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ANALYSIS OF FACTORS CAUSING EPIOSTOMY IN THE BIRTH PROCESS: SCOPING REVIEW

Analisis Faktor yang Memengaruhi Tindakan Episiotomy pada Ibu Bersalin: Scoping Review

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ABSTRAK

Episiotomi merupakan tindakan insisi perineum yang umum dilakukan dalam proses persalinan, namun praktik ini masih menuai kontroversi. Sejak tahun 1996, sebagian besar literatur menyimpulkan bahwa episiotomi rutin tidak diperlukan dan bahkan berisiko meningkatkan kejadian laserasi perineum derajat tiga atau empat. Meskipun Organisasi Kesehatan Dunia (WHO) telah merekomendasikan pembatasan praktik episiotomi rutin sejak 1990-an, kenyataannya tindakan ini masih sering dilakukan, terutama di negara berkembang, termasuk Indonesia. Scoping review ini bertujuan untuk menganalisis faktor yang mendasari tindakan episiotomi pada ibu bersalin. Scoping review menggunakan PRISMA-ScR Ceklist. Pencarian database dari Pubmed, Scopus, Wiley Online Library, dan Science Direct. dengan kata kunci pencarian "Factor" AND "indication" OR "episiotomy" OR "laceration" OR "rupture perineum". Kriteria inklusi yang digunakan meliputi artikel orisinal yang membahas topik relevan serta artikel yang diterbitkan dalam lima tahun terakhir, yaitu antara tahun 2018 hingga 2023. Sebanyak 18 artikel terpilih dianalisis menggunakan checklist dari Joanna Briggs Institute (JBI) melalui proses Critical Appraisal. Tinjauan ini menghasilkan sub tema tehadap faktor yang berhubungan dengan tindakan episiotomy yaitu jarak kelahiran, BMI ibu, gawat janin, berat lahir, paritas, kehamilan ganda, Perineum pendek, perineum kaku, kala II lama, TFU >32 cm, penggunaan oksitosin, dan persalinan instrumen. Dapat disimpulkan bahwa paritas dan berat janin yang paling banyak ditemukan dalam kasus episiotomy. Temuan ini memiliki implikasi penting bagi praktik klinis dan kebijakan pelayanan kebidanan, khususnya dalam mengembangkan panduan pengambilan keputusan berbasis bukti yang lebih selektif dan rasional terkait tindakan episiotomi, guna meminimalkan risiko komplikasi serta meningkatkan keselamatan ibu dan bayi.

***Kata kunci**: episiotomy, faktor, indikasi, robekan perineum, scoping review*

ABSTRACT

Episiotomy is a common perineal incision during labor, but the practice remains controversial. Since 1996, most literature has concluded that routine episiotomy is unnecessary and even risks increasing the incidence of third or fourth degree perineal lacerations. Although the World Health Organization (WHO) has recommended limiting the practice of routine episiotomy since the 1990s, it is still frequently performed, especially in developing countries, including Indonesia. This scoping review aims to analyze the factors underlying episiotomy in laboring women. The scoping review used the PRISMA-ScR Checklist. Database searches from Pubmed, Scopus, Wiley Online Library, and Science Direct. with the search keywords "Factor" AND "indication" OR "episiotomy" OR "laceration" OR "perineal rupture". The inclusion criteria used included original articles addressing relevant topics and articles published within the last five years, i.e. between 2018 and 2023. A total of 18 selected articles were analyzed using the Joanna Briggs Institute (JBI) checklist through the Critical Appraisal process. This review produced sub-themes on factors associated with episiotomy, namely birth spacing, maternal BMI, fetal distress, birth weight, parity, multiple pregnancy, short perineum, stiff perineum, prolonged second stage, TFU >32 cm, oxytocin use, and

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instrument delivery. It can be concluded that parity and fetal weight are most commonly found in cases of episiotomy. These findings have important implications for clinical practice and midwifery service policy, especially in developing evidence-based decision-making guidelines that are more selective and rational regarding episiotomy, in order to minimize the risk of complications and improve the safety of mothers and babies.

