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**Knowledge, Attitude and Practice of Nurses and Midwives
Toward Mothers with Miscarriage/Stillbirths in West Bank,
Palestine**

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**Knowledge, Attitude and Practice of Nurses and Midwives
Toward Mothers with Miscarriage/Stillbirths in West Bank ,
Palestine**

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Thesis Approval

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Dedication

To the Heavenly God, who has consistently provided me with direction. Through all of the difficulties and victories of this effort, your love and fidelity have supported me, and I devote this accomplishment to You alone.

To My Family, Your endless love, unwavering support, and constant prayers have been the foundation of my strength. Every step I have taken on this journey was guided by your encouragement and belief in me. I am forever grateful for the light you have brought into my life.

To My Beloved Husband, Your patience, motivation, and constant reassurance have been my anchor throughout this journey. Thank you for standing beside me in moments of difficulty .

To Myself, For every late night, every challenge faced, and every moment of perseverance you made it. This work is a testament to your dedication, resilience, and determination. I am proud of the strength within me that carried me to this point.

To Dr. Rabhi Bsharat, With deep appreciation and respect, I extend my heartfelt thanks for your invaluable guidance, insightful feedback, and continuous encouragement. Your mentorship has played a crucial role in shaping the quality and direction of this thesis. Thank you for your time, patience, and belief in my abilities.

To All My Master's Professors, Thank you for the knowledge you have shared, the support you have provided, and the inspiration you have instilled throughout my academic journey.

Sign :Aya . A.J . Awad

Declaration

We declare that this thesis entitled Knowledge, Attitude and practice of Nurses and Midwives toward mothers with miscarriage /stillbirth and recurrent Abortion .

was written by me for the fulfillment of requirements for the Master`s degree in Maternity and child Health under the guidance of Dr. Rabhi Bsharat.

The work provided in this thesis is the researcher`s own work and has not been submitted elsewhere for any other degree or qualification .

Signed 

Sign : Aya A. J Awad

Date: 3/1/2026

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Aya A. J Awad

Abstract

Background

Miscarriage / stillbirth and recurrent abortions are examples of pregnancy loss, which is an extremely upsetting experience that need both compassionate and skilled treatment. When it comes to providing afflicted mothers with emotional, physical, and psychological assistance, nurses and midwives are essential. The research on knowledge, attitudes, and practices in providing care for women who have lost a pregnancy is reviewed in this theoretical study. that although there is some fundamental knowledge, there are still difficulties, especially when it comes to offering emotional assistance. In order to provide grieving mothers with more compassionate and patient-centered care, the study emphasizes the necessity of continuing education, communication training, and supporting policies.

Aim of the study:

To assess the Knowledge, Attitude and practice of Nurses and Midwives toward mothers with miscarriage /stillbirth .

Methodology :

This study used a cross-sectional, quantitative design. a convenience sample of 123 nurses and midwives employed in Palestinian government and private hospitals' labor and postpartum departments. A Self-administered created by the researcher following a thorough analysis of earlier research was used to collect data. Thirty-three items made up the final instrument, which included important areas of clinical practices, attitudes, and knowledge in pregnancy-loss treatment. During their work shifts, participants anonymously filled out the questionnaire, and all information was kept private. This analytical approach made it possible to identify gaps in the care given to grieving moms and to conduct a thorough evaluation of present procedures.

Results:

The study involved 123 nurses and midwives Although there were gaps in areas like the function of vitamin D and the interpretation of the effect toxoplasmosis on infection, the overall level of knowledge was good (70.6%). Participants' attitudes on providing care for mothers who have lost a pregnancy were indifferent ($M = 3.55$), but they generally had positive opinions about nonjudgmental support and communication. Clinical practices were modest ($M = 3.50$), with in-hospital procedural treatment being less common than instructional practices. Age, education level, years of experience, and hospital type all showed significant disparities in knowledge, attitudes, and practices. There was no significant link found between knowledge and either attitude or practice, however there was a high positive correlation found between attitude and practice ($r = 0.525$, $p < 0.001$).

Conclusion:

The study revealed that although nurses and midwives generally demonstrate good levels of knowledge, their attitudes toward caring for mothers experiencing pregnancy loss remain neutral, and their practices are at a moderate level. Notable gaps persist in specific clinical aspects of care as well as in the provision of emotional and psychosocial support. Furthermore,

nurses' and midwives' competency levels were found to be significantly influenced by factors such as age, educational attainment, years of professional experience, and hospital type. These findings highlight the need to strengthen training programs, enhance communication skills, and establish clear institutional guidelines to promote compassionate, comprehensive, and evidence-based care for grieving mothers.

Key Words: Stillbirth, Miscarriage, Nurses, Midwives, Knowledge, Attitude, practice, Recurrent abortion.

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List of Abbreviation

WHO	World Health Organization
MOH	Ministry of Health
NPs	Nurse practitioners
UK	United kingdom
UN	United Nations
ICM	International Confederation of Midwives
KAP	knowledge, attitudes, and practices
SFL	Stillbirth fetal loss
BS	Bereavement support
PBCCS	Perinatal Bereavement Care Confidence Scale
IVF	In vitro fertilization
CVI	content validity index
I-CVI	Item – level Content Validity Index
S-CVI	Scale - level content Validity Index
SPSS	Statistical Package for the Social Sciences
SRHR	Sexual and Reproductive Health and Rights
PTSD	Post-Traumatic stress Disorder
LMICs	Low and Middle Income Countries

Chapter one :

Introduction

1.1Background

According to the World Health Organization (WHO, 2023), stillbirth occurs when one gives birth to a baby who has not moved after 28 weeks of gestation or the fetus has a weight of over 500 grams. Miscarriage, in its turn, is the loss of a pregnancy within 20 gestation weeks or with a fetus having a weight lower than 500 grams (WHO, 2023). Stillbirth and miscarriage are deeply traumatic experiences that lead to strong social, psychological, and physical implications to women and their families. In the world, it can be estimated that two million stillbirths take place annually, and about 15-20 percent of the pregnancies are terminated (preaching et al., 2023). These losses not only impact physical health, but also profoundly touch on emotional, social and cultural aspects of family living. During and after pregnancy loss, nurses and midwives are in the front lines of care offering important medical, psychological, and bereavement assistance (Ellis et al., 2016 , WHO, 2023).

Stillbirth and miscarriage are two critical public health issues across the world. In a report, WHO (2019) estimates that there are 1.9 million stillbirths each year with a 13.9 global rate per 1000 total births and over 40 percent of them happen during labor meaning that they can be prevented by better obstetric practice (Hug L et al., 2021). Correct national statistics of stillbirths and miscarriages are still scarce in Palestine but the indicators used in maternal and child health are high-risk. Infant mortality rates are estimated at 12 out of 1000 live births (PCBS, 2020). High-risk pregnancies are highly prevalent in Gaza Strip, largely due to the prolonged conflict, deteriorating health infrastructure, and limited access to essential maternal services. Continuous conflict and movement restrictions have severely weakened the quality and availability of

medical facilities, reducing women's access to timely antenatal and emergency obstetric care. There is an urgent need for improved maternal healthcare in the region (WHO, 2024).

Stillbirth is a traumatic experience that not only to families but also to the healthcare provider. The world has a wide range of rates, with a minimum of 0.19 per 1,000 births in Iceland and a maximum of 3.22 in Guinea-Bissau, with the factors contributing to these differences being maternal traits, socioeconomic status, and the capacity of the healthcare system (De L. et al., 2024). It is a long-term health complication affecting the world because in a year there are approximately two million stillbirths (Horey et al., 2021).

The role of nurses and midwives is vital not just in the field of clinical administration, but the ability to communicate with empathy, care, and support to bereaved individuals. Nevertheless, it has been shown that there are numerous obstacles such as the lack of training, personal differences in beliefs and inconsistent practices regarding the support of bereaved mothers (Ali et al., 2024). Numerous health practitioners discuss their inadequacy and an emotional burden caused by treating families who suffer pregnancy loss, which explains the necessity of a systematic training system and positive job conditions (Leitao, S. et al., 2021).

Midwives and nurses working in labor and postnatal departments offer all-day monitoring, emotional and necessary education during pregnancy and childbirth as well as during the postpartum period (Peracchini et al., 2023). Their mandate involves working with the multidisciplinary teams to provide holistic and personalized maternal care. Although they play a very crucial role, international studies indicate huge gaps in training concerning miscarriage and stillbirth. Evidenced specific training enhances clinical confidence, bereavement communication, and quality of care (Galeotti et al., 2023; Liu et al, 2023). On the other hand, a study in Russia revealed that a third of women who had stillbirth felt that the care they got was poor, and this required sensitivity, psychological support, and respect of parental choices (Mysovskaya et al., 2022).

It has been evidenced in low-middle income countries that high-quality antenatal care is a significant abater of stillbirth risk. In Ethiopia, 3/4 or more of the essential antenatal services lowered the antepartum stillbirth by 81% (Berhe et al., 2023). On the same note, through the use of skilled birth attendance in conjunction with emergency obstetric services, intrapartum stillbirth can be reduced by 23 percent, which highlights the importance of professionals and prompt care (De Roose et al., 2018). Nonetheless, not all nurses and midwives provide bereavement care, although they are aware of the significance of emotional and psychosocial care, as they do not have enough training, time, and confidence (De Roose et al., 2018)

This disparity is visible in terms of regions. Although perinatal bereavement training in high-income nations, including the UK and Sweden, is organized, countries with lower and middle incomes still face a major shortage of knowledge (Roberts et al., 2024). Research also indicates that in most instances, nurses find it hard to cope with the emotional load of repeat pregnancies loss, which underscores the necessity of enabling working conditions and coping mechanisms (Yang et al; 2025). In particular, a study conducted at Bint Al-Huda Hospital in Jordan found

that the knowledge of necessary post-abortion care activities and their application is low, so it is necessary to focus on specific training (Hammood et al., 2020).

The psychological, social and physical effects of pregnancy loss are also devastating. Women that miscarry or experience stillbirth are at increased risks of developing depression, anxiety and PTSD (Westby et al; 2021). Women can be stigmatized, shameful, and isolated socially, which also increases emotional distress. Physically, it has been seen that pregnancy loss is connected with high chances of future complications, such as gestational and non-gestational diabetes. The marital and partner relationships can also be poor, and the findings indicate more relationship problems months following stillbirth. Institutional resources, staffing, and bereavement protocols all play a role in affecting the capacity of nurses and midwives to deliver quality care (De Los. et al., 2024).

Knowledge about miscarriage and stillbirth

The information about miscarriage and stillbirth among nurses and midwives is rather different, as most of the studies indicate that nurses and midwives have considerable gaps in their knowledge about the medical and psychosocial implications of pregnancy loss (Mysovskaya et al., 2022). Despite having the clinical definition, causes, and risk factors of miscarriage and stillbirth, many healthcare providers do not have sufficient knowledge regarding bereavement care, communication skills, and emotional support of grieving families (Heazell et al., 2016; Galeotti, et al., 2023). Belgian and Japanese studies revealed that over 60-70 percent of the nurses and midwives were not provided with sufficient formal education on pregnancy-loss-related care during their training, and fewer than half of them received continuing education in this field (De Roose et al., 2018; Liu et al., 2023). There were knowledge gaps, in particular, in providing parents with counseling, offering memory-making opportunities, and decision-making support in relation to the holding or seeing of the deceased baby (Mysovskaya et al., 2022). Research in low- and middle-income countries also demonstrated a lack of knowledge regarding the application of standardized strategies to deal with pregnancy loss, the uneven evaluation of the emotional reaction, and insufficient knowledge of the role of cultural factors in grief (Ali et al., 2024; Hammood et al., 2020). In general, the literature shows that even with basic clinical knowledge, a significant number of nurses and midwives have deficient knowledge based on evidence that allows providing holistic and sensitive care, which also requires structured training programs and updated professional guidelines (Galeotti et al., 2023; Roberts et al., 2024).

Attitudes about miscarriage and stillbirth

Nurse and midwife attitudes towards miscarriage and stillbirth are very crucial in the determination of the level of bereavement care provided to the affected women. Research findings reveal that although most medical professionals are empathetic and willing to be helpful during the grieving process of parents, they also report their discomfort, emotional weight, and confusion when responding to pregnancy death (De Roose et al., 2018). Fear of inflicting further suffering, personal emotional responses to fetal demise, and lack of experience with well-organized bereavement training are the reasons why negative or neutral attitudes occur (Yenal et al., 2023). Surveys of the European and Asian populations show that providers who do not

have training tend to have more avoidant attitudes, they are more reluctant to start a supportive conversation or feel unprepared to address the emotional needs of parents (Liu et al., 2023; Mysovskaya et al., 2022). Attitudes can also be influenced by cultural and religious beliefs, which will determine the way the nurse views the death of pregnancy as a family issue, a normal event, or a traumatic event demanding professional psychological interventions (Ali et al., 2024). the desire to learn and adjust their practice to better suit the needs of bereaved mothers is strongly expressed by the majority of nurses and midwives, as compassionate communication and the emotional presence they provide are regarded as essential (Peracchini et al., 2023). These results demonstrate that specific training programs that enhance confidence, decrease emotional distress, and promote a more positive and supportive attitude toward women who have miscarriage and stillbirth are necessary.

Practices about miscarriage and stillbirth

Nursing and midwifery practices concerning women going through miscarriage and stillbirth are often not the same across the board, which is a sign of unprofessional training, institutional protocols, and lack of ability to cope with the emotional side of things (Fernández- Basanta et al ; .,2020). Studies have been conducted to find out which parts of the care given by many physicians in a competent way—such as taking vital signs, controlling bleeding, and making the patient physically safe—are generally weak; these studies showed that performance in psychosocial support, communication, and grieving interventions is weak (Hammood et al., 2020; Rubio-Alvarez, et al., 2024). According to studies done in different countries, it has been found that less than 50% of nurses carry out essential supportive practices such as showing recognition to parents' grief, giving them clear information about the loss, creating memory-making chances, and allowing parents to decide about seeing or holding the baby (Mysovskaya et al., 2022; Peracchini et al., 2023). The factors that hinder nurses' and midwives' optimal practice include the work burden, no privacy in clinical areas, guidelines that are not comprehensive, and doctors and nurses feeling uncomfortable emotionally (Ali et al., 2024). In addition to that, there are studies that say that healthcare professionals who receive training in grief counseling skills beforehand issue and deliver communication skills that are measurably better, along with the more caring and kind behaving, and they are also more confident in dealing with emotional and spiritual needs of the parents (Galeotti et al., 2023; Roberts et al., 2024). Nonetheless, in several low-resource settings, practices continue to be predominantly task-oriented, with inadequate attention paid to comprehensive, family-centered bereavement support (Hammood et al., 2020; Sharma, et al, 2022). All in all, the literature points to the fact that the making of standardized Sharma, Buidelines, the establishment of structured training programs, and the creation of supportive work environments will be the main ways of enabling nurses and midwives to convert knowledge and attitudes into consistent and high-quality bereavement .

