

Prevalence and Determinants of Depression in West Bengal: A Systematic Review

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ABSTRACT

Background: Depression is a leading cause of disability worldwide and represents a major public health concern in India. West Bengal, due to its demographic and socioeconomic diversity, may experience a unique burden of depression; however, available evidence remains fragmented.

Objective: To systematically review PubMed-indexed studies reporting the prevalence and determinants of depression in West Bengal, India.

Methods: A systematic review was conducted following PRISMA guidelines. PubMed was searched for observational studies conducted in West Bengal that reported the prevalence of depression and associated determinants. Studies published in English were screened based on predefined inclusion and exclusion criteria.

Results: Eight studies published between 2017 and 2024 were included. The prevalence of depression varied widely across population groups, ranging from approximately 29% among postpartum women to over 50% among school-going adolescents. High prevalence was also reported among community-dwelling adults (36%), elderly individuals (40–45.7%), and patients with chronic conditions such as diabetes (39.5%). Female gender, low socioeconomic status, lower educational attainment, family and social stressors, chronic medical conditions, and crisis-related factors such as the COVID-19 pandemic were consistently identified as significant determinants of depression.

Conclusion: Depression is highly prevalent across diverse population groups in West Bengal and is influenced by multiple interrelated determinants. The findings highlight the need for strengthened mental health screening, integration of mental health services into primary and maternal health care, and targeted interventions addressing social determinants. Future research should focus on population-representative and longitudinal studies to better inform mental health policy and practice in the state.

Keywords: Depression; Prevalence; Determinants; Mental Health; West Bengal; Systematic Review

INTRODUCTION

Depression is a common mental disorder characterized by persistent sadness, loss of interest or pleasure, reduced energy, disturbed sleep and appetite, impaired concentration, and feelings of worthlessness or guilt. It is one of the leading causes of disability worldwide and contributes substantially to the global burden of disease. The World Health Organization recognizes depression as a major public health concern due to its high prevalence, chronic course, association with functional impairment, and increased risk of suicide [1]. Globally, depression affects people across all age groups

and socioeconomic strata, but its burden is disproportionately higher in low- and middle-income countries where mental health services are limited and underutilized.

In India, depressive disorders constitute a major component of common mental disorders and represent a growing public health challenge. Evidence from national-level surveys and epidemiological studies indicates that depression is highly prevalent, yet underdiagnosed and undertreated, particularly in community settings [2]. Sociocultural factors such as poverty, unemployment, rapid urbanization, academic pressure, gender inequality, family conflict, and stigma related to mental illness further compound the risk of depression in the Indian population. Importantly, the prevalence of depression in India shows wide regional variation, suggesting that state- and district-level factors play a crucial role in shaping mental health outcomes [3].

West Bengal, an eastern Indian state with a large and diverse population, presents a unique social, cultural, and economic landscape that may influence the occurrence of depression. The state includes metropolitan cities such as Kolkata, semi-urban industrial belts, rural agrarian regions, and tribal-dominated areas. Rapid urbanization, migration, informal employment, economic insecurity, educational stress, and changing family structures are prominent features of the region. These factors, along with persistent social inequalities, may increase vulnerability to depression across different population groups in West Bengal.

Several studies conducted in West Bengal have reported a high prevalence of depression in community and institutional settings. Community-based studies among adults have documented that more than one-third of the adult population may suffer from depressive symptoms, with higher risk observed among women, individuals with lower education, and those residing in rural areas [4]. Adolescent mental health studies from West Bengal have reported particularly alarming findings, with over half of school-going adolescents in some districts exhibiting symptoms of depression, anxiety, or stress [5]. Adolescence is a critical developmental period marked by emotional, social, and biological changes, and exposure to academic pressure, family conflict, and substance use can significantly increase the risk of depression during this stage.

The COVID-19 pandemic further intensified mental health challenges in West Bengal, particularly among adolescents and young people. Studies conducted during and after the pandemic reported a significant increase in depressive symptoms among rural adolescents, especially those exposed to COVID-19 infection or death within the family, economic hardship, and social isolation [6]. These findings highlight the sensitivity of mental health outcomes to contextual stressors and public health crises.

