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Exploring mothers'anxiety experiences and perceptions in accessing mental health support from pregnancy through the first two years postpartum

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ABSTRACT

Background: Changes during pregnancy can cause physical and psychological symptoms, such as anxiety. However, many mothers do not undergo mental health condition detection by healthcare professionals, often due to misconceptions or lack of awareness.

Objectives: This study aims to analyze the relationship between mothers' experiences and perceptions in seeking mental health support during pregnancy and up to two years postpartum.

Methods: The design of this study is a retrospective cohort. The sample consisted of 249 respondents. The research was conducted in December 2024 at Karang Kitri Public Health Center, Sriamur Public Health Center, and the practices of midwives Luvvia Afriansid, Anita, Hj. Fitri, and Srimahi Public Health Center. The dependent variable was the experience of mental health problems, particularly anxiety, from pregnancy until two years postpartum. Statistical analysis was performed using multivariate logistic regression. Mothers' perceptions of mental health detection were measured using the Mental Health Seeking Questionnaire, and anxiety levels were assessed using the Hamilton Anxiety Rating Scale (HAM-A). The relationship between the two variables was analyzed using multivariate logistic regression.

Results: The analysis showed that prior experience of mental health problems (particularly anxiety) did not significantly affect mothers' perceptions of the importance of mental health detection (p = 0.142; p > 0.05). However, education level was significantly related to perception (p = 0.023; OR = 0.09), indicating that lower education levels are associated with lower positive perceptions toward mental health detection.

Conclusions: The study revealed no significant relationship between maternal anxiety and perceptions of seeking mental health support, as many mothers experiencing moderate to severe anxiety did not recognize their symptoms as a mental health concern or seek professional help.

KEYWORD: anxiety; mental health support; mother's perception

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INTRODUCTION

Pregnancy related changes often lead to specific physical and psychological symptoms in women. Psychologically, normal changes during pregnancy include increased emotional sensitivity, mild mood swings, enhanced empathy, and reasonable concerns regarding the baby's health or the childbirth process. These conditions are usually temporary and can be managed with adequate social support from family and the surrounding environment (1). However, when these psychological changes become excessive or persistent such as experiencing constant anxiety, feelings of distress that interfere with daily activities, severe sleep disturbances, or a loss of interest in previously enjoyed activities this condition may indicate the presence of a mental disorder such as depression, anxiety disorders, or even post-traumatic stress disorder (PTSD). Ideally, pregnant women are able to adapt in a healthy manner without developing mental health disorders (2).

Nevertheless, pregnancy is a highly sensitive period marked by significant physiological and psychological changes, which can often trigger excessive worries that may develop into anxiety, stress, insomnia, depression, or post-traumatic stress disorder (PTSD) (3). Research has shown that pregnant women in the second to third trimester experience a stress prevalence of 23%, anxiety ranging from 20% to 24%, and sleep disturbances affecting up to 81% in the final trimester (4). Women affected by anxiety

may experience disruptions in their daily lives. Research has shown that those who report significant anxiety symptoms during pregnancy are more likely to encounter further changes in their mental health status throughout the gestational period (2). These can include *generalized anxiety disorder* (GAD) marked by persistent, excessive worry and physical tension panic disorder (recurrent panic attacks), and social anxiety disorder (intense fear of social situations)(5). Clinically significant anxiety in pregnancy can substantially disrupt daily life.

For example, women with high anxiety often suffer sleep disturbances (insomnia or fragmented sleep), and many report frequent nighttime awakening and poor sleep quality due to racing thoughts and hyperarousal (6). They may also experience impaired day-today functioning: persistent worry and tension can undermine concentration, energy, and motivation, making it hard to perform usual work or household tasks and manage responsibilities (7). Studies show that nearly 1 in 5 women experience an anxiety disorder during pregnancy or after giving birth. One of the most common types is Generalized Anxiety Disorder (GAD), which affects around 5.7% of women. In fact, this number can rise to as high as 25.5% in early pregnancy, indicating that the beginning of pregnancy is a particularly vulnerable period for maternal mental health (8). Further studies have also found that anxiety is the most common mental health issue during pregnancy, with around 12% of women experiencing

depression and 13% experiencing anxiety at some point many of them suffering from both. Depression and anxiety are also known to affect approximately 15–20% of women during the first year postpartum(9).

In Indonesia, the prevalence of anxiety among pregnant women varies by parity. Among primiparous women, 33.3% experience mild anxiety and 6.7% experience moderate anxiety. Among multiparous women, 26.7% experience mild anxiety and 13.4% moderate anxiety (10). These differences are likely influenced by maternal experiences, both positive and traumatic, which may impact the risk of developing anxiety disorders.

Emotional difficulties during the perinatal period may persist even after childbirth. A growing body of evidence has linked maternal anxiety and psychological stress to increased risks of complicated deliveries, preterm birth, low birth weight, recurrent anxiety disorders, and impaired parenting abilities (11). Mothers who experience stress during pregnancy have a 50% increased risk of giving birth to low birth weight babies due to chronic maternal stress (12). Perinatal mental health refers to the emotional well-being of women during pregnancy and the first year postpartum. This includes both pre-existing mental health conditions that may worsen and new disorders that may arise or intensify during this period (13). Anxiety and other psychological disorders that persist throughout pregnancy and postpartum can significantly impact parenting practices and child development. Reduced maternal sensitivity due to postpartum anxiety or depression negatively affects three domains of child development: somatic, developmental, and psychological (3). The strongest evidence for the adverse effects of maternal postnatal anxiety is seen in delayed cognitive, behavioral, and neurophysiological development, including challenges in emotional regulation and behavioral patterns. These effects may even persist into adulthood. One study found that anxiety during pregnancy, is a significant predictor of emotional problems in children at the age of six, with similar outcomes observed(14).

