

## Original Research



# Understanding the Meaning of Lived Experience “Maternal Near Miss”: A Qualitative Study Protocol

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## Abstract

**Background:** Maternal near-miss (MNM) is defined as “a woman who almost died but survived a serious maternal complication during pregnancy, childbirth, or within 42 days of completion of pregnancy”. Despite the long-term physical and psychological burden of this event on the mother’s life, the meaning of MNM is not clear. In addition, the mother’s role complicates the understanding of this phenomenon. Therefore, this study aimed to understand lived experience of Iranian “near-miss” mothers in the postpartum period.

**Methods:** In this Heideggerian phenomenological study, we used Souza and colleagues’ theoretical framework to understand the meaning of the lived experience of near-miss mothers in-depth. The participants had experienced MNM at least one year ago by World Health Organization (WHO) approach in multicenter, academic, tertiary care hospitals in Mashhad, Iran. Taking into account reflexivity and after obtaining ethical approval, participants were purposively sampled using semi-structured interviews, and data analysis was conducted by Diekmann and colleagues up to data saturation. Data collection and analysis has been argued by Lincoln and Guba.

**Discussion:** Our findings resulted in updating the existing knowledge about the meaning of MNM and its implication. Given the different needs and challenges of near-miss mothers, it is necessary to design a supportive program of primary care for them. Policymakers and managers should consider the lived experience of these mothers when planning and taking decisions.

## Background

The World Health Organization (WHO) defined the criterion of “maternal near-miss” (MNM) as “a woman who almost died but survived a serious maternal complication during pregnancy, childbirth, or within 42 days of completion of pregnancy.”<sup>1</sup>

Maternal health has improved in recent years, especially the reduction in maternal mortality worldwide.<sup>2</sup>

Fortunately, in Sustainable Development Goals (SDGs), the health of women and the ability of women to perform economic and social functions are a central concept.<sup>3</sup> In particular, the “Survive, Thrive and Transform” agenda of the “Global Strategy for Women’s, Children’s and Adolescents’ Health (2016–2030)”<sup>4</sup> moves away from a single focus on maternal and child mortality reduction,

by adding an emphasis on ensuring good health so that women, adolescents, and children can play their full role in future development and there have been calls for “rethinking maternal health” using a life cycle approach<sup>5</sup> and the importance of women’s health is not overlooked by anyone.

In recent years, after the presentation “Beyond the numbers”,<sup>6</sup> the MNM approach has been increasingly used as a tool to evaluate and improve the quality of care in maternal health,<sup>1</sup> so a considerable body of research conducted in developing country settings, focused on the analysis of near-miss cases with a view to exploring health system failures in relation to obstetric care and addressing them,<sup>7-10</sup> therefore maternal health care has traditionally focused on diagnosing and managing

maternal morbidities.

But the women who have experienced a near miss often appear to be unable to access standard support due to feeling their experiences are so extreme or different from the norm.<sup>11</sup> These women may be discharged from hospital with major surgery, emergency treatment, intensive care, and preterm babies.<sup>11</sup> Women experience psychological symptoms such as fear and shock during the immediate emergency, and anxiety, alienation, and flashbacks in the longer term.<sup>12,13</sup>

These experiences are a long way away from normal birth and physical and psychological follow-up from hospitals varies around the country and it is necessary to have a proper understanding of the meaning of the experience of these mothers. Because by understanding the meaning of the “MNM”, one can plan early interventions to increase the function and wellbeing of mothers. For example, postpartum depression<sup>14</sup> or post-traumatic stress disorder<sup>15</sup> can be ameliorated by early intervention. The present gap in the studies is that the meaning of the “MNM” phenomenon is not clear, because the long-term burden of physical, psychological emergency and unpredictable intervention on the one hand, and his mother’s role on the other, complicates the understanding of this phenomenon. The key role of mothers in the care and provision of children and family health, their quality of life, and their problems in their family and social roles, as well as the appropriate strategies to help solve their problems, requires emersion of the nature and concept of different dimensions of the meaning of lived experience in the mother that she lived with the phenomenon of “near miss”. To answer the main research question, it is necessary to have a depth understanding of the experiences of these mothers who have lost one organ in their body due to severe morbidity and progressed to the border of death in the social, cultural, and economic context of the developing society such as Iran, through the phenomenology study which identifies the nature and meaning of the life experience of individuals. Therefore, this study aims to gain lived experience of Iranian “near miss” mothers in the postpartum period through an in-depth understanding.

