

Nurses Experiences in the Burn Unit: A Qualitative Research

Abstract

Background: Nurses form the largest group of burn care treatment team. They have valuable experiences regarding the care of burned patients that needs to be explored. Therefore, the present study was aimed to explain the experiences of nurses who work in the burn unit. **Materials and Methods:** This qualitative study was conducted in the burn units of Zabol and Zahedan Hospitals in 2018. Accordingly, the data were collected through a semi-structured deep interview with 16 nurses. Purposeful sampling method was used for data collection. The data were analyzed using a thematic analysis approach. **Results:** The data analysis ultimately led to the development of 4 themes and 16 sub-themes. The extracted themes included burden of burn unit, toil of burn unit as a deal with God, need for continuing the education program, and work-life imbalance. **Conclusions:** Nurses in burn unit experience many challenges that can affect their job and life, which require special attention of the authorities, their families, and other colleagues. For better patient care, there is a need for up-to-date facilities and training. The hospital managers should pay more attention to the nursing staff of the burn units through increasing staff number, changing the working units, and offering financial and motivational vacations.

Keywords: Burn units, Iran, nurses, qualitative research

Introduction

Burn injuries are much more common in developing countries compared to developed countries. It is estimated that more than 90% of burn-related deaths occur in developing countries.^[1] Although there is no evident information on the rate of burning causalities in Iran, it is estimated that the burning rate is eight folds greater than the average global rate. The death rate due to burning is about 2000 people per year. Moreover, there are 35 burn centers in Iran with limited beds.^[2]

Health professionals encounter serious challenges in burn units, as caring for the burned patient requires greater responsibility than in most types of serious illness. Nurses are an integral part of a multidisciplinary team of care for the burned patients and they spend more time to care for them compared to any other member of the burn team.^[3] As nurses are at the core of the multidisciplinary team, they play a vital role in the care of burn-injured patients and may experience greater levels of the challenges.^[4] Moreover, this crucial role is typically accompanied

by several issues requiring consideration.^[5] They may experience physical, emotional, and environmental challenges which are linked to the nature of burn injuries. Previous studies showed that nurses are dealing with various challenges in the burn unit which include heavy workload, being exposed to physical hazards such as infections, medical team contravention, unsuitable behavior of managers, and the lack of cooperation of patients.^[6-8] Besides, the burn unit is recognized as a stressful workplace for nurses and affect the nurse's psychosocial function.^[9] Non-standard units and unpredictability of events in burn unit can also increase the tension in nurses, which can lead to physical, psychological, and emotional problems; incompetency; burnout; and depersonalization.^[10,11] Nurses who care for the burned patients may encounter unique issues that may require support.

Although, many studies exist on nurses' experiences, there is still paucity to explore burn unit nurses experiences in depth. Exploring and understanding burn unit nurses' experiences provide valuable

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information on issues and challenges they may encounter. As qualitative studies enlighten the nature of nursing burned patients and offer useful and in-depth information for burn care nursing^[12]; there is a need to understand burn care nurses' experiences. Therefore, the current study aimed to explore and describe the nurses' experiences regarding working in burn unit.

Materials and Methods

The present study was a qualitative study conducted between December 2018 and September 2019 based on a purposeful sampling. The participants were recruited from nurses working in the burn units of the hospitals in Zabol and Zahedan (southeast Iran). Inclusion criteria included working in the burn units for at least 1 year with the maximum diversity of age and gender, and having work experience. The data were collected by semi-structured interviews. The interviews began with initial questions about the personal information, work experience, and the previous work units in the hospital, and then went on with explanatory questions such as "Tell me your experiences of work activities in the burn unit?" and "Talk about your feelings about burn patients?" as well as if needed the explanation questions such as "can you explain more or" when you say. what do you mean?," also at the end of the interview, follow-up questions were asked to complete the interview. The interviews were performed by appointment before and in a place where participants were comfortable to freely express their experiences. The interviews took time about 40–60 min due to the participants' tolerance and willingness. The whole process of interviewing was recorded with participant satisfaction, then the data were transcribed, encoded, and analyzed immediately after each interview. The interviews continued until forming themes and presenting no new data. The data were analyzed by the six-step method (Braun and Clarke) using thematic analysis. Braun and Clarke (2006) stated that thematic analysis was used for examining the communication of the various groups to identify the patterns within the data. In addition, thematic analysis is a data-driven approach; thus, themes could be directly formed from the original data.^[13]

