

Original Article

Experiences of Nurses Regarding Caring Behavior in Intensive Care Units

Anisha Shrestha ^{1*}, Archana Pandey Bista ², Kalpana Paudel ³, Madhusudan Subedi ⁴

1. Institute of Medicine, Maharajgunj Nursing Campus, Kathmandu, Nepal.
2. Institute of Medicine, Maharajgunj Nursing Campus, Kathmandu, Nepal.
3. Institute of Medicine, Maharajgunj Nursing Campus, Kathmandu, Nepal.
4. Patan Academy of Health Sciences, Lalitpur, Nepal.

* Correspondence: shrestha3anisha@gmail.com

Abstract: Nurses working in Intensive Care Unit (ICU) mostly have to deal with critically ill patients and have to care for patients during end stage of the care. Caring behavior of nurses is a unique phenomenon experienced by nurses which have direct influence toward patient's care and recovery. Thus, this study was aimed to explore nurses' experiences regarding caring behavior in ICU. Qualitative, descriptive phenomenological design was adopted. Total 21 nurses working in level III ICU of a tertiary level hospital, Kathmandu were included. Data was collected by researcher herself. Data collection was done through In-depth Interview (IDI) and Focused Group Discussion (FGD) using semi-structured interview guideline developed in Nepali version. Principle of data saturation was followed. Collazo's seven steps method was used for data management and analysis. Trustworthiness of study was maintained following guideline of Lincoln & Gobi 1994. The emergent themes of the study were; nursing intervention as caring behavior; priority given in exhibiting physical caring behavior where physical and hemodynamic stability has been given much importance; spiritual and socio-cultural care emphasized; improved knowledge & skills facilitates caring behavior where regular in-service education was most appreciated; motivation toward caring behavior seem to be promoted by team spirit. Whereas, other themes were; managerial barriers of caring behavior where inadequate and non-functioning equipment was major concern; interpersonal barriers of caring behavior, especially the communication gap; mixed impact on nurses' life where the professional growth and compromised family life were significant impact and expectations regarding caring behavior where standardized nurse patient ratio was highly expected. In addition, frequent turnover of nursing staffs also posed problems in nurse patient ratio and inadequate staffing which ultimately impact in caring behaviors. Thus, there is need to consider identified themes from concerned authority. Identified enablers should be encouraged to promote nurses' caring behavior. And barriers like sub-standardized nurse patient ratio needs to be discouraged.

Keywords: Caring Behaviors, ICU, Nurses

1. INTRODUCTION

Intensive Care Unit (ICU) was created from the time of Florence Nightingale to provide intensive nursing care for severely injured soldiers [1]. Up to mid-90s it was basically intensive nursing care. The contemporary model of ICU was changed after World War II with emergence of ventilation and has been evolving ever with more advance resuscitative and life supportive technologies [2]. Nowadays, ICUs have capacity to provide care for acutely ill to end of life care with multidisciplinary team. Considering various parameters ICU have been categorized into three levels primary, secondary and tertiary. Recently specialty of ICUs is in trend because of rapid development in education and research