Despite the long-term consequences of anxiety disorders on mothers, children, and the surrounding environment, these issues remain underrecognized and inadequately addressed. Studies have shown that pregnant women are often reluctant to seek mental health support due to feelings of embarrassment, shame, fear of social isolation, and stigma(15). Additional barriers include lack of information about available services, limited access to care, low awareness of maternal mental health, and a preference for informal sources of support (16). Therefore, healthcare professionals play a crucial role in identifying and supporting mothers to improve their emotional and mental well-being. However, the awareness and initiative of the mothers themselves in seeking mental health assistance remain key factors in the success of any intervention. To

date, few studies have explored mothers' awareness of seeking mental health support in relation to their previous mental health conditions.

A previous study reported that the prevalence of severe mental disorders, such as schizophrenia or psychosis, in West Java is relatively high reaching 5 per 1,000 population. Moreover, emotional mental disorders among individuals aged over 15 in the province reached 11%, up from 9% in 2013. However, these figures likely underestimate the true burden, as many individuals do not seek mental health services from healthcare providers (17). In Indonesia, the availability of mental health infrastructure remains extremely limited there are only 0.02 psychiatric hospitals per 100,000 population (based on approximately 188 psychiatric hospitals nationwide in a population exceeding 270 million) (18). Moreover, despite the pre-valence of mental health issues, the utilization of available mental health services remains very low, even in urban areas. Specifically, evidence shows that only about 4.7% of adolescents with a diagnosed mental disorder accessed any form of counselling or support services in the past year in Indonesia (19, 20). These findings aims to investigate the extent to which pregnant women perceive the need for mental health services, particularly in the provinces of West Java and Banten. These two regions are among the most populous in Indonesia and are experiencing a rise in untreated mental health disorders.

MATERIALS AND METHODS

This study employed a retrospective cohort design to examine the relationship between mothers' perceptions of detecting mental health conditions at the time of data collection and their past experience of anxiety disorders during pregnancy and up to two years postpartum. The research was conducted in December 2024 at six locations: Karang Kitri Public Health Center, Sriamur Public Health Center, TPMB Luvvia Afriansid, TPMB Anita, TPMB Hj. Fitri, and Srimahi Public Health Center. The study population consisted of mothers with toddlers aged at least 24 months, with a total sample of 249 respondents. Inclusion criteria included mothers who had healthy toddlers and were not experiencing any physical or psychological health issues at the time of data collection. Mothers' perceptions of seeking mental health support were measured using the Mental Health Seeking Questionnaire, which was adopted from the original instrument developed by Wilson et al. (2005). The original MHSQ was in English and was translated into Bahasa Indonesia.

The MHSQ used in this study consisted of three main domains: 1) Recognition of Mental Health Symptoms - 6 items assessing the respondent's ability to identify signs and symptoms of common mental health conditions; 2) Attitudes Toward Detection - 5 items measuring willingness and openness to detect mental health issues either independently or with professional help; 3)Perceived Barriers to Detection - 4 items exploring

cultural, social, and personal factors that may hinder mental health detection.

Anxiety levels were assessed using the Hamilton Anxiety Rating Scale (HAM-A). which was also adopted from the original English version developed by Hamilton (1959). The Bahasa Indonesia version used in this study was adapted from the validated translation by Setiawan et al. (2019). The instrument consists of 14 items assessing both psychic and somatic symptoms of anxiety, with each item rated on a 5-point Likert scale. Previous studies in Indonesia reported a Cronbach's alpha of 0.85 for this version, and in the current study, reliability testing on the pilot group produced a coefficient of 0.88. Content validity was assessed by a panel of three experts in maternal and child health, resulting in a Content Validity Index (CVI) of 0.89, indicating high relevance and clarity. Reliability testing using Cronbach's alpha on a pilot sample of 30 respondents showed a coefficient of 0.86, indicating good internal consistency. Data analysis was carried out through univariate analysis, bivariate analysis using logistic regression, and multivariate analysis using multiple logistic regression to identify the simultaneous effects of the variables.

This study adhered to the ethical principles outlined in the Declaration of Helsinki and followed the national guidelines for health research ethics in Indonesia. Ethical approval was obtained under approval number No.321/KEPK/IX/2024. All participants received detailed information

regarding the study objectives, procedures, potential risks, and benefits. Written informed consent was obtained prior to participation, and strict confidentiality was maintained throughout the research process.

RESULTS AND DISCUSSION RESULTS

Respondent Characteristics

Based on the research findings (**Table** 1), it is evident that nearly all of the respondents are housewives, totaling 200 individuals (80.3%), while only 49 respondents are employed. Regarding educational background, the majority of respondents have an education level equivalent to secondary school, with 131 individuals (52.6%). Additionally, a significant number of respondents have only completed elementary education, with 86 individuals (34.5%) having graduated from junior high school.