Depression among women in the postpartum period has also emerged as an important concern in West Bengal. Postpartum depression adversely affects maternal well-being, infant care, breastfeeding practices, and child development. A recent urban study from Kolkata reported that nearly one-third of postpartum women experienced depressive symptoms, with determinants including marital conflict, lack of social support, primiparity, and adverse neonatal outcomes such as low birth weight [7]. These findings underscore the importance of mental health screening and support during the postnatal period.

Older adults represent another vulnerable group in West Bengal. Rapid population ageing, combined with social isolation, economic dependency, chronic illnesses, and loss of spousal support, places elderly individuals at high risk for depression. Studies conducted in urban slums of Kolkata have reported a high prevalence of depression among the geriatric population, emphasizing the role of social and health-related determinants in late-life depression [8]. Earlier psychiatric morbidity studies among tribal communities in West Bengal have also identified depression as one of the most common mental

health conditions, reflecting the impact of marginalization, poverty, and limited access to health care services [9].

NEED FOR THE STUDY

Although several studies have examined depression in different population groups in West Bengal, the available evidence remains fragmented and heterogeneous. Most studies are cross-sectional in design and focus on specific subgroups such as adolescents, postpartum women, elderly individuals, or selected community samples. A wide range of screening instruments—including the Beck Depression Inventory, DASS-21, PHQ scales, Edinburgh Postnatal Depression Scale, and Geriatric Depression Scale have been used, resulting in substantial variability in reported prevalence rates. This heterogeneity limits comparability across studies and makes it difficult to draw comprehensive conclusions regarding the overall burden of depression in the state.

Furthermore, while individual studies have identified various determinants of depression such as gender, socioeconomic status, education, family environment, health conditions, and crisis-related stressors there is a lack of systematic synthesis of these determinants. Understanding which risk factors are consistently associated with depression across different populations and settings is essential for developing targeted, context-specific prevention and intervention strategies.

A systematic review focusing exclusively on PubMed-indexed studies from West Bengal is therefore warranted. Such a review can consolidate existing evidence on the prevalence of depression, identify common and population-specific determinants, and highlight gaps in current research. This synthesized evidence is crucial for informing policymakers, mental health professionals, and public health planners involved in the implementation of the National Mental Health Programme and district mental health services.

In addition, identifying methodological limitations in existing studies such as limited geographic coverage, reliance on screening tools rather than diagnostic interviews, and absence of longitudinal data can guide future research priorities. By providing a comprehensive and evidence-based overview of depression in West Bengal, the present systematic review aims to support more effective mental health planning, early identification, and intervention strategies tailored to the needs of the population.

METHODS

Study Design

This systematic review was conducted to synthesize available evidence on the prevalence and determinants of depression in West Bengal, India. The review followed standard methodological principles recommended for systematic reviews and was structured in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. A protocol-driven, transparent, and reproducible approach was adopted to identify, screen, and synthesize relevant studies.

Data Source and Search Strategy

A comprehensive literature search was carried out using PubMed, the biomedical database maintained by the National Center for Biotechnology Information (NCBI). PubMed was selected as the sole database to ensure inclusion of peer-reviewed, indexed, and methodologically sound studies. The search strategy combined Medical Subject Headings (MeSH) terms and free-text keywords related to depression and geographic location. Search terms included combinations of “depression,” “depressive symptoms,” “mental health,” “prevalence,” “risk factors,” and “determinants,” along with “West Bengal,” “Kolkata,” and other district or regional identifiers within West Bengal. Boolean operators such as AND and OR were used to refine the search. The search was limited to studies conducted in human participants and published in the English language.

Eligibility Criteria

Studies were selected based on predefined inclusion and exclusion criteria. Studies were included if they were observational in design (cross-sectional, cohort, or baseline data from longitudinal studies), conducted in West Bengal, India, and reported the prevalence of depression or depressive symptoms using a standardized assessment tool. Eligible studies were also required to examine at least one determinant or associated factor of depression. Only articles indexed in PubMed were considered. Studies were excluded if they were conducted outside West Bengal, did not report prevalence data, were intervention trials without baseline prevalence estimates, review articles, editorials, case reports, conference abstracts, or qualitative studies without quantitative prevalence measures.

Study Selection Process

The study selection process was conducted in a stepwise manner. Initially, all records retrieved from the PubMed search were screened by title to remove clearly irrelevant articles. This was followed by abstract screening to assess relevance to the review objectives. Full texts of potentially eligible studies were then retrieved and assessed in detail against the inclusion and exclusion criteria. Duplicate publications were identified and removed by comparing titles, authors, and PubMed identification numbers. Only studies that met all eligibility criteria were included in the final synthesis.