[3]. Caring is described as central and unique phenomenon in nursing [4], which leads to satisfaction of human needs. It is an important attribute of nursing, composed of multiple caring behavior [5]. Caring behavior is a way of manifesting caring and it has multiple dimension in nursing is described in relation to various concepts; as person-centeredness, as safeguarding patient's best interests, as nursing interventions and as contextually intertwined [6]. Likewise, caring behaviors are defined as actions concerned with the well-being of a patient, such as sensitivity, comforting, and attentive listening, honesty, and nonjudgmental acceptance specific, recognizable and observable actions performed by nurses [7]. Additionally, caring is defined as a process to meet both physical and psychological needs of patients [8]. The instrumental caring behavior comprise of technical and physical behavior like knowledge & skill and expressive behavior comprise of psychosocial and emotional behavior such as loyalty, hope and confidence [9]. In a study conducted among nurses have defined caring behavior as provision of physical and individualized care. They have identified meeting patient's physiological needs as a professional obligation [10]. Nurses have perceived "professional knowledge and skills as the most important caring behavior while ranking caring behavior followed by "Assurance of human presence" and "patient respectfulness" [11]. Different theorist had attempted to explain caring using their theories, Watson, Benner and Ruble and Swanson. Watson had identified 10 curative factor to manifest caring. Benner and Ruble explained caring are central to nursing which enable people to exchange help and creates concerns for others. Five process of caring is described by Swanson, which includes: knowing, being with, doing for, enabling/empowering and maintaining belief [12]. All of these theories have attempted to explain caring behavior as mean of exhibiting caring to patient considering patient as holistic individual. So, it can be concluded both instrumental and expressive components are of equal importance to exhibit caring behavior [13]. Globally, in developed countries like England, approximately 164,000 patients are admitted to ICUs where survival rate is 79%. Approximately, 4 million people are admitted to ICU per year [14]. Looking at data of Nepal, the survival rate of ICU admitted patient is 56.5%, and the mortality rate is 32.8% in a level III ICU of tertiary level hospital [15]. ICU patients often are vulnerable patients as they are unable to meet their basic need by their own and special needs of these patients demand special nursing care with kindness and empathy. The environment in ICU is very unique. This unique feature of ICU present different challenges and barriers- distressing atmosphere of the ICU, the difficulty of managing the ICU and the difficulty of communication in ICU to nurses working there to exhibit their caring behavior. Challenges like communicating with intubated patients are much demanding and sometime leads to feeling of incompetence, stress and despair among nurses of critical care settings. It can also result in preoccupation with physical and technological aspect of caring leading to poor communication [16]. Working in ICU exposes nurse to grief and human suffering which creates anxiety, burnout and emotional exhaustion [17]. Nurses are experiencing difficulty in balancing their professional responsibilities and personal feeling while working in intensive care setting where paced high-tech environment fast is adding challenges; building up frustration among nurses [18]. Dealing with death and dying is the major stressor [19] followed by violent and uncooperative families, problems with supervisors and uncertainty about treatment [20]. Nurses are also presented with various ethical dilemmas while exhibiting caring behavior. Situations like futile care and end of life care comes with greatest ethical and moral dilemma for nurses [21]. Busy environment, demand for providing care to critically ill patients and lack of human resources have been identified as barriers toward caring by ICU nurses. All four dimensions -knowledge & skills, assurance of human presence, respectful deference to others and positive connectedness-of caring behavior are found to be associated with such stress [22]. Caring behavior have strong link with positive patient outcome. Studies have revealed when nurses exhibit positive caring behavior the patients' satisfaction score is higher. The act of caring is an essential nurse attribute and has been a core of nursing practice which influences patient's outcome and, ultimately organizational ones as well [23]. Even though caring is an important concept in nursing, it is complex, an intangible concept and difficult to measure with quantitative

approach. There are some quantitative studies which measured caring behavior with validated tool, where knowledge and skill is rated high as an attribute of caring behavior. Those studies have shown relationship between caring behavior and patient's satisfaction. There are many studies related to experiences of ICU nurses regarding caring behavior in Western countries, but those studies have studied experiences in fraction of caring experiences. As caring behavior vary culture to culture and there are few studies done in Nepal in this regard. So, the researcher is interested to explore the nurses' experience regarding caring behavior.

