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Understanding unmet family planning needs and unplanned pregnancies in Malaysian women

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Abstract

This study presents a comprehensive analysis of unmet family planning needs among Malaysian women and their correlation with unplanned pregnancies. Leveraging a rigorous qualitative library research approach, this investigation delves into peer-reviewed literature, government reports, and international publications to identify key socio-cultural, economic, health and educational factors hindering women's reproductive health choices. Despite Malaysia's progress in reproductive health, significant disparities persist, particularly among marginalised women in rural and low-income communities. Limited contraceptive knowledge, cultural stigmas, and insufficient healthcare access emerge as critical barriers. By meticulously examining data sources such as the Technical Report of the National Health and Morbidity Survey (NHMS) 2022, this study highlights the urgent need for policy reforms and targeted interventions to enhance reproductive health education and expand access to diverse contraceptive options. This research directly aligns with Sustainable Development Goals (SDGs) 3 and 5, aiming to improve reproductive health outcomes and promote gender equality. By empowering women to make informed reproductive choices, this study contributes to a more equitable and sustainable future for Malaysia. The findings provide actionable recommendations for policymakers and healthcare providers to address systemic gaps and reduce unplanned pregnancies, ultimately fostering equitable access to family planning services for all Malaysian women.

Keywords: Family planning; Unmet need; Unplanned pregnancy; Tanzim al-usrah; Malaysia

1. Introduction

Unplanned pregnancies remain a critical public health issue in Malaysia, with significant implications for women's health, economic stability, and overall societal well-being. While previous studies have documented the prevalence of unmet needs in family planning, there is a lack of comprehensive analysis that integrates the socio-cultural, economic, health and educational factors influencing these needs in the Malaysian context. This study aims to fill this gap by examining not only the barriers to accessing contraceptive methods but also the nuanced ways in which cultural beliefs and socio-economic status shape women's reproductive choices. By employing a qualitative library research methodology, this research seeks to provide a deeper understanding of the specific challenges faced by women in Malaysia, particularly those from marginalised communities. The findings are intended to inform the development of targeted, culturally sensitive interventions that can effectively address the unmet needs in family planning and reduce the rates of unplanned pregnancies.

2. Methodology

This study employs a qualitative library research methodology to examine unmet family planning needs with a significant focus on how these unmet needs correlates with unplanned pregnancies among Malaysian women. It

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includes a literature review of peer-reviewed articles, government reports, and international publications, focusing on socio-cultural, economic, health and educational factors. Key themes include barriers to contraceptive access, educational gaps in reproductive health, and socio-cultural influences on women's decision-making. Findings highlight significant gaps in family planning services and propose targeted interventions with recommendations for policymakers and healthcare providers.

The study acknowledges its limitations, primarily arising from its reliance on existing literature. It suggests that future research should incorporate qualitative interviews or focus groups to gain a deeper understanding of both genders' experiences. This approach would provide a more comprehensive perspective, offering contextual depth that can inform effective, experience-centred interventions aimed at improving reproductive health outcomes and reducing unplanned pregnancies among women in Malaysia.

3. Discussion

3.1. Definition of Key Concepts

Partnered women are those who identify as being in a marriage, cohabiting relationship, or any other formal partnership. Unpartnered women, often termed as unmarried, include those who have never been married, as well as those who are separated, divorced, or widowed.[1, p. 297]

The term 'need' refers to women who are sexually active or in a partnership, can conceive, and do not wish to become pregnant within the next two years. It also includes women who are currently pregnant or those who are within two years postpartum and experiencing amenorrhea, and who wish to delay or prevent their recent or ongoing pregnancy.[1, p. 298]

Unmet need refers to the percentage of women of reproductive age who wish to avoid pregnancy but are not using any form of contraception, whether on their own or through their partners, despite their need for family planning.[1, p. 298][2, p. 2]. A significant level of unmet need contributes to rising rates of unintended pregnancies. The relationship between unmet family planning needs, unintended pregnancies, and unsafe abortions, which frequently lead to maternal deaths is well established. Abortions often reflect a considerable unmet demand for contraception, as unintended pregnancies are the primary reason behind nearly all abortions. Many of these procedures are performed illegally and in unsafe conditions.[2, p. 2]

