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Received from the General Intensive Care Unit of the Hospital Português, Salvador (BA), Brazil.

Submitted on June 11, 2008

Accepted on February 19, 2009

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Analysis of family satisfaction in intensive care unit

Análise da satisfação dos familiares em unidade de terapia intensiva

ABSTRACT

Objectives: To know the needs and level of family members' satisfaction is an essential part of the care provided to critically ill patients in intensive care units. The objective of this study was to identify the level of family members' satisfaction in an intensive care unit.

Methods: A descriptive survey was carried out in the general adult intensive care unit of the Hospital Português (Salvador - BA) from November 2007 to January 2008. Jonhson's 14-question modified version of the Critical Care Family Needs Inventory was used to evaluate satisfaction of family members.

Results: Fifty three family members were included, mean age was 44 years and 68% were female. The median of family members satisfaction level was 11 (IQI = 9-13). Critical Care Family Need Inventory, questions with higher percentiles of satisfaction were those

stating that family members felt that the patient was receiving the best possible care (96%) and that the information provided was honest (96%). The questions with lower percentiles of satisfaction were those stating that family members believed that someone in the intensive care unit had shown interest in their feelings (45%) and that a healthcare professional had explained how the intensive care unit equipment was used (41%).

Conclusions: Most family members positively evaluated the intensive care unit professionals in the questions related to communication, attitude and patient care. However, there was a lower level of satisfaction in the questions related to the intensive care unit professionals' ability to comfort family members.

Keywords: Family; Supply of health care; Intensive care units; Professional-family relations; Patient satisfaction; Health service evaluation

INTRODUCTION

Currently, there is progressive acknowledgement that a patient's family members are not merely callers at the intensive care unit (ICU). To know the needs and level of satisfaction of first degree relatives and spouses of patients in the ICU is an essential part of the care given by health professionals, committed to reduce pain and affliction of those that have a critically ill relative. The emotional stress experienced, resulting from a relative's stay in the ICU is usually related to states of anxiety and depression so that caretakers must provide family members with information regarding diagnosis, prognosis and treatment of the patient.^(1,2)

Since the descriptive study by Molter etl al.,⁽¹⁾ in 1979, needs and

satisfaction of family members of patients in the ICU has become the focus of various studies. Results suggest that better quality of information provided was associated with positive results in terms of knowing the needs and increasing family members level of satisfaction.⁽³⁻⁵⁾ The study by McDonagh et al., in 2004, asserted that the level of family satisfaction is proportional to the time allocated to resolving doubts by the medical staff. Families considered communication as much or even more important than clinical measures.⁽⁵⁾

Family members' need for precise and understandable information is universal. The family is eager to talk to a physician every day about the condition and prognosis of the patient and wishes for information by the nursing staff about the care, the unit, the equipment and about what they could do for the patients during visiting hours.⁽⁶⁾

In Brazil, few studies have assessed the level of satisfaction of family members of patients in the ICU, or suggested measures to improve the attention and reception given them.

The purpose of this study was to identify the level of satisfaction of family members of patients in the ICU, regarding communication with the physicians.

METHODS

A descriptive, cross sectional study was carried out in the general adult ICU of the Hospital Português in Salvador-BA, from November 2007 to January 2008. This is a philanthropic hospital with 302 beds, four ICU: coronary, postoperative of cardiac surgery, gastro-hepatology and general. The general ICU as place of study is comprised by 24 beds with clinical and surgical patients of different specialties with three physicians and from six to eight nurses per shift. In this unit communication with the families of all patients is always done by the physician on duty or on day shift, before or after visiting hours.

The first degree relatives of patients older than 18 years and with a minimum of 24 h stay in the mentioned unit were consequently interviewed. Family members were interviewed during the unit visiting hours, in the morning and afternoon, by duly trained medical students. An explanation was made to the interviewees that the interviewers were not involved in the patient treatments. Only a single family member was interviewed for each patient, normally it was the first found by interviewers, with no predefined

criteria. Participation in this study was voluntary and confidential after signing of an informed consent. This work was approved by the Research Ethics Committee of the Hospital Português, prior to data collection.