Table 1. Respondent employment characteristics

Category	Frequency	Percentage
Employment	· · ·	
Housewife	200	80.30%
Private	40	16.10%
Employees		
Civil Servant	9	3,6%
(Teachers)		
Total	249	100%
Education		
Primary School	86	34.50%
Junior High	131	52.50%
School		
Bachelor's	32	12.90%
Degree		
Total	249	100%

In addition to employment and education level, several socio-demographic and obstetric factors are known to influence maternal mental health, including marital status, parity, number of living children, maternal age, household income, and history of previous pregnancies or childbirths. These variables were not collected in the present study; therefore, their potential as confounding factors could not be directly analyzed. To minimize bias from unknown confounders, the study applied strict inclusion criteria, namely recruiting only mothers with healthy toddlers, free from any diagnosed physical or psychological disorders at the time of data collection, and within a similar postpartum timeframe (two years after childbirth). Furthermore, statistical control was implemented by including only variables with significant bivariate associations in the multivariate logistic regression model, thereby reducing residual confounding effects from unmeasured factors.

Table 2. Frequency distribution of the mental health disorder experience variable

Category	Frequency	Percentage
Not Anxious	5	2%
Mild Anxiety	8	3.20%
Moderate Anxiety	75	30.10%
Severe Anxiety	161	64.70%
Total	249	100%

Source: Primary Research Data, 2024

Univariat Analysis

Base on **Table 2**, the research findings indicate that nearly all of the respondents experience severe anxiety, with 161

respondents (64.7%), while 75 respondents (30.1%) experience moderate anxiety. Only 5 respondents did not experience anxiety.

Table 3. Distribution of mothers' perception in seeking mental health support

Category	Frequency	Percentage
Low (≤ average)	117	47%
Hight (> average)	132	53%
Total	249	100%

Source: Primary Research Data, 2024

Based on **Table 3**, it can be seen that the majority of mothers have a positive perception of seeking mental health support, with 132 respondents (53%) rating it above average. However, a significant number of respondents still have an inadequate perception of mental health support, with 117 respondents (47%).

Bivariat Analysis

Based on the cross-tabulation in Table 4, it can be observed that nearly all respondents who experienced anxiety were almost equally distributed in terms of their perception of seeking mental health support. Among those with severe anxiety, a considerable number still did not have a positive perception, with 81 respondents (32.5%) showing poor perception. However, an almost equal number 80 respondents (32.1%) had a good perception of seeking mental health support. A similar pattern was found among respondents with moderate anxiety, who were nearly evenly divided between having a good and poor perception regarding help-seeking behavior.

Table 4. Cross-tabulation of maternal anxiety experience and perception regarding mental health support-seeking behavior

Mantal Haalth	Perception in Seeking Support				Te	Γotal .	
Mental Health Experience	Ве	Below Hight		nai			
	n	%	n	%	N	%	
No Anxiety	1	0.4	4	1.6	5	2	
Mild Anxiety	4	1.6	4	1.6	8	3.2	
Moderate Anxiety	31	12.4	44	17.7	75	30.1	
Severe Anxiety	81	32.5	80	32.1	161	64.7	
Total	117	47	132	53	249	100	

Source: Primary Research Data, 2024

Table 5. Multivariate logistic regression: maternal anxiety experience and help-seeking perception

	Multivariate Logistic Regression			
-	P value	Odds ratio	95% Confident Interval	
	r value	(OR)	Lower Bound	Upper Bound
Maternal Mental Health Experience	0.142	-0.3	0.49	1.1
Education	0.023	0.5	1.07	2.63
Employement	0.761	-0.09	0.5	1.64
Constant	0.998	-0.01		

Source: Primary Research Data, 2024

The results of the multivariate logistic regression analysis showed a *p*-value of 0.142 (> 0.05) for mental health experience, indicating that mental health experience does not have a statistically significant influence on women's perception in seeking mental health support. However, education was found to have a significant effect, with a *p*-value of 0.023 and an odds ratio (OR) of 0.09, suggesting that lower levels of education are associated with a decreased likelihood of perceiving the need to seek mental health support.

DISCUSSION

Experience of Mental Health Disorders

The results **Table 2** of this study reveal that the majority of respondents experienced anxiety disorders, with 161 individuals (64.7%) classified as having severe anxiety, 75 (30.1%) with moderate anxiety, and only 5 showing no symptoms. These findings align with a meta-analysis of 54 studies from lowand middle-income countries (LMICs), which reported anxiety symptoms in 29.2% of pregnant women and 24.4% during the postpartum period, while clinically diagnosed anxiety disorders ranged between 8.1% and

16.0% (21). Similarly, a study in China reported a 17.4% prevalence of perinatal anxiety among 369,477 women (22).

Biologically, pregnancy induces complex hormonal changes within the endocrine system, particularly involving the hypothalamic-pituitary-adrenal (HPA) axis. During pregnancy, the placenta becomes an endocrine organ by expressing and releasing corticotropin-releasing hormone (pCRH) into maternal circulation. This shifts HPA axis regulation from negative feedback to a positive feedback loop, where maternal cortisol stimulates further pCRH production, simultaneously increasing levels of ACTH and cortisol throughout gestation(23). In late gestation, maternal cortisol levels can increase up to threefold compared to nonpregnant levels. This elevation results from the synergistic effects of heightened placental CRH release and increased corticosteroid-binding globulin production, which together sustain elevated free cortisol and overall HPA axis activation during the third trimester (24). Longitudinal studies have shown that high levels of anxiety during pregnancy correlate with a steeper trajectory of maternal cortisol increase (25).

Excessive maternal cortisol exposure may reshape the fetal HPA axis through a process known as *fetal programming*, potentially influencing offspring's stress regulation, neurocognitive function, and metabolic health later in life (26, 27). Such disruptions within the endocrine system not only carry biological consequences but also contribute

to behavioral and emotional disturbances in pregnant women, including heightened aggression, mood instability, and persistent anxiety (28). Moreover, many expectant mothers experience excessive worries about fetal safety, potential complications, and limitations in daily functioning (29). However, these symptoms are often misinterpreted as normal aspects of pregnancy rather than recognized as manifestations of mental health disorders. In fact, mood swings, chronic anxiety, impulsivity, disorientation, and even hallucinations may represent more serious underlying psychiatric conditions that warrant clinical attention (30).

