ORIGINAL RESEARCH ARTICLE

Mapping Barriers to Help-Seeking for Perinatal Depression Among Urban and Rural Women in Odisha, India

Deepanjali Behera[1], Manas Ranjan Behera[2*], Jogita Khamari[3], Simanchal Behera[4]

[1,2,3]School of Public Health, Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, Bhubaneswar, India
[4]Department of Library & Information Science, School of Liberal Studies, Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, Bhubaneswar, Odisha, India

DOI: 10.55489/njcm.161020255820

ABSTRACT

Background: Mental health concerns during the perinatal period are a growing global issue, particularly in low-resource settings like India, where cultural and social factors shape women's responses to emotional distress. The study aimed to examine help-seeking behaviours among perinatal women with depression in rural and urban areas of Khordha district, Odisha, and to identify barriers to accessing both formal and informal sources of support.

Methodology: A community-based cross-sectional study was conducted between August and November 2024 among 642 pregnant and postpartum women aged 18 years and above, selected through multistage sampling. The Patient Health Questionnaire-9 (PHQ-9) and the Multidimensional Scale of Perceived Social Support (MSPSS) were used for screening and assessment. Of the total, 193 women with depressive symptoms were included for analysing help-seeking patterns using SPSS version 25.

Results: Rural women were more likely to seek support from healthcare providers and family members, while both groups reported barriers such as stigma, lack of awareness, and distance to health facilities. Emotional distress was frequently linked to financial concerns, overthinking, and family disputes.

Conclusion: Addressing maternal mental health requires context-specific strategies that reduce stigma, increase awareness, and improve access to care in both urban and rural communities.

Keywords: Depression, Pregnancy, Prevalence, Help-seeking behaviour, Barrier, India

ARTICLE INFO

Financial Support: This research project (No. 02/72/2022-23/ICSSR/RP/MJ/GEN) was gratefully received from the Indian Council of Social Science Research (ICSSR), Ministry of Education, Government of India.

Conflict of Interest: The authors have declared that no conflict of interests exists.

Received: 26-07-2025, **Accepted**: 06-09-2025, **Published**: 01-10-2025

***Correspondence:** Prof (Dr) Manas Ranjan Behera (Email: b.manas03@gmail.com)

How to cite this article: Behera D, Behera MR, Khamari J, Behera S. Mapping Barriers to Help-Seeking for Perinatal Depression Among Urban and Rural Women in Odisha, India. Natl J Community Med 2025;16(10):989-998. DOI: 10.55489/njcm.161020255820

www.njcmindia.com | pISSN: 0976-3325 | eISSN: 2229-6816 | Published by Medsci Publications

Introduction

Perinatal depression (PND) is a widespread mental health condition that arises during pregnancy and extends up to one year postpartum. It is primarily triggered by hormonal changes, emotional stress, and psychological adjustments that occur during this transitional phase.[1-3] While extensively studied in high-income countries, perinatal depression remains a critical public health concern in low- and middle-income countries (LMICs), where healthcare access and mental health services are often limited.[3-6]

According to the World Health Organization, approximately 10% of pregnant women and 13% of postpartum women globally experience mental health disorders, with depression being the most prevalent.[7] PND adversely affects not only the mother but also the child and family. It can result in poor maternal-infant bonding, low birth weight, preterm birth, and developmental delays in children, along with strained family relationships.[8]

Studies indicate that the burden of perinatal depression is higher in LMICs compared to high-income nations. In India, a systematic review estimated the pooled prevalence of postpartum depression at 22%,[9] while antenatal depression ranged widely from 9.18% to 65%.[10]

The transition to motherhood involves a profound psychosocial shift, significantly shaping a woman's self-perception and identity. This phase is marked by emotional, physical, and social changes that often compel a redefinition of personal roles and responsibilities. The complexity of this transformation can contribute to the onset of perinatal depression (PND), which includes both antenatal and postnatal depressive episodes.[11-13] During this period, women assume new caregiving roles, experience evolving family dynamics, and adjust to shifting interpersonal relationships, all of which can increase susceptibility to psychological distress.[11,14] Those with a history of mental illness or facing challenges such as domestic violence, chronic health conditions, economic hardship, or job insecurity are particularly at risk.[15,16] Alarmingly, suicide has emerged as a leading cause of maternal mortality during the perinatal period.[17]

PND is linked with adverse outcomes including poor self-care, inadequate nutrition, preterm birth, and negative obstetric events.[18-20] Postpartum depression may further lead to suicidal ideation and harm, weaken the maternal-infant bond, and impair a child's emotional, cognitive, and physical development. It may also lead to tension within intimate relationships and family structures.[16,21-23]

Despite its far-reaching consequences, help-seeking for PND remains limited, especially in LMICs like India. Factors such as mental health stigma, lack of awareness, cultural misconceptions, and poor healthcare access contribute to under diagnosis and untreated cases.[24,25]

Odisha, a low- and middle-income state in eastern India, has limited research on perinatal mental health, particularly regarding antenatal and postnatal depression. Evidence suggests higher rates of depressive symptoms during early and late pregnancy.[26] In this resource-constrained context, factors such as low mental health awareness, cultural stigma, and poor access to specialized care hinder timely diagnosis and treatment. Fear of social judgment and misconceptions about mental illness further discourage women from seeking help. Existing studies often address rural or urban populations separately, offering limited comparative analysis. This study aims to investigate help-seeking behaviours and barriers among both rural and urban women in Odisha.

Methodology

Study design, area, and period: A community-based cross-sectional study was conducted in the Khordha district of Odisha from August to November 2024, enrolling 642 women through multi-stage sampling procedure. Of these, 193 women screened positive for depressive symptoms and were further assessed to explore help-seeking behaviours and barriers related to perinatal depression during the same period.

Background of Khordha district: This study was conducted in the Khordha district, located in the south-eastern part of Odisha, a mining-rich state with a high poverty index in India.[27] According to the 2011 census, the population of Khordha is 1,167,357, with a sex ratio of 959 females for every 1,000 males. Notably, 37.3% of women in the district undergo caesarean section deliveries, while 91% and 93% of women report attending antenatal and postnatal care visits, respectively. These figures represent a substantial improvement compared to National Family Health Survey (NFHS-4) data. The district comprises of two urban areas and 10 rural administrative blocks.