To assess family members satisfaction, a version modified and validated by Johnson et al. (1998)⁽⁷⁾ of the Critical Care Family Needs Inventory (CCFNI), originally described by Molter⁽¹⁾ was used. The version in Portuguese was produced by the back translation technique, the same way as previously done by Fumis (2006).⁽⁸⁾ This inventory comprises 14 questions with replies ranked on four levels: 1 (almost all the time), 2 (most of the time), 3 (only part of the time) and 4 (never). Each question was scored one if the reply was 1 or 2 (indicating satisfaction) or score zero if the reply was 3 or 4 (indicating dissatisfaction), exception made for questions 11 and 14, in which the scoring system is inverted. Level of satisfaction was calculated by adding the scores of all the questions, with the minimum value being zero (extreme dissatisfaction) and the maximum fourteen (extreme satisfaction). Questions of the CCFNI related to all health professionals working in the ICU (physicians, physiotherapists, nurses and auxiliary nurses).

Data analysis was made using the software Statistical Package for Social Science (SPSS) 9.0 version. Descriptive statistics parameters were used adopting usual measurements of central and dispersion tendencies and simple and relative frequency calculations. Continuous variables regarding demographic characteristics were expressed in means \pm standard deviation. Variables with continued distribution (age of patients and relatives, ICU length of stay until interview, number of visits, value of the Acute Physiologic Chronic Health Evaluation (APACHE) II and estimated mortality for this index) were ranked in two levels divided based upon the median. Level of family members' satisfaction was expressed in medians with an interquartile interval (P25-P75). For correlation of the family members' level of satisfaction with the other variables, the Mann-Whitney test was used. Significance level adopted was 5%.

RESULTS

Fifty-three families of patients in the ICU during the study period were assessed. Demographic characteristics of patients and family members are described in tables 1 and 2 respectively.

Table 1 – Demographic characteristics of patients

Variable	Results (n=53)
Gender	
Male	62.3
Female	37.8
Motive for admission	
Clinical	83.0
Surgical	17.0
Age (years)	65.1 ± 17.9 (18-93)
APACHE II	16.4 ± 6.7 (2-35)
Estimated mortality (%)	23.5 ± 17.6 (0.5-67.0)
ICU length of stay up to date of interview (days)	6.7 ± 9.8 (1-42)

APACHE – Acute Physiologic Chronic Health Evaluation, ICU – intensive care unit. Results expressed in % or mean ± standard deviation (minimum value-maximum value)

Table 2 – Demographic characteristics of family members

Variable	Result (n=53)
Male gender	32.1
Age (years)	44.1 ± 14.8 (18-79)
How many times visited the patient in the ICU	9.2 ± 11.7 (1-44)
Level of kinship	
Father/mother	3.8
Spouse	17.0
Son/daughter	64.2
Brother/sister	7.5
Others	7.5
Education	
Incomplete high school	7.5
Complete high school	34.0
Incomplete college	11.3
Complete college	47.2

ICU – intensive care unit. Results expressed in % or mean ± standard deviation (minimum value-maximum value)

Table 3 – Satisfaction index of family members for the questions of the Critical Care Family Needs Inventory

