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ORIGINAL ARTICLE

Needs of Family Members of Critically Ill Patients in a Critical Care Unit at Universiti Kebangsaan Malaysia Medical Centre

ZAINAH M, SASIKALA M, NURFARIEZA MA, HO SE

Department of Nursing, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Jalan Yaacob Latif, Bandar Tun Razak, 56000 Cheras, Kuala Lumpur, Malaysia.

ABSTRAK

Keperluan keluarga pesakit yang sedang menunggu waris di Unit Rawatan Rapi perlu dipenuhi oleh kakitangan kesihatan kerana ini membantu untuk meningkatkan kualiti hidup pesakit. Tujuan kajian ini adalah untuk mengenal pasti keperluan ahli keluarga pesakit yang sedang menunggu waris yang sedang dirawat di Unit Rawatan Rapi. Satu kajian keratan rentas telah dijalankan ke atas 109 ahli keluarga pesakit yang sedang dirawat di Unit Rawatan Rapi dan Unit Rawatan Koronari, Pusat Perubatan Universiti Kebangsaan Malaysia (PPUKM). Soalan kajian yang telah diubah suai daripada Critical Care Family Needs Inventory (CCFNI) telah digunapakai dalam kajian ini. Soalan kajian terdiri daripada 5 domain keperluan ahli keluarga: Maklumat, Berada hampir dengan pesakit, Jaminan, Keselesaan dan Sokongan. Dapatan kajian menunjukkan bahawa keperluan jaminan (3.77 ± 0.306) adalah yang tertinggi. Ini diikuti dengan keperluan mendapatkan maklumat (3.62 ± 0.379), berada hampir dengan pesakit (3.60 ± 0.415), keperluan sokongan (3.57 ± 0.477) dan keperluan keselesaan (3.55 ± 0.586). Terdapat hubungan yang signifikan di antara hubungan responden dengan keperluan keluarga berada berdekatan dengan pesakit (p = 0.013). Kajian ini menunjukkan terdapat hubungan yang signifikan antara pendapatan bulanan keluarga dengan keperluan keselesaan dan sokongan, (p = 0.033) dan (p = 0.004). Terdapat juga hubungan yang signifikan antara jantina dengan keperluan keselesaan (p = 0.013). Keperluan menerima maklumat, berada berdekatan dengan pesakit, jaminan, keselesaan dan sokongan adalah amat penting kepada ahli keluarga pesakit. Pakej pendidikan dan sentiasa memberi informasi terkini perlu diberi penekanan bagi meningkatkan keperluan keluarga pesakit kritikal dalam persekitaran penjagaan kritikal.

Kata kunci: ahli keluarga, keperluan, unit rawatan rapi

Address for correspondence and reprint requests: Zainah Mohamed, Department of Nursing, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Jalan Yaacob Latif, Bandar Tun Razak, 56000 Cheras, Kuala Lumpur, Malaysia. Tel: +6019-3181292 Fax: +603-91456683 Email: zaizan@ppukm.ukm.edu.my

ABSTRACT

Fulfillment of the family needs for the critically ill patient in Critical Care Unit should be met by healthcare providers to improve patient's quality of life. The purpose of this study was to identify the needs of family members of critically ill patients in a Critical Care Unit. A cross-sectional study was conducted on 109 family members of patient hospitalized at the Intensive Care Unit and Coronary Care Units of Universiti Kebangsaan Malaysia Medical Centre (UKMMC). The modified Critical Care Family Needs Inventory (CCFNI) comprised of 5 domains of family member's needs: Information, Proximity, Assurance, Comfort and Support. The findings showed that assurance and information needs were the highest with (3.77 ± 0.306); (3.62 ± 0.379), proximity need (3.60 ± 0.415), support need (3.57 ± 0.477) and comfort need (3.55 ± 0.586), respectively. There was significant relationship between respondent's relationship with family needs of proximity ($p = 0.013$). This study indicated that there were significant association between respondent's monthly income and family needs of comfort and support, ($p = 0.033$) and ($p = 0.004$). There was also significant association between the gender with comfort need ($p = 0.013$). In this study, it was observed that information, proximity, assurance, comfort and support were opinioned as their requirements during hospitalization. Hence, it assists in coping while being admitted to Intensive Care Unit and Coronary Care Unit of UKMMC. An educational package and updating patient's information should be emphasized to enhance the family needs of critically ill patient in the critical care settings.