Family planning offers substantial health and social benefits for women. It can be lifesaving by reducing the occurrence of unintended, unplanned, and unwanted pregnancies, thereby decreasing the demand for abortions, many of which may be unsafe or illegal. Furthermore, family planning helps lower the risk of maternal mortality associated with complications during pregnancy and childbirth.[2, p. 1]. Contemporary contraceptive options include male and female sterilisation (vasectomy and tubal ligation), oral contraceptive pills, condoms (male and female), diaphragms, spermicides, sponges, hormonal and non-hormonal intrauterine devices, implants, injections, patches, rings, and emergency contraception. Traditional family planning methods consist of practices like lactational amenorrhea, withdrawal, calendar-based methods, douching, periodic abstinence, and others. While some methods may be less common in certain areas, this overview highlights the variety of options available globally.[1, pp. 297, 298]

3.2. Global Context

In 2021, there were approximately 1.9 billion women of reproductive age (15 to 49 years) worldwide. Of these, about 1.1 billion needed family planning services. Among those in need, 874 million were using modern contraceptive methods, while 164 million faced an unmet need for contraception. The global satisfaction rate for family planning using modern methods has remained relatively stable, around 77%, from 2015 to 2022. However, in sub-Saharan Africa, satisfaction has increased from 52% to 58%. Condoms are noteworthy as the only contraceptive option that effectively prevents both pregnancy and the transmission of sexually transmitted infections (STIs), including human immunodeficiency virus (HIV). Access to contraception is essential for individuals to exercise their right to choose the number and spacing of their children. In 2022, the global contraceptive prevalence for any method was estimated at 65%, with modern methods specifically at 58.7% for married or partnered women.[3]

The 2020 research by Annie Haakenstad *et al.* analyses family planning data from 204 countries between 1970 and 2019. It highlights that over 160 million women globally have unmet contraception needs, with 40 million aged 15 to 24 years. This demographic faces the lowest satisfaction rates for demand, impacting their educational and economic opportunities. The study emphasises a significant gap in tailored contraceptive options for younger women, pointing to

the need for targeted strategies that improve accessibility, education, and method variety in family planning programs.[1]

Justine Coulson, Vinit Sharma, and Hua Wen's study in 2023 focuses on the global context of family planning, particularly emphasising the persistent unmet need for contraceptive services among women, especially in low and middle-income countries. The research discusses how, despite progress in contraceptive access and use, a significant number of women still do not have their family planning needs met, leading to high rates of unintended pregnancies. Key findings indicate that socio-economic factors, cultural stigma, and inadequate health services are major barriers contributing to this unmet need, particularly affecting marginalised groups such as unmarried adolescents and women in temporary unions.[2]

Nanati Legese's 2023 study, utilising the 2016 Ethiopian Demographic and Health Survey, reports a 24.2% infertility rate in Ethiopia, predominantly secondary infertility (90.7%). Key risk factors include age (especially women over 35), rural residence, low body mass index, smoking, and khat use, while higher education and socioeconomic status are associated with reduced risks. The study highlights inadequate infertility awareness and healthcare access in rural areas, calling for public health initiatives to address these issues and improve reproductive health.[4]

A 2023 survey by Paulina Trepczyk and Anna Weronika Szablewska explored socio-economic factors influencing reproductive decisions among 735 Polish adults aged 18 to 45. The study found that financial stability, such as steady income and secure housing, is the main factor in family planning, with economic uncertainty acting as a barrier. While social programs like Poland's 500+ and Dobry Start exist to support parenthood, young adults prioritise economic stability and work-life balance over government assistance. Homeownership is linked to procreative intentions, particularly among younger adults, indicating that better housing access could enhance family planning. Women often delay motherhood until certain life conditions are met, contributing to declining fertility rates, a trend seen across Europe. The research highlights the need for policies that promote flexible work arrangements and childcare support. Additionally, relationship status plays a significant role, with those in informal relationships expressing a strong desire for children. A gap in the research was noted regarding men's perspectives, as the sample was predominantly female.[5]