Study population: The study population included females in the pregnant and postnatal periods, residing in both rural and urban areas.

Eligibility criteria: The study included women aged 18 and above who were either pregnant or had a child under one year of age, provided they understood and spoke the Odia language and consented to participate. Further, the women of the age group of below 18 years, those with children older than one year and not pregnant, not give consent, and those who are with their incomplete responses, were excluded. Additionally, women who did not understand or speak the Odia language were also excluded.

Sample size estimation: The sample size was estimated using the formula for the difference in two prevalence proportions with a 95% confidence interval and 80% power. The calculation employed the formula,

$$N(\text{sample}) = \frac{(Z\alpha/2 + Z\beta) \times [P1(1-P1) + P2(1-P2)]}{(P1 - P2)2}$$

Where, **N**= required sample size per group, **Zα/2** = standard normal deviate for significance level (1.96 for 95% CI), **Zβ** = standard normal deviate for desired power, $\mathbf{P_1}$=estimated prevalence in rural women, $\mathbf{P_2}$=estimated prevalence in urban women, $\mathbf{P_1 - P_2}$ = expected difference between the two groups. The reported prevalence of perinatal depression among rural (18%)[28] and urban (39%)[29] women in India was used as the reference. Although the main objective is to examine health-seeking behaviours and barriers, prevalence was chosen because identifying women with depressive symptoms was the entry point for these analyses.

The base calculation yielded 69 participants per group. To account for potential clustering, a design effect of 2 was applied, following conventions used in similar public health surveys in the absence of empirical intraclass correlation coefficient estimates for the study population. Additionally, a 20% non-response rate was included, resulting in 166 participants per group. For operational considerations and to ensure a sufficient number of women with depressive symptoms for analyzing health-seeking behaviours and barriers, the sample was further doubled and rounded to 332 participants per group, giving a total sample of 664 women. This approach ensured both adequate power to detect group differences and sufficient cases of depression for subsequent analyses.

Sampling technique: This study employed a multi-stage sampling strategy to recruit perinatal women. In the first stage, Khordha district was conveniently selected from among the 30 districts of Odisha, considering its urban–rural heterogeneity, accessibility, and logistical convenience. In the second stage, Bhubaneswar city was selected for the urban study area out of the two urban areas and two rural blocks were randomly selected from the ten rural blocks in Khordha district. During the third stage, four Urban Primary Health Centres (UPHCs) were selected from Bhubaneswar city and two Rural Primary Health Centre (RPHCs) were chosen from each rural block, forming total of four RPHCs and these were chosen through random sampling. In the fourth stage, two urban wards were selected under each UPHCs and two Sub-Centres (SCs) were selected from each RPHCs forming total eight urban wards under the four selected UPHCs and eight SCs under the four RPHCs and these were also selected by using simple random sampling. Subsequently, in the fifth stage, all eligible pregnant and postpartum women registered with the selected health facilities in both urban and rural areas were identified and invited to participate in the study. All eligible women who agreed to participate in the study were screened for depression using the PHQ-9 tool. Those who screened positive for having depression were interviewed about their help-seeking behaviours and barriers related to perinatal depression. The use of a structured and stepwise sampling approach ensured a representative selection across the study populations. A detailed schematic of the sampling process is presented in Fig 1.