Keywords: family members, needs, critical care unit

INTRODUCTION

The unpredicted admission without any warning causes high level of stress and anxiety among family members (Al-Mutair et al. 2013). The experience in Intensive Care Unit (ICU) creates an intense emotional situation for both patients and their family members (Noor Siah et al. 2012). According to Verhaeghe et al. (2007), the hospitalization of a patient to Critical Care Unit could aggravate emotional shock, denial, anger, despair, guilt and fear of loss for the family members. Therefore, the family members require accurate and comprehensible information which leaves room for hope to reduce stress (Van Horn & Kautz 2007). However, research has shown that the needs of family members having a relative in Critical Care Unit have always been unmet by healthcare provider (Khalaila 2013).

In Malaysia, family bonding is very strong among family members. Therefore, it is a normal scenario that the ICU corridor will be crowded with family members visiting their loved ones. During this admission time, family members want to ensure that their sick relatives received the best nursing care. Consequently, the family members also need attention from health

care providers in terms of obtaining information, support, comfort, assurance and proximity to cope and adjust themselves to the situation (Noor Siah et al. 2012). Getting attention from health care providers may reduce the family's stress level and help in coping with the environment of critical care. A previous study by Stricker et al. (2007) emphasized that delivery of care would be more effective once family needs can be met, which include information rather than focusing on patients' diagnoses alone.

Stress level of family members is high during the first few hours of the patient being admitted to Critical Care Unit (Leon & Knapp 2008). Family members needs are overlooked, as the patient becomes a central care for the nurses and at this same time the family becomes anxious and fear for their loved one (Siddiqui et al. 2011). For family members who are struggling with a difficult situation such as financial anxiety and child care, these can lead to depression or post-traumatic stress disorder (Pochard et al. 2005; Paparrigopoulos et al. 2006). Unmet anxiety family members needs has potential to affect patient care through disregard for the treatment, distrust in health care providers and threat of lawsuit; moreover these feelings can be transferred to the patient (Browning & Warren 2006).

Effective communication between families and health care provider increases satisfaction with patient's care (Soltner et al. 2009). However, doctors and nurses were reported to be difficult to access for clear, understandable, and honest information about the patients' medical condition (Bailey et al. 2010). Effective, even adequate communication does not readily occur in the ICU. Most of the conflicts with the health care personnel during their family member's stay are related to inadequate communication (Heyland et al. 2002). For nearly 30 years, families have indicated the need for communication with and information from the healthcare team in the ICU. However, this need has not yet been successfully met (Hashim 2007).

MATERIALS AND METHODS

PARTICIPANTS AND DATA COLLECTION

Ethics approval was obtained for the study from the Universiti Kebangsaan Malaysia Research and Committee. Project number: FF-2014-128. Permission to conduct the study was also granted by the Director of the hospital where the study took place.

This cross-sectional questionnaire survey was conducted in March to May 2014 at General Intensive Care Unit (GICU) and Coronary Care Unit (CCU) at one teaching hospital in Malaysia. A convenience sample was recruited from family members of critically ill patients institutionalized in ICU and CCU. For this cross sectional descriptive study, the sample size has been calculated using simplified formula by Taro Yamane (1967) who gave a total of 275. This power calculation was based on a total of 884 patients admitted to the GICU and CCU in January to December 2013. Due to time constraints, the data collection was conducted in a

two month period. As there were 884 admissions from January to December 2013, on average, there were 74 admissions to GICU and CCU in a month. On this basis, it was estimated that 148 family members should be recruited for this study as the duration of the data collection was 2 months. All family members who were 18 years and above, understood or were able to communicate in English or Malay, stayed together with patient at the same house were eligible for inclusion. Those with family members and who had cognitive and mental impairment were excluded from the study.