Keywords: episiotomy, factor, indication, perineal tear, scoping review

INTRODUCTION

Episiotomy is an incision in the perineum that has been widely practiced since the 1920s, initially as a prophylactic procedure to prevent spontaneous lacerations in the birth canal and reduce maternal and infant morbidity[1]. Although routine prophylactic episiotomies were performed in the 1980s to mid-1990s, concerns about potential complications associated with episiotomies arose during this period[2]. Since 1996, a large body of literature has concluded that routine episiotomy is unnecessary and may even increase the risk of 3rd or 4th degree perineal laceration. The World Health Organization (WHO) and other professional societies have recommended restrictions on routine episiotomy since the 1990s, although less than ideal episiotomy rates are recommended[3].

Despite this, episiotomies are still widely practiced, especially in developing countries like Indonesia. Data shows that approximately 80% of deliveries in Indonesia still involve episiotomies, a figure significantly higher than global recommendations. The leading causes of death are hemorrhage (1,330 cases), hypertension (1,100 cases), and circulatory system disorders (230 cases). Postpartum hemorrhage is the leading cause of 40% of maternal deaths in Indonesia[4]. The birth canal is the second cause of bleeding after uterine atony which occurs in almost all first deliveries and not infrequently in subsequent deliveries. The results of the recording indicate that almost all or up to 80% of the birth process in Indonesia is followed by an episiotomy. The problem found is the still low health of women caused by the high maternal mortality rate during pregnancy, childbirth and postpartum, as well as the still low quality of life of women both in terms of health and economic capacity[5].

Postpartum hemorrhage is bleeding that occurs within 24 hours of delivery. This bleeding is caused by uterine atony, retained placenta, retained placenta, and tears in the birth canal. One cause of this bleeding is perineal tears or lacerations of the birth canal, which occur in 4-5% of cases, and this is the most common cause during childbirth[6].

The results of hospital research on patient data collected through medical records in 2010-2011 showed that the incidence of perineal rupture was 141 people. Of the 141 mothers who experienced perineal rupture, based on parity, the most were primiparas, namely 88 people (62.64%), based on birth intervals, the most were 2-3 years, namely 27 people (50.95%), and the most common infant weight was > 3500 grams, namely 66 people (46.81%)[7].These findings suggest that various factors, including maternal, fetal, and procedural factors, can influence the decision to perform an episiotomy. Given the high prevalence of episiotomy and its risk of complications, it is important to identify the factors influencing its use. This scoping review explores these factors to support more selective, evidence-based clinical policies, with the aim of improving delivery care quality and reducing unnecessary episiotomies.

METHODS

This study is a scoping review study compiled based on the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) guidelines. This design is used to map the available literature, identify knowledge gaps, clarify concepts, and evaluate the extent to which the topic has been researched. This study focuses on the synthesis of scientific evidence from various

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relevant studies regarding factors influencing episiotomy in childbirth. The subjects in this study were scientific articles discussing episiotomy, including risk factors, indications, and implementation. A total of 18 articles were analyzed, selected through a systematic selection process based on inclusion and exclusion criteria. The articles came from several countries, namely Ethiopia, the USA, France, Iran, Egypt, Spain, China, Uganda, and Poland.

The sampling technique was carried out through a purposive article search using four electronic databases, namely PubMed, Scopus, Wiley Online Library, and ScienceDirect, with the keywords: "factor" AND "indication" OR "episiotomy" OR "laceration" OR "perineal rupture". This search was conducted between November 2024 and February 2025. Inclusion criteria included original articles published in the last five years (2019–2024), available in full-text, in English, and directly discussing topics related to episiotomy. Review articles, articles irrelevant to the study focus, paid articles that are not freely accessible, and articles without full-text were excluded from the analysis.

