Needs of Family Members of Critically ill Patients in Cardiac Care Unit: A Comparison of Nurses and Family Perceptions in Thailand

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บทคัดย่อ

วิชาชีพการพยาบาลได้พัฒนาไปสู่การดูแลบุคคลแบบองค์กรรวม (holistic care) ให้การพยาบาลผู้ป่วยแบบการดูแลบุคคลทั้งคนที่ประกอบด้วยความสัมพันธ์ของบุคคลในครอบครัว อนึ่งการเจ็บป่วยในภาวะวิกฤตและการเข้ารับการรักษาตัวในโรงพยาบาลของญาติหรือบุคคลอันเป็นที่รักของตนนั้นย่อมมีผลกระทบต่อทั้งทางร่างกายและจิตใจของสมาชิกในครอบครัว ดังนั้น การศึกษาวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาเปรียบเทียบความต้องการและการได้รับการตอบสนองความต้องการของสมาชิกครอบครัวผู้ป่วยในภาวะวิกฤต ณ หอบำบัดผู้ป่วยหนักโรคหัวใจ ตามการรับรู้ของตนเองและของพยาบาล โดยใช้แบบสำรวจความต้องการของสมาชิกครอบครัวผู้ป่วยภาวะวิกฤตทำการศึกษาสมาชิกครอบครัวของผู้ป่วยที่เข้ารับการรักษาในหอบำบัดผู้ป่วยหนักโรคหัวใจภายใน 24 ถึง 72 ชั่วโมงแรก จำนวน 50 คน และพยาบาลวิชาชีพ จำนวน 42 คน เพื่อเป็นแนวทางสำหรับปรับปรุงและจัดระบบบริการพยาบาล ที่สามารถตอบสนองความต้องการได้ใกล้เคียงถึงความต้องการที่แท้จริงอันจะส่งผลถึงคุณภาพการดูแลผู้ป่วยในภาวะวิกฤตต่อไป

ABSTRACT

The nursing profession has moved away from the task oriented clinical practices and actively sought to develop a holistic approach to the individual in all varieties of health care setting. Critical illness and subsequent hospitalization of their loved ones in a Cardiac Care Unit (CCU) can result in many physiological and psychological problems for patients and their family members. The purpose of this study was to identify needs of Thai families of CCU hospitalized within 24 to 72 hours. The Critical Care Family Need was used to compare the perceived needs of family members of patients in the CCU with those perceived by nurses. A sample of 60 Thai family members and 50 registered nurses completed the "Critical Care Family Needs Inventory" (CCFNI) questionnaire. The ranked order needs were identified by family members and CCU nurses and the results were compared. Conclusion was drawn to determine what the needs of the family members are in order to implement quality care for critical ill patient.

Keywords: critical illness, family needs, family-centered care

INTRODUCTION

Coronary artery disease (CAD; also called coronary heart disease, CHD), is a serious health problem worldwide. In Thailand, CHD is the third most common cause of death and on the rising trend as the important cause of morbidity and mortality. In 2006, approximately 17,775 (per 100,000 populations) die of heart disease. Patients with CHD who do reach a hospital require rapid intervention and stabilization in a cardiac care unit

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(CCU). The hospitalization of a patient in CCU may cause families feeling vulnerable and helpless with overwhelming stresses (Berstein, 1990). It is recognized that the admission of a family member to intensive care environment usually occurs without warning, allowing little time for families to adjust to the crisis (Titler, Zichi Cohen and Craft, 1991). This may affect the family's ability to interact with the patient and provide support (Titler et al., 1991). However, nurses have traditionally directed their energies toward to correcting the patient's psychological crisis and little time may be allocated to assisting family members in coping with this stressful event (Fox and Jeffery, 1997). Despite the stressor and workplace time constraints, CCU nurses have a responsibility to view the care of critically ill patients from a family perspective. This study aimed to discover the needs of family members with CHD during their experience in the CCU and to compare their perceptions with the CCU nurses' perceptions of family needs.

