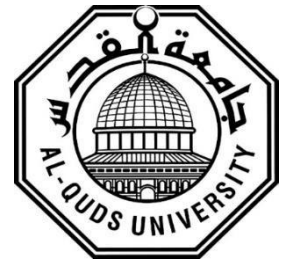


Deanship of Graduate Studies

Al-Quds University



**Midwives' Knowledge, Attitude, and Practice Toward
Episiotomy in the Northern Region of the West Bank,
Palestine: A Descriptive Cross-Section.**

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M.Sc. Thesis

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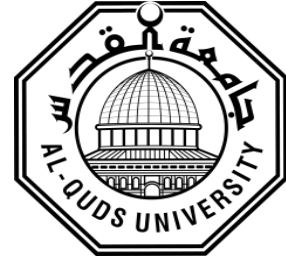
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Dedication

This thesis is dedicated to the soul of my beloved father, whose memory continues to guide and inspire me every day. To my dear mother, for her endless love, prayers, and sacrifices that have been the light of my path. To my loving husband and my precious son, whose presence, support, and unconditional love have given me strength and motivation throughout this journey. To my brothers and sisters, for their constant encouragement, support, and faith in me along the way. I also dedicate this work to all the midwives who participated in the study and generously shared their time and experience with patience and professionalism. Finally, to my beloved Palestinian people, whose resilience, strength, and sacrifices for Palestine and Al-Aqsa remain a source of pride and inspiration.

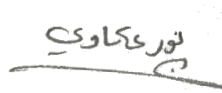
Noor Fahmi Ibrahim Akkawi

Declaration

I certify that this thesis which is submitted for the degree of master is the result of my research, except where otherwise acknowledged, and that this study (or any part of the same) has not been submitted for a higher degree to any other university or institution.

Name: Noor Fahmi Ibrahim Akkawi

Signature:



Date: 3 / 1 / 2026

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Noor Fahmi Ibrahim Akkawi

Abstract

Introduction: Episiotomy is a common obstetric intervention that continues to be overused despite evidence linking its routine application to adverse maternal outcomes. Although international guidelines recommend restrictive use, the procedure remains prevalent in Palestine, where midwives play a key role in intrapartum care. Limited evidence on midwives' knowledge and practices highlights a critical gap that may contribute to non-evidence-based use of episiotomy.

Aim: To assess midwives' knowledge, attitudes, and practices toward episiotomy in the Northern region of the West Bank, Palestine, and to examine the associations between these domains and socio-demographic factors.

Methodology: This study employed a quantitative, descriptive cross-sectional design conducted in five governmental hospitals in the Northern West Bank, Palestine. A convenience sample of 100 midwives participated in the study. Data were collected using a validated, self-administered psychometric questionnaire adopted from previous studies to assess midwives' knowledge, attitudes, and practices regarding episiotomy. Ethical approval was obtained from Al-Quds University, and permissions were secured from the Palestinian Ministry of Health and relevant hospital authorities. Informed consent was obtained from all participants. The study duration lasted two months from August to October, 2025. Data were analyzed using SPSS version 27.

Results: Most midwives showed moderate knowledge and practice regarding episiotomy, with fewer demonstrating high levels. Attitudes were mostly neutral, with a minority positive. Knowledge was significantly associated with age, training, and type of episiotomy, while attitudes were related to education level, type of episiotomy, and social status. No significant correlations were found between knowledge, attitude, and practice.

Conclusions: Although midwives demonstrated moderate knowledge and practice regarding episiotomy, their attitudes were largely neutral. These findings suggest an acceptable baseline of competence but highlight the need for targeted training and standardized protocols to better translate knowledge into consistent practice and improve maternal care outcomes.

Keywords: Midwives', Knowledge, Attitude, Practice, Episiotomy, Northern Region of West Bank, Palestine.

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List of Abbreviation

Abbreviation	Explanation
WHO	World Health Organization
ACOG	American College of Obstetricians and Gynecologists
PLO	Palestine Liberation Organization
PCBS	Palestinian Central Bureau of Statistics
HCP	Health Care Providers
ICM	International Confederation of Midwives
NGOs	Non-Governmental Organizations
UNRWA	United Nations Relief and Works Agency
PMOH	Palestinian Ministry of Health
MOH	Ministry of Health
KAP	Knowledge, Attitude, and Practice
SD	Standard Deviation
N	Number of Cases
SPSS	Statistical Package for Social Sciences
M	Mean
P	P-value
R	Correlation Coefficient

Chapter One

Introduction

1.1 Background

Episiotomy is one of the most common obstetric interventions performed during vaginal deliveries, yet it remains highly controversial due to its widespread use and the potential adverse effects on maternal health (Papadakis & Myriknas, 2020; Maphanga & Naidoo, 2021). These effects include severe perineal tears, urinary and fecal incontinence, chronic pain, and pelvic floor dysfunction, which can significantly impair a woman's quality of life. While episiotomy may be justified in certain high-risk or emergency, such as fetal distress, prolonged second stage of labor, or complicated deliveries, evidence indicates that it is frequently performed unnecessarily, particularly in countries with limited adherence to evidence-based guidelines (Ghulmiyyah et al., 2022).

Globally, countries have reported variable trends in episiotomy practice. In some regions, routine use remains extremely high, such as nearly 100% of first births in Taiwan and 75% of primiparous women in Yemen (Papadakis & Myriknas, 2020; Khresheh & Barclay, 2020). Conversely, other countries, such as the United States, have successfully reduced episiotomy rates below 10% through structured training, monitoring, and adherence to evidence-based protocols (Clesse et al., 2019). The contrast between these international experiences underscores the importance of context-specific interventions and the potential for improvement in countries where episiotomy is overused, including Palestine.

In Palestine, the overuse of episiotomy represents a significant maternal health concern. Reported rates range from 28% to 78%, depending on parity and type of delivery (Zimmo et al., 2018). Such high rates suggest that traditional practices and institutional habits often drive the decision to perform an episiotomy more than clinical necessity. This overuse is associated with increased risk of complications, longer postpartum recovery, and negative effects on women's physical and psychological well-being (Papadakis & Myriknas, 2020; Maphanga & Naidoo, 2021). Moreover, the persistence of routine episiotomy reflects a gap between theoretical knowledge and actual practice, highlighting a discrepancy between what is recommended in global guidelines, such as those of the World Health Organization (WHO) and the American College of Obstetricians

and Gynecologists (ACOG), and what occurs in clinical settings (Ghulmiyyah et al., 2022).

Midwives are central to ensuring safe and effective childbirth, particularly in settings where unnecessary interventions are common (Maphanga & Naidoo, 2021; Bick et al., 2012). They are often the primary healthcare providers responsible for assessing clinical indications for episiotomy and making real-time decisions during labor. However, research indicates that in Palestine, midwives' knowledge, attitudes, and practices regarding episiotomy are not well understood. Factors such as reliance on traditional practices, limited access to continuous professional training, and time pressures contribute to inconsistent application of evidence-based care (Maphanga & Naidoo, 2021; Woretaw et al., 2021).

The variability in midwives' practice may also be influenced by demographic and professional factors, including age, years of experience, educational level, and the type of facility in which they work (Ali-Masri et al., 2018). These disparities further emphasize the need for structured training programs, regular monitoring, and reinforcement of standardized clinical protocols. Such interventions can ensure that midwives apply episiotomy selectively, based on clear clinical indications, thereby reducing unnecessary procedures and improving maternal outcomes in accordance with WHO and ACOG recommendations.

Women exposed to unnecessary episiotomy face not only immediate postpartum complications but also long-term sequelae. These include dyspareunia, urinary and anal incontinence, pelvic organ prolapses, recto-vaginal fistulas, and chronic vulvar pain (Papadakis & Myriknas, 2020; Maphanga & Naidoo, 2021). The presence of these complications underscores the critical need for targeted interventions aimed at reducing the overuse of episiotomy and promoting adherence to evidence-based practices.

Given the ongoing gap between recommended and actual practice, there is a clear need to understand midwives' knowledge, attitudes, and practices regarding episiotomy in the Palestinian context. Assessing these factors is essential for designing effective in-service training programs, reinforcing clinical guidelines, and improving the quality of maternal healthcare. This study aims to evaluate midwives' knowledge, attitudes, and practices regarding episiotomy in the Northern West Bank, identify key training needs, and provide evidence to guide strategies for optimizing childbirth outcomes while minimizing unnecessary interventions, in alignment with WHO and ACOG guidelines.

1.2 Problem Statement

Episiotomy remains a routine obstetric intervention in many developing countries despite global recommendations by the World Health Organization (WHO) to restrict its use to medically justified cases. Its overuse exposes women to significant maternal harm, including severe perineal tears, urinary and fecal incontinence, chronic pain, and longer postpartum recovery, negatively affecting the quality of maternal care and placing additional burdens on the healthcare system (Yang & Bai, 2021; Papadakis & Myriknas, 2020). In Palestine, episiotomy rates remain high and variable (28%–78%) (Zimmo et al., 2018), yet the extent to which midwives adhere to evidence-based guidelines is largely undocumented.

Midwives are key decision-makers in the management of vaginal deliveries, although the final authority may reside with physicians in certain situations. Their knowledge, attitudes, and practices regarding episiotomy directly influence maternal outcomes, yet these remain insufficiently explored in the Palestinian context. The absence of consistent hospital policies and the persistence of traditional practices further exacerbate this issue. Therefore, this study aims to evaluate midwives' knowledge, attitudes, and practices regarding episiotomy in the Northern West Bank, identify gaps in guideline implementation, and inform strategies to enhance maternal safety and quality of care.

1.3 Justification of the study

Despite international recommendations to limit episiotomy to clinically justified cases, routine episiotomy remains widespread in Palestine, exposing women to unnecessary maternal harm, including severe perineal trauma, prolonged recovery, and chronic complications (Papadakis & Myriknas, 2020; Maphanga & Naidoo, 2021). This highlights a critical clinical need to optimize childbirth practices and ensure that interventions are applied only when necessary, improving maternal safety and quality of care.

From a professional perspective, midwives are often at the forefront of labor management, yet their knowledge, attitudes, and practices regarding episiotomy are not well documented in the Palestinian context. Limited training, reliance on traditional practices, and inconsistent adherence to guidelines undermine their ability to deliver evidence-based care, emphasizing the need for structured educational programs and competency development.

At the policy and educational level, inconsistent hospital protocols and the absence of standardized guidelines contribute to variations in practice and overuse of episiotomy. Research in this area is essential to inform targeted training, reinforce clinical protocols, and guide policy decisions, ensuring that midwifery practice aligns with global recommendations.

Therefore, this study is necessary to provide empirical evidence on midwives' knowledge, attitudes, and practices regarding episiotomy in the Northern West Bank. The findings will offer a foundation for improving clinical care, supporting professional development, and informing policy interventions to promote safe, evidence-based obstetric practices.

1.4 Aim of the study:

To assess midwives' knowledge, attitudes, and practices toward episiotomy in the Northern region of the West Bank, Palestine, and to examine their associations with socio-demographic factors.

1.5 Objectives of the study:

1. To assess the level of midwives' knowledge regarding episiotomy in the Northern region of the West Bank, Palestine.
2. To evaluate midwives' attitudes toward the routine use of episiotomy in the Northern region of the West Bank, Palestine.
3. To examine the current practices of midwives concerning episiotomy in the Northern region of the West Bank, Palestine.
4. To analyze how socio-demographic characteristics—such as age, educational level, and years of experience—affect midwives' knowledge, attitudes, and practice toward episiotomy in the Northern region of the West Bank, Palestine.
5. To investigate the relationship between midwives' knowledge, attitudes, and practice related to episiotomy in the Northern region of the West Bank, Palestine.

1.6 Research questions

1. What is the level of knowledge about episiotomy among midwives in the Northern region of the West Bank, Palestine?
2. What attitudes do midwives in the Northern region of the West Bank; Palestine hold toward the routine use of episiotomy during vaginal deliveries?
3. What are the current practices regarding episiotomy performance among midwives in the Northern region of the West Bank, Palestine?
4. How do socio-demographic characteristics (such as age, educational level, and years of experience) influence midwives' knowledge, attitudes, and practices regarding episiotomy in the Northern region of the West Bank, Palestine?
5. Is there a statistically significant relationship between midwives' knowledge, attitudes, and practices related to episiotomy in the Northern region of the West Bank, Palestine?

1.7 Context of study:

1.7.1 State of Palestine

Palestine is an Arab country located in Western Asia, situated on the eastern coast of the Mediterranean Sea. It covers approximately 27,000 square kilometers in total and was occupied by Israel in 1948. Following the 1948 conflict, the remaining areas are geographically divided into the West Bank and the Gaza Strip. The country shares borders with Jordan, Syria, Lebanon, and Egypt, and the Mediterranean Sea lies to the west. The West Bank and Gaza Strip are home to approximately 5,483,450 individuals and cover around 6,020 square kilometers, resulting in a population density of 847 persons per square kilometer (2,195 people per mi²). The West Bank consists of 5,640 km² of land, including East Jerusalem, and 220 km² of water, covering the northernmost part of the Dead Sea. Approximately 670,000 Israeli settlers reside in the West Bank along with 3,256,906 Palestinians (PCBS, 2022). In Gaza, population growth and density have been significantly

affected by the ongoing blockade, recurrent conflicts, and restrictions on movement, which have created severe social and economic challenges for the residents.

The Palestinian National Authority governs the West Bank through 11 governorates: Jenin, Tubas, Tulkarm, Nablus, Qalqilya, Salfit, Ramallah and Al-Bireh, Jericho, Jerusalem, Bethlehem, and Hebron (MoH, 2016).

1.7.2 Health care system in Palestine

The Palestinian healthcare system consists of four main sectors: the government health sector (including the Palestinian Ministry of Health and Military Medical Services), non-governmental organizations (NGOs), the United Nations Relief and Works Agency (UNRWA), and the private sector. The Palestinian Ministry of Health (PMOH) is the primary healthcare provider across all governorates. The system has been seriously affected by financial crises and political instability under the Palestinian Authority (MoH, 2021). In particular, there have been reductions in the number of patients referred outside the occupied Palestinian territory for specialized treatments, and there are growing shortages of medicines and medical disposables. These challenges are particularly acute in Gaza, where the combined effects of the blockade, recurrent conflicts, and population pressures have placed immense strain on healthcare services, affecting both routine care and emergency interventions.

1.8 Definition of terms

Midwife: the midwife is a specialized health professional who provides care for women and their newborn infants, including those with diverse gender identities. Midwives work in a professional environment that values both independence and collaboration, with a strong emphasis on ethical issues and responsibilities. They are well prepared for their roles through a unique combination of knowledge, skills, and professional attitudes drawn from various fields, including midwifery science, psychology, sociology, and neonatology. Advocates for the natural processes of childbirth, midwives dedicate themselves to ensuring the health of both mothers and their newborns. They honor the unique situations and points of view of each woman they help. Furthermore, midwives empower women to take control of their health and that of their families, collaborating with colleagues and other health professionals as needed to provide comprehensive care tailored to each woman's specific needs. Their education involves specialized training programs that meet the global standards set by the International Confederation of Midwives (ICM, 2017).

Knowledge: The process described is comprehensive, involving the collection, analysis, and understanding of information within a specific context. It functions as a dynamic strategy, where an individual's interaction with and interpretation of information are influenced by various factors, enabling its application across different fields. Knowledge is continuously evolving, shaped by profound understanding and its practical applications in both daily and professional life. This evolution reflects knowledge's ability to adapt and innovate in response to changing needs and surrounding circumstances. (Zins, 2007). This adaptability highlights the importance of fostering critical thinking and analytical skills, allowing individuals to navigate complexities and draw meaningful conclusions. As a result, the pursuit of knowledge becomes not just a process of accumulation but a transformative journey that empowers individuals to make informed decisions and contribute to their communities. (Zins, 2007).

Attitudes: attitudes are Fundamental elements in the nursing profession play a crucial role in shaping how individuals perceive healthcare issues and determine what they consider important and relevant. To effectively understand these attitudes, it is essential to provide patient-centered care that encourages collaboration among healthcare teams. These attitudes develop incrementally over time, and revisiting or modifying them can often be challenging. Attitudes can change when individuals gain new insights into their behaviors, which allows them to adopt new perspectives that align with their goals (Price, 2015).

Practice: practice is defined as the consistent repetition of an activity with the goal of enhancing one's skills over time. This process is crucial for mastering any discipline, including sports, music, or academics. Through deliberate practice, individuals can identify their weaknesses and systematically work to improve their performance. Additionally, practice can represent a profession or craft that demands a high level of skill and training, often conducted as a routine or tradition. At its core, practice illustrates the value of taking action rather than merely focusing on thoughts or ideas. (Cambridge University Press, 2021).

Episiotomy: an episiotomy is a surgical procedure that involves making an incision in the perineum. It is typically performed during the late second stage of labor to facilitate childbirth. The purpose of this incision is to prevent severe perineal lacerations and to expedite delivery, especially in situations where the baby is in distress or the mother requires assistance. There are different types of episiotomies, primarily median and mediolateral; however, the lack of standardized terminology in the literature can complicate understanding. The decision to perform an episiotomy should be based on clinical indications rather than routine practice (Kalis et al., 2012).

Chapter Two

Conceptual Framework and Literature Review

2.1 Conceptual framework

This section contains the conceptual and operational definitions of the independent and dependent variables in this study. It also presents the conceptual framework, which delves into the key concepts and variables, particularly focusing on the knowledge, attitudes, and practices of midwives toward episiotomy in the Northern region of West Bank Palestine.

2.2 Conceptual definition of independent variable

1. **Social demographic characteristics:** These characteristics refer to the social and demographic factors that influence individuals' lives and experiences within a community. These factors include age, gender, educational level, marital status, and occupational status. (Saeed, Al-Shahrabi, & Bolarinwa, 2021) Understanding these characteristics is essential in assessing how they impact midwives' knowledge, attitudes, and practice toward episiotomy in the Northern region of West Bank Palestine.

2.3 Conceptual definition of dependent variable

1. Knowledge: is a comprehensive process that involves gathering information, analyzing it, and understanding it within a specific context. It is a dynamic strategy where an individual's interaction with and interpretation of information depend on various factors, allowing for its application in different fields. Knowledge continuously evolves through deep understanding and its practical applications in daily and professional life, reflecting its ability to adapt and innovate according to needs and surrounding circumstances. (Zins, 2007).

2. Attitude: the way an individual perceives, evaluates, and feels about a particular person, event, or idea. These perceptions and feelings often result in either a favorable or unfavorable response. (ICM, 2017).

3. Practice: the regular repetition of an activity with the goal of improving one's skills over time. It can also be a profession or craft that demands a high level of skill and training, and is often performed as a routine or tradition. At its core, practice involves taking action, rather than simply focusing on thoughts or ideas. (Cambridge university press, 2021).

2.4 Operational definition of independent variable

1. Social demographic characteristics of the midwives: This study will examine the social demographic characteristics of midwives, which include their (age, midwifery experience, education level, marital status, area of residence, place of work, training on episiotomy, availability of unit protocol or policy, and the type of episiotomy recommended in their facility).

2.5 Operational definition of dependent variable

1. knowledge of the midwives: In this study, the midwife's knowledge towards episiotomy will be measured through a set of questions focusing on two main domains of knowledge. The first domain, General Knowledge, included (3) items. The second domain, Specific Knowledge, evaluated midwives' understanding of the indications and complications of episiotomy, with responses scored as follows: a correct answer of "Yes" was awarded one points, while a correct answer of "No" was awarded zero point. This domain comprised four subdomains: maternal indications (10 items); fetal indications (7 items); immediate complications (8 items); and long-term complications (six items). This structured scoring method allowed for a detailed and accurate evaluation of midwives' theoretical and practical knowledge regarding episiotomy. (Maphanga & Naidoo, 2021; Khresheh & Barclay, 2020).

2. Attitude of the midwives: In this study, the midwife's attitude towards episiotomy will be measured through ten statements measured on a five-point Likert scale: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Among these ten statements, three (3) were positively worded (code) and seven (7) were negatively worded (recode), with the latter reversed to ensure that higher scores reflected a more positive attitude toward appropriate episiotomy practice. This structured approach will allow for a comprehensive evaluation of midwives' attitudes, providing deeper insight into their beliefs and the factors influencing their professional practice. (Maphanga & Naidoo, 2021; Khresheh & Barclay, 2020).

3. Practice of the midwives: In this study, the midwives' practice toward episiotomy will be measured through a structured set of questions and statements. This part included thirteen (13) statements, of which ten (10) were positively worded (code) and three (3) were negatively worded (recode), and their coding was reversed to ensure that higher scores reflected better practice levels. These statements were measured using a five-point Likert scale: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. This structure will allow for a comprehensive assessment of midwives' adherence to evidence-based and patient-centered practices in managing episiotomy. (Maphanga & Naidoo, 2021; Khresheh & Barclay, 2020).

