

GENDER-BASED PERCEPTIONS OF PREGNANCY PLANNING AND PRECONCEPTION HEALTH: A SCOPING REVIEW

*Persepsi terhadap Perencanaan Kehamilan dan Kesehatan Prekonsepsi
Berdasarkan Gender: Scoping Review*

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ABSTRAK

Perencanaan kehamilan merupakan upaya untuk mencegah komplikasi kehamilan yang dapat menekan angka kematian ibu (AKI). Norma sosial terkait tanggung jawab kehamilan dan kurangnya komunikasi dengan pasangan menjadi faktor yang menghambat pasangan dalam persiapan kehamilan. Studi ini memetakan perbedaan persepsi berbasis gender terhadap perencanaan kehamilan dan kesehatan prekonsepsi mengikuti kerangka kerja oleh Arksey dan O'Malley. Pencarian literatur menggunakan empat basis data yaitu ScienceDirect, Scopus, Pubmed dan Proquest untuk mencari artikel 5 tahun terakhir (2020 – 2025) yang berbahasa inggris, peer-reviewed, dan open access. Artikel yang membahas persepsi berbasis gender baik pada laki-laki, perempuan, maupun keduanya disertakan tanpa membatasi desain studi yang digunakan. Proses seleksi menggunakan pedoman PRISMA dan menghasilkan 13 artikel relevan. Hasil analisis menunjukkan perbedaan persepsi laki-laki dan perempuan dalam memandang perencanaan kehamilan dan kesehatan prekonsepsi. Perempuan memandang perencanaan kehamilan sebagai proses terintegrasi baik kesiapan fisik, mental, maupun sosial. Berbanding terbalik, laki-laki menganggap kehamilan sebagai urusan utama perempuan sehingga tidak sepenuhnya membutuhkan keterlibatan mereka. Dalam aspek kesehatan prekonsepsi, kedua gender menyadari pentingnya melakukan gaya hidup sehat dan melakukan pemeriksaan kesehatan sebelum kehamilan. Namun, pembentukan persepsi turut dipengaruhi budaya, norma, dan religiusitas yang membuat kehamilan dianggap sebagai topik yang tabu untuk dibicarakan sebelum menikah. Temuan memberikan dasar untuk merancang strategi promosi kesehatan sekaligus mendorong pembentukan kebijakan dan layanan prekonsepsi yang menjamin keterlibatan setara antara laki-laki dan perempuan.

Kata kunci: kesehatan prekonsepsi, perencanaan kehamilan, persepsi gender, scoping review

ABSTRACT

Pregnancy planning aims to prevent pregnancy complications that contribute to reductions in maternal mortality rates (MMR). Social norms related to pregnancy responsibilities and inadequate partner communication are recognized as barriers to effective pregnancy preparation among couples. This study examines differences in gender-based perceptions of pregnancy planning and preconception health utilizing the Arksey and O'Malley framework. A literature search was conducted using four databases, including ScienceDirect, Scopus, PubMed, and Proquest. The search targeted English language, peer-reviewed, open access articles published between 2020 and 2025. Eligible studies were those that investigated gender-based perceptions in men, women, or both, without imposing restrictions on methodological design. After applying these criteria and screening for relevance according to PRISMA guidelines, a total of thirteen articles were selected. The findings reveal differences in how men and women perceive pregnancy planning and preconception health. Women tend to view

pregnancy planning as a comprehensive process involving physical, mental, and social readiness. In contrast, men often see pregnancy as primarily a woman's responsibility, leading them to feel less involved in the process. Regarding preconception health, both genders know the importance of adopting a healthy lifestyle and conducting health checks before pregnancy. However, cultural norms and religiosity shape perceptions that make pregnancy a taboo topic to discuss before marriage. Findings regarding gender-based perception diversity provide a foundation for designing effective health promotion strategies and developing gender-sensitive policies and preconception services that support equitable participation of both genders.