REVIEW OF THE LITERATURE

Providing care for the patients' families arises from crisis theory, which stated that critical illness is not an event that occurs in isolation for the patient and staff (Bond, Draeger, Mandleco, and Donnelly, 2003). Family structures are increasingly recognized as heterogeneous, thereby adding a varying dimension to the impact of critical illness (Whyte, 1997). In Thailand, the family unit is very important. At school, they are taught about the role they have to play in family life. They are given instruction in how to show proper respect and concern with a strong emphasis on specific roles and proper relationships among the family members. Thai families are close, and several generations may live in the same household. Therefore, any changes within the family can easily disturb relationships and create anxiety and stress for other members. Leske (2002) stated that any illness severe enough to necessitate admission to a critical care unit is life threatening and can precipitate sever anxiety within a family system. Critical illness often occurs suddenly and unexpects, leaving relatives and close friends in a state of shock and disorganization, with little time to adjust. The high morbidity and mortality associated with the CCU setting causes intense feelings of anxiety and uncertainty compounded by the fact that most families lack of experience with these events (Millar, 1991). Families suddenly faced multiple stressors such as fear of death, uncertain outcome, emotional turmoil, financial concerns, role changes, disruption of routines, dependency on others, and unfamiliar hospital environments. Therefore, specialized assessment and interventions for families are needed because anxiety may interfere with the family's ability to receive and comprehend information, and provide positive support for each other and more importantly for the patient (Berwick and Kotagal, 2004 The family remains the most important social context to consider when determining interventions that can be positively influenced patient outcomes (Leske, 2002). Leske (2002) points out that unmitigated family anxiety may manifest itself in distrust of hospital staff, noncompliance with the treatment regimen, anger and dissatisfaction with care, and even lawsuits.

Meeting the needs of their patients' family members is an essential part of the responsibilities of cardiac care unit (CCU) nurses, who are committed to provide quality care for critical ill patients and also to easing the pain and suffering of those who have a critically ill relatives or close friend. However, the area of psychological care for patients and particularly their family is often neglected, as more often nurses in CCU direct all their energies toward correcting the biological crisis of the patient (Fox and Jeffery, 1997).

Research studies of critical care nurses have shown that many nurses felt that they lack of time, training, knowledge, and support for the family care (Brinker, 2002). Some nurses considered interaction with patients' family members a low-order priority (Bond, et al. 2003).

However, there has been a change in the priorities of care delivered by nurses in the intensive care environment in the past decades. The nursing profession has moved from the task oriented clinical practices and actively sought to develop a holistic approach to the care of the individual in all variety of care setting (Wright and Leahey, 1994). The needs of families of critical ill patients have been addressed in several research studies in Western countries. The first major study by Molter (1979) and Lesky (1986) identified a list of 45 family need statements and developed the Critical Care Family Needs Inventory Index (CCFNI) as an instrument to determine family needs. This instrument has been used in many subsequent studies (Quinn, Redmond and Begley, 1996; Mendonoca and Warren, 1998; Kosco and Warren, 2000). The majority of these studies have shown that family members of patients in intensive care have specific needs and concerns which are not always incongruent with the health care professional (Norris and Grove, 1986; kleinpell and Powers, 1992). In the study of Abbott et al (2001) found that 46% of respondents thought a conflict existed between healthcare professionals and the respondents. Dockter et al. (1988) also found that disagreements were noted in the areas related to families participating in patient care and in providing emotional support.

These significant differences in perceived importance of some family needs between nurses and families of critical ill patients suggest that at least some of the importance needs are not being adequately met. The challenge for CCU nurses is to determine the way to meet their needs which requires learning what they perceived their needs to be. The purpose of this study involved the utilization of a descriptive survey to determine the needs of family members within a specific context of cardiac care unit and to compare their perceptions with the CCU nurses' perceptions of the family needs in Thailand.

METHODOLOGY

Research design

A descriptive survey design was utilized to determine the needs of family members of critical ill patient in CCU of one 500-bed general hospital in Bangkok. Both family members and staff in the Cardiac Care Unit (CCU) were surveyed utilizing the Critical Care Family Needs Index (CCFNI) developed by Molter and Leske (1983).