The KAP (knowledge, attitudes, and practices) of nurses and midwives evaluation is obligatory for recognizing the care quality given to women who happen to face either a miscarriage or a stillbirth. Research says that although a lot of healthcare providers do have at

least basic clinical knowledge about pregnancy losses, there still exist large areas where the knowledge is lacking particularly in the areas of emotional support, communication, and bereavement care(Ali et al., 2024 ;Heazell et al., 2016;). Different studies declare that the attitudes toward pregnancy loss are very different and mainly affected by cultural beliefs, personal experiences, and institutional norms. People's attitudes might range from neutral to uncertain mostly because of their emotional discomfort, limited training, and fear of saying something wrong to the grieving families (Leitao et al., 2023). Practice levels appear to be, more often than not, moderate, with nurses feeling more confident in giving physical care than providing psychological and spiritual support (Peracchini et al., 2023). Inadequate training and limited organizational guidelines together have been shown to cause inconsistency in the way care is given (De Roose et al., 2017). The KAP of nurses and midwives improvement, especially those via structured teaching, communication skills training, and supportive workplace policies, is linked with the betterment of bereavement care, as nurses become more compassionate, thereby offering patient-centered support to women after losing a pregnancy (Galeotti et al., 2023; Roberts et al., 2024).

The International Confederation of Midwives (ICM) accepts that midwives are the most important source of support to women who have a miscarriage and stillbirths , despite limited empirical studies concerning their KAP in this area. ICM's Essential Competencies for Midwifery Practice specify that midwives have to provide “abortion related care” in a culturally sensitive manner, this includes miscarriage, offering both physical and psychological support to women before, during, and after the loss.(ICM, 2019) , Over the years, (ICM) has continuously updated its competencies to reflect evolving priorities in midwifery practice. The 2024 revision of the ICM Essential Competencies further emphasizes sexual and reproductive health and rights (SRHR), explicitly including structured bereavement care for pregnancy loss as a core competency. By formally recognizing bereavement support for miscarriage and stillbirth as an essential skill, the ICM underscores the midwife's responsibility to provide comprehensive, culturally sensitive, and evidence-based care that addresses both the physical and psychological needs of women and their families throughout the pregnancy loss process (ICM, 2024). Despite its importance, research specifically assessing midwives' KAP regarding miscarriage is limited. For example, a 2022–2023 qualitative study of midwives in Ireland found that they often lack formal training, institutional guidance, and emotional support to provide effective bereavement care after perinatal loss (Whitehouse et al. 2023). Additionally, a 2024 phenomenological study of Spanish midwives revealed that staffing shortages, inadequate resources, and the absence of standardized bereavement protocols hinder consistent, compassionate care for families experiencing stillbirth (De Los et al., 2024).

One of the factors that depict the inadequate health care system in Palestine is stillbirth, which is considered a major public health issue with an estimated incidence rate of about 12-20 per 1000 total births, which is higher than the average in high-income countries. Research in Palestinian governmental hospitals indicates that stillbirths are sometimes caused by prenatal care factors that could have been avoided, such as insufficient antenatal follow-up, delays in

care seeking or receiving, maternal conditions like hypertension and diabetes, and difficulties in monitoring fetal heart rate during labor (PHIC, 2024).

World Health Organization suggests that improving midwife-led care, reinforcing antenatal screening, and providing timely intrapartum interventions are the main strategies to decrease the stillbirth rate. Because of the pivotal role of midwives in Palestinian maternity care, equipping them with appropriate knowledge, skills, and good working conditions is a prerequisite to improving maternal and newborn health outcomes(WHO, 2020).

The Palestinian health system is indeed a complicated and sensitive one and operates in a very delicate political and socioeconomic situation characterized by a lack of resources, movement restrictions, and a fragmented system of governing between the West Bank and Gaza Strip. Maternity and newborn health in the Palestinian territories, however, is a battle that still goes on, and in this battle, midwives are the major actors playing the different roles of providing reproductive, antenatal, intrapartum, and postnatal care (Peracchini et al., 2023).. Midwives in Palestine are indeed the first healthcare providers; especially in government hospitals and health centers, where they are responsible for managing a considerable part of labor and delivery services. As part of the international health policy to implement best practices, midwives' duties have been increased. Still, the system is facing huge challenges such as not having enough staff, depleted resources, and no or very limited professional development opportunities.

1.2. Problem statement

Despite the profound emotional, social, and economic consequences of miscarriage and stillbirth, there is a noticeable lack of research in Palestine assessing the knowledge, attitudes, and practices of healthcare providers, particularly nurses and midwives. During practical training periods, gaps in experience, skills, knowledge, and attitudes were observed among staff caring for women experiencing stillbirth or miscarriage. Globally, an estimated 23 million miscarriages and 2 million stillbirths occur annually, yet care provided is often inadequate due to limited knowledge, inconsistent attitudes, and insufficient practical skills among frontline healthcare providers (WHO, 2023). Studies in Japan and Belgium confirm that a significant proportion of nurses and midwives lack formal education and training, although they are willing to support grieving parents (De Roose et al., 2017; Japanese Nursing Staff Study, 2023). Emotional barriers, fear of causing distress, and lack of institutional protocols further limit effective practice (Care Perceptions Study, 2023; Fernández-Basanta et al., 2024). These gaps highlight the urgent need to assess and improve knowledge, attitudes, and practices among nurses and midwives in Palestine to ensure effective, compassionate, and evidence-based care for women experiencing pregnancy loss.

1.3. Justification / Significance of the study

This study aims to assess the knowledge, skills, and attitudes of nurses and midwives regarding care for women experiencing miscarriage and stillbirth. Addressing the current gaps will contribute to better hospital policies, improve clinical practice, and empower healthcare providers to deliver comprehensive support. Workshops, seminars, and structured training programs can equip nurses and midwives with essential competencies, bridging the gap between

existing evidence-based guidelines and current clinical practices. The study is particularly significant in Palestine, where pregnancy loss is relatively common, and bereavement services remain limited. By strengthening the preparedness of healthcare providers, the study will ultimately improve maternal healthcare quality, support grieving families, and ensure the delivery of compassionate, respectful, and high-quality care.

1.4. General Objective

- To assess the Knowledge, Attitude and practice of Nurses and Midwives toward mothers with miscarriage / stillbirth .

1.4.1. Specific Objectives

1. To assess the level Knowledge , Attitude and practice of Palestinian Nurses and Midwives about miscarriage and stillbirth. .
2. To assess the relationship between dependent variable(KAP toward mothers with miscarriage and stillbirth) and independent variable (demographic data).

1.5 Research Questions

Q1. What is the level Knowledge, Attitude and practice of Palestinian Nurses and Midwives about miscarriage and stillbirth?

Q2. What is the relationship between dependent variable (KAP toward mothers with miscarriage and stillbirth) and independent variable (demographic data).

1.6. Study hypothesis

Here are null hypotheses

1. There is no significant relationship between dependent variable (KAP toward mothers with miscarriage and stillbirth) and independent variable (demographic data) .
2. There is no significant relationship between demographic data Knowledge , Attitude and practice of Nurses and Midwives toward stillbirth and miscarriage .

1.7. Conceptual Definition

Stillbirth: Stillbirth is defined by the World Health Organization (WHO, 2023) as a baby born with no signs of life after 28 weeks of gestation and with a fetal weight exceeding 500 grams. **Miscarriage** is defined as the loss of pregnancy before 20 completed weeks of gestation or with a fetal weight less than 500 grams (WHO, 2020).

Bereavement care ; care will help you identify strength , difficulties , stressors and coping skills that will help you adapt to a significant loss in your life(Hutti et al., 2016).

Midwife : is a trained health professional who provides care, support, and education to women during pregnancy, childbirth, and the postpartum period, and also offers care for newborns. Midwives are skilled in normal (low-risk) pregnancies and childbirth, promote maternal and newborn health, and refer cases to specialists when complications arise.(WHO 2020) .

Knowledge : is “familiarity, awareness, or understanding of someone or something — such as facts, information, descriptions, or skills — acquired through experience or education.(Gilanie, 2022) .

Attitude can be defined as a belief, idea, or image formed by how something is viewed or understood (Lawn et al., 2016).

Practice : performing an activity repeatedly to gain skill, doing something habitually, or the professional work of doctors/lawyers, involving both the act of doing (verb) and the habit/profession itself (Merriam-Webster , 2023).

Recurrent abortion is defined as the occurrence of two or more consecutive pregnancy losses before fetal viability, usually before 20 weeks of gestation. (American College of Obstetricians

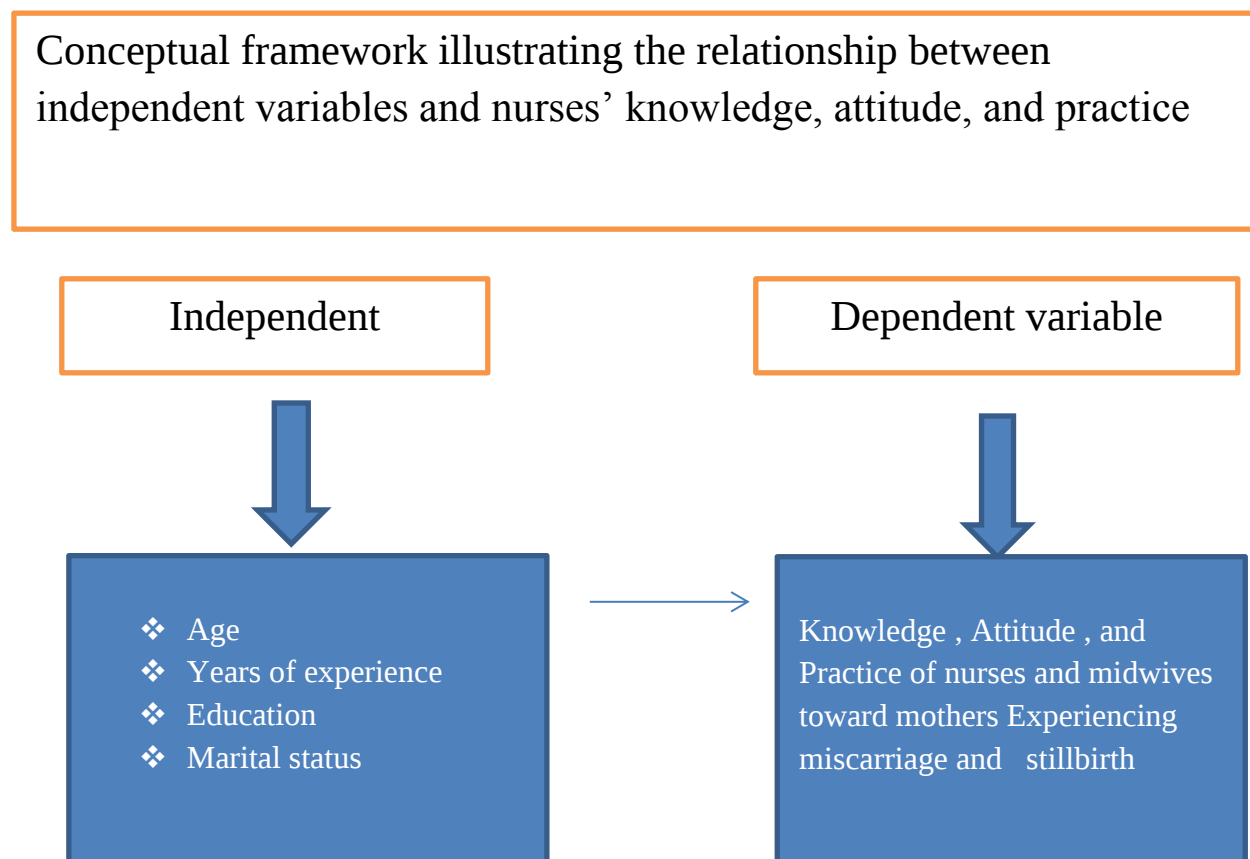


Figure 1.1.Conceptual framework

Chapter Two:

Literature Review

2.1. Introduction

Miscarriage and stillbirth are highly traumatic processes in life, which can lead to catastrophic psychological, social, physical consequences on women and their families. According to an estimate provided by the World Health Organization the number of stillbirths in the world is two million annually, and miscarriage is estimated to happen in 15 to 20 % of pregnancies. Such losses go way beyond the physical health of the individuals, into emotional, cultural, and social aspects of the families concerned. Nurses and midwives in particular are often on the front line in terms of offering medical and psychosocial support throughout and after these experiences (Ellis et al., 2016 ;WHO, 2023).

The loss of pregnancies due to early pregnancy occurs in 10 to 20 percent of known pregnancies. Nurse practitioners (NPs) are important in providing safe and caring services through the provision of medical, expectant, or procedural care as well as psychosocial care. It also points to policy and educational limitations which block full involvement of NPs in miscarriage management, and calls to extend training and involvement in managing miscarriages to provide holistic patient-centered reproductive care (Pravdo et al., 2024).

The functions of nurses and midwives are hence not restricted to clinical interventions but holistic bereavement which involves communication, emotional support, and bereavement guidance. Nonetheless, even though they are central in their role, numerous studies have found that nurses and midwives have significant problems in dealing with miscarriage and stillbirth. The issues that are most prevalent are the lack of knowledge, the insufficiency of training, different attitudes toward grieved mothers, and inconsistencies in clinical practice (Ali et al., 2024).

This chapter is a review of the literature available regarding the KAP(knowledge, attitudes, and practices) of nurses and midwives with regard to mothers who have suffered a miscarriage and stillbirth. The review consists of thematic parts, including knowledge, attitudes, and practices,

and then the idea of emotional and psychological impact on the healthcare provider himself or herself is discussed. Synthesis of gaps in the literature and areas of improvement is also synthesized.

2.2. Searching Strategy

A systematic search was done to find out the related research on nurses and midwives KAP on mothers with miscarriage and still birth. Between 2016 to 2025, electronic databases were searched, such as PubMed, Science Direct, Scopus, Google Scholar, CINAHL. The search strategy incorporated the keywords and the Boolean operators like: “nurses’ knowledge” OR “midwives’ knowledge” “attitude” OR “perceptions” “practice” OR “clinical practice” “miscarriage” OR “reproductive health” OR “pain management” “Palestine” OR “Middle East” OR “developing countries”.

Inclusion and exclusion criteria were used to ensure that the literature reviewed was of good quality and relevant. Peer-reviewed articles in English were the only ones taken into consideration. The inclusion criteria were that the studies had to be based on nurses or midwives and had to cover something about their knowledge, attitude and/or practice and had to be in a hospital or clinical place. Conversely, commentaries, abstracts of conferences, and editorials were excluded as well as the studies which did not focus on KAP among nurses or midwives specifically or which did not relate to the healthcare settings.

Titles and abstracts were then filtered with the application of these criteria and relevancy.

The rest of the full-text articles were then carefully scrutinized and only those articles that fulfilled the inclusion criteria were retained. The high-quality studies discovered in this manner were then subjected to thematic synthesis giving an evidence-based framework to emphasize the gaps in the literature and place them into alignment with the purpose of the present research.

2.3. Global and Professional Perspectives on Perinatal Death

Stillbirth is a deep-rooted societal issue in all parts of the world, and an annual number of close to 2 million babies are stillborn (Peracchini et al., 2023). In this case, midwives and nurses being the main healthcare providers are usually on the front line of care provision. In another recent study, a qualitative study of midwives at the birth unit of a third-level public hospital in Jaen, Spain, in 2023, the effect of the birth of a stillborn child was a major concern not only to families but also to the professionals of the health team, the midwives who deliver crucial care and support (Horey et al., 2021). The process of handling stillbirth cases has proven to cause emotional and psychological effects on the healthcare provider, which in some cases led to burnout and post-traumatic stress disorder (Ravaldi et al., 2025). These results highlight the importance of proper preparation, in terms of education and emotional state, of nurses and midwives, who are directly connected with such incidents.