2. MATERIALS & METHOD

This chapter deals with the research methodology adopted for the study. This section describes the research design, study population, sample size, sampling technique, sampling procedure, data collection procedure, guideline for in-depth interview and Focus group discussion, validation of the guidelines, data collection procedure and methods of data analysis. Descriptive Phenomenological design was used in this study. Phenomenology is simply study of phenomena. This deals with studying human experience in the form as it is in everydayness. Further phenomenological approach enhances in-depth understanding of peoples' lived experiences unless the researcher obtains the crux of the experiences of participants the study was conducted in level III ICU of Tribhuvan University Kathmandu. The hospital is running 11 bedded level III ICU staffed with 30 nurses. The level III ICU of Tribhuvan University Teaching Hospital was selected because there are very few hospitals which are running level three ICU in Nepal and it was one of them. The hospital does not take any charges to conduct study their which was cost-effective for a student the researcher. In addition, interpersonal relationship to conduct in-depth interview was more easily established with trust as the clinical posting from college is mostly in Tribhuvan University Teaching Hospital's various wards including level III ICU. Study Population was nurses who are working in ICUs for IDI and the managerial level nurses who were directly involved in managing ICU were included in FGD. Purposive sampling technique was used for the selection of sample. Sampling is used because the identified population contains the characteristics that are likely to produce the valuable information for the objectives of the study. Study was conducted among 21 nurses. 15 staff nurses with minimum of 1 year experience of working in level III ICU were included for IDI. The list of the nurses with experience of more than 1 year was obtained with the nurse in-charge or supervisor and then the nurses were contacted as per convenience and interest to participate in study. One FGD was conducted among 6 managerial level nurses including; nurse in-charges, supervisors and nursing director who were directly responsible for ICU. The research instrument comprised of parts i.e socio-demographic Information, in-depth Interview Guideline & dfocused Group Discussion Interview Guideline. The researcher developed semi-structured interview guideline for In-depth Interview (IDI) after reviewing literatures. Guidelines was first developed in English by the researcher herself and then translated into Nepali by bilingual translator who had master degree in English. IDI was conducted by the researcher herself. The guideline focused on 2 aspects to explore the lived experiences of nurses regarding caring behavior and the enablers and barriers of caring behavior. Validation of interview guideline was done through 4 experts working in Qualitative Research and critical care nursing. Preliminary study was carried out among 3 nurses who were working in Medical Intermediate Care Unit of TUTH and necessary modifications was done. Which consisted of addition of probing questions to grand questions. An interview guideline was developed on the basis of IDI & literature review and the researcher herself conducted FGD. The interview guideline is in Appendix D. One note taker having skills in qualitative data collection was included to observe the nonverbal responses and facilitate discussion while conducting FGD. Guideline was developed in English language by the researcher herself and was translated into Nepali by bilingual translator from Nepal. FGD guideline was focused on broad 2 aspect similar to IDI to explore lived experiences of nurses regarding caring behavior and the enablers and barriers of caring behavior. The participants were provided with

the Participants Information Sheet which informed participants about the title, objectives, methodology and duration of study. Along with it also provided information that the IDI will be recorded in an audio recorder for study purpose. Need for repetitive interaction was discussed with participants beforehand. Written informed consent was obtained from the participants. Participants were assured that they can withdraw from study at any point of the study if they don't want to talk about any of the lived experiences related to particular phenomenon. Interview, date, time and place were mutually set with research participants beforehand. On the day of interview, reminder call was given by taking permission from the participants in advance. IDI was conducted using in- depth Interview guideline. All the precautionary measures were followed in order to prevent COVID 19 transmission. One of the participants was not ready to talk about her pay scale while she was talking about incentives so, addressing the principle of autonomy she was not asked about that. IDI was conducted by the researcher herself. Privacy was maintained while conducting IDI by carrying it in a separate room within the ICU. And the collected information was kept safe maintaining confidentiality. And the data obtained were used only for study purpose and shared with supervisors within the study circumference. Duration of IDI ranged from 40 min to 50 minutes. When no new information's were achieved, data saturations was assumed. All the documents were saved in the researcher laptop with password protection. Transcripts were stored safely to maintain confidentiality maintaining separated folder in locked rack with access only to the researcher. The researcher maintained the diary to document participant's identification code, interview dates, time spent on different research activities, and study related meetings. The researcher preconceived notions, beliefs and judgements related to ICU nurses' experiences regarding caring behavior were discussed with supervisor to ensure bracketing. Date, time and place were set mutually by discussing with each participant and most convenient time and place for participants was considered. Homogenous 6 Participants (Nurse in-charge, supervisor and superior managerial nurses) were included in discussion. Informed consent was obtained from each participant with need for recording well explained. The researcher performed the role of moderator while conducting FGD. Participants were explained about the ground rule of FGD and asked to keep their phone in silence mood before starting discussion. Sitting arrangement was planned in L shape structure maintaining relatively safe distance considering guideline of COVID 19 prevention. The duration of FGD was 40 minutes. One of the participants left prior to completion of discussion because of medical emergency in family. Audio recordings were transcribed and translated by the researcher herself simultaneously. Audio recording and translated document was saved in personal laptop with special password protection. Transcript was stored safely maintaining separate folder, to maintain confidentiality. Transcript was stored safely to maintain confidentiality maintaining separated folder in locked rack with access only to the researcher. One note taker having skills in qualitative data collection was included to observe the nonverbal responses and facilitate discussion.