To analyze the obtained data, the interviews were first listened several times by the researcher and were then transcribed. Second, the initial encoding was performed. Third, the codes with similar meanings were placed in a sub-theme with an appropriate label. Fourth, the sub-themes with similar meanings were placed in a theme. Fifth, the initial codes, sub-themes, and themes were reviewed and relabeled. Finally, the report was written.^[13,14]

To ensure the trustworthiness of the data, researchers have been given enough time to collect and go back and forth between the data to ensure that the data are acceptable. To form the sub-themes and the main themes, the initial codes were moved between the sub-themes several times. In addition, variation in age, gender, work experience,

and nurses' work unit were considered to increase the transferability of the data. Dependability was achieved through the development of an audit trail and a qualitative expert reviewed the findings. To enhance the credibility of the study, the transcripts and extracted codes were returned to the participants to ensure that the extracted meanings have matched with their opinions. Peer debriefing was done with the qualitative expert to ensure that the findings emerged from the data, as well as gaining new perspectives of the data. To ensure confirmability, the researchers have done bracketing of their opinions on nurses potential challenges on working in burn units.^[15]

Ethical considerations

This study was approved by the Ethics Committee of Zabol University of Medical Sciences [Ethics code: IR.ZBMU.REC.1397.185]. The objective of the study and willingness to participate in the study were explained verbally and through a cover letter. Verbal and informed consent forms were obtained from all participants.

Results

Data were collected from 16 participants (13 men and 3 women nurse) aged between 25 and 40 years old, with work experiences in burn unit between 2–16 years. Moreover, 11 participants were married and 5 of them were single. The study results include 16 sub-themes and 4 main themes (burdens of the burn unit, the toil of burn unit as a deal with God, need for the continuing education program, and work-life imbalance) [Table 1].

Burdens of the burn unit

The theme of burdens of burn unit consisted of five subthemes including hard patient, hard work, unpleasant environment, shortages of expert personnel, and high expectations. The nurses in burn unit experienced some

Table 1: Nurses' experience of working in a burn unit

Sub-themes	Themes
Hard patient	Burden of the burn unit
Hard work	
Unpleasant environment	The toil of the burn unit as a deal with God
Shortage of expert personnel	
High expectations	
Working in a burn unit as a valuable effort	
Caring for burned patients as a connection to God	Need for continuing education program
Caring burn patients as a sacred duty	
Need for learning new devices	Work-life imbalance
Need for psychological strengthening	
Need for new training	Constant stress in work and life
Changes in individual feelings,	
Lasting changes in mood and emotion	

burdens including unpleasant environment and difficulty to care from patients. The participants declared that burn unit is full of various unpleasant odors, which are caused by burned tissues, infections, and medications. They also mentioned that patients with high rate of burned surface were more vulnerable to infection. Changing the dressing of patients took long time. The dressing room was warm and humid and they had to wear mask and gloves during dress changing, which caused heat, excessive sweating, and intolerable environment for working. Participant 15 stated: "... [The] unit smell is very bad so that we always feel unpleasant Oder here. The unit is hot and humid and dressing of patients takes a lot of time so that we sweat excessively like taking a shower." The lack of expert personnel and unwillingness to work in the burn unit caused more pressure on nurses to bear the burdens of working in the burn unit. In this regard, participant 13 stated: "The nursing managers disagreed to change my unit even after 10 years of working in this unit because there is no experienced applicant there. Besides, they expect me to add a shift more to compensate for the personnel shortage."