### **Theoretical Framework: “Maternal Near-Miss Syndrome”**

As a question that wants to have a deep understanding of the essence of everyday experience from MNM mother, a qualitative exploratory approach is considered appropriate.<sup>16,17</sup> Qualitative research attempts to make sense of people’s experiences and the world in which they live.<sup>17</sup> Qualitative research is distinguished from quantitative research, in the literature.<sup>18</sup> In this study, the theoretical framework will be used to explore the meanings attached by survivors to this experience was adapted from Souza et al., with “MNM syndrome”,<sup>19</sup> which was developed from the definition of near miss based on admission to an intensive care unit during a participant’s hospitalization but close to hospital discharge. They suggested that “the

construction of qualitative theories may contribute toward raising the awareness of the health care professionals to important factors in certain situations, which may be the case with severe maternal morbidity”. The complexity of emotional experiences observed and the manner in which some health care providers perceive suggest the need for more integrated care of the woman, and not only restricted to the biomedical events that trigger the process of morbidity.

In the present study, we will use Souza and colleagues<sup>19</sup> theoretical framework and using the objectification of the importance of Firoz et al.,<sup>20</sup> and Filippi et al.,<sup>21</sup> framework in promotion of maternal health, by WHO criteria,<sup>1</sup> will identify maternal near misses.

By understanding the meaning of the lived experience of these mothers through the phenomenology study, it can be proved that the implementation of integrated care that encompasses the physical, psychological, social, and spiritual aspects of women’s health may help to alleviate the burden of organ dysfunction that MNM imposes on women around the world. Conceptually, MNMs represent a point on a continuum between extremes of good health and death, where mothers develop near misses and somehow survive, either due to luck or the health care they receive.<sup>20</sup> Such individuals may eventually recover, become temporarily or permanently disabled, or die.<sup>22</sup>

## **Material and Methods**

### **Design**

‘Towards the things themselves’ is the best phrase for phenomenology.<sup>23</sup> According to Langdridge,<sup>24</sup> phenomenology as a method of qualitative research is a discipline that focuses on people’s lived experience of the world in which they live and what it means to them, so experience arises of meaning and the way of its emergence. Phenomenology can be done in two different forms, including descriptive perspective of Husserl,<sup>25</sup> the interpretive perspective of Heidegger et al.,<sup>26</sup> or a combination of both interpretive and descriptive Van Manen.<sup>23</sup> Human experiences are interpreted historically and contextually.<sup>27</sup> Heidegger et al., stated that the interpretation of the human experience is based on our understanding of the culture and context in which circumstances occur,<sup>26</sup> but Husserl<sup>25</sup> claimed that these two components have no effect on people’s experience. For example, to understand the near-death phenomenon, it is necessary to achieve meaning by interpreting mothers’ life experiences in the socio-cultural context of their lives; this is possible using the Heidegger et al., method.<sup>26</sup> So in this study, we will use Heidegger and colleagues<sup>26</sup> qualitative method of phenomenology.

### **Setting**

Mashhad is the second-most populous city in Iran and the capital of Khorasan province. It is located in the northeast of the country, near the borders with Turkmenistan and Afghanistan. The Islamic Educational, Scientific and Cultural Organization named Mashhad 2017’s “cultural

capital of the Muslim world” in Asia on January 24, 2017. This study will be conducted within an academic, tertiary care hospital in Mashhad. Most high risk mothers in the suburban cities of Khorasan are sent to Mashhad hospitals to receive better care. In this study, participants will be selected from the electronic records of mothers who refer to this hospital. Because high level of intensive care is provided here, it is a place of admission for high-risk mothers who have not been able to manage childbirth in their cities and have been referred. For this reason, the number and variety of near-miss mothers admitted to this hospital will be higher.