Keywords: gender perception, preconception health, pregnancy planning, scoping review

INTRODUCTION

Planning for pregnancy and taking care of health before conception are key to reproductive health and avoiding problems. To lower maternal deaths, improving health before pregnancy is important. In 2023, about 260,000 women worldwide will die from preventable causes related to pregnancy and childbirth [1]. Countries with low and lower-middle incomes make up 90% of these deaths [1]. Sub-Saharan Africa is the only region with a high maternal death rate, accounting for 70% of global maternal deaths [2]. According to the WHO, the maternal mortality rate decreased from 328 per 100,000 live births in 2000 to 197 in 2023 [2]. Still, the rate needs to drop more rapidly to meet the Sustainable Development Goals, specifically target 3.1, which aims for fewer than 70 deaths per 100,000 live births [2]. This situation highlights that insufficient preventive measures are taken before pregnancy.

The preconception period, which refers to the time before pregnancy, is crucial as it significantly influences both the quality of the pregnancy and the future health of the child. Attention to health, particularly lifestyle and overall well-being, during this period can significantly impact both the mother and the fetus [3]. Despite its importance, efforts to reduce low birth weight (LBW), premature births, and infant mortality in the United States have stalled since 1996, partly due to inconsistent pre-pregnancy interventions [4]. Clearly defining and implementing preconception interventions as essential health services enables women to identify risks, understand their health status, and adopt beneficial behaviors for pregnancy.

Insufficient communication and understanding of pregnancy responsibilities undermine effective preparation during the preconception period. Couples often find discussions about pregnancy and related health matters uncomfortable, and prevailing social norms place decision-making about pregnancy with men [5]. For instance, Tanzanian studies highlight that men are viewed as household heads, while women play a subordinate role in reproductive health decisions [6]. This limited male involvement often results from the belief that pregnancy planning is mainly the woman's duty, which further hampers comprehensive preconception planning [7].

Research on differences in perceptions between men and women regarding pregnancy planning and preconception health is still limited. Some studies focus on knowledge, beliefs, and behaviors before pregnancy but often examine only one gender [8], [9]. The studies examine the reproductive age population but do not compare genders or specifically discuss perceptions [10]. Thus, a comprehensive review of the scientific literature is needed to understand how men's and women's perceptions differ in pregnancy planning and preconception health. This scoping review aims to (1) identify the differences in men's and women's perceptions of pregnancy planning, and (2) identify the differences in men's and women's perceptions of preconception health. This review systematically maps gender-based perceptions of pregnancy planning and preconception health. By analyzing both male and female perspectives, it addresses a

significant gap in existing research and supplies evidence to guide the development of gender-sensitive policies and preconception health services.

METHODS

Study Design

The study used a systematic search strategy based on the framework developed by Arksey and O'Malley [11]. This approach was used to explore perceptions of pregnancy planning and healthy conception among women and men.

Identifying Relevant Studies and Study Selection

A literature search was conducted to identify studies discussing perceptions of pregnancy planning and preconception health among men and women. To ensure comprehensive data collection, four databases, Science Direct, Scopus, PubMed, and ProQuest, were utilized. The search was conducted using a keyword strategy designed based on the research question, namely ("pregnancy planning" OR "preconception health") AND (perception OR belief) AND (men OR male OR women OR female). Articles obtained from searches using these keywords are filtered according to specific inclusion criteria. These criteria are as follows: the articles must be primary research studies published in the last five years, from 2020 to May 10, 2025, written in English, peer-reviewed, and available as open access. Eligibility criteria included studies involving either men, women, or both, provided they addressed the research question. This strategy supports the objective of scoping reviews to comprehensively map available evidence and identify gaps concerning the roles of men and women in pregnancy planning and preconception health.