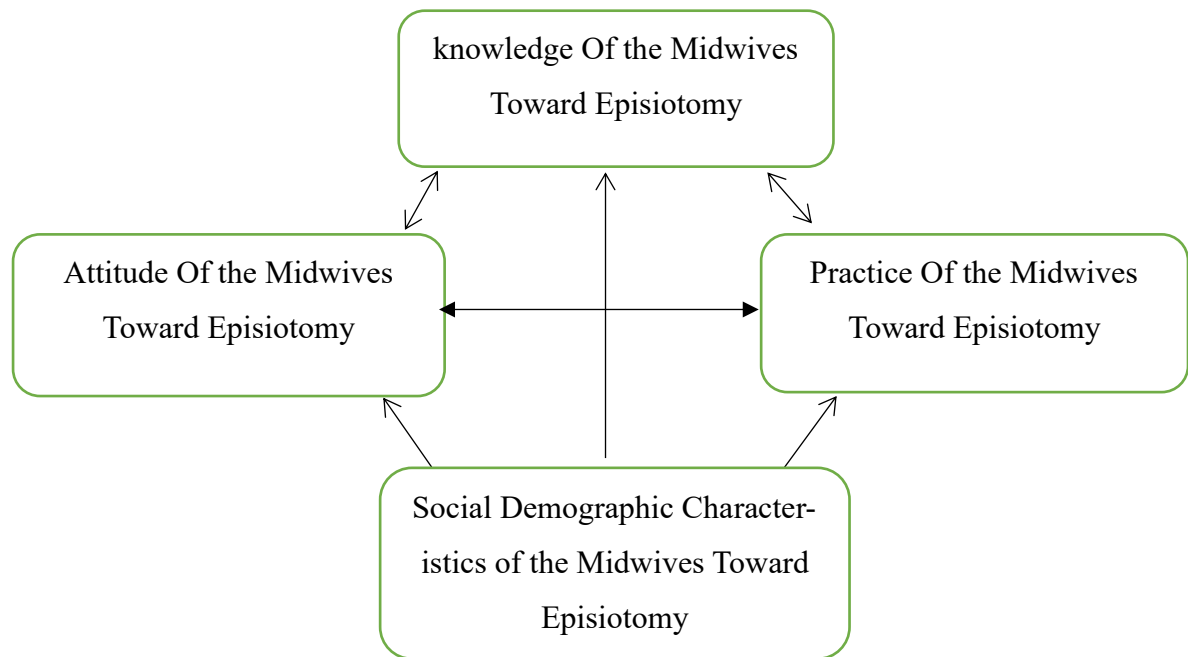


Figure (2.1): Conceptual Frameworks Diagram

Literature Review

2.6 Introduction

This chapter presents a comprehensive review and critical analysis of the existing literature related to episiotomy. It aims to provide a clear understanding of the procedure by exploring its various definitions, types, and methods of performance. Furthermore, the chapter discusses the prevalence of episiotomy, its indications and contraindications, and the possible complications associated with the practice. Special attention is given to the role of midwives in performing and managing episiotomy, as well as to their knowledge, attitudes, and practices (KAP) toward the procedure. Through this review, the chapter seeks to establish a theoretical foundation for understanding the factors influencing episiotomy practices and to identify gaps in the literature that justify the need for the present study.

The purpose of this literature review is to summarize current evidence (2018–2025) on midwives' knowledge, attitude, and practice regarding episiotomy, as well as to identify trends, barriers, and facilitators to evidence-based perineal care. This review also seeks to highlight the Palestinian context and compare it with global findings, thereby providing a foundation for interpreting the study results and framing recommendations for education, clinical practice, and policy.

An empirical search was conducted via electronic databases, including PubMed, ScienceDirect, Google Scholar, and ResearchGate. The search included studies published between 2018 and 2024. The following keywords were employed: “episiotomy” and (“knowledge” OR “attitude” OR “practice” OR “experience”) and (“midwives” OR “nurses” OR “healthcare providers”). Another filter included only peer-reviewed journal articles available in English. We included both quantitative and qualitative studies on the KAP domains related to episiotomy among healthcare providers, especially studies from Palestine and other low- and middle-income countries.

2.7 Episiotomy:

Episiotomy is a surgical procedure performed during the second stage of labor to enlarge the vaginal opening, facilitating delivery. The purpose of this incision is to reduce pressure on the perineum during a difficult delivery and provide a controlled, more easily repairable incision compared to uncontrolled vaginal tears (Barjon et al., 2024). The routine uses of episiotomy began after the shift of births from homes to hospitals in the 1920s (Kemboi-Notie, 2009).

2.8 Historical development and origins of episiotomy

While the historical origins of the procedure are not entirely clear, it was first described by Sir Fielding Olds, a midwife, who advocated for its use in cases where the vaginal opening was excessively narrow, leading to a dangerous delay in delivery (Kamel & Khaled, 2014). The procedure involves an incision into the vaginal lining, superficial perineal muscles, and some fibers of the levator ani muscle, which is part of the pelvic floor supporting both the urethra and vagina (Yang & Bai, 2021).

2.9 Perineal anatomy and its importance during labor

The external female genitalia include the mons pubis, labia majora, labia minora, clitoris, vagina, and the perineal body, which is located between the vaginal opening and the anus. The perineum refers to the anatomical area at the pelvic outlet, which includes both the superficial and deep perineal muscles, along with the perineal membrane. This region is surrounded by skeletal structures such as the pelvic rami, sacrococcygeal ligaments, and the pubic symphysis, sacrum, and coccyx (Barjon et al., 2024; Graziottin & Gambini, 2015).

2.10 Performance of an episiotomy

An episiotomy is a surgical incision made in the perineum and posterior vaginal wall during the second stage of labor to enlarge the vaginal opening and facilitate childbirth. It is done to prevent major perineal tears, facilitate delivery in fetal distress, or aid in instrumental deliveries like forceps or vacuum extraction (Alharthy et al., 2020). Its use is not routinely recommended and is only utilized for clear medical indications (Amorim et al., 2023). The two primary types are midline (median) and mediolateral episiotomy. In a midline episiotomy, the incision originates at the posterior fourchette and moves vertically toward the anus, whereas in a mediolateral episiotomy it begins at the same site but is directed laterally at an angle of about 45–60 degrees to avoid damage to the anal sphincter (Kettle et al., 2012).

2.11 Procedure

The procedure is done post fetal head crowning, which provides sufficient analgesia, sterile preparation, and visualizing the perineum. The incision is used through skin, subcutaneous tissue, and perineal muscles using surgical scissors, permitting controlled enlargement of the vaginal opening. From birth, the incision is then repaired step by step (beginning with the vaginal mucosa, progressing to the perineal muscles, moving up to the skin) using absorbable sutures like polyglactin (Beckmann et al., 2013). Procedures include hygiene of perineal area, analgesic analgesics, cold compresses, and/or sitz bathing, as well as surveillance for complications such as infection, hematoma or dehiscence (Choudhari et al., 2022). Potential complications are pain, wound infection after the surgery and extension into third- or fourth-degree tears or dyspareunia, but the mediolateral incision is considered with fewer severe extensions (Thakur et al., 2020). The overall clinical evidence suggests episiotomy is a useful obstetric technique when medically indicated and if necessary, as long as it may be performed in a limited manner and is performed conservatively (using correct skills, layering repair, and postnatal care in order to reduce maternal morbidity to enable recovery).

2.12 Prevalence

Episiotomy prevalence was found to be variable globally due to institutional policies, obstetric practices, training and socio-cultural factors. In a meta-analysis conducted in Ethiopia, the pooled prevalence was 42.75 % among vaginal births (Aragaw et al., 2023). In 2022, a cross-sectional study performed in eastern Ethiopia showed a prevalence of 52.6 % among

women delivering vaginally (Belay et al., 2024). In comparison, in France the prevalence decreased from 25.8% in 2010 to 8.3% in 2021 (Houlbracq et al., 2025). These data indicate that, although some high-income countries have achieved restrictive rates, in many low/middle income settings there are reported rates significantly higher than WHO guidance of no more than 10% (WHO, 2018). For total episiotomy rate in Palestine this is observed to be about 28.7%, however for women having their first vaginal birth 78.8%. On the other hand, the rate for women with a previous vaginal birth has been reported to be much lower, at a rate of about 5.9% (Zimmo et al., 2018).

2.13 Indications

Episiotomy is mainly performed when there is an urgent requirement to expedite vaginal delivery or serious perineal tear formation is imminent. There are several clinical indications for this approach: non-reassuring fetal heart rate (fetal distress), and instrumental vaginal delivery (forceps or vacuum extraction); breech presentation and macrosomia as well as shoulder dystocia (Kettle et al., 2012). It can be done as well when the perineum is rigid and not stretching adequately, and tearing is likely, or when rapid delivery is necessary to avoid hypoxic injury to the fetus. Nonetheless, restrictive, not routine, episiotomy is associated with better maternal outcomes (WHO, 2018).

Domain 2: Specific knowledge on episiotomy (maternal indication for performing episiotomy)

Primiparity: Primiparity is one of the strongest predictors in women experiencing episiotomy, resulting from decreased perineal elasticity and increased resistance during the first vaginal birth (Beckmann et al., 2013). If the fetal head crowns rapidly or the second stage of labor is prolonged, new mothers are more likely to experience perineal trauma. Primigravida's consistently show much higher prevalence of episiotomy than do multiparas, even when practice is selective rather than routine. Preventive measures such as caution in individualization according to clinical guidelines are emphasized since unnecessary episiotomy could bring higher maternal morbidity (Aragaw et al., 2023).

Prolonged Second Stage of Labor: A lengthier second stage is associated with increased fatigue of the mother and difficulty with descent, leading to an episiotomy (Beckmann et al., 2013). When pushing is more than the minimum limits (≥ 3 hours combined with epidural or ≥ 2 hours without) recommended for pushing (Cohen & Friedman, 2024). Clinicians may act to alleviate the maternal stress and prevent obstructed labor. Episiotomy can ease baby delivery for women if they have insufficient contractions but progress does stall. Modern guidelines, on the other hand, suggest that routine episiotomy should not be performed. By doing so, the aim is to reduce severe perineal tears and even prevent adverse neonatal outcomes. They say selective use of early care aims also to lessen adverse outcomes (Cohen & Friedman, 2024).

Instrumental (operative vaginal) delivery: Instrumental (operative vaginal) delivery involves the use of obstetric instruments primarily forceps or a vacuum extractor in labor and delivery as expeditious intervention in cases where maternal or fetal conditions necessitate

such delivery (Hayes et al., 2025). These procedures are indicated for prolonged second stage of labor, maternal exhaustion, or non-reassuring fetal status (Wegner & Bernstein, 2020). Vacuum extraction is generally associated with fewer maternal perineal injuries, while forceps may offer better control of the fetal head in certain situations. Proper technique and clinical judgment are essential to minimize risks such as perineal trauma, neonatal cephalohematoma, or facial nerve injury (Gaur et al., 2025). In the field of evidence-based obstetric practice, instrumental delivery is the standard of care especially when timely birth is needed but cesarean section can be avoided.

Perceived Tight Perineum: The perineum may be rigid, non-elastic, or resistant during crowning, resulting in a need for episiotomy to avoid uncontrolled tearing. If the perineum is tight then it can affect fetal head rotation and extension—raising the risk of 3rd–4th degree tears. Selective episiotomy can prevent severe lacerations by providing a controlled incision (Wilson & Homer, 2020). Evidence suggests that perineal massage, warm compresses, and hands-on protection techniques may decrease episiotomy; however, clinical judgment remains essential in situations where the perineum does not stretch adequately (Wilson & Homer, 2020).

Obstructed Delivery: Patients with second stage obstructed labor may need episiotomy to achieve rapid birth and avert maternal-fetal complications. In cases of fetal descent which is obstructed even with adequate contractions, episiotomy can expand the opening and assist with a safe delivery. It is frequently combined with maneuvers for shoulder dystocia or in the presence of fetal malposition (Dajani & Magann, 2014; Kopas, 2014). Yet just episiotomy is insufficient to remove obstruction, because the cause has to be treated. Selective use is suggested to reduce the risk of prolonged labor, hypoxia and severe perineal trauma (Kopas, 2014).

Domain 2: Specific knowledge on episiotomy (fetal indication for performing episiotomy)

Fetal distress: Fetal distress refers to signs before or during childbirth indicating that the fetus is not well oxygenated, often due to impaired placental or umbilical blood flow (Pinas & Chandrachan, 2016). From a clinical viewpoint it is typically recognized by abnormal fetal heart rate patterns, decreased fetal movements, or meconium-stained amniotic fluid. Non-reassuring CTG findings of fetal bradycardia, late decelerations, or minimal variability are signs that may require urgent obstetric intervention to avoid hypoxia and acidemia (Pinas & Chandrachan, 2016). Early identification and treatment are vital to avoid adverse neonatal outcomes. When fetal distress persists despite intrauterine resuscitation, cesarean delivery or instrumental delivery may be necessary.

Breech presentation: A breech presentation occurs when the fetus is positioned with the buttocks or feet closest to the birth canal rather than the head (Beckmann et al., 2013). Breech births are associated with higher risks of cord prolapse, birth trauma, and perinatal morbidity, which is why external cephalic version (ECV) is recommended at 36–37 weeks, and cesarean delivery is often preferred when vaginal birth is unsafe (Beckmann et al., 2013; Macharey et al., 2017). Shoulder dystocia, on the other hand, is an obstetric emergency

where the fetal head delivers but the shoulders become impacted behind the maternal symphysis pubis. It is associated with maternal complications (postpartum hemorrhage, perineal trauma) and neonatal risks such as brachial plexus injury (Dajani & Magann, 2014). Immediate maneuvers McRoberts, suprapubic pressure, or delivery of the posterior arm are essential for safe resolution (Lau et al., 2024).

Large baby (fetal macrosomia): Fetal macrosomia is a frequent reason for performing an episiotomy, because a large fetal head leads to increased stretching of the perineum and potential for severe perineal tears and shoulder dystocia (Nguyen & Ouzounian, 2021). Macrosomic ($\geq 4,000$ – $4,500$ g) babies are highly associated with difficult crowning, prolonged second stage and increased likelihood of instrumental delivery (Turkmen et al., 2018). Selective episiotomy may be beneficial for managing more control of head delivery and reducing uncontrolled tearing. Guidelines stress individualized decision-making over routine episiotomy even when suspected macrosomia occurs.

Abnormal fetal positions such as persistent occipito-posterior (OP): Abnormal fetal positions such as persistent occipito-posterior (OP), brow, or face presentation increase labor difficulty, prolong descent, and raise the risk of perineal trauma (Barth Jr, 2024). In OP position, larger presenting diameters and slow rotation often necessitate instrumental delivery, where episiotomy is commonly used to reduce sphincter injury (Beckmann et al., 2013). Face presentation similarly increases resistance at the perineum because the fetal mentum must navigate a less optimal angle. Selective mediolateral episiotomy is sometimes recommended to facilitate rotation or expedite birth in these scenarios (Alharthy et al., 2020).

2.14 Contraindications

Episiotomy is a minor surgical procedure, but in some cases, it is contraindicated. Failure to receive maternal consent, perineal or vulvar infection, significant scarring, or prior perineal reconstructive surgery, as well as cases where cesarean delivery is already indicated (Beckmann et al., 2013). Additionally, it should also be avoided among women with bleeding disorders or severe anemia, where minimal surgical bleeding could aggravate the maternal status (Beckmann et al., 2013). Performing episiotomy without clear indication may also expose the woman to unnecessary risks, contrary to the principles of evidence-based obstetric care.

2.15 Complications

Complications of episiotomy span short-term and long-term outcomes. Short-term risks include perineal pain, hematoma, bleeding, wound dehiscence, infection, and extension into more severe perineal tears (third or fourth degree) involving the anal sphincter (Radner et al., 2024). In a study on long- and short-term outcomes, episiotomy did not decrease urinary incontinence, perineal pain or sexual dysfunction; rather, restricted use was associated with better results (Gün et al., 2016). A 2025 study of postpartum mothers found that complications from episiotomy (infection, laceration-related) negatively impacted quality of life, breastfeeding, and maternal daily functioning. This evidence supports using episiotomy only

when clearly indicated, minimizing maternal morbidity (Diluni Umesha Dharmasiri et al., 2025).

Domain 2: Specific knowledge on episiotomy (the immediate complications of episiotomy)

Complications of episiotomy span short-term and long-term outcomes. Short-term risks include perineal pain, hematoma, bleeding, wound dehiscence, infection, and extension into more severe perineal tears (third or fourth degree) involving the anal sphincter (Radner et al., 2024).

Excessive bleeding: Excessive bleeding is one of the most immediate complications following episiotomy (Gün et al., 2016). It results from injury to branches of the pudendal or perineal arteries during the incision or repair. Heavy bleeding significantly increases postpartum morbidity and may require additional suturing, pressure application, or surgical exploration. Studies show that episiotomy is associated with higher estimated blood loss compared with spontaneous perineal tears, particularly when performed inappropriately or without adequate visualization (Alharthy et al., 2020). Careful technique and postpartum monitoring are therefore essential.

3rd and 4th degree perineal tears: Although episiotomy was historically believed to prevent severe perineal tears, evidence shows it can increase the risk of 3rd and 4th degree obstetric anal sphincter injuries (OASI) when poorly executed (Gün et al., 2016). Midline episiotomy in particular has a high association with anal sphincter damage (Ali-Masri et al., 2018). These injuries can cause long-term complications such as fecal incontinence and pelvic floor dysfunction. Selective mediolateral episiotomy is currently recommended to reduce OASI in high-risk births (Alharthy et al., 2020).

Infection with abscess formation: Infection at the episiotomy site occurs when bacteria invade the wound, leading to cellulitis or abscess formation. Symptoms include fever, foul-smelling discharge, redness, tenderness, and wound breakdown (Darukshan & Grover, 2022). Infection is more likely when the incision is deep, hemostasis is poor, or hygiene is inadequate. Untreated infections may progress to abscesses requiring drainage. Studies show that postpartum perineal wounds, including episiotomies, have an infection rate of 1–11% (Jones et al., 2019).

Wound dehiscence: Wound dehiscence occurs when the episiotomy repair partially or completely splits open, typically due to infection, tension, or inadequate suturing technique (Schmidt & Fenner, 2024). Dehiscence causes severe pain, delayed healing, and increased risk of chronic perineal pain or dyspareunia. Some cases require resuturing in an operating room, while others heal by secondary intention. Evidence shows that wound breakdown is more common after episiotomy compared to natural tears due to greater tissue disruption (Jones et al., 2019).

Domain 2: Specific knowledge on episiotomy (long term complication of episiotomy)

Dyspareunia: Dyspareunia is one of the most frequently reported long-term complications of episiotomy (McDonald et al., 2015). Persistent perineal pain, scar tissue tightness, and nerve injury contribute to painful intercourse months or even years after delivery. Women with mediolateral or poorly repaired episiotomies have a significantly higher risk of dyspareunia compared with those who experience spontaneous tears. Research shows that up to 25% of women report sexual pain after episiotomy, often requiring pelvic-floor physiotherapy and scar management (Choudhari et al., 2022).

Urinary incontinence and perineal pain: In a study on long- and short-term outcomes, episiotomy did not decrease urinary incontinence, perineal pain or sexual dysfunction; rather, restricted use was associated with better results (Gün et al., 2016). A 2025 study of postpartum mothers found that complications from episiotomy (infection, laceration-related) negatively impacted quality of life, breastfeeding, and maternal daily functioning. This evidence supports using episiotomy only when clearly indicated, minimizing maternal morbidity (Diluni Umesha Dharmasiri et al., 2025).

Anal incontinence: Anal incontinence results from damage to the anal sphincter complex, often following 3rd or 4th degree tears associated with episiotomy. Women may experience loss of flatus control, fecal leakage, or urgency (Viannay et al., 2021). Midline episiotomies significantly increase the risk of obstetric anal sphincter injury (OASI). Long-term consequences include social embarrassment, reduced quality of life, and need for pelvic floor rehabilitation or surgical repair (Alharthy et al., 2020).

Pelvic organ prolapses: Pelvic organ prolapse may develop years after childbirth due to weakening of the pelvic floor muscles and connective tissues. Deep episiotomies, particularly when combined with instrumental delivery, increase the likelihood of cystocele, rectocele, or uterine prolapse (Razzak, 2018). Damage to levator ani muscles or perineal body integrity compromises pelvic support. Although childbirth itself is the strongest predictor of prolapse, episiotomy-related trauma can worsen the long-term risk (Alketbi et al., 2021).

Rectovaginal fistula: Rectovaginal fistula is a rare but severe long-term complication where an abnormal tract forms between the rectum and vagina (Maeda et al., 2023). This often results from infection, wound breakdown, or unrecognized anal sphincter injury following episiotomy. Symptoms include fecal leakage through the vagina, recurrent infections, and significant psychological distress. Most cases require surgical repair. Preventing severe perineal trauma during childbirth is essential to lowering fistula risk (Maeda et al., 2023).

2.16 Role of midwives

Midwives will help prevent unnecessary episiotomies by implementing the right practices for safe perineal outcomes (Beckmann et al., 2013). Their roles consist of perineal stretch assessment, promoting physiological birth positions, warm compress application, gentle pushing assistance, and supporting at the perineum during crowning (Kettle et al., 2012; Rodrigues et al., 2024). Midwives are also vital for recognizing when episiotomy is clinically

indicated and ensuring that it is performed safely under aseptic conditions. In many countries, a move to midwife-led woman-centered care has been associated with lower rates of episiotomy and more satisfied mothers (Lundgren et al., 2022). Furthermore, midwives are crucial in postpartum care, guiding perineal hygiene, pain management, and early detection of complications to promote optimal recovery.

2.17 Knowledge toward episiotomy

This study conducted by Khresheh and Barclay (2020) in Jordan, aimed to determine the knowledge, attitudes, and experience of episiotomy practice among obstetricians and midwives who were working in three public hospitals. To examine the knowledge level of evidence on overuse and risk of episiotomy, the authors discovered that participants demonstrated low knowledge with a statistically significant difference between obstetricians and midwives ($P < 0.05$). The results showed that midwives have limited access to evidence which is not emphasised in their learning, practice, or hospital policy. In fact, the majority of midwives (79%) felt that an episiotomy rate of 81% is about right. For midwives the most frequent reason for episiotomy (75.5%) was to reduce the risk of 3rd and 4th degree perineal laceration. According to midwives, the most common challenges were insufficient time to wait for the perineum to stretch (56.6%) and difficulty changing the conventional practices in the labour ward (52.8%).

This study conducted by Maphanga and Naidoo (2021) in South Africa aimed to assess healthcare workers' perception and knowledge about episiotomy in a low- and middle-income setting. The findings showed that midwives demonstrated poor knowledge of national episiotomy guidelines, were often unaware of recommendations against routine use, and continued to justify episiotomy based on misconceptions about preventing severe perineal tears. In addition, the commonly reported reason for performing an episiotomy by midwives was to reduce 3rd – 4th degree perineal tears.