The review focus was determined using the PCC (Population, Concept, Context) framework as recommended by the Joanna Briggs Institute (2015). Furthermore, the selected articles were analyzed and evaluated for quality using the Joanna Briggs Institute (JBI) critical appraisal checklist to ensure data validity and reliability.

Identifying research questions

This study used the Population, Concept, and Context (PCC) framework to find articles, establish inclusion and exclusion criteria, and identify relevant outcomes. This scoping review aimed to analyze the factors underlying episiotomy in women giving birth. This analysis used the PCC (Population, Concept, Context) framework, where the population studied was women giving birth, the concept discussed was the factors influencing the decision to perform an episiotomy, and the context was the labor process.

Identifying relevant studies

The article search strategy was developed according to the research questions and objectives. Researchers used inclusion criteria that included original articles published within the last five years (2019-2024). Articles that did not meet the inclusion criteria, such as review articles, irrelevant articles, articles not available in full text, or paid articles, were excluded from the search.

In identifying relevant studies, researchers used several databases. The databases used were Pubmed, Scopus, Wiley Online Library, and Science Direct. Article searches used several strategies such as the use of keywords and Boolean operators (OR, AND, NOT). The keywords used in the article search were "factor" AND "indication" OR "episiotomy" OR "laceration" OR "perineal rupture". The obtained articles were entered into Mendeley to assist in article selection including titles, abstracts, and reading the full text. Then, a critical appraisal was conducted to assess the quality of the selected articles using the Joanna Briggs Institute checklist. The Joanna Briggs Institute checklist was chosen because the JBI provides a complete critical appraisal checklist for all research study designs.

Selecting study results

Identifying the literature that has been obtained using the PRISMA Flowchart with the aim of describing the literature identification process in detail and transparently.[9]. From the results of searching for articles in 4 databases used 72 articles from PubMed, Scopus 276 articles, Science Direct 52 articles, and Wiley Online Library 159 articles, the next step is to enter the articles into the Mendeley software then 46 duplicate articles are obtained, after removing duplicate articles the researcher filters the title and abstract, conducts a scoping review by reading the research publication as a whole to determine the eligibility of the research article. The article search process can be seen in the PRISMA Flowchart as follows:

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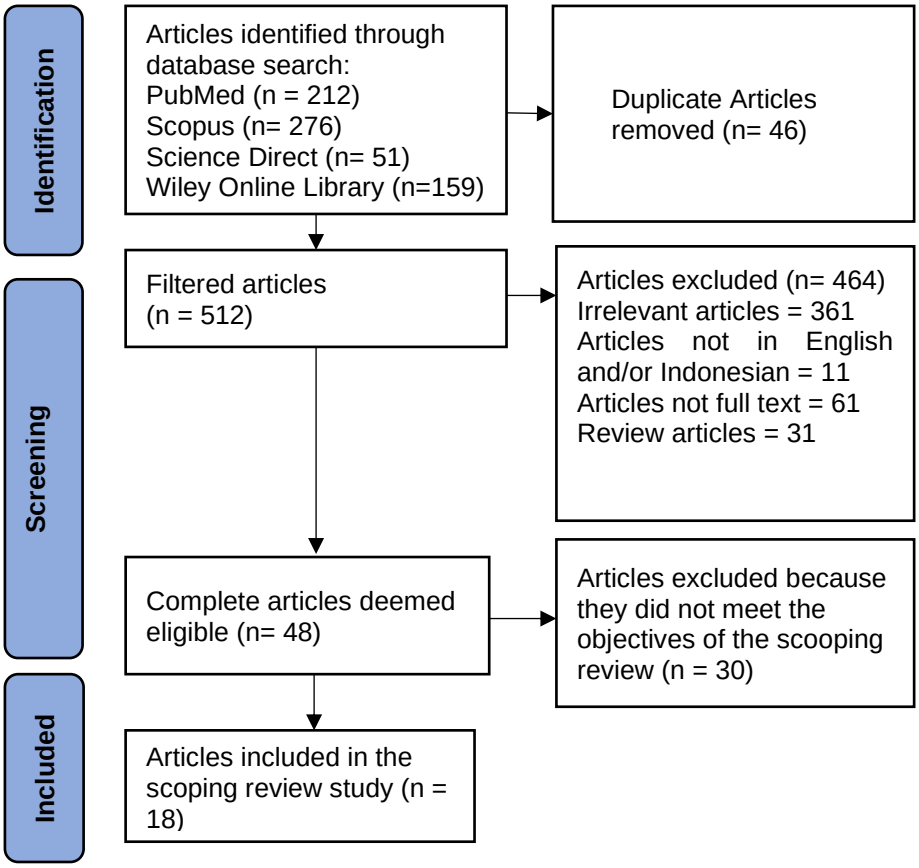

