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PERCEPTION OF FAMILY SATISFACTION WITH CARE AT CRITICAL CARE SETTING HOSPITAL UNIVERSITY SAINS MALAYSIA: A PILOT STUDY

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ABSTRACT

Family members' satisfaction has become an important measurement in determining the quality of care of patients in the critical care setting. The aims of the study were to determine the satisfaction level of family members, to determine the reliability of family satisfaction and its subscales, to identify mean of each question and their subscales. A cross-sectional study was conducted on 30 family members who accompanied patients during intensive care admission. The study was conducted in a critical care setting in a high dependency unit (HDU) and cardiac intensive care unit (CCU), Hospital University Sains Malaysia (Hospital USM). The data was collected from October 2012 to January 2013. The Critical Care Family Satisfaction Survey (CCFSS) Malay version was used to measure family satisfaction in addition to the collection of demographic data. The statistical analysis used a descriptive approach. Ethical approval was obtained prior to data collection. Majority of the respondents were female: 23 (76.7%). Mean age was 35.67 years (SD=12.83) and the score of overall satisfaction level was 78.80 (SD=13.88). The Cronbach's alpha was 0.96. A majority of the respondents, 19 (63.3%) were satisfied with the care provided. This study showed that a majority of family members were slightly satisfied with the care that was provided in a critical care setting at HUSM. It also showed that families play an important role in giving support and hope to patients.

Keywords: Family members, satisfaction, CCFSS

INTRODUCTION

In healthcare, patient and family satisfaction had become one of the significant scales in providing holistic care and improve quality of care. According to Roberti and Fitzpatric (2010), healthcare providers are expected to provide high quality of care towards patient and achieve client's expectations as well as it is cost-effective. Satisfaction is usually measured by satisfaction survey completed by patients about their hospitalization experiences. Nevertheless, to measure patient satisfaction in critical care environments is complicated. In critical care setting, most of the patients could not make a decision regarding the treatment due to their severity of illness and level of consciousness (Wasser *et al.*, 2001). The patient is too ill to determine their level of satisfaction with care provided and may not remember their critical care experience because of several factors such as the side effect of the sedation.

Most of the studies had assessed family satisfaction and one of them used Critical Care Family Needs Inventory (CCFNI), developed by Molter and Leske (1983). This was reviewed few years later by Molter (1979). This tool is focused on the needs of family members while the patient is being cared for in critical

care unit (Roberti and Fitzpatric, 2010). The CCFNI instrument was used in numerous studies that include family members from multiple of cultures (Azoulay *et al*., 2001, Azoulay *et al*., 2002, Damghi *et al*., 2008). The other family satisfaction survey was developed by (Heyland and Tranmer, 2001, Heyland *et al*., 2002) which emphasis on communication and decision making dimensions. The study found that the satisfaction depended on overall care and decision making regarding care which had a positive relationship (r=0.64). Wasser *et al.* (2001) developed and validated Critical Care Family Satisfaction Survey (CCFSS) which measure overall satisfaction with care. The researchers had assessed the psychometric qualities of the instruments with 2494 family members of patients admitted to 10 critical care units in a 3-year period and they found their instrument had high reliability and validity (Wasser *et al*., 2001). The CCFSS instrument had comprehensive items and was selected for use in the present study. This tool was suitable to measure family satisfaction overall care of critically ill patients. The purposes of the study were to determine the reliability of the questionnaire, to identify mean of each question and their subscales and to determine the satisfaction level of family members regarding the care delivered to patients in High Dependency Unit (HDU) and Cardiac Care Unit (CCU) at Hospital Universiti Sains Malaysia (HUSM).

MATERIALS AND METHODS

Study Design and Study Population

A cross-sectional study design was carried out from October 2012 to January 2013. The study was carried out at HDU and CCU in HUSM. Sampling method for this study was a convenient sample of 30 participants and only family members were included.

After obtaining permission from one of the main authors, Daniel Ray the original version of the questionnaire (Wasser *et al*., 2004) was translated from American English to Bahasa Melayu and translated back into English by the School of Languages, Literatures and Translation USM. After that, the English version and Malay version were given to expert to review and few changes were made. The study had been approved by the Human Research Ethics Committee, Universiti Sains Malaysia (USM). The study had adopted Critical Care Family Satisfaction Survey (CCFSS) (Wasser *et al*., 2001) for data collection.

The study population consisted of one, 18 years old or older, relative of patients who had been cared for in HDU and CCU for at least 24 hours and consented to participate in this study. Furthermore, the patient's condition must be mimic Intensive Care Unit patient and ventilated. Only one spokesperson asked to fill the survey form, when multiple family members were available. The exclusion criteria were person without blood relation next of kin and family member with language barrier. The interview and survey were conducted in Bahasa Malaysia. Participation was purely voluntary and no pressure was applied. The time allocated for the respondents to fill the survey form was 10-15 minutes. All the participants were informed of the study aim, objectives and methods.

