



Prevalence of Depression and Coping Mechanisms: A Clinical Psychology Study among Women in Gaya District

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Abstract

Depression is one of the most prevalent psychological disorders affecting women across socio-cultural contexts, yet its recognition and management in rural and semi-urban regions of India remain inadequate. This study empirically examined the prevalence of depression and the coping mechanisms employed by women in Gaya district, Bihar. A sample of 114 women aged 18–60 years was selected using random sampling from both urban and rural blocks. Data were collected through the Beck Depression Inventory-II (BDI-II), Perceived Stress Scale (PSS-10), Pittsburgh Sleep Quality Index (PSQI), Brief COPE Inventory, and semi-structured interviews. Results revealed that 42.1% of participants experienced moderate-to-severe depression, with 74.6% reporting moderate-to-high stress and 45.6% reporting poor sleep quality. Religious and spiritual coping emerged as the most common strategy, followed by problem-focused and emotion-focused coping, while avoidance coping was associated with higher depression scores. Structural and cultural barriers, such as cost, distance, stigma, and lack of awareness, were identified as key deterrents to professional help-seeking, with nearly half of the women reporting no treatment. The findings highlight the urgent need for community-based mental health interventions that address both structural accessibility and cultural attitudes towards depression, while integrating social support systems to strengthen women's resilience.

Keywords: Depression; Coping Mechanisms; Women's Mental Health; Gaya District; Clinical Psychology

Introduction

Depression has emerged as a major public health concern globally, contributing significantly to the overall burden of disease and disability. According to the World Health Organization, women are nearly twice as likely to experience depression as men, primarily due to a combination of biological, psychological, and socio-cultural factors. In India, the challenge of depression is further compounded by limited awareness, inadequate health infrastructure, and persistent stigma surrounding mental illness. For women in particular, intersecting issues such as poverty, family responsibilities, social expectations, and restricted mobility aggravate their vulnerability to psychological distress.

The context of Gaya district in Bihar provides an important setting for studying this issue. With a predominantly rural population, high levels of economic deprivation, and limited access to healthcare, women in Gaya encounter unique challenges in maintaining mental well-being. Traditional gender roles, coupled with caregiving responsibilities and domestic pressures, create significant stressors. Furthermore, cultural norms that emphasize silence and endurance often prevent women from openly discussing or seeking treatment for depressive symptoms. These dynamics make it essential to study both the prevalence of depression and the coping strategies employed by women within this socio-cultural framework.

Coping mechanisms are integral to understanding how individuals respond to psychological distress. Women in India often rely on a mix of problem-focused strategies, emotional support, and religious or spiritual practices to navigate life challenges. While some of these approaches can be adaptive, others, such as avoidance coping, may perpetuate the cycle of depression. Investigating these coping responses in relation to depression among women in Gaya provides valuable insights into culturally embedded patterns of resilience and vulnerability.

The present study adopts a mixed-methods, cross-sectional design to systematically examine the prevalence of depression and coping mechanisms among women in Gaya district. By combining standardized psychological assessments with qualitative interviews, the research captures both the measurable extent of depression and the nuanced ways women manage psychological distress. The findings contribute to clinical psychology literature while also offering practical implications for policymakers, healthcare professionals, and community organizations seeking to address mental health concerns in rural and semi-urban India.

Methodology

The present study titled "*Prevalence of Depression and Coping Mechanisms: A Clinical Psychology Study among Women in Gaya District*" adopts an empirical methodology to systematically investigate the extent of depression among women and the strategies they employ to cope with psychological distress. Since mental health conditions such as depression manifest in diverse social and cultural contexts, a rigorous methodological framework was essential to ensure both reliability and validity of findings. This methodology outlines the research design, sampling strategy, tools of data collection, and procedures followed for data analysis.

Research Design

This study is based on a cross-sectional, quantitative-qualitative empirical design, chosen deliberately to capture both the prevalence of depression and the variety of coping mechanisms employed by women in Gaya district. A cross-sectional design was suitable because the objective was not to trace changes over time but to provide a snapshot of the psychological state of women at a particular point.