Figure 1. PRISMA *Flow chart*

Data Charting

At this stage, the selected articles are numbered A1-A18, then entered into a table that can explain: article title, author, year of publication, country name, research objectives, type of research, data collection method, number of respondents, and research results[10].

RESULT

The charting data is explained in the following table 1:

Table1. Scoping Study Article

No	Title and Author	Types of research	Population and Sample	Data Collection	Results
A1	*Restrictive versus routine episiotomy among Southeast Asian term pregnancies: a multicentre randomized controlled trial (Thailand)* [11]	RCT	Population: 3006 singleton pregnant women aged 18 years and above, gestational age ≥37 weeks. Sampling technique: block randomization adjusted for study location and maternal parity.	Multicenter randomized controlled trial. Established in two tertiary hospitals and two general hospitals in Thailand.	A restrictive episiotomy maintains a more intact perineum in multiparas, but increases the risk of vaginal lacerations in primiparas and multiparas without increasing the need for sutures. The risks of cervical lacerations, postpartum hemorrhage, wound complications, birth asphyxia, and neonatal intensive care are relatively comparable.

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No	Title and Author	Types of research	Population and Sample	Data Collection	Results
A2	*Incidence of Obstetric Lacerations and Episiotomy Following Labiaplasty (United States)* [12]	retrospective cohort	204 patients responded to the telephone survey. Seventy patients had children before labiaplasty, while 33 had children after labiaplasty. Sampling technique: non-probability sampling with a retrospective approach.	Interview	The rate of vaginal delivery is lower in women who had children before labiaplasty. Episiotomy in vaginal delivery is lower in women who had children before labiaplasty compared to women who had children before labiaplasty.
A3	*Impact of Episiotomy During Operative Vaginal Delivery on Obstetrical Anal Sphincter Injuries. (Canada)*[13]	retrospective cohort	56,070 operative vaginal deliveries met the inclusion criteria. Of these, 14,665 (28.1%) were assisted with forceps and 37,576 (71.9%) were vacuum-assisted. Episiotomies were performed in 17,824 (34%) deliveries. The sampling technique used was total sampling.	Questionnaire	Episiotomy in forceps or vacuum delivery increases the risk of severe perineal laceration in vacuum and OASIS in forceps in women with a history of vaginal delivery, but is protective in forceps for vaginal primiparas.
A4	*Randomized Clinical Trial of an Aquatic Physical Exercise Program During Pregnancy (Spain)*[14]	RCT	A total of 129 pregnant women (control group [CG] ¼ 64; aquatic exercise group [EG] ¼ 65). Sampling technique: simple random sampling	The intervention was an aquatic physical exercise program specifically designed for pregnant women. (Study of Water Gymnastics During Pregnancy SWEP Method).	Women in the EG had a greater rate of intact perineum than those in the CG (odds ratio [OR] = 13.54, 95% confidence interval [CI] [2.75, 66.56]). After adjusting for infant birth weight, the effect of the intervention on intact perineum was OR 8.57 (95% CI [1.85, 39.68].
A5	*The relationship between perineal size and episiotomy during delivery (Iran)*[15]	Cross-sectional	376 primiparous women were referred to Fatemieh Hospital in Hamadan with singleton pregnancies, first stage of labor, and gestational age of 37 weeks or more, of whom 372 participated. The sampling technique used was purposive sampling.	Questionnaire	The mean gestational age was 39.10±1.21 weeks, and the newborn weight was 3107.37±42.39 g. 86.3% of women underwent episiotomy, and 5.4% experienced perineal tears (lacerations). The average perineal size was 3.99±0.77. There was a statistically significant relationship between perineal body