Stillbirth is a very traumatizing event which not only has many effects on the families but also on health professionals. It happens in approximately 1 out of 200 time in the high-income nations. The rates are widely different and range between 3.22 in Guinea-Bissau up to 0.19 in Iceland. Risk is compounded by a combination of multiple factors, among them the maternal, social and health-system ones. Despite the drop-in global rates, the problem of stillbirth is a

significant concern in terms of the overall health of the population, thus it needs to be prevented and better treated (Gallego et al., 2024). The experiences of the parents after stillbirth have also been well examined since they dictate the kind of care and support that is needed. An example is a qualitative semi-structured interview study done in Ireland involving 15 parents (ten mothers and five fathers) to examine the issue of future pregnancy after stillbirth. Two important themes were identified, including hopes of having a future pregnancy and hopes of care during later pregnancies. Mothers indicated that they wanted to contemplate later pregnancies despite their fears (fathers were not keen on this). One thing that participants had in common was the necessity of further reassurance in further pregnancies with more frequent visits to maternity hospitals. These results help to illustrate the diverse and highly individual outcomes of stillbirth and emphasize how personalized care and multidisciplinary team-based solutions can be used to meet more multifaceted needs of parents (Meaney et al., 2017).

A phenomenological study was carried out in 2023 and included 12 women, who had lost their fetuses. With the help of Colaizzi seven steps analysis, it was possible to identify five key themes including unfulfilled dreams, passing the stage of happiness into grief, personal differences in responses, a new healthy baby bringing new hope, and the long-term emotional consequences of a loss. The results indicated that fetal death is a highly traumatic experience that can have consequences on the psychological well-being of women and their family relations. The paper has highlighted the importance of special attention of health care providers, especially midwives, gynecologists, and family counselors, to provide emotional and long-term help to women who are managing such loss (Amirshahi et al., 2024).

The study was a qualitative descriptive study investigating how stigma affects stillbirth care in healthcare, which was a significant gap in the research. This allowed to identify four main themes, such as (1) personal, societal, racial and cultural bias; (2) quality of care and patient involvement; (3) psychological, behavioral, and health consequences; and (4) institutional culture and readiness through thematic analysis of the experiences of interdisciplinary professionals in healthcare. These results showed that stigma has a strong effect on the mental health of parents as well as the performance of health care providers. The paper has indicated that it is necessary to establish specific interventions to save the face of stigma, improve caring communication, and increase institutional preparedness to care about stillbirths (Freedle et al., 2025).

2.4. Knowledge Of Nurses and Midwives About Miscarriage and Stillbir

Literature demonstrated that the presence of basic biomedical knowledge is not always sufficient, and misunderstandings and gaps still exist- especially when it comes to psychosocial care, the need to be culturally sensitive, and the long-term consequences of miscarriage and stillbirth. These omissions demonstrate the necessity of systematic education and lifelong learning of nurses and midwives. A number of studies have noted the differences in knowledge levels among nurses and midwives in different countries of the world. In a cross-sectional survey in Japan, Horey et al. (2021) confirmed that even though the majority of the survey participants knew that the age of the mother at conception put them at risk of miscarriage (95.9%), fewer of

them knew that repeated pregnancy losses were unexplained (45.1%). This implies that although there is clinical knowledge on cause factors, there are still gaps in the understanding of recurrent miscarriage.

A cross-sectional study in 28 Flanders, Belgium hospitals evaluated the KAP of midwives on miscarriage. The average score of the number of participants (n= 647) was 6.31 out of 10, which represented a moderate level of knowledge. Although 47% of them previously received miscarriage care, 72.4 % had poor knowledge, and 89% of them felt that they needed additional training. The level of knowledge was also much improved when the trained received an education on miscarriage ($p < 0.001$), and those receiving communication training felt more competent to offer psychosocial support (De Roose et al., 2018). A study was carried in the period between January and April 2022 in the Chugoku-Shikokuregion of Japan among 370 nurses and midwives were studied to determine their knowledge and attitudes regarding bereavement care among couples who had miscarriages or stillbirth. The findings revealed that the participants lacked enough information about recurrent pregnancy loss and bereavement support. Only 41.1% had formal education on bereavement care at their educational level, and 64.1% had been trained on it on the job. In spite of these lapses, 79.2% of the people interviewed said they were willing to offer bereavement care. The parental status, age, reproductive history, having a midwifery license, the number of working years, and the workplace environment were among the factors and were strongly associated with the level of knowledge. On the same note, readiness to give care was also positively associated with work environment, midwifery qualification, knowledge on bereavement care and training opportunities (Liu et al., 2023).

Mohamed et al. (2023) evaluated the knowledge of perinatal bereavement in Malaysia and found out that around 67% of nurses did not have adequate knowledge regarding bereavement principles. In a similar fashion, (Yenal et al., 2021) found that in Turkey, a significant proportion of nurses did not diagnose evidence-based reasons behind recurring miscarriage; some of them were attributing it to old-fashioned or mythological explanations. Knowledge deficiencies are not confined to medical etiologies, but rather psychosocial aspects of care. research in Spain and Ireland conducted by (Meaney et al., 2017; Peracchini et al., 2023), indicated that it is essential to comprehend psychological needs of parents, but most healthcare professionals are not trained to support grieving. A qualitative study in Nigeria (Ali et al., 2024) demonstrated that nurses perceived the importance of providing emotional support, but they lacked confidence in providing emotional support because of the deficit of training.

To evaluate the performance and knowledge of 50 nurse-midwives at Bint Al-Huda Hospital, a cross-sectional descriptive study was performed to assess the knowledge and performance of the target group in the period between January 19 and April 30, 2020. The result showed knowledge and practice gaps: only 22% correctly advised their clients to clear the toilet, 44% correctly isolated infected patients, 20% understood the importance of hand washing, 35% accurately evaluated vaginal bleeding, 25% correctly provided their clients with appropriate emotional support, 19% correctly monitored their vital signs, 38% checked the medical profile of their patients, and 40 percent performed the perineum care correctly. These findings suggest

that specific training interventions are required to enhance the knowledge and performance of nurse- midwives in the post-abortion care (Hammood et al., 2020).

Stillbirth fetal loss (SFL) impacts thousands of families and may lead to extreme distress in the parents and nurses. This cross-sectional research evaluated confidence and knowledge in delivering bereavement support (BS) in 48 postpartum RNs on the Perinatal Bereavement Care Confidence Scale (PBCCS), which included knowledge, skills, self-awareness, and organizational support. The outcome indicated average scores in subscales, and greater knowledge and confidence were correlated with age, experience, and previous BS education. Results indicate that further training is necessary to enhance the readiness of the nurses and increase their emotional support of the bereaved families (Salazar et al., 2022).

2.5. Attitudes Toward Mothers with Miscarriage and Stillbirth

Generally, the attitudes are pleasant and are affected by workload, experience and sensitivity to the culture. Interventions at training level and favorable work environments play a very important role in promoting more consistently positive attitude towards bereaved mothers.

Attitudes determine the quality of care provided. Most of the studies demonstrate overall positive attitudes to mothers who have suffered miscarriage and stillbirth that are held by nurses and midwives. As an instance -(Mohamed et al., 2023) identified that 85.2 percent of the respondents in Malaysia had positive perceptions about the delivery of bereavement care. In the study by- (Peracchini et al. ,2023) , Japanese nurses also explained bereavement care as a sign of respect to the mothers and babies, as Japanese culture sees dignity as very important.

Attitudes are not necessarily positive even though the trends are. Research conducted by García-Catena et al. (2023) in Spain found that younger and less experienced nurses tended to use neutral or non-emotional attitudes, which showed a lack of disposition to deal with grief.

Similar conclusions were made by(Ravaldi et al., 2022), as occasionally, repeated exposure to cases of stillbirth resulted in avoidance styles, emotional withdrawal, or burnout. These results indicate that empathy is present but might be compromised by stress, lack of training, or culture.

Attitudes are greatly affected by culture and religion. In a scoping review,(Pollock et al. ,2024) conducted by among First Nations populations in Australia, Canada, and New Zealand found various practices related to stillbirth, including rituals, memory-making, and post-mortem practices. Nurses and midwives were frequently at a loss on how to honor these cultural requirements and as a result were hesitant or avoided. In Muslim dominated countries, religious teachings also influence attitude towards miscarriage, which occasionally translates to the family perceiving losses as Godly will, which changes expectations of healthcare providers.

In 2023 a qualitative study was carried out to investigate the views and experiences of midwives when working with the families after the stillbirth using the hermeneutic phenomenology developed by Gadamer. The birth unit of a third-level Spanish public hospital in Jaen took part in semi-structured interviews with eighteen midwives, which were audio-recorded and transcribed by two researchers by following the approach of Fleming. Two themes came out, namely, (1) the paramount significance of every action of the midwife, and (2) the quality of care offered by the availability of human and material resources. The research noted that the

issue of stillbirth is a complicated phenomenon to both families and the medical practitioners. Effective care delivery requires psychological support, sufficient resources, and compliance with clinical guidelines, which cannot be achieved due to the financial constraints of resources, which can affect midwives on an emotional level. These conclusions highlight the idea that midwives and nurses are in a central position in the management of stillbirths, whose new procedures, proper support, and collaboration with the rest of the healthcare system are necessary to provide the families with sensitive and quality services (De Los Ángeles Linares-Gallego et al., 2024).

2.6. Practices of Nurses and Midwives

Practice is the application of knowledge and attitude into practice. Practices are more organized when there is a guideline. As Roberts et al. (2024) have stressed, patient satisfaction and family coping were better in hospitals that adopted bereavement guidelines, such as communicational rules, memory-making, and post-discharge counseling. Surveys were conducted on a sample of 117 nurses and midwives working in five maternity hospitals in Granada, Spain to determine their perceptions and practice towards perinatal death care and compliance with international standards. The study conducted a response rate of 75.4% with the majority being female (88.9) with an average age of 40.9 years and 17.4 years of experience using the Lucina questionnaire. Perinatal death had greater exposure with midwives (67.5%), as well as more bereavement training. Nevertheless, compliance to international guidelines was low- 57.3% of the cases favored immediate delivery, 26.5% pharmacological sedation, and 47% would take away the baby in case parents refused to see them.

Only half of them (58) supported taking photos, 47% of them would bathe and dress the baby, and 33.3% allowed family presence. The compliance in memory-making was 58% and respect to the baby and parents was 41.9%, delivery management 23%, and follow-up care 10.3% (Martínez- García et al., 2023).

Practices in most settings are however inconsistent. According to Ali et al. (2024), supportive care in the context of Nigerian hospitals was narrowly confined to the minimum of medical care, focused primarily on medical management and less on psychological care and follow-ups. The literature found positive practices as empathetic listening, therapeutic communication, reassurance, and parental involvement in the care (Lee et al., 2023). Promotion of healthy behaviors, including eating well, staying off of harmful substances, and moderate physical activity, has also proven to be an area nurses and midwives perform well (Furtado-Eraso et al., 2020).

The obstacles are work overloads, a shortage of training, no institutional assistance, and the emotional weight of healthcare providers (Fernandez-Basanta et al., 2020). Poor staff to patient ratios also impede giving personalized bereavement care in most LMICs. Nurses and midwives find caring to mothers who have either miscarried or still born to be a challenge emotionally. Research shows that perinatal loss commonly brings about grief and trauma to many professionals, and even symptoms of post-traumatic stress disorder (PTSD) (Jones et al., 2019). Spanish research (Ordóñez et al., 2020) found that moral distress (the discrepancy between

professional norms and personal feelings) was prevalent in nurses. The methods of protection entail the use of structured debriefing, peer support groups and access to counseling services. García-Catena et al. (2023) also found that the prevalence of burnout among hospital staff was lower in hospitals that had formal debriefing systems. On the same note, Yenil et al. (2021) discovered that ongoing learning and mentoring program enhanced the emotional strength and clinical assurance of healthcare personnel.

After the death of their pregnancy, healthcare professionals experience stress and are unprepared to support the parents. Ten studies in five countries were meta-ethnographic revealing the metaphor caring in darkness and five major themes that characterize the experiences of nurses and midwives. There were organizational barriers that usually hampered emotional involvement, and there were professionals who had the right skills, support, and values to offer emotional care, at times at the expense of their own emotions. The results indicate that training and support are necessary to facilitate sensitive and holistic care (Fernández-Basanta et al., 2020). In addition, the literature on general healthcare practices, including (Adisasmita et al., 2021) reflects that the knowledge and attitudes of nurses regarding specific care practices (such as Kangaroo Mother Care and non-pharmacological pain management) depend on their academic

experience and institutional encouragement. These results suggest that the improvement in educational programs can be effective to increase the willingness of nurses and midwives to assist mothers in the event of miscarriage and stillbirth.

2.7. Gaps in Literature

Although there is much research on perinatal loss, there are still various gaps. First, though there is reported basic clinical knowledge among nurses and midwives, there is still reported persistent lack of psychosocial care, communication skills, and culture sensitive practices. Second, training and education before bereavement care is inconsistent, especially in low- and middle-income countries, which puts healthcare providers in an unprepared state. Third, international recommendations are frequently not followed in perinatal bereavement care, with memory- making, involvement of family, and follow-up support practices being not consistently implemented. Fourth, perinatal loss may lead to moral distress, burnout, and post-traumatic stress in nurses and midwives, although organizational support systems like debriefing and counseling are not available in a consistent manner. Fifth, the influence of the knowledge, attitudes, and practices of healthcare providers on the outcomes of parental grief and staff wellbeing in the long- term have not been studied extensively. Lastly, the issue of cultural and contextual factors on the care provision is under-studied, and more region-specific research is needed.

The literature indicates that although healthcare providers generally express positive attitudes and empathy towards parents, knowledge gaps, training gaps, and emotional preparedness gaps exist.

Research in a variety of countries has found that the awareness of medical, psychosocial, and culturally sensitive issues in bereavement care may be inadequately developed, especially in

low-and middle-income environments. There are generous practices and irregular practices in regards to following the international guidelines and memory making processes. Repeated exposure to loss, workload, absence of a structured training system, and a lack of institutional support and burnout are the causes of stress, avoidance behavior, and burnout in healthcare providers.

On the whole, it has been indicated that well-organized education, constant training, emotional support towards the staff, and culturally aware and guideline-based practice are needed to enhance care. By filling these gaps, the effectiveness of nurses and midwives in supporting a grieving family through the perinatal loss will be improved and will enable them to approach patients with compassion, competence, and holistic care.

Chapter three :

Methodology

3.1.Introduction

This chapter presents the research method used to answer the research questions. That is various key aspects are elaborated including methodology concept as research design, research location, research population, sample size, sampling process, inclusion and exclusion criteria, study tools, data collection, ethical and administrative research consideration.

3.2. Study design

A descriptive quantitative study design used to assess the Knowledge, Attitude and practice of Nurses and Midwives toward mothers with miscarriage and stillbirth in Palestine .

3.3. Study population

In this study the target population consisted of 179 nurses and midwives working in the labor and post-natal departments of six Palestinian hospitals have acceptance to participate in this study during the period of data collection for two months from (1/8/2025 – 1/10/2025) which is from Palestinian hospitals that select in West Bank .