Data Extraction

Data extraction was performed systematically using a predefined data extraction framework. From each included study, information was extracted on author(s), year of publication, study setting and population, study design, sample size, assessment tool used for measuring depression, reported prevalence, and identified determinants or risk factors. Additional methodological details such as sampling technique and analytical approach were also noted where available. Extracted data were cross-checked to ensure accuracy and completeness.

Quality Considerations

Although formal risk-of-bias scoring was not performed, methodological quality was appraised narratively by considering key aspects such as clarity of study objectives, appropriateness of sampling

methods, validity of depression assessment tools, and adequacy of statistical analysis. Studies employing standardized and validated screening instruments were considered methodologically stronger.

Data Synthesis

Due to heterogeneity in study populations, assessment tools, and outcome definitions, a quantitative meta-analysis was not undertaken. Instead, a narrative synthesis approach was used. Findings were synthesized thematically, with prevalence estimates and determinants summarized according to population groups such as adults, adolescents, postpartum women, elderly individuals, and tribal communities. Common determinants of depression across studies were identified and compared to highlight consistent patterns and context-specific factors.

Ethical Considerations

As this study was based exclusively on secondary analysis of published data, ethical approval was not required. All included studies had obtained ethical clearance as reported in their respective publications.

REVIEW OF LITERATURE

Prevalence and Determinants of Depression in West Bengal

Depression is a major public health concern and is increasingly recognized as a significant contributor to disability and reduced quality of life across populations. In India, the prevalence of depression shows wide regional variation, influenced by socioeconomic status, gender, age, health conditions, and contextual stressors. West Bengal, due to its demographic diversity encompassing urban, rural, slum, and tribal populations, presents unique vulnerabilities to depression. Several epidemiological studies conducted in the state have examined the prevalence of depression and its associated determinants among different population groups. The following section reviews key PubMed-indexed studies related to depression in West Bengal.

Chaudhuri et al. (2017) [4]

Chaudhuri and colleagues conducted a community-based cross-sectional study to assess the prevalence of depression and its associated risk factors among adults residing in the Siliguri subdivision of Darjeeling district, West Bengal. Depression was assessed using the Beck Depression Inventory-II. The study reported that 36% of the adult population exhibited depressive symptoms, with 11% having significant depression. Female gender, rural residence, and lower educational status were identified as significant predictors of depression. The authors concluded that depression is highly prevalent among community-dwelling adults and emphasized the need for early detection and mental health services at the primary care level.

Gupta et al. (2023) [5]

Gupta et al. examined the prevalence and correlates of depression, anxiety, and stress among high school students in Hooghly district, West Bengal. Using the Depression Anxiety Stress Scale-21 (DASS-21), the study found that 52.3% of adolescents had depressive symptoms. Depression was significantly associated with female gender, late adolescence, family-related social problems, and substance use. The authors highlighted adolescence as a highly vulnerable period for mental health problems and recommended school-based mental health screening and counseling interventions.

Mitra et al. (2024) [6]

Mitra and associates conducted a community-based study among rural adolescents in West Bengal during the COVID-19 pandemic to assess anxiety and depression. The study reported a depression

prevalence of 30%. Multivariate analysis revealed that female gender, lower socioeconomic status, higher adolescent age, and exposure to COVID-19 cases or deaths within the family were significant determinants of depression. The authors emphasized that public health emergencies can substantially increase psychological distress among adolescents, particularly in resource-limited rural settings.

Roy et al. (2024) [7]

Roy et al. assessed the prevalence and risk factors of depressive symptoms among postpartum women in an urban area of Kolkata, West Bengal, using the Edinburgh Postnatal Depression Scale. The study found that approximately 29% of postpartum women experienced depressive symptoms. Factors such as primiparity, low birth weight of the newborn, marital conflict, and lack of family support were significantly associated with postpartum depression, while financial independence acted as a protective factor. The authors underscored the importance of integrating mental health screening into routine postnatal care services.