3. RESULTS & DISCUSSION

This chapter presents the findings of the study. In order to explore experiences of nurses regarding caring behavior in Intensive Care Unit (ICU). This incorporates the perceived caring behavior among nurses and various enablers and barriers of caring behavior. Then the expectations and suggestions regarding what is to be improved to enhance the caring behavior are also considered. In this study total 21 nurses had participated. Total 15 nurses were purposively interviewed considering the inclusion criteria and participant's interest to participate. And 6 nurses from managerial level participated in Focused Group Discussion. All of the staff nurse had more than 1-year experience of working in ICU. All of the participants were female with age ranging from 25-60 years (mean 35.4 years). Among them 2 had completed Masters in Public Health with baccalaureate degree in nursing, 1 had completed Masters in Nursing (MN), 1 had completed Master in Health Care Management (MHCM), with baccalaureate degree in nursing and 14 had completed baccalaureate degree in nursing (2 Post Basic

Nursing, 8 Bachelor of Nursing Science and 4 Bachelor of Science in Nursing) and 3 of them had completed their proficiency certificate level. Their work experience (overall) ranged from 1 years to 39 years (mean 12.6 years). Among nurses, 4 of them had had the basic training of critical care for 3 months whereas, 3 of them had had the advanced training of 6 months duration. However, 8 participants hadn't had any formal trainings in ICU or critical care. All of the managerial level nurses had basic training in critical and 1 of them had advanced training of trainer in critical care

Table 01: Socio-Demographic Characteristics of the Participants (n=15)

Participants	Age in Years	Years of Experiences (in ICU)	Training	Educational Status
1	25	3	No Formal Training	BNS
2	32	10	TOT-6 month	BNS
3	25	2	No Formal Training	BSC
4	29	1	No Formal Training	BNS
5	27	2	No Formal Training	BNS
6	26	4	No Formal Training	PCL
7	31	6	TOT-6 month	BSC
8	28	7	TOT-6 month	BNS
9	27	8	No Formal Training	BNS
10	29	4	Basic Training	PCL
11	32	2	Basic Training	PCL
12	26	7	Basic Training	BNS
13	25	2	Basic Training	BSC
14	26	6	No Formal Training	BNS
15	26	2	No Formal Training	BSC

Table 02: Socio-Demographic Characteristics of the Participants (n=6)

Participants	Age in Years	Years of Experiences	Educational Status
1	58	37	BN, MPH
2	60	39	BN, MPH
3	53	30	MN
4	46	25	BN
5	57	33	BN
6	57	35	BN, MHCM

The findings of study were analyzed and the following 9 themes were generated. Nursing intervention as caring behavior. Priority in exhibiting physical caring behavior. Spiritual and socio-cultural care emphasized. Improved knowledge & skills facilitates caring behavior. Motivated toward caring behavior. Managerial barriers for exhibiting caring behavior. Interpersonal barriers for exhibiting caring behavior. Caring behavior have mixed impact on nurses' life. Multiple expectations regarding caring behavior. Participants have reported different perceptions regarding caring behavior. They have described it in relation to defining and giving meaning to it and putting it into practice with different priority. Analyzing data from IDI and FGD, 3 key themes and 14 sub themes are generated which describes perception toward caring behavior. The meaning units behind themes and subthemes are listed in the table of appendix I. These themes, subthemes, meaning units and significant statements identified in the transcripts were categorized based on their likeliness and correspondence and themes were generated. Excerpts are included in description of each of the subthemes. Themes and subthemes describing the perception regarding caring behavior are arranged accordingly in table below.

Table 03: Perception Regarding Caring Behaviors

Theme Cluster	Emergent Theme
Routine Care Obligation Toward Patient Need Based Patient Care Keeping Patient at Their Best Nurses' Behaviour Toward Patient While Providing Care Patient Outcome Determines Caring Behaviour	Nursing Intervention as Caring Behaviour
Physical Care on Limelight Various Physical Care Overlooked Psychological & Emotional Care Protocol Lacks Psychological, Emotional Care Guidelines	Priority in exhibiting physical caring behaviour
Care During End Stage of Life Integrating Religious Belief in Practice Respecting Faith and Cultural Beliefs Sometimes Deviation from the Protocol	Spiritual and socio-cultural Care Emphasized

Majority of the participants used the term holistic and total care to explain their meaning to caring behavior. However, their explanation to holistic or total care was completely oriented to the nursing intervention carried out after they complete patient assessment. They have often talked about the routine care they do, their obligation toward patients, attaining the patient's need, keeping the patient at their best possible condition and nurses' own behavior