MEASUREMENT TOOLS

Critical Care Family Needs Inventory (CCFNI) adopted from Norris and Grove (1986) were used. This questionnaire was a self-reported scale measuring the family's needs during patients' admission to GICU and CCU. There are 5 domains of family members needs measured by CCFNI, which are: i) Information - cognitive and reflect the family's need for consistent and realistic information from appropriate health care provider about the patient's condition, prognosis, care and treatment that has been delivered to patient.;ii) Proximity - A family's need to be near and close, including freely access and unlimited visiting hours to their admitted family members; iii) Comfort - related to the comfortable hospital environments for the family members waiting to visit; iv) Support - availability of resources and support systems for family members to cope up with the admission of their relatives in critical care unit, and include needs of personal and physical comfort; and v) Assurance - family's need of hope, honest communication and caring behaviors of the staff to family members.

Information Using Likert scale, family members rated their needs from scale 1 (not important) to scale 4 (very important). To determine whether the family needs were met, 30 items from the Need Met Inventory (NMI) developed by Warren (1993) were used. Using Likert Scale, family members rated their needs were met or not from scale 1 (never met) to scale 4 (always met). Seven questions pertained to respondents' demographic data include age, gender, relationship to patient, educational level and monthly income were also asked. The questionnaire was translated to Malay language and then back translated to English by an English teacher who had Teaching English as a Second Language (TESL) qualification. The Cronbach's test for the CCFNI instrument was 0.92; and 0.93 for the NMI instrument.

STATISTICAL ANALYSIS

Statistical analysis was performed using SPSS version 21.0. The level of family needs in Critical Care Unit, the needs of family members being met, and the relationship between socio-demographic data and level of family needs in Critical Care Unit were analyzed. Data are summarized as means, standard deviations or percentages, as appropriate. ANOVA tests were used to analyze the relationship between categorized variables of socio-demographic data; age, respondent's relationship with patient, education level and monthly

income with family needs in Critical Care Units. Independent T test was used to identify the association between family needs and gender of respondents.

RESULTS

A total of 109 (74%) family members completed the questionnaires. The respondents consisted of 48 (44%) male respondents and another 61 (56%) were females. The demographic data (Table 1) showed that majority of the respondents 35 (32.1%) were 18-29 years old, 27 (24.8%) were 40-49 years old, 20 (18.3%) for each age group of 30-39 years old and 50-59 years old, and for age group above than 60 years old, the percentage were 7 (6.4%). For the relationship variable, 41 (37.6%) were relatives of patient, children consisted of 33 (30.3%), of which 20 (18.3%) were spouses, and 15 (13.8%) were parents. The level of education was categorized into three groups; primary, secondary

Table 1: Frequency and percentage distribution of socio demographic data

Variables	Frequency	Percentage (%)
Gender		
Male	48	44
Female	61	56
Highest education level		
Primary	13	11.9
Secondary	35	32.1
Tertiary	61	56.0
Relationship with patient		
Spouses	20	18.3
Children	33	30.3
Parents	15	13.8
Relatives	41	37.6
Age (years)		
18 – 29	35	32.1
30 – 39	20	18.3
40 – 49	27	24.8
50 – 59	20	18.3
> 60	7	6.4
Monthly income		
< RM1500	24	22.0
RM 1600 – 2500	37	33.9
RM 2600 – 3500	21	19.3
RM 3600 – 4500	11	10.1
>RM 4600	16	14.7
Total	**109**	

Table 2: Family members' needs during admission to Critical Care Unit according to the CCFNI scores - ranked

CCFNI Subscales	Mean	Std. Deviation	Ranking
Assurance	3.77	0.306	1
Information	3.62	0.434	2
Proximity	3.60	0.415	3
Support	3.57	0.477	4
Comfort	3.55	0.586	5

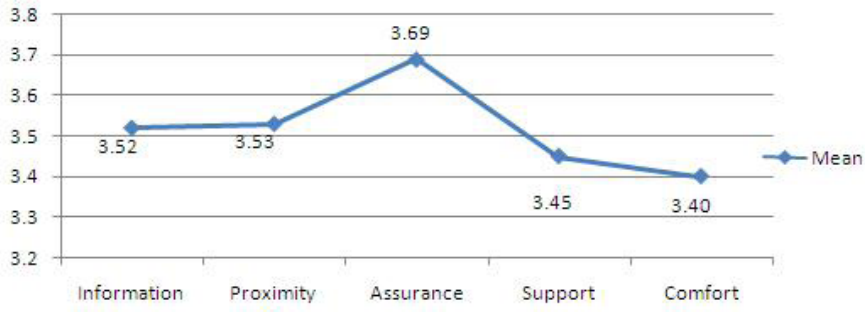

Figure 1: Mean of family members needs met or unmet

and tertiary. About 61 (56.0%) were tertiary, 35 (32.1%) were secondary and 13 (11.9%) were primary. Most of the family members 37 (33.9%) earned their monthly income between RM 1600 – RM2500.