This study conducted by Yang and Bai (2021) in China aimed to evaluate the knowledge, attitude, and experience of episiotomy practice among obstetricians and midwives in public hospitals. The authors reported that the average knowledge level (4.15, $SD = 1.10$) on complications and overuse was identified among participants. Episiotomy was performed more frequently in secondary hospitals than in tertiary hospitals ($p < 0.05$). Furthermore, the most common reason for performing episiotomy identified by obstetricians (83.94%) and midwives (79.69%) was to reduce third-degree or fourth-degree perineal laceration. Both obstetricians (80.29%) and midwives (82.57%) agreed that the most significant obstacle to reducing the rate of episiotomy was lack of training on reducing perineal tears.

This study conducted by Ankarcrona et al. (2022) in Sweden aimed to explore healthcare providers (HCP) knowledge and attitudes regarding episiotomy use during vacuum extraction and prevention of obstetric anal sphincter injuries. The results indicated that while many HCP recognized that episiotomy is not universally indicated, knowledge about when it truly reduces sphincter injury was inconsistent, and a considerable group reported uncertainty about the current evidence base, highlighting the need for more focused education.

This study conducted by Lye et al. (2022) in Malaysia aimed to assess knowledge and practices of episiotomy among house officers, student midwives, and experienced midwives working in a low-risk obstetric unit. The authors found that overall knowledge scores were only moderate, with experienced midwives showing better understanding of indications and

complications than junior doctors and student midwives, and they concluded that structured, evidence-based teaching on episiotomy is still insufficient in training programs.

2.18 Attitude toward episiotomy

This study conducted by Khresheh and Barclay (2020) in Jordan aimed to investigate participants' knowledge, attitudes, and experience of episiotomy practice in public hospitals. The survey found that both obstetricians and midwives consistently had positive attitudes toward routine or high rates of episiotomy, perceived episiotomy as necessary to prevent severe tears, as well as to protect fetal safety, and believed that the present very high rate was 'about right,' and indicated a generally pro-episiotomy attitude.

This study conducted by Yang and Bai (2021) in China aimed to determine midwives' knowledge, attitude, and experience regarding episiotomy in public maternity units. The authors found that although some participants expressed support for moving toward selective episiotomy, a large proportion retained a favorable attitude to performing episiotomy in primiparous women and in many non-evidence-based situations, influenced by fear of litigation, habit, and institutional culture.

This study conducted by Maphanga and Naidoo (2021) in South Africa aimed to examine healthcare workers' perception and knowledge about episiotomy use. The findings indicated that attitudes were still shaped by traditional training and hierarchical norms, with many participants believing that episiotomy was a routine component of safe delivery despite recognizing its potential complications, and the authors reported resistance to changing long-standing practices in labor wards.

This study conducted by Garcia-Cerde et al. (2021) in Mexico aimed to explore healthcare workers' perceptions of episiotomy in the era of respectful maternity care within an obstetric training program. The qualitative findings showed ambivalent attitudes: providers acknowledged that routine episiotomy conflicted with respectful care principles, yet many continued to view it as a safeguard against perineal trauma and neonatal risk, revealing tension between humanized childbirth ideals and entrenched procedural habits.

This study conducted by Rodrigues et al. (2024) in a European context (Portugal/Spain setting) aimed to explore midwives' practices on perineal protection and episiotomy decision-making through a qualitative descriptive design. The authors reported that midwives' attitudes toward episiotomy ranged from strongly interventionist to strongly restrictive, shaped by previous experience, perceived risk of tears, and institutional norms; many midwives expressed a desire to reduce episiotomy but felt pressured by colleagues, time constraints, or fear of adverse outcomes to continue using it more often than they believed necessary.

This study conducted by Taha (2022) aimed to explore midwives' perceptions and reasons for continuing routine episiotomy in teaching hospitals. The results showed that midwives often held a positive or pragmatic attitude toward routine episiotomy, citing fear of extensive

perineal tears, pressure to expedite labor, and expectations of senior obstetricians as key reasons, even when they were aware of global recommendations for selectivity.

2.19 Practice of episiotomy

This study conducted by Zimmo et al. (2018) in six hospitals across Gaza and the West Bank to describe episiotomy practice and its association with severe perineal lacerations among singleton vaginal births in Palestine. They found that episiotomy remained routine practice, particularly in primiparous women, with rates close to 80% in first vaginal births, and large variation between hospitals. The authors conclude that non-evidence-based practices surrounding episiotomy were prevalent and that restrictive use was not yet implemented, and they recommend the education of birth attendants, adherence to updated guidelines, and clinical audits to reduce overuse.

This study conducted by Dwekat et al. (2022) in northern West Bank clinics aimed to determine the prevalence of mistreatment of women during childbirth and its associated factors, including obstetric interventions. In this cross-sectional survey of 269 women within 16 weeks after vaginal birth, the authors reported a very high overall prevalence of mistreatment and found that women who had an episiotomy or perineal tear were almost six times more likely to report one or more types of mistreatments compared with those without perineal trauma. Mistreatment included poor rapport, failure to meet professional standards of care, and lack of pain relief. The study emphasized that in the Palestinian context, episiotomy and perineal trauma are not only clinical events but are strongly linked to women's perceptions of disrespect and violation of their rights during childbirth.

This study conducted by Khresheh and Barclay (2020) in Jordan aimed to investigate clinicians' knowledge, attitudes, and experience of episiotomy practice in public hospitals. The findings demonstrated that episiotomy was still performed very frequently, especially in primiparous women, and that many clinicians considered high episiotomy rates acceptable; practice patterns were driven more by routine and local norms than by international evidence on restrictive use.

This study conducted by Bekele et al. (2022) in Ethiopia aimed to determine the magnitude of episiotomy practice and associated factors among women who gave birth at Hiwot Fana Specialized University Hospital. The authors found that the episiotomy rate (about 44%) was substantially higher than WHO recommendations, and that primiparity, instrumental delivery, fetal distress, and provider preference were significant predictors of episiotomy, indicating a pattern of overuse in routine care.

This study conducted by Lye et al. (2022) in Malaysia aimed to assess knowledge and practices of episiotomy among house officers, student midwives, and experienced midwives in a tertiary hospital. The findings showed that episiotomy was frequently performed in low-risk situations, particularly by less experienced staff, and that experienced midwives were more likely to adopt selective practice with better perineal support techniques, suggesting that practice is strongly influenced by training level and clinical supervision.

This study conducted by Rodrigues et al. (2024) in Europe aimed to describe midwives' practices on perineal protection and episiotomy decision-making using qualitative interviews. The authors reported diverse practical approaches, including hands-on and hands-poised techniques, variable criteria for performing episiotomy, and considerable influence of team culture and physician expectations; some midwives had successfully reduced their episiotomy rates, while others still performed the procedure routinely in specific scenarios.

This study conducted by Laderas Díaz et al. (2024) in Spain aimed to analyze midwives' approach to prevention and repair of obstetric perineal trauma, including episiotomy practice. The results indicated that most midwives reported relatively low episiotomy rates for normal vaginal births, but there were still units with higher usage; adherence to clinical guidelines, confidence in alternative perineal protection methods, and ongoing training were associated with more restrictive and evidence-based episiotomy practice.

This study conducted by Nam Giang et al. (2025) in Central Vietnam aimed to assess episiotomy practices and associated factors among primiparous women one year after implementing a national policy promoting selective episiotomy. The authors found that episiotomy rates remained very high among first-time mothers, and that factors such as provider type, hospital level, and use of instrumental delivery significantly predicted episiotomy; the findings suggested that actual clinical practice lagged behind policy, with midwives and doctors continuing to perform episiotomy routinely despite formal recommendations for restriction.

2.20 Chapter Summary

This chapter reviewed literature on episiotomy, addressing its prevalence, indications, contraindications, complications, and the role of midwives. Globally, the prevalence of episiotomy remains variable, with higher rates in developing countries compared to the restrictive practice recommended by WHO (<10%). Limited data from Palestine show an overall episiotomy rate in Palestine is reported to be around 28.7%, but it is much higher for women having their first vaginal birth at 78.8%. In contrast, the rate for women who have previously given birth vaginally is significantly lower at approximately 5.9%.

Chapter Three

Research Methodology

3.1 Introduction:

In this chapter, the methodology implemented in this study to assess midwives' knowledge, attitudes, and practices toward episiotomy in the Northern region of the West Bank, Palestine, is presented. The chapter describes the procedures that were carried out, including obtaining ethical approvals, designing the study instrument, verifying its validity and reliability, conducting a pilot study, systematically collecting data, and performing data entry and statistical analysis. These procedures were conducted to ensure the accuracy and reliability of the research findings. Finally, a summary of the methodology used to achieve the study objectives is provided.

3.2 Study design:

This study adopted a quantitative, descriptive cross-sectional design to assess midwives' knowledge, attitudes, and practices toward episiotomy in the Northern region of the West Bank, Palestine. The questionnaire, previously used in similar studies (Maphanga & Naidoo, 2021; Khresheh & Barclay, 2020), was adapted for the local context and population. It included items covering key aspects of knowledge, attitudes, and practices, with reliability and validity ensured through expert review and pilot testing. It should be noted that practices were assessed via self-report rather than direct observation, which may introduce social desirability and recall biases, potentially affecting the accuracy of the reported behaviors.

3.3 Setting:

The study was conducted in five government hospitals located in the northern West Bank, which provide maternal health care services. These hospitals included Thabet Thabet Hospital in Tulkarm, Khalil Suleiman Hospital in Jenin, Rafidia Hospital in Nablus, Turkish Hospital in Tubas, and Darwish Nazzal Hospital in Qalqilya.

3.3.1 Government hospitals

1. Martyr Dr. Thabet Thabet Governmental Hospital (Tulkarem Governmental Hospital).

Martyr Dr. Thabet Thabet Governmental Hospital, formerly known as Al-Jihad Hospital, is one of the Palestinian governmental hospitals operated by the Ministry of Health. The hospital is located in the city of Tulkarem, in the Northern region of West Bank Palestine, and it serves the local population as well as surrounding villages.

The hospital has a clinical capacity of approximately 129 beds, with around 356 staff members working in various medical specialties. The obstetrics department has 5 delivery beds, while the postnatal care unit has 26 beds.

Regarding midwifery services, the hospital employs 18 midwives. The hospital records an annual total of 1,492 natural deliveries, reflecting the significant role it plays in maternal healthcare. (MoH,2022).

2. Jenin Governmental Hospital (Martyr Dr. Khalil Suleiman Governmental Hospital).

Jenin Governmental Hospital, officially known as Martyr Dr. Khalil Suleiman Governmental Hospital, is one of the governmental hospitals in the West Bank, Palestine. It is operated under the Ministry of Health of Palestine.

The hospital has a clinical capacity of approximately 223 beds, and it employs a staff of 433 individuals across various departments. In the obstetrics department, there are 32 midwives, and the obstetrics department is equipped with 6 delivery beds. The postnatal care unit includes 38 beds for mothers and newborns.

The hospital is a key provider of maternal healthcare, with an annual total of 3,307 natural deliveries. (MoH,2022).

3. Rafidia Surgical Governmental Hospital

Rafidia Surgical Governmental Hospital is one of the governmental hospitals in the Northern region of the West Bank, Palestine. It is operated under the Ministry of Health of Palestine.

The hospital has a clinical capacity of 201 beds and employs a staff of 539 individuals across various departments. In the obstetrics department, there are 10 midwives, and it has 5 delivery beds. The postnatal care unit, there are 16 midwives, and it includes 32 beds for mothers and newborns. The hospital handles a total of 2,688 natural deliveries annually. (MoH,2022).

4. Tubas Turkish Governmental Hospital

Tubas Turkish Governmental Hospital is one of the Palestinian governmental hospitals operated by the Ministry of Health. It is the only hospital serving Tubas Governorate and the Jordan Valley region. Established in 2013, it officially opened in early 2014 to provide essential medical services to the local population. The hospital has a clinical capacity of 70 beds and employs 169 staff members across various specialties. The obstetrics and postnatal care unit is staffed by 12 midwives to support women during labor and postpartum care. The hospital records an annual total of 771 natural deliveries. (MoH, 2022).

5. Dr. Darwish Nazzal Governmental Hospital (Qalqilya Governmental Hospital).

Dr. Darwish Nazzal Governmental Hospital, also known as Qalqilya Governmental Hospital, is one of the governmental hospitals in the Northern region of the West Bank, Palestine. It is operated under the Ministry of Health of Palestine.

The hospital has a clinical capacity of approximately 68 beds, with 12 midwives working in the obstetrics department, and it includes 4 delivery beds, and the postnatal care unit has 13 beds for mothers and newborns. The hospital handles a total of 1,001 natural deliveries annually. (MoH,2022).

3.4 Study population and sampling

The study population included all midwives working in the field of childbirth in the northern region of the West Bank, Palestine, during the study period from October 2024 to 2025. The total number of midwives was determined to be 113, based on their distribution among the five selected hospitals in the northern region of the West Bank. This number was obtained by contacting the heads of departments in these hospitals and reviewing the data recorded in the Annual Report (Ministry of Health Annual Report, 2022).

After receiving research approval, an official letter was obtained from the university to request permission from the Ministry of Health. This allowed access to the hospitals and the heads of nursing departments to obtain approval to communicate with the midwives in the five governmental hospitals located in the northern West Bank.

Table (3.1): Name of the selected hospitals and number of midwives distributed per hospital

No.	Hospital Name	Midwives No
1	Thabet Thabet Hospital	18
2	Khalil Suleiman Hospital	33
3	Rafidia Hospital	32
4	Turkish Hospital	16
5	Darwish Nazzal Hospital	14
	Total	113

Sample size

The sample size for this study was determined using an online sample size calculator (Raosoft, 2012), based on the total number of midwives (113) working in the five selected governmental hospitals in the northern region of the West Bank, Palestine. The calculation was conducted with a 95% confidence level and a 5% margin of error. Using Slovin's formula, the estimated sample size was calculated as follows:

$$n = \frac{N}{1 + N \cdot e^2}$$

Where

- n: required sample size.
- N: total population size (113 midwives).
- e: margin of error (0.05).

Thus, the final calculated sample size was 88 midwives. To ensure adequate representation and to compensate for potential non-response, all midwives working in the selected hospitals during the data collection period were approached. Midwives who provided informed consent were included in the study, resulting in the participation of 100 midwives. Private hospitals were excluded because governmental hospitals provide care to the largest proportion of pregnant women and offer midwives greater opportunities to independently perform episiotomy. In contrast, midwives in private hospitals are less frequently authorized to make clinical decisions regarding episiotomy, which may limit the generalizability of the study findings to non-governmental healthcare settings.

Sample type

The study used convenience sampling to select midwives working in five governmental hospitals in the northern region of the West Bank (Thabet Thabet, Khalil Suleiman, Rafidia, Turkish, and Darwish Nazzal hospitals). These hospitals were selected as study sites because they provide maternal health services to a large number of women and are the primary destinations for vaginal births due to their status as public healthcare facilities. However, due to the use of convenience sampling, the results of this study can only be generalized to similar study contexts and designs and are not representative of the entire population because of the inherent limitations of this sampling method (Golzar et al., 2022).

However, due to the use of convenience sampling, the results of this study can only be generalized to similar study contexts and designs and are not representative of the entire population because of the inherent limitations of this sampling method (Golzar et al., 2022).

Inclusion criteria

1. Midwife with a two-year practical study, bachelor's degree, or higher education.
2. Midwives who agreed to provide informed consent and participate in the study.
3. Midwives with at least one year of work experience.

Exclusion criteria

1. Midwives with less than one year of work experience.

3.5 Instruments of the study

This study used a self-administered questionnaire found in the literature (Maphanga & Naidoo, 2021; Khresheh & Barclay, 2020). Permission was obtained from the authors who developed and used the questionnaire. These tools were specifically designed to assess midwives' knowledge, attitudes, and practices toward episiotomy. The original questionnaires were received from the authors via email. The questionnaires were revised and modified to align with the study objectives, and their reliability and validity were ensured through expert review and pilot testing before data collection. This process confirmed that the questions were clear, appropriate, and capable of gathering the necessary information from participants.

In designing the questionnaire, differences between guidelines, protocols, policies, and procedures were considered, as each has a distinct role in shaping midwives' practice. Guidelines provide general evidence-based recommendations, protocols define specific steps for practice, policies establish institutional rules and standards, and procedures detail the exact steps for performing clinical tasks such as episiotomy.

3.5.1 Midwives' knowledge, attitudes, and practices toward episiotomy (self-administered questionnaire)

The self-administered questionnaire used in this study was a validated psychometric instrument adapted from previous studies (Maphanga & Naidoo, 2021; Khresheh & Barclay, 2020). It was designed to assess midwives' knowledge, attitudes, and practices toward episiotomy. The questionnaire was paper-based and anonymous, and special attention was given to the clarity and simplicity of the language to ensure that all items were easily understood, allowing participants to respond accurately and objectively.

The questionnaire was prepared in English and consisted of four main parts:

Part One: Socio-demographic characteristics of midwives: this section assessed the socio-demographic characteristics of the midwives, including their age, midwifery experience, education level, marital status, area of residence, place of work, training on episiotomy, availability of unit protocol or policy, and the type of episiotomy recommended in their facility.

Part Two: Midwives' knowledge toward episiotomy: this section assessed the midwives' knowledge of episiotomy through a structured set of questions divided into two main domains. The first domain, General Knowledge, included Three items focusing on the definition

of episiotomy, the anatomical structures involved, and technical aspects such as the recommended angle for a mediolateral episiotomy. The second domain, Specific Knowledge, evaluated midwives' understanding of the indications and complications of episiotomy, with responses scored as follows: a correct answer of "Yes" was awarded one point, while a correct answer of "No" was awarded zero point. This domain comprised four subdomains: maternal indications (10 items), where six statements required a "Yes" response and four required a "No" response; fetal indications (seven items), where six statements required a "Yes" response and one required a "No" response; immediate complications (8 items), where six statements required a "Yes" response and two required a "No" response; and long-term complications (six items), where four statements required a "Yes" response and two required a "No" response. This structured scoring method allowed for a detailed and accurate evaluation of midwives' theoretical and practical knowledge regarding episiotomy.

Regarding scoring system, 1 point given for correct answer and 0 point for incorrect answer, the total sum score range between 0 to 34. The cutoff point set as follow based on equal interval categorization as follows; Poor knowledge: 0 – 11, Moderate knowledge: 11 – 22 and High knowledge: 23 – 34.

Part Three: Midwives' Attitudes toward episiotomy: this section assessed the midwives' attitudes toward episiotomy through ten statements measured on a five-point Likert scale: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Among these ten statements, three (3) were positively worded (code) and seven (7) were negatively worded (recode), with the latter reversed to ensure that higher scores reflected a more positive attitude toward appropriate episiotomy practice. The statements explored various aspects of midwives' perspectives, including their views on restricted versus routine use of episiotomy among primiparous and multiparous women, their readiness to minimize perineal trauma, the influence of traditional practices and patient expectations, the role of episiotomy in busy labor wards, and the perceived need for continuous training and clear unit protocols. This structured approach allowed for a comprehensive evaluation of midwives' attitudes, providing deeper insight into their beliefs and the factors influencing their professional practice.

Regarding the scoring system, the cutoff point set as follow based on equal interval categorization as follows Negative: 1-2.33, Moderate: 2.34-3.67 and Positive: 3.68-5.

Part Four: Midwives' practice toward episiotomy: this section assessed the midwives' actual practices regarding episiotomy through a structured set of questions and statements. Midwives' experience in performing episiotomies was measured by asking how many procedures they had performed under supervision, with responses categorized into specific ranges. The section also examined the timing and indications considered appropriate for performing an episiotomy during labor, as well as perineal care practices after the procedure.

In addition, this part included thirteen (13) statements, of which ten (10) were positively worded (code) and three (3) were negatively worded (recode), and their coding was reversed to ensure that higher scores reflected better practice levels. These statements were measured using a five-point Likert scale: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. They covered various aspects of clinical practice, such as the use of perineal massage and warm compresses to reduce the need for episiotomy, obtaining verbal consent from the mother, providing local anesthesia, administering analgesia and prophylactic antibiotics after repair, offering adequate counseling on perineal and wound care, performing episiotomy in cases of prolonged, obstructed, or augmented labor, or when maternal or fetal health is at risk, employing manual perineal protection techniques, and allowing natural labor progres-

sion to minimize unnecessary episiotomies. This structure allowed for a comprehensive assessment of midwives' adherence to evidence-based and patient-centered practices in managing episiotomy.

Regarding the scoring system, the cutoff point set as follow based on equal interval categorization as follows Poor: 1-2.33, Moderate: 2.34-3.67 and Good: 3.68-5.

3.6 Validity of the study questionnaire

To ensure the face and content validity of the instrument, the final version of the structured questionnaire was reviewed by a gynecologist/obstetrician and two experienced midwives working in antenatal care and the labor ward of a private hospital. Their feedback was invaluable, and the questionnaire was modified accordingly.

The questionnaire was translated into Arabic by a professional translator to guarantee linguistic precision and cultural relevance. The translated document was evaluated by specialists in midwifery and maternal health to ensure clarity, relevance, and conceptual equivalence with the original English text. Minor modifications were implemented in accordance with expert feedback, and the final Arabic version underwent pilot testing before data collection commenced.

3.7 Reliability of the study questionnaire:

Table 2 shows the internal consistency reliability for each domain of the instrument. The Cronbach's alpha values demonstrated acceptable reliability across all domains, indicating good internal consistency. Specifically, the knowledge domain ($\alpha = 0.79$), attitude domain ($\alpha = 0.81$), and practice domain ($\alpha = 0.78$) all exceeded the commonly accepted threshold of 0.70, confirming that the tool was reliable for measuring participants' responses.