Malia Duffy *et al.*'s 2024 study reveals that poor perinatal mental health (PMH) affects 13 to 30% of individuals globally, with higher rates in low and middle-income countries. This includes conditions like depression and anxiety, particularly impacting marginalised groups. Contributing factors include socioeconomic, political, and gender-related issues, along with societal stigma, which deter treatment-seeking. Poor PMH harms both maternal and infant health and raises risks for complications and developmental issues in children. Economic analyses show significant lifetime costs of untreated PMH. The United States of America (USA) Agency for International Development's (USAID's) Mental Health Position paper proposes rights-based interventions to tackle these barriers, emphasising multi-sectoral collaboration to improve global PMH investment and awareness.[6]

Cheshire *et al.* (2024) examined the Fertility Education Initiative in the UK, which aims to improve fertility awareness among young people. The study found that while adolescents are confident in contraception, they lack critical knowledge about factors affecting fertility, such as age and lifestyle. A key finding is that many are unaware of how delaying parenthood can impact their fertility, highlighting gaps in current education that leave them unprepared for reproductive choices. The initiative seeks to fill this gap by providing better resources and strategies for youth empowerment in reproductive health.[7]

Jonathan Bearak *et al.*'s 2020 study analyses unintended pregnancies and abortion across 166 countries over nearly 30 years. Key findings reveal that from 2015 to 2019, about 121 million unintended pregnancies occurred annually, with 61% ending in abortion. Low-income countries had the highest unintended pregnancy rates, while middle-income countries had the highest abortion rates. The study found that restrictive abortion laws do not lower abortion rates but increase unsafe abortions, particularly in low-income areas. It emphasises the need for equitable access to reproductive health services, including contraception and safe abortion, and calls for sustained investment in reproductive health infrastructure, especially in low-resource settings.[8]

It is worth noting that maternal mortality rates remain unacceptably high, with around 287,000 women dying from pregnancy and childbirth complications in 2020. Approximately 95% of these deaths occurred in low and lower-middle-income countries, many of which were preventable. Sub-Saharan Africa and Southern Asia together accounted for about 87% of global maternal deaths, with Sub-Saharan Africa being responsible for 70% and Southern Asia for 16%. [1]

The global context section offers a comprehensive overview of the significant gaps in family planning services. It reveals that more than 1.1 billion women require these services, with 164 million facing unmet needs. While 874 million women

utilise modern contraceptives, the overall satisfaction rate has plateaued at around 77% since 2015, indicating ongoing challenges related to access and utilisation. The section underscores the importance of condoms as a dual-purpose contraceptive that not only prevents pregnancy but also safeguards against STIs. Additionally, it highlights that young women are particularly impacted by high levels of unmet needs, underscoring the necessity for targeted interventions to improve access to and education regarding family planning for this demographic. In summary, the section elucidates the current state of family planning worldwide, pointing out significant disparities and the urgent need for focused efforts to enhance contraceptive access and satisfaction, particularly among vulnerable populations.

3.3. Malaysia's Context

According to the Technical Report of the National Health and Morbidity Survey (NHMS) 2022: Maternal and Child Health in Malaysia, the data reveal that as of 2022, the current contraceptive prevalence rate stood at 42.8%. Among the respondents, 34.5% reported using modern contraceptive methods, while the prevalence of unmet needs for family planning was documented at 26.7%. Additionally, the report indicated that 51.6% of the demand for family planning was satisfied through modern contraception, and 33.0% of respondents experienced unplanned pregnancies.[9]

3.3.1. Health Conditions

A 2024 study by Siti Athirah Baharuddin *et al.* examined family planning intentions among antenatal women at risk of gestational diabetes mellitus (GDM) in Klang Health District, Malaysia. The cross-sectional study involved 431 participants from four government clinics and used a self-administered questionnaire to evaluate demographics, knowledge, attitudes, and family planning practices. Findings revealed that 64.7% intended to use family planning, with significant predictors including ethnicity, income, knowledge, and previous practices. Malay women, low-income individuals, and those with positive past experiences showed higher intentions to adopt family planning. The study highlights educational gaps among non-Malay women and advocates for targeted interventions to enhance family planning uptake among high-risk groups, emphasising its importance for improving maternal and neonatal outcomes.[10]

