

Limited Access to Health Services and Pregnancy Risks

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ABSTRACT

Purpose: This study aims to examine the limitations of access to health services and their relationship to increased pregnancy risk in Indonesia, highlighting the interacting geographical, socioeconomic, cultural, and policy factors that shape maternal access disparities.

Research Method: This study employs a qualitative approach, utilizing the Systematic Literature Review (SLR) method to analyze academic literature published between 2015 and 2025. The search was conducted comprehensively through searches in reputable international journals from publishers Elsevier, Emerald, Wiley, and Springer.

Results and Discussion: The study's results indicate that structural factors, including low socioeconomic status, geographical isolation, and a shortage of trained healthcare workers, primarily cause limited access to maternal health services. In addition, socio-cultural factors such as the dominance of non-medical personnel and gender norms also contribute to delays in accessing medical services. The mismatch between national policies and local needs exacerbates service gaps and increases the risk of pregnancy complications.

Implications: This study highlights the importance of a multidisciplinary and contextual approach in developing maternal health policies. Community-based strategies that take into account the socio-cultural context and strengthen primary services and health literacy are needed as long-term, sustainable interventions.

Keywords: health care access; pregnancy risk; socioeconomic inequality; contextual approach; health policy.

Introduction

Maternal health during pregnancy is a key indicator in assessing the quality of a country's healthcare system. Equitable access to healthcare services, particularly for pregnant women, is essential to reduce the risk of pregnancy complications and lower maternal and infant mortality rates. However, in practice, disparities in access to healthcare services persist as a fundamental issue in many regions, particularly in developing countries such as Indonesia. These disparities are not only related to the uneven distribution of health facilities but also include social, economic, geographical, and cultural barriers. These limitations in access directly impact low utilization of antenatal care services and the lack of timely medical interventions, ultimately increasing pregnancy risks (Haddrill *et al.*, 2014). This phenomenon has become more pronounced during the COVID-19 pandemic, exacerbating the



accessibility of healthcare services for vulnerable groups such as pregnant women. During the pandemic, many pregnant women experienced a decline in the quality of healthcare services due to mobility restrictions, fear of infection, and the allocation of medical resources focused on COVID-19 management (Aranda *et al.*, 2022). Furthermore, limited access to healthcare services during pregnancy impacts the quality of prenatal monitoring received by pregnant women. According to research, during the pandemic, 14.1% of pregnant women did not receive comprehensive antenatal care, with the completeness of care significantly associated with the mother's employment status (Nurriszka *et al.*, 2021). This situation is exacerbated by structural barriers, including remote geographical locations, low socioeconomic and educational status, and limited information and autonomy in decision-making regarding access to healthcare services (Hapsari *et al.*, 2014; Syam *et al.*, 2019). Other barriers include concerns about COVID-19 transmission, transportation limitations, and a lack of trust in non-medical personnel, such as traditional birth attendants (Salsa & Dhamanti, 2022; Syam *et al.*, 2019). This phenomenon requires systemic interventions that not only focus on medical aspects but also consider social, cultural, economic, and infrastructure factors.

Various studies have identified the COVID-19 pandemic as a significant trigger for disruptions in maternal and child health services, including the disruption of access to health facilities for pregnant women (Nurriszka *et al.*, 2021; Salsa & Dhamanti, 2022). These studies highlight the role of social and economic factors such as place of residence, education, and employment in influencing the quality and completeness of pregnancy services. Hapsari *et al.*, (2014) state that living in rural areas and having low levels of education and economic status are significant risk factors for pregnancy. Other research has found that pregnant women's decisions to access health services are influenced by their knowledge, social support, access to information, and availability of health facilities (Syam *et al.*, 2019). Additionally, solution-based approaches have been widely proposed. One such approach is strengthening infrastructure and utilizing telemedicine to reach groups with limited direct access to healthcare facilities (Nurriszka *et al.*, 2021). Economic factors are also recognized as important determinants of healthcare access. Binuko & Fauziyah, (2024) demonstrate that socioeconomic status and service costs play a significant role in determining community access to healthcare services. Meanwhile, a multidisciplinary approach is recommended by Kudarti & Rahmaningtyas, (2024) emphasizing the importance of integrating policy, infrastructure, education, and cultural and social values to improve the quality of maternal health services. Initiatives such as the Antenatal Care Plus program have proven effective in reducing stunting rates among children with the support of appropriate service interventions (Susianto, 2023). On the other hand, the implementation of the National Health Insurance Program (BPJS Kesehatan) has helped expand service coverage as a national health insurance program. However, it still faces challenges in achieving Universal Health Coverage (Sagala *et al.*, 2024).