Table 04: Enablers of Caring Behaviors

Theme Cluster	Emergent Theme
Regular In-service Education Occasional Training	Improved knowledge & Skills Facilitates Caring Behaviors
Encouragement by Seniors Improved Patient Condition Team Spirit	Motivated Toward Caring Behaviors

All of the participant mentioned that the in-service education program conducted in ICU is most helpful for them to enhance their caring behavior. Talking about the in-service education all of them focused on importance of Continuous Medical Education on their caring behavior. The following are the verbatim which emphasized the in-service education program: One participant said the Continuous Medical Education are strengthening their knowledge

Table 05: Impact and Expectations Regarding Caring Behaviors

Theme Cluster	Emergent Theme
Inadequate & Non-functioning Equipment Scarce Human Resource Inefficient Physical Setting Deficient Resource	Managerial Barriers for Exhibiting Caring Behaviors
Dissatisfaction of Patient Family Professional Issues Communication Gap	Interpersonal Barriers for Exhibiting Caring Behaviors

Participants have reported various barriers toward their caring behavior. They have mentioned about different managerial and interpersonal barriers. Most of the participants have identified equipment, human resource, inefficient physical setting and deficient resources as managerial barriers to their

caring behavior. Along with the managerial barriers the interpersonal barriers like dissatisfaction of patient family, lack of professional autonomy was discussed by majority of participants.

Table 06: Impact and Expectations Regarding Caring Behaviors

Theme Cluster	Emergent Theme
Gloomy Impact on Personal Life Positive Impact on Professional Life	Caring Behaviour Have Mixed Impact on Nurses' Life
Professional Standard Fringe Benefit	Multiple Expectations Regarding Caring Behaviour

While exploring the lived experiences regarding caring behavior, participants reported the impact of work on their life and a few expectations, which would help to improve caring behavior.

DISCUSSION

The researcher has explored the perception of nurses regarding caring behavior and the enablers and barriers of caring behavior as their experiences in a tertiary level ICU [24]. Various themes and sub themes have emerged [25]. Those themes, subthemes and categories are discussed in this section in reference with many similar and contrast findings of other studies [26]. In this study it is found that caring behavior is perceived as the nursing interventions. Where nursing interventions like positioning patient, suctioning, feeding and medication are given greater importance. Among those physical and physiological care, the physiological parameters seem to take precedence. Nurses have explained unless the patient assigned to them are hemodynamically stable, they barely move on to other care. Most of the participants from the study have agreed that they are not being able to address the communication need of the patient because they are much busy with managing the hemodynamic stability of patient. Almost all of them said as they are assigned with two patients, so it is hard to manage to invest time in communication. Which is similar to the findings of a qualitative study conducted among 48 nurses from 5 different ICUs in Denmark. The study finding also reveals communication has always been in shadow. The participant of that study had found communicating with intubated patient as a challenging task [27]. The current study has found patient condition of being in intubation and tracheostomy as a barrier to communication along with 1:2 nurse patient ratio and language barrier in some instance. Similarly, the sub theme of another explorative qualitative study done among 32 ICU nurses in New York have revealed patient's inability to participate in communication due to the advance life supportive measures as a barrier [28]. This study finding reveals participant have appreciated their team spirit and the importance of team work to perform well in a hectic schedule. They have explained how they help each other when one of the cases get sick among 2 assigned cases. Which is similar to the theme of phenomenological study conducted in Nepal among 13 nurses working in ICU. Where the findings suggest the participants have found team effort as a strength to deal with burdens [29]. Similarly, another qualitative study conducted in Brazil have similar findings. The theme of the study is similar to findings of current study. In which, team work is identified as nurses' managerial tool in a hectic duty with critically ill patients [30]. The study finding reveals despite many professional issues, the encouraging behavior of the in-charge and supervisor level nurses have motivated them toward caring behavior. They said their in-charge and supervisors are always ready to teach them and guide them at their difficulties. Also, they are available any time for consultation even if it is in phone calls. This behavior of seniors is highly appreciated by nurses. Participants also recognizes the manager level nurse's effort to make video of in-service education classes to make sure everyone come to know the new knowledge and skill. The findings are similar to theme of a phenomenological study done in China among 15 nurses. That study finding reveals the first-line-nurse managers are encouraging and supportive toward the nurses' professional growth [31]. Current study findings shows that the insufficient and faulty equipment along with inadequate human resource is one of the barriers to caring

