ISSN: 2576-0017 2024, VOL 7, NO S8

The Role of Nurses in Obstetric Care: Comprehensive Review

Sharifah Mohammed Faleh Al-Saluli¹, Hanan Mahdi Alenazi², Fatima Saeed Al-Qahtani³, Hakam Qasim Ali Majrashi⁴, Dlal Rhail Alrwaili⁵, Abdulmajeed Mofareh Hassab Alruwaili⁶, Tahani Mohammed Ahmed Al-Ghamdi⁷, Munira Abdo Walby⁸, Afnan Raheel Al-Ruwaili⁹, Mai Miteb Al-Mutairi¹⁰

- 1. Nursing technician, Maternity and Children's Hospital Asir Health Cluster, Bisha, KSA
- 2. Nursing technician, Al Izdihar Health Center, Riyadh, KSA
- 3. Nursing technician, Badr II Health Center, Riyadh, KSA
- 4. Nursing, Sultana Health Center, Riyadh, KSA
- 5. Nursing Specialist, Specialized Dental Center in Dumat Al Jandal, Aljouf, KSA
- 6. Nursing specialist, King Abdulaziz specialist in aljouf, Sakaka, KSA
- 7. Nursing, Public Health Administration, Riyadh, KSA
- 8. Nursing technician, Al-Urayja Western Health Center, Riyadh Region, KSA
- 9. Nursing, Prince Miteb bin Abdulaziz Hospital, Sakaka, KSA
- 10. Nursing Specialist, King Khalid Hospital in Al-Majmaah, Riyadh Region, KSA

ABSTRACT

Nurses play a pivotal role in obstetric care, providing essential support and expertise throughout the perinatal period, which includes pregnancy, childbirth, and the postpartum phase. Their multifaceted responsibilities encompass comprehensive assessment, education, emotional support, and clinical interventions, all of which are critical for promoting positive maternal and neonatal outcomes. This article explores the diverse functions of nurses in obstetric care, emphasizing their contributions during antenatal, intrapartum, and postpartum stages. In antenatal care, nurses monitor maternal and fetal health, educate patients on prenatal care, and identify high-risk pregnancies, ensuring timely interventions. During labor and delivery, nurses provide continuous emotional and physical support, monitor vital signs, and assist healthcare providers in delivering safe and effective care. In the postpartum period, they conduct thorough assessments, educate mothers on newborn care and breastfeeding, and offer resources for mental health support, recognizing the significance of addressing postpartum depression. Despite their critical contributions, nurses in obstetric care face numerous challenges, including staffing shortages, emotional and physical demands, and the need to stay updated with evolving guidelines and practices. These challenges can impact the quality of care provided to mothers and infants. As the landscape of healthcare continues to evolve, the role of nurses in obstetrics must adapt to meet the changing needs of patients. Enhanced education and training, advocacy for nursing roles, and the integration of technology are essential for preparing nurses to navigate the complexities of maternal and neonatal care effectively. This review highlights the indispensable role of nurses in obstetric care and underscores the need for ongoing support, education, and

Sharifah Mohammed Faleh Al-Saluli, Hanan Mahdi Alenazi, Fatima Saeed Al-Qahtani, Hakam Qasim Ali Majrashi, Dlal Rhail Alrwaili, Abdulmajeed Mofareh Hassab Alruwaili, Tahani Mohammed Ahmed Al-Ghamdi, Munira Abdo Walby, Afnan Raheel Al-Ruwaili, Mai Miteb Al-Mutairi resources to empower them in their practice. By recognizing and investing in the nursing workforce, healthcare systems can improve maternal and infant health outcomes, ensuring safe, compassionate, and patient-centered care during one of the most significant periods in a woman's life.

KEYWORDS: nurses, obstetric.

1. Introduction

Obstetric care is a vital aspect of healthcare that focuses on the management of pregnancy, childbirth, and the postpartum period. The role of nurses in this field is multifaceted, encompassing a wide range of responsibilities that contribute to the health and well-being of both mothers and newborns. As frontline healthcare providers, nurses are often the first point of contact for women seeking care during pregnancy and childbirth. Their expertise in assessment, education, and clinical intervention is essential for promoting positive maternal and neonatal outcomes [1].

The significance of nursing in obstetric care cannot be overstated. Research has consistently shown that the quality of nursing care directly impacts maternal and infant health outcomes. Nurses play a crucial role in providing emotional support, education, and advocacy for patients, ensuring that women receive the care they need throughout the perinatal period. This article aims to provide a comprehensive overview of the role of nurses in obstetric care, highlighting their contributions, challenges, and the evolving landscape of maternal health [2].