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No	Title and Author	Types of research	Population and Sample	Data Collection	Results
					size, episiotomy, and neonatal birth weight. In primiparous women with a gestational age of 37 to 42 weeks, vaginal delivery, the perineum was shorter, distance significantly increases the likelihood of an episiotomy.
A6	*Magnitude of Episiotomy and Associated Factors among Mothers Who Gave Birth in Arba Minch General Hospital, Southern Ethiopia: Observation-Based Cross-Sectional Study (Ethiopia)*[16]	*Cross-Sectional*	The sample size of this study was 410. The systematic random sampling technique employed.	Questionnaire	The highest incidence of episiotomy was found in women with secondary education, birth weight ≥3000 g, primipara, housewives, and body mass index < 25 kg/m2 has a significant relationship with episiotomy
A7	*A nationwide cross-sectional survey of episiotomy practice in China (China)*[17]	*Cross-sectional*	Hospitals with at least 1,000 deliveries per year were eligible for this survey. We randomly selected six weeks within a year for facilities with 6,000 or more deliveries per year, or ten weeks for facilities with fewer than 6,000 deliveries per year, for data collection.	Survey	The episiotomy rate in vaginal births was 41.7% in nulliparas and multiparas in China. Factors associated with episiotomy included pre-pregnancy BMI, maternal disease, and obstetric factors. Unindicated mediolateral episiotomy increased the risk of third- and fourth-degree lacerations.
A8	*Perineal massage and training reduces perineal trauma in pregnant women older than 35 years: a randomized controlled trial. (Egypt)*[18]	RCT	The first group (n=200) was taught to perform digital perineal massage and pelvic floor muscle massage. training and received a PFD prevention education program. The second group (n = 200) received only the prevention education program. The sampling technique used was purposive sampling.	Questionnaire	Perineal massage can reduce episiotomy and perineal laceration rates. Perineal tear rates are significantly higher in obese women, and those with a higher BMI are more likely to have severe perineal lacerations.
A9	*The role of mediolateral episiotomy during vacuumassisted vaginal delivery with*	Retrospective cohort	A sample size of 500 women in each group was sufficient to detect the benefit of episiotomy. The sampling technique	Questionnaire	The results showed that mothers who underwent episiotomy were more likely to be younger, primiparous, and babies with macrosomia and