Ali and Patra (2024) [10]

Ali and Patra investigated the impact of the COVID-19 pandemic on the mental health of elderly patients attending a tertiary care hospital in West Bengal. Depression was assessed using the Bangla version of DASS-21. The study reported that 43.9% of elderly participants experienced moderate to extremely severe depression. Significant associations were observed with older age, female gender, living without a spouse, unemployment or retirement, and income loss during the pandemic. The findings highlighted the heightened vulnerability of the elderly population to depression during periods of social and economic disruption.

Banerjee et al. (2023) [9]

Banerjee and colleagues studied depression among elderly individuals with hypertension in Kharagpur, West Bengal. Using standardized depression scales along with physical activity assessment tools, the study reported a high prevalence of depressive symptoms among hypertensive elderly patients. Low levels of physical activity emerged as a strong predictor of depression, along with older age and lower educational status. The authors emphasized the role of lifestyle modification and physical activity in preventing depression among elderly individuals with chronic diseases.

Sau and Bhakta (2017) [8]

Sau and Bhakta conducted a study among the geriatric population residing in an urban slum of Kolkata to predict depression using the Geriatric Depression Scale. The prevalence of depression was reported as 45.7%. Depression was associated with multiple sociodemographic and health-related factors, including age, gender, literacy, income, family structure, sleep disturbances, and sensory impairments. The study highlighted the compounded effect of social deprivation and health problems on depression among urban slum-dwelling elderly.

Karpha et al. (2022) [11]

Karpha et al. examined depression and anxiety among diabetic patients attending a tertiary care hospital in Kolkata. Using the Patient Health Questionnaire-9, the study reported that 39.5% of diabetic patients had depression, compared to a much lower prevalence among non-diabetic controls. Depression was significantly associated with low income, insulin therapy, diabetic complications such as retinopathy and ischemic heart disease, and unmarried status. The authors concluded that depression is common among diabetic patients and should be routinely screened in clinical settings.

Summary of Review

The reviewed studies indicate that depression is highly prevalent across diverse population groups in West Bengal, including adolescents, adults, postpartum women, elderly individuals, and patients with chronic illnesses. Female gender, low socioeconomic status, family and social stressors, chronic medical

conditions, and crisis-related factors such as the COVID-19 pandemic consistently emerge as key determinants. However, most studies are cross-sectional and population-specific, highlighting the need for integrated, region-wide mental health strategies and further longitudinal research.

Table: Summary of Studies on Prevalence and Determinants of Depression in West Bengal

Ref. No.	Author & Year	Study Design & Setting	Study Population	Tool Used	Prevalence of Depression	Key Determinants / Findings	Ref.
[1]	Chaudhuri et al., 2017	Community-based cross-sectional study, Siliguri subdivision, Darjeeling district	Adults (community-dwelling)	Beck Depression Inventory-II (BDI-II)	36% depressed; 11% significantly depressed	Female gender, rural residence, lower educational status were significant predictors	4
[2]	Gupta et al., 2023	School-based cross-sectional study, Hooghly district	High school adolescents	DASS-21	52.3% had depressive symptoms	Female gender, late adolescence, family/social problems, substance use	5
[3]	Mitra et al., 2024	Community-based cross-sectional study during COVID-19, rural West Bengal	Adolescents	Standardized depression scale (PHQ-based)	30%	Female gender, low socioeconomic status, higher age, COVID-19 cases/death in family	6
[4]	Roy et al., 2024	Urban cross-sectional study, Kolkata	Postpartum women	Edinburgh Postnatal Depression Scale (EPDS)	~29% probable postpartum depression	Primiparity, low birth weight baby, marital conflict, lack of family support; financial independence protective	7

[5]	Ali & Patra, 2024	Hospital-based cross-sectional study, Midnapore Medical College	Elderly patients	DASS-21 (Bangla version)	43.9% (moderate to extremely severe)	Older age, female gender, living without spouse, unemployment/retirement, income loss	10
[6]	Banerjee et al., 2023	Cross-sectional study, Kharagpur, West Bengal	Elderly with hypertension	HAM-D, GPAQ	~40%	Low physical activity, older age, lower education	8
[7]	Sau & Bhakta, 2017	Community-based study, urban slum of Kolkata	Geriatric population	Geriatric Depression Scale (30-item)	45.7%	Age, gender, literacy, income, family type, sleep problems, sensory impairment	9
[8]	Karpha et al., 2022	Hospital-based cross-sectional study, Kolkata	Diabetic patients	PHQ-9	39.5% in diabetics		11

RESULTS

Study Selection and Characteristics

The systematic review included eight PubMed-indexed studies conducted in West Bengal that met the predefined inclusion criteria. All included studies were observational and cross-sectional in design and were published between 2017 and 2024. The studies covered diverse population groups, including community-dwelling adults, school-going and rural adolescents, postpartum women, elderly individuals, and patients with chronic medical conditions such as hypertension and diabetes. Depression was assessed using standardized and validated instruments, including the Beck Depression Inventory-II, DASS-21, PHQ-9, Edinburgh Postnatal Depression Scale, and Geriatric Depression Scale.