behavior. These sub themes of the study are similar to the sub theme of a phenomenological study conducted in Iraq among 10 nurses working in ICU. That study has discussed how insufficient resources (both human and material) are being a major barrier toward caring behavior of nurses [32]. Findings of this study suggests that narrow space and need to adjust life sustaining technologies and chaotic environment is perceived as barrier toward caring behavior. This finding is similar to the theme of a phenomenological study conducted in Thailand among 8 nurses working in ICU. The theme of the study finding is similar to current findings, where the findings have revealed the work space is felt as restrictive because of use of life supporting devices and machines. Hence the participants found the work space insufficient [33].

4. CONCLUSIONS

From the findings of the study, it is concluded that, majority of participants described caring behavior as nursing intervention where physical care and hemodynamic stability is given more emphasis on. Spiritual and socio-cultural care have been emphasized particularly in relation to end-of-life care. Most of the participant have mentioned regular in-service education and team spirit as an enabler of caring behavior. Along with these; occasionally arranged trainings, encouragement by seniors and improved patient condition are also found to be enabling caring behavior among nurses. However, some barriers identified are; inadequate and non- functioning equipment, substandard nurse patient ratio, inefficient physical setting and deficient resources have been the major managerial barriers of caring behavior. Whereas, dissatisfaction of patient family, professional issues like lack of professional autonomy and communication gap are the major interpersonal barriers of caring behavior. The findings of study might be useful for hospital administration and nurse managers to plan an enabling environment for nurses to exhibit caring behavior. The patients and consumer of nursing care may ultimately be benefited by improved caring behavior. The finding of the study may be helpful for further the researchers. The findings may help government and non-governmental policy makers and planners to develop a standard protocol and policies for ICU.

5. RECOMMENDATIONS

Based on the conclusion derived from findings, the recommendations from this study are: There is a need to advocate comprehensive nursing care. And ICU protocol should also address the other aspects of caring like spiritual care, communication and psychosocial aspect of caring. The new staff should be provided with orientation and induction training on needed protocols from Institutional Level There should be more focus on standardized nurse patient ratio which is 1:1 for level III Intensive care units. The barriers like inadequate supply of equipment and non-functioning equipment should be discourage.

REFERENCES

- [1] Sert, H., Gulbahar Eren, M., & Ucgul, K. (2024). Occupational fatigue, compassion competence and caring behaviours of intensive care nurses: A structural equation modelling approach. *Nursing in Critical Care*.
- [2] Attar, Meshari & Shahzad, Faisal & Khalid, Amna & Siddiqui, Khaizran & Riaz, Mariam & Shahid, Fareeha & Zulfiqar, Rabia. (2024). ROLE OF BONE MARROW EXAMINATION IN THE EVALUATION OF INFECTIONS: CLINICOHEMATOLOGICAL ANALYSIS OF MULTI-SETTING STUDY. *Zhonghua er bi yan hou tou jing wai ke za zhi = Chinese journal of otorhinolaryngology head and neck surgery*. 55. 1501-1509
- [3] Ishak, S. A., Sharoni, S. K. A., Seman, N., & Katmawanti, S. (2024). Effect of Caring Behaviour: A Study Protocol of Caring-based Education Program. *Environment-Behaviour Proceedings Journal*, 9(27), 447-453.