While the quantitative component assessed the prevalence levels of depression using standardized instruments, the qualitative component, captured through semi-structured interviews, facilitated deeper insight into coping mechanisms within the socio-cultural milieu of Gaya. This mixed approach allowed the research to move beyond numerical prevalence rates and integrate the subjective, lived experiences of women who encounter psychological stress.

The study was carried out in both urban and rural blocks of Gaya district, ensuring representation of women from diverse socio-economic, occupational, and cultural backgrounds. By adopting a dual approach, statistical measurement and contextual interpretation, the research design fulfilled the dual aim of prevalence estimation and explanatory understanding.

Sampling Strategy

Population and Sampling Frame

The target population for this research comprised adult women residing in Gaya district, Bihar, who were aged between 18 and 60 years. The district has heterogeneous socio-economic conditions, ranging from marginalized rural populations to urban communities with greater access to health services. The sampling frame, therefore, encompassed women from multiple demographic categories, including

homemakers, employed women, students, and those engaged in agricultural or unorganized labor.

Sample Size and Selection

A total of 114 women were selected as the sample for this research. The choice of 114 as sample size was statistically justified as it was considered adequate to identify patterns and provide reliable prevalence estimates while remaining manageable in terms of resources and time.

The selection of participants was done through random sampling. To ensure fairness and minimize researcher bias, a two-stage random sampling method was adopted. In the first stage, different administrative blocks within Gaya district were randomly chosen, representing both rural and urban regions. In the second stage, households and individuals within those blocks were randomly approached. Random number tables and systematic interval selection techniques were used to avoid subjective choices by the researcher.

This strategy ensured that women belonging to diverse educational, occupational, and socio-economic categories were proportionately represented, thereby enhancing the generalizability of findings to the wider female population of Gaya district.

Data Collection Methods

Instruments Used

Data collection was carried out through a combination of standardized psychological scales and interview-based techniques.

- Beck Depression Inventory-II (BDI-II):** This validated self-report measure was used to assess the severity of depression. It contains 21 items measuring affective, cognitive, and somatic dimensions of depression, making it a comprehensive diagnostic tool for empirical research.
- Brief COPE Inventory:** To study coping mechanisms, the Brief COPE scale was administered. This instrument is widely employed to measure adaptive and maladaptive coping strategies, covering dimensions such as problem-focused coping, emotion-focused coping, and avoidance strategies.
- Socio-demographic Data Sheet:** A structured data sheet was prepared to capture demographic details including age, marital status, education, occupation, family structure, income level, and residence

(urban/rural). These variables were considered essential to contextualize depression and coping outcomes.

4. **Semi-Structured Interviews:** In addition to standardized scales, semi-structured interviews were conducted with participants to explore the subjective experience of depression, personal challenges, and cultural coping mechanisms that may not be adequately captured by standardized tools.

Mode of Data Collection

Data were collected through both **in-person interviews** and **online interviews**, depending upon the feasibility, accessibility, and willingness of participants.

- **In-person interviews** were carried out in households, community centers, and local institutions across different blocks of Gaya. This method was particularly crucial for participants from rural areas who had limited access to digital devices or internet connectivity. In-person interaction also facilitated rapport-building and allowed researchers to observe non-verbal cues, which often provide additional insight into emotional states.
- **Online interviews** were employed to reach urban and semi-urban participants who were comfortable using digital platforms. This mode of data collection became especially relevant in the post-pandemic context, where many individuals preferred remote interaction for health and convenience reasons.

The dual-mode collection ensured inclusivity, reduced geographical barriers, and helped to gather diverse perspectives while safeguarding methodological rigor.

Ethical Considerations

Ethical guidelines were strictly followed throughout the research. Informed consent was obtained from all participants prior to data collection, with explicit assurance of confidentiality and anonymity. Participants were informed that their responses would be used solely for academic purposes and that they could withdraw from the study at any stage without any negative consequences. For participants displaying acute depressive symptoms, referrals to local mental health practitioners and counseling services were provided.

Procedure

The data collection procedure involved multiple steps. First, contact was established with local community leaders, health workers, and women's self-help groups to facilitate access to participants, particularly in rural settings. Second, participants were randomly identified and briefed about the purpose of the study. Consent was obtained, and the socio-demographic data sheet was administered.

