ประสบการณ์การได้รับการดูแลในภาวะวิกฤตของผู้รอดชีวิตจากหอผู้ป่วยหนัก

Intensive Care Experience among Intensive Care Unit Survivors

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บทคัดย่อ

ผู้ป่วยวิกฤตต้องการการดูแลในระดับสูงเพื่อรักษาชีวิตและป้องกันภาวะแทรกซ้อนที่รุนแรง อย่างไรก็ตามผู้ป่วยอาจมีประสบการณ์ทั้งที่เป็นความทรงจำที่พึงปรารถนาและไม่พึงปรารถนา ประสบการณ์ในทางลบจะส่งผลต่อผู้ป่วยทั้งในขณะรักษาอยู่ในหอผู้ป่วยหนักและอาจเป็นผลต่อเนื่องในภายหลัง พยาบาลวิกฤตมีบทบาทสำคัญในการค้นหาประสบการณ์ที่ก่อให้เกิดบาดแผลทางใจเพื่อปรับปรุงคุณภาพการดูแลให้ดีขึ้น การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อ ศึกษาประสบการณ์ของผู้ป่วยวิกฤตต่อการได้รับการดูแลในหอผู้ป่วยหนัก สถานที่ทำการศึกษาคือหอผู้ป่วยสามัญของโรงพยาบาล 3 แห่งในประเทศมาเลเซีย กลุ่มตัวอย่างในการวิจัยเป็นผู้ที่รอดชีวิตจากหอผู้ป่วยหนักจำนวน 142 รายที่ยินดีให้ความร่วมมือในการวิจัยครั้งนี้ เครื่องมือวิจัยคือแบบสอบถามประสบการณ์ที่ได้รับการดูแลในภาวะวิกฤต (the Intensive Care Experience Questionnaire, ICEQ) ซึ่งมี 4 ด้านได้แก่ ด้านการตระหนักรู้ต่อสิ่งแวดล้อม ด้านประสบการณ์ที่ทำให้ตื่นตระหนก ด้านประสบการณ์ที่เป็นความทรงจำและ ด้านความพึงพอใจต่อการดูแล

ผลการศึกษาพบว่า กลุ่มตัวอย่างในการวิจัยเพียงร้อยละ 50 มีความตระหนักรู้ต่อสิ่งแวดล้อมในระดับสูง กลุ่มที่มีความตระหนักรู้ต่อสิ่งแวดล้อมต่ำกว่ารายงานว่าไม่มีความตระหนักรู้ต่อบุคคล สถานที่และเวลา ตัวอย่างในการวิจัยประมาณร้อยละ 67.6 รายงานว่ามีประสบการณ์ที่ทำให้ตื่นตระหนกในระดับสูง ประสบการณ์ความเจ็บปวดของกลุ่มตัวอย่างในการวิจัยมาจากกระบวนการรักษาและกระบวนการของโรค มีเพียงร้อยละ 17.6 ของกลุ่มตัวอย่างในการวิจัยที่รายงานว่าสามารถจำรายละเอียดได้ในสิ่งที่เกิดขึ้นและบอกว่ามองเห็นสิ่งที่น่ากลัว แต่ก็สามารถนอนหลับได้อย่างเพียงพอขณะรักษาอยู่ในหอผู้ป่วยหนัก ผลการวิจัยยังแสดงให้เห็นว่ากลุ่มตัวอย่างร้อยละ 43.0 มีความพึงพอใจในระดับสูงต่อการดูแลที่ได้รับ และกล่าวว่าบุคลากรใจดีและให้การดูแลที่ดีที่สุดแก่ผู้ป่วย ผลการวิจัยชี้ให้เห็นว่าผู้ป่วยวิกฤตโดยเฉพาะในหอผู้ป่วยหนักต้องการการประคับประคองทั้งทางด้านร่างกายและจิตใจอย่างมาก เพื่อที่จะช่วยลดประสบการณ์ที่ไม่น่าพึงพอใจและการเกิดผลต่อเนื่องด้านลบในภายหลังโดยการจัดสิ่งแวดล้อมที่มีส่วนสนับสนุนประคับประคองและให้การดูแลด้วยความเห็นอกเห็นใจ

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Abstract

Critically ill patients need advanced support to remain alive and prevent serious complications. However, patients may experience either pleasant or unpleasant memories during their stay in ICU. Unpleasant experiences can affect patients or lead to later negative consequences. Critical care nurses have a pivotal role in identifying traumatic experiences in order to improve care. This study aims to explore the intensive care experiences among ICU survivors. This study was conducted in the general wards of three selected hospitals in Malaysia. One hundred and forty-two (142) participants agreed to take part in this study and to answer the Intensive Care Experience Questionnaire (ICEQ) which included additional questions that covered four domains: awareness of surroundings, frightening experiences, recall of experiences, and satisfaction with care.