The study selection was done in three steps using the Rayyan app [12]. First, duplicate articles were found and removed, leaving 618 articles. Then, the titles and abstracts were checked to see if they matched the focus of the review, which was about how people view pregnancy planning and preconception health. Articles were left out if they only talked about contraception or preconception interventions and did not discuss people's views on pregnancy planning and preconception health. This kept the focus on people's perceptions instead of medical or technical details. Some articles included people who were already pregnant, but they were still included because they looked at how these people remembered or thought about pregnancy planning or preconception health. So, these articles were kept even if the participants were pregnant at the time.

The studies included in this scoping review employed diverse methodological designs including quantitative, qualitative descriptive, and mixed-method approaches. This diversity aims to capture the breadth and complexity of gender-based perceptions on pregnancy planning and preconception health, which might not be fully represented by a single type of research design. Following the PRISMA-ScR guideline, this review did not appraise study quality. Its primary goal was to map existing evidence, not assess methodological quality. However, study characteristics such as design, sample size, and context were considered to ensure relevance and depth of the synthesis.

Data Extraction

The data extraction process was conducted using Microsoft Excel. Research components were extracted, analyzed, and presented in a table that includes the author's name, year of publication, article title, study population, study design, study location, study objectives, and research findings. Data were thematically analyzed using manual coding. Information regarding pregnancy planning and perceptions of preconception health in both men and women was identified, categorized, and synthesized into key themes through discussions among the authors.

RESULT

This study identified a total of 666 articles from four database sources: ScienceDirect (188 articles), Scopus (31 articles), ProQuest (422 articles), and PubMed (25 articles).

After removing duplicates, 618 articles remained for screening. Based on the title, the screening results produced 58 articles, followed by abstract screening, which left 24 articles. The remaining articles were screened in full text to assess their suitability with the established criteria. Ultimately, 13 articles were selected for comprehensive review to support this study (see Figure 1)