Questions	Almost all the time	Most of the time	Only some of the time	None of the time	Satisfaction index
1. Do you feel that the best possible care is being given to the patient?	62.3	34.0	3.8	-	96.2
2. Do you feel that the hospital personnel care about the patient?	52.9	37.3	9.8	-	86.8
3. Have the explanations given to you about the patient's clinical condition been in terms you can understand?	49.1	43.4	7.5	-	92.5
4. Do you feel that you have been given honest information about the patient's condition?	63.5	34.6	1.9	-	96.2
5. Do you understand what is happening to the patient and why things are being done?	49.1	37.7	13.2	-	86.8
6. Have the ICU staff members been courteous to you?	58.5	35.8	5.7	-	94.3
7. Have any of the staff members shown interested in how you are doing?	24.5	20.8	13.2	41.5	45.3
8. Do you believe that someone will call you at home with any major or significant change in the patient's condition?	37.7	32.1	15.1	15.1	69.8
9. Have the hospital personnel explained the equipment being used?	20.8	20.8	28.3	30.2	41.5
10. I am very satisfied with the medical care the patient receives.	56.6	35.8	7.5	-	92.5
11. There are some things about the medical care the patient receives that could be better.	26.5	26.5	26.5	20.4	50.9
12. Do you feel comfortable visiting the patient in the intensive care unit?	36.5	25.0	11.5	26.9	60.4
13. Is the waiting room comfortable?	60.4	28.3	7.5	3.8	88.7
14. Do you feel alone and isolated in the waiting room?	9.4	7.5	30.2	52.8	83.0

* The satisfaction index was calculated based on the sum of replies received at levels 1 and 2 except for questions 11 and 14 where it was calculated based on the sum of replies reached at levels 3 and 4. ICU = intensive care unit. Results expressed in %.

Questions of the CCFNI with higher indices of satisfaction were those where family members felt that the best possible care was given to patients and that information supplied was honest. Questions with lower indices of satisfactions were those stating that family members believed that someone in the ICU showed interest in knowing how family members felt and that hospital personnel explained how the equipment was being used. Indices of satisfaction of family members for all questions pointed out are illustrated in table 3.

The median of family members' level of satisfaction was 11(9-13). Demographic data associated to a lower level of satisfaction were reasons for clinical admission, female gender of the relative, number of visits, less than four visits to the ICU and better education (Table 4). There was no difference in the level of satisfaction of family members in relation to the patient's gender, patient's age, APACHE, estimated mortality by the APACHE, length of stay in ICU until date of interview, age of the family member and degree of kinship of the relative.

Table 4 - Factors associated to family members' satisfaction

Factors	Level of satisfaction	P value
Motive for admission		
Clinical	10 (9-12)	0.001
Surgical	13 (12.5-13)	
Gender		
Female	10 (9-12.75)	0.018
Male	12 (11.25-13)	
Number of visits		
Up to 4	12 (10-13)	0.028
5 or more	10 (9-12)	
Familial schooling		
Up to high school	12 (10.5-13)	0.009
College	10 (9-12)	

Results expressed in median (percentile 25- 75). Mann-Whitney test

DISCUSSION

The level of satisfaction of family members of patients in the ICU is one of the fundamental parameters for assessing communication in this setting. Many works have endeavored to study factors considered stressful for patients and health professionals working in this setting and, more recently some authors have sought to assess needs of the family members or companions of admitted patient and their level of satisfaction with the care provided.⁽⁹⁻¹²⁾ Freitas studied this subject and found that the primary needs of family members are related to the information received, safety related to the care with the patient and nearness

with him/her.⁽¹³⁾

In the unit assessed in this study, family members presented a high level of satisfaction with the overall assistance, mainly in the questions related to communication, attitude and medical care with the patient. Lower indices of satisfaction were found in questions related to the ICU professionals' ability to show interest for the feelings of the family members and supply more information about the operation of the equipment used for the patient. Other authors have highlighted not only the importance of ICU health professionals providing complete information, but also of their interaction with the family members in a pleasing and open way.^(9,10,14)

It is well known that professionals working in the ICU are submitted to a high level of stress, with extenuating working conditions and pace, in addition to facing situations of suffering and death daily. Reaction to this stress associated with work is known as the Burnout Syndrome which results in remoteness of professionals towards the persons directly involved with work, because he/she feels that it is safer to be indifferent.⁽¹⁵⁾ However, this attitude may be related to a worsening in the quality of attention to the patient and their families.