### Sample Selection

The researcher, after receiving the introduction letter from Mashhad University of Medical Sciences, must first select eligible participants. In order to achieve this, at this stage, researchers and colleagues choose Mashhad’s educational hospitals that have more birth rates and are the third-level hospitals referring to high-risk mothers. Then, using the medical records and documents available at the hospital, be extracted the list of mothers who were registered as “near death” during the past year, along with their address and telephone number. No matter where you live, depending on the condition and comfort of the mother, the appointment is made by agreement on both sides. After explaining the aims of the study and obtaining informed consent, the mother prepares for the interview. In a quiet and unrestrained environment, interviews begin with respect to the principles of effective communication. A gift will be given to thank the participant, and the next time the interview will be determined if necessary.

### Guiding Principles Underlying the Study

Heidegger is a philosopher, whose hermeneutic philosophical tenets underpin this study. Heidegger asserted that the understanding of ‘Dasein’ is within the viewer’s perspective of a person who has experienced the phenomenon. In his perspective, this method is directed at making sense of the peoples’ experience in the world. Therefore, this study tries to examine the daily experience of mothers to understand the meaning of ‘lifeworld’. The main research questions to achieve this goal include the following:

- What is the structure of the experience of the “near miss” phenomenon in mothers?
- What are the components of this experience?
- What are the relations in the different concepts of the structure of this phenomenon?

These questions will go beyond the description of experience and seek to determine the meaning of the MNM, which is based on Heidegger’s ontological questions about the meaning of existence. Three main research studies will be conducted to guide each set of interviews and provide in-depth research with participants:

- Describe what happened to you during pregnancy or childbirth?
- What conditions did you experience in the post-

discharge period?

- Define one day’s experience of your life for me?

In the course of initial interviews, the questions and propping are merely the expressions of experiences related to the phenomenon of the study and the questionnaire is not a checklist or predefined, but after extracting the appropriate data, in the subsequent interviews, the possibility of designing new questions and discovering the experiences of a participant on non-completed codes. Data analysis in a phenomenological study is performed with the aim of obtaining the nature of life experience.<sup>28</sup> Based on the Heideggerian beliefs, data analysis will be performed according to Diekelmann and colleagues’ method.<sup>29</sup>

### Reflexivity

Reflexivity means that the researcher reaches a degree of self-awareness, personal assumptions, values and social background during collection and analysis of research.<sup>30</sup> According to Wosket,<sup>31</sup> by extending the understanding on personal positions and interest during all stages of the research, reflexivity enhances the trustworthiness of the research.

In this study, reflectivity shows a dynamic process that puts aside the researcher’s previous personal experiences and reflects on the participants’ current understanding of the experience.<sup>30</sup> To achieve this, researcher have adopted a position of making this explicit by assessing my pre-understandings through the background information in responsibility for the Department of Midwifery and Maternity and acknowledging my understandings of a MNM as an Iranian.

### Ethical Considerations

The nature of ethics is to protect the interests of research participants.<sup>32</sup> Ritchie et al.,<sup>33</sup> described the ethical practice as the heart of research will be addressed based on ethical principles such as respect for autonomy, beneficence, and fairness.

In this research, ethical practices will be considered before, during, and after data collection.<sup>32</sup> During data collection, participants have the right not to answer questions they do not want. Written consent will be obtained from them prior to the interview. Participants will be treated with the utmost respect. The interview environment will be considered comfortable in their opinion. The right to confidentiality and anonymity will be respected, whilst data will only be made available to supervisors. In addition, unbiased reporting of participants’ interviews will be provided in the findings.<sup>32</sup> Access to participant information will be limited through a pseudonym and interview number.

### Inclusion Criteria

In this study, mothers who have experienced life-threatening conditions and have been through for at least one year of their experience will be included in the study. This time interval helps to enrich the lived experience and

the mother is involved in this phenomenon in her daily life. According to the WHO, these mothers suffer from organ failure as follows:

- Cardiovascular dysfunction: cardiac arrest (absence of pulse/heartbeat and loss of consciousness), use of continuous vasoactive drugs, severe acidosis (pH<7.1), Shock, cardiopulmonary resuscitation, severe hypoperfusion (lactate >5 mmol/L or >45 mg/dL).
- Respiratory dysfunction: Acute cyanosis, gasping, severe tachypnea (respiratory rate >40 breaths per minute), intubation and ventilation not related to anesthesia, severe bradypnea (respiratory rate <6 breaths per minute), severe hypoxemia (O<sub>2</sub> saturation <90% for ≥60 minutes, or PaO<sub>2</sub>/FiO<sub>2</sub> <200)
- Renal dysfunction: dialysis for acute renal failure, Oliguria non-responsive to fluids or diuretics, severe acute azotemia (creatinine ≥300 μmol/mL or ≥3.5 mg/dL).
- Coagulation/hematological dysfunction: massive transfusion of blood or red cells (≥5 units), severe acute thrombocytopenia (<50 000 platelets/mL), failure to form clots.
- Hepatic dysfunction: severe acute hyperbilirubinemia (bilirubin >100 μmol/L or >6.0 mg/dL), jaundice in the presence of preeclampsia.
- Neurological dysfunction: Total paralysis prolonged unconsciousness (lasting ≥12 hours)/coma (including metabolic coma), uncontrollable fits/status epilepticus, stroke.
- Uterine dysfunction: hysterectomy due uterine hemorrhage or infection leading to hysterectomy.

#### Exclusion Criteria

Mothers who for any reason do not want to continue to collaborate with the study.

#### Sample Size

Saturation is a tool used for ensuring that adequate and quality data are collected to support the study. Saturation is frequently reported in qualitative research and maybe the gold standard.<sup>34</sup> Data saturation is reached when there is enough information to replicate the study when the ability to obtain additional new information has been attained, and when further coding is no longer feasible<sup>35</sup> and theoretical saturation is not sought in hermeneutic studies.<sup>36</sup>

#### Purposive Sampling

The purposive sampling is the selecting information-rich participants for in-depth study and purposefully of them.<sup>37</sup> In this study, utilizing a purposeful sampling method will be considered appropriate for participants are selected based on the fact that they have experience of the phenomenon being investigated.

#### Semi-structured Interviews

The semi-structured interview is used in phenomenological

study to allowing new idea's participants to be brought up during the interview.<sup>24</sup>

#### Assuring Rigor

It has been argued that the criteria of rigor and quality in qualitative methods should be consistent with the philosophical and methodological assumptions. In support of this, we will choose the criteria of 'credibility, transferability, dependability and confirmability' suggested by Lincoln and Guba.<sup>38</sup>

#### Data Analysis

The goal of analyzing phenomenological data is to 'transform lived experience into textual expression and thus gain essence, in such a way that the effect of the text is a meaningful experience.'<sup>28</sup> Based on the Heideggerian beliefs, Diekelmann et al.,<sup>29</sup> devised a step-by-step process of analyzing narrative text. The analysis is typically done by an interpretive team and involves seven steps: (a) reading the participant interviews to gain an overall understanding; (b) writing interpretive summaries and coding them; (c) analyzing emerging themes (d) returning to the text or to the participants to confirm analysis text; (e) comparing and contrasting texts to identify common meanings; (f) identifying patterns that link the themes; and (g) eliciting basic pattern and final draft by the interpretive team.

In this study, the hermeneutic analysis will begin when the first researcher listened to the tape recordings repeatedly to extract the true meaning of the data. The team will continue data analysis according to the seven steps above and all transcripts will be read repeatedly and will be compared with records to confirm the accuracy of the data.

#### Discussion

According to a researcher's review of studies on the MNM, there are few qualitative researches done in this area. For example, the Hinton et al., study in the United Kingdom in 2015 aimed to investigate the primary care needed to support mothers and their families who have been exposed to life-threatening conditions, and showed that these mothers have many physical and psychological complications that require support and attention to postpartum life. In this study, 36 mothers and 11 of their spouses participated in a content analysis study, and the results showed that despite a large range of long-term physical and mental-emotional complications, these mothers receive little support from service providers.<sup>11</sup> Also, in a study by Souza et al., in 2009 on 30 mothers who were admitted to the intensive care unit due to pregnancy and childbirth complications, they concluded that these mothers encountered a series of problems. They named it "The Maternal Near Miss Syndrome". The results of the study indicated that the implementation of integrated care that includes physical, mental, social, and spiritual aspects of their health is necessary in order to reduce the burden of maternal complications in these mothers.<sup>19</sup> Another