1. Historical Context of Nursing in Obstetric Care

1.1 Evolution of Nursing Roles

The role of nurses in obstetric care has evolved significantly over the past century. Historically, midwives were the primary caregivers for women during childbirth. However, as the medical field advanced, the role of nurses expanded to include a broader range of responsibilities in maternal care. The introduction of formal nursing education programs in the late 19th and early 20th centuries laid the foundation for the professionalization of nursing and its integration into obstetric care [3].

In the early 20th century, the focus of obstetric care shifted from home births to hospital deliveries, leading to an increased demand for skilled nursing care in maternity wards. Nurses began to take on more responsibilities, including monitoring maternal and fetal health, assisting with labor and delivery, and providing postpartum care. The development of evidence-based practices and advancements in technology further transformed the role of nurses in obstetrics, allowing them to provide high-quality care that is both safe and effective [4].

1.2 The Impact of Nursing on Maternal and Neonatal Outcomes

Numerous studies have demonstrated the positive impact of nursing care on maternal and neonatal outcomes. Research has shown that higher nurse-to-patient ratios are associated with lower rates of maternal mortality, fewer complications during childbirth, and improved neonatal health. Nurses play a critical role in monitoring vital signs, administering medications, and recognizing early signs of complications,

thereby enhancing patient safety and quality of care [5].

The implementation of standardized nursing protocols and evidence-based practices has further contributed to improved outcomes in obstetric care. For example, the use of continuous labor support by nurses has been associated with reduced rates of cesarean sections, shorter labor durations, and increased satisfaction among women during childbirth. As advocates for patient-centered care, nurses are essential in promoting the preferences and needs of women throughout the perinatal period [6].

2. Responsibilities of Nurses in Obstetric Care

2.1 Antenatal Care

Antenatal care is a critical component of obstetric care that focuses on monitoring the health of the mother and fetus during pregnancy. Nurses play a key role in providing comprehensive antenatal care, which includes:

- Assessment and Monitoring: Nurses conduct thorough assessments of maternal health, including vital signs, weight, and laboratory tests. They monitor fetal growth and development through ultrasound and fetal heart rate monitoring.
- Education and Counseling: Nurses provide education on prenatal nutrition, exercise, and self-care. They counsel women on the importance of regular prenatal visits, screening tests, and immunizations [7].
- Screening and Risk Assessment: Nurses are responsible for identifying high-risk pregnancies and implementing appropriate interventions. They conduct screenings for gestational diabetes, hypertension, and other conditions that may affect maternal and fetal health [8].

2.2 Intrapartum Care

During labor and delivery, nurses play a vital role in providing care to women and their families. Their responsibilities include:

- Labor Support: Nurses provide continuous emotional and physical support to women during labor. They offer comfort measures, such as pain management techniques, breathing exercises, and positioning strategies.
- Monitoring and Assessment: Nurses closely monitor maternal and fetal vital signs, contractions, and progress of labor. They assess the need for interventions and communicate findings to the healthcare team [9].
- Assisting with Delivery: Nurses assist obstetricians and midwives during the delivery process, ensuring that the environment is safe and supportive. They prepare necessary equipment and medications, and they may also assist in the immediate care of the newborn [10].

2.3 Postpartum Care

The postpartum period is crucial for the recovery of the mother and the adjustment to parenthood. Nurses provide essential care during this time, which includes:

• Physical Assessment: Nurses conduct thorough assessments of the mother's

Sharifah Mohammed Faleh Al-Saluli, Hanan Mahdi Alenazi, Fatima Saeed Al-Qahtani, Hakam Qasim Ali Majrashi, Dlal Rhail Alrwaili, Abdulmajeed Mofareh Hassab Alruwaili, Tahani Mohammed Ahmed Al-Ghamdi, Munira Abdo Walby, Afnan Raheel Al-Ruwaili, Mai Miteb Al-Mutairi physical recovery, monitoring for complications such as hemorrhage or infection. They also assess the newborn's health and provide necessary interventions [11].

- Education and Support: Nurses educate mothers about breastfeeding, newborn care, and self-care during recovery. They provide emotional support and resources for mental health, recognizing the importance of addressing postpartum depression and anxiety [12].
- Discharge Planning: Nurses play a key role in discharge planning, ensuring that mothers and families have the resources and knowledge needed for a smooth transition home. They provide information on follow-up appointments, community resources, and support groups [13].