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No	Title and Author	Types of research	Population and Sample	Data Collection	Results
	soft cup devices (Israel)[19]		used was total sampling in the context of a retrospective cohort study.		fetal weight >4000 g had a higher tendency to undergo episiotomy.
A10	[20] *Factors Associated with Episiotomy Practices in Gondar City at Public Health Facility Northwest Ethiopia: A Cross-Sectional Study (Ethiopia)*	Cross-sectional	All mothers who gave birth naturally at the Gondar Community Health Center were sampled using random sampling techniques. A total of 411 participants were included in the study.	Questionnaire	The prevalence of episiotomy was 52.8%, and factors significantly associated with episiotomy were primipara, fetal distress, and fetal weight.
A11	[21] *Factors associated with episiotomy practices in Bahirdar City, Ethiopia: A cross-sectional study (Ethiopia)*	Cross-sectional	All 411 women who gave birth vaginally participated in this study.	Questionnaire	Primipara, prolonged second stage of labor, instrumental delivery, use of oxytocin, birth weight >4000 grams have a significant relationship with episiotomy.
A12	*Episiotomy practice and associated factors among mothers who gave birth at public health facilities in Metema district, northwest Ethiopia (Ethiopia)*[3]	Cross-sectional	All 410 mothers who gave birth normally were recruited using random sampling techniques.	Allocate samples proportionally to all health facilities	The incidence of episiotomy was 44.15%. Maternal age 25-35 years, birth spacing <2 years, and use of oxytocin were factors significantly associated with episiotomy.
A13	*Episiotomy practices in France: epidemiology and risk factors in non-operative vaginal deliveries (France)* [22]	Retrospective cohort	A total of 584 vaginal deliveries were performed in French hospitals, including 28 teaching hospitals. Sampling technique: total sampling	Collecting individual data in a standardized manner is diagnosed and then coded.	Among non-operative deliveries, epidural analgesia, fetal distress, meconium, shoulder dystocia, fetal weight, breech delivery, and multiple pregnancy are risk factors for episiotomy.
A14	*Prevalence and factors associated with episiotomy practice among primiparous women in Mulago national referral hospital Uganda (Uganda)* [23]	Cross-sectional	249 participants were systematically recruited on the first day postpartum after meeting the criteria. The sampling technique used was systematic random sampling.	Questionnaire	The prevalence of episiotomy is 73%, long second stage of labor, gestational age above >37 weeks are factors associated with episiotomy.
A15	*To Determine the Affecting Factors of Performing Episiotomy among Women Delivering Vaginally in King*	Cross-sectional	All mothers who gave birth vaginally. The sampling technique used was total sampling.	Questionnaire	The results showed that 132 primiparas, 66 stiff perineums, and 63 fetal distress had a significant relationship with the incidence of episiotomy.

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No	Title and Author	Types of research	Population and Sample	Data Collection	Results
	Salman Armed Forces Western Region Hospital (KSAFWRH) (Saudi Arabia) [24]				
A16	*Risk factors for obstetric anal sphincter injuries (OASIS) and the role of episiotomy: A retrospective series of 496 cases (Germany)* [25]	Case study	A total of 42,626 patients were included in the study. The case group consisted of patients with OASIS, and the control group consisted of patients without signs of OASIS on the day of delivery. The sampling technique used was a retrospective case-control study.	Collected using a digital obstetric records database.	The main factors of OASIS are nulliparous, TFU height >32 cm, gestational diabetes, birth weight >3500 gr, and instrumental delivery.
A17	*Magnitude of Episiotomy and Associated Factors among Mothers Who Gave Birth in Arba Minch General Hospital, Southern Ethiopia: Observation-Based Cross-Sectional Study (Ethiopia)* [26]	Cross-sectional	Mothers who gave birth at Arba Minch General Hospital. Using random sampling techniques	Questionnaire	Factors associated with episiotomy include women with secondary education, women with college degrees, birth weight >3000 gr, primipara, and BMI <25 kg/m2. [22]
A18	*Episiotomy for Medical Indications during Vaginal Birth—Retrospective Analysis of Risk Factors Determining the Performance of This Procedure (Poland)* [27]	Case study	The study group consisted of patients who had undergone episiotomy and the control group consisted of patients without episiotomy. The sampling technique used was a retrospective case-control study.	Patient records from Saint Sophi Hospital in Warsaw to create an anonymous database of all deliveries.	Risk factors for episiotomy include the use of oxytocin and a long second stage of labor.

After data mapping, journal quality was assessed through critical appraisal, assessing potential methodological bias or systematic errors in the research so that reviewers could consider the findings. The articles were assessed using the Journal of Critical Review (JBI), a freely available critical review tool, based on the assessment of 18 articles, 12 of which received a B grade and six of which received an A grade.