- [4] Charissa Rosamond D. Calacday (2024). Patient Safety Culture in Selected Government Hospitals in the National Capital Region (NCR) Towards Improved Healthcare Practices. *Dinkum Journal of Medical Innovations*, 3(05):349-357.
- [5] Das, Sanjoy & Mehtab, Fahd & Shehzad, Anum & Saad, Muhammad & Zafar, Tooba & Mahmood, Asad & Khawaja, Iqra & Zulfiqar, Rabia. (2024). THE INDICATORS OF PSYCHOLOGICAL DISTRESS AND ANXIETY IN PATIENTS HAVING HEAD & NECK SURGERY: IMPACTS ON QUALITY OF LIFE. *Zhonghua er bi yan hou tou jing wai ke za zhi = Chinese journal of otorhinolaryngology head and neck surgery*. 55. 1491-1500.
- [6] Munir, Shaouki & Biswas, Anirudha & Shakil, Jamil & Mouri, Sadia & Mostafa, Shekh Mohammad & Zulfiqar, Rabia. (2024). COMPARISON OF QUALITY ASSURANCE, EMPATHY, AND BURNOUT IN HEALTHCARE PEOPLE SETTINGS: A DESCRIPTIVE STUDY OF PATIENTS AND HEALTHCARE ASSOCIATES. *Chinese Science Bulletin*. 69. 1267-1276.
- [7] Rukmani Kafle (2024). Medication Adherence to Psychotropic Drugs among Patient Attending OPD of Teaching Hospital Chitwan Medical College Teaching Hospital, Nepal. *Dinkum Journal of Medical Innovations*, 3(04):321-336.
- [8] Zahra, Musarrat & Bukhari, Saima & Khan, Tariq & Zakir, Afsheen & Munshi, Muhammad & Mehnaz, Gul & Zulfiqar, Rabia. (2024). Comparative Analysis Of Incidence Of Non-Opioid Analgesic Self-Medication Practice Among Health Associates. *Journal of Population Therapeutics and Clinical Pharmacology*. 31. 1649-1656. 10.53555/jptcp.v31i4.5980.
- [9] Shi, J., Cao, X., Chen, Z., Pang, X., Zhuang, D., Zhang, G., & Mao, L. (2024). Sensory processing sensitivity and compassion fatigue in intensive care unit nurses: A chain mediation model. *Australian Critical Care*.
- [10] Rakesh Kumar Mahato, Sagar Pokharel & Avinash Sahani (2024). Knowledge & Practice Regarding Neonatal Resuscitation among Health Care Providers in Tertiary Care Hospitals of Nepal. *Dinkum Journal of Medical Innovations*, 3(03):257-270.
- [11] Awan, Nukhbat & Malik, Uzma & Azam, Malaika & Nasrullah, Anum & Tahir, Fatima & Zulfiqar, Rabia & Awais, Amna. (2024). Behavioral And Emotional Difficulties In Hearing Impaired Children And Adolescents: A Systematic Review. *Kurdish Studies*. 12. 544-554. 10.53555/ks.v12i4.3003
- [12] Fidan, Ö., Köktaş, N. Ç., & Zeyrek, A. Ş. (2024). The relationship between moral courage and lovingkindness–compassion levels in critical care nurses: A cross-sectional study. *Australian Critical Care*, 37(3), 468-474.
- [13] Sharifnia, A. M., Green, H., Fernandez, R., & Alananzeh, I. (2024). Empathy and ethical sensitivity among intensive and critical care nurses: A path analysis. *Nursing Ethics*, 31(2-3), 227-242.
- [14] de Jong, A. E., Tuinebreijer, W. E., Hofland, H. W., & Van Loey, N. E. (2024). Person-Centred Pain Measurement in the ICU: A Multicentre Clinimetric Comparison Study of Pain Behaviour Observation Scales in Critically Ill Adult Patients with Burns. *European Burn Journal*, 5(2), 187-197.
- [15] Özden, G., & Parlar Kılıç, S. (2024). Compassion in action: Exploring the relationship between nurse conscientious intelligence and palliative care. *Nursing in Critical Care*, 29(4), 695-705.
- [16] Ulus, M., & Durmaz Edeer, A. Delirium care burden of intensive care nurses caring for patients undergoing open-heart surgery: A mixed-method research. *Nursing in Critical Care*.
- [17] Dr. Shovit Dutta (2024). Knowledge & Practice about Personal Hygiene among Primary School Students in Rural Chattogram, Bangladesh . *Dinkum Journal of Medical Innovations*, 3(02):72-88.
- [18] Keskin Kızıltepe, S., & Koç, Z. (2024). Intensive Care Nurses' Experiences Related to Dying Patients: A Qualitative Study. *OMEGA-Journal of Death and Dying*, 88(3), 1016-1030.
- [19] Ara, Jehan & Sadiq, Aneesa & Fiaz, Huma & Bukhari, Saima & Shaheen, Faiza & Israr, Surraya & Zulfiqar, Rabia & Nawaz, Haq. (2024). Pharmacists' Expertise And Approach To The Safety And Efficacy Of Medications (Herbs And Allopathic) Throughout The Pregnancy Period. *Journal of Population Therapeutics and Clinical Pharmacology*. 31. 1095–1103.