Several studies have investigated the limitations of access to health services for pregnant women, highlighting significant gaps in the approaches and coverage of existing research. Empirically, most previous studies, such as those conducted by Nurriszka *et al.*, (2021) and Hapsari *et al.*, (2014), tend to focus on identifying barriers to access, such as geographical location, economic status, and education. These studies contribute to describing the macro picture of the problem but have not explored the dynamics of pregnant women's subjective experiences in facing limited access to health services, especially in extraordinary conditions such as the COVID-19 pandemic. Additionally, few studies explicitly link limited access to healthcare services with increased pregnancy risks from a cross-factorial perspective, such as the combination of women's autonomy, cultural stigma, and preferences for non-medical personnel. Theoretically, most of the approaches used in previous studies have not

comprehensively integrated social, cultural, economic, and policy dimensions simultaneously. Studies such as those conducted by (Binuko & Fauziyah, 2024; Kudarti & Rahmaningtyas, 2024) have indeed highlighted the importance of a multidisciplinary approach; however, few have developed an analytical framework capable of explaining how the complex interactions between these factors contribute to pregnancy risk.

This study will specifically examine in depth the limitations of access to health services and their relationship to pregnancy risk through a systematic approach based on qualitative literature. Unlike previous studies that generally highlight aspects of accessibility from geographical or economic perspectives separately, this study seeks to understand the overall relationship between factors, including the role of socio-cultural factors, local infrastructure conditions, and decision-making dynamics within households. The main emphasis is on how pregnant women in various regions experience limited access, not merely as statistical data, but as a series of life experiences influenced by their surroundings, social values, and the availability of services. This study not only expands the theoretical understanding of maternal health service disparities but also provides practical contributions to the design of more contextually relevant, vulnerable-friendly, and locally responsive service policies. The primary objective of this research is to identify and summarize thematic findings from relevant qualitative literature, thereby building a comprehensive understanding of barriers to healthcare access and pregnancy risks, and to formulate more inclusive and sustainable intervention strategies.

Literature Review and Hypothesis Development

Health Service Access

Access to healthcare is an essential component in ensuring public health, especially for vulnerable groups such as pregnant women. Within the framework of the national healthcare system, access is understood not only as the physical ability to reach healthcare facilities, but also encompasses the dimensions of availability, affordability, and community acceptance of services. Access disparities are a significant issue in developing countries, including Indonesia, where health infrastructure and the distribution of medical personnel remain uneven. Anindya *et al.*, (2020) emphasize that the National Health Insurance Program (JKN) has indeed increased service coverage but has not fully succeeded in bridging disparities between regions and social groups. Communities in remote areas or from low-income families continue to face various barriers, including indirect costs (such as transportation and loss of income), a lack of information, and inadequate service quality at community health centers or primary clinics. Rahmawati and Hsieh (2024) also highlight that, despite increased health insurance coverage, the utilization of services by pregnant women remains low due to limited professional healthcare staff, diagnostic facilities, and coordination gaps between primary and referral services. This situation suggests that efforts to improve access to healthcare services are insufficient if they rely solely on expanding insurance coverage but must also be accompanied by equitable quality of services and community empowerment.

In addition to structural and economic barriers, access to maternal health services is also influenced by social and cultural factors that shape individuals' perceptions and decisions regarding the use of medical services. In societies with strong patriarchal norms, the decision to seek prenatal care or give birth in a health facility often depends on the approval of the husband or extended family, which can limit women's autonomy in determining their own needs. Ali *et al.*, (2021) showed that in urban areas of India, social discrimination and low trust in the public health system contribute to disparities in

the utilization of maternal health services. Similar findings have been observed in Indonesia, particularly in rural communities that still rely on non-medical personnel such as traditional birth attendants for pregnancy and childbirth, as they are considered more accessible, cheaper, and more in line with local cultural values. Gube *et al.*, (2024) identified that low health literacy, coupled with a lack of reproductive education, exacerbates the vulnerability of pregnant women to pregnancy risks. The lack of outreach and engagement from healthcare providers toward these marginalized groups further reinforces their exclusion from formal healthcare systems. To improve access to healthcare services for pregnant women, strategies are needed that are not only medical and technical but also sensitive to the cultural conditions and social relationships within local communities.