3.4. Study setting

This study was conducted non randomly in six hospitals in Palestine West Bank (Al- Ahli hospital , Alia government hospital in South West Bank , Palestine Medical Complex , Red Crescent Al-Bireh Hospital in meddle West Bank , Rafidia Hospital , Al Arabi Specialized Hospital in north West Bank) , because that is easy to access to some of them .These hospitals are chosen to represent a mix of governmental and private healthcare institutions.

Table 3.1 Name of Hospital and number of Nurses and Midwives

Hospital Name	Number of nurses and midwives
Al- Ahli hospital	28
Alia government hospital	39
Palestine Medical Complex Hospital	38
Red Crescent Al-Bireh Hospital	22
Rafidia Hospital	32
Al Arabi Specialized Hospital	20
Total Number	179

Al-Ahli Hospital is one of the leading private hospitals, providing comprehensive medical services in various specialties such as internal medicine, surgery, obstetrics and gynecology, pediatrics, emergency care, and intensive care. The hospital employs around 500 staff members, including medical and administrative teams, and is dedicated to delivering high-quality healthcare services that meet the highest standards of excellence.

Alia Governmental Hospital is one of the main public hospitals in Hebron Governorate, providing comprehensive medical services in various specialties such as internal medicine, general surgery, obstetrics and gynecology, pediatrics, emergency care, and intensive care. It also includes supporting departments such as laboratories, radiology, and pharmacy. The hospital employs around 700 staff members, including doctors, nurses, and administrative personnel, and aims to provide high-quality, integrated healthcare services for all patients.

Palestinian Medical Complex, is one of the largest public hospitals in the West Bank. It provides a wide range of medical services through departments such as internal medicine, general surgery, orthopedics, pediatrics, obstetrics and gynecology, urology, and intensive care. The hospital also includes laboratory, radiology, and physiotherapy units. It has an estimated capacity of around 150 beds and serves thousands of patients annually. The Palestinian Medical Complex as a whole includes five hospitals and employs hundreds of healthcare professionals dedicated to providing advanced medical care to the Palestinian population.

Palestine Red Crescent Society Hospital in Al-Bireh, established in 1987, is a non-profit medical center that provides comprehensive health services to residents of Al-Bireh, Ramallah, and nearby areas. The hospital includes departments such as internal medicine, general surgery, obstetrics and gynecology, pediatrics, and neonatal care. It also offers laboratory, radiology, physiotherapy, and pharmacy services, along with 24-hour emergency care and specialized outpatient clinics. The hospital employs around 200–500 staff members and serves nearly 100,000 patients each year, making it one of the key healthcare providers in the region.

Rafidia Governmental Hospital, established in 1976 in Nablus, is one of the largest public hospitals in the northern West Bank and serves nearly half a million people in the region. The hospital provides comprehensive medical and surgical services, including general surgery, orthopedics, neurology, obstetrics and gynecology, pediatrics, and intensive care. It also offers specialized units such as plastic surgery, ENT, burns, and vascular surgery, supported by modern diagnostic departments including radiology, laboratory, and emergency care. Rafidia Hospital has a capacity of about 200 beds and employs around 600 staff members. In recent years, it has undergone major improvements, including the addition of an MRI unit and upgrades to its emergency and intensive care departments.

Arab Specialized Hospital, located in the Rafidia area of Nablus on Al-Ghafqi Street, is a private hospital under the Smart Health network. It offers a variety of clinical and support services, including general hospital care, radiology, laboratory diagnostics, and pharmacy services. The hospital is recognized in local medical directories and insurance network listings , approximately 200 staff members , including doctors , nurses and administrative personal .

3.5. Sample size

In this study, approximately 179 nurses and midwives work in the labor and post-natal department of the target hospitals. A convenience sample is select, comprising nurses and midwives who are readily accessible during data collection period. To achieve a 95% confidence level, with a margin of error + 5%,. The final sample size met this requirement, consisting of 123 participants.

The screenshot shows a web browser interface for a 'Sample Size Calculator'. The page title is 'Sample Size Calculator' and the subtitle is 'Find Out The Sample Size'. Below this, a brief description states: 'This calculator computes the minimum number of necessary samples to meet the desired statistical constraints.' A green bar labeled 'Result' displays 'Sample size: 123'. Below the result, a note explains: 'This means 123 or more measurements/surveys are needed to have a confidence level of 95% that the real value is within $\pm 5\%$ of the measured/surveyed value.' The input fields are: 'Confidence Level: 95%', 'Margin of Error: 5%', 'Population Proportion: 50%', and 'Population Size: 179'. There are 'Calculate' and 'Clear' buttons at the bottom of the input section. The footer of the page includes the 'IO Scores' logo and the URL 'calculator.net'.

3.6. Sampling criteria (Eligibility Criteria)

- Inclusion criteria: All nursing and midwives working in labor and post natal department in the target hospitals. nurses and midwives who accepted to participated in the study and completed the questionnaire.
- Exclusion criteria: nurses and midwives not working in labor and post-natal departments in target hospitals. nurses and midwives who refuse of to participate in the study. nurses and midwives where did not complete the questionnaire. nurses and midwives who are sick or on maternity leave during the data collection period.

3.7. Study instrument

After reviewing relevant research and literature, the study investigator created a questionnaire to find out how nurses and midwives in the West Bank, Palestine, perceive the Knowledge , Attitude and practice of Nurses and Midwives toward mothers with miscarriage and stillbirth that are associated with them during the study period. By conducting a thorough literature analysis of the paper and consulting with other experts in the subject, content legitimacy will be guaranteed.

3.8 Pilot Study

To ensure clarity and refine the questionnaire, a pilot study was conducted with a small group of participants. A subset of 10% of the study sample (n = 13) was selected; these participants were excluded from the main study .

3.8. Validity and reliability

3.8.1. Validity

By having a group of specialists (n=5) examine the instruments to ensure they are accurate and pertinent. Five experts were shown the questionnaire in order to evaluate each item for necessity, clarity, and relevance. Content Validity Index,(CVI) was applied. Relevance is rated on a 4-point CVI scale: not relevant (1), slightly relevant (2), quite relevant (3), and highly relevant (4). Without complicated thresholds, the CVI is computed as a straightforward proportion. Counting the number of experts who gave the item a valid rating of three or four is how item CVI (I-CVI) is calculated. Dividing by the total number of specialists. Scale CVI (S- CVI) is calculated by averaging all I-CVI values for each item.

CVI Interpretation: For the majority of items, an I-CVI of 0.78 or higher is generally regarded as acceptable. S-CVI $\geq$ 0.80 or 0.90 is often used (Table 3.2. ; Table 3.3. ; Table 3.4.) .

Table 3.2.(a) Knowledge Content Validity Table (n = 5 experts, all items valid)

Knowledge Statement	E1	E2	E3	E4	E5	I-CVI
Recurrent abortion includes only biochemical pregnancies.	3	3	2	4	3	0.80
Recurrent abortion does not include ectopic or molar pregnancies.	4	3	4	3	4	1.00
Recurrent abortion is highly complex, and the specific causes remain unidentified.	2	3	4	4	3	0.80
Chromosomal abnormalities are a common cause of recurrent abortion.	4	4	4	3	4	1.00
Autoimmune diseases (e.g., antiphospholipid syndrome, lupus) are recognized causes of recurrent abortion.	3	4	4	2	4	0.80
Toxoplasmosis is a major cause of recurrent abortion.	3	3	4	3	3	1.00
Hypothyroidism is an important cause of recurrent abortion.	2	3	4	3	4	0.80
There is no single treatment that completely prevents miscarriage.	3	4	3	4	3	1.00
Patients with antiphospholipid syndrome are treated with heparin and low-dose aspirin.	4	2	3	4	3	0.80
Patients with hypothyroidism should receive levothyroxine therapy.	3	4	4	3	4	1.00
Chromosomal analysis of spouses or miscarriage tissue can guide diagnosis and genetic counseling.	4	4	3	4	3	1.00
Vitamin D supplementation can reduce the risk of recurrent miscarriage.	3	4	3	3	4	1.00
There is no strong evidence that vitamin D prevents miscarriage, but it may reduce complications.	3	2	4	4	3	0.80
In vitro fertilization (IVF) is only one option and does not fully resolve recurrent abortion.	4	3	4	3	4	1.00
Scale CVI (S-CVI) Sum of I-CVI values ÷ 14 = (0.80 + 1 + 0.80 + 1 + 0.80 + 1 + 0.80 + 1 + 0.80 + 1 + 1 + 1 + 0.80 + 1) ÷ 14 = 12.80 ÷ 14 = 0.914 S-CVI = 0.91 → Excellent content validity.						

Table 3.3. Attitude Content Validity Table (n = 5 experts, all items valid)

Attitude Statement	E1	E2	E3	E4	E5	I-CVI
Family care and support are very important to women experiencing recurrent miscarriage	4	4	3	4	4	1.00
Recurrent abortion can cause psychological pain and stress to the women and their husbands	3	4	4	3	4	1.00
After abortion, women want more open communication with their partner	3	3	4	2	3	0.80
The aborted women do not want to be treated differently after an abortion	4	3	3	4	4	1.00
Women need useful advice from nurses, midwives, family, and friends, without judgment or avoidance	4	4	4	3	4	1.00
Women with recurrent abortions should gain full trust with the attending physician, nurses, or midwives	3	2	3	4	3	0.80
Sum of I-CVI values $\div 6 = (1.00 + 1.00 + 0.80 + 1.00 + 1.00 + 0.80) \div 6 = 5.60 \div 6 = \mathbf{0.93}$						
S-CVI = 0.93 $\rightarrow$ Excellent content validity.						

Table 3.4.(a) Practice Content Validity Table (n = 5 experts, all items valid)

Practice Statement	E1	E2	E3	E4	E5	I-CVI
In our hospital we perform etiological screening for women with recurrent miscarriage, treat causes, and plan for pregnancy after recovery	4	3	4	4	4	1.00
In our hospital we treat the causes for women with recurrent miscarriage	3	4	4	3	4	1.00
In our hospital we help women in planning for pregnancy after recovery	3	3	4	4	3	0.80
In our hospital, a standardized abortion procedure is used when a miscarriage is inevitable	4	4	3	4	4	1.00
I advise women with recurrent abortion to quit smoking and avoid secondhand smoke	3	4	3	4	4	1.00
I advise women with recurrent abortion to stay in a good mood	3	3	4	4	3	0.80

Table 3.4.(b) Practice Content Validity Table (n = 5 experts, all items valid)

I advise women with recurrent abortion to engage in moderate exercise and avoid obesity	4	4	3	4	4	1.00
I advise women with recurrent abortion to maintain a balanced diet, avoid raw/cold foods	3	4	4	3	4	1.00
I advise women with recurrent abortion to avoid exposure to harmful substances (e.g., heavy metals, pesticides)	4	4	4	3	4	1.00
Sum of I-CVI values $\div 9 = (1.00 + 1.00 + 0.80 + 1.00 + 1.00 + 0.80 + 1.00 + 1.00 + 1.00) \div 9 = 8.60 \div 9 = \mathbf{0.96}$ S-CVI = 0.96 → Excellent content validity.						

3.8.2. Reliability Statistics of Scales

As shown in (Table 3.1), all instruments were reliable evidenced by Cronbach's Alpha were more than 0.7 in both pilot and main study.

Table 3.5. Reliability Statistics

Scale	Cronbach's Alpha		N of Items
	Pilot Study	Main Study	
Knowledge	0.712	0.779	14
Attitude	0.801	0.828	6
Practice	0.811	0.886	9

Summary of Scoring Process

Table (3.6) summarizes scoring process for knowledge attitude and practice

Variable	Items (n)	Scoring		
Knowledge 0= No 1= Yes	14	$\leq 50\%$ (0-7) Poor	$> 50\%$ (7.1-14) Good	
Attitude 1= Strongly Disagree 5= Strongly Agree	6	1 to 2.33 Negative	2.34 to 3.67 Neutral	3.68 to 5 Positive
Practice 1= Never 5= Always	9	1 to 2.33 Poor	2.34 to 3.67 Fair	3.68 to 5 Good

3.9. Data collection

After completing a pilot study and securing ethical approval (IRB) from the university, we obtained formal authorization from the Ministry of Health to conduct the research. Following approval, we coordinated with the nursing directors of six hospitals across the West Bank, including Al-Ahli Hospital and Alia Government Hospital in the southern region, Ramallah Hospital and the Palestine Red Crescent Hospital–Al-Bireh in the central region, and Rafidia Hospital and Al-Arabi Specialized Hospital in the northern region. The questionnaire was distributed electronically to the nursing directors, who in turn circulated it to the heads of maternity and postpartum departments for administration to eligible nurses and midwives. Data collection was carried out between August 1, 2025, and October 1, 2025.

3.10 Data Analysis

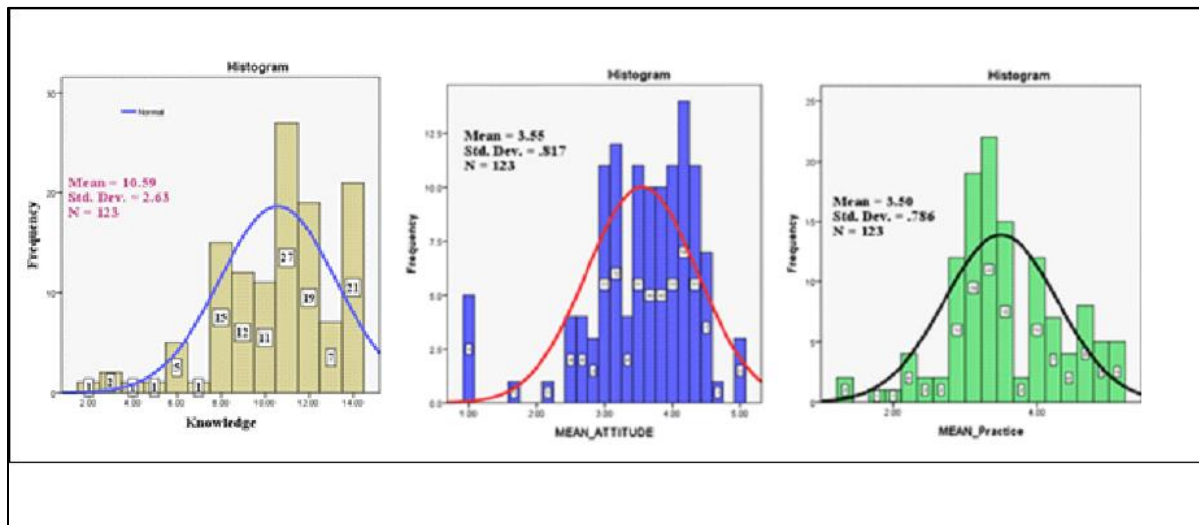
The statistical analysis was conducted using SPSS version 21. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the demographic and clinical characteristics of the participants as well as their knowledge, attitudes, and practices regarding care for mothers who experienced miscarriage or stillbirth. The reliability of the study instrument was assessed using Cronbach's alpha. Prior to inferential analysis, the normality of data distribution was examined using the Shapiro–Wilk and Kolmogorov–Smirnov tests. The results indicated that all study variables were not normally distributed, as the p-values were less than 0.05. Accordingly, non-parametric statistical tests were applied for inferential analysis. Differences in knowledge, attitude, and practice scores across demographic variables were analyzed using appropriate non-parametric tests. All statistical tests were two-tailed, and a p-value of less than 0.05 was considered statistically significant.