Globally, perinatal anxiety is a significant public health issue. A meta-analysis involving thousands of pregnant women found that 18–25% exhibited notable anxiety symptoms, with around 15% meeting clinical criteria for diagnosis (31). The high rate of moderate to severe anxiety in this study (94.8%) reflects a serious condition that mirrors global trends and warrants comprehensive clinical attention. Hormonal changes during pregnancy particularly increased cortisol and progesterone effect the hypothalamic pituitary adrenal (HPA) axis, which regulates the body's stress response (32). Dysregulation of the HPA axis not only affects maternal mental health but may also compromise fetal development through mechanisms like fetal programming (33).

In response to these challenges, several therapeutic interventions have proven effective. Randomized controlled trials (RCTs) show that mindfulness-based interventions and Cognitive Behavioral Therapy (CBT) can significantly reduce perinatal anxiety. For example, an eight-week mindfulness counseling program reduced anxiety and enhanced positive childbirth perceptions. A four-week digital mindfulness intervention also improved maternal fetal bonding and emotional well-being (Sehwan et al., 2025), although long-term effects varied (34). Group-based CBT has demonstrated sustained benefits up to three months postpartum. Additionally, fluctuations in endocrine hormones such as cortisol, oxytocin, prolactin, progesterone, and thyroid hormones are strongly associated with pregnancy-related anxiety (35).

The high prevalence of anxiety identified in this study highlights an urgent perinatal mental health crisis. This is reinforced by a meta-analysis which reviewed over 23,000 articles involving 221,974 participants from 34 countries and found that anxiety rates increased from 18.2% in the first trimester to 24.6% in the third trimester (36). These findings underscore that perinatal anxiety is a global issue requiring integrated clinical, educational, and policy-level interventions. Anxiety during pregnancy disrupts the hypothalamic-pituitary-adrenal (HPA) axis and elevates circulating cortisol levels. This can impact the developing fetus, altering brain structure such as the amygdala and hippocampus, and even triggering epigenetic adaptations that may influence long-term stress regulation in offspring (37,38).

Mothers' Perception in Seeking Mental Health Support

Based on Table 3, most mothers held a positive perception of mental health support, with 132 respondents (53%) rating their perception as above average. However, 117 respondents (47%) still had unfavorable views toward mental health services. These results are consistent with studies showing that positive attitudes toward mental health are closely linked to greater awareness and knowledge of mental health issues. Therefore, improving access to mental health information is vital for fostering public awareness and reducing stigma. Amid Indonesia's rapid digital transformation, expanding access to psychological education remains a pressing need (39). For instance, perinatal mental health education campaigns have been found to enhance the ability to recognize symptoms and reduce negative perceptions toward postpartum depression (40, 41).

Despite the high prevalence of peripartum mental health issues, few pregnant and postpartum women seek help from midwives only 5.8% for depression and 27.3% for suicidal thoughts. Components like counseling and psychosocial support were often lacking, with up to 69% of mothers not receiving adequate childbirth preparation. This gap may shape mothers' perceptions and experiences, particularly in accessing mental health support during and after pregnancy (42). This reluctance is compounded by limited training and awareness among

healthcare providers, as well as the lack of clear clinical guidelines. These barriers highlight the urgent need to strengthen mental health services in maternity care settings to improve maternal outcomes (43).

A European study further found that midwives often lack confidence and competence in identifying and managing perinatal mental health issues, despite acknowledging their professional responsibility in this area (44). Even in high-income countries like Italy, only 23.7% of midwives fully understand the symptoms of perinatal depression, leading to underdiagnosis and misreferral (45). Digital training programs have proven more effective in reducing perinatal depression symptoms (RR 0.44) compared to face-to-face approaches (RR 0.70), with optimal durations ranging from 3 to 8 days (46). These findings present a promising opportunity to implement digital training for primary healthcare workers in Indonesia, particularly in underserved and remote areas. Finally, stigma whether individual, institutional, or societal continues to be a major barrier to both accessing and delivering perinatal mental health services. Addressing this stigma is essential for building a more responsive and inclusive healthcare system (47).

The Relationship Between Experience and Perception of Mothers in Seeking Mental Health Support

The results **Table 5** of the multivariate logistic regression analysis showed that previous experience with mental health

issues did not significantly influence women's perceptions toward seeking help (p = 0.142; > 0.05). This finding aligns with previous studies who reported that although awareness of perinatal mental health services was moderate, there was no significant correlation between knowledge and awareness of perinatal depression(48). In essence, having knowledge alone does not necessarily promote awareness or encourage helpseeking behavior. Therefore, emotional support and positive reinforcement are essential to facilitate both the provision and acceptance of adequate care.

In many developing countries, mental health remains a low priority. Limited resources, persistent social stigma, and inadequate treatment underscore the urgent need for greater attention to mental health, equal to that given to physical health (49). Although mental health services have been integrated into primary care through facilities such as Community Health Centers (Puskesmas), their implementation remains suboptimal. While 64% of the 8,981 Puskesmas had initiated mental health services by 2011, only 21.47% were functioning effectively(39). These figures point to a critical gap between policy and practice.

