Lived experiences of intensive care nurses in caring for critically ill patients

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ABSTRACT

Background: Caring for critically ill patients requires competent nurses to help save and secure the lives of patients, using technological developments while maintaining humanistic care. Nepal is a developing country with limited advanced technologies and resources. It is important to understand nursing care for critically ill patients under these shortages.

Aim: To describe the lived experiences of intensive care nurses in caring for critically ill patients in intensive care units.

Methods: A hermeneutic phenomenological study was conducted. Purposive sampling was used to recruit 13 nurses from three intensive care units, who met the inclusion criteria. Face-to-face, in-depth individual interviews with an audio recorder were used to collect the data. The interview transcriptions were analysed and interpreted using van Manen's approach. Trustworthiness was established following the criteria of Lincoln and Guba.

Findings: Seven thematic categories emerged from the experiences of nurses and were reflected within the four life worlds of space, body, relation and time. The categories were: low technology of care and insufficient resources (lived space); physical and psychological distress and requiring competency in caring (lived body); connecting relationship as a family, trusting technology of care, and realizing team working (lived relation); and less time to be with the patient as a whole person (lived time).

Conclusions: This study provides an understanding of the lived experience of nurses caring for critically ill patients, with inadequate support that can affect holistic care of patients and nurses' health.

Relevance to clinical practice: Intensive care nurses need to enhance their knowledge and skills related to the use of technologies and patient care by attending training programs and gaining further education. This study recommends that hospital administrators should support sufficient facilities and technologies of care and, in particular, increase the competency of nurses in caring for critically ill patients as the whole person.

Key words: Caring ● Critically ill patients ● Intensive care nurse ● Intensive care unit ● Technology

BACKGROUND

Caring is the essential attribute of nurses and intensive care nurses (ICNs) who play an important role in fulfilling the holistic needs of critically ill patients (CIPs) and support for their families (American Association of Critical Care Nurses, 2016; Cypress, 2011; Drahosova and Jarosova, 2016; Vincent and Singer, 2010). Nursing theorists, whose theories have been used in caring for CIPs, have consistently viewed caring as a virtue of humanism, requiring competency and a nurturing of the relationship between nurses and patients (Boykin and Schoenhofer, 2015; Locsin, 2005; Roach, 2002; Watson, 2015).

Previous studies in intensive care units (ICUs) described caring as a process of providing physical care along with meeting the psychological needs of patients and their families (Cypress, 2011; Laerkner et al., 2015). However, the complexity of disease conditions of the patients and the use of technological equipment can interfere with caring for CIPs. Also, advancements in treatment procedures have brought changes and challenges for ICNs (Kongsuwan and Locsin, 2011; Tunlind et al., 2015). Although these studies described caring for the patients in ICU settings, the ICNs described different experiences while caring for those patients but did not explain their experiences in caring for CIPs.

There is a high burden of critical illness, and access to ICU services is difficult and not well known in Nepal compared with other countries (Acharya, 2013). Limited resources and accessibility to health care make it difficult to care for CIPs in developing countries (Dhillon et al., 2010; Westcott et al., 2012). Acharya (2013) and Shrestha et al. (2011) revealed a lack of training programs for ICNs, inadequate staff and equipment and the burden of high costs borne by the patients and families in Nepal. This creates a certain barrier for ICNs when they care for CIPs. Meanwhile, studies in Nepal stated that nurses were stressed while working in the ICU (Shrestha and Joshi, 2014) even though they had adequate knowledge of mechanical ventilation (Mehta, 2014). However, there are hardly any studies that mention nurses caring for CIPs.

In order to maintain and promote human caring for CIPs, it is significant to understand nursing care for these patients in Nepal with limited resources and health care technologies. Human lived experience

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is valued as a source of knowledge and can provide meaning and reality of their existence (Moule and Goodman, 2014). As caring is the expression of nursing (Boykin and Schoenhofer, 2015), this caring expression can be understood through the lived experiences of the nurses, particularly the lived experience as a reflection of the knowledge or skills which the person understands through the exposure in that particular situation. It describes the way by which people understand their world (Van Manen, 1990) and find the meaning of the experience as they perceive it. This is referred to as being in the world by Heidegger (1999). In other words, we can understand and find meaning in what it is like for ICNs who are caring for CIPs. Similarly, ICNs can understand and elaborate on what it means to them to care for CIPs. They have a rich knowledge of experience in caring for such patients. Therefore, the hermeneutic phenomenological research method was used in this study to describe the meaning of the nurses' lived experience of caring for CIPs in the Nepalese context.