Toil of burn unit as a deal with God

The theme of the toil of burn as a deal with God consisted of three sub-themes including working in burn unit as a valuable effort, caring for burned patients as a connection to God, and caring for burned patients as a sacred duty. The nurses declared that working in the burn unit is a valuable effort in spite of its difficulties. The nurses experienced strange feeling during caring the patients who attempted to suicide or were burnt by own or by others' negligence. However, they attempted to do their best for the patients because it will be awarded by God as good deeds. Caring the burned patients is difficult and painful for nurses. However, they believe that the toil of caring in the burn unit is an invaluable deal with God. The participant 4 stated: "Despite the fact that working in the burn unit is hard, the values that I gain cannot be described with material values and I always look elsewhere, I deal with God."

"Any neglect leads to major hurt in patients; so I try to do my best when working with patients because God see everything" (Participant 5).

Need for continuing education program

The theme need for continuing education programs comprised of three sub-themes including the need for new training, learning new devices, and psychological strengthening.

The nurses in the burn unit stated that they need to continue their education programs to enhance their competencies in caring the burned patients. The participants 10 declared: "When I see a new technique or method of dressing or working with burned patients on scientific news or on the Internet, I'd like to learn those methods and expect the authorities to provide opportunities for learning."

"When supervisors or other managers come to attend in the unit rounds, I think we need workshops and continuing programs of new technologies and procedures to care the patients" (Participant 7).

Work-life imbalance

The work-life imbalance theme consisted of three subthemes including changes in individual feelings, lasting changes in mood and emotion, and constant stress during work and life. Nurses declared that they experience imbalance in work-life, and stress and apathy during working in the burn unit. They stated that the pressure of workload had changed their lifestyle and these changes led to frustration in their daily living responsibility at home, too. They also felt an apathetic mood and constant stress in their life. The nurses also stated that the patients' emotions affect their behaviors so that they need some entertainment for refreshing and visit a counselor to help them overcome the experienced imbalances. Participant 7 stated: "I feel so tired when arriving home. If my spouse is not present in the home, I cannot manage house works and children, because each one has different expectations or situations. In any case, it affects the life."

"After coming from hospital, I feel like a moving dead with an unconscious body, although I try so hard that the work situation does not affect my life, but it is effortless. I feel I used to be happier" (Participant 11).

"When dressing a patient with different degrees of burns and being annoyed, the patient can affect my health and cause me to get annoyed, I get very busy at home and I am bored with the children. Even at nights, I dream my patients. Sometimes I feel like referring to a psychiatrist and sharing my problems" (Participant 8).

Nurses experience a stressful situation when caring the burned patients, especially during dress changing. Despite their attempts to deliver a safe care method to control contamination, procedures may be painful and patients control their painful procedures through holding the nurse's hands, which affects sterilization of dressings. Therefore, the nurses commit to working in a safe method feel stress. Besides, nurses feel stress when the patients distrust them. The participant 2 declared: "I feel stressed when working for patients. Despite my experiences to care all kinds of patients, still some educated patients do not trust me so that it causes stress to me".

"Patients may hold our hands to control painful procedures during dressings that interferes a safe method of caring. That's stressful" (Participant 4).

Nurses also felt apathy due to long term working with burned patients. The nurses must control their emotions or may be adapted to situations doing painful intervention such as changing the dressing. The participant 5 stated: "When work experiences in the burn unit increase, I changed even

greater. I do not become sad like the ordinary people by seeing the ghostly scene, I do not communicate a lot with others, and I'm stranger with laughter and sadness. I think it's due to working in this unit."

Discussion

The results of the present study, which are presented in the form of 4 themes, showed that working in the burn unit had different effects on nurses.