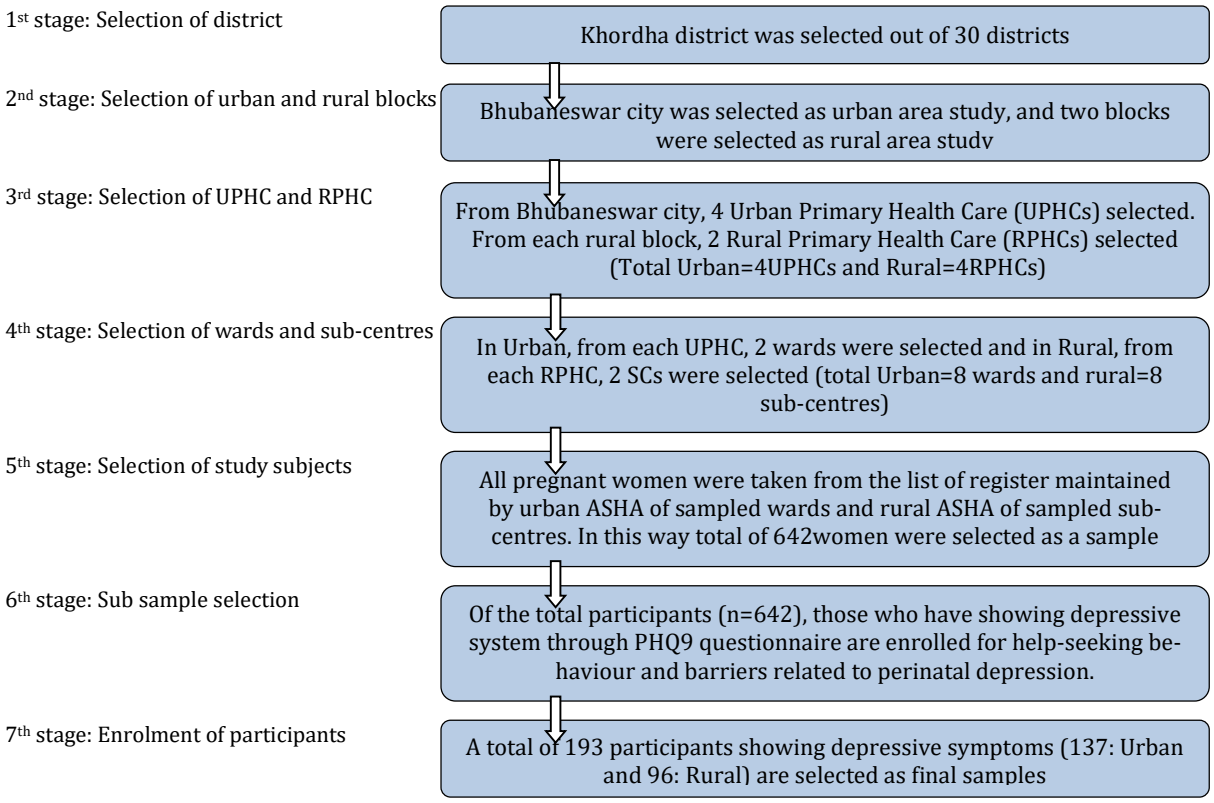

Figure 1: Flow diagram of the multi-stage sampling technique

Data Collection Tools and its measurement: Three research tools were used for data collection. To know the socio-demographic characteristics of the participants, various questions were used in the first part. In this part, the questions included their age, qualifications, occupations, monthly income, religion, and number of family members. Further, obstetric history, maternal history of previous mental illness, family history of mental disorders, the presence of social support during the perinatal period, and domestic violence, etc were also sought for. To determine social support details, the 30-item Multidimensional Scale of Perceived Social Support (MSPSS)[30] was used to identify the presence of social support and the individual receiving it. The MSPSS is a 12-item instrument in which individuals respond using a 7-point Likert scale, ranging from 1 ("very strongly disagree") to 7 ("very strongly agree"). The scale generates a mean score ranging from 1 to 7, with specific thresholds for categorization: scores between 1 and 2.9 indicate low social support, scores between 3 and 5 reflect moderate support, and scores from 5.1 to 7 signify high support.

In the second part, to screen for perinatal women's depression, the Patient Health Questionnaire 9 (PHQ-9)[31] tool was used, which consisted of 9 questions with a total score ranging from 0 to 27. If the PHQ 9 value is 5 and above, then the data collector collects information on the barrier to help-seeking of perinatal depression, with a specific point for categorization: scores between 0 to 4 signify none or minimal depression, scores between 5 to 9 indicate mild depression, scores between 10-14 reflect moderate depression, score between 15-19 signify moderately severe depression, and score between 20-27 indicate severe depression. In the third part, a structured questionnaire was used to collect information on the independent variables and barriers to help-seeking for perinatal depression. Meanwhile, the History of depression and domestic violence was self-reported by participants. The history of depression was assessed using a binary response format (Yes/No) based on whether participants reported a previous experience of depressive episodes. Similarly, exposure to domestic violence was evaluated by determining the presence or absence of physical and verbal abuse.

Data Quality control and data processing: The questionnaire was prepared in English and translated into the local Odia language through a native expert. To maintain the consistency of the ideas, another individual again back-translated into English. A further two-day training session for data collectors was conducted for the field investigators to understand the data collection procedures. At the time of data collection, both field investigators and supervisors have been checking every day's collected data for its completeness. After data collection, the investigators rechecked the data to ensure accuracy and eliminate inconsistencies. Once verified, the data were entered into SPSS version 25 for analysis, ensuring reliability and precision in subsequent statistical procedures.

Data management and analysis: Data analysis was performed using SPSS version 25. Descriptive statistics were computed to summarize all variables and it has presented through frequencies and percentages. For the specific objective of this study, descriptive statistical methods, including frequencies and percentages were calculated to assess help-seeking behaviours and associated barriers associated with perinatal depression, with particular emphasis on identifying barriers to both formal and informal help-seeking. Further, Chi-square test was used to compare the rural and urban mothers, particularly for help-seeking behaviours and barriers to seeking treatment and p-value <0.05 was considered as statistically significant.

Ethical consideration: The Institutional Review Board of Kalinga Institute of Industrial Technology (KIIT) deemed to be University, was granted ethical approval of this study (Ref No: KIIT/KIMS/IEC/1438/2023, Approval date: 14/11/2023). Informed consent was obtained from all participants who were willing to participate in this study. Anonymity and confidentiality were maintained for the participants through-out the study. The study was conducted in accordance with Helsinki declaration.

RESULTS

The study aimed to recruit 664 participants, of whom 642 consented, resulting in a 96.7% response rate. From these 193 participants, it was found that to were depressed through the PHQ-9 score. Table 1 shows the demographic and socioeconomic characteristics of 193 mothers, with 137 found in urban areas and 56 found in rural areas. Majority of mothers are aged ≥25 years (61.7%), with similar distributions observed in urban (61.3%) and rural (62.5%) populations. Education levels indicate that 64.2% of mothers have primary education, with comparable proportions in urban (64.2%) and rural (64.3%) areas. Family income is notably higher among urban mothers, with 63.5% reporting earnings of ≥15000, compared to 51.8% in rural areas. Unemployment remains prevalent (78.8%), with a significantly higher rate in rural areas (91.1%) than in urban areas (73.7%). The caste distribution is evenly split, with 50.3% identifying as a general caste and 49.7% as a backward caste. Most participants identify as Hindu (78.8%), with a slightly higher proportion in urban (81.0%) than in rural (73.2%) areas. Additionally, pregnancy status reveals that 73.1% of participants are pregnant, with a higher prevalence in urban areas (81.0%) compared to rural areas (53.6%). Conversely, postpartum mothers are more common in rural areas (46.4%) than in urban areas (19.0%). A history of depression is reported by 46.1% of mothers, with similar rates in urban (45.3%) and rural (48.2%) populations. Family history of depression is

more prevalent in rural areas (28.6%) compared to urban areas (21.2%). Domestic violence is reported by 18.7% of participants, with a higher incidence in urban areas (20.4%) than in rural areas (14.3%). Meanwhile, Social support is predominantly high (53.9%), with rural mothers (58.9%) reporting slightly higher levels of support than urban mothers (51.8%).

Table 2 outlines the association between the perceptions of support-seeking and the causes of emotional problems using a chi-square analysis test. A majority sought help from medical officers at nearby health facilities, with rural mothers (85.7%) reporting higher reliance than urban mothers (75.9%). Support from psychiatric specialists was low in both groups. Rural participants more often sought help from gynaecologists, community health workers, and faith healers than urban counterparts. Family support appeared more prominent in rural areas, where women reported seeking more support from their husband (80.4% in rural areas vs. 63.5% in urban areas) and from their mothers or sisters (76.8% vs. 52.6%) and this association is found to be statistically significant. Support from in-laws was also higher in rural areas (48.2%) than urban (33.6%). Few participants in either group sought support from friends or neighbours. Regarding emotional problem causes, "too much thinking" and financial difficulties were commonly reported across both groups. Rural mothers more frequently cited family conflicts (60.7% vs. 38.7%) and lack of family support (60.7% vs. 45.3%), with family conflict showing statistical significance.