AIM
This aim of the study was to describe the meaning of the lived experiences of ICNs in caring for CIPs in ICUs.

METHODOLOGY
Design and setting of the study
Hermeneutic phenomenology was used in the study underpinning Heideggerian philosophy. Heidegger (1999) viewed knowledge as the result of interpretation of the experience. So it requires further exploration based on accessing the individual's expressed perspective of their lived experiences to which they are exposed. Van Manen's (1990) hermeneutic phenomenological approach was used to analyse and interpret the interview data from the lived experiences of Nepalese nurses caring in the ICUs. This study took place in Kathmandu, Nepal. The settings of the study were three ICUs: two medical/surgical ICUs and a neurosurgical ICU in a tertiary hospital. Forty-two ICNs were working in these ICUs and each nurse was assigned to provide bedside nursing care to two or three patients. These ICUs provided treatment to medical and surgical problems that require facilities for intra-arterial blood pressure monitoring, mechanical ventilation and electrocardiography.

Description of participants
Thirteen ICNs participated and all met the inclusion criteria, which were: being a registered nurse in an ICU; having experience in critical care nursing for at least 1 year; having the ability to reflect on the experience of caring in the ICUs; and willingness to be interviewed. All participants were female with an age range 24–52 years (mean 32 years). Twelve participants had a baccalaureate degree in nursing. Working experience in the ICUs ranged from 1 to 13 years (mean 2 years). Ten participants were working in a medical/surgical ICU and three in a neurosurgical ICU. Only eight participants attended critical care basic training programs such as how to operate ventilator, use of infusion pump and administration of emergency drugs, which were arranged by the hospital.

Data collection
The data were collected from December 2016 to January 2017 through individual in-depth interviews using a semi-structured interview guide that was developed by reviewing the literature and conducting a preliminary study. The participants were asked to describe their experiences of caring for CIPs in the ICU. For example, one interview question was, 'Can you please tell me your experience of caring for CIPs.' Further questions, such as 'Please give an example' and 'How did you feel then?' were asked. Each interview lasted from 40 to 50 min and took place in a quiet, private room in the hospital in accordance with their wishes. The second interview was conducted for clarifying the unclear points in the first interview after reading the interview transcription. The interviews were digitally recorded and transcribed verbatim. The researcher reviewed the transcripts with the participants and another researcher to ensure accuracy.

Data analysis
Van Manen's (1990) hermeneutic phenomenological approach was used to analyse and interpret the data of the interview transcriptions. Words, phrases and statements that described the experiences of nurses caring for CIPs in the ICUs were identified and highlighted. These were isolated, thus forming themes that reflected the experiences of the nurses. All essential themes were reflective of Van Manen's

(1990) four lived worlds: spatiality or lived space; corporeality or lived body; temporality or lived time and relationality or lived relations. Lived space refers to felt space while lived body refers to the bodily experience related to the phenomenon. Lived human relations are the relationships that are shared by individuals in their interpersonal space and lived time refers to the subjective time. These four life world existentials were followed to describe and interpret the phenomena.

Trustworthiness of the study
The Lincoln and Guba (1985) criteria were used to establish the rigour of this study. It included credibility, transferability, dependability and confirmability. Credibility was performed by recruiting and interviewing participants who were able to describe their experience of caring for CIPs. Transferability was maintained by providing the context of this study and in-depth descriptions describing the nurses' lived experiences. Dependability was demonstrated by another researcher who checked the accuracy of the study findings. Confirmability was ensured by the researcher through detailed documentation of the research process and reflections on the writing.

Ethical considerations
Ethical approval was obtained from the institutional review board and data collection site. Prior to participation, a detailed description of the study and process was explained to the participants. Each participant signed an informed consent form and received a copy. Assurances were given that all data would be used for academic purposes only and would remain confidential. The participants were informed that their names and identifying address were kept confidential. The researcher used code numbers to present the data. All data were stored in the researcher's personal computer.