A study performed for the assessment of family member's satisfaction of patients in the ICU in Spain, found similar results, showing that generally relatives are satisfied with the information received, care with the patient and empathy with ICU professionals. However, it also stresses the importance of improving some aspects, such as more concern with the feelings of family members and more precise explanations about the equipment used for the patient.⁽¹⁶⁾

Analysis of these data discloses measures that could better fulfill the needs of family members and thus increase their level of understanding and satisfaction with the ICU. Some of the proposed measures would be: educational videos about ICU routines that could be shown in the waiting room for family members prior to visits, orientation and presentations of the service by a member of the staff or a secretary before the initial visit of the family members to the patient in the ICU; diagrammatic poster with specifications, function and nomenclature of the equipment in the unit and leaflets with the required orientations and care that must be taken during family members visits in the ICU.^(3,17)

Our results also point to some characteristics of the family members that may be related with a lower level of satisfaction, such as better education, larger number of visits and female gender. Family members with such characteristics may be more demanding demand in relation to the other. Fumis also found a higher level of dissatisfaction among

family members with college education.⁽⁸⁾ On the contrary, for Johnson et al., the female gender of the family member was associated to a higher level of satisfaction.⁽⁷⁾ These differences may be related, among others, to cultural difference in the localities where the studies were carried out.

A characteristic of the patients that in our casuistry was related to lower satisfaction of the family members was the type of treatment, with the clinical type being the worse, probably because these are more chronic patients with a higher severity profile although no relation was found with the APACHE II. Results in literature are controversial on this matter, while some works show relation between the higher severity score and the level of dissatisfaction of family members,⁽⁸⁾ there was no difference in the others⁽⁴⁾ or this association was converse.⁽⁷⁾ Results of this study must be viewed in the context of some limitations, the main being that the study was carried out in a single center with a relatively small number of patients. However, data is in agreement with Brazilian and international literature and stress some aspects that may be improved for better communication in the ICU environment.

CONCLUSION

The majority of family members have a positive evaluation of ICU professionals in the questions related to communication, attitude and medical care to the patient. However, there was a lower percentage of satisfaction in the group of questions related to the ability of professionals to comfort family members. Further works on the subject must be encouraged for a better assessment of the needs of this population and the efficacy of measures aiming to improve their level of satisfaction with the care provided.

RESUMO

Objetivos: Conhecer as necessidades e o grau de satisfação dos familiares de pacientes internados em unidades de terapia intensiva é uma parte essencial dos cuidados dos profissionais de saúde. O objetivo deste trabalho foi identificar o grau de satisfação dos familiares de pacientes internados em unidades de terapia intensiva.

Métodos: Foi realizado um estudo descritivo na unidade de terapia intensiva Geral Adulto do Hospital Português (Salvador-BA) durante o período de novembro de 2007 a janeiro de 2008. Para avaliação da satisfação dos familiares foi utilizada a versão modificada por Jonhson (1998) do Inventário de Necessidades de Familiares em Terapia Intensiva.

Resultados: Foram avaliados 53 familiares, com média de idade de 44 anos, sendo 68% do sexo feminino. A mediana do nível de satisfação dos familiares foi de 11 (IIQ:9-13), numa escala de um a quatorze. As questões do Inventário de Necessidades de Familiares em Terapia Intensiva com maiores índices de satisfação foram as que afirmavam que os familiares sentiam que o melhor cuidado possível estava sendo oferecido ao paciente (96%) e que as informações dadas foram honestas (96%). As questões com índices menores de satisfação foram as que afirmavam que os familiares acreditavam que alguém da unidade de terapia intensiva demonstrou interesse em saber como estavam se sentindo (45%) e que os funcionários do hospital explicaram como os equipamentos estão sendo usados (41%).

Conclusões: A maioria dos familiares avaliou positivamente os profissionais da unidade de terapia intensiva nas questões relacionadas à comunicação, atitude e cuidado médico com o paciente. No entanto, houve um percentual menor de satisfação nas questões relacionadas com a capacidade dos profissionais de confortar os familiares.

Descritores: Família; Assistência à saúde; Unidades de terapia intensiva; Relações profissional-família; Satisfação do paciente; Avaliação de serviços de saúde

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