Setting

Two groups of participants were involved in this study: 1) Staff nurse working in the CCU and 2) family members of adult CCU patients, from 10th January to 15th April 2008 from the 300 beds Hospital.

Staff nurse participations

The staff participations were drawn from the total population of staff nurse working full time in the CCU at the time of survey. They voluntarily agreed to participate in the study through the informed consent. A total of 50 staff nurses working in the CCU were invited to complete the survey. Forty- two were returned giving a response rate of 84%.

Family member participations

A total of 60 family members of critical ill patients in CCU were approached and invited to complete the questionnaire. In order to minimize the potential for distress to families within 24-72 hours of

patients' admission, inclusion and exclusion criteria were used to determine which family members to approach. The inclusion criteria were as follows: age over 15 years old, lived in the same house, husband/wife, consanguinity, capable of reading, writing, listening and speaking, having family member hospitalized within 24 to 72 hours. The exclusion criterion was a family member who was not willing to participate. The voluntarily agreed to participate in the study through informed consent. Fifty completed questionnaire were returned giving a response rate of 83%.

Instrument

The instrument used was the revised CCFNI developed by Leske (1991). The CCFNI scale was translated into Thai language. The CCFNI is composed of 45 need statements that are rated on a likert scale of 1 to 5 according to their importance; (1) not important, (2) slightly important, (3) sometimes important, (4) important, (5) very important. The 45 need statements of CCFNI have been categorized into 5 subscales as assurance needs (7 items), information needs (8 items), proximity needs (9), support needs (15 items) and comfort needs (6). The reliability of an instrument reflects its accuracy and consistency in measuring a specific attribute. Internal consistency refers to the extent to which all items of the instrument measure the same concept. In this study, the Cronbach's Alpha of the CCFNI for the staff participation was .82., and for the family members participation was .84.

Analysis of the data

Data were entered into the Statistical Package for the social Sciences (SPSS) version 14. Data were analyzed using rank ordering of means, standard deviation and independent-samples t-test. The independent-samples t-test was used to determine a statistical significant difference in the mean scores of two different groups (family members and staff nurses) on a continuous variable (the CCFNI). The significance of the Levine's test for equal variances was less than p=0.05. Therefore the data in this study violated the assumption of equal variances (Polit and Hungler, 1995). The t-value reported in the results of this study is the second line of the t-test where equal variances are not assumed.

RESULTS

Characteristics of the sample

For the 50 CCU nurses, Most of them were women (88%) and only 12% were men. The age range of the CCU nurses was 20 to 29 years and the mean age was 27.8 years (S.D.=4.05). Twenty-two of them (52.4%) were single and sixteen (38.1%) were married, only four (9.5%) were separated. Most of the nurses (92.8%) had obtained a bachelor degree in nursing as their highest nursing qualification and the remaining 7.2% had obtained a master's degree. Twenty-one of them (50%) had 2 to 5 years of CCU experience. Thai families of CCU hospitalized within 24 to 72 hours, eleven of them had 1 to 2 years of CCU experience, and seven of them had more than 5 years of CCU experience. Only three of them had experience less than 1 year (see table 1).

For the 50 (check number) family members, they were 19 males (38%) and 31 females (62%). The age range of the family members was 30-49 years and the mean age was 38.2 years (S.D.=3.08). Most of them were spouse (74%). More than 50% of them obtained a diploma. Ten of them graduated high school and twelve of them were graduated bachelor's degree. Most of family members participated in the study has their relatives admitted in CCU for more than 48 hours. Thirty-six of them have no experience of their loved one staying in CCU, and only fourteen of them have had this experience (see table 2).

Table 1 The characteristics of the CCU nurse participations

Characteristic	Frequency	Percentage
Gender		
Male	5	11.9
female	37	88.0
Age		
20-29 years	18	42.8
30-39 years	16	38.1
40-49 years	6	14.3
50-59 years	2	4.8
>59 years	-	-
Marital status		
Single	22	52.4
Married	16	38.1
Separated	4	9.5
Academic qualification		
Certificated		
Bachelor degree	39	92.8
Master degree	3	7.2
Doctoral degree	-	-
Length of experience		
< 1 years	3	7.1
1-2 years	11	26.2
2-5 years	21	50
> 5 years	7	16.7

The item means of the 45 need statements rated by the families were found between 2.43 and 3.94. The item means of the need statements by the CCU nurses ranged from 1.96 to 3.89. Family members and nurse participants ranked the assurance category highest. For family members this was followed the categories of proximity, information, comfort and lastly support. However, CCU nurses ranked the subsequent categories in order as comfort, information, proximity, and support (see table 3). It can be seen from Table 3 the CCFNI subcategories of assurance, proximity, information, and support evidenced statistically significant differences in the mean scores.