Table 3 evaluated opinions regarding the need for medical treatment for emotional problems among 137 urban and 56 rural mothers. Majority of participants in both the groups acknowledge the importance of medical intervention, with 57.7% of urban and 53.6% of rural mothers believing that treatment is "very much required."

Table 1. Sociodemographic characteristics of depressed perinatal women in Khordha district(N=193)

Sociodemographic characteristics	Place of residency		Total (%) (N=193)
	Urban (%) (N=137)	Rural (%) (N=56)	
Age of the mothers			
<25 years	53 (38.7)	21 (37.5)	74 (38.3)
≥25 years	84 (61.3)	35 (62.5)	119 (61.7)
Education of mother			
Primary education	88 (64.2)	36 (64.3)	124 (64.2)
Higher education	49 (35.8)	20 (35.7)	69 (35.8)
Family income			
< INR 15000	50 (36.5)	27 (48.2)	77 (39.9)
≥ INR 15000	87 (63.5)	29 (51.8)	116 (60.1)
Employment status			
No	101 (73.7)	51 (91.1)	152 (78.8)
Yes	36 (26.3)	5 (8.9)	41 (21.2)
Caste			
General	69 (50.4)	28 (50.0)	97 (50.3)
Backward caste	68 (49.6)	28 (50.0)	96 (49.7)
Religion			
Hindu	111 (81.0)	41 (73.2)	152 (78.8)
Muslim/Christian	26 (19.0)	15 (26.8)	41 (21.2)
Pregnancy status			
Pregnant	111 (81.0)	30 (53.6)	141 (73.1)
Postpartum	26 (19.0)	26 (46.4)	52 (26.9)
History of depression			
No	75 (54.7)	29 (51.8)	104 (53.9)
Yes	62 (45.3)	27 (48.2)	89 (46.1)
Family history of depression			
No	108 (78.8)	40 (71.4)	148 (76.7)
Yes	29 (21.2)	16 (28.6)	45 (23.3)
Domestic violence			
No	109 (79.6)	48 (85.7)	157 (81.3)
Yes	28 (20.4)	8 (14.3)	36 (18.7)
Social support			
Low	9 (6.6)	5 (8.9)	14 (7.3)
Moderate	57 (41.6)	18 (32.1)	75 (38.9)
High	71 (51.8)	33 (58.9)	104 (53.9)

Table 2 Distribution of the perception of seeking support and the causes of emotional problems among study participants (N=193)

Perception of seeking support and the causes of emotional problems	Urban (%) (N=137)	Rural (%) (N=56)	p-value
Perception about seeking support during emotional problems			
Seek support from a medical officer at the nearby health facility	104 (75.9)	48 (85.7)	0.131
Seek support from a psychiatric specialist	44 (32.1)	20 (35.7)	0.630
Seek support from a gynaecologist	87 (63.5)	41 (73.2)	0.195
Seek support from community health workers in the area	99 (72.3)	43 (76.8)	0.518
Seek support from a faith healer	7 (5.1)	5 (8.9)	0.319
Seek support from your husband	87 (63.5)	45 (80.4)	0.022*
Seek support from your mother or sister	72 (52.6)	43 (76.8)	0.002*
Seek support from Mother-in-law or Sister-in-law	46 (33.6)	27 (48.2)	0.057
Seek support from friends	47 (34.3)	20 (35.7)	0.852
Seek support from neighbours	16 (11.7)	11 (19.6)	0.148
Causes of the emotional problems			
Too much thinking	97 (70.8)	34 (60.7)	0.173
Financial problems	70 (51.1)	33 (58.9)	0.322
Family conflicts	53 (38.7)	34 (60.7)	0.005*
Lack of support from family	62 (45.3)	34 (60.7)	0.053
Biological cause	60 (43.8)	24 (42.9)	0.905

*Chi-square test was applied with a significant level of 0.05

Table 3: Opinions of participants about the medical treatment for emotional problems (N=193)

Opinion about the need for medical treatment	Urban(%) (N=137)	Rural(%) (N=56)
Not required, gets better with time	29 (21.2)	11 (19.6)
Sometimes required	29 (21.2)	15 (26.8)
Very much required	79 (57.7)	30 (53.6)
Not required, gets better with time	29 (21.2)	11 (19.6)

A notable proportion considers medical treatment necessary only occasionally, with 21.2% of urban and 26.8% of rural mothers expressing this view. Meanwhile, a smaller group holds the opinion that medical treatment is unnecessary, believing that emotional problems improve naturally over time; this view is shared by 21.2% of urban and 19.6% of rural participants.

Table 4 presents the formal and informal barriers to seeking treatment for emotional problems among 193 mothers (137 urban Vs 56 rural). Among formal barriers, the most reported was preference for help from family and friends, more common in urban participants (44.5%) than rural (37.5%). A small percentage preferred faith healer, particularly in rural areas (8.9%). Stigma-related concerns—such as being judged as mentally ill, unable to handle stress, or a bad mother—were present across both groups, though differences were not statistically significant. Practical barriers such as not knowing where treatment is available and distance of the health facility were similarly reported. For informal treatment barriers, feeling ashamed to discuss emotional problems was significantly more common in urban mothers (22.6%) than rural (8.9%) (p=0.027). Other concerns such as stigma and self-perception were reported at low to moderate levels in both groups. Overall, urban participants more frequently reported emotional shame, while rural participants noted logistical and cultural preferences.