3. Challenges Faced by Nurses in Obstetric Care

Despite their critical role, nurses in obstetric care face numerous challenges that can significantly impact their ability to provide high-quality care. These challenges are multifaceted and can arise from systemic issues, the nature of the work itself, and the evolving landscape of healthcare. Understanding these challenges is essential for developing strategies to support nurses and improve maternal and neonatal outcomes. The following sections delve deeper into some of the primary challenges faced by obstetric nurses [14].

3.1 Staffing Shortages

One of the most pressing issues in obstetric care is the persistent shortage of nursing staff in maternity units. This shortage can lead to increased workloads and heightened stress for nurses, which can ultimately compromise patient care. High nurse-to-patient ratios are a significant concern, as they reduce the amount of time nurses can spend with each patient. In obstetric settings, where individualized care and emotional support are paramount, this can lead to inadequate monitoring of both maternal and fetal health [15].

Moreover, staffing shortages can result in burnout, as nurses may be required to work overtime or take on additional responsibilities without adequate support. This situation can create a vicious cycle: as nurses experience burnout and job dissatisfaction, they may leave the profession, exacerbating the staffing crisis. The lack of sufficient staff not only affects the quality of care provided but also places additional emotional and physical strain on the remaining nursing staff. Consequently, addressing staffing shortages through recruitment, retention strategies, and supportive work environments is crucial for ensuring that nurses can deliver safe and effective obstetric care [16].

3.2 Emotional and Physical Demands

The emotional and physical demands of obstetric nursing are significant and can take a toll on nurses' well-being. Nurses often work long hours in high-stress environments, which can lead to chronic fatigue and job dissatisfaction. The nature of obstetric care involves dealing with critical and often unpredictable situations, including complications during labor and delivery, which can create a high-pressure atmosphere [17].

Additionally, the emotional toll of caring for patients during critical moments—such as experiencing complications, loss, or unexpected outcomes—can profoundly impact nurses' mental health. Nurses are often the primary source of support for families during these challenging times, and the weight of this responsibility can lead to compassion fatigue or secondary traumatic stress. It is essential for healthcare organizations to recognize these emotional challenges and provide resources such as counseling services, peer support groups, and wellness programs to help nurses cope with the demands of their profession [18].

Moreover, the physical demands of the job, including long hours on their feet, lifting and repositioning patients, and managing multiple tasks simultaneously, can lead to musculoskeletal injuries and other health issues. Ergonomic training and proper staffing levels can help mitigate these risks, ensuring that nurses can perform their duties effectively while maintaining their health [19].

3.3 Evolving Guidelines and Practices

The field of obstetric care is constantly evolving, with new evidence-based practices and guidelines emerging regularly. While this evolution is essential for improving patient outcomes, it also presents challenges for nurses who must stay updated on these changes. The rapid pace of advancements in medical knowledge and technology can be overwhelming, particularly when combined with the demands of a busy clinical schedule [20]. Nurses are responsible for implementing these new practices in their daily routines, which requires ongoing education and training. However, finding time for professional development amidst heavy workloads can be difficult. Furthermore, the lack of standardized training programs across institutions can lead to inconsistencies in knowledge and practice among nurses. To address these challenges, healthcare organizations must prioritize continuing education and create structured training programs that facilitate the integration of new guidelines into clinical practice [21].

Additionally, fostering a culture of lifelong learning and collaboration among healthcare professionals can help nurses feel more confident in adapting to changes in obstetric care. Encouraging interprofessional education and teamwork can enhance nurses' understanding of their roles within the broader healthcare team, ultimately benefiting patient care [22].

4. Future Implications for Nursing in Obstetric Care

As the landscape of healthcare continues to evolve, the role of nurses in obstetric care will also change. Future implications for nursing in this field include the need for enhanced education and training, advocacy for nursing roles, and the integration of technology to improve patient care [23].

4.1 Enhanced Education and Training

There is a growing need for enhanced education and training programs for nurses specializing in obstetric care. The complexities of maternal and neonatal care require a solid foundation of knowledge and skills. Incorporating simulation-based learning and interprofessional education into nursing curricula can better prepare nurses for the challenges they will face in clinical practice. Simulation training allows nurses to

Sharifah Mohammed Faleh Al-Saluli, Hanan Mahdi Alenazi, Fatima Saeed Al-Qahtani, Hakam Qasim Ali Majrashi, Dlal Rhail Alrwaili, Abdulmajeed Mofareh Hassab Alruwaili, Tahani Mohammed Ahmed Al-Ghamdi, Munira Abdo Walby, Afnan Raheel Al-Ruwaili, Mai Miteb Al-Mutairi

practice critical skills and decision-making in a safe environment, ultimately increasing their confidence and competence [24].

