.
8. *Verhaeghe S, Defloor T, van Zuuren F, Duinstee M, Grypdonck M*: The needs and experiences of family members of adult patients in an intensive care unit: a review of literature. J Clin Nurs 2005; 14: 501–509.
9. *Juczyński Z*: Narzędzia pomiaru w promocji i psychologii zdrowia. Pracownia Testów Psychologicznych Wyd. II. Warszawa 2009: 55.
10. *Chartier L, Coutu-Wakulczyk G*: Families in ICU: their needs and anxiety level. Int Care Nurs 1989; 5: 11–18.
11. *Nelson JE, Kinjo K, Meier DE, Ahmad K, Morrison RS*: When critical illness becomes chronic: informational needs of patients and families. J Crit Care 2005; 20: 79–89.
12. *Abbott KH, Sago JG, Breen CM, Abernethy AP, Tulsky JA*: Families looking back: one year after discussion of withdrawal or withholding of life-sustaining support. Crit Care Med 2001; 29: 197–201.
13. *Koller PA*: Family needs and coping strategies during illness crisis. AACN Clin Issues 1991; 2: 338–345.
14. *Kleinpell RM, Powers MJ*: Needs of family members of intensive care unit patients. Appl Nurs Res 1992; 5: 2–8.
15. *Al-Hassan MA, Hweidi IM*: The perceived needs of Jordanian families of hospitalized, critically ill patients. Int J Nurs Pract 2004; 10: 64–71.
16. *Price DM, Forrester DA, Murphy PA, Monaghan JF*: Critical care family needs in an urban teaching medical center. Heart Lung 1991; 20: 183–188.
17. *Chavez C, Faber L*: Effect of an educational-orientation program on family members who visit their significant other in the intensive care unit. Heart Lung 1987; 16: 92–99.
18. *Halm M*: Effects of support groups on anxiety of familiy members during critical illness. Heart Lung 1990; 19: 62–71.
19. *Malacrida R, Bettelini CM, Degrate A, et al*.: Reasons for dissatisfaction: a survey of relatives of intensive care patients who died. Crit Care Med 1998; 26: 1187–1193.
20. *Cuthbertson SJ, Margetts MA, Streat SJ*: Bereavement follow-up after critical illness. Crit Care Med 2000; 28: 1196–1201.
21. The relationship between family members of intensive therapy unit patients and medical staff. Anaesthesiol Intensive Ther 2011: 43: 85–89.
22. *Leske J*: Interventions to decrease family anxiety. Crit Care Nurse 2002, 22: 61–65.

Corresponding author:
Lucyna Płaszewska-Żywko MD, PhD
Department of Clinical Nursing, Faculty of Health Sciences,
Collegium Maius, Jagiellonian University of Cracow
ul. Kopernika 25, 31–501 Kraków
e-mail: lucyna.plaszewska-zywko@uj.edu.pl

Received: 09.03.2012
Accepted: 05.07.2012