The major need of the family members of critically ill patients in a Critical Care Unit was found to be assurance. It would be because family members feel there were still hope of their loved one to be discharged to ward as well as the appropriate treatment was given by the healthcare professionals. Hence, helping in coping the anxiety level and build trust and confident in them. Comfort was rated to be the last need been met among the family members by health care professionals in Critical Care Unit at a tertiary hospital (Table 2). This may be due to less need on comfort subscales among family members during first few days of admission of their loved one in Critical Care Units.

Needs of family members being met (Figure 1), shows assurance was the most need been met by the health care professionals (M = 3.69, SD = 0.334). Proximity need was ranked second (M = 3.53, SD = 0.406), information need (M = 3.52, SD = 0.397), support need (M = 3.45, SD = 0.498) and the least need been met was comfort (M = 3.40, SD = 0.641). Relationship between socio-demographic data and subscales of family needs found that respondent's relationship with patient and proximity needs was statistically significant, indicating that the proximity was influenced by respondent's relationship with patient, F = 3.759, p = 0.013 (Table 3). The children showed that their attachment with the patient is high and

Table 3: Family member relationship with patient and proximity needs

Variable	n	Mean	SD	F	ρ
Relationship with patient				**3.759**	**.013**
Spouses	20	3.60	.265		
Children	33	3.68	.368		
Parents	15	3.50	.341		
Relatives	41	3.38	.470		

Table 4: Relationship between gender and comfort need

Variables	n	Mean	SD	t	Sig-t
Male	48	3.2292	.72902	-2.514	.013*
Female	61	3.5328	.53126		

they need to be close and nearer to the patient among other respondents' relationship with patient (mean = 3.68).

The respondent's monthly income was statistically significant with the support (F = 4.172, p = 0.004) and comfort needs (F = 2.724, p = 0.033) indicating that the support and comfort need was influenced by respondent's monthly incomes. The relationship between comfort needs with gender found that female showed highest mean score compared to male which indicate that female need more comfort from health care providers during their loved one admission to the Critical Care Units (Table 4).

DISCUSSION

Family members expected that they would be informed on every patient's situation and progress. The details of patient's current condition and progress have been found to be the most information demand by family members. Findings of this study showed that Malaysian families are concerned when their relatives admitted to Critical Care Units. The principle of informing family members at home about changes in the patient's conditions by nurses are not a common practice in hospitals in Malaysia as they needed to be nearer to the ill person physically and emotionally (Hashim & Hussin 2012). Therefore, great effort should be given by health care professionals especially critical care nurses to the family members. By doing so, it can build a trust and effective communication which can prevent most of the family members misunderstandings towards health care professionals. This is because the health care provider helps in build confident among the family members by assuring that their loved one was treated well and encourage the recovery phase. Lack in providing assurance to family members may result in anxiety and feeling of uncertainty of the survival rate of the patient (Hashim & Hussin 2012).

The findings of this study also revealed that most of the family members highly focused on the care of the critically ill patient. With the high stress level and low coping mechanism with the critical

situation, family members will burnout and became more emotional in which will affect their health status especially elderly family members (Yousefi et al. 2012). Nurses need to be sensitive of family members' words and feelings to identified the problems and help them to cope with the situation. It is also important to empathize and provide adequate information by updating patient's condition from time to time to the family members which will help them to understand patient's condition. Critical care nurses should aware the importance of holistic approach in fulfilling family members needs of critically ill patient (Noor Siah et al. 2012).