The assurance category comprised of seven items reflecting a need to maintain or redefine hope about the patient's outcome (Lesky, 1991a). For the family members in this sample the most important need statement was *N*5 "to have questions answered honestly" ($\bar{X}$=3.94) followed by *N*17 "to be assured that the best possible care was given to the patient' ($\bar{X}$=3.92), these two statements in the assurance category were ranked second and first respectively by CCU nurses.

Table 2 The characteristics of the family members

Characteristic	Frequency	Percentage
Gender		
Male	19	38
female	31	62
Age		
20-29 years	10	20
30-39 years	12	24
40-49 years	18	36
50-59 years	7	14
>59 years	3	6
Relationship of family member to the patient		
Mother	5	10
Father	3	6
Wife	6	12
Husband	19	38
Daughter	18	36
Son	6	12
Sister	1	2
Brother	1	2
Daughter-in-law	1	2
Father-in-law	-	-
Academic qualification		
High school	10	20
diploma	28	56
Bachelor degree	12	24
Master degree	-	-
Doctoral degree	-	-
other	-	-
Length of CCU stay		
<24 hours	3	6
24-48 hours	11	22
>48 hours	36	72
Have experience with critical care unit		
- Yes	14	28
- no	36	72

Table 3 presents the rank ordering of mean importance for CCFNI subcategories for family members and staff nurses. It also presents independent t-test results for each CCFNI subcategory.

Table 3 CCFNI subcategories rank ordering of means, standard deviation and t-test for family members and staff nurse participations.

Subcategory	Family members (*N*=50)		Staff nurses (*N*=42)				
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	*t*	*df*	Sig (2-tailed)
Assurance	3.89(1)	.18	3.64 (1)	.28	5.512	115	0.00*
Proximity	3.60 (2)	.38	3.34 (4)	.36	5.530	115	0.00*
Information	3.46 (3)	.42	3.22 (3)	.43	6.425	115	0.00*
Comfort	3.25 (4)	.55	3.28 (2)	.48	.511	115	0.51
Support	2.58 (5)	.65	2.88 (5)	.32	-.2.445	115	0.012*

* = significant at p=0.05

Proximity category was ranked second by the family members and fourth by CCU nurses. This category evidenced statistically significant differences in the mean scores between the two independent samples. This category comprised of nine items related to visiting frequently, receiving regular information, being called about condition changes and transfer plans. They reflect the family's need for personal contact and remaining near the patient in both a physical and emotional sense (Leske, 1991a) Family ranked items in this category higher important than CCU nurses.

The information category was ranked third by both family members and CCU nurse. However, this category evidenced statistically significant difference in the mean scores between the two independent samples. This category comprised of eight items addressing the family's need to have realistic information about their critically ill loved one (Leske, 1991a). Family also ranked 7 items in this category higher important than CCU nurses.

The comfort category was ranked fourth by family members and second by CCU nurses. This category evidenced no statistically significant difference in the mean scores between two independent samples. This category comprised of six items addressing the family's need for personal comfort in having a conveniently located waiting room, telephone, toilet and good food available. No individual items in this category showed statistically significant difference in the mean scores between the two groups.

The support category was ranked fifth overall by both the family members and CCU nurses. However, this category evidenced statistically significant differences in the mean scores between the two independent samples. This category comprised of 15 items addressing the family's need for resources and support structures to assist them during their loved one's critical illness (Leske, 1991a). CCU nurses ranked these items higher importance than family members.