Table 4: Informal and formal barriers to seeking treatment for emotional problems (N=193)

Barriers	Urban (N=137) (%)	Rural (N=56) (%)	P-value
Barriers to seeking formal treatment for emotional problems			
Theme: Cultural preference			
I don't think it is important to seek treatment	28 (20.4)	11 (19.6)	0.901
Prefer to get help from family and friends	61 (44.5)	21 (37.5)	0.370
Prefer to get help from faith healers	6 (4.4)	5 (8.9)	0.216
Theme: Stigma			
I will be judged as mentally ill	26 (19.0)	9 (16.1)	0.634
I will be judged as not being able to handle stress	23 (16.8)	7 (12.5)	0.456
I will be judged as a bad mother	18 (13.1)	7 (12.5)	0.905
Shame about discussing issues	14 (10.2)	6 (10.7)	0.918
Theme: Awareness, access and service			
Don't know where the treatment is available	27 (19.7)	11 (19.6)	0.992
Distance of the health facility	12 (8.8)	7 (12.5)	0.429
Nobody is there to help me get treatment	24 (17.5)	6 (10.7)	0.236
Barriers to seeking informal treatment for emotional problems			
Theme: Cultural preference			
I don't think it is important to seek support	23 (16.8)	12 (21.4)	0.448
Theme: Stigma			
I will be judged as mentally ill	16 (11.7)	5 (8.9)	0.578
I will be judged as not being able to handle stress	24 (17.5)	7 (12.5)	0.389
I will be judged as a bad mother	8 (5.8)	6 (10.7)	0.236
Shame about discussing issues	31 (22.6)	5 (8.9)	0.027*

*Chi-square test was applied with a significant level of 0.05

Discussion

The burden of mental health disorders, like perinatal depression is more likely in low- and middle-income countries. Most of the women who lack knowledge about mental health have negative attitudes toward mental illness. In the perinatal period, women seek fewer health care services as compared to other transitions of life. Most of the barriers among women that have been outlined in accessing help-seeking behaviour were stigma, shame, and fear of being mentally ill.

This study provides valuable insights into the barriers mothers face when seeking formal and informal treatment for emotional problems in both urban and rural settings. The findings indicate that although most participants acknowledge the importance of formal treatment, a considerable proportion still believe that emotional issues resolve on their own, over time. Notably, when comparing rural and urban communities, this study showed that participants from rural areas demonstrated a higher tendency to seek both professional and non-professional support during emotional problems they face. Despite this, the study found that a relatively small proportion of participants sought help from faith healers, with rates slightly higher rates observed in rural areas (8.9%) compared to urban areas (5.1%). Similarly, a study conducted among postpartum women in rural Africa reported low levels of help-seeking from biomedical healthcare providers, with only 12.7% accessing these services and an even smaller proportion seeking mental health care. A considerable

number of women reported relying on non-professional sources of support, including partners, parents, and friends. However, the majority expressed the need for professional assistance to manage their symptoms, demonstrating an equal preference for biomedical healthcare and traditional or religious healing practices.[32] Another study conducted among postpartum women in Saudi Arabia found that their confidence could be enhanced through the support of spouses and family members during the postpartum period. The study recommended that healthcare providers counsel women during the antenatal period to seek support after childbirth, whether from family members, friends, healthcare professionals, or religious leader.[33] In line with previous studies, a study assessing the help-seeking process for mental health concerns during the perinatal period among women were more likely to seek informal support from their male partners during times of distress rather than seeking formal professional help.[34] Similarly, our findings align with previous studies involving women who screened positive for depressive symptoms.[35,36]

Consistent with other studies,[37-40] our study identified several key factors contributing to emotional distress during the perinatal period within the community. The primary causes reported by participants included "too much thinking", "Financial problems", "Family conflicts", "Lack of support from family", and "Biological causes". Our findings revealed that in urban areas, emotional problems were primarily attributed to excessive thinking and biological factors. In contrast, rural areas reported financial difficulties, family conflicts, and a lack of family support as the main causes of emotional distress.

In contrast to other findings, our study found that medical treatments were responded to as "very much required" at that time. Similar findings were reported in other studies, reinforcing the importance of timely and adequate medical intervention.[41,42] While one study stated that lack of social support, and financial problems had major coping strategies for adopting hep-seeking.[43] This finding aligns with our study, underscoring how economic and relational support systems are essential in encouraging timely healthcare access. Our findings indicated that most participants favoured seeking medical treatment in larger urban areas rather than rural regions.

The study revealed several formal and informal barriers that mothers face when seeking help for emotional problems. Many mothers in both urban and rural areas believed that emotional issues would resolve on their own over time, often leading to delayed help-seeking. Support from family and friends remained a preferred coping mechanism, while reliance on faith healers was minimal. Fear of judgment was a significant barrier, with concerns about being perceived as mentally ill, unable to handle stress, or being labelled a bad mother. Practical challenges, including limited awareness of treatment options and the distance to healthcare facilities, further hindered access to professional support. Rural mothers were more likely to view informal support as unnecessary, whereas urban mothers reported greater feelings of embarrassment when discussing emotional problems. These findings highlight the need to address societal stigma and practical obstacles to improve help-seeking behaviours. Comparable findings were observed in other studies. A 2018 study in Uganda[44] identified stress, gender-based violence, and spiritual beliefs as key community concerns, recommending culturally tailored strategies to enhance women's health. In 2023, research in Nigeria[45] revealed that stigma, guilt, and delayed caregiver responses hindered timely help-seeking for perinatal depression. Similarly, studies from India[46] indicated that while women were aware of mental health issues, societal reluctance and limited family support remained significant barriers. Research in Ghana found that family abuse and poor social support obstructed healthcare access.[36] In Bangladesh[35] and rural Madhya Pradesh,[47] cultural beliefs, financial strain, and logistical challenges negatively impacted help-seeking.

Strengths and Limitations

This study possesses significant strengths that bolster the credibility of its findings, primarily its focus on the under-researched issue of perinatal mental healthcare-seeking in contrasting urban and rural Indian settings. The community-based design and multistage sampling enhance representation within the district, while data collection during Health and Nutrition Days (VHNDs/UHNDs) facilitated strong participation and provided insights into real-world behaviours within the public health system. The use of validated tools, the PHQ-9 and MSPSS, ensures reliable measurement of depression and social support.