The least need of family members of critically ill patients being met by the healthcare professionals was the comfort need, with the mean score of 3.40 and standard deviation of 0.641. The two questions being asked for this need are: "to feel accepted by the hospital staff", and "to have a telephone in waiting room". Few of the reasons of family needs were not met by the healthcare workers due to lack of time and knowledge, focus on the patient's need only, and not understanding the relationship between family members' needs with patient outcomes and because healthcare workers do not recognize meeting the family needs as their conscientiousness (Hashim & Hussin 2012). Besides that, the needs of comfort were least met as there was no telephone provided and there was no waiting room at the ICU and CCU for the family members of patient at UKMMC. It can be assumed that the telephone was not provided by UKMMC in the waiting room as all family members owned a cell phone. As the family members set their mind that the patient's welfare is the most important, the personal comforts of their own selves are no more a priority (Kosco & Warren 2000).

The healthcare provider must also treat the family members as a human being including aspect of psychological and spiritual to help them cope with the condition of their loved one rather than just focusing to treat the patient. Thus, the family members could give the support to the patient to recover. The sudden unexpected unstable nature and strong probability of death, makes the families of patients become frailer. This are the time when nurses can play a role in giving support and comfort by listening to them or even acknowledged them as a human being. The second least need that being met was support need with a mean score of 3.45 and standard deviation of 0.498. Support can be given to the family members by the healthcare providers especially nurses through fulfilling the spiritual and psychological needs (McKinly & Elliott 2008). Therefore, it is very important to instil the empathy sense in nurses and the nursing education of the importance of caring of the patient as well as the family members.

This study has found that only three family member's needs; proximity, support and comfort have relationship with socio-demographic data such as gender, relationship to patient and monthly income. There are significant relationship between respondent's relationship with patient and proximity need ($F = 3.759$, $p = 0.013$). Some

of them expressed disappointment because could not visit patient after the visiting hour after they reached hospital after visiting hour.The children showed that their attachment with the patient is high and they need to be close and nearer to the patient among other relationship with patient (mean = 3.68). Other study by Stricker et al. (2007) also found similar findings that prove the relationship between proximity need and respondent's relationship with patient

Between the two gender, female showed highest mean score indicate that they need more comfort due to high stress level and lack of coping level to the critical care admission, hence their responsibility to other family members as well. They also tend to be more emotional and expect acceptance from the health care professionals (Wall et al. 2007). The respondents with lower income (less than RM 1500) suggest highly demanding for comfort and support from health care professionals during their loved one's admission in Critical Care Units.

IMPLICATIONS FOR PRACTICE

Nurses play an important role in fulfilling the family members' needs in Critical Care Unit apart from doctor's involvement in updating patient's progress to the family members. A change in nursing administration entails nurses to evaluate family needs in a more universal manner. A family support group program could be developed with collaboration of various health care professionals. Nurses should pay more attention to the needs which will help to reduce the anxiety level and burden of the family members especially in the physical and psychological aspects. Nurses need to be prepared through continuing education programs towards sustaining a good collaboration with family members. This program will enhance the knowledge of nursing students in the care of patient and family members in crisis situation in a more holistic manner. This program should include the importance and priority needs of family members of critically ill patient such as effective communication, counseling and supportive nursing in crisis situation to effectively interact with the families and reduce the stress level of family members.

The researchers were unable to reach the targeted sample size of 275 family members of critically ill patient in the Critical Care Unit at UKMMC due to time constraint and relatives' lack of cooperation especially spouse of the patient due to emotional stress. The achieved sample size was only 109 (74%) out of the actual sample size being calculated. Besides that, some of the relative refused to take part in answering the questionnaire due to language barrier especially Chinese family members. Future research is suggested with a longer period of data collection, larger sample and multi-language questionnaire. A qualitative approach to study the needs of the family members of critically ill patient might yield more valuable outcomes as a quantitative research can be limited by biasness of the family members input in answering the questionnaire. Valuable outcomes from the family members will be more helpful to improve in fulfilling

the needs by the health care provider in critical care setting.

CONCLUSION

Meeting the needs of the family members of critically ill patient in Critical Care Unit at a tertiary hospital is an important aspect for a better health care delivery. It is important to identify the needs of the family members that have been met by the health care provider during admission to Critical Care Unit. Nevertheless, to fulfill the family members needs is not only an individual responsibility of critical care professionals, but should be assumed together with health institution managers. Fulfilling the needs of the family members in Critical Care Unit will be indirectly contributed in patient's recovery.

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