A study by Sarah Awang Dahlan *et al.* in the same year examines family planning behaviours in women with diabetes mellitus, revealing they are significantly less likely to use contraceptives compared to non-diabetic women, with usage rates ranging from 4.8% to 89.8% among the studied population. The research highlights the lack of focus on clinical factors like diabetes severity and healthcare access, which influence family planning, while primarily addressing sociodemographic aspects such as age and education. It also points out the need to understand how health-related motivations, like glycaemic control, affect contraceptive choices. The authors suggest incorporating various factors to improve family planning services for high-risk populations and reduce unintended pregnancies.[11]

A 2023 study by Hanis Harlida Zaini, Cheong Ai Theng, and Abdul Hadi Abdul Manaf explored weight change among 366 women using hormonal contraceptives at Nur Sejahtera Clinics. Over 12 months, one-third of users gained more than 5% in body weight, with the highest risks observed in etonogestrel implant users and women under 40. The study emphasises the need for proactive lifestyle interventions and weight monitoring to address the potential long-term health risks associated with hormonal contraceptive use, particularly for younger women.[12]

The study by Hasnoorina Husin *et al.* (2023) examines infertility among women with Polycystic Ovarian Syndrome (PCOS) at the Subfertility Clinic in Kuala Lumpur, Malaysia. It reveals that 44% of the women studied were classified as obese, correlating with severe hormonal imbalances such as elevated testosterone and reduced progesterone levels. This highlights the detrimental impact of obesity on reproductive health in PCOS patients, increasing infertility risk. The research identifies a gap in targeted interventions for managing obesity, suggesting that addressing this issue could improve fertility outcomes and calling for further studies to develop effective strategies.[13]

The study by Nik Hazlina NH *et al.* (2022) assesses the global prevalence and psychological effects of infertility in women, analysing 32 studies from countries like Iran, Turkey, the USA, and China. The global infertility prevalence stands at 46.25%, with 51.5% having primary infertility. Smoking increases infertility risk by 1.85 times. Women with infertility are 1.63 times more likely to experience psychological distress, including depression with an odds ratio of 1.40. The study emphasises inconsistent diagnostic criteria across studies and highlights insufficient focus on mental health interventions for affected women, calling for standardised and culturally sensitive approaches in infertility treatment.[14]

A 2024 study by Jin Rong Tan *et al.* examined awareness and barriers to sperm banking among testicular cancer patients at Hospital Sultanah Aminah and Sarawak General Hospital from 2019 to 2023. It highlighted that 58.1% of participants were aware of sperm banking, but only 9.7% used the service. Key barriers included inadequate offers from healthcare

providers (41.1%), cost concerns (21.4%), urgency to start treatment (16.1%), and cultural or religious factors, especially among Muslim Malay patients. The findings underscore a critical need for improved communication about fertility preservation options, financial support, and culturally sensitive counselling to help patients at risk of infertility due to cancer treatments.[15]

3.3.2. Socio-Demographic and Socio-Economic Influences on Family Planning and Fertility

The 2024 study by Nurhatiah Ahmad Chukari, Nurul 'Aisha Sofian, and Asmah Mohd Jaapar analyses socio-demographic factors affecting Malaysia's total fertility rate from 1990 to 2021 using the Autoregressive Distributed Lag (ARDL) approach. Key findings indicate that higher income and female education positively influence fertility rates, while urbanisation negatively impacts them due to increased living costs and improved access to family planning. The study highlights the complex link between female labour force participation and fertility, noting that increased participation does not always result in higher fertility. It emphasises the need for policies that improve workplace flexibility and offer family planning resources for working women.[16]