Amidst the complexity of health service access issues, a cross-sectoral approach and the use of technology are key to addressing existing challenges sustainably. Shah *et al.*, (2025) argue that social assistance programs such as the Family Hope Program (PKH) have a positive impact on improving access to health services for pregnant women. The economic incentives provided can reduce the cost burden that has been a major obstacle. However, the effectiveness of such programs is significantly influenced by their implementation at the local level and coordination among agencies, including health departments, social services, and educational institutions. In addition to policy-based interventions, the role of technology in expanding access has become increasingly important. Anshari (2021) demonstrates that e-health systems leveraging information and communication technology can serve as practical solutions for geographically remote areas. Through online consultation services, pregnant women can access health information without having to travel long distances to service centers. Lamichhane & Neupane, (2022) note that mobile health (m-health) solutions, including pregnancy monitoring apps and educational text message services, have proven effective in various regions of Asia and Africa. However, implementing such technology requires training, stable internet connectivity, and a willingness to adopt innovative approaches within the healthcare system.

Pregnancy Risks

Pregnancy risk is a condition that describes the potential for complications during pregnancy, childbirth, or the postpartum period that can adversely affect the health of the mother and fetus (Nanda, 2025). This risk arises from medical factors such as hypertension, gestational diabetes, anemia, history of miscarriage, as well as social and economic factors that hinder access to quality health services (Rajia, 2024). According to Zhang *et al.*, (2025), pregnancy with more than one risk factor shows a higher tendency toward serious complications, including preeclampsia, premature birth, postpartum hemorrhage, and even neonatal death. In Indonesia, awareness of high-risk pregnancy is still low, especially in areas with limited health literacy. Many women are unaware that being too young or too old during pregnancy, as well as having pregnancies too close together, fall under the high-risk category. Rizkianti *et al.*, (2021) emphasize that perceptual barriers and structural barriers in accessing healthcare services are the primary causes of delayed detection of pregnancy risks. When women cannot actively access antenatal services or fail to recognize danger signs during pregnancy, the risk of complications increases significantly. This indicates that strategies to address pregnancy risks are not sufficient through the provision of medical services alone but also require community education and women's empowerment to make independent and timely health decisions based on accurate and contextual information.

Geographical diversity and the uneven distribution of health facilities in Indonesia contribute to the potential for pregnancy risks, particularly in remote, frontier, and outer regions. Misnaniarti *et al.*, (2024) revealed that differences in perinatal mortality rates between Western and Eastern Indonesia reflect systemic disparities in the availability and quality of pregnancy care services. In certain areas, long distances to healthcare facilities, limited transportation, and shortages of professional medical staff make pregnant women reluctant or late in seeking prenatal care. On the other hand, medical factors such as comorbidities also contribute to the risk. Chronic diseases such as hypertension, diabetes, and heart disease are dominant factors contributing to high maternal mortality rates, both in developing and developed countries (Palinski, 2014). In the local context, the interaction between medical and non-medical factors becomes increasingly complex when traditional cultural practices remain the primary reference for some communities. Aryastami & Mubasyiroh, (2021) found that many women still prefer to use traditional birth attendants rather than medical facilities because they are considered more affordable, emotionally accessible, and aligned with cultural values. However, this practice leads to delayed detection of complications and low referral rates to healthcare facilities, resulting in inadequate management of pregnancy risks. Therefore, maternal health interventions in Indonesia must be designed with a cross-sectoral and cross-cultural approach to address the diverse challenges faced by pregnant women in various local contexts.

The importance of an empathetic and experience-based approach in understanding pregnancy risks has been further emphasized by qualitative studies that highlight the perspectives of pregnant women themselves. Badakhsh *et al.*, (2020) revealed that women experiencing high-risk pregnancies often experience anxiety, feelings of insecurity, and fear about the outcome of their pregnancy, especially if they feel they are not receiving adequate medical or emotional support. This uncertainty is often exacerbated by an unresponsive and bureaucratic healthcare system that fails to understand the context of patients' lives. Therefore, understanding women's subjective experiences is crucial for developing inclusive and humane maternal health services. On the other hand, an ecological approach in public health is also important to consider. Tajvar *et al.*, (2022) in their systematic review explain that pregnancy risks are not only influenced by individual factors such as nutritional status or age, but also by environmental factors, policy systems, and the socio-economic conditions of the community in which they live. In this context, the WHO (2025) states that most pregnancy complications can be prevented with timely and quality medical care. However, delays in recognizing and addressing complications, as well as limited access to antenatal care, remain the primary causes of high pregnancy risks in developing countries.