Following this, participants completed the BDI-II and Brief COPE inventory. For illiterate participants, questions were read aloud by trained research assistants, ensuring clarity and neutrality in tone. After completion of scales, semi-structured interviews were conducted to capture coping narratives in greater detail. Each interview lasted between 30 and 45 minutes.

The process of data collection extended over a period of **eight weeks**, ensuring sufficient time for participant recruitment, rapport building, and completion of scales and interviews.

Data Analysis

Both quantitative and qualitative methods were used to analyze the data.

- Quantitative Analysis:** Scores from the Beck Depression Inventory-II and Brief COPE inventory were coded and entered into SPSS software. Descriptive statistics such as frequency, percentage, mean, and standard deviation were computed to assess prevalence levels. Inferential statistics including chi-square tests, t-tests, and ANOVA were applied to explore differences across demographic categories such as age, marital status, and occupation. Correlation and regression analysis were further conducted to examine the relationship between depression severity and coping mechanisms.
- Qualitative Analysis:** Interview transcripts were subjected to thematic analysis. Key themes relating to coping strategies, such as reliance on family support, religious faith, community interaction, avoidance, or substance use, were identified and categorized. This thematic analysis enabled the interpretation of coping as culturally situated rather than merely individualistic.

The combination of quantitative and qualitative findings facilitated methodological triangulation, strengthening the overall validity of the study.

Limitations of Methodology

Though the research design was comprehensive, certain methodological limitations must be acknowledged. First, the reliance on self-report measures carries the risk of social desirability bias, particularly in a cultural context where mental illness often carries stigma. Second, while random sampling was employed, the sample size of 114, though adequate, may not fully capture the entire diversity of women in Gaya district. Finally, the use of online interviews, though efficient, may have excluded women with low digital literacy, potentially skewing urban representation.

RESULTS AND DISCUSSION

Table 1: Demographic Profile of Respondents (N = 114)

Variable	Categories	Frequency (n)	Percentage (%)
Age (Years)	18–29	32	28.1
	30–39	41	36.0
	40–49	27	23.7
	50–60	14	12.2
Residence	Rural	77	67.5
	Urban	37	32.5
Marital Status	Single	21	18.4
	Married	82	71.9
	Separated/Widowed	11	9.6
Education	No Formal	9	7.9
	Primary	19	16.7
	Secondary	30	26.3
	Higher Secondary	26	22.8
	Graduate	25	21.9
	Postgraduate	5	4.4
Occupation	Homemaker	40	35.1
	Agricultural Labour	13	11.4
	Self-Employed	13	11.4
	Service/Clerical	12	10.5
	Student	17	14.9
	Daily Wage Worker	9	7.9
	Teacher/Health Worker	10	8.8

Variable	Categories	Frequency (n)	Percentage (%)
Family Type	Nuclear	66	57.9
	Joint/Extended	48	42.1
Income (Monthly)	< ₹10,000	24	21.1
	₹10k–₹20k	40	35.1
	₹20k–₹40k	33	28.9
	₹40k–₹60k	12	10.5
	₹60k+	5	4.4
Interview Mode	In-person	83	72.8
	Online	31	27.2

Discussion

The demographic profile situates the study firmly within the socio-cultural context of Gaya district. A majority (67.5%) of participants were from rural areas, highlighting the relevance of structural and cultural constraints in shaping women's mental health. The dominance of the married category (71.9%) reflects traditional family structures, with a small percentage of widowed or separated women (9.6%), a group often more vulnerable to psychological distress.

Educational attainment was mixed: while 26.3% completed secondary schooling, only 26.3% reached graduate or higher levels. This reflects limited educational access for women in the district and likely contributes to reduced awareness of mental health resources. Occupational distribution shows homemakers as the largest group (35.1%), reinforcing traditional gender roles, but also a presence of women in agriculture, service, and teaching, which provides variance for comparative analysis.

Economic data are striking: 56% reported household incomes under ₹20,000 per month, suggesting financial vulnerability as a significant stressor. Family structures revealed a slight dominance of nuclear families, but joint/extended households remain significant (42.1%), which could provide or restrict social support depending on dynamics. The predominance of in-person interviews reflects both rural dominance and digital divides.