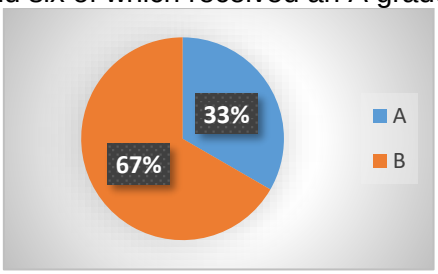

Figure 2. Analysis Based on Article Value

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Table 4. Mapping

Theme	Sub-theme
Factors underlying episiotomy	Birth spacing 12 BMI 6 7 9 17 Fetal distress 10 13 15 Birth weight 4 6 8 9 10 11 13 16 17 Parity 1 2 5 6 7 10 15 17 Multiple pregnancy 13 Short Perineum 5 Stiff perineum 15 Long stage II 14 18 TFU >32 cm 16 Use of oxytocin 11 12 18 Instrumented workforce 3 11 13 16

The mapping in Table 4 shows that episiotomy is influenced by various factors, including maternal factors (such as BMI, parity, perineal length), pregnancy conditions (baby weight, multiple gestation, TFU), and medical interventions (oxytocin use, instrumental procedures). These data support the need for a selective approach to episiotomy, taking into account the individual conditions of both mother and baby.

1. Geographic characteristics of the results

A systematic search yielded 18 articles published between 2018-2023, originating from several countries, namely Ethiopia, USA, France, Iran, Egypt, Spain, China, and Uganda.

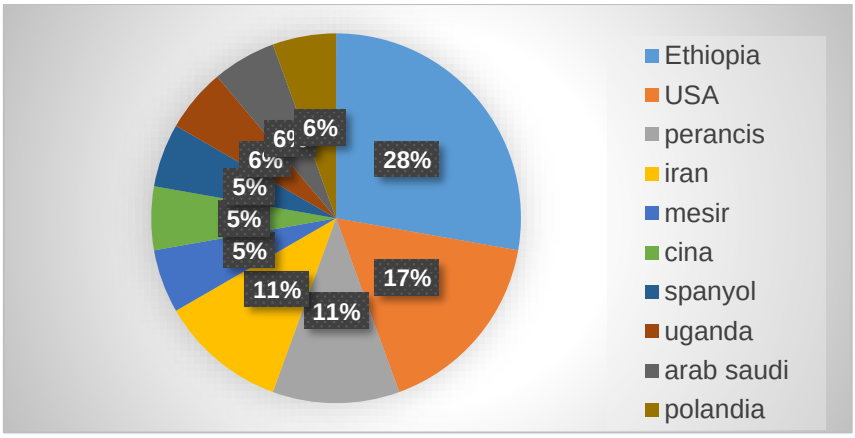

Figure 3. Analysis by Country Type

Based on the 18 selected articles, there were 6 articles of research conducted in developed countries and 12 articles in developing countries.

2. Characteristics based on research design

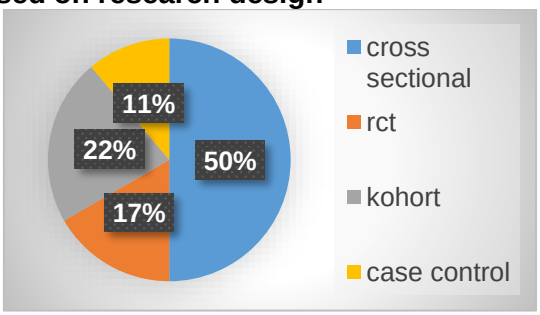

Figure 4. Analysis by Research Type

Based on the 9 selected articles, they were grouped based on their research design, namely quantitative research with cross-sectional studies (3 articles), cohort studies (3 articles), and RCTs (3 articles).