Table (3.2): Reliability coefficient

Domain	N	Cronbach Alpha
Knowledge	34	0.79
Attitude	11	0.81
Practice	16	0.78

3.8 Ethical considerations

Prior to conducting the study, ethical approval was obtained from the Ethical Committee at Al-Quds University, in accordance with the principles outlined in the Helsinki Declaration. Permission to conduct the study was also secured from the Palestinian Ministry of Health, and approvals were requested from hospital managers, nurse directors, and head nurses at the participating governmental hospitals.

Informed consent was obtained from each participating midwife, ensuring that participation was entirely voluntary. Confidentiality and anonymity were strictly maintained throughout the study, and participants' identities were not disclosed. Completed questionnaires were placed in sealed envelopes and deposited in a designated box labeled "Research Questionnaire" at the reception area, to safeguard participants' information.

All research procedures were conducted following established ethical standards to protect the rights and safety of the participants.

3.9 Data collection

Before starting data collection, the researcher visited the hospital managers, nurse directors, and head nurses in charge of maternity units at the five participating government hospitals to explain the study objectives and request approval.

The researcher personally communicated with potential midwife participants and invited them to take part in the study. A validated psychometric, self-administered, paper-based, anonymous questionnaire designed to assess midwives' knowledge, attitudes, and practices toward episiotomy was distributed. The questionnaire was accompanied by an introductory letter explaining the purpose of the study, instructions for completion, and assurances of confidentiality. Participants were informed that participation was voluntary and that they could withdraw from the study at any time without any consequences.

Informed consent was obtained from all participants. To maintain confidentiality, participants were not required to provide their names or the names of their hospitals. Completed questionnaires were placed in sealed envelopes and deposited in a designated box labeled "Research Questionnaire" at the reception area. The data collection process lasted approximately two months, starting in August 2025. The estimated time required to complete the questionnaire was approximately 15 minutes, as reported in previous studies using similar instruments (Maphanga & Naidoo, 2021; Khresheh & Barclay, 2020).

Data were collected by the researcher and other trained midwives nominated by the hospital managers. These midwives were trained on the data collection process after the study's purpose was explained. All completed questionnaires were securely stored in a locked location to ensure confidentiality and the safety of the collected data throughout the study.

The data were collected by the researcher and other trained midwives nominated by the hospital managers. These midwives received training on the data collection process after the study's purpose was explained. Some questionnaires were distributed by midwives from the same hospitals, which may have influenced participants' responses due to perceived professional evaluation or peer pressure, potentially contributing to response bias. It is important to note that collecting data over a fixed 2-month period does not capture changes in practice over time or the effects of ongoing training or policy changes. All completed questionnaires were securely stored in a locked location to ensure confidentiality and the safety of the collected data throughout the study.

3.10 Data analysis

The collected data were analyzed by the Statistical Package for Social Sciences (SPSS Version 27). Data analysis of descriptive and inferential statistics was conducted. Regarding descriptive statistics, frequency, percentages, mean score, and Standard Deviation (SD) were used to describe the study variables. Regarding inferential statistics, parametric tests were used, such as the independent t-test to assess the differences between two categorical variables and the one-way ANOVA test for three or more categorical variables, as well as Pearson correlation to assess the relationships between study variables after assessing the normality of the data using the Kolmogorov-Smirnov and Shapiro-Wilk tests ($p \geq 0.05$). As seen in Table 3.3).

Table (3.3) Normality tests

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Sta-tistic	df	p-value	Sta-tistic	Df	p-value
Knowledge	.114	100	.330	.964	100	.344
Attitude	.077	100	.158	.991	100	.754
Practice	.104	100	.101	.953	100	.111

*Significant value $p \leq 0.05$

3.11 Summary:

This chapter presented the methodology used in this research, detailing the study design, the target population, and the procedures followed to collect and analyze data using SPSS version 27. These steps were implemented to ensure accuracy and reliability in achieving the study objectives.

Chapter Four

Results

4.1 Introduction:

This chapter presents the findings of the study, which aimed to assess the knowledge, attitude, and practice of midwives toward episiotomy. The results are organized according to the study objectives and are supported by descriptive and inferential statistics.

4.2 Sociodemographic characteristics of the midwives

The study included 100 midwives with a mean age of 32.4 years (SD = 5.92). Most participants were aged 26–35 years (64%) and had over five years of experience in midwifery (62%). The majority held a bachelor's degree (86%), while 10% had a diploma and 4% a postgraduate qualification. Most respondents were married (81%) and resided in villages (55%), followed by cities (32%) and camps (13%). Participants were distributed across five hospitals, with the largest proportion working at Jenin Hospital (32%). Regarding professional preparation, 74% had received previous training on episiotomy, primarily during midwifery college (39%), while 82% reported the presence of a protocol or policy guiding episiotomy practice in their units. The most commonly recommended episiotomy type was the right mediolateral technique (49%), followed by right lateral (28%) and left lateral (18%), whereas none of the facilities practiced the midline approach. As seen in Table (4.1.A.B).

Table 4.1.A: Frequency and percent of sociodemographic characteristics of the midwives' (N=100)

Sociodemographic Characteristics of the Midwives		No	(%)
Age group (years)	21-25	10	10.0%
	26-30	35	35.0%
	31-35	29	29.0%
	36-40	16	16.0%
	>40	10	10.0%
	Mean: 32.40, SD: 5.92, Min: 23 Max: 45		

Table 4.1.B: Frequency and percent of sociodemographic characteristics of the midwives' (N=100)

Sociodemographic Characteristics of the Midwives		No	(%)
Experience in Midwifery	<1 year	8	8.0%
	1-5 years	30	30.0%
	6-10 years	31	31.0%
	>10 years	31	31.0%
Education Level	Diploma	10	10.0%
	Bachelor's	86	86.0%
	Master or PhD	4	4.0%
Social Status	Single	17	17.0%
	Married	81	81.0%
	Divorced OR Widowed	2	2%
Area of residence	City	32	32.0%
	Village	55	55.0%
	Camp	13	13.0%
Hospital name	Jenin Hospital	32	32.0%
	Qalqilya Hospital	12	12.0%
	Tulkarm Hospital	18	18.0%
	Tubas Hospital	12	12.0%
	Nablus Hospital	26	26.0%
Previous training on episiotomy?	Yes	74	74.0%
	No	26	26.0%
If yes, where did you get the training?	Midwifery college	39	39.0%
	During internship	15	15.0%
	Continued training in the labor ward	9	9.0%
	Special courses	11	11.0%
Do you have a protocol/policy at your unit on episiotomy practice for the midwives?	Yes	82	82.0%
	No	18	18.0%
What type of episiotomy is recommended in your facility?			
	Right lateral episiotomy	28	28.0%
	Left lateral episiotomy	18	18.0%
	Right mediolateral episiotomy	49	49.0%
	Left mediolateral episiotomy	5	5.0%
	Midline episiotomy	0	0%

4.3 Level of midwives' knowledge toward episiotomy

The overall knowledge toward the episiotomy among midwives (34 items)

The majority of midwives demonstrated a moderate level of knowledge regarding episiotomy (62%), while a smaller proportion exhibited a high level of knowledge (38%). Notably, none of the participants fell within the poor knowledge category (0%), as illustrated in Figure (4.11) (see Annex).

Average of correct and incorrect answer toward general knowledge items

The chart illustrates the average percentage of correct and incorrect answers regarding midwives' general knowledge of episiotomy. The results show that slightly more than half of the

responses (54.7%) were correct, while 45.3% were incorrect, as illustrated in Figure (4.12) (see Annex).

Average of correct and incorrect answer toward specific knowledge items

The chart illustrates the average percentage of correct and incorrect responses in specific knowledge related to episiotomy among midwives. The findings show that 62.8% of answers were correct, while 37.2% were incorrect, as illustrated in Figure (4.13) (see Annex).

Average of correct & incorrect answers in maternal indications

The chart illustrates the average percentage of correct and incorrect answers regarding maternal indications for performing an episiotomy among midwives. The results show that 65.4% of responses were correct, while 34.6% were incorrect, as illustrated in Figure (4.14) (see Annex).

Average of correct & incorrect answers in fetal indications

The chart presents the average percentage of correct and incorrect responses regarding fetal indications for performing an episiotomy among midwives. The findings show that 64% of responses were correct, while 36% were incorrect, as illustrated in Figure (4.15) (see Annex).

Average of correct & incorrect answers in immediate complications

The chart illustrates the average percentage of correct and incorrect responses regarding the immediate complications of episiotomy among midwives. The results show that 63.8% of responses were correct, while 36.3% were incorrect, as illustrated in Figure (4.16) (see Annex).

Average of correct & incorrect answers in long-term complications

The chart shows the average percentage of correct and incorrect answers regarding long-term complications of episiotomy among midwives. The findings reveal that 58% of responses were correct, while 42% were incorrect, as illustrated in Figure (4.17) (see Annex).

4.3.1 General knowledge about episiotomy among midwives

The findings revealed that more than half of the midwives correctly identified the definition of episiotomy (58.0%), while 42.0% provided incorrect answers. Regarding the anatomical structures involved, only 41.0% answered correctly, and 59.0% were incorrect. For the correct angle of a mediolateral episiotomy (40–60 degrees), 65.0% responded correctly, whereas 35.0% were incorrect. Overall, the average percentage of correct answers across the three items was (54.7%), and incorrect answers were (45.3%), as seen in Table (4.2).

Table 4.2 General knowledge about episiotomy among midwives (n=100)

General knowledge about episiotomy		N	%
1. Definition of episiotomy (Surgical enlargement of the posterior aspect of the vaginal orifice by an incision to the perineum during last part of 2nd stage of labor)	Incorrect	42	42.0%
	Correct	58	58.0%
2. Anatomical structures are cut during episiotomy (It involves the skin and subcutaneous tissue, bulbocavernosus muscle and fascia, transverse perineal muscle, and sometimes the levator ani muscle and fascia depending on the size of the episiotomy)	Incorrect	59	59.0%
	Correct	41	41.0%
3. Angle from midline for a properly constituted mediolateral episiotomy (40-60)	Incorrect	35	35.0%
	Correct	65	65.0%
Average answers (3 items)	Incorrect	45.3%	
	Correct	54.7%	

Bold is a correct answer

4.3.2 Specific knowledge about episiotomy among midwives

maternal indications for performing episiotomy

The results show that most midwives correctly identified maternal indications for performing an episiotomy, with an overall correct response rate of (65.4%) and incorrect responses at (34.6%). The highest correct answers were related to perceived tight perineum (95.0%) and prevention of 3rd and 4th degree perineal tears (94.0%). Moderate levels of correct responses were reported for poor maternal effort (72.0%), instrumental deliveries (71.0%), and obstructed delivery (69.0%). However, knowledge was lower regarding specific medical conditions (56.0%), prolonged second stage of labor (63.0%), history of previous episiotomy (63.0%), and use of analgesia (64.0%). The lowest correct response was for primiparity (7.0%), as seen in Table (4.3.A.B)

Table 4.3.A Knowledge toward maternal indications for performing episiotomy among midwives (n=100)

Maternal indications for performing episiotomy		N	%
1. Primiparity	Incorrect	93	93.0%
	Correct	7	7.0%
2. Perceived tight perineum	Incorrect	5	5.0%
	Correct	95	95.0%
3. To prevent 3rd and 4th degree perineal tears	Incorrect	6	6.0%
	Correct	94	94.0%
4. Poor maternal effort	Incorrect	28	28.0%
	Correct	72	72.0%
5. Prolonged 2nd stage of labor	Incorrect	37	37.0%
	Correct	63	63.0%

Table 4.3.B Knowledge toward maternal indications for performing episiotomy among midwives (n=100)

Maternal indications for performing episiotomy		N	%
6. Obstructed delivery (during second stage)	Incorrect	31	31.0%
	Correct	69	69.0%
7. Instrumental deliveries	Incorrect	29	29.0%
	Correct	71	71.0%
8. History of Previous episiotomy	Incorrect	37	37.0%
	Correct	63	63.0%
9. The use of analgesia during labor	Incorrect	36	36.0%
	Correct	64	64.0%
10. specific medical conditions	Incorrect	44	44.0%
	Correct	56	56.0%
Average answers (10 items)	Incorrect	34.6%	
	Correct	65.4%	

Fetal indications for performing an episiotomy

The findings indicate that the overall correct response rate regarding fetal indications for performing episiotomy was (64%), while incorrect responses accounted for (36%). The highest correct knowledge was observed for large baby (89.0%), abnormal fetal positions such as occipitoposterior or face presentations (75.0%), and shoulder dystocia (73.0%). Moderate correct responses were found for breech presentation (55.0%) and non-reassuring fetal heart to expedite delivery (54.0%). However, knowledge was lower concerning very preterm baby (59.0%) and multiple pregnancies (43.0%), as seen in Table (4.4)

Table 4.4 Knowledge toward fetal indications for performing an episiotomy among midwives (n=100)

Fetal indications for performing an episiotomy		n	%
1. The large baby	Incorrect	11	11.0%
	Correct	89	89.0%
2. Very preterm baby	Incorrect	41	41.0%
	Correct	59	59.0%
3. The non-reassuring fetal heart to expedite delivery	Incorrect	46	46.0%
	Correct	54	54.0%
4. The Breech presentation	Incorrect	45	45.0%
	Correct	55	55.0%
5. The Shoulder dystocia	Incorrect	27	27.0%
	Correct	73	73.0%
6. Abnormal fetal positions such as occipito-posterior or face presentations	Incorrect	25	25.0%
	Correct	75	75.0%
7. Multiple pregnancies	Incorrect	57	57.0%
	Correct	43	43.0%
Average answers (7 items)	Incorrect	36%	
	Correct	64%	

Immediate complications of episiotomy

The results reveal that the overall correct response rate regarding immediate complications of episiotomy was (63.8%), while incorrect answers accounted for (36.3%). Most midwives correctly identified vulva/vaginal hematoma (81.0%), excessive bleeding (78.0%), and third- and fourth-degree perineal tears (79.0%) as immediate complications. Similarly, a high proportion recognized extension of the episiotomy (80.0%) and infection with abscess formation (75.0%) as possible outcomes. However, fewer respondents identified wound dehiscence (70.0%), and notably lower awareness was found regarding deep vaginal lacerations (26.0%) and anal sphincter injury (21.0%), as seen in Table (4.5).

Table 4.5 Knowledge toward the immediate complications of episiotomy among midwives (n=100)

The immediate complications of episiotomy		N	%
1. Excessive bleeding	Incorrect	22	22.0%
	Correct	78	78.0%
2. Vulva/vaginal hematoma	Incorrect	19	19.0%
	Correct	81	81.0%
3. 3rd and 4th degree perineal tears	Incorrect	21	21.0%
	Correct	79	79.0%
4. Infection with abscess formation	Incorrect	25	25.0%
	Correct	75	75.0%
5. Extension of the episiotomy	Incorrect	20	20.0%
	Correct	80	80.0%
6. Deep vaginal lacerations	Incorrect	74	74.0%
	Correct	26	26.0%
7. Wound dehiscence (opened & expanded)	Incorrect	30	30.0%
	Correct	70	70.0%
8. Anal sphincter injury	Incorrect	79	79.0%
	Correct	21	21.0%
Average answers (8 items)	Incorrect	36.30%	
	Correct	63.80%	

Long-term complications of episiotomies

The results show that the overall correct response rate regarding long-term complications of episiotomy was (58%), while incorrect responses accounted for (42%). Most midwives correctly identified dyspareunia (79.0%), anal incontinence (77.0%), and urinary incontinence (73.0%) as possible long-term complications. Moderate awareness was observed for pelvic organ prolapse (63.0%). However, lower knowledge levels were found concerning recto-vaginal fistula (32.0%) and vulvodynia (24.0%), as seen in Table (4.6).

Table 4.6 Knowledge toward the long-term complications of episiotomies among midwives (n=100)

Long-term complications of episiotomies		N	%
1. Dyspareunia	Incorrect	21	21.0%
	Correct	79	79.0%
2. Anal incontinence	Incorrect	23	23.0%
	Correct	77	77.0%
3. Urinary incontinence	Incorrect	27	27.0%
	Correct	73	73.0%
4. Pelvic organ prolapses	Incorrect	37	37.0%
	Correct	63	63.0%
5. Recto-vaginal fistula	Incorrect	68	68.0%
	Correct	32	32.0%
6. Vulvodynia	Incorrect	76	76.0%
	Correct	24	24.0%
Average answers (6 items)	Incorrect	42%	
	Correct	58%	

4.4 Midwives attitudes toward episiotomy

The findings show that most midwives demonstrated a neutral attitude toward episiotomy (73.0%), while 25.0% showed a positive attitude and only 2.0% expressed a negative attitude, as illustrated in Figure (4.18) (see Annex).

The findings show that all attitude items among midwives toward episiotomy were rated as neutral, with total mean score (3.32, SD=0.551). The highest mean scores were for the statements “There is no time to wait for the perineum to stretch; therefore, episiotomy should be performed often” and “Episiotomies help accelerate deliveries in a busy and overcrowded labor ward” (both M=3.52, SD=1.020). Other items with relatively high means included “Women often expect an episiotomy, so it is difficult to restrict its use” (M=3.50, SD=1.059) and “Midwives are not well prepared to minimize perineal tears or keep the perineum intact” (M=3.45, SD=1.192). The lowest mean was observed for “Routine episiotomy is appropriate for primiparous women” (M=2.67, SD=1.155). Overall, these findings reflect a predominantly neutral attitude toward episiotomy practice among midwives, as seen in Table (4.7.A.B).

Table 4.7.A Midwives' attitudes toward episiotomy (n=100)

Item	Mean	SD	Status
1. I believe that the restricted use of episiotomy is better than routine use	3.30	1.275	Neutral
2. I believe that routine episiotomy is appropriate for primiparous women	2.67	1.155	Neutral
3. Routine episiotomy is appropriate for multiparous women	3.39	1.325	Neutral

Table 4.7. B Midwives' attitudes toward episiotomy (n=100)

Item	Mean	SD	Status
4. Midwives are not well prepared to minimize perineal tears or keep the perineum intact	3.45	1.192	Neutral
5. There is no time to wait for the perineum to stretch; therefore, episiotomy should be performed often.	3.52	1.020	Neutral
6. I think it is hard to change traditional practice	3.40	1.172	Neutral
7. Women often expect an episiotomy, so it is difficult to restrict its use.	3.50	1.059	Neutral
8. Episiotomies help accelerate deliveries in a busy and overcrowded labor ward. So, it is often a good solution.	3.52	1.020	Neutral
9. Midwives are not well trained to perform episiotomies	3.33	1.173	Neutral
10. More in-service training is needed for the midwives to improve their performance in episiotomy	3.23	1.081	Neutral
11. To have a protocol/policy on episiotomy practice for the midwives is an important issue that should be considered	3.30	1.159	Neutral
Total Mean Score (11 items)	3.32	.551	Neutral

Cut off points: Negative: 1-2.33, Neutral: 2.34-3.67 and Positive: 3.68-5

4.5 Midwives practice toward episiotomy

The results indicate that nearly half of the midwives (44.0%) performed episiotomy between 0–5 times under supervision, followed by 29.0% who performed it 6–10 times, and 27.0% who performed it more than 10 times. Regarding the appropriate time for performing an episiotomy, most midwives (40.0%) reported that it should be done when all conditions are present—when the patient has the urge to push, 3–4 cm of the presenting part is visible during contraction, the perineum is bulging, and delivery is expected within the next 3–4 contractions. Smaller proportions selected only one condition: perineum bulging (23.0%), urge to push (16.0%), presenting part visible (11.0%), or delivery expected within 3–4 contractions (10.0%).

In terms of episiotomy wound care, 44.0% reported daily shower and washing with mild soap and water, 25.0% used stool softeners, 17.0% applied antiseptic solution after urination or bowel evacuation, and 14.0% used sit baths. These findings suggest moderate practical engagement with varying care approaches, as seen in Table (4.8.A.B).

Table 4.8.A Midwives' practice toward episiotomy (n=100)

Practice of episiotomy		N	%
How many times have you performed an episiotomy through your work under supervision?	0-5 times	44	44.0%
	6-10 times	29	29.0%
	>10 times	27	27.0%

Table 4.8.B Midwives' practice toward episiotomy (n=100)

Practice of episiotomy		N	%
When do you consider the appropriate performance of an episiotomy?	When the parturient patient has the urge to push	16	16.0%
	When 3–4 cm of the presenting part is visible during contraction	11	11.0%
	When the perineum is bulging	23	23.0%
	When delivery is expected within the next 3–4 contractions	10	10.0%
	When all the above are present	40	40.0%
What method do you use in caring for the Episiotomy (perineal wound)?	Use of antiseptic solution after urinating or bowel evacuation	17	17.0%
	Sit baths	14	14.0%
	Daily shower and washing with mild soap and water	44	44.0%
	Stool softeners	25	25.0%

The results show that most midwives demonstrated a moderate level of practice toward episiotomy (81.0%), while 16.0% exhibited good practice and only 3.0% had poor practice. This indicates that the majority possess a fair but improvable level of practical competency in performing and managing episiotomy procedures, as illustrated in Figure (4.19) (see Annex).

The findings indicate that the overall mean score for midwives' practice toward episiotomy was (3.27, SD=0.363), reflecting a moderate level of practice. The highest mean scores were recorded for providing analgesia routinely after episiotomy repair and upon discharge (M=3.82, SD=0.968) and administering local anesthesia before cutting the perineum (M=3.78, SD=0.927), both classified as good practices.

Moderate levels were noted for providing prophylactic antibiotics (M=3.65, SD=1.048) and counseling mothers on wound and perineal care before discharge (M=3.65, SD=0.968). Other moderately rated practices included obtaining verbal consent (M=3.43, SD=0.998), using warm compresses (M=3.17, SD=1.101), allowing natural labor progression (M=3.15, SD=0.957), and employing manual perineal protection (M=3.26, SD=1.097).