study by Kaye et al., in 2014 was conducted in Uganda to investigate the experiences of survivors who had a uterus rupture after childbirth. The study suggested that appropriate interventions should be designed for these mothers and that they should be supported in order to reduce the consequences of the disabilities.<sup>39</sup> The gap found in several qualitative studies of these mothers is that these studies have not been phenomenologically applied and cannot provide an in-depth understanding of the meaning of the experience of these mothers. Second, studies have been carried out immediately or shortly after delivery, and cannot reflect the experience of a mother who has long lived with this phenomenon. Third, in mothers who have been admitted to the intensive care unit or in which all the cases of dysfunction of vital organs are not, then it does not reflect the full range of mothers who are near-miss and only consider limited criteria. Fourth, these studies have not been carried out in Iran, and there is certainly a cultural and social context and a different understanding of the phenomenon, as well as the way different services care, are provided to these mothers, can affect their live experience and change their perceptions about this situation. Finally, the authors conclude that with the increasing prevalence of near-miss mothers worldwide<sup>40</sup> as well as in Iran,<sup>41</sup> it is imperative to understand their experience.<sup>42,43</sup> We will probably recognize several limitations inherent in our design. Our study will be conducted at least one year of near-miss experience, sampling of these mothers is hard, given that their number is not too high according to inclusion criteria.

### Conclusion

Outcomes of this research will be new knowledge about the meaning of MNM and its implication will be to understand the experiences of these mothers. Given the different needs and challenges of their experience, it is necessary to design a supportive program for primary care and be placed on the agenda of policymakers and managers.

### Abbreviation

MNM: maternal near-miss.

WHO: world health organization.

SDGs: sustainable development goals.

PH: potential of hydrogen.

Pao<sub>2</sub>: partial pressure of arterial oxygen.

Fio<sub>2</sub>: fraction of inspired oxygen.

### Research Highlights

#### What is the current knowledge?

To enhance the quality of life of near-miss mothers and their rehabilitation into normal life, it is vital to understand the meaning of the lived experience of these mothers.

#### What is new here?

Health providers should receive appropriate training with a focus on supportive care in various aspects of maternal near-miss life in the hospital until a long time after discharge.

### Declarations

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### Ethical Issues

This study research ethics confirmation (ethics code: IR.MUMS.NURSE.REC.1398.009) was received at the time of reviewing this protocol from the Ethics Committee of Mashhad University of Medical Sciences.

### Conflict of Interest

The authors declare no conflict of interest in this study.

### Author's Contributions

Study conception and design, data collection: SA; Data analysis and interpretation: SA, AH and TKh; Drafting of the article; SA, AH, HE, FF and TKh.

### References

1. World Health Organization (WHO). Evaluating the quality of care for severe pregnancy complications: the WHO near-miss approach for maternal health. WHO; 2011
2. WHO, UNICEF, UNFPA, world bank group and the united nations population division. trends in maternal mortality: 1990 to 2015. Geneva: WHO; 2015. Available from: [https://apps.who.int/iris/bitstream/handle/10665/194254/9789241565141\\_eng.pdf;jsessionid=C7F88F85A12F6F12A89F6CE446972766?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/194254/9789241565141_eng.pdf;jsessionid=C7F88F85A12F6F12A89F6CE446972766?sequence=1).
3. Langer A, Meleis A, Knaul FM, Atun R, Aran M, Arreola-Ornelas H, et al. Women and health: the key for sustainable development. *Lancet*. 2015; 386(9999): 1165-210. doi: 10.1016/s0140-6736(15)60497-4
4. World Health Organization (WHO). Global health observatory data portal for the global strategy for women's, children's and adolescents' health. Geneva: WHO; 2018. [cited 20Dec 2018] Available From: [https://www.who.int/gho/publications/gswcah\\_portal/en/](https://www.who.int/gho/publications/gswcah_portal/en/).
5. Knaul FM, Langer A, Atun R, Rodin D, Frenk J, Bonita R. Rethinking maternal health. *Lancet Glob Health*. 2016; 4(4): e227-8. doi: 10.1016/s2214-109x(16)00044-9
6. World Health Organization (WHO). Beyond the numbers: reviewing maternal deaths and complications to make pregnancy safer. Geneva: WHO; 2004.
7. Noor S, Majid S, Ruby N. An audit of obstetrical hysterectomy. *J Coll Physicians Surg Pak*. 2011; 11(10): 642-5.
8. Sahel A, Brouwere VD, Lardi M, Lerberghe WV, Ronsmans C, Filippi V. Obstetric catastrophes barely just avoided: near misses in Moroccan hospitals. *Sante*. 2001; 11(4): 229-35.
9. Sivalingam N, Looi KW. Clinical experience with management of "near-miss" cases in obstetrics. *Med J Malaysia*. 1999; 54(4): 496-503.
10. Vandecruys HI, Pattinson RC, Macdonald AP, Mantel GD. Severe acute maternal morbidity and mortality in the pretoria academic complex: changing patterns over 4 years. *Eur J Obstet Gynecol Reprod Biol*. 2002; 102(1): 6-10. doi: 10.1016/s0301-2115(01)00558-9
11. Hinton L, Locock L, Knight M. Support for mothers and