DISCUSSION

In this study, of the most important needs category identified by both families of critically patients and CCU nurses was the need for assurance. This finding is consistent with those in previous studies using Molterand Leske's (1983) CCFNI (Daley, 1984; Norris and Grove, 1986; Mendonca and Warren, 1998). Leske (1991b) suggests that all families need assurance for a realistic appraisal of the situation facing them. Family members at a time of crisis become naturally worried that their loved ones are receiving the best possible healthcare from professionals who will communicate that can build their trust. However, the need for reassurance does not mean that families want false hope for a recovery that will not occur (Henneman and Cardin, 2002). Moreover, families require concrete information to help them to focus on areas of primary importance and not become overwhelmed by extra detail. It is suggested that families require information to reduce their anxiety and help them feel more involved in the care of their loved one (Titler et al., 1995). However, information seeking by families changes over time with families shocked and uncertain by their loved ones illness (Jamerson et al., 1995).

It is interesting that the proximity category was ranked second by family members and fourth by CCU nurses. The need for families to be near their critically ill loved one during a time of crisis has been described repeatedly over time by other research studies (Molter, 1979; Daley, 1984; Leske, 1986; Kleinpell and Power, 1992; Warren, 1993; Henneman and Cardin, 2002). Family members ranked these items related to being near the patient higher in importance than CCU nurses. Wilkinson (1995) also found that families need access to the patient frequently and need a caring environment. Burr (1998) highlighted family need to protect the patient and maintain a vigil. However, the results of this study may reflect the environment of the CCU in which the study was conducted. CCU has restricted family access or visiting as the patient in CCU need to absolute bed rest during the first few days of their admission. This may limit nurse and family interactions which will leave the family in isolation with the greater fear of not knowing or seeing (Titler and Walsh, 1992). In Thailand family, when a family member is admitted into the CCU, all family members visit the patient and overcrowded the corridor outside the unit. Thai family is considerably cohesive and each family member has an obligation to take care of all other member. Therefore, the family's need for connectedness with the patient is heightened upon their admission into a CCU. Unfortunately, it is often at this time of greatest need when the family is excluded. However, Benner, Hooper-Kyriakidis, and Stannard (1999) demonstrated no adverse effects of family visiting for the patient or family. Nevertheless, family access to the patient during admission in CCU requires professional judgment.

The comfort category was ranked fourth by family members and second by CCU nurses. Interestingly, results of this study found that CCU nurses placed greater emphasis than family members on the family member's need for comfort. This could reflect the CCU nurse's recognition of providing facilities that address the family's personal needs. However, the results of this study indicate that family members do not have much concern about their personal and physical needs. Research has demonstrated that families have traditionally placed less emphasis on their personal comfort needs, preferring to focus more on the needs of their critically ill loved one (Coulter, 1989; Burr, 1998).

The support category was ranked fifth overall by family members and CCU nurse. It has been suggested that strong interpersonal support in crisis situations facilities coping and reduces anxiety (Leske, 1991b). It is interesting to note that family members ranked items related to personal support lower than CCU nurses. As previous discussed, families have traditionally placed less emphasis on their personal needs, preferring to focus more on the needs of their critical ill loved one (Coulter, 1989; Burr, 1998). In this study, Thai families are very cohesive so that they usually show their feelings for only persons in family rather than by communicating their feelings to someone else even with the nurses. It is also imply that supporting family members in crisis situation require nurses to establish a trusting relationship.

Not only some significant differences were detected between the family members' and CCU nurses' rankings the need categories, but nurses also ranked the family needs slightly lower. Therefore, the nurses might be said to be moderately accurate in their assessment of the importance of family's needs. Leske (2002) pointed out that it is the time to embrace the practice of family-centered care. Patients and their families have basic needs that must be met if healthcare institutions are to be successful in addressing consumers' needs and providing holistic care. Meeting the needs of families of critically ill patients requires excellent assessment, planning, intervention and evaluation skills. The results of this study contributed to understanding the family needs and would be useful as a basis for determining interventions to meet family member's needs in the CCU. As Leske (1991:242) argued "coordinating and prioritizing those interventions to help meet specific family members needs for support, comfort, proximity, information and assurance is a worthwhile beginning".

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