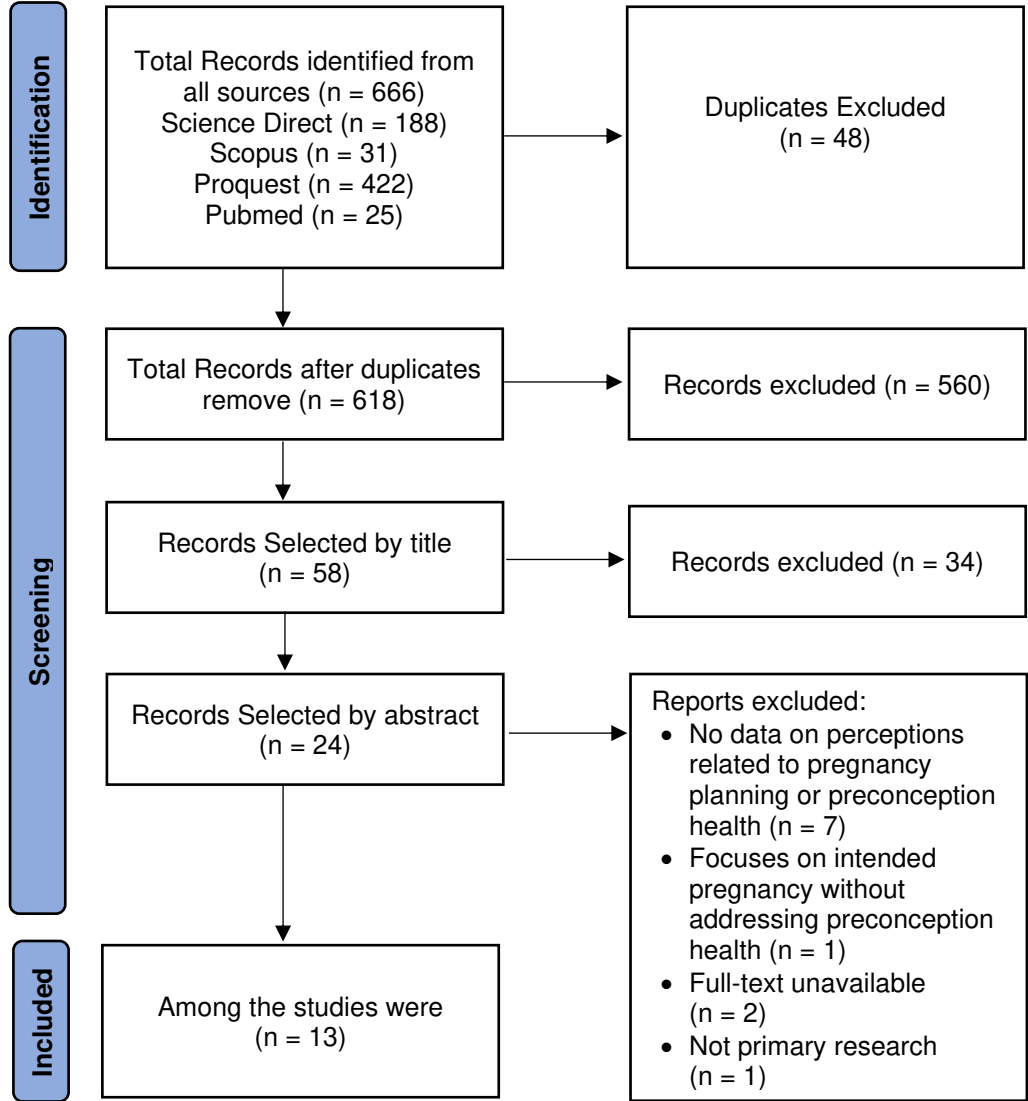


Figure 1. PRISMA Flowchart

Characteristics of the studies

Table 1 outlines the key characteristics of the 13 articles included in the study. It provides details about the authors, publication year, research objectives, research design, study location, population, sample size, sampling technique, and the instruments used. This information offers a comprehensive overview of the context, population, and methods employed in the selected studies.

Table 1. Data Charting of Study Characteristics

No	Author(s)/Year/Title	Objective	Study Locations	Methods	Population & Sample
1.	Cassinelli <i>et al.</i> (2023) [13] / "Exploring Health Behaviours, Attitudes and Beliefs of Women and Men during the Preconception and Interconception Periods"	To explore health behaviours, attitudes and beliefs of reproductive-aged adults regarding preconception health and care	Island of Ireland (Northern Ireland and Ireland)	Cross-sectional; Online survey using Qualtrics; Convenience sampling	Adults aged 18–60 years in Ireland and Northern Ireland (n = 368)
2.	McGowan <i>et al.</i> (2020) [14] / "Exploring preconception health beliefs amongst adults of childbearing age in the UK: a qualitative analysis"	To explore beliefs, knowledge, and attitudes on preconception health among UK adults of childbearing age	United Kingdom (urban and rural Northern Ireland)	Descriptive qualitative; Focus Group Discussion using London Measured Unplanned Pregnancy (LMUP) and Eating Choices Index (ECI); purposive sampling	Adults aged 18–45 years in the UK, with and without children (n = 21)
3.	Walker <i>et al.</i> (2022) [15] / "Empowerment for behaviour change through social connections: a qualitative exploration of women's preferences in preconception health promotion in the state of Victoria, Australia"	To explore women's understandings of health and health behaviours and what supports are important to promote behaviour change in the preconception period	Victoria, Australia	Qualitative study; in-depth interviews using Zoom)	Population: Women aged 18 – 45 years in Victoria, Australia Sample: Female participants who were intending to become pregnant in the next 2 years (n=6) and participants who were not intending to become pregnant in the next 2 years (n=6)
4.	Irmi Z. I. <i>et al.</i> (2020) [16] / "Factors influencing pregnancy planning of multi-ethnic Asian women with diabetes: A qualitative study"	To explore factors influencing pregnancy planning among multi-ethnic diabetic women in Malaysia	Peninsular Malaysia (urban and rural clinics)	Descriptive qualitative (individual in-depth interviews); purposive sampling	Non-pregnant diabetic women of reproductive age in Malaysia (n=33)
5.	Kang & Kim (2020) [17] / "Gender Differences in Factors Influencing Self-Efficacy Toward	To examine gender differences in self-efficacy and beliefs	Seoul National University, South Korea	Comparative cross-sectional survey using the Health Belief Model;	Unmarried college students (aged 18–30) in Korea (n = 819)