However, this study has several limitations. Recruiting participants exclusively through scheduled health events likely introduced selection bias by excluding women not engaged with public health services or facing significant access barriers. Consequently, the prevalence of unmet mental health needs and barriers to care may have been underestimated, particularly in rural areas where the smaller sample size further limits generalizability. Although a multistage sampling strategy was used, the first-stage district selection was based on convenience, which reduces representativeness and external validity. In addition, including all eligible participants within selected clusters created unequal probabilities of selection, potentially biasing estimates without proper weighting.

Conclusion

This study offers valuable insights into perceptions, causes, and barriers related to emotional distress among urban and rural mothers. Findings indicate that although medical support is commonly sought,

rural mothers demonstrate a slightly greater tendency to access healthcare services, including psychiatric specialists, gynecologists, and community health workers, compared to their urban counterparts. Faith healers were the least preferred option in both settings. Family support was a primary coping mechanism, with rural mothers relying heavily on husbands, parents, siblings, and in-laws, reflecting stronger family networks. Urban mothers, however, more often sought support from friends and neighbors. Major causes of emotional distress included excessive worrying and financial strain, with overthinking more prevalent in urban mothers and financial difficulties more frequent among rural mothers. Barriers included perceptions that emotional distress resolves spontaneously, stigma, fear of judgment, lack of awareness about treatment options, and geographic inaccessibility of health facilities. Interventions targeting stigma reduction and improved healthcare accessibility are essential.

Acknowledgement: The authors wish to acknowledge School of Public Health, Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, which provided administrative and technical support and allowed collaboration with field research site activities. They also wish to thank all field coordinators, investigators and participants who took part in the data collection process.

Individual Authors' Contributions: MRB conceptualized the study and lead the project; **DB**, **JK**, wrote the first draft. **DB** & **JK** carried out analysis and made the interpretations. **MRB**, **DB** & **SB** conducted the technical review of the methods and interpretation of the findings and provided content-expertise. All authors contributed to scientific writing and guaranteed the integrity of the work.

Availability of Data: Data will be available upon request to the corresponding author.

Declaration of Non-use of Generative AI Tools: This article was prepared without the use of generative AI tools for content creation, analysis, or data generation. All findings and interpretations are based solely on the authors' independent work and expertise.

REFERENCES

1. Luciano M, Di Vincenzo M, Brandi C, Tretola L, Toricco R, Perris F, Volpicelli A, Torella M, La Verde M, Fiorillo A, Sampogna G. Does antenatal depression predict post-partum depression and obstetric complications? Results from a longitudinal, long-term, real-world study. Front Psychiatry. 2022 Dec 14;13: 1082762. DOI: https://doi.org/10.3389/fpsyt.2022.1082762 PMid:36590632 PMCid:PMC9795022
2. Bluett-Duncan M, Kishore M, Patil D, Satyanarayana V, Sharp H. A systematic review of the association between perinatal depression and cognitive development in infancy in low and middle-income countries. PLOS ONE. 2021 Jun 25;16(6): e0253790. DOI: https://doi.org/10.1371/journal.pone.0253790 PMid:34170948 PMCid:PMC8232443
3. Al-abri K, Edge D, Armitage CJ. Prevalence and correlates of perinatal depression. Soc Psychiatry Psychiatr Epidemiol. 2023;58(11):1581-1590. DOI: https://doi.org/10.1007/s00127-022-02386-9. Correction 2023;58:1591. DOI: https://doi.org/10.1007/s00127-023-02468-2
4. Pan T, Zeng Y, Chai X, Wen Z, Tan X, Sun M. Global Prevalence of Perinatal Depression and Its Determinants Among Rural Women: A Systematic Review and Meta-Analysis. Depress Anxiety. 2024 Sep 20;2024:1882604. DOI: https://doi.org/10.1155/2024/1882604 PMid:40226692
5. Roddy Mitchell A, Gordon H, Lindquist A, Walker SP, Homer CSE, Middleton A, et al. Prevalence of Perinatal Depression in Low- and Middle-Income Countries. JAMA Psychiatry. 2023; 80(5):425-431. DOI: https://doi.org/10.1001/jamapsychiatry.2023.0069 PMid:36884232 PMCid:PMC9996459
6. Roberts LR, Renati SJ, Solomon S, Montgomery S. Perinatal Grief Among Poor Rural and Urban Women in Central India. Int J Womens Health. 2021 Mar 9;13:305-315. DOI: https://doi.org/10.2147/IJWH.S297292 PMid:33727864.
7. WHO guide for integration of perinatal mental health in maternal and child health services;2022. [cited 2025 Feb 27]. Available from: https://www.who.int/publications-detail-redirect/9789240057142
8. Dagher RK, Bruckheim HE, Colpe LJ, Edwards E, White DB. Perinatal Depression: Challenges and Opportunities. Journal of Women's Health. 2021 Feb;30(2):154-159. DOI: https://doi.org/10.1089/jwh.2020.8862 PMid:33156730
9. Upadhyay RP, Chowdhury R, Aslyeh Salehi, Sarkar K, Singh SK, Sinha B, Pawar A, Rajalakshmi AK, Kumar A. Postpartum depression in India: a systematic review and meta-analysis. Bull World Health Organ. 2017 Oct 1;95(10):706-717C. DOI: https://doi.org/10.2471/BLT.17.192237 PMid:29147043 PMCid:PMC5689195
10. Arora P, Aeri B. Burden of Antenatal Depression and Its Risk Factors in Indian Settings: A Systematic Review. Indian Journal of Medical Specialities. 2019 Apr;10(2):55-60. DOI: https://doi.org/10.4103/INJMS.INJMS_36_18
11. Hwang WY, Choi SY, An HJ. Concept analysis of transition to motherhood: a methodological study. Korean J Women Health Nurs. 2022 Mar 31;28(1):8-17. DOI: https://doi.org/10.4069/kjwhn.2022.01.04 PMid:36312044 PMCid:PMC9334210
12. Bjelica A, Cetkovic N, Trninic-Pjevic A, Mladenovic-Segedi L. The phenomenon of pregnancy - a psychological view. Ginekologia Polska. 2018;89(2):102-106. DOI: https://doi.org/10.5603/GP.a2018.0017
13. Meaney MJ. Perinatal Maternal Depressive Symptoms as an Issue for Population Health. Am J Psychiatry. 2018;175(11): 1084-1093. DOI: https://doi.org/10.1176/appi.ajp.2018.17091031. PMID: 30068258.
14. Seid J, Mohammed E, Cherie N, Yasin H, Addisu E. The magnitude of perinatal depression and associated factors among women in Kutaber woreda public health institution and Boru Meda general hospital, Ethiopia, 2022: a cross-sectional study. Front Psychiatry. 2024 Jan 22;14:1302168. DOI: https://doi.org/10.3389/fpsyt.2023.1302168 PMid:38318482 PMCid:PMC10838999
15. Raghavan V, Khan HA, Seshu U, Rai SP, Durairaj J, Aarthi G, et al. Prevalence and risk factors of perinatal depression among women in rural Bihar: A community-based cross-sectional study. Asian J Psychiatr. 2021 Feb;56:102552. DOI: https://doi.org/10.1016/j.ajp.2021.102552 PMid:33454561 PMCid:PMC7896100
16. Rajendran B, Ibrahim SU, Ramasamy S. Maternal and Neonatal Risk Factors Associated with Perinatal Depression-A Prospective Cohort Study. Indian J Psychol Med. 2024 Jan;46(1):24-31. DOI: https://doi.org/10.1177/02537176231176405
17. Shidhaye R. Suicide in Indian women. The Lancet Public Health. 2023 May 1;8(5):e323-e324. DOI: https://doi.org/10.1016/S2468-2667(23)00053-1 PMid:37120256