FINDINGS
Seven thematic categories structured the lived experiences of the nurses caring for CIPs and were reflected within the four lived worlds.

Spatiality (lived space)
Thematic category: low technology of care and insufficient resources

Participants described their experiences of being in a low-technology and insufficient

resources environment where they often used old machines and equipment that did not function properly. This made them spend more time managing the equipment and machines rather than concentrating on caring for the patient. They were also concerned about problems that occurred while providing care to the patients.

'Even though there is adequate equipment (monitors and ventilators, we face problems because most of them are not functioning. Most of the equipment is old. We tried to repair the equipment but the equipment does not function after certain hours which is not good.'

(Participant 12)

Participants also described insufficient resources such as nursing personnel and space in the ICU which caused difficulties and inconvenience in providing care for the patients who require whole person care. They worked continuously to handle the situation despite these difficulties.

'…There is a shortage of staff personnel. For example, there are five patients and only two staffs to provide care for the patients, which is difficult to manage. It is also difficult to provide total care in the morning to all patients. Another issue is space in the ICU is congested. Patients are sick and when we intubate the patients, we are running all over the place.'

(Participant 5)

Corporeality (lived body)
Thematic category: physical and psychological distress

The participants had physical distress such as health problems because they had to manage with a fewer number of coworkers and use low technology of care.

'There was a senior who used to work here for a long period of time. She left because of plantar fasciitis. I wear a silicon sole while working. We have to face health problems. Another staff member suffered from tendonitis and she was transferred to another ward. If there was no shortage of manpower then there would not have been health problems.'

(Participant 8)

Psychological distress indicates unpleasant feelings, such as the feeling

of failure, stress and frustration, which was shared by the participants while caring for CIPs in the ICU. The uncertain outcome of patients and futile efforts caused distress in the participants.

'In the case of CIPs, the initial outcome is good but the patient's symptoms are not ruled out at the beginning. I feel burned out as a lot of money is spent and the time and effort of the family members and mine are lost. If a patient's outcome is not good, I ask myself why I do this sort of work. I feel happy when a patient gets cured at the hospital but when the outcome is almost zero, I feel burn out.'

(Participant 6)

Thematic category: requiring competency in caring

Participants perceived that their knowledge and skills necessarily have to be enhanced and updated in caring for CIPs. They stated that they could benefit from a training program in order to focus more on patient care. For example, one participant who was asked why she needs to increase competency said this:

'It was hard at first when I started to work. When I took one-week basic training (using ventilators), it became easier for me to care for the patients.'

(Participant 9)

Some participants have the knowledge to use equipment but they are not competent in using it because they develop their skills by learning from senior nurses or supervisors. The following example shows the need to polish the competency of nurses:

'I still remember when I came here the first time. I had heard and studied about tracheostomy care. I used to do tracheostomy care without even knowing about it. One day when I was using metallic tubes, another staff member demonstrated how to use it and I learned about it.'

(Participant 2)

Relationality (lived relation)
Thematic category: connecting relationship as a family

Participants valued the patients and their families as the participants' family members while providing care. One participant said:

'A patient needs to be cared for in the same way as our own family member.'

(Participant 6)

Furthermore, participants expressed that they perform better and gain trust from the patients when they cared for them like their own family.

'They are one of your family members. I should think that I am taking care of my own family member. When I develop that kind of feeling within myself, the patients will get proper care and I think they will trust me.'

(Participant 6)

Thematic category: trusting technology of care

Most participants described trusting technology such as monitors and ventilators that the participants used in order to care for CIPs. The patients could not express themselves and the participants needed technology to observe and understand the patient's condition to care for them.

'Critical means that they cannot do anything. They make a sound like, 'Ah' or 'oh' but they cannot say that they are in pain. The monitor shows the vital signs of the patient. Normally, we observe the monitor and know the condition of the patient and from the alarms of the monitor.'

(Participant 3)

Another participant said:

'CIPs are usually unconscious or cannot move. We (nurses) need to observe the patients and check hourly. These patients are attached to the monitor and the monitor shows if there is any change anytime. Thus, we can maintain observation all the time.'

(Participant 12)

Thematic category: realizing team working

Participants acknowledged, admired and maintained cooperation while working with the families of the patients and co-workers such as doctors and in-charge nurses.