Women's reluctance to seek help is also influenced by limited access to healthcare providers, such as doctors and midwives. Research shows mothers voluntarily disclosed emotional problems during medical visits (50). Most stated they would only speak up if directly asked by a provider,

highlighting the need for proactive inquiry and a safe, empathetic communication environment during routine check-ups. Similar challenges are evident in other low- and middle-income countries. In Vietnam, where the prevalence of perinatal mental disorders ranges from 16% to 40%, primary healthcare rarely conducts screenings or provides treatment due to cultural stigma and poorly integrated services (51). In Shanghai, a recent study revealed that nearly half of the women diagnosed with perinatal mental disorders did not seek help at all. Barriers included limited knowledge of services, lack of family or partner support, and economic constraints(52).

Stigma, societal expectations for women to appear "strong," and the absence of social support remain persistent obstacles. These factors are interconnected and require holistic strategies to bridge the gap between knowledge, perception, and actual helpseeking behavior. Strengthening the health-care system's readiness is critical. Training primary healthcare workers particularly through digital or blended learning has proven more effective in reducing perinatal depression symptoms compared to traditional in-person training.

Moreover, community-based strategies such as task-sharing with cadres or non-professional health workers have shown promising results in reaching women with unmet mental health needs. Although this study found that previous experience with mental health issues did not significantly

influence women's perceptions toward seeking help, evidence from recent research highlights several other factors that may play a critical role in shaping perinatal helpseeking behavior but were not examined in this study. Socio-cultural stigma and societal expectations for women to appear "strong" often discourage disclosure of emotional distress; studies from China, the UK, and other LMICs show that women feared judgment, loss of privacy in multigenerational households, or even state intervention when admitting to mental health struggles (53, 54). Structural barriers within healthcare systems further exacerbate these challenges, as limited consultation time, high workloads, and weak policy support reduce opportunities for providers to conduct screening or initiate referral for perinatal mental health conditions (51,55). In addition, low levels of mental health literacy remain a consistent obstacle; in India, for instance, fewer than 10% of respondents could identify perinatal depression symptoms, reflecting how poor recognition contributes to underutilization of available services(56).

Interpersonal dynamics also strongly influence women's decisions, with family members particularly husbands and in laws acting as gatekeepers who may either facilitate or hinder help-seeking, while inadequate spousal or social support is linked to persistent symptoms and reduced treatment uptake (40,57). Practical barriers such as childcare responsibilities, financial constraints, transportation difficulties, and

distance to facilities are also widely reported, especially in LMICs, including Indonesia where many community health centers (Puskesmas) have administratively integrated mental health services but only a fraction function effectively in practice (39,58).

CONCLUSION AND RECOMMENDATION

Based on the findings of this study, no significant relationship was observed between mothers' previous experiences with mental health disorders particularly anxiety and their perceptions of seeking mental health support during pregnancy and up to two years postpartum. Although the majority of respondents reported moderate to severe anxiety, this condition did not necessarily translate into a stronger perception of the importance of seeking professional help. Several factors may explain this lack of association.

First, many mothers may not recognize their symptoms as indicative of a mental health disorder, since manifestations such as mood swings, persistent worry, or fatigue are often normalized during pregnancy and the postpartum period. Second, persistent social stigma and feelings of shame may discourage disclosure of emotional struggles, leading mothers to internalize their conditions rather than seeking assistance. Third, structural barriers, including limited access to mental health services and inadequate dissemination of information, further hinder professional help-seeking. Fourth, mothers

often rely more heavily on informal support networks such as family or peers rather than consulting healthcare professionals. Finally, this study found that educational attainment significantly shaped perceptions, where mothers with lower educational backgrounds demonstrated more limited understanding of mental health issues and reduced awareness of available services.

In light of these findings, several recommendations can be drawn. Perinatal mental health education should be tailored to different educational levels to enhance awareness and foster positive perceptions regarding professional support-seeking. Healthcare providers, especially those in primary care, should receive targeted training to identify symptoms early and communicate information in culturally sensitive and accessible ways.

Moreover, anti-stigma campaigns need to be expanded through mass media, digital platforms, and community-based initiatives to normalize conversations around perinatal mental health. Future research is encouraged to explore socio-cultural and interpersonal factors including family dynamics, partner support, and cultural expectations that may further influence maternal help-seeking behavior. Longitudinal and mixed-method approaches are particularly recommended to capture temporal changes and provide deeper insight into causal mechanisms.

REFERENCES

- Sperati A, Passaquindici I, Persico ME, Di Matteo C, Fasolo M, Lionetti F, et al. Maternal depression during the peri natal period: the role of Sensory Process ing Sensitivity and social support and its impact on infants' negative affect. Frontiers in Psychology. 2025 Mar 20; 16: 1551016.
- Alini A, Meisyalla LN, Novrika B. Faktor-faktor yang Berhubungan dengan Kesehatan Mental Ibu Hamil di Desa Pulau Rambai. Jurnal Ners. 2024; 8(1): 178–86. https://doi.org/10.31004/jn.v8i1.23506
- Della Vedova AM, Santoniccolo F, Sechi C, Trombetta T. Perinatal Depression and Anxiety Symptoms, Parental Bonding and Dyadic Sensitivity in Mother–Baby Interactions at Three Months Post-Partum. International Journal of Environmental Research and Public Health. 2023 Feb 27;20(5):4253. https://doi.org/10.3390/ijerph20054253
- Pascal R, Casas I, Genero M, Nakaki A, Youssef L, Larroya M, et al. Maternal Stress, Anxiety, Well-Being, and Sleep Quality in Pregnant Women throughout Gestation. Journal of Clinical Medicine. 2023 Nov 26;12(23):7333. https:// doi.org/10.3390/jcm12237333
- The American College of Obstetricians and Gynecologists. Anxiety and Preg nancy [Internet]. 2024. Available from: https://www.acog.org/womens-health/ faqs/anxiety-and-pregnancy