Instruments and Statistical Analysis

The questionnaire was consists of two parts. Part A: Demographic data: age of respondent, gender, education status, occupation, relationship of the respondent to the patient, length of stay, waiting type, waiting with and any relationship with hospital staff. Part B: consisted of 20 items Critical Care Family Satisfaction Survey (CCFSS) to measure family satisfaction with care. The CCFSS was developed by Wasser *et al*. (2001) which is an useful tool to measure family satisfaction with care in intensive care unit (Roberti and Fitzpatric, 2010, Karlsson *et al*., 2011).

The CCFSS was divided into five subscales, accordingly comfort (2 items), proximity (3 items), information (4 items), and assurance (5 items) and support (6 items). Each of the item is ranked by the family member on a scale of 1-5 (1= very much dissatisfied and 5= very much satisfied). The psychometric of the CCFSS was evaluated in 2001 by Wasser and colleagues for both total and subscale scores. He also examined content and construct validity and the study provided support that the CCFSS was reliable and valid; Cronbach alpha was 0.93 for the 5-factor model. According to the previous study (Wasser *et al*., 2001), the following five subscales were produced: assurance (the need to feel hope for desired outcome), information (the need for consistent, realistic and timely information), proximity (the need for personal contact i.e to be present physically and emotionally near the patient), support (the need for resources, support systems and ventilation), and comfort (the need for personal comfort). The subscale was calculated as follows: (Brown and Hijazi, 2008; Roberti and Fitzpatric, 2010):

(i) Assurance': summed scores for items 3, 4, 7 19 and 20 were divided by 5,

(ii) Proximity': summed scores for items 5,15 and 18 were divided by 3,

(iii) Information': summed scores for items 2,6,10 and 12 were divided by 4,

(iv) Support': summed scores for items 1,9,11,13,14 and 16 were divided by 6,

(v) Comfort': summed scores for items 8 and 17 were divided by 2.

The internal consistency was calculated for the total subscale and each of the subscales. The level of satisfaction was set by the mean score of the total subscale. The score with above mean score was considered as satisfied with the care and below the mean score considered as dissatisfaction with care.

RESULTS

Characteristics of respondents

A total of 30 respondents were Malays and had completed the questionnaires with mean age 35.67 years (SD 12.83). The socio-demographic data of the participants (Table 1) showed that most of respondents are aged between 35 and 59 (43.3%), 26.7% between 18 and 24 and 25 and 34, and only 3.3% 60 years or older. Majority of the respondents were female (76.7%), secondary education level (63.3%) and spent more than 7 days (33.3%) at the hospital. In addition, most of the respondents were the patient's offspring (33.3%) and the second highest category was the patient's siblings (23.3%). Moreover, more than half of the respondents spent time at ICU with other family members during patient admission (83.3%). The researcher had added four questions regarding the patient companions such as waiting type, waiting with, health care background and relationship with the HUSM staff to adapt with the Malay culture. Most of the patient companions take turn with other relatives during the patient admission in ICU (60%). In addition, majority of the relatives were waiting for their loved ones with other family members (83.3%) and they does not have any blood relationship with the HUSM staff (83.3%).

Table 1: The socio-demographic characteristics of the respondents (n=30)

Variables	Frequency (%)
Age group of respondent (Years)	
18-24	8 (26.7)
25-34	8 (26.7)
35-59	13 (43.3)
60 and above	1 (3.3)
Gender	
Female	23 (76.7)
Male	7 (23.3)
Level of education	
Primary	2 (6.7)
Secondary	19 (63.3)
Tertiary	9 (30.0)
Employment status	
Housewife	10 (33.3)
Government	3 (10.0)
Private	6 (20.0)
Self-employed	6 (20.0)
Students	5 (16.7)
Relationship of respondent to patient	
Wife	5 (16.7)
Parents	5 (16.7)
Siblings	7 (23.3)
Offspring	10 (33.3)
Others	3 (10.0)
Length of stay (days)	
1-2	4 (13.3)
3-4	8 (26.7)
5-6	8 (26.7)
7 and above	10 (33.3)
Relative waiting type	
Fixed	12 (40.0)
Take turn	18 (60.0)
Relative waiting with	
Alone	
With other family members	5 (16.7) 25 (83.3)
Others family members is a HUSM staff	
Yes	5 (16.7)
No	25 (83.3)

The total score of 20 items CCFSS was 78.80 (SD: 13.90) and scoring for the satisfaction level were based on the total mean score which was 78.8 and above was satisfied (78.7) and below was not satisfied with the care. Majority of the participants were satisfied with the care (63.3%) and 36.7% were dissatisfied with the care. The reliability of the CCFSS in this study was measured; the Cronbach's alpha of the total score was 0.96 which indicates very good internal consistency with a mean (SD) of 78.80 (13.9). The Cronbach's alpha for the subscales ranged from 0.80 (proximity subscale) to 0.85 (assurance and support subscale; Table 2).