Socio-economic inequality

Socioeconomic inequality can be defined as significant differences in access to resources, opportunities, and development outcomes between individuals or groups within a society, which are typically influenced by income levels, education, employment status, and geographical location. In the context of maternal health, this inequality is a structural factor that both directly and indirectly impacts the health status of mothers and their infants. Misu *et al.*, (2025) state that in low- and middle-income countries, socioeconomic disparities are reflected in inequalities in the use of maternal health services, including antenatal care, skilled birth attendance, and postpartum visits. They emphasize that women from lower socioeconomic groups are more likely to face barriers in accessing healthcare services due to financial constraints, low health literacy, and unequal distribution of medical facilities. In Indonesia,

this phenomenon is reflected in the findings of Adnan & Ekasari, (2025) which show that pregnant women from low-income communities are more likely to give birth in non-medical facilities or with the assistance of non-professional personnel, primarily due to cost and distance from hospitals. This disparity not only reflects systemic failures in service distribution but also perpetuates intergenerational health inequities. If mothers from disadvantaged backgrounds consistently lack access to adequate healthcare, their children are at higher risk of developing health issues from an early age, thereby reinforcing long-term disparities.

One of the root causes of inequality in access to maternal health services is disparity in terms of women's education and employment status. Wulandari *et al.*, (2020) found that in urban areas of Indonesia, women with higher levels of education were more likely to undergo regular pregnancy check-ups and choose safe places to give birth. Education enables women to understand the importance of health during pregnancy better and strengthens their ability to make informed, independent health decisions. This is also related to employment status, where women with steady jobs or independent income tend to be more empowered to access healthcare services because they have control over economic resources. Johar *et al.*, (2018) highlighted in their study that household income is the primary determinant of maternal healthcare utilization. Women from poor households often delay or even avoid visiting medical facilities because they cannot afford transportation costs, laboratory tests, or treatment. Research by Anindya *et al.*, (2021) adds that this dimension of inequality is not only individual but also operates systemically at the national and regional levels. In lower-middle-income countries, disparities in maternal health services indicate policy failures in reaching vulnerable groups equitably.

Socioeconomic inequality in the context of maternal health services also reveals highly complex spatial dynamics, particularly in archipelagic countries like Indonesia. Differences in welfare levels between regions, both within urban and rural areas and between Western and Eastern Indonesia, result in highly unequal patterns of access to health services. Utomo *et al.*, (2025) conducted a census block-based analysis and found that the highest maternal mortality rates were found in areas with extreme poverty and low levels of female education. This indicates that the location of a pregnant woman's residence is a critical variable determining her likelihood of accessing quality maternal care. A study by Rahut *et al.*, (2024) in Southeast Asia also confirms that socio-economic and demographic variables, including distance to facilities, transportation availability, and local health worker capacity, significantly influence maternal and neonatal service coverage. Meanwhile, Baten *et al.*, (2025) in their systematic review concluded that households with low levels of education and wealth consistently face barriers in accessing maternal services from the beginning of pregnancy to the postpartum period. This situation reflects that socioeconomic disparities are not only rooted in the lack of health infrastructure but are also linked to broader structural inequalities.

Research Method

This study uses a qualitative approach with a systematic literature review design. The primary objective of this study is to examine and synthesize scientific findings related to limited access to health services and their implications for pregnancy risk, with a focus on the context of socioeconomic inequality. This design was chosen because it enables researchers to comprehensively collect, organize, and interpret various published research results, as well as to develop thematic patterns that provide an in-depth understanding of the phenomenon being studied. Qualitative systematic studies are

considered relevant for exploring the complexity of the relationship between socioeconomic, cultural, and policy dimensions and the health conditions of pregnant women.

The subjects of this study are scientific documents relevant to the topic of limited access to health services and pregnancy risks. The selected articles are empirical research or qualitative studies published in reputable journals between 2015 and 2025. The primary focus is on publications from leading international publishers such as Elsevier, Emerald, Wiley, and Springer to ensure the validity and academic quality of the sources reviewed. The articles included in this study cover topics such as socioeconomic inequality, health literacy, antenatal care, and maternal health interventions in various regions, particularly in developing countries.