Overall, this demographic landscape creates a picture of women negotiating multiple vulnerabilities, economic, social, and cultural, that shape their experiences of depression and coping.

Table 2: Depression and Stress Measures

Measure	Categories/Range	Frequency (n)	Percentage (%)
BDI-II Depression Category	Minimal (0–13)	31	27.2
	Mild (14–19)	35	30.7
	Moderate (20–28)	36	31.6
	Severe (29–63)	12	10.5
Perceived Stress (PSS-10)	Low (0–13)	29	25.4
	Moderate (14–26)	63	55.3
	High (27–40)	22	19.3
Sleep Quality (PSQI)	Good	62	54.4
	Poor	52	45.6
Recent Life Events	0–1 Events	44	38.6
	2–3 Events	50	43.9
	4–6 Events	20	17.5

Discussion

Depression prevalence is significant: 42.1% (moderate + severe) of respondents exhibited clinically meaningful symptoms. This aligns with the stress distribution, where 74.6% reported moderate or high perceived stress. The strong correlation between stress and depression suggests a feedback loop: women facing chronic stress, whether from financial strain, family conflict, or caregiving, manifest heightened depressive symptoms.

Sleep quality results reinforce this link: 45.6% of women reported poor sleep, a known symptom and predictor of depression. The presence of multiple life events (43.9% had 2–3 in the last year) further contextualizes the psychological burden. Events likely included financial crises, bereavement, and familial disputes, each known to precipitate depressive episodes.

Overall, the data demonstrate that depression among women in Gaya is not isolated but strongly embedded in psychosocial stressors, which magnify each other across domains.

Table 3: Coping Mechanisms (Brief COPE)

Coping Style	Mean Score (1-4)	Dominant Users (n)	Percentage (%)
Problem-Focused	2.9	31	27.2
Emotion-Focused	3.0	28	24.6
Avoidant	2.6	21	18.4
Religious/Spiritual Coping	3.3	34	29.8

Discussion

Religious/spiritual coping emerged as the most common style (29.8%), reflecting cultural embeddedness of faith-based strategies in Gaya. Religious practices, prayers, and rituals often provide women with comfort, meaning, and a sense of collective identity. However, while spiritually adaptive, reliance on divine intervention alone may also delay professional help-seeking.

Problem-focused coping (27.2%) was significant among more educated women, who could actively address stressors through planning and problem-solving. Emotion-focused coping (24.6%) involved venting emotions and seeking interpersonal support, common in collectivist societies where sharing burdens within family is normative.

Avoidant coping, although lower (18.4%), is concerning, as avoidance is associated with worse mental health outcomes. In this study, avoidant copers disproportionately fell into moderate/severe depression categories, highlighting the maladaptive consequences of denial and withdrawal.

Taken together, the coping landscape shows a balance between culturally normative (spiritual/emotional) and problem-solving strategies, with a minority using maladaptive avoidance. This interplay shapes how depression is experienced and managed within socio-cultural constraints.

Table 4: Social Context and Support

Variable	Categories	Frequency (n)	Percentage (%)
MSPSS Support Level	Low (<40)	29	25.4
	Moderate (40-59)	49	43.0
	High (60+)	36	31.6

Variable	Categories	Frequency (n)	Percentage (%)
SHG/Community Group Membership	Yes	32	28.1
	No	82	71.9
Domestic Conflict (Past Year)	Yes	16	14.0
	No	98	86.0
Caregiving Responsibility	Yes	54	47.4
	No	60	52.6

Discussion

Social support was uneven: one-quarter of women reported low support, a strong risk factor for depression. Moderate support (43%) dominated, while only one-third enjoyed high support networks. The limited membership in self-help groups (28.1%) reflects low community engagement. SHGs, where present, provided not only financial but also psychosocial support, yet their reach remains narrow.

Domestic conflict, though reported by only 14%, was strongly associated with moderate/severe depression in qualitative interviews, underscoring how interpersonal violence or disputes erode women's mental well-being. Nearly half (47.4%) carried caregiving responsibilities, particularly for children and elderly family members. Caregiving strain often reduced self-care opportunities, intensified stress, and exacerbated depressive symptoms.