- 6. Mei X, Du P, Li Y, Mei R, Wang X, Chen Q, et al. Fear of childbirth and sleep quality among pregnant women: a generalized additive model and moderated media tion analysis. BMC Psychiatry. 2023 Dec 11;23(1):931.
- Wallace K, Araji S. An Overview of Maternal Anxiety During Pregnancy and the Post-Partum Period. Journal of Mental Health & Clinical Psychology. 2020 Nov 1;4(4):47–56. https://doi.org/ 10.29245/2578-2959/2020/4.1221
- Ayers S, Sinesi A, Meade R, Cheyne H, Maxwell M, Best C, et al. Prevalence and treatment of perinatal anxiety: diagnostic interview study. BJPsych Open. 2025 Jan;11(1):e5. https:// doi.org/10.1192/bjo.2024.823
- Liu Y, Guo N, Li T, Zhuang W, Jiang H. Prevalence and Associated Factors of Postpartum Anxiety and Depression Symptoms Among Women in Shanghai, China. Journal of Affective Disorders. 2020 Sep;274:848–56. https://doi.org/ 10.1016/j.jad.2020.05.028
- Hastanti H, Budiono B, Febriyana N. Primigravida Memiliki Kecemasan Yang Lebih Saat Kehamilan. Indonesian Midwifery and Health Sciences Journal. 2021 Jun 23;3(2):167–78. https://doi.org/10.20473/imhsj.v3i2.2019.167-178
- Wallace K, Araji S. An Overview of Maternal Anxiety During Pregnancy and the Post-Partum Period. Journal of Mental Health & Clinical Psychology.

- 2020 Nov 1;4(4):47–56. https://doi.org/ 10.29245/2578-2959/2020/4.1221
- Matsas A, Panopoulou P, Antoniou N, Bargiota A, Gryparis A, Vrachnis N, et al. Chronic Stress in Pregnancy Is Associa ted with Low Birth Weight: A Meta-Analysis. Journal of Clinical Medicine. 2023 Dec 14;12(24):7686. https:// doi.org/10.3390/jcm12247686
- Howard LM, Khalifeh H. Perinatal mental health: a review of progress and challenges. World Psychiatry. 2020 Oct; 19(3): 313–27. https://doi.org/10.1002/ wps.20769
- 14. Hennessey EMP, Swales DA, Markant J, Hoffman MC, Hankin BL, Davis EP. Maternal anxiety during pregnancy predicts infant attention to affective faces. Journal of Affective Disorders. 2024 Jan;344:104–14. https://doi.org/ 10.1016/j.jad.2023.09.031
- 15. Thi LM, Manzano A, Ha BTT, Vui LT, Quynh-Chi NT, Duong DTT, et al. Mental health stigma and health-seeking behaviors amongst pregnant women in Vietnam: a mixed-method realist study. International Journal for Equity in Health. 2024 Aug 16;23(1):163. https://doi.org/10.1186/s12939-024-02250-z
- 16. Place JMS, Renbarger K, Van De Griend K, Guinn M, Wheatley C, Holmes O. Barriers to help-seeking for postpartum depression mapped onto the socioecological model and recommendations to address barriers. Frontiers in Global Women's Health. 2024 May 24;5:

- 1335437. https://doi.org/10.3389/fgwh. 2024.1335437
- 17. Prihartanti T, Khodijah Parinduri S, Masitha Arsyati A. Evaluasi Pelaksa naan Program Upaya Kesehatan Jiwa Di Puskesmas Sindang Barang Kota Bogor Provinsi Jawa Barat Tahun 2020. Promotor. 2021 Oct 20;4(4):380–94. https://doi.org/10.32832/pro.v4i4.5605
- PoiData.io. How many Psychiatric hospitals are in Indonesia? PoiData.io; 2025.
- 19. Munira L, Liamputtong P, Viwatta nakulvanid P. Barriers and facilitators to access mental health services among people with mental disorders in Indonesia: A qualitative study. Belitung Nursing Journal. 2023 Apr 18;9(2): 110-7. https://doi.org/10.33546/bnj.2521
- 20. Wahdi AE, Astrini YP, Setyawan A, Fine SL, Ramaiya A, Li M, et al. Mental health service use among adolescents in three low- and middle-income countries: An analysis of the National Adolescent Mental Health Surveys. Child and Adolescent Psychiatry and Mental Health. 2025 Jul 31;19(S1):84.
- 21. Nielsen-Scott M, Fellmeth G, Opondo C, Alderdice F. Prevalence of perinatal anxiety in low- and middle-income countries: A systematic review and meta-analysis. Journal of Affective Disorders. 2022 Jun;306:71–9. https://doi.org/10.1016/j.jad.2022.03.032
- 22. Yang L, Sun J, Nan Y, Waqas A, Nisar A, Wang D, et al. Prevalence of perinatal