The lowest mean scores were observed for performing perineal massage (M=2.78, SD=1.040) and using effective communication strategies to reduce episiotomy need (M=2.66, SD=0.956). Overall, these results demonstrate that while midwives exhibit acceptable procedural practice, areas such as preventive and communication strategies require further enhancement, as seen in Table (4.9).

Table 4.9 Midwives' practice toward episiotomy (n=100)

Item	Mean	SD	Status
1. I often do perineal massage for women to reduce the need for episiotomy.	2.78	1.040	Moderate
2. I often use warm compresses during labor to minimize the need to perform an episiotomy	3.17	1.101	Moderate
3. I often take verbal consent for episiotomy from the mothers	3.43	.998	Moderate
4. We often give local anesthesia to the women before cutting the perineum	3.78	.927	Good
5. Analgesia is routinely given to mothers after episiotomy repair and upon discharge	3.82	.968	Good
6. Prophylactic antibiotics are routinely administered to mothers after episiotomy repair	3.65	1.048	Moderate
7. Mothers receive adequate counselling on wound and perineal care before discharge from the hospital	3.65	.968	Moderate
8. Is episiotomy part of your practice during prolonged or obstructed labor?	3.13	1.143	Moderate
9. Do you perform an episiotomy when maternal or fetal health concerns require expedited delivery?	2.93	1.075	Moderate
10. Do you perform episiotomy in cases where labor is augmented with oxytocin?	3.14	1.181	Moderate
11. Do you employ manual perineal protection techniques during delivery to avoid episiotomy?	3.26	1.097	Moderate
12. To reduce the need for episiotomies, I follow the strategy effective communication with laboring women	2.66	.956	Moderate
13. I do allow natural labor progression to stretch the perineum and reduce the need for episiotomy?	3.15	.957	Moderate
Total Mean Score (13 items)	3.27	.363	Moderate

Cut off points: Poor: 1-2.33, Moderate: 2.34-3.67 and Good: 3.68-5

4.6 Differences between demographic variables in relation to midwives' knowledge, attitudes, and practices toward episiotomy

4.6.1 Differences between demographic variables in terms of knowledge sum scores

The analysis revealed statistically significant differences in knowledge scores among midwives based on age group, previous training on episiotomy, and the type of episiotomy recommended in their facilities. Specifically, age showed a significant association with knowledge ($p = .049$). A Tukey post hoc test indicated that midwives aged over 40 years demonstrating the highest mean knowledge score ($M = 21.90$, $SD = 3.24$), while those aged 21–25 years had the lowest ($M = 18.80$, $SD = 3.58$). Previous training on episiotomy was also significantly related to knowledge ($p = .013$), as midwives who received prior training ($M = 20.14$, $SD = 3.40$) scored higher than those without training ($M = 18.08$, $SD = 4.00$). Additionally, significant differences were observed based on the type of episiotomy recommended in the facility ($p = .039$), where participants working in settings recommending right

mediolateral episiotomy achieved higher knowledge scores ($M = 20.51$, $SD = 3.93$) compared with those following left mediolateral or lateral approaches.

Other demographic factors, including years of experience, education level, marital status, area of residence, hospital name, and the presence of an institutional protocol, did not show statistically significant differences in knowledge scores ($p > .05$). seen in Table (4.10.A.B).

Table 4.10.A Differences between demographic variables in terms of knowledge sum score among midwives (n=100)

Demographic variables		n	Mean	SD	P-value
Age group	21-25	10	18.80	3.58	.049*
	26-30	35	18.94	3.81	
	31-35	29	19.00	3.29	
	36-40	16	21.18	3.56	
	>40	10	21.90	3.24	
Experience in Midwifery	<1 year	8	17.13	3.72	.138
	1-5 years	30	19.33	3.18	
	6-10 years	31	19.65	3.95	
	>10 years	31	20.45	3.63	
Education Level	Diploma	10	20.30	3.68	.064
	Bachelor's	86	19.71	3.55	
	Master or PhD	4	15.50	4.43	
Social Status	Single	17	18.41	3.06	.332
	Married	81	19.83	3.78	
	Divorced OR Widowed	2	20.50	2.12	
Area of residence	City	32	19.09	3.57	.448
	Village	55	19.65	3.75	
	Camp	13	20.62	3.55	
Hospital name	Jenin Hospital	32	18.72	3.35	.298
	Qalqilya Hospital	12	21.08	3.00	
	Tulkarm Hospital	18	19.72	2.80	
	Tubas Hospital	12	20.67	4.21	
	Nablus Hospital	26	19.42	4.40	
Previous training on episiotomy?	Yes	74	20.14	3.40	.013*
	No	26	18.08	4.00	
Do you have protocol/policy at your unit on episiotomy practice for the mid?	Yes	82	19.76	3.63	.866
	No	18	19.67	3.72	

Table 4.10.B Differences between demographic variables in terms of knowledge sum score among midwives (n=100)

Demographic variables		n	Mean	SD	P-value
What type of episiotomy is recommended in your facility?	Right lateral episiotomy	28	19.36	3.28	.039*
	Left lateral episiotomy	18	18.22	3.14	
	Right mediolateral episiotomy	49	20.51	3.93	
	Left mediolateral episiotomy	5	17.00	2.00	

*Sig at $p \leq 0.05$

4.6.2 Differences between demographic variables in terms of attitude mean scores

The results showed statistically significant differences in attitude mean scores among midwives based on their education level and the type of episiotomy recommended in their facilities. Education level was significantly associated with attitude ($p = .037$). A Tukey post hoc test indicated that midwives holding a Master's or PhD degree demonstrated the highest mean attitude score ($M = 3.80$, $SD = 0.26$), followed by those with a bachelor's degree ($M = 3.34$, $SD = 0.55$), while diploma holders had the lowest mean score ($M = 3.00$, $SD = 0.48$). Similarly, the type of episiotomy practiced at the facility showed a significant effect on attitude ($p = .014$). Midwives working in facilities that recommended left mediolateral episiotomy had the highest mean attitude score ($M = 3.53$, $SD = 0.50$), followed closely by those performing right lateral episiotomy ($M = 3.45$, $SD = 0.54$). In contrast, the lowest attitude score was observed among those following left lateral episiotomy ($M = 2.96$, $SD = 0.40$).

No significant differences were found in attitude scores concerning age group, years of experience, marital status, area of residence, hospital name, prior training on episiotomy, or the presence of institutional protocols or policies ($p > .05$). As seen in Table (4.11A.B).

Table (4.11.A) Differences between demographic variables in terms of attitude mean score among midwives (n=100)

Demographic variables		n	Mean	SD	P-value
Age group	21-25	10	3.27	.632	.827
	26-30	35	3.27	.565	
	31-35	29	3.39	.484	
	36-40	16	3.42	.517	
	>40	10	3.23	.712	

Table (4.11.A) Differences between demographic variables in terms of attitude mean score among midwives (n=100)

Demographic variables		n	Mean	SD	P- value
Experience in Midwifery	<1 year	8	3.63	0.64	.086
	1-5 years	30	3.25	0.54	
	6-10 years	31	3.19	0.47	
	>10 years	31	3.46	0.58	
Education Level	Diploma	10	3.00	0.48	.037*
	Bachelor's	86	3.34	0.55	
	Master or PhD	4	3.80	0.26	
Social Status	Single	17	3.35	0.60	.764
	Married	81	3.33	0.55	
	Divorced OR Widowed	2	3.05	0.45	
Area of residence	City	32	3.34	0.69	.733
	Village	55	3.30	0.50	
	Camp	13	3.43	0.41	

Table (4.11.B) Differences between demographic variables in terms of attitude mean score among midwives (n=100)

Demographic variables		n	Mean	SD	P-value
Hospital name	Jenin Hospital	32	3.41	0.68	.057
	Qalqilya Hospital	12	3.52	0.36	
	Tulkarm Hospital	18	3.06	0.50	
	Tubas Hospital	12	3.12	0.38	
	Nablus Hospital	26	3.42	0.48	
Previous training on episiotomy?	Yes	74	3.34	0.55	.831
	No	26	3.31	0.57	
Do you have a protocol/policy at your unit on episiotomy practice for the midwives?	Yes	82	3.30	0.57	.184
	No	18	3.50	0.36	

Table (4.11.B) Differences between demographic variables in terms of attitude mean score among midwives (n=100)

Demographic variables		n	Mean	SD	P-value
What type of episiotomy is recommended in your facility?	Right lateral episiotomy	28	3.45	0.54	.014*
	Left lateral episiotomy	18	2.96	0.40	
	Right mediolateral episiotomy	49	3.37	0.57	
	Left mediolateral episiotomy	5	3.53	0.50	

*Sig at $p \leq 0.05$

4.6.3 Differences between demographic variables in terms of practice mean scores

The analysis revealed a statistically significant difference in practice mean scores among midwives based on their social status ($p = .017$). A Tukey post hoc test indicated that married midwives demonstrated higher practice scores ($M = 3.31$, $SD = 0.33$) compared with single ($M = 3.17$, $SD = 0.42$) and divorced or widowed participants ($M = 2.65$, $SD = 0.71$).

No other demographic variables showed significant associations with practice scores ($p > .05$). Specifically, age group, years of experience, education level, area of residence, hospital affiliation, prior episiotomy training, presence of a protocol or policy in the unit, and the type of episiotomy recommended in the facility did not significantly influence midwives' practice scores, as seen in Table (4.12.A.B)

Table 4.12. A Differences between demographic variables in terms of practice mean score among midwives (n=100)

Demographic variables		n	Mean	SD	P-value
Age group	21-25	10	3.20	.378	.709
	26-30	35	3.29	.343	
	31-35	29	3.27	.412	
	36-40	16	3.19	.362	
	>40	10	3.37	.288	
Experience in Midwifery	<1 year	8	3.11	0.62	.087
	1-5 years	30	3.22	0.31	
	6-10 years	31	3.24	0.35	
	>10 years	31	3.40	0.32	

Table 4.12. A Differences between demographic variables in terms of practice mean score among midwives (n=100)

Demographic variables		n	Mean	SD	P-value
Education Level	Diploma	10	3.42	0.30	.257
	Bachelor's	86	3.27	0.36	
	Master or PhD	4	3.08	0.52	
Social Status	Single	17	3.17	0.42	.017*
	Married	81	3.31	0.33	
	Divorced OR Wid-owed	2	2.65	0.71	
Area of residence	City	32	3.23	0.44	.411
	Village	55	3.32	0.30	
	Camp	13	3.20	0.42	

Table 4.12. B Differences between demographic variables in terms of practice mean score among midwives (n=100)

Hospital name	Jenin Hospital	32	3.31	0.51	.723
	Qalqilya Hospital	12	3.21	0.15	
	Tulkarm Hospital	18	3.34	0.30	
	Tubas Hospital	12	3.19	0.27	
	Nablus Hospital	26	3.24	0.30	
Previous training on episiotomy?	Yes	74	3.27	0.36	.902
	No	26	3.28	0.39	
Do you have a protocol/policy at your unit on episiotomy practice for the midwives?	Yes	82	3.27	0.37	.906
	No	18	3.26	0.36	
What type of episiotomy is recommended in your facility?	Right lateral episiotomy	28	3.20	0.42	.178
	Left lateral episiotomy	18	3.34	0.33	
	Right mediolateral episiotomy	49	3.32	0.31	
	Left mediolateral episiotomy	5	3.02	0.53	

*Sig at $p \leq 0.05$

4.7 Relationship between knowledge, attitude and practice toward episiotomy

The correlation analysis demonstrated no statistically significant relationships among knowledge, attitude, and practice scores of midwives, as all p-values were greater than the 0.05. As seen in Table (4.13).

Table 4.13 Relationships between study variables (n=100)

		Knowledge	Attitude	Practice
Knowledge	R	-		
Attitude	R	-.126	-	
	P-value	.210		
Practice	R	.026	.012	-
	P-value	.800	.905	

4.8 Summary

Several limitations related to the results of this study should be acknowledged. First, the predominance of neutral attitudes (73%) limited differentiation between positive and negative perspectives toward episiotomy. Second, no significant correlations were observed among knowledge, attitude, and practice scores, restricting interpretation of the interrelationships between these domains. Knowledge levels showed limited variability, with no participants classified as having poor knowledge, which may reflect the relative difficulty of the questionnaire items or bias from self-reporting. Practice outcomes were also based solely on self-reported measures rather than direct observation, which could introduce social desirability and recall biases.

Additionally, although some associations were statistically significant—for example, knowledge by age ($p = .049$), prior training ($p = .013$), and type of episiotomy ($p = .039$); attitude by education level ($p = .037$) and episiotomy type ($p = .014$); and practice by social status ($p = .017$)—these findings demonstrated borderline p-values without reported effect sizes, limiting assessment of their clinical relevance. Finally, the sample was restricted to midwives in governmental hospitals, which may limit the broader applicability of the results to other healthcare settings.

Chapter Five

Discussion

5.1 introduction

This chapter presents a detailed discussion of the findings related to midwives' knowledge of episiotomy, interpreting the results within the context of previous studies and international evidence. It aims to explain the implications of the findings, highlight consistencies or discrepancies with prior research, and explore potential factors influencing knowledge levels among midwives.

5.2 Midwives knowledge toward episiotomy

In the current analysis, the majority of midwives showed a level of moderate knowledge regarding episiotomy 62%, followed by 38% showing a high level of knowledge. None of the participants fell under the poor knowledge category, demonstrating a relatively adequate knowledge regarding episiotomy procedures within midwives in general. This data offers insights at the competency level and should be compared with some global evidence. In South Africa, Maphanga and Naidoo (2021) revealed that most health care professionals, specifically midwives, had no access to episiotomy protocols and little knowledge of national guidelines; thereby signaling systemic knowledge dissemination gaps. In the same way, Yang and Bai (2021) showed that obstetricians and midwives in China had only an average level of knowledge ($M = 4.15$, $SD = 1.10$) about complications and overuse of episiotomy, indicating that moderate knowledge among maternity care services providers is likely a common problem.

Conversely, Ibrahim et al. (2018) found that 83.5% of Nigerian women had good knowledge regarding episiotomy—reflecting public, not professional knowledge—and also highlights the diversity in knowledge around demographics and settings. The lack of poor knowledge subjects in the current study is reassuring and may indicate effective midwifery education, in-service training or greater emphasis at an institutional level on evidence-based obstetric

practice. This aligns well with newer clinical guidelines, which might be better reflected in local midwifery programs as compared to the previous studies, which may not adapt adequately to the current clinical practice (Woldegeorgis et al., 2022).

Given the moderate rather than high knowledge levels, perhaps due to differences in access to continuing education, experience working with revised clinical practice guidelines or institutional policy on episiotomy use. Furthermore, the moderate level of knowledge may suggest that it is necessary for more structured professional development that enhances midwives' ability to learn the knowledge of competence towards expertise. Enhancing lifelong education, utilizing national protocols, and nurturing reflective critical analysis could assist in making possible that knowledge results into regular evidence-based clinical decisions.

The average correct and incorrect rates across knowledge subdomains further demonstrate that although midwives are showing more than half correct responses in each subdomain, substantial knowledge gaps persist—specifically, with regards to general knowledge and long-term complication subdomains. This result is consistent with recent literature that midwives and obstetric providers often show moderate information about episiotomy use and what it entails. Some evidence comes from cross-sectional research conducted in China where midwives and obstetricians showed only average knowledge on episiotomy indications and complications, which demonstrates that more education is required (Yang & Bai, 2021). Additionally, a qualitative study of midwives' experiences in perineal protection and decision-making in 2024 reported a lack of access to updated protocols and variability in midwifery practitioners' knowledge of when episiotomy was actually indicated (Rodrigues et al., 2024).

Compared to the overall population, the relatively high correct rate of the “maternal indications” subdomain may indicate increased familiarity with traditional indications (e.g., prolonged second stage, primiparity) whereas the rate of “general knowledge” and “long-term complications” seem to be relatively lower, reflecting a lack of awareness regarding current evidence (e.g., avoiding routine episiotomy, as advised by the World Health Organization) and more distal sequelae (e.g., pelvic floor disorders or sexual dysfunction), which are less often addressed in standard practice (Amorim et al., 2023). These findings indicate that although standard baseline knowledge is acceptable in many components, systematic educational intervention—particularly in relation to evidence, midwifery practice outcomes, and protocol application—is essential to facilitate practice of selective rather than routine episiotomy by midwives, which should lead to better maternal outcomes.

Due to the moderate baseline knowledge of most midwives, this presents a significant challenge to inform practice by modifying skills related to the latest evidence. Continuing Education Programs Structured continuing education should be provided to improve awareness of episiotomy indications, benefits, risks, and perineal protection strategies. It is equally important that clear institutional protocols and policies are created and disseminated, as lack of such guidelines has been shown in previous research to interfere with evidence-based prac-

tice (Maphanga & Naidoo, 2021). Routine audit and feedback activities can help ensure accountability and stimulate midwives to assess local episiotomy rates, outcomes and complications.

5.3 Midwives attitudes toward episiotomy

The results of this study indicate that the majority of midwives exhibited a neutral attitude toward episiotomy, with 73% reporting neutrality, 25% a positive attitude, and only 2% a negative attitude. This neutrality should not be regarded as merely a descriptive midpoint; rather, it reflects uncertainty and a lack of clear professional commitment to either routine or selective episiotomy practice, which may hinder the consistent application of evidence-based care and limit the proactive adoption of perineal protection strategies and selective episiotomy.

Neutrality may also reflect several underlying factors, including limited confidence in applying evidence-based alternatives, insufficient or inconsistent training on restrictive episiotomy, lack of clear or consistently enforced institutional protocols, and reliance on physician preferences or unit culture. The observed neutrality and moderate practice are not coincidental; the prevalence of neutral attitudes may partially explain the moderate level of practice observed in this study, highlighting how professional uncertainty can limit active engagement in selective and evidence-based practices.

Internationally, a cross-sectional study among obstetricians and midwives in China found that slightly over 42% considered the current episiotomy rate appropriate or even too low, indicating a positive or accepting attitude toward the procedure (Yang & Bai, 2021). In Palestine, while no direct survey on midwives' attitudes was identified, structural and professional analyses suggest an environment where midwifery autonomy is constrained by medicalized childbirth culture and hierarchical professional structures. A qualitative study of Palestinian nurse-midwives highlighted the restrictions imposed by a male-dominated obstetric system and institutional pressures on their professional scope, decision-making authority, and access to continuing education (Hasso & Saifi, 2024). Earlier qualitative research in other populations indicated that midwives' approaches to episiotomy were often influenced by fear of severe perineal laceration, lack of confidence in alternatives, and persistent local practice norms rather than critical appraisal of evidence (Crowe et al., 2018).

The predominance of neutral attitudes in this study may reflect an intermediate professional status: midwives are aware that episiotomy is commonly practiced but are not fully convinced of its routine utility, particularly given recent guidelines favoring selective use. This ambivalence can act both as a constraint and an opportunity: on one hand, it may reinforce unchanged practice patterns by treating episiotomy as standard rather than elective; on the other hand, it indicates that many midwives are willing to engage in education and participate in policy reforms to promote evidence-based, selective practice.

Practically and educationally, these findings suggest that strategies to change attitudes should focus on the large neutral group rather than the small number of strongly opposed providers,

by providing up-to-date evidence, opportunities for critical reflection, and enabling practitioners to question their assumptions in practice. Policymakers and continuing education supervisors could incorporate discussions of episiotomy rationale, benefits, risks, and alternative strategies, emphasizing the role of midwives as co-partners and decision-makers.

Overall, the neutral attitudes observed among midwives reflect uncertainty and limited professional conviction and may partly explain the moderate level of practice observed. This highlights an opportunity for targeted educational and policy initiatives to transform neutrality into evidence-based beliefs and practices while fostering professional confidence and autonomy among midwives.

5.4 Midwives practice toward episiotomy

A large majority of midwives had moderate practice towards episiotomy (81.0 %), a smaller proportion had good practice (16.0 %) and only a few (3.0 %) demonstrated poor practice in the current study. The pattern indicates that the majority of midwives apply episiotomy practices competently but there is a significant gap to be bridged between moderate to consistently good practice. Similar issues are shown by comparable international studies; for instance, among Chinese obstetricians and midwives, knowledge, attitude and experience toward episiotomy were average, but many endorsed rates above recommended (Yang & Bai, 2021).

In the Jordanian study by Khresheh and Barclay (2020) most midwives exhibited routine (as opposed to selective) practice of the procedure, which indicates the difficulty in adhering to evidence-based practices. Most (approximately 80%) considered it to be appropriate to maintain an episiotomy rate of 81%, suggesting an acceptance of high levels of intervention. The primary objective for enacting episiotomy was to avoid third- and fourth-degree perineal tears, and the main barriers in reducing its use were inadequate education in perineal tear prevention, inadequate time to allow natural stretching, and difficulty changing routine practice in labor. These findings suggest that episiotomy remains a routine practice in Jordan, because of entrenched behaviors and low levels of continuing professional development.

Moderate rather than good practice might continue to be developed, due to institutional habits, limited professional development, lack of updated guidelines, and entrenched labor ward culture. Furthermore, midwives' practice is not fully autonomous, as decisions regarding episiotomy are often guided by supervising obstetricians, who generally have greater authority in clinical decision-making. This may partly explain why knowledge and attitudes do not always translate into independent practice. Although the low rate of poor practice (3.0%) is encouraging, the small proportion achieving good practice highlights the need for targeted interventions. Structured in-service training, simulation workshops, clear institutional protocols, and regular audit-feedback systems must be among these. Strengthening evidence-based decision-making, as opposed to routine procedural behavior, will help midwives progress from moderate to high practice levels, supporting more selective use of episiotomy and improved maternal outcomes.