Data collection techniques were employed by systematically searching documents through online databases, including ScienceDirect (Elsevier), Wiley Online Library, SpringerLink, and Emerald Insight. Researchers used a combination of keywords, including **“maternal health access,” “pregnancy risk,” “socioeconomic inequality,” “antenatal care,”** and **“healthcare barriers.”** Selected articles were filtered based on the following inclusion criteria: (1) published between 2018 and 2025, (2) available in full-text format, (3) relevant to the study focus, and (4) employing a qualitative or mixed-method approach that explores experiential, policy, and socioeconomic aspects. Meanwhile, articles of an editorial nature, opinions, or those not peer-reviewed were excluded from the selection. The selection process involved reading abstracts, analyzing methodologies, and assessing thematic relevance to the research questions. To ensure the accuracy of the selection, each selected document was recorded and coded thematically in an initial coding table.

Data analysis was conducted using a thematic approach, which aims to identify, evaluate, and group key findings from selected articles into main themes. This analysis was conducted in several stages, beginning with the recording of key information in each article, identifying the main issues, and categorizing them based on key themes, including access to health services, socioeconomic inequality, pregnancy risks, and intervention policies. Each article was analyzed in depth to examine the development of relationships between themes within the study's context. Next, the meaning of each finding is interpreted and contextualized to provide a basis for developing a holistic and in-depth narrative of the study's results. This thematic approach allows researchers to capture the complexity of qualitative data scattered across various studies and summarize it in an integrated conceptual framework.

Results and Discussion

Analysis Result

Barriers to Maternal Healthcare Access: A Structural Market Failure

In designing any system intended to serve people, accessibility must be viewed as a central dimension of value creation, not a secondary concern. In the context of maternal healthcare, particularly in low- and middle-income countries such as Indonesia, numerous studies have underscored how structural inequities result in persistent access gaps. These barriers ranging from geographic isolation to economic deprivation and limited human resource capacity form a complex web that restricts pregnant women from seeking or receiving timely care. Adnan & Ekasari, (2025) show that socioeconomic disparities continue to dictate who can safely deliver in hospitals and who cannot. Their findings, drawn from national health data, confirm that women in the poorest quintiles are far less likely

to use formal maternal health services than their wealthier counterparts. Similarly, Wulandari *et al.*, (2020) identify socioeconomic status, particularly in urban Indonesia, as a critical determinant of antenatal care utilization. Low-income women, especially those with limited education, often forego routine checkups due to indirect costs such as transportation and lost income. These access barriers are not accidental they are systemic design failures. From a marketing perspective, this represents a fundamental failure to segment and reach underserved populations effectively. Anindya *et al.*, (2020) highlight how Indonesia's National Health Insurance scheme has made strides in reducing inequity but note that geographic and logistical barriers still prevent equitable utilization.

The Subjective Experience of Pregnant Women: Humanizing the Healthcare Gap

Understanding how pregnant women experience access to healthcare services goes beyond assessing logistics—it requires an empathetic engagement with the human condition. Many maternal health interventions fail because they view the mother merely as a clinical subject rather than a complex individual navigating fear, uncertainty, and sociocultural constraints. Studies such as Badakhsh *et al.*, (2020) offer a phenomenological lens on high-risk pregnancy, revealing that women often feel isolated, anxious, and powerless during their care journey. These emotions are not incidental; they are the product of systemic neglect and insufficient patient-centered design in healthcare services. Further complicating this is the social context in which decisions are made. As Syam *et al.*, (2019) demonstrate, healthcare-seeking behavior is heavily influenced by family structures and gender dynamics, particularly in coastal and rural communities where women often defer decisions to their husbands or elders. This lack of autonomy diminishes their ability to seek timely medical care, even when they recognize the need for it. From a marketing strategy perspective, this reflects a profound breakdown in trust and perceived value. The healthcare "brand," so to speak, is tainted by perceptions of inaccessibility, impersonality, or fear. Anindya *et al.*, (2021) reinforce this by showing how service coverage gaps persist despite national programs, particularly when services fail to align with patient expectations and values. Thus, re-humanizing the healthcare experience through culturally sensitive engagement and relational service delivery is not a luxury but a necessity for closing the maternal care gap.