The data underline that mental health outcomes are not only individually determined but also socially embedded: social support deficits, domestic violence, and caregiving loads critically shape vulnerability to depression.

Table 5: Help-Seeking and Attitudes

Variable	Categories	Frequency (n)	Percentage (%)
Help-Seeking Status	None	53	46.5
	Informal (family/friends)	28	24.6
	Primary Care/GP	18	15.8
	Counselor/Psychiatrist	15	13.1
Primary Barrier to Care	Cost	24	21.1

Variable	Categories	Frequency (n)	Percentage (%)
	Distance/Transport	22	19.3
	Family Opposition	12	10.5
	Stigma	15	13.1
	Lack of Awareness	17	14.9
	Time Constraints	14	12.3
	Traditional Healer Preference	10	8.8
Prior Depression Diagnosis	Yes	12	10.5
	No	102	89.5
Suicidal Ideation	Yes	11	9.6
	No	103	90.4

Discussion

The most alarming finding is that 46.5% of women sought no help at all despite significant depressive symptoms. Informal support from family/friends was the next most common (24.6%), reflecting reliance on kinship ties rather than professional care. Only 13.1% accessed a counselor or psychiatrist, illustrating a massive treatment gap.

Barriers to care were predominantly structural: cost (21.1%) and transport (19.3%) restricted access to services. Cultural barriers such as stigma (13.1%) and family opposition (10.5%) compounded the problem. Lack of awareness (14.9%) highlighted the need for mental health literacy campaigns. Alarmingly, 9.6% reported suicidal ideation, a red flag for urgent intervention. The low diagnosis rate (10.5%) underscores chronic under-recognition of depression.

This table reflects a dual challenge: unmet treatment needs and systemic barriers preventing women from accessing timely, professional help.

Overall Discussion

The study reveals a distressing mental health landscape among women in Gaya district. Depression affects over 40% of respondents at clinically significant levels, coexisting with high stress, poor sleep, and frequent life stressors. Socio-demographic vulnerabilities, low income, limited education, caregiving burdens, compound psychological strain.

Coping strategies are culturally patterned: spirituality dominates, followed by problem-solving and emotion-sharing. While adaptive in some respects, reliance on

spiritual and emotional coping often substitutes for professional care, delaying intervention. Avoidant coping exacerbates depression severity, revealing maladaptive behavioral cycles.

Social structures both help and hinder: moderate-to-low social support, limited SHG membership, and domestic conflict increase vulnerability. Caregiving burdens further restrict women's ability to prioritize their own mental health. The help-seeking data are most concerning, with nearly half receiving no care and systemic barriers, cost, distance, stigma, severely curtailing access to services.

Overall, the findings highlight the **urgent need for integrated community-based mental health programs**. Interventions must address both structural barriers (affordability, accessibility) and cultural factors (stigma, awareness). Empowering SHGs, training primary care providers, and integrating spiritual resources with professional counseling could enhance resilience. Without such measures, depression among women in Gaya risks remaining a silent epidemic, undermining both individual well-being and broader social development.

Conclusion

The present study on the *Prevalence of Depression and Coping Mechanisms among Women in Gaya District* highlights a significant mental health burden shaped by socio-economic, cultural, and structural factors. Nearly half of the participants experienced moderate to severe depression, closely linked with high stress, poor sleep quality, and recurring life stressors. Coping responses were largely rooted in religious and emotional strategies, reflecting cultural norms, while problem-focused approaches were less frequent. However, a considerable reliance on avoidance coping was evident among women with more severe symptoms. Social support networks were uneven, community participation was limited, and caregiving responsibilities placed additional strain on many respondents. Alarmingly, professional help-seeking was minimal, with cost, accessibility, stigma, and lack of awareness acting as major barriers.

Overall, the findings underscore that depression among women in Gaya is not merely an individual concern but a complex interplay of social, cultural, and economic vulnerabilities. Addressing these challenges requires community-based interventions, greater mental health awareness, and improved accessibility of affordable counseling and psychiatric services. Without such integrated efforts, women's mental health needs in the district risk remaining unmet, perpetuating cycles of psychological distress and social disadvantage.

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