The results of the study were as follows: Half of the samples reported a high awareness of their surroundings. The less aware group reported not being aware of people, place and time. About 70% (67.6%) of the samples reported high levels of frightening experiences. Pain experienced by the participants came from medical procedures or by the disease process. Only 17.6% of the samples reported being able to recall precisely what happened in the ICU. Participants recalled seeing scary things but having enough sleep in the ICU. The results showed that 43.0% reported being highly satisfied with their care, and claimed that the staff was kind and delivered the best care to patients. This result indicates that critically ill patients, especially in the ICU, need strong support physically and psychologically in order to minimize unpleasant experiences and, later, negative consequences by providing a conducive environment and care with sympathetic concern.

Background and Significance

Serious disease or trauma often lead to life-threatening conditions which are far beyond a person's daily experience. This kind of experience can be a crucial moment, especially when someone is sent to an intensive care unit (ICU), which can be described as an unfamiliar environment, and a strange and frightening place. Admission to the ICU itself was commonly described as something that suddenly and unexpectedly happens which can also bring higher mortality among the patients (Rovatti, Teodoro, & Kern de Castro, 2012). In Malaysia, the number of ICU admissions has been increasing every year. From 2008 to 2016, in government hospitals, it has increased each year, 18907, 21266, 26977, 29794, 33892, 37436, 38904, 39595, and 37759 respectively (Malaysian Registry of Intensive Care, 2016). After a period of time, patients will be transferred out from the ICU and these patients are called ICU survivors. Intensive care unit survivors were the patients who were stable for more than 24-hours in general wards, and were discharged from the

ICU after meeting certain criteria: haemodynamically stable, patent airway, oxygen requirement not more than 60%, no longer need inotropic or vasopressor support or require a low dose, neurologically stable, and show improvement from critical problems (Malaysian Society of Intensive Care, Ministry of Health, & Anaesthesia Programme, 2012). The Intensive care experience leaves an impression on patients during their stay in ICU (Rattray, Johnston, & Wildsmith, 2004), which can be either positive or negative, depending on how patients perceive it.

From previous literature reviews, Rattray et al. (2004) listed the key domains and integrated all of it and came out with four domains of intensive care experience: awareness of surrounding, frightening experience, recall of experience, and satisfaction of care. The first domain, awareness of surrounding, is best described as how patients are aware about what happens around them. It can be patient's own self, relationship with others, or awareness towards their environment such as room and equipment (Fredriksen & Ringsberg, 2007). The second domain is a frightening experience, and the examples include: unable to communicate, having nightmares, pain, discomfort, and fear (Russell, 1999). The third domain, recall of experience, is described as the retained memories that cannot simply vanish from the patient's mind. The fourth domain of intensive care experience was satisfaction with care, which is described as the reaction from the patient towards the services given by staffs. Received support from good communication, ensure safety, and friendly attitude may ease the mind of the patient (Fredriksen & Ringsberg, 2007).

The unwanted experience may put patients at risk for late consequences including posttraumatic stress disorder (PTSD)(Jones, Humphris, & Griffiths, 2000), post-intensive care syndrome (PICS), and acute stress disorder. Hence, a study about the intensive care experience among ICU patients is important for early detection or prevention of consequences from the unwanted experiences. Most of the studies were done in a Western country, hence there were limited local data on patients' experiences during their ICU stay (Ho, Hamidah, Sanisah, & Syed, 2008). Although, there was a study was conducted by Ho et al. (2008) in one hospital in Malaysia. The information was gained through a modification of the Intensive Care Experience Questionnaire by Rattray et al. (2004); Soh et al. (2014) who conducted the study in four government hospitals and used the questionnaire that was adapted from another study to look at a patient's experience in physical and psychological themes.

Hence, this study aimed to explore the intensive care experience among ICU survivors by using a larger sample size (142 samples); the study was done in three government hospitals; this study provide the latest information regarding experiences since the previous study was done about seven to eight years ago, thus, the changes of technology, critical care practices and environment in ICU might give different data; and this study used ICEQ without any modifications.

Research Objectives

To explore the intensive care experiences among ICU survivors.