Moreover, ongoing professional development opportunities are essential for keeping nurses informed about the latest evidence-based practices. Organizations should invest in continuing education programs that address the specific needs of obstetric nurses, focusing on areas such as maternal-fetal health, emergency response, and patient-centered care. By fostering a culture of continuous learning, healthcare institutions can empower nurses to deliver high-quality obstetric care [25].

4.2 Advocacy for Nursing Roles

Advocacy for the nursing profession is essential to ensure that nurses are recognized for their contributions to obstetric care. This includes promoting policies that support adequate staffing levels, mental health resources, and professional development opportunities. Advocacy efforts should focus on raising awareness about the critical role nurses play in maternal and neonatal health, emphasizing the need for supportive work environments that prioritize nurse well-being. Furthermore, engaging in policy discussions at local, state, and national levels can help shape legislation that benefits the nursing workforce. By collaborating with professional organizations and stakeholders, nurses can advocate for changes that enhance their working conditions and ultimately improve patient care. This advocacy is vital not only for the current nursing workforce but also for attracting new talent to the profession, ensuring a sustainable future for obstetric nursing [26].

4.3 Integration of Technology

The integration of technology in obstetric care presents numerous opportunities for nurses to enhance patient care. Innovations such as telehealth, electronic health records, and mobile health applications can streamline workflows, improve communication, and facilitate access to care for patients. Telehealth, in particular, has gained prominence, allowing nurses to provide prenatal education, monitor patients remotely, and offer support during the postpartum period [27].

Utilizing technology can also enhance data collection and analysis, enabling nurses to track patient outcomes more effectively and identify areas for improvement. Training nurses to use these technologies proficiently is essential for maximizing their potential benefits. Healthcare organizations should invest in training programs that equip nurses with the skills needed to navigate and leverage technology in their practice. Moreover, fostering a culture of innovation within healthcare settings can encourage nurses to explore new technological solutions that enhance patient care. By involving nurses in the decision-making process regarding technology implementation, organizations can ensure that the tools introduced align with the needs of both patients and nursing staff [28].

2. Conclusion

Nurses play a vital role in obstetric care, providing essential support and expertise throughout the perinatal period. Their contributions significantly impact maternal

and neonatal outcomes, emphasizing the importance of patient-centered care. Despite the challenges they face, nurses continue to adapt and evolve in their roles, ensuring that women receive safe, effective, and compassionate care during one of the most significant times in their lives. As the field of obstetrics continues to advance, ongoing education, advocacy, and support for nurses will be crucial in promoting the health and well-being of mothers and their newborns.

References

- (2016). Birth plans: encouraging patient engagement. the journal of perinatal education, 25(4), 215-222. https://doi.org/10.1891/1058-1243.25.4.215
- (2023). Correlation of academic and clinical practice performance of nursing students in an obstetrics and gynecology nursing course; at woldia university, ethiopia. sage open, 13(4). https://doi.org/10.1177/21582440231209728
- (2022). Perceptions of postpartum women about educational practices developed in a normal birth center: a descriptive-exploratory study. cogitare enfermagem, (27), 1-9. https://doi.org/10.5380/ce.v27i0.87186
- (2011). Skilled birth attendants in mexico: how does care during normal birth by general physicians, obstetric nurses, and professional midwives compare with world health organization evidence-based practice guidelines?. journal of midwifery & women s health, 57(1), 18-27. https://doi.org/10.1111/j.1542-2011.2011.00075.x
- (2022). Obstetric nursing in minas gerais: analysis of emergence and provenance. texto & contexto enfermagem, 31. https://doi.org/10.1590/1980-265x-tce-2022-0259en
- (2015). Depressive symptoms and violence exposure: contributors to repeat pregnancies among adolescents. the journal of perinatal education, 24(4), 225-238. https://doi.org/10.1891/1058-1243.24.4.225
- (2021). Work activities of primary health care nurses in poland: national survey results. bmc nursing, 20(1). https://doi.org/10.1186/s12912-021-00541-2
- (2021). Humanization practices in the parturitive course from the perspective of puerperae and nurse-midwives. revista brasileira de enfermagem, 74(suppl 4). https://doi.org/10.1590/0034-7167-2019-0743
- (2021). Effect of "motivational interviewing" and "information, motivation and behavioral skills" on choosing mode of delivery in pregnant women: a randomized controlled trial.. https://doi.org/10.21203/rs.3.rs-62237/v3
- (2022). Nurse allocation in hospital: hybridization of linear regression, fuzzy set and gametheoretic approaches. sadhana, 47(3). https://doi.org/10.1007/s12046-022-01932-0
- (2023). Effect of "motivational interviewing," and "information, motivation and behavioral skills" counseling interventions on choosing the mode of delivery in pregnant women: a randomized controlled trial.. https://doi.org/10.21203/rs.3.rs-2378632/v1
- (2023). Effect of childbirth education program on maternal anxiety: a randomized controlled trial using roy's adaptation model. journal of health technology assessment in midwifery, 6(1), 36-48. https://doi.org/10.31101/jhtam.2862
- (2022). Effects of educational program on maternity nurses' knowledge and practice regarding obstetric triage. egyptian journal of health care, 13(2), 1739-1754. https://doi.org/10.21608/ejhc.2022.254822
- (2023). The history of obstetric nurses' professional training of in minas gerais (1957-1999): a genealogical analysis. revista brasileira de enfermagem, 76(2). https://doi.org/10.1590/0034-7167-2022-0459
- (2023). Induction of labor education and advocacy. mcn the american journal of maternal/child nursing, 48(6), 349-349. https://doi.org/10.1097/nmc.0000000000000052
- (2017). Effects of antenatal education program on postpartum functional status and depression. clinical and experimental health sciences, 7(4), 133-138.