5.5 Differences between variables in term of knowledge, attitude and practice toward episiotomy

The present investigation found a number of significant differences in midwife KAP towards episiotomy by demographic and career factors. Age was significantly related with knowledge ($p = .049$), and that older midwives had higher scores in knowledge. This result indicates that accumulated experience of clinical care, professional maturity and long-standing exposure to obstetric practices facilitates better understanding and familiarity with episiotomy techniques. These findings are in line with earlier studies conducted with Khresheh and Barclay (2020) in Jordan and Yang and Bai (2021) in China, show older and more senior practitioners seem to have more knowledge and confidence around the indications and complications related to episiotomy. Moreover, previous training on episiotomy was significantly associated with knowledge ($p = .013$) as midwives of formal or in-service training performed better than those who had no previous training (Chernysh et al., 2023). This finding reinforces the importance of continuing professional development and skill-based training, which enhance evidence-based knowledge and clinical competence, as emphasized by Ali-Masri et al. (2018) in Palestine. Additionally, the type of episiotomy recommended at the facility affected knowledge ($p = .039$), with those working in institutions that support right mediolateral episiotomy scoring much higher. That could indicate better standardization of practices and adherence to modern clinical guidelines in such sites.

In terms of attitude, a significant association has been found with education level ($p = .037$) and attitudes toward evidence-based episiotomy practice are most positive among midwives with higher academic qualifications. This is supported by previous findings that indicate that higher educational attainment supports more critical thinking and acceptance of an updated clinical guideline (Akhtar et al., 2024). The kind of episiotomy performed in the facility also affected attitudes ($p = .014$), as members of the institutions practicing left mediolateral or right lateral episiotomy showed more favorable attitudes. This indicates that exposure to practices that employ selective and standardized episiotomy strategies develops positive attitudes toward patient centered and conservative practices.

In terms of practice, there was significant social distinction ($p = .017$) in which, married midwives had higher practice scores than single or widowed women. This may reflect increased professional accountability, stability, and confidence as perceived by a more likely practitioner to be able to work for longer and become mature, generally characteristic characteristics of married practitioners. Similarly, for studies that examined professional performance of midwives, personal-societal stability was associated with greater adherence to institutional processes and procedural accuracy (Zondag et al., 2022).

Overall, these findings emphasize that age, training, education level, and workplace protocols play a pivotal role in shaping midwives' KAP toward episiotomy. Continuous education, standardized clinical guidelines, and supportive institutional policies are therefore essential to strengthen knowledge, foster positive attitudes, and improve evidence-based practice among midwives.

5.6 Limitations

A number of limitations should be acknowledged in this study.

1. In a cross-sectional design, causal relationships between demographic factors and knowledge, attitude, and practice of episiotomy cannot be established.
2. The use of a convenience sample may limit the generalizability of the findings.
3. The self-reported questionnaires that were used in this study can be prone to recall bias, reporting bias, **and social desirability bias**, potentially affecting the accuracy of responses
4. The study setting was restricted to selected governmental hospitals, and findings may not be generalizable to all midwives practicing in Palestine.

5.7 Strengths

The study includes many strengths. It is one of the few studies in Palestine examining knowledge of, attitudes towards, and practices employed by midwives toward episiotomy, offering valuable baseline information for future interventions. The inclusion of multiple demographic and institutional variables resulted in a holistic understanding of the determinants of clinical competence, as well as of attitude towards evidence-based care.

5.8 Conclusion

This study examined midwives' KAP regarding episiotomy in the Central West Bank and identified the demographic and institutional factors associated with these domains. Overall, midwives demonstrated moderate levels of knowledge, attitude, and practice, indicating partial alignment with current evidence-based recommendations, but also highlighting areas requiring improvement.

Knowledge varied significantly by age, prior training on episiotomy, and the type of episiotomy recommended in their facilities. Older midwives and those who had received training showed higher knowledge scores, emphasizing the value of experience and structured educational exposure. Attitude was significantly influenced by education level and the type of episiotomy used in the workplace, with highly educated midwives reporting more positive attitudes. Practice differences were limited, with only social status showing a significant association—married midwives reported better adherence to recommended practices than single or widowed/divorced counterparts. No significant correlations were found between knowledge, attitude, and practice, suggesting that improvements in one domain do not automatically translate to changes in the others.

These findings underscore that both personal characteristics (age, education, marital status) and professional factors (training and facility protocols) shape midwives' performance and readiness to apply evidence-based practices. The moderate scores across all domains point

to persistent dependence on routine or traditional approaches and limited integration of updated recommendations regarding episiotomy. Strengthening midwifery practice in Palestine requires sustained professional development, standardized training, consistent institutional policies, and supportive leadership. These efforts are essential to improve midwives' competencies, ensure the adoption of evidence-based episiotomy practices, and enhance the overall quality of maternal care.

5.9 Recommendations

1. Educate midwives on episiotomy indications, complications, and evidence-based alternatives; therefore, midwives should have ongoing professional development programs.
2. Hospitals should create clear institutional protocols for promoting selective, rather than routine, episiotomy.
3. The incorporation of simulation-based workshops and hands-on training into midwifery curricula may improve clinical competence and self-efficacy.
4. Periodic audits and means for feedback should be established to check adherence to guidelines and identify areas for improvement.
5. Policymakers, educators, and healthcare institutions must work together to standardize episiotomy practice, support midwives' autonomy in decision-making, and deliver more robust, safe, and woman-centered obstetric care in Palestine.

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Annexes

Figures

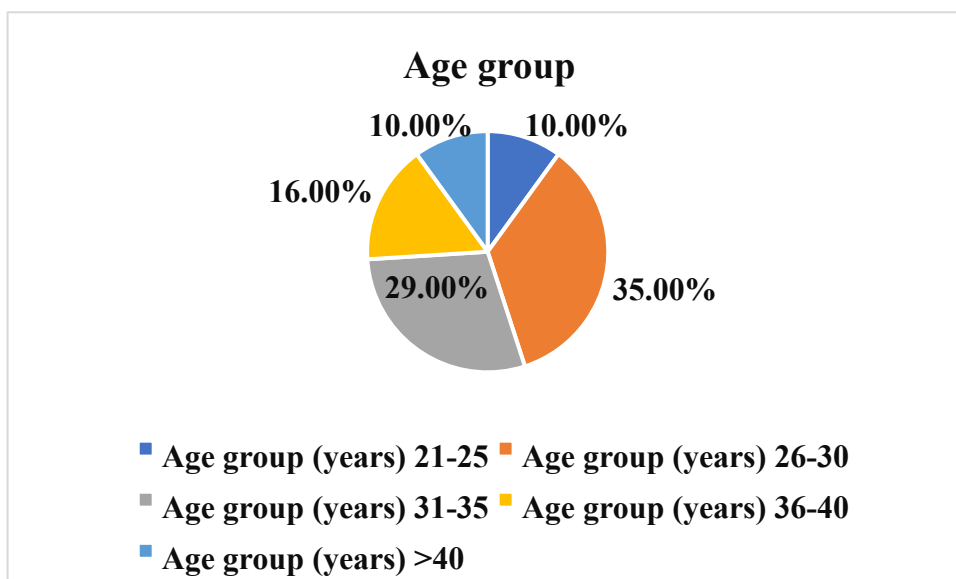


Figure (4.1): Distribution of midwives' age.

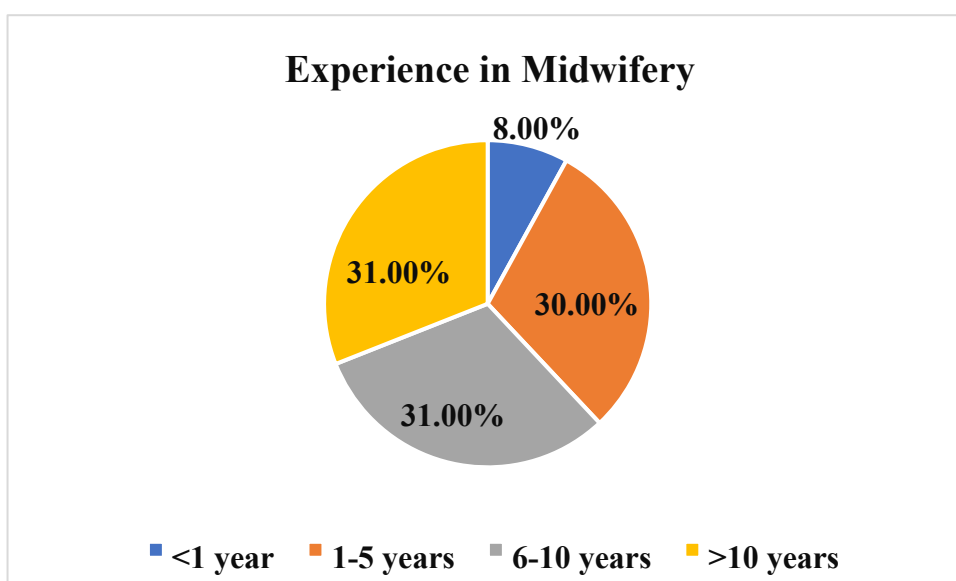


Figure (4.2): Distribution of midwives' experience.

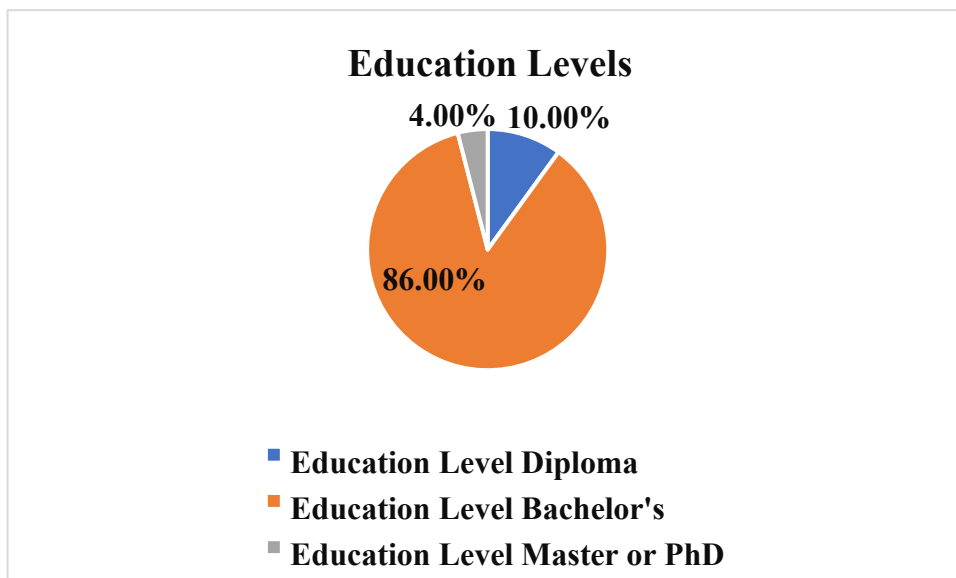


Figure (4.3): Distribution of midwives' education levels.

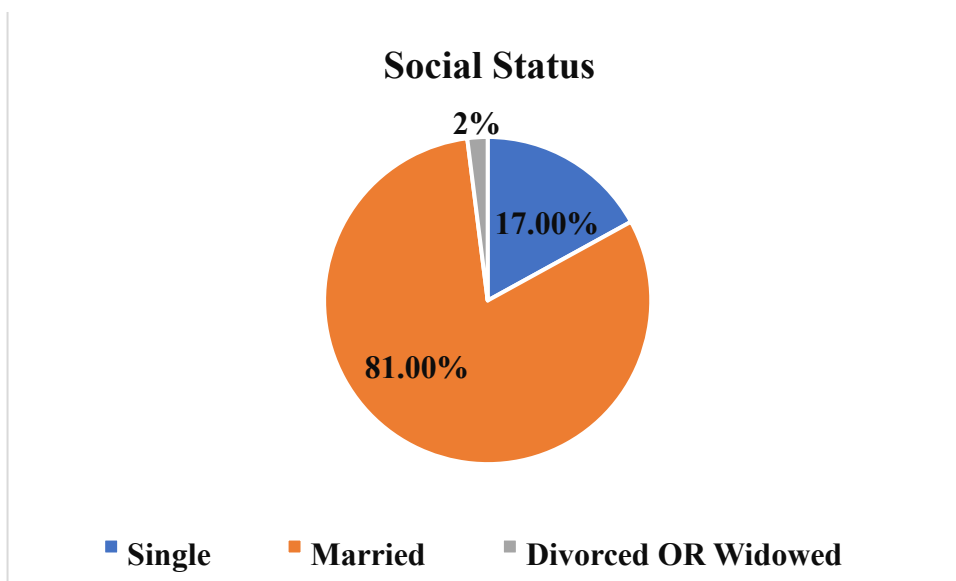


Figure (4.4): Distribution of midwives' social status.

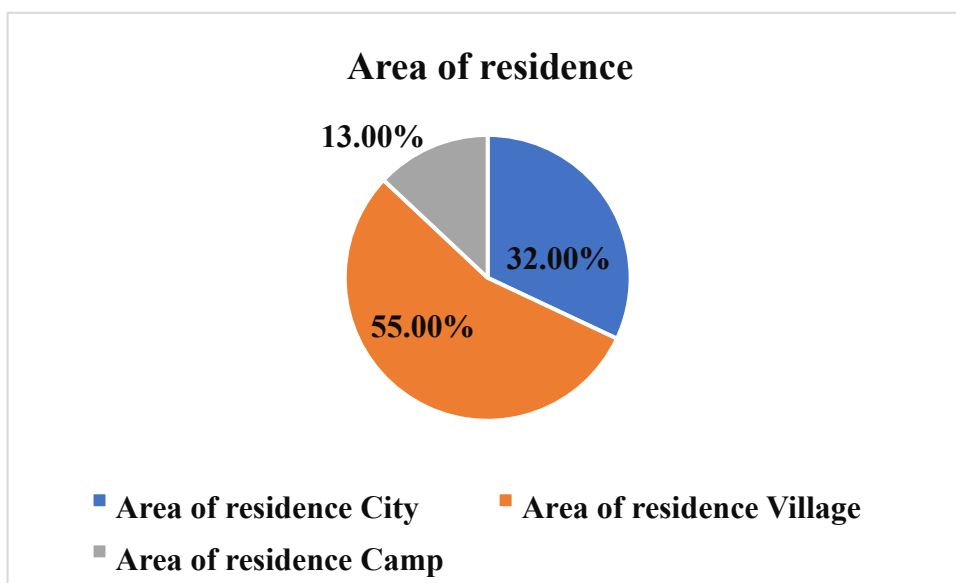


Figure (4.5): Distribution of midwives' area of residence.

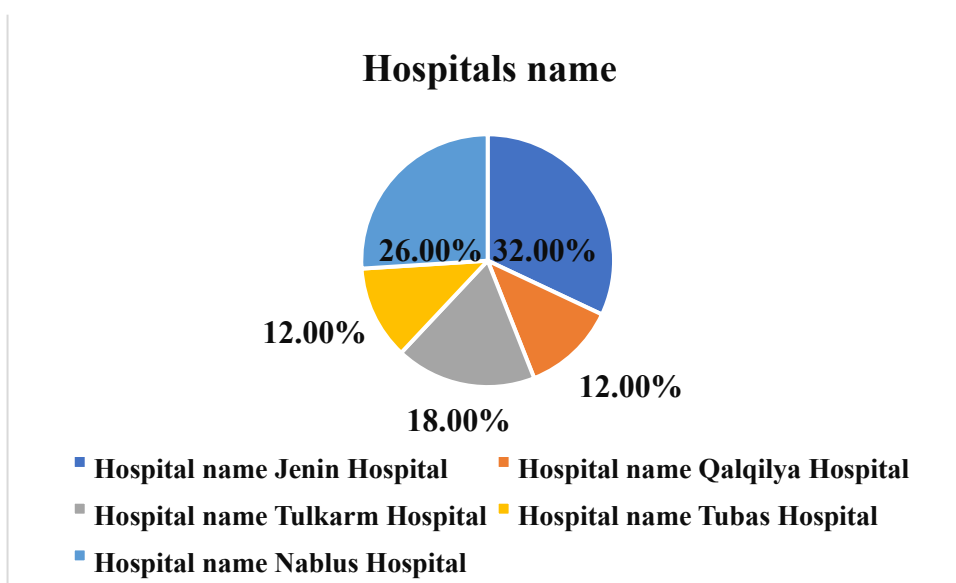


Figure (4.6): Distribution of midwives according hospitals name.

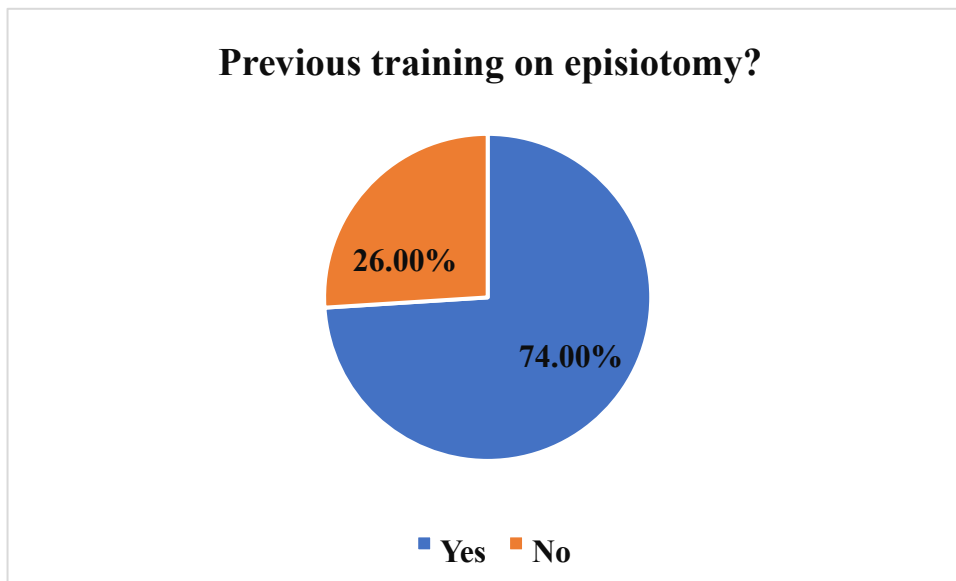


Figure (4.7): Distribution of midwives who received previous training on episiotomy.



Figure (4.8): Distribution of midwives according to training and training place.

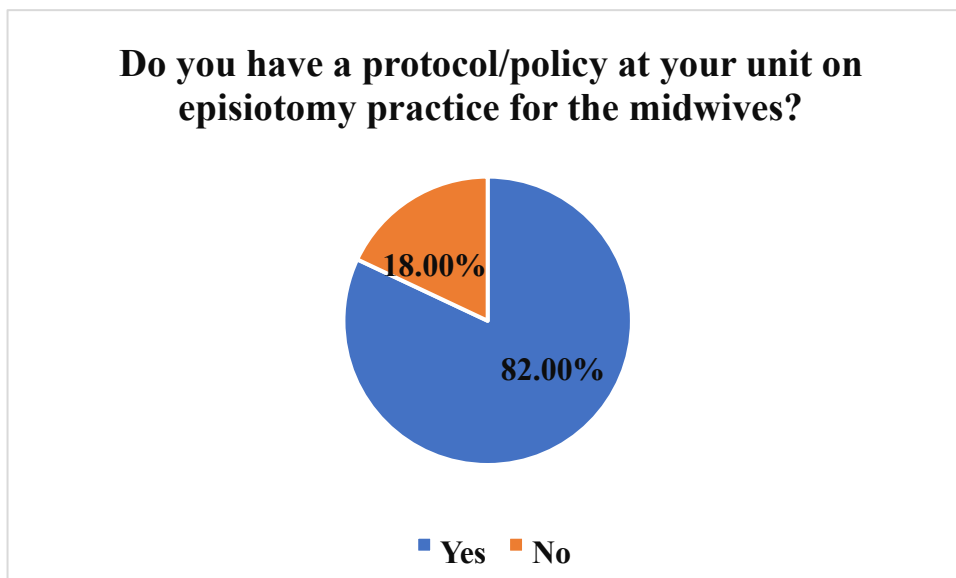


Figure (4.9): Distribution of midwives regarding the availability of a protocol/policy on episiotomy practice in their unit.

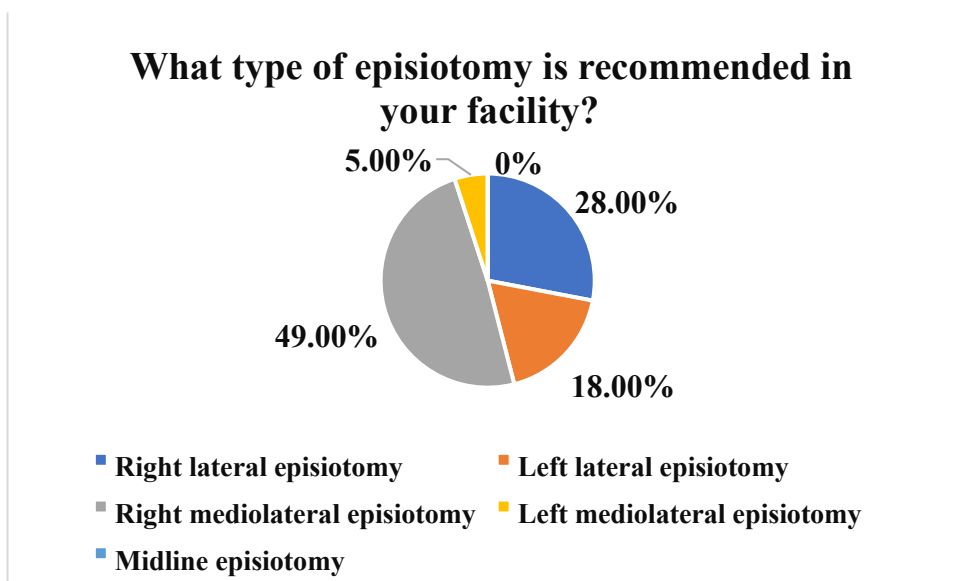


Figure (4.10): Distribution of midwives according to the type of episiotomy recommended in their facility.