- their families after life-threatening illness in pregnancy and childbirth: a qualitative study in primary care. *Br J Gen Pract.* 2015; 65(638): e563-9. doi: 10.3399/bjgp15X686461
12. Jones C, Griffiths RD, Humphris G, Skirrow PM. Memory, delusions, and the development of acute posttraumatic stress disorder-related symptoms after intensive care. *Crit Care Med.* 2001; 29(3): 573-80. doi: 10.1097/00003246-200103000-00019
  13. Prinjha S, Field K, Rowan K. What patients think about ICU follow-up services: a qualitative study. *Crit Care.* 2009; 13(2): R46. doi: 10.1186/cc7769
  14. Abdollahpour S, Keramat A, Mousavi SA, Khosravi A, motaghi z. The effect of debriefing and brief cognitive-behavioral therapy on postpartum depression in traumatic childbirth: a randomized clinical trial. *J Midwifery Reproductive Health.* 2018; 6(1): 1122-31. doi: 10.22038/jmrh.2017.10000
  15. Abdollahpour S, Khosravi A, Bolbolhaghghi N. The effect of the magical hour on post-traumatic stress disorder (PTSD) in traumatic childbirth: a clinical trial. *J Reprod Infant Psychol.* 2016; 34(4): 403-12. doi: 10.1080/02646838.2016.1185773
  16. Bowling A. *Research methods in health: investigating health and health services.* 1st ed. United States: McGraw-Hill Education; 2014.
  17. Holloway I, Galvin K. *Qualitative research in nursing and healthcare.* 4th ed. United States: Wiley-Blackwell; 2016.
  18. Neuman WL. *Social research methods: qualitative and quantitative approaches.* 5th ed. United Kingdom: Pearson Education; 2013.
  19. Souza JP, Cecatti JG, Parpinelli MA, Krupa F, Osis MJ. An emerging "maternal near-miss syndrome": narratives of women who almost died during pregnancy and childbirth. *Birth.* 2009; 36(2): 149-58. doi: 10.1111/j.1523-536X.2009.00313.x
  20. Firoz T, McCaw-Binns A, Filippi V, Magee LA, Costa ML, Cecatti JG, et al. A framework for healthcare interventions to address maternal morbidity. *Int J Gynaecol Obstet.* 2018; 141(Suppl 1): 61-8. doi: 10.1002/ijgo.12469
  21. Filippi V, Chou D, Barreix M, Say L. A new conceptual framework for maternal morbidity. *Int J Gynaecol Obstet.* 2018; 141(S1): 4-9. doi: 10.1002/ijgo.12463
  22. Say L, Souza JP, Pattinson RC. Maternal near miss--towards a standard tool for monitoring quality of maternal health care. *Best Pract Res Clin Obstet Gynaecol.* 2009; 23(3): 287-96. doi: 10.1016/j.bpobgyn.2009.01.007
  23. Van Manen M. *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy.* 2nd ed. United Kingdom: Routledge; 2016.
  24. Langdridge D. *Phenomenological psychology: theory, research and method.* 1st ed. United States: Prentice Hall; 2007.
  25. Husserl E. *The phenomenology of internal time-consciousness.* 1st ed. Bloomington, Indiana: Indiana University Press; 1964.
  26. Heidegger M, Stambaugh J, Schmidt DJ. *Being and Time: A Revised Edition of the Stambaugh Translation (SUNY Series in Contemporary Continental Philosophy).* 1st ed. United States: SUNY Press; 2010.
  27. Koch T. Interpretive approaches in nursing research: the influence of Husserl and Heidegger. *J Adv Nurs.* 1995; 21(5): 827-36. doi: 10.1046/j.1365-2648.1995.21050827.x