No	Author(s)/Year/Title	Objective	Study Locations	Methods	Population & Sample
	Pregnancy Planning among College Students in Korea"	toward pregnancy planning using HBM		non-probability sampling (convenience sampling)	
6.	Offiong <i>et al.</i> (2021) [18] / "I can try and plan, but still get pregnant": The complexity of pregnancy intentions and reproductive health decision-making for adolescents"	To explore contextual and social factors shaping pregnancy intentions and decisions in adolescents	Baltimore, Maryland, USA	Qualitative (focus groups, phenomenological approach); snowball sampling	Urban adolescents aged 15–19 years (n = 46)
7.	Clark & DiPietro Mager (2022) [19] / "Nobody talks about it": Preconception health and care among women in the rural, Midwestern United States"	To determine what rural women perceive to be their community's most pressing health needs and effective ways to provide outreach and education regarding preconception/interconception health	Hardin County, Ohio, USA	Qualitative (semi-structured in-depth interviews); convenience sampling	Non-pregnant reproductive-age women (20–44 yo) in Hardin County, Ohio (n = 19)
8.	Ukoha & Mtshali (2021) [20] / "Perceptions and Practice of Preconception Care by Healthcare Workers and High-Risk Women in South Africa: A Qualitative Study"	To explore the perception and practice of preconception care by healthcare workers and high-risk women	eThekwini, KwaZulu-Natal, South Africa	Qualitative (in-depth interviews); non-probability sampling (purposive sampling)	24 women at high risk of adverse pregnancy outcome and 5 healthcare workers in a tertiary hospital
9.	Lang <i>et al.</i> (2020) [21] / "Perspectives on preconception health among migrant women in Australia: A qualitative study"	To explore pregnancy planning, preconception lifestyles, awareness, experiences and healthcare needs of migrant women	Melbourne, Australia	Qualitative (semi-structured interviews and FGD); purposive and snowball sampling	25 Migrant women of reproductive age (> 18 years)
10.	Maas <i>et al.</i> (2022) [22] / "Planning is not equivalent to preparing: how Dutch women perceive their pregnancy planning in relation to preconceptional lifestyle behaviour change - a cross-sectional study"	To explore the associations between pregnancy planning, preconception lifestyle behaviours and health beliefs	Netherlands	Cross-sectional; quantitative survey using London Measured Unplanned Pregnancy (LMUP); convenience sampling.	Low-risk pregnant women aged ≥ 18 years (n = 1077)

No	Author(s)/Year/Title	Objective	Study Locations	Methods	Population & Sample
11.	Kraus <i>et al.</i> (2023) [23] / "Reproductive decision making in women with medical comorbidities: a qualitative study"	To understand factors influencing reproductive decision-making among pregnant women with chronic medical conditions	Urban tertiary hospital, USA	Qualitative (semi-structured interviews); purposive sampling	Pregnant women with pre-existing medical conditions (USA) (n = 28)
12.	Dorney <i>et al.</i> (2025) [24] / "Understanding preconception health in Australia through the lens of people of reproductive age: Implications for care providers"	To explore the understanding of "preconception health" amongst people of reproductive age in Australia, to inform the delivery of preconception care.	Australia	Qualitative descriptive study (online in-depth interviews); purposive sampling	Population: Reproductive aged 18 – 41 years Sample: 25 participants (20 women, 5 men) of reproductive age (19–40) from rural, regional, and metropolitan Australia
13.	Jeckinson (2025) [25] / "The need for preconception care: Australian women's health beliefs, expectations, and trust in healthcare"	To explore women's perceptions of the need for preconception care and the factors influencing these perceptions, including competing demands and expectations perceived by women while planning for pregnancy	Australia	Qualitative (in-depth semi-structured interviews by Zoom); purposive sampling	Women in Australia aged 18-49 years, whether currently pregnant, have been pregnant in the last 2 years, or are planning a pregnancy in the next 2 years (n = 38)