Table 2: Reliability statistics for subscales

Subscale	No. of items	Cronbach α
Assurance	5	0.85
Information	4	0.84
Proximity	3	0.80
Support	6	0.85
Comfort	2	0.84

Frequency and percentage of participants' responses for each question in the survey and question 16 ("Preparation for my family members transfer from critical care") had most responses of very satisfied (n=12, 40%) and the highest mean score (4.27) for all questions. Question 13 ("Nurses' availability to speak with me every day about my family member's care.") had the fewest responses with respect to very satisfied (n=4, 13.3%) and the lowest means score (3.53) (Table 3).

Table 3: Descriptive statistics for each question (n=30)

No.	Item	Mean (SD)
1.	Honesty of the staff about my family member's condition	4.13(0.68)
2.	Availability of the doctor to speak with me on a regular basis	4.00(0.79)
3.	Waiting time for results of test and radiographs	3.57(0.90)
4.	Peace of mind in knowing my family member's nurse	4.10(0.92)
5.	Ability to share in the care of my family member	4.03(0.96)
6.	Clear explanation of test, procedure and treatments	4.07(0.79)
7.	Promptness of the staff in responding to alarms and requests for assistance.	3.77(0.86)
8.	Cleanliness and appearance of the waiting room.	4.10(0.96)
9.	Support and encouragement given to me during my family member's stay in the critical care unit.	3.83(1.02)
10.	Clear answers to my questions	3.83(0.91)
11.	Quality of care given to my family member	3.97(1.1)
12.	Sharing in decisions regarding my family member's care on a regular basis.	4.03(0.77)
13.	Nurses' availability to speak with me every day about my family member's care.	3.53(1.11)
14.	Sensitivity of the doctor(s) to my family member's needs	4.10(0.71)
15.	Privacy provided for me and my family member during our visits.	3.97(0.93)
16.	Preparation for my family member's transfer from critical care.	4.27(0.74)
17.	Peacefulness of the waiting room	3.93(0.91)
18.	Fixed visiting hour	4.03(1.03)
19.	Noise level in the critical care unit	3.87(1.07)
20.	Sharing in discussions regarding my family member's recovery	3.67(0.99)

The five subscales showed that the comfort and proximity had highest mean score (4.01; SD, 0.87) and (4.01; SD, 0.82) respectively and assurance had the lowest mean score (2.97; SD, 0.60) (Table 4).

Table 4: Descriptive statistics for scores on subscales (n=30)

Subscale	Mean	SD
Assurance	2.97	0.60
Information	3.98	0.67
Proximity	4.01	0.82
Support	3.97	0.69
Comfort	4.01	0.87

DISCUSSION

The results of the study represent that the family members' perception of satisfaction in HDU and CICU were slightly satisfied with care provided. It is similar with the others study regarding family satisfaction which showed that most of the participants were satisfied with the care of their next-of-kin received in Intensive Care Unit (ICU) (Brown and Hijazi, 2008). Some of the respondents demographic characteristics were different from the other published studies. A huge percentage of participants were offspring (33.3%) compared with 15% in Heyland and Tranmer (2001) and 18.5% in Wasser *et al*. (2004). However, it had similar result of participant's relationship with patient in study done at Saudi Arabia, 30.3% (Brown and Hijazi, 2008).

The mean of the subscale had a different result, with high mean on support subscale (4.74; SD0.43) and lowest mean score on comfort subscale (4.62; SD 0.60) (Roberti and Fitzpatric, 2010)

Consequences for Delivery and Improvement of Care

The results of this study are applicable to implement the care of delivery for the nurse managers and nurses. The nurse availability to communicate with family members regarding the patient's care had a lowest score. Secondly, waiting time for results of test and radiographs had overall lowest score. Identifying a main cause for communication gap between nurses and family members, and waiting time for laboratory results and radiographs results can provide useful information for implementation of the correction plan.

The nurse managers and staff can sit together and identify the cause of the availability of the nurses to communicate about patient's care with family members. If the cause of less discussion about patient's care between nurse and family members is detected to be nursing workload, the nurse managers may make new work plan in order to give information to the family members. The nurse manager also can create awareness about the importance to speak with family members regarding the care because family members are a part of patient's life and may reduce their anxiety. In addition, the nurses can plan their work properly and include communication with family members in their work plan.

The nurse managers and staff can discuss and identify the cause of delay results of test and radiographs. Furthermore, the healthcare professional also can focus on the identified communication gaps between the staffs and family members in discussing about patient's care. Giving information to the staff regarding the problematic area may influence them to communicate effectively with patients and their families in regard to waiting for important test results and interpretations of radiographs in problematic area.

Recommendations for future research

The findings give a baseline and opportunities to improve family satisfaction of critically ill patients. The larger sample size would give more information and comparison.

CONCLUSION

In conclusion, this study showed that family members of critically ill patients in critical care setting were satisfied with care provided. Most of the family members score high on information and assurance

satisfaction. Family satisfaction had given the reflection of the facility and standard of care provided by the hospital. Families play an important role in giving support and hope to their family member who is admitted in critical care setting. Proper education of staff and the development of good strategies in addressing concerns of family members can significantly improve overall client's satisfaction scores. For example creating peaceful, comfort and healing environments are some of the factors.

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