  28. Van Kaam AL. *Existential foundations of psychology.* UK: Image Books; 1969.
  29. Diekelmann NL, Allen D, Tanner CA. *The NLN Criteria for Appraisal of Baccalaureate Programs: A Critical Hermeneutic Analysis.* 1st ed. United States: National League for Nursing Press; 1989.
  30. Finlay L, Gough B. *Reflexivity: A Practical Guide for Researchers in Health and Social Sciences.* 1st ed. United States: John Wiley & Sons; 2008.
  31. Wosket V. *The Therapeutic Use of Self: Counselling Practice, Research and Supervision.* 2nd ed. United Kingdom: Routledge; 2016.
  32. Eide P, Kahn D. Ethical issues in the qualitative researcher-participant relationship. *Nurs Ethics.* 2008; 15(2): 199-207. doi: 10.1177/0969733007086018
  33. Ritchie J, Lewis J, Nicholls CM, Ormston R. *Qualitative research practice: a guide for social science students and researchers.* 2nd ed. USA, California: SAGE Publications; 2013.
  34. Walker JL. The use of saturation in qualitative research. *Can J Cardiovasc Nurs.* 2012; 22(2): 37-46.
  35. Fusch PI, Ness LR. Are we there yet? data saturation in qualitative research. *Qual Rep.* 2015; 20(9): 1408-16.
  36. Whitehead L. Enhancing the quality of hermeneutic research: decision trail. *J Adv Nurs.* 2004; 45(5): 512-8. doi: 10.1046/j.1365-2648.2003.02934.x
  37. Palinkas LA, Horwitz SM, Green CA, Wisdom JB, Duan N, Hoagwood K. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Adm Policy Ment Health.* 2015; 42(5): 533-44. doi: 10.1007/s10488-013-0528-y
  38. Lincoln YS, Guba EG. But is it rigorous? trustworthiness and authenticity in naturalistic evaluation. *New Directions for Program Evaluation.* 1986; 1986(30): 73-84. doi: 10.1002/ev.1427
  39. Kaye DK, Kakaire O, Nakimuli A, Osinde MO, Mbalinda SN, Kakande N. Lived experiences of women who developed uterine rupture following severe obstructed labor in Mulago hospital, Uganda. *Reprod Health.* 2014; 11: 31. doi: 10.1186/1742-4755-11-31
  40. Abdollahpour S, Heidarian Miri H, Khadivzadeh T. The global prevalence of maternal near miss: a systematic review and meta-analysis. *Health Promot Perspect.* 2019; 9(4): 255-62. doi: 10.15171/hpp.2019.35
  41. Abdollahpour S, Heidarian Miri H, Khadivzadeh T. The maternal near miss incidence ratio with WHO approach in Iran: a systematic review and meta-analysis. *Iran J Nurs Midwifery Res.* 2019; 24(3): 159-66. doi: 10.4103/ijnmr.IJNMR\_165\_18
  42. Abdollahpour S, Heydari A, Ebrahimipour H, Faridhosseini F, Khadivzadeh T. The needs of women who have experienced "maternal near miss": a systematic review of literature. *Iran J Nurs Midwifery Res.* 2019; 24(6): 417-27. doi: 10.4103/ijnmr.IJNMR\_77\_19
  43. Herklots T, Yussuf SS, Mbarouk KS, O'Meara M, Carson E, Plug SB, et al. "I lost my happiness, I felt half dead and half alive" - a qualitative study of the long-term aftermath of obstetric near-miss in the urban district of Zanzibar, Tanzania. *BMC Pregnancy Childbirth.* 2020; 20(1): 594. doi: 10.1186/s12884-020-03261-8