18. Chauhan A, Potdar J. Maternal Mental Health During Pregnancy: A Critical Review. Cureus. 2022 Oct 25;14(10):e30656. DOI: https://doi.org/10.7759/cureus.30656 PMID: 36426343 PMCID: PMC9681705

19. Kaiyo-Utete M, Langhaug L, Chingono A, Dambi JM, Magwali T, Henderson C, Chirenje ZM. Antenatal depression: Associations with birth and neonatal outcomes among women attending maternity care in Harare, Zimbabwe. PLoS One. 2023 Jul 7;18(7):e0270873. DOI: https://doi.org/10.1371/journal.pone.0270873 PMid:37418441 PMCid:PMC10328234

20. Fekadu Dadi A, Miller ER, Woodman RJ, Azale T, Mwanri L. Effect of antenatal depression on adverse birth outcomes in Gondar town, Ethiopia: A community-based cohort study. PLoS One. 2020 Jun 17;15(6):e0234728. DOI: https://doi.org/10.1371/journal.pone.0234728 PMid:32555631

21. Baldwin A, Herde E, Hoehn E, Kimble R, Funk H, Spink D, et al. Transition to Parenthood: Antenatal Education Promotes Perinatal Mental Health When Collaboratively Delivered by Midwives, Mental Health Peer Workers and Perinatal and Infant Mental Health Professionals. J Perinat Educ. 2022 Apr 1;31(2):104-110. DOI: https://doi.org/10.1891/JPE-2021-0008 PMid:35386492 PMCid:PMC8970130

22. Ye Z, Wang L, Yang T, Chen LZ, Wang T, Chen L, et al. Gender of infant and risk of postpartum depression: a meta-analysis based on cohort and case-control studies. The Journal of Maternal-Fetal & Neonatal Medicine. 2022 Jul 3;35(13):2581-2590. DOI: https://doi.org/10.1080/14767058.2020.1786809 PMid:32635787

23. Lanjewar S, Nimkar S, Jungari S. Depressed Motherhood: Prevalence and Covariates of Maternal Postpartum Depression among Urban Mothers in India. Asian J Psychiatr. 2021 ;57:102567. DOI: https://doi.org/10.1016/j.ajp.2021.102567 PMid:33581370

24. Handa A, Gaidhane A, Choudhari S. Shedding light on maternal mental health in LMICs: a cornerstone of maternal and child health care. Discov Ment Health. 2024 Nov 12;4(1):55. DOI: https://doi.org/10.1007/s44192-024-00111-3

25. Alderdice F. Supporting psychological well-being around the time of birth: what can we learn from maternity care? World Psychiatry. 2020 Oct;19(3):332-333. DOI: https://doi.org/10.1002/wps.20778 PMid:32931125 PMCid:PMC7491633

26. Bhakta M, Satapathy DM, Padhy M, Dalai S, Panda JN, Marandi P, Svn S, Pattnaik A. Assessing the Prevalence and Risk Factors of Postpartum Depression: A Cross-Sectional Study Conducted in the Urban Areas of Ankuli in Southern Odisha. Cureus. 2024 Jun 1;16(6):e61503. DOI: https://doi.org/10.7759/cureus.61503 PMID: 38952605; PMCID: PMC11216125.

27. Poverty Alleviation. [Internet] [cited 2025 Apr 29]. Available from: https://pc.odisha.gov.in/sites/default/files/2020-03/eco-8CFA.pdf

28. Rathod SD, Honikman S, Hanlon C, Shidhaye R. Characteristics of perinatal depression in rural central, India: a cross-sectional study. Int J Ment Health Syst. 2018;12:68. DOI: https://doi.org/10.1186/s13033-018-0248-5

29. Fisher J, Cabral de Mello M, Patel V, Rahman A, Tran T, Holton S, et al. Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: a systematic review. Bull World Health Organ. 2012 Feb 1;90(2):139-149H. DOI: https://doi.org/10.2471/BLT.11.091850 PMid:22423165 PMCid:PMC3302553

30. Sharif M, Zaidi A, Waqas A, Malik A, Hagaman A, Maselko J, et al. Psychometric Validation of the Multidimensional Scale of Perceived Social Support During Pregnancy in Rural Pakistan. FRONTIERS IN PSYCHOLOGY. 2021 Jun 15;12:601563. DOI: https://doi.org/10.3389/fpsyg.2021.601563 PMid:34211414 PMCid:PMC8239233