Table (3.6) and Figure (3.1) demonstrate that all p-values for the Shapiro-Wilk and Kolmogorov-Smirnov tests were below the significance level ($p < 0.05$). This implies that the data for every research variable does not have a normal distribution. This result can imply that non-parametric tests need to be taken into account for further data processing.

Table 3.7. Tests of Data Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Knowledge	0.164	123	0.000	0.924	123	0.000
Attitude	0.108	123	0.001	0.908	123	0.000
Practice	0.111	123	0.001	0.972	123	0.011

Figure3.1 : Tests of Data Normality



In this research It is believed that participants experience no adverse effects. If a person feels that answering any element of the questionnaire will negatively affect them, they are allowed to choose not to do so. This study will provide protection from harm, informed consent, and the option to withdraw. Every effort was taken to ensure the participants didn't sustain any injuries. Sensitive subjects were avoided, and the surveys were carefully crafted to avoid embarrassing or upsetting any participants. They showed respect and decency to everyone.

Chapter Four

Results

4.1 Introduction

The results of a study that assessed nurses' and midwives' knowledge, attitude, and practice (KAP) about mothers who had miscarried or stillborn children are presented in this chapter. The findings are arranged methodically to meet the goals of the study. This is how the chapter is structured: First, the demographic information of the individuals is given. a comprehensive examination of knowledge levels, attitudes, and self-reported practices. Statistical analysis that looks at the relationships between these elements concludes the results. The results provided valuable insights into areas that require improvement and potential strategies for enhancing KAP in clinical settings.

4.2 Descriptive Statistics

4.2.1 Socio-demographic Characteristics of Participants

As it was presented in (Table 4.1), the majority of the participants were young, with 56.1% having an age range of 21- 30 years. Almost half of them had a Bachelor degree (47.2%), and most of them earned between 2000-4000 NIS per month (80.5%). The marital status was nearly equal with single (34.1%), married (35.8%), and smaller proportions were divorced (19.5%), and widowed (10.6%).

Table 4.1. Socio-demographic Characteristics of Participants (n=123)

Variables		F	%
Residence Place	City	38	30.9
	Village	60	48.8
	Camp	25	20.3
Age	21-25	35	28.5
	26-30	34	27.6
	31-35	26	21.1
	36-40	17	13.8
	>40	11	8.9
Education Level	Diploma	35	28.5
	Bachelor	58	47.2
	Master	30	24.4
Monthly Income	2000-3000	44	35.8
	3000-4000	55	44.7
	4000-5000	14	11.4
	>5000	10	8.1
Marital Status	Single	42	34.1
	Married	44	35.8
	Divorced	24	19.5
	Widow	13	10.6
Data were based on Frequencies (F) and Percentages (%)			

4.2.2 Work Related Factors

over half of the participants were midwives (55.3%), and most of them lived in villages (48.8%). In terms of years of experience, nearly one-third of the respondents had 11-15 years of work experience (32.5), with 30.1% having 6-10 years of experience and 26.8 having 1-5 years' experience. A small percentage of them reported longer experience with 8.1% of 16-20 years old and 2.4% over 20 years. The distribution of participants by hospital was the greatest in the Alia Hospital (24.4%), and Al-Ahli Hospital (23.6%). The rest of the respondents were spread between the Palestinian Medical Complex (14.6%), Red Crescent (12.2%), Rafeidia (12.2%), and the Arab Specialized Hospital (13.0%). Regarding the type of hospital, the participants were nearly evenly distributed with 51.2 % of them in governmental hospitals and 48.8 % of them in private hospitals

Table 4.2. Work Related Factors of Participants (n=123)

Variables		n	%
Specialty	Nursing	55	44.7
	Midwifery	68	55.3
Experience Years	1-5	33	26.8
	6-10	37	30.1
	11-15	40	32.5
	16-20	10	8.1
	>20	3	2.4
Hospital	Alia	30	24.4
	Al-Ahli	29	23.6
	Palestinian Medical Complex	18	14.6
	Red crescent	15	12.2
	Rafeidia	15	12.2
	Arab Specialized	16	13.0
Hospital Type	Governmental	63	51.2
	Private	60	48.8
Data were based on Frequencies (F) and Percentages (%)			

4.2.3.Level of Knowledge of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth .

As Figure (4.1) and Table (4.3) demonstrate, the general knowledge level of nurses and midwives with respect to miscarriage and stillbirth was good Knowledge (70.6%). Most of them exhibited proper understanding of frequent causes of repeated miscarriage which includes chromosomal aberrations (81.3%), autoimmune diseases (82.9%) and hypothyroidism (80.5%). There was also high awareness in terms of treatment methods, i.e. levothyroxine in hypothyroidism (84.6%), heparin-aspirin in antiphospholipid syndrome (75.6%), and the need to have chromosomal analysis to undertake genetic counseling (91.9%).

Nonetheless, some areas were found to have a lot of gaps. Just 32.5% were correct in guessing that vitamin D can lower recurrent miscarriage and 24.4% were wrongly thinking toxoplasmosis is a significant cause. The mentioned results demonstrate the necessity of specific educational interventions that can help to dispel the myth and provide healthcare professionals with the most

Figure 4.1. Level of Knowledge of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth (n=123)

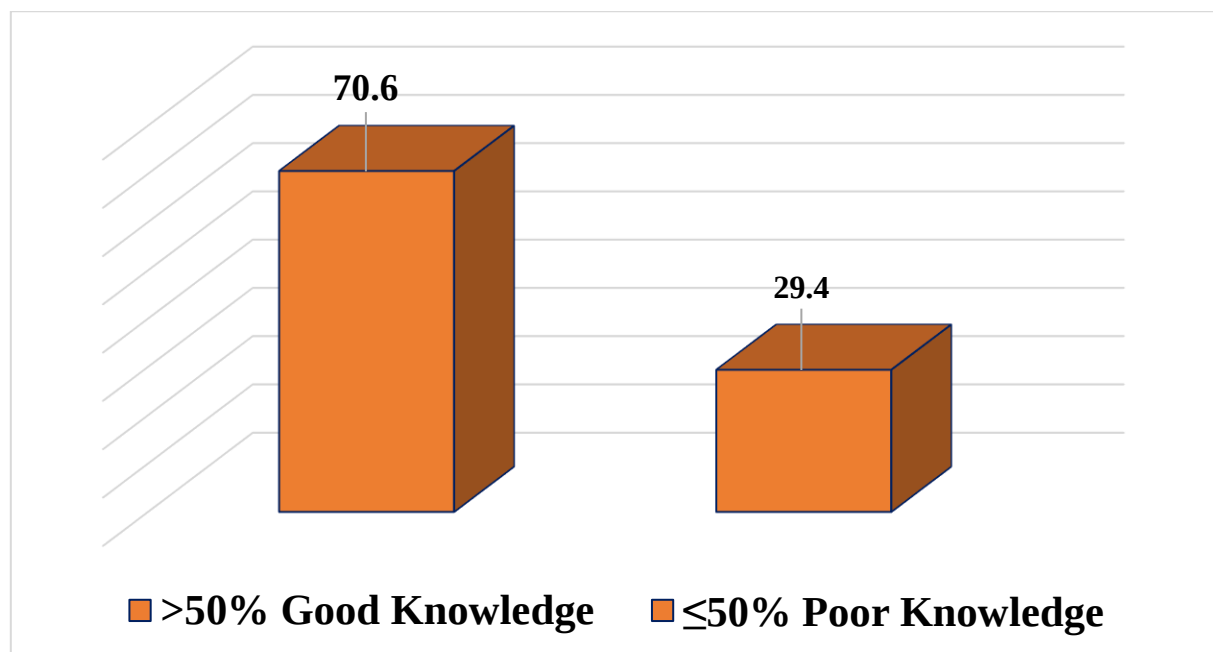


Table 4.3.(a) Level of Knowledge of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth (n=123)

Item	Correct		Incorrect	
	F	%	F	%
Recurrent Abortion includes biochemical pregnancies only	71	57.7	52	42.3
Recurrent Abortion is not related to ectopic and molar pregnancies	75	61.0	48	39.0
Recurrent Abortion is highly complex, and the specific causes are still not identified	92	74.8	31	25.2
Chromosomal abnormalities are the common cause of recurrent abortion	100	81.3	23	18.7
Autoimmune diseases (e.g., antiphospholipid syndrome, lupus, etc.) are well-known causes of recurrent abortion	102	82.9	21	17.1
Toxoplasmosis is major cause of recurrent abortion	30	24.4	93	75.6

Table 4.3. (b) Level of Knowledge of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth (n=123)

Hypothyroidism is an important cause of recurrent abortion	99	80.5	24	19.5
There is no single treatment that completely prevents miscarriage	104	84.6	19	15.4
Patients with antiphospholipid syndrome are treated with heparin and low-dose aspirin	93	75.6	30	24.4
Patients with hypothyroidism need to take levothyroxine	104	84.6	19	15.4
Chromosomal analysis of spouses or miscarriage tissue can guide diagnosis and genetic counseling	113	91.9	10	8.1
Taking Vitamin D can reduce recurrent miscarriage	40	32.5	83	67.5
No evidence supports vitamin D reducing miscarriage, but it may reduce complications	95	77.2	28	22.8
In vitro fertilization (IVF) is just one technique and doesn't fully solve recurrent abortion	97	78.9	26	21.1
Average (≤50% Poor Knowledge) (>50% Good Knowledge)		70.6%	29.4%	

4.2.4 Level of Attitude of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth .

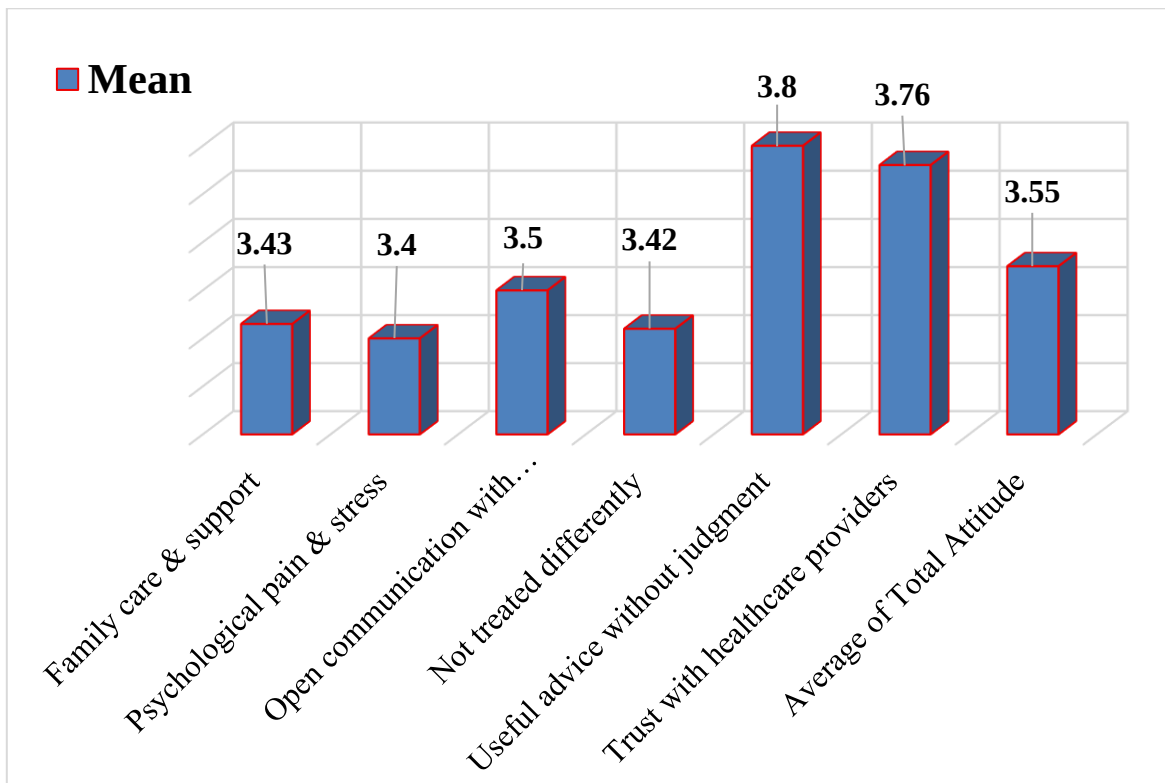
Overall, nurses' and midwives' mean attitude score toward moms who had miscarried and stillbirth was neutral (71.03%, M = 3.55, SD = 1.11), according to Table (4.4) and Figure (4.2). The majority of the items, such as acknowledging family support, psychological impact, communication needs, and equitable treatment following abortion, received neutral replies.

the importance of building trust with medical professionals (75.2%) and providing nonjudgmental advice (76.0%). These findings suggest that training and awareness campaigns can still aid in promoting positive attitudes even though nurses and midwives generally understand the emotional and supportive needs of women who have suffered a miscarriage or stillbirth.

Table 4.4. Mean of Attitude of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth (n=123)

Item	Attitude (%)	Mean	SD	Value
Family care and support are very important to women experiencing recurrent miscarriage	68.6	3.43	1.167	Neutral
Recurrent Abortion can cause psychological pain and psychological stress to the women and their husbands	68.0	3.40	1.172	Neutral
After abortion, the women want more open communication with their partner	70.0	3.50	1.155	Neutral
The aborted women do not want to be treated differently after an abortion	68.4	3.42	1.201	Neutral
The women need useful advice from nurses, midwives, family, and friends, without judgment or avoidance	76.0	3.80	0.975	Positive
Women with recurrent abortions should gain full trust with the attending physician, Nurses, or midwives.	75.2	3.76	0.992	Positive
Average • ($\leq 46.6\%$ Negative Attitude); (46.7% to 73.4% Neutral Attitude); ($>73.5\%$ Positive Attitude) • (1 to 2.33= Negative); (2.34 to 3.67= Neutral); (3.68 to 5= Positive)	71.03%	3.55	1.110	Neutral

Figure 4.2. Mean of Attitude of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth (n=123)



4.2.5 Mean of Practice of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth

The mean scores of midwives' and nurses' practices toward mothers who have stillbirths and miscarriages are shown in Table (4.5) and Figure (4.3). At 69.93% ($M = 3.50$, $SD = 1.084$), the overall mean score was categorized as fair practice. Hospital-based treatments, including doing etiological screening, addressing causes, and using standardized abortion techniques, had the lowest practice scores at the item level (63.0–68.6%, $M = 3.15$ – 3.43), all of which were within the fair range. Conversely, health advises behaviors that fall within the good range, like encouraging women to keep a balanced diet, avoid dangerous substances, stay in a positive mood, and exercise moderately, scored considerably good practices (74.0–76.0%, $M = 3.70$ – 3.80).