- Sharifah Mohammed Faleh Al-Saluli, Hanan Mahdi Alenazi, Fatima Saeed Al-Qahtani, Hakam Qasim Ali Majrashi, Dlal Rhail Alrwaili, Abdulmajeed Mofareh Hassab Alruwaili, Tahani Mohammed Ahmed Al-Ghamdi, Munira Abdo Walby, Afnan Raheel Al-Ruwaili, Mai Miteb Al-Mutairi https://doi.org/10.5152/clinexphealthsci.2017.284
- (2021). Female genital mutilation/cutting education for midwives and nurses as informed by women's experiences: protocol for an exploratory sequential mixed methods study. jmir research protocols, 10(10), e32911. https://doi.org/10.2196/32911
- (2022). Local knowledge and derived practices of safety during pregnancy, childbirth and postpartum: a qualitative study among nurse-midwives in urban eastern tanzania. bmj open, 12(12), e068216. https://doi.org/10.1136/bmjopen-2022-068216
- (2014). Implications for nurses and researchers of internet use by childbearing women. nursing for women s health, 18(5), 392-400. https://doi.org/10.1111/1751-486x.12147
- (2016). Relationship between nursing students' emotional intelligence and their clinical performance during obstetrics and gynaecologic nursing practical training. american journal of nursing science, 5(6), 240. https://doi.org/10.11648/j.ajns.20160506.12
- (2011). Grand multiparous women's perceptions of birthing, nursing care, and childbirth technology. the journal of perinatal education, 20(2), 108-117. https://doi.org/10.1891/1058-1243.20.2.108
- (2023). Experiences of nurses returning to work after the second/third childbirth and organizational support in southeastern china: a qualitative exploration. journal of nursing education and practice, 13(8), 8. https://doi.org/10.5430/jnep.v13n8p8
- (2010). Grant writing for childbirth educators: lessons learned from the resource center for young parents-to-be. the journal of perinatal education, 19(1), 40-46. https://doi.org/10.1624/105812410x482338
- (2013). Historical reflection on health promotion within midwifery care in the united states. journal of midwifery & women s health, 58(3), 253-256. https://doi.org/10.1111/jmwh.12029
- (2023). Effect of respectful maternity care educational program on the perception of internship nursing students. tanta scientific nursing journal, 31(4), 34-50. https://doi.org/10.21608/tsnj.2023.328652
- (2023). Effect of an educational program on knowledge and self care practices of pregnant women regarding prevention of puerperal sepsis. journal of nursing science benha university, 4(2), 51-68. https://doi.org/10.21608/jnsbu.2023.306049
- (2017). 'unladylike commotion': early feminism and nursing's role in gender/trans dialogue. nursing inquiry, 24(1). https://doi.org/10.1111/nin.12179
- (2020). The development and testing of a co-designed distance learning programme to improve the knowledge of trained auxiliary nurse midwives in normal midwifery practice in central india. journal of research in nursing, 25(6-7), 541-558. https://doi.org/10.1177/1744987120952836