'Only the care provided by the nurse is not enough. There should be family support as well. The ICU is teamwork. Proper coordination among the

doctors, charge nurse and the family (patient's family) can lead to a better outcome of the patients. There should be proper coordination among us.'

(Participant 4)

Some participants appreciated their team efforts. Because of their team efforts, it made a positive impact on the participants.

'There is our team effort. We have a participatory approach while caring. We form a group of two (nurses) and take care of the patients which make us feel good and with fewer burdens.'

(Participant 6)

Temporality (lived time)
Thematic category: less time to be with the patient as a whole person

Participants had time constraints while caring for the patient as a whole person because they had limited nursing staff and were engaged working with doctors, documenting files and treatment procedures.

'There is less equipment and we cannot do our job freely. There is a shortage of staffs (nurses) and the doctors keep us busy with other work. Therefore, we are not able to give full time to the care of patients. If we start to do the morning care, we will finish by 11 am to 12 pm but actually, we ought to finish everything including checking the vital signs and feeding by 10 am.'

(Participant 2)

However, the participants expressed that they could identify the needs of the patients and included aspects of whole person care, i.e. physical, psychological and financial needs while caring.

'Nurse caring should be a holistic approach. We should look at the physical, emotional and financial conditions of the patient. As far as possible, we take care of all these aspects.'

(Participant 8)

DISCUSSION
Lived space
A cross-sectional survey study conducted in Nepal by Shrestha *et al.* (2011) in an ICU found limited number of trained ICNs, hospital finance and equipment in the hospital setting. A similar description was found in the study by Westcott *et al.* (2012) in the Solomon Islands. The thematic category 'Low technology of care and insufficient resources' in this current study confirms that nurses in developing countries often work with inadequate resources such as shortages of critical care nurses, medicines and monitors. This might have occurred due to the hospital's financial problems as revealed in the study conducted by Shrestha *et al.* (2011). Similarly, Huntington *et al.* (2011) also found that shortage in number of nurses occurred due to budget problems. In addition, Murthy *et al.* (2015) also discussed that developing countries like Cambodia, Ethiopia, Kenya, Nepal, Tanzania and Uganda have less availability of resources such as ventilator, inadequate nurses and financial support that delayed the ability to care for CIPs.

Lived body
In the current study, nurses admitted having 'physical difficulties', which was similar to the finding of a longitudinal online survey study conducted by Huntington *et al.* (2011). This study showed that 7604 nurses from Australia, New Zealand and The UK reflected having physical problems such as low back pain and injuries from using equipment and exposure to infectious diseases. These physical problems were caused by inadequate staffing, which raised the workload on the nurses. Similarly, a lack of nursing staff and equipment created a feeling of frustration, stress and failure among the participants in the present study. This feeling of psychological distress was similar in a qualitative study by Tunlind *et al.* (2015) in eight Swedish nurses. They vented their frustration and felt uncertainty on the use of new or advanced technologies of care such as short tubes, catheters, tracheostomies *etc.* because they had not mastered its use, which inhibited patient care. This rationale was different in comparison with the current study because the Nepalese nurses did not have high or advanced technologies of care that could reduce manpower. However, a descriptive study conducted in 89 ICUs supported the use of high technologies of care, which provided a sense of security for the nurses and in patient care (Adel *et al.,* 2014). This lingering feeling of insecurity among the Nepalese nurses may be due to low technologies of care and demanding workloads.

In this study, most participants agreed there is a need for training and updating their skills to increase their competency and focus more on caring for the CIP as a whole person using technologies of care. Only 60% of participants attended critical care basic training program and the others were trained in their daily practice with seniors. However, Nepal is a low-income developing country with low resources, training opportunities and updated knowledge on critical care. These findings coincide with a previous study where a review by Baker (2009) found intensive care in low-income countries, e.g. Tanzania, Uganda and Zambia, had limitations in training programs and updates on intensive care. This was also identified in a descriptive study by Johan *et al.* (2017) among 92 Indian nurses as a factor for stress in the ICUs. Participants in the study felt the need for more education in critical care as it enriched nurses' knowledge in caring for patients and in the use of technologies of care, which was supported by a previous study by Blegen *et al.* (2013) conducted in 21 hospitals in California. The other reason might be related to working experience though most of the participants had more than 1 year of working experience. According to Benner's model (Benner, 1982), nurses acquire competency if they are exposed for 2 to 3 years in the same work. Therefore, the participants in this study possibly felt there are still novice nurses who need to increase their competency.