Table 4.5. Mean of Practice of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth (n=123)

Item	Practice (%)	Mean	SD	Value
In our hospital we Perform etiological screening for women with recurrent miscarriage. treat causes, and plan for pregnancy after recovery	63.0	3.15	1.138	Fair
In our hospital we treat the causes for women with recurrent miscarriage	63.0	3.15	1.099	Fair
In our hospital we help women in planning for pregnancy after recovery	64.8	3.24	1.081	Fair
In our hospital, a standardized abortion procedure is used when a miscarriage is inevitable	68.6	3.43	1.064	Fair
I advise women with recurrent abortion to quit smoking and avoid secondhand smoke	70.0	3.50	1.197	Fair
I advise women with recurrent abortion to stay in a good mood	74.0	3.70	1.032	Good
I advise women with recurrent abortion to engage in moderate exercise and avoid obesity	76.0	3.80	1.000	Good
I advise women with recurrent abortion to Maintain a balanced diet, avoid raw/cold foods	74.0	3.70	1.048	Good
I advise women with recurrent abortion to avoid exposure to harmful substances (e.g., heavy metals, pesticides)	76.0	3.80	1.101	Good
Average (≤46.6% Poor Practice); (46.7% to 73.4% Fair Practice); (>73.5% Good Practice) (1 to 2.33= Poor); (2.34 to 3.67= Fair); (3.68 to 5= Good)	69.93%	3.50	1.084	Fair

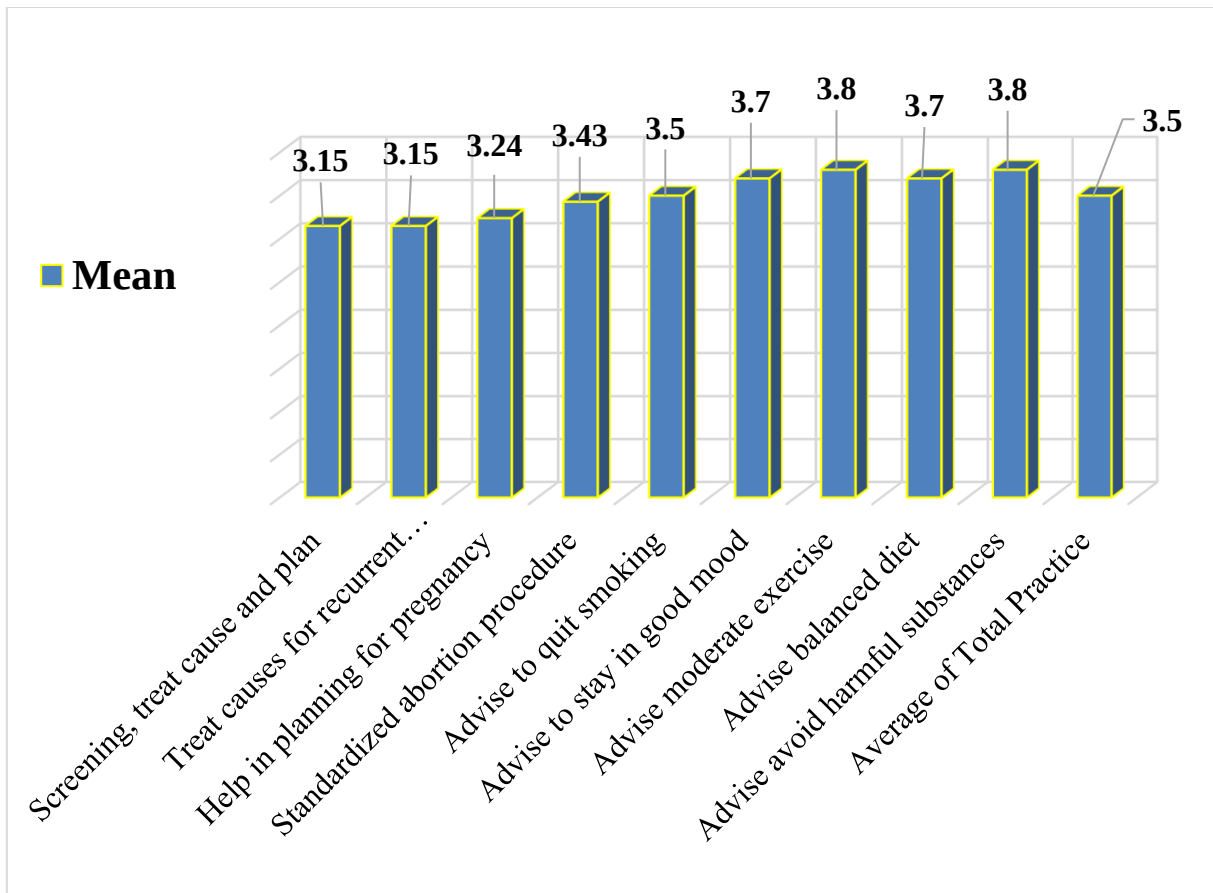


Figure 4.3. Mean of Practice of Nurses and Midwives toward Mothers with Miscarriage and Stillbirth (n=123)

4.3 Knowledge, Attitude and Practice across Socio-Demographic Data

The scores of the participants on knowledge, attitude and practice based on the socio-demographic variables are shown in (Table 4.5). Differences in knowledge ($p = 0.48$) and attitude ($p = 0.43$) were not statistically significantly different across residence place. Nevertheless, there was a notable difference between practice ($p = 0.024$) with higher practice scores shown among participants living in cities than villages and camps.

There were large differences in knowledge ($p = 0.027$), attitude ($p = 0.018$), and practice ($p = 0.037$). The participants with higher knowledge were those aged 26-30 and >40 years, with the highest practice mean scores being those of the 36-40 age group. Participants who were older than 40 years had the lowest scores on attitude.

The scores in knowledge were statistically different based on monthly income ($p = 0.049$), and the respondents earning above 5000 reported higher knowledge. There were no significant differences between attitude ($p = 0.75$) or practice ($p = 0.25$). There was no significant difference in the knowledge ($p = 0.28$). But attitude ($p = 0.001$) and practice ($p = 0.001$) differed significantly by the levels of education. The master degree holders had the highest attitude and the bachelors had the highest practice scores.

There were no statistically significance differences between any of the categories of marital status in knowledge ($p = 0.45$), attitude ($p = 0.17$), or practice ($p = 0.53$).

4.4 Knowledge, Attitude and Practice across Work Related Factors

Table 4.6 demonstrates the distribution of knowledge, attitude and practice scores of participants concerning work related factors. The knowledge, attitude and practice did not show any significant differences between nursing and midwifery (all $p > 0.05$).

Knowledge ($p = 0.024$), attitude ($p = 0.035$) and practice ($p = 0.047$) were significantly different. The highest knowledge was noted among participants who had a 20 or more years of experience and the highest practice was among those who had experience of 16-20 years. The attitude score was lowest in those who had experience of more than 20 years. None of the governmental and private hospitals demonstrated any significant differences in knowledge, attitude or practice (all $p > 0.05$). There was no significant difference in knowledge and attitude ($p = 0.26$ and $p = 0.64$, respectively). The practice however, differed greatly among hospitals ($p = 0.03$) with Arab Specialized and Rafeidia Hospitals recording the highest scores .

Table 4.6.(a) Knowledge, Attitude and Practice across Socio-Demographic Data (n=123)

Variables			M (SD)	Mean Rank	(Z) / (χ^2)	P
Residence Place	Knowledge	City	10.16 (2.900)	56.68	1.426	0.48
		Village	10.93 (2.193)	65.41		
		Camp	10.40 (3.123)	61.90		
	Attitude	City	3.61 (0.692)	62.99	1.688	0.43
		Village	3.59 (0.856)	64.75		
		Camp	3.39 (0.908)	53.90		
	Practice	City	3.65 (0.779)	68.46	7.500	0.024
		Village	3.55 (0.768)	65.05		
		Camp	3.15 (0.767)	44.86		

Table 4.6. (b)Knowledge, Attitude and Practice across Socio-Demographic Data (n=123)

Age	Knowledge	21-25	11.06 (1.714)	66.24	10.95	0.027
		26-30	11.38 (2.570)	72.68		
		31-35	9.23 (3.037)	46.10		
		36-40	9.82 (2.900)	51.41		
		>40	11.00 (2.683)	69.45		
	Attitude	21-25	3.52 (0.940)	62.11	8.29	0.018
		26-30	3.71 (0.637)	68.47		
		31-35	3.54 (0.791)	60.13		
		36-40	3.76 (0.601)	69.21		
		>40	2.88 (1.000)	34.91		
	Practice	21-25	3.72 (0.871)	69.86	10.18	0.037
		26-30	3.29 (0.684)	53.62		
		31-35	3.45 (0.639)	59.38		
		36-40	3.88 (0.704)	78.32		
		>40	2.94 (0.825)	43.86		
Monthly Income	Knowledge	2000-3000	10.11 (1.498)	50.48	7.86	0.049
		3000-4000	10.96 (2.867)	68.49		
		4000-5000	10.14 (3.739)	63.79		
		>5000	11.20 (3.293)	74.50		
	Attitude	2000-3000	3.53 (0.935)	62.66	1.22	0.75
		3000-4000	3.67 (0.572)	64.49		
		4000-5000	3.41 (0.938)	56.00		
		>5000	3.20 (1.173)	53.80		
	Practice	2000-3000	3.64 (0.816)	67.70	4.10	0.25
		3000-4000	3.51 (0.703)	62.36		
		4000-5000	3.41 (0.759)	55.25		
		>5000	2.95 (0.970)	44.35		
Education Level	Knowledge	Diploma	10.97 (2.321)	65.81	2.75	0.28
		Bachelor	10.28 (2.315)	56.66		
		Master	10.73 (3.444)	67.87		
	Attitude	Diploma	3.22 (0.822)	45.49	14.31	0.001
		Bachelor	3.56 (0.860)	63.30		
		Master	3.92 (0.543)	78.75		
	Practice	Diploma	3.12 (0.773)	42.80	14.66	0.001
		Bachelor	3.68 (0.667)	71.36		
		Master	3.60 (0.879)	66.30		

Table 4.6 (c) Knowledge, Attitude and Practice across Socio-Demographic Data (n=123)

Marital Status	Knowledge	Single	11.24 (2.046)	68.98	2.63	0.45
		Married	10.02 (3.521)	58.33		
		Divorced	10.38 (1.789)	56.94		
		Widow	10.77 (1.641)	61.23		
	Attitude	Single	3.67 (0.881)	68.02	5.03	0.17
		Married	3.56 (0.880)	64.22		
		Divorced	3.67 (0.606)	48.19		
		Widow	3.49 (0.881)	60.54		
	Practice	Single	3.52 (0.802)	63.98	2.20	0.53
		Married	3.39 (0.871)	57.10		
		Divorced	3.51 (0.598)	61.58		
		Widow	3.77 (0.746)	72.96		
P values based on Mann-Whitney U (Z) and Kruskal Wallis Tests (χ^2)						

Table 4.6(d) Knowledge, Attitude and Practice across Work Related Factors (n=123)

Variables			M	SD	Mean Rank	(Z) / (χ^2)	P
Specialty	Knowledge	Nursing	10.27	2.483	57.28	-1.335	0.18
		Midwifery	10.84	2.736	65.82		
	Attitude	Nursing	3.64	0.801	65.37	-0.947	0.34
		Midwifery	3.48	0.823	59.27		
	Practice	Nursing	3.65	0.678	68.68	-1.847	0.061
		Midwifery	3.38	0.848	56.60		
Experience Years	Knowledge	1-5	10.49	2.167	58.89	5.93	0.024
		6-10	10.58	3.005	63.07		
		11-15	10.73	2.522	63.43		
		16-20	9.600	3.098	50.10		
		>20	13.33	0.577	103.67		
	Attitude	1-5	3.70	0.908	70.76	10.35	0.035
		6-10	3.69	0.742	68.39		
		11-15	3.27	0.842	48.31		
		16-20	3.77	0.504	69.55		
		>20	3.33	0.289	44.17		
	Practice	1-5	3.79	0.791	73.56	8.18	0.047
		6-10	3.37	0.805	56.58		
		11-15	3.30	0.747	54.03		
		16-20	3.83	0.679	76.85		
		>20	3.33	0.001	58.50		
Type of Hospital	Knowledge	Governmental	10.48	2.687	60.06	-0.624	0.53
		Private	10.70	2.586	64.03		
	Attitude	Governmental	3.57	0.778	61.95	-0.015	0.99
		Private	3.53	0.863	62.05		
	Practice	Governmental	3.52	0.764	62.30	-0.096	0.92
		Private	3.47	0.813	61.68		
Hospital	Knowledge	Alia	10.77	3.318	67.57	6.58	0.26
		Al-Ahli	11.35	2.335	72.47		
		Palestinian Medical Complex	10.06	2.128	51.89		
		Red crescent	10.47	2.669	59.83		
		Rafeidia	10.40	1.805	54.87		
		Arab Specialized	9.75	2.769	52.69		
	Attitude	Alia	3.51	0.779	59.48	3.88	0.64
		Al-Ahli	3.44	1.086	62.60		
		Palestinian Medical Complex	3.56	0.817	62.81		
		Red crescent	3.40	0.577	50.07		
		Rafeidia	3.71	0.762	65.87		
		Arab Specialized	3.83	0.534	72.28		
	Practice	Alia	3.40	0.794	56.90	6.06	0.03
		Al-Ahli	3.31	0.940	56.59		
		Palestinian Medical Complex	3.57	0.635	64.42		
Red crescent		3.39	0.594	54.43			
Rafeidia		3.72	0.843	70.57			
Arab Specialized		3.84	0.659	77.72			
P values based on Mann-Whitney U (Z) and Kruskal Wallis Tests (χ^2)							

4.5 Correlation between Knowledge, Attitude and Practice

As shown in Table 4.7, there was no statistically significant correlation between knowledge and either attitude ($r = 0.048$, $p = 0.595$) or practice ($r = 0.040$, $p = 0.657$). However, a significant moderate positive correlation was found between attitude and practice ($r = 0.525$, $p < 0.001$).

Table 4.7. Correlation between Knowledge, Attitude, and Practice (n = 1

Variables	Attitude	Practice
Knowledge	(r) 0.048	(r) 0.040
	(P) 0.595	(P) 0.657
Attitude		(r) 0.525 (P) 0.000
Correlations are based on <i>Spearman's rho</i> . $p < 0.05$ (2-tailed).		

4.6 Summary of Results

Nurses and midwives comprising 123 of the total participated in the study, the majority of them were young (2130 years), with Bachelor, and earned 2000-4000 NIS per month. There was a close balance in the participants in terms of marital status, hospital type and specialty, and the midwives and village residents were the largest groups. The vast majority of the participants had between 1 and 15 years of experience with the highest percentages working at Alia and Al-Ahli hospitals. In general, participants expressed high levels of knowledge (70.6%) related to miscarriage and stillbirth, especially with respect to the most common causes and ways of treatment, but some gaps were still identified, including the importance of vitamin D and the myths about toxoplasmosis. The score of attitude was neutral ($M = 3.55$), with positive attitudes towards trust building and nonjudgmental care. Practice scores were moderate ($M = 3.50$), and more success in health advice behaviors as compared to hospital-based procedures. The influence on knowledge, attitude, and practice was more pronounced with age, education, experience, and selected hospitals whereas residence, income, marital status, specialty, hospital type had a minor effect. The finding showed that there was a significant moderate positive relationship between attitude and practice ($r = 0.525$, $p < 0.001$), but no significant relationship between knowledge and either. The results indicate the need to conduct specific training to promote the attitudes and behaviors, even among well-informed participants.