- 10.53555/jptcp.v31i5.6274.
- [20] Kuyler, A., Heyns, T., & Johnson, E. (2024). Critical care nurses' experiences of communication-vulnerable patients in the intensive care unit and the influence on rendering compassionate care. *Southern African Journal of Critical Care (Online)*, 40(1), 23-30. Shalaby, S. A., Janbi, N. F., Mohammed, K. K., & Al-harhi, K. M. (2018). Assessing the caring behaviors of critical care nurses. *Journal of Nursing Education and Practice*, 8(10), 77. <https://doi.org/10.5430/jnep.v8n10p77>
- [21] Shrestha, R. R., Vaidya, P., & Bajracharya, G. (2011). A survey of adult intensive care units in Kathmandu valley. *Post Graduate Medical Journal of National Academy of Medical Sciences*, 11(2), 7.
- [22] Sinuff, T., Cook, D. J., & Giacomini, M. (2007). How qualitative research can contribute to research in the intensive care unit. *Journal of critical care*, 22(2), 104-111.
- [23] Zulfiqar, Rabia & Riaz, Nabeela. (2023). Using Technological Diagnostic Tools to Find Early Caries: A Systematic Review. 2. 271-283.
- [24] Sarah Rehman, Saira Rana & Mehru-Nisa (2023). Knowledge, Influence of Factors, and Management Strategies among Family Members with Behavioral Conditions. *Dinkum Journal of Medical Innovations*, 2(03):79-84.
- [25] Woodward, V. M. (1997). Professional caring: A contradiction in terms? *Journal of advanced nursing*, 26(5), 999–1004. <https://doi.org/10.1046/j.1365-2648.1997.00389.x> Rafii, F., Nikbakht Nasrabadi, A., & Karim, M. A. (2016). End-of-life care provision: experiences of intensive care nurses in Iraq. *Nursing in critical care*, 21(2), 105- 112.
- [26] Asghar, Saima & Tabassum, Rabia & Gulshan, Rubana & Hameed, Sidra & Rafiq, Tanzila & Shaheen, Sadaf & Zulfiqar, Rabia. (2024). A Cross-Sectional Investigation On The Correlation Between Clinical And Histological Diagnosis And Their Associated Risk Factors Following Gynecological Hysterectomy. *General Medicine*. 26. 1875-1883.
- [27] Romero-Martín, M., Gómez-Salgado, J., Robles-Romero, J. M., Jiménez-Picón, N., Gómez-Urquiza, J. L., & Ponce-Blandón, J. A. (2019). Systematic review of the nature of nursing care described by using the caring behaviours inventory.
- [28] Pooja Agarwal & Komal Mishra (2023). Examining the Long-Term Effects of Breastfeeding on Infants' Neurocognitive and Gross Development. *Dinkum Journal of Medical Innovations*, 2(02):72-78.
- [29] Salimi, S., & Azimpour, A. (2013). Determinants of Nurses' Caring Behaviors (DNCB): preliminary validation of a scale Text/html. *Journal of Caring Sciences; EISSN 2251-9920*, 2(4). <https://doi.org/10.5681/JCS.2013.032>
- [31] Sarafis, P., Rousaki, E., Tsounis, A., Malliarou, M., Lahana, L., Bamidis, P., Niakas, D., & Papastavrou, E. (2016). The impact of occupational stress on nurses' caring behaviors and their health-related quality of life. *BMC Nursing*, 15(1), 56. <https://doi.org/10.1186/s12912-016-0178-y>
- [32] Scholtz, S., Nel, E. W., Poggenpoel, M., & Myburgh, C. P. H. (2016). The culture of nurses in a critical care unit. *Global Qualitative Nursing Research*, 3(1), 233339361562599. <https://doi.org/10.1177/2333393615625996> Paneru, H. R. (2020). Intensive care units in the context of COVID-19 in Nepal: current status and need of the hour. *Journal of Society of Anaesthesiologists of Nepal*, 7(1), 3.
- [33] Peng, X., Liu, Y., & Zeng, Q. (2015). Caring behaviour perceptions from nurses of their first-line nurse managers. *Scandinavian journal of caring sciences*, 29(4), 708-715.