The Level of Knowledge Toward the Episiotomy Among Midwives

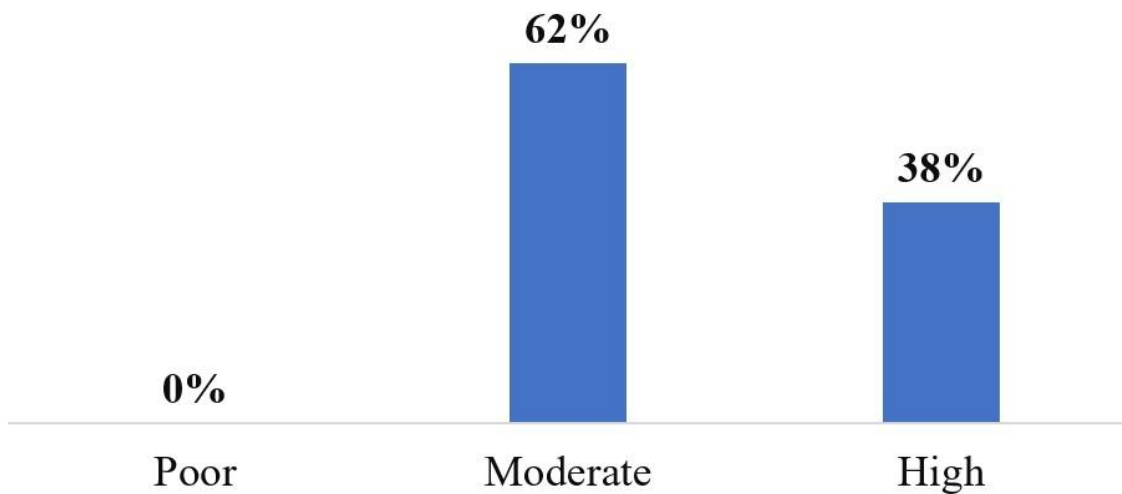


Figure (4.11) Level of Knowledge toward the Episiotomy Among Midwives (n=100) based on the following cut off points: Low: 0 – 11, Moderate: 11 – 22 and High: 23 – 34.

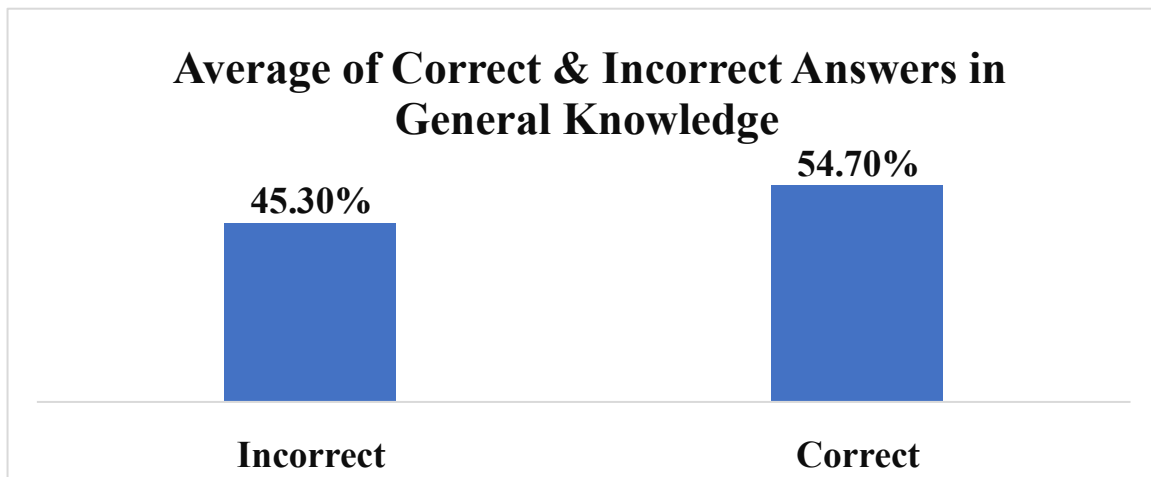


Figure (4.12) Average of correct and incorrect answer toward the general knowledge among midwives (n=100)

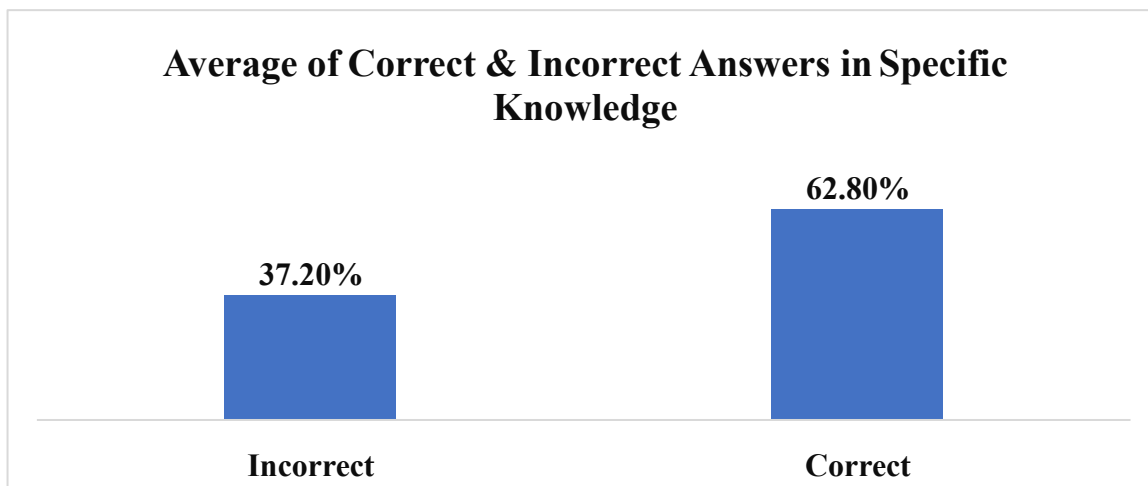


Figure (4.13) Average of correct and incorrect answer toward the specific knowledge among midwives (n=100)

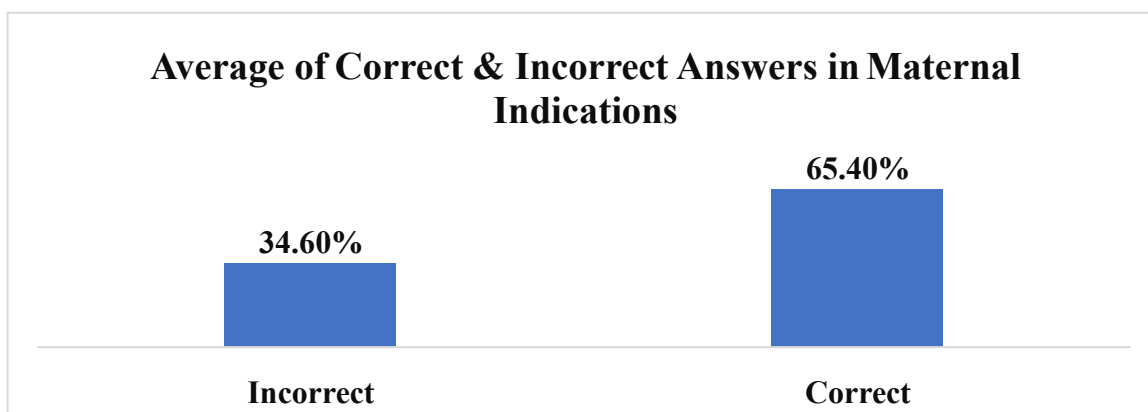


Figure (4.14) Average of correct and incorrect answer toward the maternal indication among midwives (n=100)

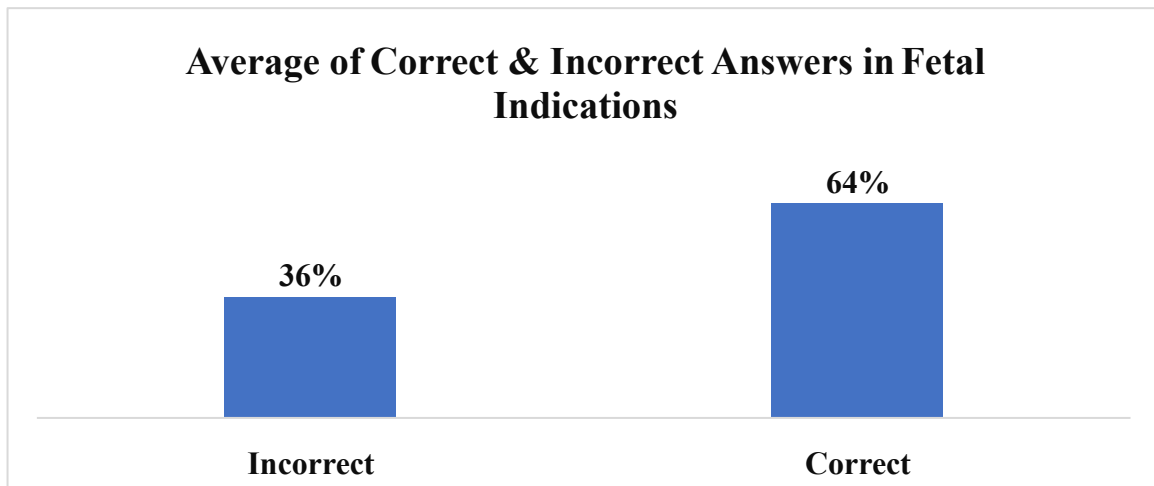


Figure (4.15) Average of correct and incorrect answer toward the fetal indication among midwives (n=100)

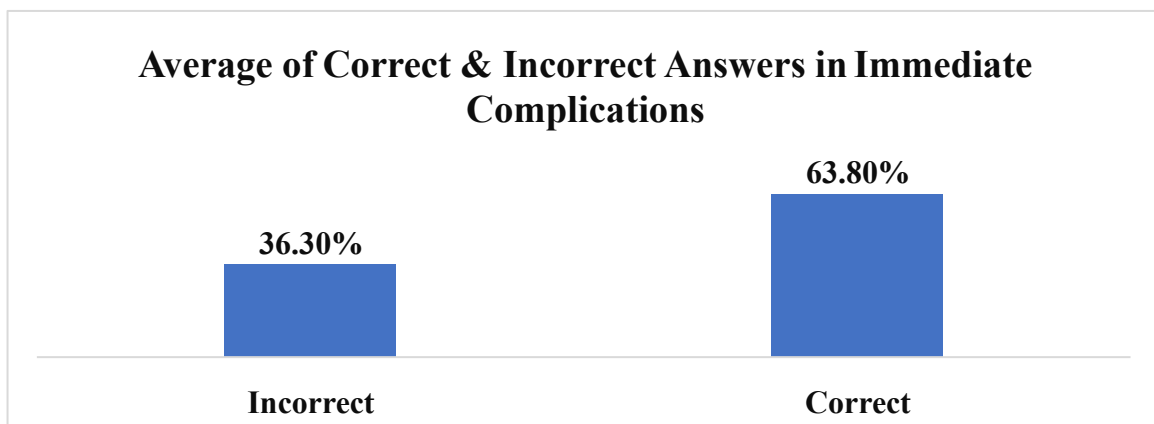


Figure (4.16) Average of correct and incorrect answer toward the immediate complication among midwives (n=100)

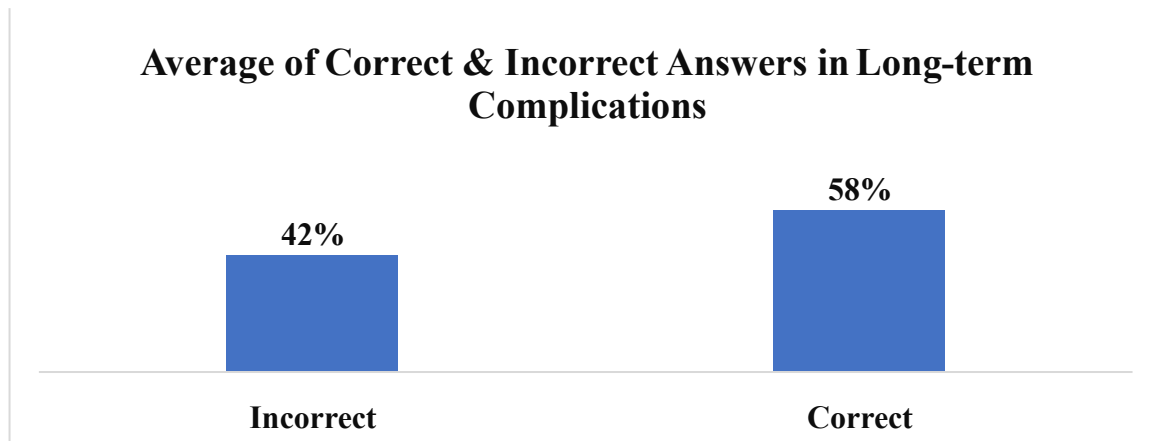


Figure (4.17) Average of correct and incorrect answer toward the long-term complication among midwives (n=100)

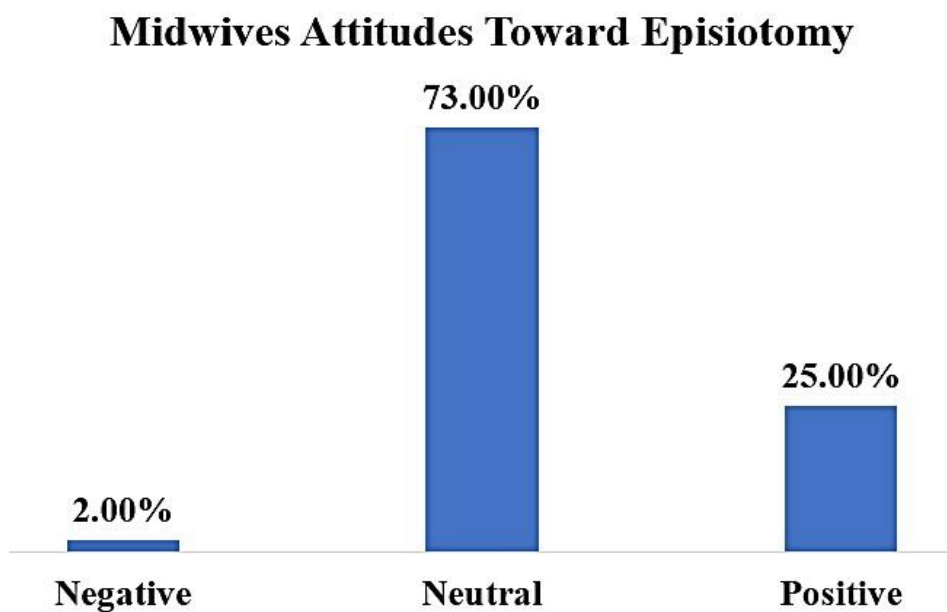


Figure (4.18) Midwives attitude toward episiotomy (n=100). Cut off points: Poor: 1-2.33, Moderate: 2.34-3.67 and Good: 3.68-5

Midwives Practice Toward Episiotomy

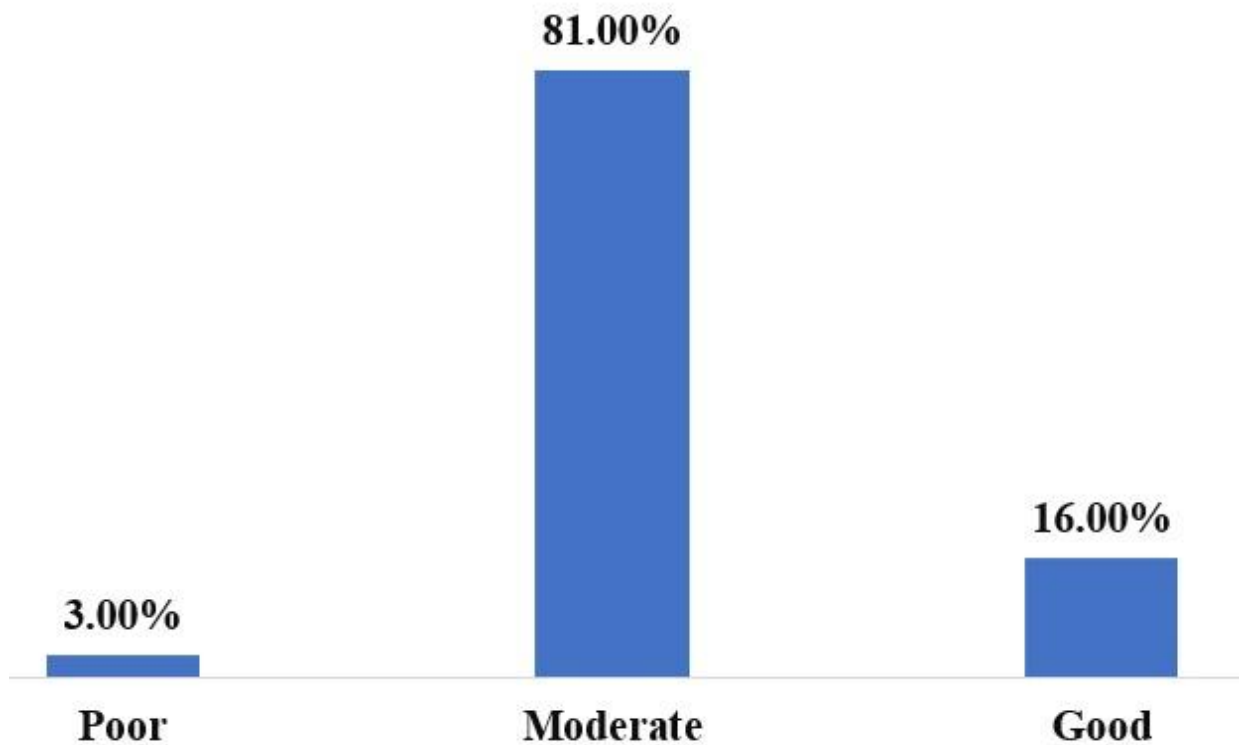


Figure (4.19) Midwives Practice Toward Episiotomy (n=100). Cut off points:
Poor: 1-2.33, Moderate: 2.34-3.67 and Good: 3.68-5

A. Ethical approval letter

 Al Quds University Faculty of Health Professions Jerusalem – Abu Dis		جامعة القدس كلية المهن الصحية القدس – أبو ديس
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Research Ethics Subcommittee of Faculty of Health Professions
Letter of approval

May 2, 2025
Ref. No.: RESC/2025-77

Dear Applicants, (Dr. Maha Nahal, Ms. Noor Akkawi)
Program: MSc Nursing Department

The Research Ethics subcommittee of the Faculty of Health Professions has recently reviewed your proposal entitled (**Assessment of the Midwives' Knowledge, Attitude, and Practice Toward Episiotomy in the Northern Region of West Bank Palestine**) submitted by (**Dr. Maha Nahal**). 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

Tel. Fax: 02 2791243 Email: dean@hpro.alquds.edu تلفاكس: 02 2791243

B. permission letters.

State of Palestine Ministry of Health Education in Health and Scientific Research Unit		دولة فلسطين وزارة الصحة وحدة التعليم الصحي والبحث العلمي
Ref.:	الرقم: C. 50/1588/178	
Date:	التاريخ: 2017/11/20	
عطوفة الوكيل المساعد لشؤون الصحة العامة وطب الأسرة المحترم،،، الأخ مدير عام الادارة العامة للمستشفيات المحترم،،، تعبية واحترام،،،		
<u>الموضوع: تسهيل مهمة بحث</u>		
يرجى تسهيل مهمة الطالبة: نور فهمي إبراهيم عكاوي- ماجستير تمريض صحة الام والطفل/ جامعة القدس، وبإشراف د. مها نحال، في عمل بحث بعنوان: " تقييم معرفة ومواقف وممارسات القابلات تجاه عملية شق العجان، في المنطقة الشمالية من الضفة الغربية - فلسطين" من خلال السماح للطالبة بجمع معلومات عن طريق تعبئة استبانة الدراسة من قبل القابلات بعد اخذ موافقتهم للمشاركة، وذلك في:		
- مستشفى رفيديا - مستشفى طولكرم - مستشفى قلقيلية - مديرية صحة نابلس - مديرية صحة طولكرم - مديرية صحة قلقيلية على ان يتم الالتزام باساليب وإخلاقيات 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		
Telfax.: 09-2333901	scientificresearch.dep@gmail.com	تلفاكس: 09-2333901



Ref.:
Date:.....

الرقم: ٢٠١٧/٢٢٢٢ / ٢٠٢٠
التاريخ: ٢٠٢٠/١٢/٢٢

الأخ مدير عام الإدارة العامة للمستشفيات المحترم،،،
تعبية واحترام،،،

الموضوع: تسهيل مهمة بحث

يرجى تسهيل مهمة الطالبة: نور فهمي ابراهيم عكاوي- برنامج ماجستير تمريض صحة الام
والطفل/ جامعة القدس، وبإشراف د. مها نحال، في عمل بحث بعنوان:

من خلال السماح للطالبة بجمع معلومات عن طريق تعبئة استبانة من قبل القابلات، وذلك في
مستشفيات شمال الضفة الغربية:

- مستشفيات: - رفيديا - جنين - طوباس- طولكرم - قلقيلية - سلفيت

على ان يتم الالتزام بأساليب وأخلاقيات 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/ إدارة التمريض المحترمة/ جامعة القدس

C. Instruments used in the study (Self-administration questionnaire)



Midwives' Knowledge, Attitudes, and Practices Toward Episiotomy in the Northern Region of the West Bank, Palestine: A Descriptive Cross-Sectional Study

Dear Participants:

I am a graduate student from Al-Quds University, I appreciate your participation in this research entitled " **Midwives' Knowledge, Attitudes, and Practices Toward Episiotomy in the Northern Region of the West Bank, Palestine: A Descriptive Cross-Sectional Study**". This study is being carried out as a part of the requirements for the master's degree in Maternal Child Health at Al-Quds University, College of Health Professions - Palestine. Your participation is voluntary, and you will be appreciated for your cooperation. Filling out the questionnaire will not take more than 15 minutes. your answers will be kept anonymous, confidential, and you have the right to withdraw from the study without giving any reason.