Chapter Five:

Discussion

5.1. Introduction

This chapter talks about the results of the research on the knowledge, attitude and practice(KAP) of nurses and midwives on miscarriage and stillbirth mothers. The discussion also relates the findings to the existing studies, identifies the major implications, and discusses the findings as they apply to practice and education.

5.2. Socio-Demographic Characteristics and Work-Related Factors

Most of the respondents were young (21-30 years), had a Bachelor's degree, and 1-15 years of work experience. This allocation indicates the average workforce in a maternal and reproductive health facility in the study scene. Midwives were the largest group of professionals and it is in line with the primary role of midwives in maternal care. The majority of respondents were employed in both governmental and privately owned hospitals nearly in a 50:50 proportion, which means that there was a equal representation of the various healthcare settings.

5.3. Knowledge Of Nurses and Midwives About Miscarriage and Stillbirth

In this study, it was determined that most participants (70.6%) knew a lot about miscarriage and stillbirth especially the identification of most common causes of these conditions such as chromosomal aberrations, autoimmune diseases, and hypothyroidism and the correct medication used, such as levothyroxine, heparin-aspirin, and genetic counseling. These findings indicate a high biomedical knowledge among nurses and midwives. Nevertheless, like in the past, there were gaps in certain and new areas of care, including the use of vitamin D in the prevention of miscarriage and the misunderstanding of toxoplasmosis (Horey et al., 2021; De Roose et al., 2018; Liu et al., 2023).

In line with the literature presented before, the present study supports the idea that knowledge is not always the direct translator of better attitudes or practices. according to which the knowledge is sufficient to implement post-abortion care protocols properly. This implies that obstacles in the way of knowledge implementation, including emotional ill-equipment, institutional and deficient continuing education, could stand in the way of the realization of knowledge in practical clinical practice.

The major correlations observed between knowledge and sociodemographic variables including age, income, and years of experience also reflect the previous research (Liu et al., 2023; Salazar et al., 2022), who found out that older and experienced nurses are more likely to possess higher knowledge levels. This could be explained by the increased exposure, cumulative learning and the availability of professional development opportunities. Nevertheless, it also indicates a gap in knowledge between younger or less experienced practitioners, and the necessity to have structured and continuous training programs. On balance, the level of knowledge of participants was also higher than indicated in the studies in Belgium (De Roose et al., 2018; Sanchez, et al, 2023) and Malaysia (Mohamed et al., 2023) yet, the cultural specificities of bereavement care and psychosocial support show similar gaps in knowledge. The results highlight that it is important to empower evidence-based and holistic education to guarantee that nurses and midwives not only know the medical causes and therapies of miscarriage and stillbirth but also that they are prepared to offer holistic emotional and psychological support to bereaved families.

5.4. Attitudes Toward Mothers with Miscarriage and Stillbirth

In the present research, it was established that the respondents were mostly neutral about mothers who miscarried a child or had a stillborn birth ($M = 3.55$, 71%), with the positive aspect of the trust and the provision of nonjudgmental advice to mothers. These results slightly contrast with the previous studies that showed mostly positive nurse and midwife attitudes. As an example, Mohamed et al. (2023) found that 85.2% of participants in Malaysia had positive perceptions of bereavement care, and Peracchini et al. (2023) learned that Japanese nurses understood bereavement care as a respectful attitude based on cultural values of dignity. The observed neutral attitudes of the current study could be the reflection of the internal conflict between nurses and midwives in terms of emotional engagement and professionalism.

This fits the description of the research by García-Catena et al. (2023), as the authors indicated that inexperienced nurses of younger age tended to be emotionally neutral because of the lack of confidence in dealing with grief-related cases. On the same note, Ravaldi et al. (2022) proposed that repeated exposure to stillbirth cases might cause emotional withdrawal, avoidance behaviors or burnout, which might be the reason behind the moderate reactions of the current findings.

The level of difference in attitude scores was found to be significant based on the level of education and experience in the professional field, and individuals with higher education qualifications (master degree) exhibited more empathetic and sensitive attitudes. This trend is in line with earlier studies (De Los Angeles Linares-Gallego et al., 2024 Pollock et al., 2024), with professional training and emotional readiness being mentioned as two crucial factors that

help to contribute to compassionate care. Post-secondary education can also be used to increase the knowledge of nurses and midwives regarding the process of grief and communication, and provide them with better skills in empathetic responses to bereaved mothers.

The other significant determinants of attitude mentioned in the literature were cultural and religious influences. Pollock et al. (2024) have discovered that nurses tended to experience uncertainty when working with cultural rituals and mourning practices and show reluctance or avoidance. On the same note, miscarriage and stillbirth are commonly viewed as a form of divine will in Muslim-majority settings and this may influence family expectations as well as the attitudes of healthcare providers. These beliefs can be helpful in fostering acceptance, but can be detrimental to proactive emotional care on the part of caregivers. Moreover, the complexity of stillbirth care was supported by the qualitative results obtained by(De Los Angeles Linares-Gallego et al. (2024), who indicated the importance of emotional support, sufficient resources, and collaboration to provide high-quality service. The neutral attitude results of the present study can, thus, be indicative of not only personal emotional coping styles, but also structural issues, including workload, resource constraints, and the absence of institutional support of bereavement care.

Concisely, the overall stance of indifference they take implies that the professionals (nurses and midwives) in the current study are not only conscious of the emotional and psychological demands of grieving mothers but do not integrate empathy and communication skills in their daily activity. This emphasized the need to implement the specialized training programs, conducive working conditions, and culturally competent care guidelines in order to promote improved rates of positivity of women who experience miscarriage and stillbirth .

5.5. Practices of Nurses and Midwives Toward Mothers with Miscarriage and Stillbirth

This current research showed that the practice of nurses and midwives was fair ($M = 3.50$, 69.93%), and the strengths were in health promotion actions, such as diet, exercise, and substance avoidance advice, and weaknesses in hospital-based interventions, including etiological screening, and standard abortion procedures. This trend is in agreement with the world data according to which even though healthcare providers usually perform well in terms of counseling and emotional support, their involvement in complicated clinical practices is minimal (Ali et al., 2024; Furtado- Eraso et al., 2020).

In line with Martínez-García et al (2023), who reported that the level of adherence to international bereavement care guidelines in Spain is low, the results of the current study reveal a mismatch between theory and practice. Although resources, training, and institutional guidance might serve as obstacles preventing the application of bereavement care principles, nurses and midwives are aware of the principles and, as a result, apply them inconsistently. Implementing organized bereavement policies (including communication, memory-making and post-discharge counseling) was more likely to result in better patient and family outcomes (Roberts et al., 2024) due to the importance of structured instructions. Strong correlations between practice and age, education, experience, and hospital of employment are even greater

evidence in favor of past studies. Adisasmita et al. (2021) and Yenil et al. (2021) also point to the need to constantly educate and train the staff and employ mentoring programs, which can be seen as a way to preserve the competence and emotional strength of the professionals (experienced and well-trained). The high performance in Arab Specialized and Rafeidia Hospitals might also be an outcome of institutional investment in staff development and organization support.

Emotional issues related to perinatal loss care are also constantly highlighted in the literature. Nurses and midwives can develop grief, moral distress, and even post-traumatic symptoms (Jones et al., 2019; Ordóñez et al., 2020). This emotional stress may result in avoidance, or inconsistent quality of care (Fernández-Basanta et al., 2020). Structured debriefing, peer support, and access to counseling has demonstrated effectiveness in burnout reduction and enhancing coping (Garcia-Catena et al., 2023). This way, using institutional support systems becomes critical in the maintenance of high-quality and compassionate care.

All in all, the results indicate that nurses and midwives are competent in delivering low-level supportive or health-promoting care, but there is an urgent need to enhance their clinical and procedural competencies with changed training and the adoption of guidelines. Programs of institutional encouragement, ongoing education of professionals and emotional well-being are also essential to enhancing the uniformity and quality of practice on miscarriage and stillbirth care.

5.6. Correlation between Knowledge, Attitude, and Practice

The results showed that there was no significant correlation between knowledge and attitude as well as practice, but moderate positive correlation between attitude and practice was found ($r = 0.525$, $p < 0.001$). This implies that knowledge will not always be converted to better behavior or care performance. However, there are attitudinal elements that are more directly involved in affecting the way that nurses and midwives are handling the instances of miscarriage and still birth, including empathy, sensitivity and motivation. The same tendencies were observed by Mohamed et al. (2023), and by Garcia-Catena et al., who concluded that positive attitudes, but not just knowledge, were better predictors of effective and compassionate bereavement care. These findings underscore the need to incorporate emotional and attitudinal growth, in terms of reflective practice, training in communication and positive environments, in educational and professional training programs to improve practical performance.

5.7. Conclusion

This study has systematically evaluated the knowledge, attitudes, and practices of nurses and midwives in matters related to miscarriage and stillbirth and also indicated the strengths and areas of improvement. In general, the participants displayed good knowledge (70.6%), which is the awareness about the biomedical pathophysiology of the miscarriage and stillbirth (chromosomal abnormalities, autoimmune disorders, hypothyroidism and common methods of treatment, such as levothyroxine, heparin-aspirin therapy and genetic counseling). Nevertheless, there were certain loopholes in such aspects as the role of vitamin D in preventing miscarriage wrong perceptions on toxoplasmosis. The results are consistent with the previous literature that

suggests that even the professionals with extensive experience can still have outdated or erroneous beliefs, and the constant need to engage in professional growth and training based on evidence(Horey et al., 2021; Mohamed et al., 2023).

The research also found no overall neutrality of the participants (71%), and positive points such as trust-building with the patients and providing nonjudgmental advice. However, moderate, but not highly positive scores in such domains as recognition of family support and communication needs indicate that empathy and sensitivity are not always used. These findings are aligned with the earlier results of changes in attitudes that can be caused by age, experience, level of education, or cultural or institutional backgrounds and that habitual exposure to stillbirth might result in withdrawal or avoidance behavior (García-Catena et al., 2023; Pollock et al., 2024 ; Raval di et al., 2022).

Practice-wise, the participants had a relatively good score (69.9%), excelling in such areas of health promotion as diet and exercise advice and avoiding of substances; however, performing worse concerning hospital-based interventions, such as standardized abortion procedures and etiological screening. This is a wider trend throughout the world with nurses and midwives showing their ability to counsel and provide supportive care, but struggle to perform complex clinical interventions because of institutional constraints, inadequate resources, or inadequate recent training (; Ali et al., 2024 Martínez -García et al., 2023).

Notably, the study found that knowledge is not significantly correlated with attitudes and practices but there was a moderate positive correlation between attitudes and practices ($r = 0.525, p < 0.001$). It means that clinical knowledge is necessary, but it does not necessarily result in the provision of compassionate and patient-centered care. Rather, positive attitudes seem to be a decisive factor of care quality delivered, which explains the significance of developing emotional intelligence, empathy, and sensitivity in nursing practice. On the whole, the results reveal that although nurses and midwives have a good background of biomedical knowledge, psychosocial competence gaps and gaps in the translation of knowledge into practice still exist. Mentorship, institutional support and structured training programs are thus required in order to prepare and increase the effectiveness of offering holistic care to women who have suffered miscarriage and stillbirth to increase the overall outcome of the family and the health care person.

5.8. Implications

The results of this research have important implications on nursing practice, education and healthcare policy. **First**, the findings reveal that knowledge is not enough to provide quality care, attitudes play a significant role in the implementation of knowledge in clinical practice. Thus, the interventions focused on enhancing perinatal care need to be organized to focus not only on the biomedical knowledge of care but also on the emotional, cultural, and psychosocial aspects of care. **Second**, the identified knowledge gaps in relation to particular risk factors, prevention options, and standardized clinical practices imply that unceasing professional education is required. To improve competency and confidence of nurses and midwives, healthcare institutions are advised to give priority on miscarriage and still birth management

training on the basis of etiological screening, standard abortion procedures and bereavement counselling. **Third**, the lack of emotional support and psychological preparedness in relation to the application of empathy and family-centered care demonstrates the existence of indifference among the participants in the case of the necessity of employing these skills and abilities. This highlights the need to foster healthy working conditions, mentorship and emotional resilience approaches including debriefing sessions, peer support groups, and counseling accessibility. By addressing these factors, the amount of burnout, moral distress, and compassion fatigue experienced by healthcare professionals working with perinatal loss can be reduced (Fernandez-Basanta et al., 2020 Ordóñez et al., 2020;). **Fourth**, the equitable performance in practice, especially in the practice involving the use of hospitals, indicates the impact of the institutional resources and procedural guidelines. The gap between knowledge and practice can be closed with the help of policies that define clear protocols, offer a sufficient number of staff members, and make access to necessary equipment possible. In addition, the fact that the scores of high practices are correlated with experience or institutional support indicates that mentorship and well-developed on-the-job training may be very effective in enhancing practical competence. Lastly, the paper points out the importance of a holistic, culturally sensitive and patient centered approach to perinatal loss care. The nurses and midwives frequently come across families with different cultural and religious backgrounds, and this may influence the expectations and bereavement behaviors. Cultural competence should thus be part of education and training programs so that care is catered to family needs in a respectful, inclusive and responsive manner.

5.9. Recommendations

The results of the current research allow making a number of recommendations to improve the knowledge, attitudes, and practices of nurses and midwives working with women who had a miscarriage and stillbirth. To begin with, continuing education should be improved by creating evidence-based training programs that will specifically target both biomedical and psychosocial components of care. These programs must consist of information about preventative measures such as the importance of vitamin D and the prevention of infectious risks, such as toxoplasmosis, and standard clinical practices and methods of bereavement support.

Second, it is essential to form positive attitudes and emotional competence in healthcare providers. Mentorship and peer-support systems are also possible solutions to enhance empathy and trust in delivering emotional care. Moreover, the burnout, moral distress, and emotional fatigue, which are likely to be linked with consistent exposure to perinatal loss, can be addressed with the help of structured debriefing and access to counseling services.

Third, there should be institutional support and clear guidelines that would be used to provide care of high quality. Facilities should develop uniform guidelines on how to handle the miscarriage and stillbirth cases and avail staff, resources and equipment to handle patient care as well as professional growth.

Fourth, cultural and psychosocial competence should be encouraged in order to deliver holistic and patient-centered care. Culturally sensitive care, spiritual considerations, and individualized bereavement are modules that should be included in the training programs. The effectiveness of

the interdisciplinary collaboration between the nurses, midwives, psychologists, and social workers can also be encouraged to promote the completeness of care.

Fifth, practice should be monitored and evaluated on a regular basis. Nurses and midwives must have their knowledge, attitudes, and practice measured on a regular basis, enabling healthcare institutions to detect the gaps in their knowledge and evaluate the efficiency and success of training programs. Audit feedback and patient satisfaction data can inform quality improvement efforts to facilitate continuous improvement.

Last but not least, long-term changes in perinatal care improvement rely on research support and the exchange of knowledge. Further studies are needed to determine the interventions which may be effectively applied in order to be able to convert knowledge into practice, and evaluate the efficiency of attitude-based training. The collaboration with other countries can also be facilitated on an international basis to bring education and practice disparities, particularly among high and low-income countries and middle-income countries, to enable women who miscarry and still have their babies to have more equal and effective care.