- anxiety and its determinants in mainland China: A systematic review and metaanalysis. Journal of Affective Disorders. 2023 Feb;323:193-203. https://doi.org/ 10.1016/j.jad.2022.11.075
- 23. Rinne GR, Hartstein J, Guardino CM, Dunkel Schetter C. Stress before conception and during pregnancy and maternal cortisol during pregnancy: A scoping review. Psychoneuroendo crinology. 2023 Jul;153:106115. https:// doi.org/10.1016/j.psyneuen.2023.1061 15
- 24. Hantsoo L, Jagodnik KM, Novick AM, Baweja R, Di Scalea TL, Ozerdem A, et al. The role of the hypothalamic-pituitary-adrenal axis in depression across the female reproductive lifecycle: current knowledge and future directions. Frontiers in Endocrinology. 2023 Dec 12;14:1295261. https://doi.org/10.33 89/fendo.2023.1295261
- 25. Peterson GF, Espel EV, Davis EP, Sandman CA, Glynn LM. Characterizing prenatal maternal distress with unique prenatal cortisol trajectories. Health Psychology. 2020 Nov;39(11):1013–9.
- 26. Irwin JL, Meyering AL, Peterson G, Glynn LM, Sandman CA, Hicks LM, et al. Maternal prenatal cortisol programs the infant hypothalamic–pituitary–adrenal axis. Psychoneuroendocrinology. 2021 Mar;125:105106.
- 27. Womack SR, Murphy HR, Arnold MS, Duberstein ZT, Best M, Qiu X, et al. Timing sensitivity of prenatal cortisol

- exposure and neurocognitive development. Development and Psychopatho logy. 2024 Nov 6;1–14.
- Syahfitri W, Putra DP. Kesehatan Mental Warga Binaan di Lembaga Pembinaan Khusus Anak. JRTI (Jurnal Riset Tinda kan Indonesia). 2021 Nov 13;6(2):226.
- 29. Corchero-Falcón MDR, Gómez-Salgado J, García-Iglesias JJ, Camacho-Vega JC, Fagundo-Rivera J, Carrasco-González AM. Risk Factors for Working Pregnant Women and Potential Adverse Consequences of Exposure: A Syste matic Review. International Journal of Public Health. 2023 Feb 16;68:16056 55.
- 30. Abdelhafez MohsenMA, Ahmed Karim A M, Ahmed NashwaAM, Ismail M, Mohd Daud MNB, Ping NPT, et al. Psychiatric illness and pregnancy: A literature review. Heliyon. 2023 Nov;9(11):e20 958. https://doi.org/10.1016/j.heliyon. 2023.e20958
- 31. Green EC, Murphy EM, Gryboski K. The Health Belief Model. In: Sweeny K, Robbins ML, Cohen LM, editors. The Wiley Encyclopedia of Health Psychology [Internet]. 1st ed. Wiley; 2020 [cited 2025 Mar 13]. p. 211–4. Available from: https://onlinelibrary.wiley.com/doi/10.10 02/9781119057840.ch68
- 32. Mbiydzenyuy NE, Qulu LA. Stress, hypothalamic-pituitary-adrenal axis, hypothalamic-pituitary-gonadal axis, and aggression. Metabolic Brain Disease. 2024 Jul 31;39(8):1613–36.

- https://doi.org/10.1007/s11011-024-013
- 33. Ruffaner-Hanson C, Noor S, Sun MS, Solomon E, Marquez LE, Rodriguez DE, et al. The maternal-placental-fetal interface: Adaptations of the HPA axis and immune mediators following maternal stress and prenatal alcohol exposure. Experimental Neurology. 2022 Sep;355:114121. https://doi.org/10.1016/j.expneurol.2022.114121
- 34. Leng LL, Yin XC, Ng SM. Mindfulness-based intervention for clinical and subthreshold perinatal depression and anxiety: A systematic review and meta-analysis of randomized controlled trial. Comprehensive Psychiatry. 2023 Apr; 122: 152375.
- 35. Mikolajkow A, Małyszczak K. Biological factors and consequences of preg nancy-related anxiety What do we know so far? Psychiatria Polska. 2022 Dec 31;56(6):1289–314. https://doi.org/10.12740/PP/144138
- 36. Mahini E, Hakimi S, Shahrokhi H, Salahi B, Baniadam KO, Ranjbar F. Evaluation of factors related to maternal anxiety during pregnancy among women referred to Tabriz primary care centers. BMC Psychiatry. 2023 May 10; 23(1): 329. https://doi.org/10.1186/s12888-023-04823-8
- 37. Franke K, Van Den Bergh BRH, De Rooij SR, Kroegel N, Nathanielsz PW, Rakers F, et al. Effects of maternal stress and nutrient restriction during gestation on

- offspring neuroanatomy in humans. Neuroscience & Biobehavioral Reviews. 2020 Oct;117:5–25. https://doi.org/ 10.1016/j.neubiorev.2020.01.031
- 38. Szyf M. Perinatal stress and epigenetics. In: Handbook of Clinical Neurology [Internet]. Elsevier; 2021 [cited 2025 Sep 3]. p. 125–48. Available from: https://linkinghub.elsevier.com/retrieve/ pii/B9780128201077000082
- 39. Savitri EN, Hayati EN, Daryanti MS. Scoping Review: Layanan Perinatal Mental Health oleh Bidan di Negara ASEAN. Jurnal Kesehatan Manarang. 2022 Aug 25;8(2):115. https://doi.org/10.33490/jkm.v8i2.479
- 40. Daehn D, Rudolf S, Pawils S, Renne berg B. Perinatal mental health literacy: knowledge, attitudes, and help-seeking among perinatal women and the public a systematic review. BMC Pregnancy Childbirth. 2022 Dec;22(1):574.
- 41. Ismail NA, Kusumaningtyas I, Firngadi MSK. Self-diagnose is associated with knowledge and attitude towards mental illness of university students in Indo nesia. The Egyptian Journal of Neuro logy, Psychiatry and Neurosurgery. 2023 Nov 28;59(1):162.
- 42. Faozi BF, Wijaya M, Sukandar H. Relationship characteristic of midwife in pregnancy services and patient satis faction In Public Health Center, Soreang, Bandung. JNKI (Jurnal Ners dan Kebidanan Indonesia) (Indonesian Journal of Nursing and Midwifery). 2022