Cultural Norms and Non-Medical Preferences: The Power of Social Positioning

When marketing a service especially one as personal and consequential as maternal healthcare—understanding cultural norms is as vital as understanding consumer behavior. In many communities across Indonesia and other low- and middle-income countries, maternal healthcare decisions are driven less by clinical need than by cultural acceptability. Aryastami & Mubasyiroh, (2021) highlight how traditional practices, including reliance on dukun beranak (traditional birth attendants), persist due to their cultural legitimacy, proximity, and affordability. These figures are not merely health alternatives; they are embedded social institutions. In this context, formal medical care is often perceived as alien, overly technical, and detached from community values. Haddrill *et al.*, (2014) found that many women delay or avoid antenatal visits due to feelings of shame, mistrust, or fear of judgment—feelings deeply rooted in social interactions and community expectations. This cultural landscape shapes not only the demand for services but also their relevance. In marketing terminology, this is a matter of brand positioning and trust. If the formal health system is to become a "preferred brand," it must win over cultural gatekeepers and integrate itself into community life. Shah *et al.*, (2025) argue that Indonesia's

cash transfer programs had variable success in changing behavior precisely because they did not adequately engage with local norms and expectations.

Fragmented Policy Responses and the Need for Responsive Integration

One of the most profound missteps in public health strategy lies in over-centralization. A national maternal health policy, no matter how well-intentioned, often stumbles when it fails to adapt to local realities. Kudarti & Rahmaningtyas, (2024) emphasize that Indonesia's maternal healthcare landscape requires not a uniform blueprint but a flexible framework—one that empowers local actors to adapt national strategies to the specific sociogeographic conditions of their communities. However, as Rahmawati & Hsieh, (2024) note in their evaluation of Jaminan Kesehatan Nasional (JKN), implementation gaps persist across provinces due to unequal infrastructure, staff shortages, and limited budget allocations. These disconnects highlight a fundamental design flaw: a lack of responsiveness to policy. In marketing, we might refer to this as a "product mismatch"—when the service offered does not align with the consumer's lived reality. This misalignment is not benign; it leads to poor uptake, eroded trust, and a perception that government services are irrelevant or ineffective. Aranda *et al.*, (2022) examined health system disruptions during COVID-19 and found that, without localized contingency planning, even the most robust national systems faltered. From a strategic lens, the lesson is clear: integrated health delivery systems must be agile, decentralized, and community-informed. Anshari (2021) suggests leveraging digital health and localized management systems to support this adaptive integration.

The Link Between Access Inequity and Pregnancy Risk: A Causal Chain

From a systemic standpoint, the connection between poor healthcare access and heightened pregnancy risk is not just correlative it is causal, direct, and well-documented. When women cannot access skilled care during antenatal, delivery, or postpartum periods, they are far more likely to experience complications such as anemia, hemorrhage, hypertension, and sepsis. Zhang *et al.*, (2025), in their meta-analysis of high-risk pregnancies, confirm that multiple risk factors including late care, lack of diagnostics, and unmanaged comorbidities lead to exponentially worse outcomes. Rizkianti *et al.*, (2021) further argue that perceived barriers, including distance, cost, and provider attitude, directly influence women's ability to detect and manage complications. Adnan & Ekasari, (2025) echo this in the Indonesian context, noting that women from low-income and rural settings are disproportionately exposed to preventable pregnancy risks due to systemic exclusion. This is not merely a failure of service provision it is a failure of preventive strategy. In marketing terminology, this refers to the high cost of non-consumption. When at-risk populations fail to engage with a life-saving service, the consequences are not only tragic but also economically unsustainable. Misnaniarti *et al.*, (2024) highlight how regional disparities in perinatal mortality in Indonesia reflect not only resource deficits but also access inequities.

Multidisciplinary and Contextual Strategies: Toward a Holistic Health Ecosystem

A fragmented approach to maternal healthcare is no longer viable. Solving entrenched access issues and reducing pregnancy risk requires a multidisciplinary strategy that combines medical science with behavioral insight, community participation, and localized governance. Gube *et al.*, (2024) emphasize that structural inequality in maternal care uptake arises not from singular barriers but from intersecting deficits in education, infrastructure, and policy alignment. Rahut *et al.*, (2024) recommend

adopting a continuum of care framework, where services are linked across community, clinic, and policy levels from preconception to postnatal care. From a marketing systems perspective, this involves redesigning the entire service journey, ensuring that every “touchpoint” is functional, welcoming, and culturally attuned. Lamichhane & Neupane, (2022) offer promising insights into how mobile health and telemedicine can bridge gaps in remote areas, allowing midwives and community health workers to extend care beyond clinical walls. Likewise, Baten *et al.*, (2025) show that community health education, when embedded in local structures, significantly improves service uptake. This is where co-creation becomes essential. When communities participate in shaping the design and delivery of healthcare, they are more likely to trust and use it. The health system must stop acting as a remote provider and start behaving like an active, listening partner. This paradigm shift toward holistic, user-centered design is not only more ethical, but it is also demonstrably more effective in improving maternal health outcomes in diverse and unequal settings.