5.10. Strengths and Limitations

The current research offers precious information about what nurses and midwives know, what they think about miscarriage and stillbirth, and what they do concerning them, which outlines the competencies and limitations in the clinical practice and emotional support. The holistic perspective of perinatal care is one of the main advantages of this study that did not investigate only biomedical knowledge but also attitudes and practical behavior. The research also examined relationships between demographic variables (age, education, years of experience and hospital of employment) and KAP scores that would be useful in developing interventions. Also, the presence of nurses and midwives representing various hospitals improves the transferability of the results into the local healthcare setting. The other strength is that quantitative data has been incorporated with comparisons to the existing literature on the subject, which puts the results into the broader international picture and emphasizes the common challenges in miscarriage and stillbirth care.

This contextualization highlights the application of the results to the informing of the evidence-based training, institutional policies, and support programs. Nevertheless, there are a number of restrictions that need to be taken into account. To start with, the study adopted cross-sectional design, which measures knowledge, attitudes, and practices at one point in time, and does not provide an opportunity to establish causality and follow the changes in any time. Second, use of self-report measures can generate response bias where the respondents can be overly optimistic about his/her knowledge or following best practices. Third, the sample was rather small, consisting of the participants work in different hospitals, which can decrease the external validity of the results to other locations or other countries, where the healthcare system, cultural traditions, and resources might be different.

Finally, the reasons that may influence KAP such as work load, accessibility to continuing education and even personal experience of perinatal loss were not well studied and need to be studied in future.

However, the research is still a useful addition to the body of literature on the topic of perinatal care and it can be used to design particular interventions to enhance the quality and efficacy of nurses and midwives working in the area of women and families impacted by miscarriage and stillbirth.

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Appendix I: Questionnaire

Self-administered questionnaire



Consent Form

Questionnaire

Dear participant:

You are being asked to participate in a research study titled: **“Knowledge , Attitude and practice of nurses and midwives toward mothers with miscarriage and stillbirths “** in Governmental and Private Hospitals in West Bank, Palestine. You have the right to know what you will be asked to do so that you can decide whether or not to be in the study. Your participation is voluntary. you do not want to continue to be in the study, you may stop at any time without penalty or loss of benefits to which you are otherwise entitled. This research as a key prerequisite of the requirements for a master's degree from faculty of graduate studies- Mother and Child Health -Al-Quds University. Researcher himself funds this research. Therefore, I hope you to answer all questions because your opinion represents a great importance for this study. This questionnaire will take 15 min approximately. This research will only be used for scientific research purposes. Information produced by this study will be stored in the investigator’s file and identified by a code number only. For questions about the study or research related injury, contact the researcher on

Gmail Account : ayaabuhash64@gmail.com

Researcher: Aya Ahmad Jameel Awad

Signature:

Section 1: Demographic Data

Question	Options
1. Specialty	☐ Nurse ☐ Midwife
2. Residence Place	☐ City ☐ Village ☐ Camp
3. Age	☐ 21–25 ☐ 26–30 ☐ 31–35 ☐ 36–40 ☐ Above 40
4. Experience (years)	☐ 1–5 ☐ 6–10 ☐ 11–15 ☐ 16–20 ☐ Above 20
5. Education Level	☐ Diploma

	☐ Bachelor ☐ Master
6. Hospital	☐ Alia ☐ Al-Ahli ☐ Palestinian Medical Complex ☐ Red Crescent–AlBerieh ☐ Rafidia ☐ Arab Specialized
7. Hospital Type	☐ Private ☐ Governmental
8. Marital Status	☐ Single ☐ Married ☐ Divorced ☐ Widow
9. Monthly Income	☐ 2000–3000 NIS ☐ 3001–4000 ☐ 4001–5000 ☐ Above 5000

Section 2: Knowledge

Please check the box that best represents your knowledge about Abortion:

Statement	Yes	No
A. Causes of recurrent abortion		
1. Recurrent Abortion includes biochemical pregnancies only		
2. Recurrent Abortion is not related to ectopic and molar pregnancies		
3. Recurrent Abortion is highly complex, and the specific causes are still not identified		
4. Chromosomal abnormalities are the common cause of recurrent abortion		
5. Autoimmune diseases (e.g., antiphospholipid syndrome, lupus, etc.) are well-known causes of recurrent abortion		
6. Toxoplasmosis is major cause of recurrent abortion		
7. Hypothyroidism is an important cause of recurrent abortion		
B. Management of recurrent abortion		
1. There is no single treatment that completely prevents miscarriage		
2. Patients with antiphospholipid syndrome are treated with heparin and low-dose aspirin		
3. Patients with hypothyroidism need to take levothyroxine		

4. Chromosomal analysis of spouses or miscarriage tissue can guide diagnosis and genetic counseling		
5. Taking Vitamin D can reduce recurrent miscarriage		
6. No evidence supports vitamin D reducing miscarriage, but it may reduce complications		
7. In vitro fertilization (IVF) is just one technique and doesn't fully solve recurrent abortion		

Section 3: Attitude

Please rate the following statements about attitudes :

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Family care and support are very important to women experiencing recurrent miscarriage					
2. Recurrent Abortion can cause psychological pain and psychological stress to the women and their husbands					
3. After abortion, the women want more open					

communication with their partner					
4.The aborted women do not want to be treated differently after an abortion					
5.The women need useful advice from nurses, midwives, family, and friends, without judgment or avoidance					
6.women with recurrent abortions should gain full trust with the attending physician, Nurses, or midwives.					

Section 4: Practice

Please rate the frequency of the following actions:

Statement	Never	Occasionally	Sometimes	Often	Always
1.In our hospital we Perform etiological screening for women with recurrent miscarriage. treat causes, and plan for pregnancy after recovery					

2.In our hospital we treat the causes for women with recurrent miscarriage. ,					
3.In our hospital we help women in planning for pregnancy after recovery.					
4.In our hospital, a standardized abortion procedure is used when a miscarriage is inevitable					
5.I advise women with recurrent abortion to quit smoking and avoid secondhand smoke					
6.I advise women with recurrent abortion to stay in a good mood					
7.I advise women with recurrent abortion to engage in moderate exercise and avoid obesity					
8.I advise women with recurrent abortion to Maintain a balanced diet, avoid raw/cold foods					
9.I advise women with recurrent abortion to avoid exposure to harmful substances (e.g., heavy metals, pesticides)					

نموذج موافقة

تحية طيبة وبعد

انا طالبة اية احمد جميل عوض طالب دراسات عليا في جامعة القدس تخصص رعاية امومة وطفولة – جامعة القدس ادعوك للمشاركة في دراسة بحثية كمطلب للحصول على درجة الماجستير حول مستوى المعرفة والمواقف والممارسات للمرضات والقبالات في رعاية الامهات اللاتي تعرضن للإجهاض المتكرر تهدف الدراسة الى تقييم وجهات النظر للمتخصصين في الرعاية الصحية وتحديد المجالات المحتملة للتحسين في رعاية المرضى

عزيزتي الممرضة / القابلة

مشاركتك في هذه المشروع البحثي طوعية تماما ويمكنك اختيار عدم المشاركة ويمكنك الانسحاب في أي وقت دون أي عواقب ولن يؤثر قرارك على وظيفتك او حالتك الاكاديمية او علاقتك المهنية

اذا وافقت على المشاركة سيطلب منك اكمال الاستبيان والذي يستغرق اكماله حوالي 10-15 دقيقة

سيتم الحفاظ على سرية كافة الاجابات واستخدامها فقط لأغراض البحث ولن تسجل أي معلومة تعريفية سيتم تخزين البيانات بشكل امن ولا يمكن الوصول اليها الا فريق البحث وسيتم الابلاغ عن النتائج بطريقة تضمن عدم الكشف عن هويته

اذا كان لديك أي اسئلة حول هذا الموضوع او فيما يتعلق بالدراسة او حول حقوقك كمشاركة في الدراسة فلا تتردد بالسؤال عبر البريد الالكتروني

Ayaabuhash64@gmail.com

او من خلال رقم الهاتف 0593673964

مشرف البحث : د ربحي بشارات

مع اطيب الامنيات وشاكرين لكم حسن تعاونكم

Ethics Committee's Decision Letter

Al Quds University
Faculty of Health Professions
Jerusalem – Abu Dis



جامعة القدس
كلية المهن الصحية
القدس – أبو ديس

Research Ethics Subcommittee of Faculty of Health Professions
Letter of approval

May 25, 2025
Ref. No.: RESC/2025-85

Dear Applicants, (Dr. Rebhi Bsharat, Ms. Aya Awad)

Program: MSc Nursing Department

The Research Ethics subcommittee of the Faculty of Health Professions has recently reviewed your proposal entitled (**Knowledge, Attitude and Practice of Nurses and Midwives toward mothers with miscarriage and stillbirth**) submitted by (**Dr. Rebhi Bsharat**). Your proposal is deemed to meet the requirements of research ethics at Al-Quds University, but further assessment is required by the Central Research Ethics Committee of Al-Quds University. We wish you all best for the conduct of the project.

Hussein ALMasri, PhD

Hussein ALMasri

Associate Professor of Medical Imaging
Research Ethics Subcommittee Chair
Faculty of Health Professions

CC: File
CC: Committee members



Ref.:
Date:.....

الرقم: ١٦٣/٢٠٢٠
التاريخ: ١٩/٨/٢٠٢٠

عطوفة الوكيل المساعد لشؤون المستشفيات المحترم،،،
الأخ مدير عام الادارة العامة للمستشفيات المحترم،،،
تمية واحترام،،،

الموضوع: تسهيل مهمة بحث

يرجى تسهيل مهمة الطالبة: آية احمد جميل عوض- ماجستير تمريض الام والطفل/ جامعة القدس، وبإشراف د. ربحي بشارت، في عمل بحث بعنوان:
"معرفة ومواقف وممارسات الممرضات والقابلات تجاه الامهات اللاتي يعانين من الاجهاض أو ولادة جنين ميت"
من خلال السماح للطالبة بجمع معلومات عن طريق تعبئة استبانة من قبل كادر التمريض بعد اخذ موافقتهم، وذلك في:

- مستشفى مجمع فلسطين - مستشفى رفيديا - مستشفى عاليه
على ان يتم الالتزام باساليب واخلاقيات البحث العلمي، وعدم التعرض للمعلومات التعريفية للمشاركين.
على ان يتم تزويد الوزارة بنسخة PDF من نتائج البحث، التعهد بعدم النشر لحين الحصول على موافقة الوزارة على نتائج البحث.

مع الاحترام،،،

د. عبد الله القواسمي
رئيس وحدة التعليم الصحي والبحث العلمي



نسخة: منسقة برنامج الماجستير/ دائرة التمريض المحترمة/ جامعة القدس

عنوان البحث : المعرفة والمواقف والممارسات لدى الممرضات والقابلات تجاه الأمهات اللاتي يتعرضن الى الاجهاض وولادة جنين ميت والاجهاض المتكرر

اعداد : اية احمد جميل عوض

اشراف الدكتور : ربحي بشارت

الملخص

يُعدّ الإجهاض المتكرر وولادة الجنين الميت مثالين على فقدان الحمل، وهي تجربة مؤلمة للغاية تتطلب رعايةً حانيةً ومهنية. ويُعدّ دور الممرضات والقابلات أساسياً في تقديم الدعم العاطفي والجسدي والنفسي للأمهات المتضررات. تستعرض هذه الدراسة النظرية الأبحاث المتعلقة بمعارفهم ومواقفهم وممارساتهم في تقديم الرعاية للنساء اللواتي فقدن حملهن. وتشير الدراسة إلى أنه على الرغم من وجود بعض المعارف الأساسية، إلا أن هناك صعوبات لا تزال قائمة، خاصةً فيما يتعلق بتقديم الدعم العاطفي. ولتقديم رعاية أكثر رافةً وتركيزاً على المريضة للأمهات الثكالي، تؤكد الدراسة على ضرورة التعليم المستمر، وتدريب مهارات التواصل، ودعم السياسات ذات الصلة.

هدف الدراسة:

تقييم معارف ومواقف وممارسات الممرضات والقابلات تجاه الأمهات اللاتي تعرضن للإجهاض المتكرر أو ولادة جنين ميت.

المنهجية:

استخدمت هذه الدراسة تصميمًا كمياً مقطوعياً. شملت عينة ملائمة مكونة من 123 ممرضة وقابلة يعملن في أقسام الولادة وما بعد الولادة في المستشفيات الحكومية والخاصة الفلسطينية. استُخدم استبيان منهجي أعدّه الباحث بعد تحليل دقيق لدراسات سابقة لجمع البيانات. تكوّن الاستبيان النهائي من 33 بنداً، شملت جوانب مهمة من الممارسات السريرية والمواقف والمعارف المتعلقة بعلاج فقدان الحمل. خلال نوبات عملهن، قامت المشاركات بتعبئة الاستبيان بشكل مجهول، وحُفظت جميع المعلومات بسرية تامة. مكّن هذا النهج التحليلي من تحديد الثغرات في الرعاية المقدمة للأمهات المفجوعات وإجراء تقييم شامل للإجراءات الحالية.

النتائج:

شملت الدراسة 123 ممرضة وقابلة. على الرغم من وجود بعض النواقص في مجالات مثل وظيفة فيتامين د وتفسير عدوى داء المقوسات، إلا أن المستوى العام للمعرفة كان جيداً (70.6%). كانت مواقف المشاركات تجاه تقديم الرعاية للأمهات اللواتي فقدن حملهن محايدة (المتوسط = 3.55)، لكنهن أبدین عموماً آراءً إيجابية حول الدعم والتواصل غير المتحيز. كانت الممارسات السريرية متواضعة (المتوسط = 3.50)، حيث كان العلاج الإجرائي داخل المستشفى أقل شيوعاً من الممارسات التعليمية. أظهر العمر، والمستوى التعليمي، وسنوات الخبرة، ونوع المستشفى تباينات كبيرة في المعرفة والمواقف والممارسات. لم يُعثر على

ارتباط ذي دلالة إحصائية بين المعرفة والموقف أو الممارسة، ومع ذلك، وُجد ارتباط إيجابي قوي بين الموقف والممارسة ($r = 0.525$ ، $p > 0.001$).

الخلاصة

كشفت الدراسة أنه على الرغم من أن الممرضات والقابلات يُظهرن عمومًا مستويات جيدة من المعرفة، إلا أن مواقفهن تجاه رعاية الأمهات اللاتي يعانين من فقدان الحمل تظل محايدة، وممارساتهن متوسطة المستوى. ولا تزال هناك فجوات ملحوظة في جوانب سريرية محددة من الرعاية، وكذلك في تقديم الدعم العاطفي والنفسي والاجتماعي. علاوة على ذلك، وُجد أن مستويات كفاءة الممرضات والقابلات تتأثر بشكل كبير بعوامل مثل العمر، والمستوى التعليمي، وسنوات الخبرة المهنية، ونوع المستشفى. تُبرز هذه النتائج الحاجة إلى تعزيز برامج التدريب، وتحسين مهارات التواصل، ووضع مبادئ توجيهية مؤسسية واضحة لتعزيز الرعاية الرحيمة والشاملة والقائمة على الأدلة للأمهات المفجوعات.

الكلمات المفتاحية: ولادة جنين ميت، تجربة الإجهاض، الاجهاض المتكرر، الممرضات، القابلات، المعرفة، الموقف، الممارسة