This scoping review included 13 studies conducted in diverse geographical settings, including the United Kingdom (2), Australia (4), Malaysia (1), Korea (1), the United States of America (3), Africa (1), and the Netherlands (1). The methodological designs varied, encompassing cross-sectional (3), in-depth interviews (8) and focus groups (2). The primary objectives of these studies were to explore the perceptions, attitudes, and beliefs towards pregnancy planning, preconception health, and preconception lifestyle. Only one studies explore the factors influencing pregnancy planning in the general discussion (Table 1).

Features of participants and studies

This study targeted a specific population of reproductive age, focusing on individuals in the preconception phase and pregnant women. Adults aged 15 to 60 years were included in the studies.

Women with various conditions participated, including non-pregnant diabetic women, migrant women, low-risk pregnant women, and pregnant women with pre-existing medical conditions. Of the 13 studies analyzed, seven specifically focused on women as the primary study population. The remaining five included participants of both genders, namely men and women.

Perception of Pregnancy Planning and Preconception Health among Men and Women

Table 2 summarizes gender-based perceptions of pregnancy planning and preconception health. It highlights how men and women view roles and responsibilities, interpret planning, face barriers, hold beliefs, engage in health behaviors, and access services differently.

Table 2. Gender-Based Perceptions of Pregnancy Planning and Preconception Health

Main Theme	Gender Interpretations	
	Men	Women
Roles and Responsibilities	Pregnancy is a woman's duty [13], [18]	Pregnancy planning is a priority, so it is important to do so [13]
Meaning of Planning	Men tend to have high self-efficacy because they consider the benefits of a planned pregnancy [17]	Pregnancy is holistic readiness [21]
Barriers and Difficulties	Discussion and involvement of men in pregnancy planning is important but rarely done [24]	Pregnancy planning is an obstacle and something difficult to do [17], [21]
Religious & Value Beliefs	-	Pregnancy is a gift from God, so pregnancy must still be planned [16]. An unplanned pregnancy goes against faith [21]
Lifestyle and Preconception Health	Reducing or stopping cigarettes and alcohol can be done before planning pregnancy [14]. Preconception health is important information regardless of wanting children [24]	Quitting smoking, limiting alcohol, and maintaining fitness are essential [21]. Awareness of folic acid and a healthy diet to minimize risks [14], nutritional intake, physical activity, and sleep quality are priorities [15]
Access to Health Services	Health service visits are essential [13]	Need to prepare and follow a health plan for the sake of children's health [16]
Education & Knowledge Readiness	-	Preconception health must be supported by good-quality education [14]
Negative Perceptions	-	Preconception health behaviors are difficult to change, shaped by intergenerational patterns [19]. Health before pregnancy is not as important as during pregnancy [20], perception of being healthy enough to dismiss lifestyle changes or preconception check-up [22], [23], [24], [25].
Social Norms & Taboos	"Female-led operations": greater responsibility placed on women to maintain health [14], [18]	Pregnancy is taboo to discuss before marriage [21]

Figure 1 displays the distribution of studies across each identified theme, indicating the themes most frequently examined in the selected articles.