Strategic Recommendations: Redesigning for Equity and Inclusion

Based on the synthesized evidence, several actionable strategies emerge to enhance maternal healthcare access and equitably mitigate risk. First, as proposed by Binuko & Fauziyah, (2024), targeted investments must be made to strengthen basic health infrastructure in low-access regions, especially those with the highest maternal mortality rates. These include mobile clinics, maternity waiting homes, and midwife-assisted satellite posts. Second, Anindya *et al.*, (2021) highlight the importance of demand-side interventions such as conditional cash transfers, transportation stipends, and service subsidies, which effectively reduce financial deterrents for low-income families. Third, Wulandari *et al.*, (2020) and Shah *et al.*, (2025) both advocate for improving health literacy through culturally adapted materials and community-based outreach, which has shown measurable success in increasing the frequency of antenatal visits. Fourth, there must be a shift in how providers are trained not just in clinical competence, but also in empathy, cultural humility, and effective communication. As emphasized by Tajvar *et al.*, (2022), maternal care is not merely a technical task but a relational engagement. Ultimately, policy-making must adopt decentralized planning, where local authorities and civil society organizations collaborate to co-create health strategies based on real-time data and user input. Sagala *et al.*, (2024) underline that rigid central policies, while structurally sound, often fail in execution without local adaptation.

Discussion

The results of this study indicate that limited access to health services for pregnant women is a significant factor contributing directly to increased pregnancy risks, both in the form of medical complications and socio-economic and psychological unpreparedness in facing pregnancy and childbirth. The barriers to access identified in this study include geographical aspects, such as long distances to health facilities that are difficult to reach; socioeconomic aspects, such as low income and education levels; and cultural factors that shape perceptions and preferences regarding the types of services accessed. These findings are relevant to the study's primary objective, which is to comprehensively identify and analyze the relationship between limited access and pregnancy risk through a qualitative literature review. Furthermore, this study confirms that the various dimensions influencing access to health services cannot be viewed in isolation but are interrelated and form a complex structure of inequality. This confirms the initial assumption that access limitations are not

merely an infrastructure issue but the result of a combination of social, economic, and cultural inequalities that remain deeply entrenched in the maternal health care system.

Socioeconomic inequality is the most prominent factor limiting women's access to quality maternal health services. Women from low-income communities with limited education are more vulnerable to barriers in accessing services, whether due to transportation costs, inability to pay for additional healthcare services, or lack of adequate information about the importance of continuous pregnancy care. In such conditions, women tend only to access healthcare services when the situation is already urgent, increasing the risk of complications such as preeclampsia, anemia, or premature birth. These findings align with the results of studies by (Anindya *et al.*, 2020; Adnan & Ekasari, 2025) which indicate that poor communities in Indonesia tend to have low utilization rates of maternal health services, including antenatal visits and childbirth at health facilities. Low educational levels also result in limited maternal health literacy, reducing their ability to recognize danger signs during pregnancy. Additionally, informal work that does not provide social protection or health insurance exacerbates this situation, as women lack the flexibility or economic support to access necessary services. Thus, low socioeconomic status not only limits access but also increases the likelihood of delayed medical care, which can have fatal consequences for both mothers and babies.

In addition to economic constraints, social and cultural dynamics also play an important role in determining women's access to maternal health services. In many communities, especially in rural areas or traditional communities, decisions regarding the health of pregnant women are often not made by the women themselves, but rather by their husbands, parents-in-law, or traditional leaders. Cultural values such as taboos against prenatal examinations by male medical personnel, reliance on traditional practices such as traditional birth attendants, or the belief that pregnancy is a natural process that does not require medical intervention, constitute cultural barriers that are difficult to change. A study by Aryastami & Mubasyiroh, (2021) shows that trust in non-medical personnel remains very high in some areas because they are perceived as more emotionally close and less likely to cause embarrassment. On the other hand, stigma toward women who seek prenatal care at health centers or hospitals still exists, especially if they are not legally married or are considered to visit health facilities "too frequently." In this context, cultural preferences not only influence perceptions of risk but also directly shape patterns of service-seeking behavior. Women who feel they lack control over their health decisions are more likely to experience delays in accessing medical care, which ultimately increases the risk of pregnancy.