The 2022 research by Ahmad Muadz bin Zulqarnain and Mazlynda Md Yusuf examines the relationship between socioeconomic factors and fertility rates in Malaysia amidst its demographic challenges, particularly an ageing population. The study finds that while rising household incomes initially encourage larger families, prioritisation of education and quality of life subsequently leads to declining birth rates. It also identifies a critical gap in existing literature, which often focuses on economic factors while neglecting cultural and social influences on fertility decisions. The authors advocate for a comprehensive approach that incorporates these aspects to better inform family planning policies in Malaysia.[17]

A 2023 study by Mohd Hanif Zulfakar, Farida Islahudin, and Nanthina Punniaseelan examined unmarried young adults (aged 18 to 35) in Malaysia regarding contraception. While all participants recognised at least one contraceptive method, their knowledge was limited, averaging 4.76 out of 12. The research indicated a strong correlation between knowledge and positive attitudes toward contraception. However, the focus was mainly on condoms and pills due to cultural sensitivities and misinformation. This gap in comprehensive sexual education increases the risk of unintended pregnancies and sexually transmitted diseases, highlighting the need for accessible, culturally sensitive contraceptive education in Malaysia.[18]

The study by Anizah Ali *et al.* (2024) examines healthcare providers' attitudes towards pediatric oncofertility in Malaysia, particularly in light of the country's first oncofertility centre established in 2020. While 71.6% of providers showed good knowledge about fertility preservation, 88.2% exhibited unfavourable attitudes, especially towards patients with poor prognoses. Key barriers identified include high costs, inadequate patient education, and urgent cancer treatments that often neglect fertility issues. The study suggests the need for policy changes, increased funding, and improved education to enhance fertility preservation in pediatric cancer care in Malaysia.[19]

Selangor is addressing Malaysia's declining birth rate, which dropped from 2.1 in 2010 to 1.6 in 2022. Anfaal Saari, chair of the Women, Family Empowerment, Welfare and Care Economy Committee, emphasised the importance of quality data at the Selangor State Population Seminar 2024. The Sixth Malaysia National Population and Family Survey (KPKM-6), open for public participation until 31 December, aims to gather data from 3,000 households to understand fertility declines and demographic shifts. Currently, Selangor's fertility rate is 1.5 children per woman, the fourth lowest in the nation, influenced by increased female education, delayed marriage, and family planning. Research shows singles aged 25 to 49 prefer to marry later, with men aiming for marriage at 32 and women at 30.[20]

In 2022, Malaysia faced a significant unmet need for family planning, with 26.7% of women not using modern contraceptives despite not wanting to conceive, as noted by the National Population and Family Development Board (NPFDB) Chairperson Datuk Sri Rohani Abdul Karim. The contraceptive prevalence rate stood at 42.8%, with an actual usage rate of 34.5% and around 33% of pregnancies unplanned. At the 2024 Family Planning Advocacy Forum, Rohani emphasised the importance of raising awareness about family planning as a way to improve pregnancy planning. The NPFDB provides free contraceptives to women in the B40 group and launched the '*Melancar Keluarga Sejahtera*' campaign in September to support these initiatives.[18]

It is submitted that the literature review on Malaysia's family planning highlights substantial barriers, with unmet needs at 26.7% and unplanned pregnancies at 33%. Health issues, such as diabetes and obesity, deter contraceptive use among high-risk groups, while socio-economic factors indicate that although education and income support family planning, urbanisation and workplace demand contribute to declining fertility. Cultural and religious sensitivities further influence attitudes, especially among younger adults who lack access to comprehensive, culturally sensitive

contraceptive education. Notably, gaps persist in addressing these needs through targeted interventions; there is insufficient integration of family planning within public health education, limited healthcare provider support for fertility preservation, and an absence of policies that bridge religious perspectives with modern contraceptive practices. While initiatives like the *'Melancar Keluarga Sejahtera'* campaign provide some access, the enduring disparities reveal a need for tailored, inclusive strategies to effectively meet Malaysia's diverse family planning needs.