Lived relation
Most of the participants connected relationship with the patients and patients' families as if they were the participants' own family members. The emotional attachment as family resulted in the participants being trusted by the patients and patients' families in caring. The feeling as a family member is consistent with the findings noted in the qualitative studies by Cypress (2011) in New York and by Kongsuwan (2011) in Thailand. In New York, five nurses explained that they felt empathy to the patients as they were caring for their own families. This feeling made them provide better care and helped in the recovery of the patients (Cypress, 2011). Kongsuwan (2011) described that 10 Thai nurses empathized with the patients in the ICU as they would for their families and cared for them purposefully with sincerity. Thus, relationship as a family is valuable in

human caring in intensive care in order to promote trust, honesty and healing.

This study found that the participants trusted technologies of care because technologies could help them in observing and saving the patients' lives. Crocker and Timmons (2009) and McGrath (2008) supported that technologies are significant in facilitating nursing care and saving the lives of CIPs. According to Locsin (2016), technologies are used to know patients' conditions and care for them. However, with the use of technologies of care, technological competency should be developed in order to know the patient as a person in nursing care, not the object of care and provide efficient care as for a whole person. A review study conducted by Browne and Cook (2011) suggested that training ICNs in using equipment such as an arterial transducer and monitor, and appropriate monitoring of the equipment will enhance the safety of the patients.

Participants in this study have understood teamwork as an influential factor to improve the quality of patient care. This finding was also supported by the studies of Andersson *et al.* (2015) and Rose (2011) in Sweden and Canada where the importance of teamwork was acknowledged by the participants. They appreciated that good teamwork among health care professionals promoted patient safety and improved the quality of care and outcomes of the patients as described by the participants in the current study. Furthermore, Andersson *et al.* (2015) explained that 21 Swedish nurses communicated with other staff such as doctors and therapists and act in the best interests of patient care as they hold vital information and knowledge of the patient's condition.

Lived time

The finding 'less time to be with the patients' in the current study hinted that participants are involved more in doing other activities such as documentation as in the study of Ballermann *et al.* (2011) in Canada. This observational study showed that nurses spent more time in documenting tasks, attending rounds than spending time with patients. Similarly, Tunlind *et al.* (2015) found eight Swedish nurses needed to pay more attention to technologies of care while caring for the patients. Furthermore, an observational study conducted in 10 ICUs in Australia revealed that longer nursing procedures such as preparing medication and intravenous fluid and handover made nurses reduce quality time spent in patient care (Abbey *et al.*, 2012). These findings affirmed that the time to be with CIPs was distracted by other works and the use of technologies of care. Particularly, in the midst of shortage of nursing staff and facilities as in this study, time to be spent with patients and care for them as a whole person was inadequate.

LIMITATION

The participants were from only one setting (hospital) with experience (at least 1 years) in an ICU at Nepal that lacked advanced technologies of care and resources for caring. Therefore, the findings from this study may be limited to similar context.

CONCLUSION

This study provided an understanding of the lived experiences of ICNs caring for CIPs in a hospital ICU in Nepal. From the findings of this study it can be concluded that nurses had physical and psychological distress due to caring in environments with low technology of care and insufficient resources and requiring competency in caring. They trusted technology of care and believed in team-work. Even though time spent with the patient as a whole person was less, they connected and established relationship as a family with the patients.

WHAT IS KNOWN ABOUT THIS TOPIC

- Nursing care is essential for critically ill patients and patients depend on the nurses for their care.
- High demand for critical care is present in the developed and developing countries.
- Little is known about intensive care nursing in the midst of low technology of care and insufficient resources.

WHAT THIS PAPER ADDS

- Caring in environments with low technology of care and insufficient resources can lead to physical and psychological distress in intensive care nurses, which might affect the quality of critical care.
- Caring with low technologies of care and insufficient human resources can distract intensive care nurses from providing whole person care to the critically ill patient.
- Nurse competency in caring and relationship as a family are valued in critical care.

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