At the policy level, the gap between national regulations and implementation at the local level has exacerbated the condition of maternal service access. Although the Indonesian government has launched various initiatives such as the National Health Insurance (JKN) and maternal and child health (KIA) programs, the effectiveness of these programs has not been evenly distributed across all regions. One of the main issues is the lack of responsiveness of policies to highly diverse local conditions. A study by Rahmawati & Hsieh (2024) shows that although JKN has expanded health financing coverage, the distribution of services and quality of care remain challenges, particularly in remote areas. Many health facilities at the village or sub-district level lack sufficient medical personnel, adequate equipment, or efficient referral mechanisms. Additionally, coordination between the central and local governments remains suboptimal, leading to mismatches between policies designed at the central level and the actual needs of communities on the ground. A top-down approach to policy formulation has resulted in limited community participation and the underrepresentation of local actors in designing effective interventions. As a result, programs that are supposed to be solutions do not fully address the access

issues faced by pregnant women, especially those living in areas with complex geographical and social conditions.

Theoretically, the findings of this study indicate the importance of a multidisciplinary and contextual approach in understanding and overcoming limitations in access to health services. Theories that focus solely on structural factors, such as economic or logistical models of service access, are insufficient to explain the complexity faced by pregnant women in various regions. An integration is needed between social theories that emphasize power relations and culture, economic theories that take into account purchasing power and incentives, and policy approaches that consider the dynamics of implementation at the micro level. This research enriches the literature by showing that pregnancy risks are not only the result of limited access to services but also due to power imbalances in decision-making, social stigma, and structural weaknesses in the public service system. Additionally, this study emphasizes that healthcare cannot be understood solely as a medical product, but as a form of social service that must be designed according to the needs, expectations, and local context of users. Therefore, the integration of interdisciplinary theories is a crucial foundation for developing a more adaptable and relevant framework that accommodates the diversity of existing contexts.

When compared to previous literature, the results of this study demonstrate consistency and an expansion of previous findings. International studies such as those conducted by Ali *et al.*, (2021) in India and Gube *et al.*, (2024) in other developing countries also highlight that socioeconomic and cultural inequalities are significant factors in access to maternal health. However, this study suggests that these factors not only have separate impacts but also interact in complex and layered ways. For example, women with low socioeconomic status living in remote areas not only face geographical and economic barriers but are also trapped in cultural structures that limit their autonomy to access health services. By systematically combining these various dimensions, this study provides a more holistic and in-depth understanding than previous studies. Furthermore, this study highlights that general maternal health interventions will be ineffective if they are not tailored to local characteristics and cultural contexts. In other words, the unique contribution of this study lies in its ability to elaborate on the interactions between factors and provide a strong foundation for the development of context-based health policies.

Conclusion

This study aims to explore limitations in access to health services as determinants of pregnancy risk in the social, economic, cultural, and policy contexts in Indonesia. Through a systematic review of the latest literature, this study demonstrates that barriers to access are not only physical or geographical, but also influenced by factors such as low socioeconomic status, limited education, informal employment, and cultural values that restrict women's autonomy in making health decisions. This study addresses the central question of how these various dimensions of barriers contribute to increased risks of complications and maternal mortality during pregnancy and childbirth. By referencing various empirical sources, the analysis confirms that limited access is not solely caused by the absence of facilities but also by the complex interaction of structural and cultural factors.

This study makes an important contribution to the development of multidisciplinary discourse on maternal health by emphasizing the need for contextual understanding of access inequalities. The originality of this research lies in its integrated approach, which combines social, economic, cultural, and policy dimensions to analyze pregnancy risks. The practical implications of this study encourage

policymakers to develop community-based interventions, strengthen the capacity of local health workers, and ensure that national programs such as JKN and KIA are implemented in a manner responsive to local needs. From a managerial perspective, the findings emphasize the importance of strengthening primary health care systems and empowering women through improved health literacy and their involvement in local health service planning.

This study has several limitations that need to be considered. First, the limitation of this study lies in its qualitative literature review nature, which does not allow for the presentation of primary field data for comparison. Second, the diversity of geographical regions and local cultural characteristics in Indonesia is not fully represented in detail in this analysis. Therefore, future research is recommended to conduct field studies in specific regions using a participatory approach to explore the real-life experiences of pregnant women in accessing health services. Further research could also integrate quantitative approaches to more precisely measure the relationship between access disparities and pregnancy complications, as well as explore the effectiveness of existing policies across different regions. As a result, future research agendas can focus more on developing contextual, inclusive, and sustainable community-based intervention models.

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