Conceptual framework

In this study, ICU survivors were adults whose stable from critical condition at least 24-hours in step down units or general wards after moving out of the intensive care unit. The intensive care experience was thoroughly looked upon four domains; awareness of surroundings, frightening experiences, recall of experiences, and satisfaction with care. These domains were developed by Rattray et al. (2004). The information gained from this study provides basic information that will be useful in developing the nursing intervention in order to reduce the unwanted outcomes from the intensive care experiences among the patients in ICU

Methodology

Population and Sampling

A descriptive study was designed to explore the intensive care experience among Intensive Care Unit survivors in three government hospitals in Malaysia. The samples for this study included ICU survivors who were discharged from three government hospitals: Hospital Tengku Ampuan Afzan, Hospital Raja Permaisuri Bainun, and Hospital Taiping. One hundred forty-two (142) samples fulfilled the inclusion criteria namely; discharged from ICU to general wards for at least 24 hours to two weeks, admitted to the ICU for at least 48 hours, age from 18 to 64 years old, discharged from ICU with full conscious level, understand Malay language, and willing to participate. The patient who were readmitted to the ICU after having been transferred out to the general ward was excluded from this study.

Research Instruments

The instruments used in this study consisted of two parts: (A) demographic data (12 questions): age, sex, ethnicity, religion, education level, length of stay, medical diagnosis, type of admission, ventilator support, receiving sedation or analgesic, the severity of the illness, and conscious level. The questions were in close-ended form. (B) Intensive Care Experience Questionnaire (ICEQ) with 10 additional questions. ICEQ was developed by Rattray et al. (2004) consists of four domains: awareness of surroundings (9 items), frightening experiences (6 items), recall of experiences (5 items), and satisfaction with care (4 items). All questions had gone through a back translation process (Brislin, Lonner, & Thorndike, 1973), and there was no significant discrepancy of both English versions (original and translated), hence, ICEQ in Malay version was used for this study. The Cronbach's alpha coefficient of domain awareness of surrounding, frightening experience, recall of experience, and satisfaction with care were .914, .821, .797, .841, respectively.

Ethical Consideration

The researcher collected data from the general wards of three selected hospitals after receiving the approval from the Research Ethics Committee, Faculty of Nursing, Chiang Mai University, Thailand [Ref. 6593(7.15.2)/182] [Study code: 2558-EXP022]; Medical Research and Ethics Committee, Malaysia [NMRR-14-1615-23580]; and approval from the director of selected hospitals. Prior to data collection,

written consent was obtained from the samples willingly, and the confidentiality was maintained by using numbering on all set of questionnaires.

Data Collection

After signing informed consent, samples would complete the questionnaires and returned to the researcher after finished answering the questions.

Data Analysis

Data were analyzed using the Statistical Package for Social Sciences program version 19.

Results

Subjects' Characteristic

One hundred forty-two participants completed the questionnaires. Out of these 142, 81 (57%) were male and 61 (43%) were female. The age ranged from 18 to 64 years old (mean: 39.93). In this study the numbers of samples according to age groups were the following: young adult (n = 56, 39%), middle age adult (n = 69, 49%), and older adult (n = 17, 12%). The majority were Malay (n = 100, 70.4%), followed by Indian, Chinese, and other ethnicities. Muslims consisted of 109 (76.8%) from the total sample size. More than half of samples completed high school education (n = 97, 68.3%). The length of stay ranged from two to 90 days (mean: 12.07). Forty-seven (33.1%) samples were categorized as planned admission, while 95 (66.9%) were unplanned admission. About 106 (74.6%) samples claimed not being fully conscious during their stay in ICU. More than half (n = 79, 55.6%) reported having the moderate severity of the condition in ICU, and almost all of the samples had been intubated (n = 134, 94.4%). Around 82.4% samples received sedation in ICU, 19 (13.4%) not sure about either was given sedation or not, and 6 (4.2%) claimed did not get sedation.

Intensive Care Experiences

The results from ICEQ were presented in Table 1. The levels of each domain were classified into two levels by using class interval.

Table 1 The level of intensive care experience by domain (n = 142)

Domain/ Score	High [n (%)]	Low [n (%)]
Awareness of surrounding (9 questions) (Mean: 25.61, SD: 8.916, range 9 - 44)	71 (50.0%)	71 (50.0%)
Frightening experience (6 questions) (Mean: 20.39, SD: 5.447, range: 6 - 30)	96 (67.6%)	46 (32.4%)
Recall of experience (5 questions) (Mean: 12.70, SD: 2.979, range: 5-20)	25 (17.6%)	117 (82.4%)
Satisfaction with care (4 questions) (Mean: 12.06, SD: 2.257, range: 4-19)	61 (43.0%)	81 (57.0%)

Table 1 showed 71 (50.0%) participants claimed to be highly aware of their surroundings and 96 (67.6%) had a high level of frightening experiences and reported a low level on domain recall of experiences (n = 117, 82.4%) and satisfaction with care (n = 81, 57.0%).