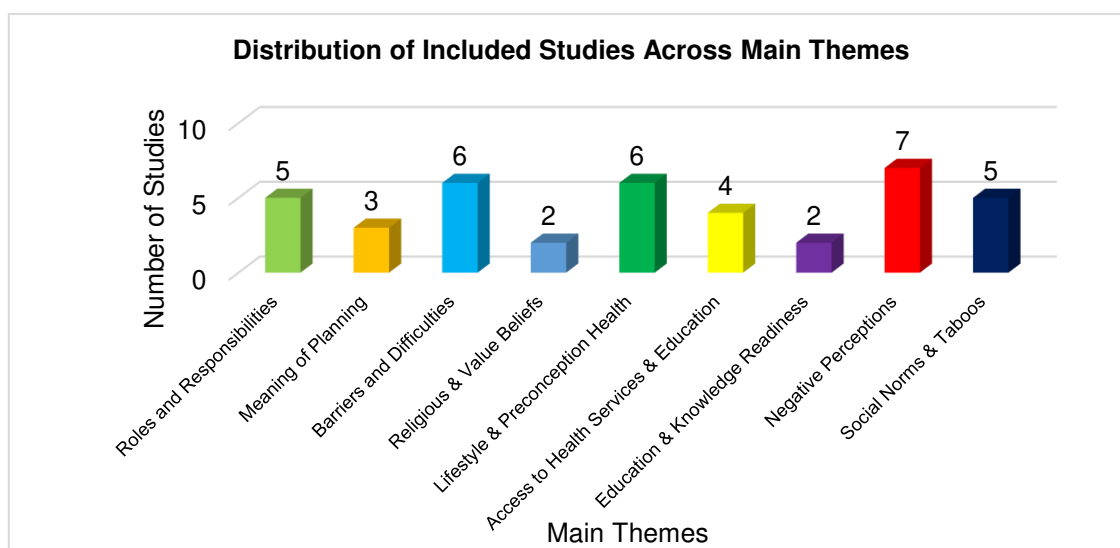


Figure 1. Distribution of Included Studies Across Main Themes

DISCUSSION

When interpreting these findings, consider the strengths and limitations of the included studies. This review analyzed 13 articles from various countries. These provide a comprehensive perspective on pregnancy planning and preconception health. The studies used different methodological designs. Most focused on women, so men were underrepresented. Several relied on small samples and non-probability sampling, which limits generalisability. Despite these issues, the use of both qualitative and quantitative designs provides complementary insights and enriches the synthesis.

Taking the previous points into account, the findings reveal distinct gendered perceptions of pregnancy planning and preconception health. Findings reveal that men commonly view these issues as primarily women's responsibilities, contributing to low male involvement. In terms of pregnancy planning, most women consider pregnancy planning as an important priority [13]. It is crucial to assess health status and identify risk factors before becoming pregnant [20]. For women with pre-existing health conditions, planning is essential to prevent complications and manage potential health risks [20], [16]. However, pregnancy planning extends beyond just health considerations; it also involves preparing financially, considering educational plans for children, and understanding how to care for and educate them [21]. This highlights that pregnancy planning involves not only immediate needs but also preparing for responsible parenthood and role modelling.

In contrast to women, men often have a more limited perspective on pregnancy planning. While most men recognize the importance of pregnancy, their desire to engage in the process remains relatively low [13], [24], [17]. Many men delegate the entire responsibility of pregnancy planning to women, which reinforces the idea that pregnancy is primarily a woman's concern [14], [18]. This highlights gender differences in pregnancy planning, with women viewing it holistically and men perceiving it as an external, non-participatory responsibility.

However, not all women have an ideal perspective on pregnancy planning. Several studies indicate that many women view pregnancy as a normal occurrence that can happen without prior planning [14], [18], [23]. This perception leads some women to neglect lifestyle changes and focus mainly on contraception and mental readiness, often overlooking the physical aspects, such as preconception health checks.