31. Ransing R, Deshpande SN, Shete SR, Patil I, Kukreti P, Raghuveer P, Mahadevaiah M, Bhosale N, Ramesh VO, Puri M, Bantwal P. Assessing antenatal depression in primary care with the PHQ-2 and PHQ-9: Can It Be carried Out by auxiliary nurse midwife (ANM)? Asian J Psychiatr. 2020 Oct;53:102109. DOI: https://doi.org/10.1016/j.ajp.2020.102109

32. Azale T, Fekadu A, Hanlon C. Treatment gap and help-seeking for postpartum depression in a rural African setting. BMC Psychiatry. 2016 Dec;16(1):1-10. DOI: https://doi.org/10.1186/s12888-016-0892-8 PMid:27287387 PMCid:PMC4901434

33. Almutairi AF, Salam ,Mahmoud, Alanazi ,Samiyah, Alweldawi ,Manal, Alsomali ,Najad, and Alotaibi N. Impact of help-seeking behavior and partner support on postpartum depression among Saudi women. Neuropsychiatric Disease and Treatment. 2017 Jul 20;13:1929-1936. DOI: https://doi.org/10.2147/NDT.S135680 PMid:28790828 PMCid:PMC5530055

34. Fonseca A, Canavarro MC. Women's intentions of informal and formal help-seeking for mental health problems during the perinatal period: The role of perceived encouragement from the partner. Midwifery. 2017 Jul 1;50:78-85. DOI: https://doi.org/10.1016/j.midw.2017.04.001 PMid:28395200

35. Dutta GK, Sarker BK, Ahmed HU, Bhattacharyya DS, Rahman MdM, Majumder R, et al. Mental healthcare-seeking behavior during the perinatal period among women in rural Bangladesh. BMC Health Serv Res. 2022 Mar 7;22(1):310. DOI: https://doi.org/10.1186/s12913-022-07678-z

36. Adjorlolo S. Seeking and receiving help for mental health services among pregnant women in Ghana. PLoS One. 2023 Mar;18(3):e0280496. DOI: https://doi.org/10.1371/journal.pone.0280496 PMid:36867597 PMCid:PMC9983869

37. Behera D, Bohora S, Tripathy S, Thapa P, Sivakami M. Perinatal depression and its associated risk factors during the COVID-19 pandemic in low- and middle-income countries: a systematic review and meta-analysis. Soc Psychiatry Psychiatr Epidemiol. 2024 Oct;59(10):1651-1668. DOI: https://doi.org/10.1007/s00127-024-02628-y. Epub 2024 Feb 20. Erratum in: Soc Psychiatry Psychiatr Epidemiol. 2024 Oct;59(10):1669-1670. DOI: https://doi.org/10.1007/s00127-024-02662-w. PMID: 38376751.

38. What Causes Perinatal Mental Health Problems? | Mind - Mind [Internet]. [cited 2025 Mar 25]. Available from: https://www.mind.org.uk/information-support/types-of-mental-health-problems/postnatal-depression-and-perinatal-mental-health/causes/

39. Goyal S, Gupta B, Sharma E, Dalal P, Pradeep Y. Psychiatric morbidity, cultural factors, and health-seeking behaviour in perinatal women: A cross-sectional study from a tertiary care centre of North India. Indian J Psychol Med. 2020;42(1):52-60. DOI: https://doi.org/10.4103/IJPSYM.IJPSYM_96_19

40. Walters S. Mental Health Changes During the Perinatal Period [Internet]. Foundation for Female Health Awareness. 2020 [cited 2025 Mar 25]. Available from: https://femalehealthawareness.org/en/mental-health-changes-during-the-perinatal-period/

41. Hu Y, Huang S, Xiao M, Fu B, Tang G, Lommel L, et al. Barriers and facilitators of psychological help-seeking behaviors for perinatal women with depressive symptoms: A qualitative systematic review based on the Consolidated Framework for Implementation Research. Midwifery. 2023 Jul 1;122:103686. DOI: https://doi.org/10.1016/j.midw.2023.103686

42. Sorsa MA, Kylmä J, Bondas TE. Contemplating Help-Seeking in Perinatal Psychological Distress-A Meta-Ethnography. Int J Environ Res Public Health. 2021 May 14;18(10):5226. DOI: https://doi.org/10.3390/ijerph18105226 PMid:34069073 PMCid:PMC8156805

43. Goyal S, Gupta B, Sharma E, Dalal PK, Pradeep Y. Psychiatric Morbidity, Cultural Factors, and Health-Seeking Behaviour in Perinatal Women: A Cross-Sectional Study from a Tertiary Care Centre of North India. Indian J Psychol Med. 2020 Jan 6;42(1):52-60. DOI: https://doi.org/10.4103/IJPSYM.IJPSYM_96_19 PMid:31997866 PMCid:PMC6970307

44. Tol WA, Ebrecht B, Aiyo R, Murray SM, Nguyen AJ, Kohrt BA, et al. Maternal mental health priorities, help-seeking behaviors, and resources in post-conflict settings: a qualitative study in eastern Uganda. BMC Psychiatry. 2018 Feb 7;18:39. DOI: https://doi.org/10.1186/s12888-018-1626-x PMid:29415710 PMCid:PMC5803865

45. Adeponle A, Groleau D, Gureje O, Kirmayer LJ. Help-seeking for moderate to severe perinatal depression in Nigeria: Implications for a cultural-ecosocial approach to global mental health. SSM - Mental Health. 2023;3:100217. DOI: https://doi.org/10.1016/j.ssmmh.2023.100217

46. Arahanthabailu P, Praharaj SK, Purohith AN, Yesodharan R, Rege S, Appaji R. Exploring barriers to seek mental health services among patients with severe mental illness and their caregivers in a modified assertive community treatment program: A qualitative thematic analysis. Indian J Psychiatry. 2024 Jul;66(7):621-629. DOI: https://doi.org/10.4103/ indianjpsychiatry.indianjpsychiatry_314_24 PMID: 39257514

47. Roberts T, Shidhaye R, Patel V, Rathod SD. Health care use and treatment-seeking for depression symptoms in rural India: an exploratory cross-sectional analysis. BMC Health Serv Res. 2020 Apr 6;20:287. DOI: https://doi.org/10.1186/s12913-020-05162-0 PMid:32252760 PMCid:PMC7137455