In additional questions, under the domain awareness of surrounding, participants felt safe in the presence of family members, and the reason was only family members know them well so the sense of familiarity made them feel safer (n = 72, 50.7%); 31 (21.8%) participants answered presence of both staff and family members made them feel safe as long as there was someone nearby; and 14 (9.9%) reported the presence of staff who was always by their side whenever they needed help and were always encouraged for their recovery made them feel safe in ICU. Under domain frightening experience, participants reported feeling helpless or scared, feeling like they were dying, or in pain (n = 46, 32.4%) which resulted in nightmares, seeing things or scary creatures like shadows or ghosts, afraid of dying, the progress of illnesses, and because of procedures in ICU. Participants in this study (n = 97, 68.3%) recalled about having enough sleep and claimed sedation or pain killers were the reasons behind it. Participants reported being satisfied with the care and claimed nothing disturbed them from receiving treatment in ICU (n = 38, 27%), while 32 (22.5%) claimed noises from various sources and pain (n = 22, 15.5%) did disturb them.

Discussion

The discussion was divided into four parts according to the domain of intensive care experience.

Awareness of Surrounding

This study showed that 71 participants (50.0%) had a high awareness towards their surroundings and the other half were unaware (Table 1). Meanwhile, the study from Ho et al. (2008) found that 20 participants (44%) had a high level of awareness towards their surroundings. Similarly, Soh et al. (2014) reported that 47 participants (45.2%) remembered their stay and 36 (35%) samples did not remember anything. However, Alasad, Abu Tabar, and Ahmad (2015) found high awareness among patients especially awareness about their relatives (83%). The results of this study indicated that the critically ill patients who were unaware about their surroundings is due to many factors including the disease process, pain, lack of information, or that they received a sedation during their stay; for this study about 82.4% of the participants received sedation. Moreover, patients in ICU who experienced pain showed less awareness towards their environment (Demir, Korhan, Eser, & Khorshid, 2013).

In this study, participants were aware with the presence of family members and claimed the sense of familiarity made them feel safer (n = 72, 50.7%), while 31 (21.8%) samples answered presence of both staff and family members make them felt safe, and 14 (9.9%) samples reported presence of staff made them felt safe in ICU. The result in this study is consistent with the study by Rattray et al. (2004) reported that out from 106 samples, half of them were aware when someone nearby, claimed recognize and remember their relatives,

and 70% reported felt safe in ICU. The result was also corresponding with the study by Alasad et al. (2015) reported that 76% samples felt safe most of the time and it was influenced by family members, staffs, monitor, and also religious belief [76.8% of samples are Muslim]. The close family member can give encouragement and motivation for their speed recovery and fight for life. This was congruent with another study that mentioned that presence of relatives helped in overcoming fear (Hofhuis et al., 2008); the presence of staff helped in recovery, besides encouraging the patient's will to survive (Karlsson, Bergborn, & Farsberg, 2012). Hence, accompanied by the staff and a family member are important for enhancing safety and feeling security among the patients.

Frightening Experiences

This study revealed that 96 (67.6%) participants had a high level of fright and 46 (32.4%) were not frightened (Table 1). This finding is consistent with Ho et al. (2008) who reported that 31 participants (69%) experienced frightening moments, while 14 (31%) claimed to not be frightened. The results of this study indicate that frightening experiences were common among patients when staying and receiving treatment in ICUs. The frightening experiences can come from many causes, such as environment, diseases, treatments, and consequences of the disease or treatment. An example of a frightening experience was pain and it was reported as one of the major stressful experiences among ICU survivors (Rotondi et al., 2002), which at least half of the patients experienced it during a stay in ICU (Demir et al., 2013; Alasad et al., 2015).