When it comes to preconception health, many women feel that they have a greater responsibility and burden for pregnancy. From their perspective, pregnancy must be prepared because it is related to physical, mental, and social risks [24], [18], [15]. This

perception is reinforced by the social view of "female-led operation," which is developing in male groups and only burdens women to maintain health as prospective mothers [14], [18]. Although both perceptions seem to be in line, this social construction cannot be justified because it increasingly limits the role of pregnant men and reinforces the stereotype of pregnancy as the primary domain of women.

In analyzing the aspects of preconception health, both genders exhibit similar views. Most men in this study recognize the importance of preconception health and express a desire to change their lifestyles before pregnancy. This includes consulting with healthcare professionals about pregnancy planning and reducing smoking and alcohol consumption [13], [24], [14]. In line with this perception, most women consider a healthy body an investment before pregnancy [14]. They are mainly aware of the significance of folic acid supplementation, engaging in physical activity, adopting healthy eating habits, maintaining nutritional intake and good sleep habits, and minimizing smoking and alcohol consumption before pregnancy [13], [16], [24], [14]. The findings indicate that factors such as fertility, the health of the future child, and the reduction of medical risks motivate both genders to prioritize their health before pregnancy [16], [14]. Additionally, women believe that everyone should strive for a healthy lifestyle, irrespective of their plans regarding pregnancy [21].

However, not all women share the same perspective on preconception health. Some women view it differently, with many believing that focusing on health before pregnancy is not important [20]. They often think that maintaining good health and a healthy lifestyle can begin once pregnant [21], [19]. Specifically, many women do not consider preconception health because they do not recognize its significance prior to pregnancy [21]. This perception is further reinforced by their belief that they are already healthy, leading to reluctance to adopt a healthy lifestyle, undergo health checks, and make behavioral changes before becoming pregnant [24], [23], [25], [22].

Norms, culture, and religiosity values also shape perceptions of pregnancy planning and preconception health. Some women consider pregnancy to be a gift from God that must be planned and pursued to the fullest [16]. For them, pregnancy that is allowed to happen without planning is considered contrary to faith [21]. In certain cultures, pregnancy is considered a sensitive and taboo topic to discuss with a partner before marriage [21]. However, both genders in several studies showed similar perceptions regarding the importance of discussing pregnancy with a partner [24]. Both considered that ideal pregnancy planning is done together with the active involvement of men [24].

Understanding differences in how men and women perceive preconception health and pregnancy planning can inform effective health promotion strategies. These should address the needs of both genders. This study highlights a gender-based gap in perceptions of pregnancy planning and preconception health. A key strength of this scoping review is its synthesis of diverse findings across contexts. This offers a broad understanding of gender roles in reproductive health decision-making. However, it is important to acknowledge some limitations of the study. Some articles did not disaggregate data by gender. Most used qualitative methods, limiting the depth of gender-specific analysis. Studies focusing on specific medical populations may reduce the generalizability of the findings.

CONCLUSION

This study highlights gender differences in perceptions of pregnancy planning and preconception health. Women tend to view pregnancy holistically, while men often adopt a narrower perspective. Both men and women recognized the importance of reducing alcohol and tobacco use, but women additionally prioritized physical activity, vitamin supplementation, adequate sleep, maintaining a healthy weight, and balanced nutrition. Cultural and religious factors significantly shape perceptions, often reinforcing the notion that women bear primary responsibility for pregnancy. Additionally, societal norms may

hinder open discussions about pregnancy, particularly before marriage. These findings show that health promotion interventions should use gender-sensitive communication and educational strategies that involve men and promote shared responsibility in pregnancy planning. Future research should use quantitative or mixed-method approaches to measure men's perceptions and participation more broadly, which will provide stronger evidence for designing gender-equitable reproductive health programs.

ACKNOWLEDGEMENT

Thanks to the lecturers of the Department of Health Promotion, Faculty of Public Health, Diponegoro University, who provided direction, guidance, and assistance during the process of compiling this study. The author fully funds this research independently without external funding support.

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