I appreciate your cooperation

If you have any further inquiries about the questionnaire, please call Mrs. Noor Akkawi at 0595195366 / + 972 568420381

Name of the researcher: Noor Akkawi

Name of supervisor: Dr Maha Nahal

Part I: Demographic Data

Please put a tick mark (✓) next to your choice on the following items:

1. Age -----

2. Experience in Midwifery

Less than 1 Year ☐ 1-5 Years ☐ 6-10years ☐ more 10 Years ☐

3. Education Level

Diploma ☐ Bachelor's ☐ Master ☐ PhD ☐

4. Social Status

Single ☐ Married ☐ Divorced ☐ Widowed ☐

5. Area of residence

City ☐ Village ☐ Camp ☐

6. place of work

Thabet Thabet Governmental Hospital ☐ Darwish Nazzal Governmental Hospital ☐
Khalil Suleiman Governmental Hospital ☐ Rafidia Surgical Governmental Hospital ☐
Tubas Turkish Governmental Hospital ☐

7. Have you received any formal training on episiotomy? Yes ☐ No ☐

8. If you answered yes to question 7, where did you get the training?

Midwifery college ☐ During internship ☐

Continued training in the labor ward ☐ Special courses ☐

9. Do you have a protocol/policy at your unit on episiotomy practice for the midwives? Yes ☐ No ☐

10. What type of episiotomy is recommended in your facility?

A. Right lateral episiotomy ☐

B. Left lateral episiotomy ☐

C. Right mediolateral episiotomy ☐

D. Left mediolateral episiotomy ☐

E. Midline episiotomy ☐

Part 2: Midwives' knowledge of episiotomy

In this part, please sign ☒ on one of the choices:

1) General knowledge about episiotomy.

1. How do you define episiotomy?

- A. Surgical enlargement of vaginal orifice during labor ☐
- B. Surgical enlargement of the posterior aspect of the vaginal orifice by an incision to the perineum during last part of 2nd stage of labor ☐
- C. Enlargement of the posterior aspect of the vaginal orifice because of tearing during delivery ☐
- D. All of the above define an episiotomy ☐

2. What anatomical structures are cut during episiotomy?

- A. Skin and subcutaneous tissue ☐
- B. Bulbocavernosus muscle and fascia ☐
- C. Transverse perineal muscle ☐
- D. Levator ani muscle and fascia (may not always be involved — depends on the size of episiotomy) ☐
- E. All of the above ☐

3. What is the recommended angle from midline for a properly constituted mediolateral episiotomy?

- A. 40-60 ☐
- B. 60 ☐
- C. < 30 ☐
- D. Angle does not matter ☐

2) **Specific knowledge about episiotomy.**

In this part, please sign ☒ on one of the choices

Maternal indications for performing episiotomy		Yes	No
1.	Primiparity		
2.	Perceived tight perineum		
3.	To prevent 3rd and 4th degree perineal tears		
4.	Poor maternal effort		
5.	Prolonged 2nd stage of labor		
6.	Obstructed delivery (during second stage)		
7.	Instrumental deliveries		
8.	History of Previous episiotomy		
9.	The use of analgesia during labor		
10.	specific medical conditions		
Fetal indications for performing an episiotomy		Yes	No
1.	The large baby		
2.	Very preterm baby		
3.	The non-reassuring fetal heart to expedite delivery		
4.	The Breech presentation		
5.	The Shoulder dystocia		
6.	Abnormal fetal positions such as occipito-posterior or face presentations		
7.	Multiple pregnancies		
The immediate complications of episiotomy		Yes	No
1.	Excessive bleeding		
2.	Vulva/vaginal hematoma		
3.	3rd and 4th degree perineal tears		
4.	Infection with abscess formation		
5.	Extension of the episiotomy		
6.	Deep vaginal lacerations		
7.	Wound dehiscence (opened & expanded)		
8.	Anal sphincter injury		
Long-term complications of episiotomies		Yes	No
1.	Dyspareunia		
2.	Anal incontinence		
3.	Urinary incontinence		
4.	Pelvic organ prolapses		
5.	Recto-vaginal fistula		
6.	Vulvodynia		

Part 3: Midwives' attitudes toward episiotomy

In this part, please sign ☒ on one of the choices

Statement of the midwives' attitudes		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I believe that the restricted use of episiotomy is better than routine use					
2.	I believe that routine episiotomy is appropriate for primiparous women					
3.	Routine episiotomy is appropriate for multiparous women					
4.	Midwives are not well prepared to minimize perineal tears or keep the perineum intact					
5.	There is no time to wait for the perineum to stretch; therefore, episiotomy should be performed often.					
6.	I think it is hard to change traditional practice					
7.	Women often expect an episiotomy, so it is difficult to restrict its use.					
8.	Episiotomies help accelerate deliveries in a busy and overcrowded labor ward. So, it is often a good solution.					
9.	Midwives are not well trained to perform episiotomies					
10.	More in-service training is needed for the midwives to improve their performance in episiotomy					
11.	To have a protocol/policy on episiotomy practice for the midwives is an important issue that should be considered					

Part 4: Midwives' practice of episiotomy

In this part, please sign ☒ on one of the choices

Question one: How many times have you performed an episiotomy through your work?

1. I did 0-5 episiotomies under supervision ☐

2. I did 5-10 episiotomies under supervision ☐

3. I did >10 episiotomies under supervision ☐

Question Two: When do you consider the appropriate performance of an episiotomy?

1. When the parturient patient has the urge to push ☐

2. When 3–4 cm of the presenting part is visible during contraction ☐

3. When the perineum is bulging ☐

4. When delivery is expected within the next 3–4 contractions ☐

5. When all the above are present ☐

Question Three: What method do you use in caring for the Episiotomy (perineal wound)?

1. Use of antiseptic solution after urinating or bowel evacuation ☐

2. Sit baths ☐

3. Daily shower and washing with mild soap and water ☐

4. Stool softeners ☐

Question Four practices:

In this part, please sign ☒ on one of the choices

Practice toward episiotomy		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I often do perineal massage for women to reduce the need for episiotomy.					
2.	I often use warm compresses during labor to minimize the need to perform an episiotomy					
3.	I often take verbal consent for episiotomy from the mothers					

4.	We often give local anesthesia to the women before cutting the perineum					
5.	Analgesia is routinely given to mothers after episiotomy repair and upon discharge					
6.	Prophylactic antibiotics are routinely administered to mothers after episiotomy repair					
7.	Mothers receive adequate counselling on wound and perineal care before discharge from the hospital					
8.	Is episiotomy part of your practice during prolonged or obstructed labor?					
9.	Do you perform an episiotomy when maternal or fetal health concerns require expedited delivery?					
10.	Do you perform episiotomy in cases where labor is augmented with oxytocin?					
11.	Do you employ manual perineal protection techniques during delivery to avoid episiotomy?					
12.	To reduce the need for episiotomies, I follow the strategy effective communication with laboring women					
13.	I do allow natural labor progression to stretch the perineum and reduce the need for episiotomy?					

الاستبيان باللغة العربية

معرفة القابلات ومواقفهن وممارساتهن تجاه شق العجان في المنطقة الشمالية من الضفة الغربية - فلسطين

عزيزتي المشاركة،

أنا طالبة دراسات عليا في جامعة القدس، وأقدّر مشاركتك في هذا البحث بعنوان:
(معرفة القابلات ومواقفهن وممارساتهن تجاه شق العجان في المنطقة الشمالية من الضفة الغربية - فلسطين) يتم إجراء هذه الدراسة كجزء من متطلبات الحصول على درجة الماجستير في صحة الأم والطفل في جامعة القدس - كلية المهن الصحية. مشاركتك في هذه الدراسة اختيارية، ونقدّر تعاونك. إن تعبئة الاستبيان لن تستغرق أكثر من 15 دقيقة. سيتم التعامل مع إجاباتك بسرية تامة وبشكل مجهول، ولك الحق في الانسحاب من الدراسة في أي وقت ودون الحاجة إلى إبداء أي سبب.

نقدر تعاونك ومشاركتك القيمة.

إذا كان لديك أي استفسار بخصوص الاستبيان، يُرجى الاتصال بالسيدة نور عكاوي على الرقم المرفق.

0595195366 / + 972 568420381

اسم الباحثة: نور عكاوي.

اسم المشرفة: الدكتورة مها نحال.

قسم الأول: البيانات الديموغرافية

يرجى وضع علامة (√) بجانب الخيار المناسب:

1. العمر _____

2. الخبرة في القبالة

أقل من سنة ☐ من 1-5 سنوات ☐ من 6-10 سنوات ☐ أكثر من 10 سنوات ☐

3. المستوى التعليمي

دبلوم ☐ بكالوريوس ☐ ماجستير ☐ دكتوراه ☐

4. الحالة الاجتماعية

عزباء ☐ متزوجة ☐ مطلقة ☐ أرملة ☐

5. مكان السكن

مدينة ☐ قرية ☐ مخيم ☐

6. مكان العمل

مستشفى رفيديا الحكومي ☐ مستشفى خليل سليمان الحكومي ☐

مستشفى الشهيد ثابت ثابت الحكومي ☐ مستشفى درويش نزال الحكومي ☐ مستشفى طوباس التركي ☐

7. هل تلقيت تدريباً رسمياً حول شق العجان (episiotomy) ؟ نعم ☐ لا ☐

8. اذا كانت اجابتك (نعم) على السؤال رقم 7 , اين حصلت على التدريب؟

كلية القبالة ☐ أثناء فترة التدريب العملي (الامتياز) ☐

تدريب مستمر في قسم الولادة ☐ دورات خاصة ☐

9 . هل يوجد في المشفى بروتوكول/ سياسة خاصة بممارسة شق العجان للقبالات؟
نعم ☐ لا ☐

10. ما نوع شق العجان الموصى به في مؤسستك؟.

- A. شق العجان جانبي أيمن ☐
- B. شق العجان جانبي أيسر ☐
- C. شق العجان وسطي جانبي أيمن ☐
- D. شق العجان وسطي جانبي أيسر ☐
- E. شق العجان في الخط المتوسط ☐

القسم الثاني: معرفة القابلات حول شق العجان (Episiotomy)

في هذا القسم، يرجى وضع علامة (☑) على أحد الخيارات:

1 (المعرفة العامة حول شق العجان

1. كيف تُعرِّفين شق العجان (Episiotomy)؟

- A . توسيع جراحي لفتحة المهبل أثناء الولادة ☐
- B . توسيع جراحي للجزء الخلفي من فتحة المهبل بعمل شق في العجان خلال المرحلة الثانية الأخيرة من الولادة ☐
- C . توسيع الجزء الخلفي من فتحة المهبل نتيجة التمزق أثناء الولادة ☐
- D . جميع ما سبق يُعرّف شق العجان ☐

2. ما هي التراكيب التشريحية التي يتم قصها أثناء شق العجان؟

- A. الجلد والأنسجة تحت الجلد ☐
- B. Bulbocavernosus muscle and fascia ☐
- C. Transverse perineal muscle ☐

☐ D. Levator ani muscle and fascia

☐ E. جميع ما سبق

3 . ما هي الزاوية الموصى بها من خط المتوسط عند اجراء شق العجان الوسطي الجانبي (Mediolateral Episiotomy) بشكل صحيح ؟

☐ A . 40-60 درجة

☐ B . 60 درجة

☐ C . أقل من 30 درجة

☐ D . الزاوية لا تهم

(2)المعرفة تفصيلية حول شق العجان (Episiotomy)

في هذا الجزء ، يرجى وضع علامة (✓) على الخيار المناسب

مؤشرات عند الام لإجراء شق العجان		نعم	لا
1.	بكرية (الولادة الاولى)		
2.	اذا كانت منطقة العجان مشدودة		
3.	للقاوية من التمزقات من الدرجة الثالثة والرابعة		
4.	ضعف القدرة على الدفع عند الولادة		
5.	طول المرحلة الثانية من المخاض		
6.	تعسر الولادة (أثناء المرحلة الثانية)		
7.	الولادة باستخدام الادوات (الملقط / والشفاط)		
8.	اذا كانت قد اجرت شق المهبل في الولادات السابقة		
9.	استخدام التخدير (المسكنات) أثناء الولادة		
10.	حالات طبية خاصة		

		مؤشرات عند الجنين لإجراء شق العجان	
لا	نعم		
		1. جنين ذو حجم كبير	
		2. جنين (خداج)	
		3. تأثر نبض الجنين خلال الولادة (والحاجة لتسريع الولادة)	
		4. اذا كان الجنين Breech	
		5. Shoulder dystocia	
		6. اوضاع غير طبيعية للجنين مثل occipito-posterior or face presentations	
		7. يوجد اكثر من جنين	

		المضاعفات الفورية لشق العجان	
لا	نعم		
		1. نزيف مفرط	
		2. Vulva/vaginal hematoma	
		3. تمزقات من الدرجة الثالثة والرابعة	
		4. Infection with abscess formation	
		5. امتداد في الشق العجاني	
		6. تمزقات مهبلية عميقة	
		7. انفتاح في الجرح	
		8. اصابة العضلة العاصرة الشرجية	

لا	نعم	المضاعفات طويلة المدى لشق العجان
		1. عسر الجماع
		2. سلس البراز
		3. سلس البول
		4. هبوط أعضاء الحوض
		5. ناسور مستقيمي - مهبلي
		6. ألم الفرج المزمن

القسم الثالث: مواقف القابلات تجاه شق العجان

في هذا القسم، يرجى وضع علامة (☑) على الخيار المناسب

أوافق بشدة	أوافق	محايدة	أعارض	أعارض بشدة	تصريحات حول مواقف القابلات
					1. أعتقد أن الاستخدام المقيد لشق العجان أفضل من الاستخدام الروتيني
					2. أعتقد أن الشق الروتيني مناسب للنساء البكرات (Primiparous)
					3. أعتقد أن الشق الروتيني مناسب للنساء متعدّدات الولادة (Multiparous)
					4. القابلات غير مؤهلات بشكل كافٍ لتقليل تمزقات العجان أو الحفاظ عليه سليماً

					5. لا يوجد وقت كافٍ لانتظار تمدد العجان، لذا يجب إجراء البضع بشكل متكرر
					6. أعتقد أنه من الصعب تغيير الممارسات التقليدية
					7. غالباً ما تتوقع النساء إجراء شق العجان، لذلك من الصعب تقييد استخدامه
					8. يساعد شق العجان في تسريع الولادة في أقسام الولادة المزدحمة والمكتظة، لذلك غالباً ما يكون حلاً مناسباً
					9. القابلات غير مدربات بشكل كافٍ على إجراء شق العجان
					10. هناك حاجة لمزيد من التدريب أثناء العمل لتحسين أداء القابلات في شق المهبل
					11. وجود بروتوكول/سياسة خاصة بممارسة شق العجان للقابلات هو أمر مهم يجب أخذه بعين الاعتبار

القسم الرابع : ممارسات القابلات ل الشق العجاني

في هذا القسم، يرجى وضع علامة (☑) على الخيار المناسب:

السؤال الأول: كم مرة أجريت شق العجان خلال عملك؟

1. أجريته 0-5 عمليات شق العجان تحت الإشراف ☐

2. أجريته 5-10 عمليات شق العجان تحت الإشراف ☐

3. أجريَتْ أكثر من 10 عمليات شق العجان تحت الإشراف ☐

السؤال الثاني: متى تعتبرين الوقت مناسباً لإجراء شق العجان؟

1. عندما تشعر المرأة الحامل بالرغبة في الدفع ☐

2. عندما يظهر 3-4 سم من الجزء المقدم أثناء الانقباض ☐

3. عندما يبدأ العجان بالانتفاخ ☐

4. عندما يُتوقع حدوث الولادة خلال 3-4 انقباضات قادمة ☐

5. عند توافر جميع ما سبق ☐

السؤال الثالث: ما الأسلوب الذي تستخدمينه في العناية بجرح شق العجان (جرح العجان)؟

1. استخدام محلول مطهر بعد التبول أو التبرز ☐

2. عمل مغاطس ☐

3. الاستحمام اليومي والغسل بصابون لطيف وماء ☐

4. استخدام ملينات البراز ☐

السؤال الرابع: الممارسات تجاه شق العجان

في هذا الجزء، يرجى وضع علامة (✓) على الخيار المناسب

الممارسات تجاه شق المهبل	أعارض بشدة	أعارض	محايدة	أوافق	أوافق بشدة
1. غالباً ما أقوم بتدليك العجان للنساء لتقليل الحاجة إلى شق العجان					

					2. غالباً ما أستخدم الكمادات الدافئة أثناء الولادة لتقليل الحاجة إلى إجراء شق العجان	
					3. غالباً ما آخذ الموافقة الشفهية من الأمهات قبل إجراء شق العجان	
					4. غالباً ما نعطي التخدير الموضعي للنساء قبل شق العجان	
					5. يتم إعطاء مسكنات الألم للأمهات بشكل روتيني بعد خياطة شق العجان وعند الخروج من المستشفى	
					6. يتم إعطاء المضادات الحيوية الوقائية للأمهات بشكل روتيني بعد خياطة شق العجان	
					7. تتلقى الأمهات إرشادات كافية حول العناية بالجرح والعجان قبل الخروج من المستشفى	
					8. يعتبر بشق العجان جزءاً من ممارستي أثناء الولادة المطولة أو المتعسرة	
					9. أقوم بإجراء شق العجان عند وجود مخاطر على صحة الأم أو الجنين تتطلب تسريع الولادة	
					10. أقوم بإجراء شق العجان في الحالات التي يتم فيها تحفيز الولادة باستخدام الأوكسيتوسين	

					11. أطبق تقنيات الحماية اليدوية للعجان أثناء الولادة لتجنب الحاجة إلى شق العجان
					12. لتقليل الحاجة إلى شق العجان، أتبع استراتيجية التواصل الفعال مع النساء أثناء المخاض
					13. أسمح بالتقدم الطبيعي للمخاض لتمديد العجان وتقليل الحاجة إلى شق العجان

معرفة القابلات ومواقفهن وممارساتهن تجاه شق العجان في المنطقة الشمالية من الضفة الغربية -
فلسطين. دراسة وصفية مقطعية
اعداد: نور فهمي ابراهيم عكاوي
اشراف د. مها نحال.

الملخص

المقدمة: تُعد شقّ العجان إجراءً توليدياً شائعاً لا يزال يُستخدم بشكلٍ مفرط، على الرغم من الأدلة التي تربط الاستخدام الروتيني له بآثار سلبية على صحة الأم. وعلى الرغم من أن الإرشادات الدولية توصي بالاستخدام المقيد لهذا الإجراء، إلا أنه ما يزال منتشرًا في فلسطين، حيث تلعب القابلات دورًا محوريًا في رعاية المرأة أثناء المخاض والولادة. ويُظهر محدودية الدليل المتوفر حول معارف القابلات وممارساتهن وجود فجوة معرفية مهمة قد تُسهم في الاستخدام غير المبني على الدليل العلمي لشقّ العجان.

الهدف: هدفت هذه الدراسة إلى تقييم معارف القابلات واتجاهاتهن وممارساتهن تجاه شقّ العجان في المنطقة الشمالية من الضفة الغربية في فلسطين، ودراسة العلاقة بين هذه الجوانب والعوامل الاجتماعية والديموغرافية.

المنهجية: استخدمت هذه الدراسة تصميمًا كميًا وصفيًا مقطعيًا، وأُجريت في خمسة مستشفيات حكومية في شمال الضفة الغربية، فلسطين. شاركت في الدراسة عينة ملائمة مكونة من 100 قابلة. جُمعت البيانات باستخدام استبانة سيكومترية ذاتية التعبئة ومُحققة الصدق، تم تبنيها من دراسات سابقة لتقييم معارف القابلات واتجاهاتهن وممارساتهن المتعلقة بشقّ العجان. تم الحصول على الموافقة الأخلاقية من جامعة القدس، كما جرى الحصول على الموافقات اللازمة من وزارة الصحة الفلسطينية وإدارات المستشفيات المعنية. وقد تم الحصول على الموافقة المستنيرة من جميع المشاركات. استمرت الدراسة لمدة شهرين خلال الفترة من آب إلى تشرين الأول 2025. وتم تحليل البيانات باستخدام برنامج SPSS الإصدار 27.

النتائج: أظهرت غالبية القابلات مستوىً متوسطاً من المعرفة والممارسة المتعلقة بشقّ العجان، في حين أظهرت نسبة أقل مستويات مرتفعة. وكانت الاتجاهات في معظمها محايدة، مع وجود نسبة محدودة ذات اتجاهات إيجابية. وارتبط مستوى المعرفة بشكل دالٍ إحصائيًا بالعمر، والتدريب، ونوع شقّ العجان، في حين ارتبطت الاتجاهات بالمستوى التعليمي، ونوع شقّ العجان،

والحالة الاجتماعية. ولم تُظهر النتائج وجود علاقة ارتباطية ذات دلالة إحصائية بين المعرفة والاتجاهات والممارسة.

الاستنتاجات: على الرغم من أن القابلات أظهرن مستوى متوسطاً من المعرفة والممارسة المتعلقة بشقّ العجان، إلا أن اتجاهاتهن كانت في الغالب محايدة. وتشير هذه النتائج إلى وجود مستوى مقبول من الكفاءة الأساسية، إلا أنها تؤكد الحاجة إلى برامج تدريبية موجهة وبروتوكولات موحّدة لتعزيز ترجمة المعرفة إلى ممارسة متسقة، وتحسين نتائج رعاية صحة الأمهات.

الكلمات المفتاحية: القابلات، المعرفة، الاتجاهات، الممارسة، شقّ العجان، المنطقة الشمالية من الضفة الغربية، فلسطين.