In this study, participants felt helpless, scared, like dying, or were in pain (n = 46, 32.4%) as a result from nightmares, seeing things or scary creatures like shadows or ghosts; or were afraid about dying or the progress of their illnesses, and some procedures in ICU. Some of the procedures were a stressful or painful experience, such as one experience of being attached to the ventilator which caused patients to feel restricted (Rotondi et al., 2002). Furthermore, suctioning via ETT was the most stressful procedure and being confined in a bed was claimed as a stressful environment (Soh et al., 2014). The common procedures in ICU related with the ventilator and ETT were intubation, suctioning, or extubation, and for this study, about 94.4% of the participants were intubated. How can staff help these patients from experiencing these frightening experiences? Staff members could give much help by providing analgesic or by minimizing the movement of patients especially on the affected site in order to reduce pain, deliver non-pharmacological approaches such as music therapy, to minimize the physical and psychological discomfort, give proper explanation regarding what they saw might not true, and always by their side to give a secure feeling. In addition, activities related to religion can provide spiritual comfort for those who have religious beliefs (Alasad et al., 2015).

Recall of experiences

About 25 participants (17.6%) able to recall their memory precisely, while 117 (82.4%) unable to recall their experiences during the

stay and receiving treatment in ICU (Table 1). The result is consistent with Ho et al. (2008) who stated that 39 participants (89%) were able to recall their experiences in ICU. The study by Alasad et al. (2015) reported more than half of the participants wished to know more about what was happening while staying in the ICU. However, patients cannot recall much about their experiences which indicated that patients received a lack of information regarding the environment and their own condition (Alasad et al., 2015).

A possible reason why patients were unable to recall about their experiences in ICU was they were given sedation or they were unconscious, and this study showed that 82.4% participants received sedation and 74.6% were unconscious. Moreover, sedation help patients to get rest especially at night (Pisani et al., 2015; Matthews, 2011). This study revealed that 97 participants (68.3%) recalled having enough sleep, and sedation or pain killer was listed as the reasons behind this event. Sometimes, the pharmacological approach was not enough to overcome sleep deprivation, hence a combination of pharmacological and non-pharmacological strategies might help; possible methods to apply included modifying the environment factors, such as noise and light by avoiding any interventions at night, using relaxation technique such as listening music, and using devices such as earplugs (Matthews, 2011).

Satisfaction with Care

Sixty-one (43.0%) of the participants in this study were highly satisfied with the care services, while 81 (57.0%) were not (Table 1). This finding is quite similar to the previous studies by Ho et al. (2008) and Rattray et al. (2004). The opinion about the care services might differ from one patient to another depending on various factors including the condition of the patient and their environment. Beside the listed factors, the experience gained by patients in ICU also depends on personality and attitude of the staff while handling patients (Samuelson, 2011). Moreover, receiving good care services help patients overcome fear and enhanced their feeling of safety (Russell, 1999). In addition, the practice of nurses over the patient (1:1 or 1:2) might give the advantage to the staff to deliver patient care as best as they can (Malaysia's Health, 2005).

Participants in this study reported that they were satisfied with care and reported nothing disturbing when receiving treatment in the ICU (n = 38, 27%). Moreover, staff in the ICU reminded them of their religious practice which gave them a comfortable feeling. However, 32 participants (22.5%) from this study claimed noises from various sources and pain (n = 22, 15.5%) disturbed them. Noises from alarms, machines, the voice of staff made patients feel uncomfortable (Granberg, Engberg, & Lundberg, 1998). This not just implicated their satisfaction towards care services, but also affected their sleep and rest patterns as well (Pisani et al., 2015). Thus, nurses or critical care staff should avoid unnecessary activities or procedures at night time (Pisani et al., 2015; Soh et al., 2014; Tomlin, 1977), and provide a conducive environment including reducing the noises in order to promote a comfortable feeling among

patients (Soh et al., 2014).

Conclusions

In summary, ICU survivors in this study reported a high level of frightening experiences, unawareness of their surroundings, vague memories about their stay, and a low level of satisfaction with care. It indicates that critically ill patients, especially in ICU, need strong support physically and psychologically, in order to minimize the negative experiences by providing nursing management during their stay in the ICU.

Implication for nursing

Implications for nursing administration, the results could provide valuable information to nurse managers in order to enhance nursing skills of critical care nurses through special training or courses regarding the care services for the critically ill patients in ICU. An implication for nursing practice, the result of this study provides basic information for critical care nurses to improve quality of care and providing care with empathy concern in order to reduce discomfort among critically ill patients.

Recommendation for future research

Intensive care experiences should be further studied with related factors such as drugs, the condition of the patients and so on, in future research, in order to look at the causes that trigger such experiences. Moreover, qualitative study design in future research should be taken into consideration in order to explore in-depthly the experiences of patients while staying and receiving treatment in the ICU.

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