- May 31;10(1):48. http://dx.doi.org/10. 21927/jnki.2022.10(1).48-54
- 43. Amarasinghe, Agampodi. Help-seeking intention for depression and suicidal ideation during pregnancy and post partum in rural Sri Lanka, a cross-sectional study. RRH [Internet]. 2022 Sep 5 [cited 2025 Mar 13]; Available from: https://www.rrh.org.au/journal/article/7273
- 44. Dubreucq M, Dupont C, Lambregtse-Van Den Berg MP, Bramer WM, Massoubre C, Dubreucq J. A systematic review of midwives' training needs in perinatal mental health and related interventions. Frontiers in Psychiatry. 2024 Apr 22; 15: 1345738. https://doi.org/10.3389/fpsyt. 2024.1345738
- 45. Ravaldi C, Mosconi L, Crescioli G, Lombardo G, Russo I, Morese A, et al. Are midwives trained to recognise peri natal depression symptoms? Results of MAMA (MAternal Mood Assessment) cross-sectional survey in Italy. Archives of Women's Mental Health. 2024 Aug; 27(4):567-76. https://doi.org/10.1007/s00737-024-01439-z
- 46. Wang WL, Hung HY, Chen YR, Chen KH, Yang SN, Chu CM, et al. Effect of Foot Reflexology Intervention on Depression, Anxiety, and Sleep Quality in Adults: A Meta-Analysis and Metaregression of Randomized Controlled Trials. Litscher G, editor. Evidence-Based Complemen tary and Alternative Medicine. 2020 Jan;2020(1):2654353. https://doi.org/

- 10.1155/2020/2654353
- 47. Marshman A, Saunders E, Chaves D, Morton Ninomiya ME. Barriers to perinatal mental health care experi ences by midwives and obstetricians and their patients: A rapid review. Mid wifery. 2023 Feb;117:103544. https:// doi.org/10.1016/j.midw.2022.103544
- 48. Hassan NA, Izzati N, R, Arifin SRM, Samsudin SB. Healthcare Practitioners' Knowledge And Awareness On Peri natal Depression In Kuantan, Pahang, Malaysia. International Journal of Psychosocial Rehabilitation. 2020 Feb 28;24(04):2530–7. http://dx.doi.org/10.37200/IJPR/V24I4/PR201360
- 49. Basrowi RW, Wiguna T, Samah K, Dju wita F Moeloek N, Soetrisno M, Purwanto SA, et al. Exploring Mental Health Issues and Priorities in Indonesia Through Qualitative Expert Consensus. Clinical Practice & Epidemiology in Mental Health. 2024 Nov 7;20(1): e174 50179331951. https://doi.org/10.2174/0117450179331951241022175443
- 50. Kuipers YJ, Beeck EV, Cijsouw A, Van Gils Y. The impact of motherhood on the course of women's psychological wellbeing. Journal of Affective Disorders Reports. 2021 Dec;6:100216. http:// dx.doi.org/10.1016/j.jadr.2021.100216
- 51. Trang DTH, Ha BTT, Vui LT, Chi NTQ, Thi LM, Duong DTT, et al. Understanding the barriers to integrating maternal and mental health at primary health care in Vietnam. Health Policy and Planning.

- 2024 Jun 3;39(6):541–51.
- 52. Zhu Z, Wang H, Zhu T, Wang Z, Shen Y, Xiong C, et al. Mental health service utilization among pregnant and post partum women: status, determinants, and insights from a mixed-methods study. BMC Public Health. 2025 May 26;25(1):1942.
- 53. Rinne GR, Hartstein J, Guardino CM, Dunkel Schetter C. Stress before conception and during pregnancy and maternal cortisol during pregnancy: A scoping review. Psychoneuroendo crinology. 2023 Jul;153:106115. https:// doi.org/10.1016/j.psyneuen.2023.1061 15
- 54. Xue W, Cheng KK, Liu L, Li Q, Jin X, Yi J, et al. Barriers and facilitators for referring women with positive perinatal depression screening results in China: a qualitative study. BMC Pregnancy Childbirth. 2023 Apr 5;23(1):230.
- 55. Baldisserotto ML, Miranda Theme M, Gomez LY, Dos Reis TBQ. Barriers to Seeking and Accepting Treatment for Perinatal Depression: A Qualitative

- Study in Rio de Janeiro, Brazil. Community Ment Health J. 2020 Jan; 56(1):99–106. https://doi.org/10.1007/s10597-019-00450-4
- 56. Ransing R, Kukreti P, Deshpande S, Godake S, Neelam N, Raghuveer P, et al. Perinatal depression–knowledge gap among service providers and service utilizers in India. Asian Journal of Psychiatry. 2020 Jan;47:101822. https://doi.org/10.1016/j.ajp.2019.10.00
- 57. Dutta GK, Sarker BK, Ahmed HU, Bhattacharyya DS, Rahman MdM, Majumder R, et al. Mental healthcareseeking behavior during the perinatal period among women in rural Bangla desh. BMC Health Services Research. 2022 Dec;22(1):310.
- 58. Sajjad A, Shah S, Abbas G, Aslam A, Randhawa F, Khurram H, et al. Treat ment gap and barriers to access mental healthcare among women with post partum depression symptoms in Pakis tan. PeerJ. 2024 Jul 18; 12: e17711. https://doi.org/10.7717/peerj.17711