DISCUSSION

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Based on the results of a review involving 18 relevant articles, several articles discussed themes that were factors related to episiotomy procedures.explained in several sub-themes, namely birth spacing, maternal BMI, fetal distress, birth weight, parity, multiple pregnancy, short perineum, stiff perineum, long second stage, TFU >32 cm, use of oxytocin, and instrumental delivery. An episiotomy, a surgical procedure that involves cutting the perineum to widen the birth canal, is often performed in high-risk pregnancies. While once considered a routine procedure, its use is now under greater scrutiny, with evidence suggesting it is not always necessary and may carry risks. Episiotomy is still often used as a preventative measure to reduce further perineal tearing or other complications.

One factor influencing the decision to have an episiotomy is short birth spacing, meaning births occurring less than two years after the previous birth. Research shows that short birth spacing increases the risk of weakening the mother's reproductive organs, making the perineum more susceptible to tearing. A study[3]revealed that mothers with short birth intervals have a higher risk of experiencing perineal tears, so episiotomy is considered a preventive measure.

Body mass index (BMI) is also closely linked to the likelihood of requiring an episiotomy. Mothers with a high BMI, which can lead to obesity, are more susceptible to severe perineal tears. The perineal tissue in obese women is less able to stretch, increasing the risk of deep tears. Data shows that approximately 52% of mothers with a higher BMI are more likely to give birth with an episiotomy. Excess weight also affects the elasticity of the perineal tissue, making an episiotomy an option to prevent further tears.

Fetal distress and multiple pregnancies are also important factors. A distressed or multiple pregnancy often results in prolonged labor, especially in the second stage. If not treated promptly, this condition can be life-threatening for the fetus. In these cases, an episiotomy is performed to expedite labor and reduce the risk of fatal complications for the fetus. Several studies have shown that[15],[20], showing that episiotomy is effective in reducing the risk of fetal death or other complications that endanger the mother.

A birth weight of >4000 grams and a length of >32 cm increase the risk of episiotomy due to the potential for perineal tearing or distortion. Parity also plays a role, with primiparas and mothers with short or stiff perineums being more likely to require an episiotomy. The use of oxytocin, which can trigger strong contractions and affect fetal well-being, also increases the likelihood of an episiotomy. A study at Saint Sophia Hospital showed that the use of oxytocin during the second stage of labor significantly increased the risk of episiotomy (OR = 6.00; 95% CI: 4.76–7.58).

Instrumental deliveries, such as vacuum or forceps, often require an episiotomy to widen the birth canal and facilitate safe instrument use, while reducing the risk of severe perineal tears. The decision to episiotomy is influenced by clinical factors such as birth spacing, maternal BMI, fetal distress, birth weight, parity, multiple gestation, short or rigid perineum, prolonged second stage of labor, oxytocin use, and instrumental delivery. This study comprehensively mapped these factors from 18 articles, providing a basis for more selective practice. Weaknesses include reliance on secondary data and limited study design. Implications include improved clinical practice, maternal education, and opportunities for further research on non-episiotomy techniques and their long-term impact on maternal health.

CONCLUSION

Factors influencing the decision to perform an episiotomy include birth spacing, maternal body mass index (BMI), fetal distress, birth weight, parity, multiple gestation, short or rigid perineum, prolonged second stage of labor, uterine fundal height (FFU) >32 cm, oxytocin use, and instrumental delivery. These factors increase the risk of perineal tears and labor complications, and therefore, episiotomy is often considered a

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preventative measure. Health care providers need to be more selective, guided by clear medical indications, and educate pregnant women about risk factors and prevention, including optimal prenatal care and perineal exercises. Evidence-based guidelines are needed to ensure episiotomy is performed only when necessary. Future research is recommended to compare the effectiveness of non-episiotomy methods, such as alternative birth techniques or perineal exercises, and to conduct longitudinal studies to assess their long-term impact. Examining other factors, such as genetics and pre-pregnancy health, also has the potential to provide more effective prevention strategies.

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