3.4. Islamic Perspective

Islamic scholars have differing views on family planning (*tanzim al-usrah*) for economic reasons. Generally, there are two main perspectives on this issue.[21]

The first view opposes family planning due to fear of poverty, emphasising that Allah is the sole provider of sustenance for every child. In Surah al-An'am (6:151), Allah subhanahu wa ta'ala (SWT) prohibits killing children due to poverty, affirming that He provides for both parents and children. Scholars with this perspective equate family planning for financial concerns with pre-Islamic practices where children were killed to avoid hardship. While family planning may not end lives, the underlying intention of fearing poverty is considered similarly flawed. They argue that Muslims should trust in Allah SWT's provision, as stated in Surah al-Baqarah (2:216), which reminds believers that what they dislike may be good for them, and only Allah SWT knows what is truly beneficial.[21]

The second view on family planning allows it under specific conditions, distinguishing between temporary birth spacing (*tanzim al-nasal*) and permanent birth restriction (*tahdid al-nasal*). *Tanzim al-nasal* includes temporary methods like contraceptive pills, condoms, withdrawal (*azal*), and intrauterine devices (IUDs), permitted as long as couples acknowledge Allah SWT's ultimate control over outcomes. These methods should not harm the wife and require mutual consent. This perspective is supported by *hadiths* showing that the Prophet Muhammad's Peace Be Upon Him (PBUH) companions practised *'azal* without prohibition. In contrast, *tahdid al-nasal*, which encompasses permanent methods like sterilisation and abortion, is generally forbidden as it alters Allah's creation, though exceptions may be made for severe health risks to the mother, allowing abortion before the foetus reaches 120 days.[21]

Prominent Islamic jurists have provided differing rulings on family planning. Imam al-Ghazzali prohibits abortion at any stage but permits *'azal (coitus interruptus)* for valid reasons, such as the wife's health or financial concerns while forbidding it due to gender preference. The 1988 Organisation of Islamic Cooperation's (OIC's) *Majma' al-Fiqh al-Islami* ruled that sterilisation is haram except in dire cases, and temporary methods are acceptable with both spouses' consent, as long as they do not cause harm. In 1997, Sheikh Atiyah allowed temporary sterilisation for health reasons but prohibited permanent sterilisation unless medically necessary. Malaysia's National Fatwa Council (1991) ruled sterilisation as prohibited (*haram*) but permitted safe contraceptive implants like Norplant. Overall, Islamic law permits *tanzim al-nasal* for economic reasons, as long as couples remain receptive to Allah's will.[21]

The research by Adzmel Mahmud *et al.* (2024) examines family planning practices among ever-married Malaysian women aged 15 to 49, exploring the influence of socio-demographic factors and Islamic teachings on contraceptive use. Using data from 2,081 respondents, the study highlights that, despite long-standing family planning initiatives, contraceptive prevalence remains modest at 64.7%. A major finding reveals that 48.1% of women lack adequate knowledge about family planning, with limited understanding of Islamic perspectives on contraception, which affects their openness to contraceptive methods. The study recommends incorporating Islamic teachings into family planning education to bridge this knowledge gap, as it could help address misconceptions and improve contraceptive adoption. However, a gap in the literature persists regarding in-depth examination of how religious beliefs specifically shape attitudes toward family planning, which could clarify the barriers contributing to the relatively low uptake of contraceptive methods.[22]

4. Conclusion

This study highlights the urgent need to address the multifaceted barriers contributing to unmet needs in family planning in Malaysia. The research reveals that while access to contraceptive methods is a significant factor, socio-cultural beliefs, economic constraints and health conditions also play critical roles in shaping women's reproductive choices. By identifying these interconnected challenges, the study contributes to a more nuanced understanding of family planning dynamics in Malaysia. The findings underscore the importance of developing tailored interventions that not only improve access to contraceptive options but also engage with cultural sensitivities and provide comprehensive education on reproductive health. Future research should explore the effectiveness of these interventions and consider the perspectives of women from diverse backgrounds to ensure that family planning services are inclusive and

responsive to their needs. Ultimately, addressing these unmet needs is essential for empowering women, improving reproductive health outcomes, and advancing public health goals among Malaysian women.

Compliance with ethical standards

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Disclosure of conflict of interest

The author declares no conflict of interest.

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