The symbol of the burn unit signifies hard patient, hard work, unpleasant environment, lack of expert personnel, and high expectations from nursing personnel to offer their best care for the patients. Daily self-immolation, lack of patient collaboration, interpersonal conflicts, and dying patients are some of the difficulties that nurses encounter in the burn units.^[16]

Apart from caring for burned patients, the nurses have the most contact with the patients. The physical changes that patients encounter are fluid balance, cardiovascular changes, neural changes, and nutritional tolerance. A nurse may also be the best person to support a patient for psychosocial needs such as pain control and anxiety. Due to the difficulty of working in the burn unit, it seems that the nurses' expectations for patient care are high; along with the problem of shortage of nurses.^[17]

Correspondingly, the nurses face different problems concerning patients in issues such as much delirium, deformation, pain, suffering sighs and groans of patients, lack of cooperation with planned therapies, and dying patients. The patients and families have great expectations for helping nurses who can overcome the problems. The nurses also face many constraints.^[18]

Regarding the theme that working in the burn unit is a deal with God and a valuable effort; as the burned patients' conditions are critical, nurses feel their services provided to them are valuable. Nurses believe that caring for burned patients is a deal with God to gain divine rewards, so that spiritual beliefs make the burdens of working in the burn unit easier. Divine supervision, rewards, or punishments are strong motivators for believers to perform their best in duties. As most of Iranians are Muslims believing to hereafter day, they expect to receive rewards for their good deeds. Therefore, they may cope easily and tolerate the burdens of work and life. Besides, they equally delivered nursing care for all patients without judging them why burning incident had happened. The results of a study show that the feeling of being valuable is related to spirituality in nurses.^[19] Some patients had chosen self-burning as a suicidal method. In these situations, nurses may judge them and do not offer them enough care. Nurses as human beings can be influenced by the condition of the patients.^[20] The results of a study show that in units where suicidal patients are being cared, nurses and caregivers have felt fatigued, guilty, and changing the perspectives of work and life.^[21]

Furthermore, characteristics of nurses such as a sense of commitment, conscience, religious beliefs, altruism under fatigue, high workload, and lack of resources conditions are the triggering factors for delivering effective care.^[22]

The nurses in the burn unit need a training program for being updated with new knowledge and expertise. Offering workshops in the hospital or attending the international or national conferences are in demands. The nurses believe that being up-to-date is necessary for offering suitable care for the patients. These findings are supported by the previous studies, which further state that enhancing the knowledge, receiving the updated training, and being expert are necessary for the burn unit nurses to identify the potential risks and complications in patients and offer preventive care.^[5,23-25]

Nurses experienced imbalance in work-life, stress, and apathy while working in the burn unit. Moreover, these effects can change their lifestyle as they are frustrated to do their daily living responsibility at home. They also feel an apathetic mood and constant stress in life. In this regard, the results of studies show that workplaces such as burn units have a significant effect on the personnel mental health. In fact, occupational stress leads to physical harm or psychological discomfort; and in the long-term, can cause negative results in the performance of individuals, and consequently in the performance of organizations.^[26,27]

The results of the current study are limited to burn unit nurses. Although the close relationship between the researcher and participants may affect the results of the study, the researcher attempted to bracket her ideas and experiences and only described the participants' experiences about the phenomenon. Moreover, the number of settings where the participants were recruited seems to be low. Therefore, the results may be unique to the workplace in which the study was conducted. Thus, the generalizations of the finding are limited to the study settings.

Conclusion

Nurses play a vital role in burn units and their role is usually accompanied by numerous problems which needs to be addressed yet. For better patient care, there is a need for up-to-date facilities and new training methods. They are also exposed to mental and psychological damages due to problems in the unit and types of patients and are more exposed to burnout. The findings of this study offer insight into the nurses' experiences in the burn unit. These findings are expected to have significant implications for nursing practice, management, and further nursing research. The burn unit is a stressful environment for the nursing staff working due to the workload and complexity of patients' problems. Therefore, nursing managers should pay special attention to improve the burn unit environment for nurses by considering some techniques such as additional vacations for regaining physical and emotional strengths and providing enough human and material resources.

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Conflicts of interest

Nothing to declare.

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