Prevalence of Depression

The prevalence of depression in West Bengal varied widely across populations and study settings. Among community-dwelling adults, the prevalence of depression was reported as 36%, with 11% having significant depressive symptoms [4]. Among adolescents, prevalence estimates ranged from 30% to 52.3%. School-based adolescents in Hooghly district demonstrated the highest prevalence, with more than half exhibiting depressive symptoms [5], whereas rural adolescents studied during the COVID-19 pandemic showed a prevalence of 30% [6]. Among postpartum women, approximately 29% were identified as having probable postpartum depression in an urban Kolkata setting [7].

The elderly population showed consistently high prevalence rates. Depression ranged from 40% to 45.7% among elderly individuals residing in urban slums, those attending tertiary care facilities, and elderly patients with hypertension [8-10]. Among patients with chronic diseases, particularly diabetes mellitus, depression prevalence was notably high, with 39.5% of diabetic patients experiencing depressive symptoms compared to much lower prevalence among non-diabetic controls [11].

Determinants of Depression

Across the reviewed studies, several determinants of depression were consistently identified. Sociodemographic factors emerged as strong predictors. Female gender was significantly associated with depression across adults, adolescents, postpartum women, and elderly populations [1–6]. Lower educational status and low socioeconomic status were repeatedly linked with higher depression prevalence among adults, adolescents, and elderly individuals [1,3,5,6].

Family and psychosocial factors played a major role. Adolescents experiencing family or social problems and those reporting substance use had significantly higher depressive symptoms [5]. Among postpartum women, marital conflict and lack of family support were strongly associated with depression [6]. Elderly individuals living without a spouse or experiencing social isolation were also more vulnerable to depression [8-10].

Health-related and clinical factors were prominent determinants in specific groups. Low birth weight of the newborn and primiparity were associated with postpartum depression [7]. Among elderly populations, chronic conditions such as hypertension, reduced physical activity, sleep disturbances, and sensory impairments were linked to higher depression levels [7,10]. In diabetic patients, insulin therapy, diabetic complications, and comorbid cardiovascular disease were significant predictors of depression [11].

Contextual and crisis-related factors, particularly the COVID-19 pandemic, significantly influenced mental health outcomes. Adolescents exposed to COVID-19 infection or death within the family showed higher odds of depression [3], while elderly individuals experienced increased depression due to income loss, unemployment, and social disruption during the pandemic period [5].

Overall, the results indicate that depression is highly prevalent across all age groups in West Bengal, with particularly high burden among adolescents, elderly individuals, postpartum women, and patients with chronic diseases. The determinants of depression are multifactorial, encompassing sociodemographic disadvantage, family and social stressors, health-related factors, and contextual crises. Despite variation in tools and populations, consistent patterns of vulnerability were observed across studies.

DISCUSSION

The present systematic review synthesizes PubMed-indexed evidence on the prevalence and determinants of depression in West Bengal and demonstrates that depressive symptoms constitute a substantial public health burden across diverse population groups. The findings reveal consistently high prevalence of depression among adolescents, adults, postpartum women, elderly individuals, and patients with chronic medical conditions. Although the reviewed studies varied in terms of study design, population characteristics, and assessment tools, the overall evidence points toward depression being a widespread and multifactorial condition influenced by social, demographic, health-related, and contextual factors [4–9].

The prevalence of depression reported in the reviewed studies ranged from approximately 29% among postpartum women to over 50% among school-going adolescents. Adolescents emerged as one of the most vulnerable groups, particularly in school-based settings, where more than half of students exhibited depressive symptoms [5]. This finding aligns with national and international evidence

indicating that adolescence is a critical developmental period characterized by academic stress, emotional instability, peer pressure, and family expectations [12,13]. In the Indian context, increasing competition in education, limited access to counseling services, and stigma surrounding mental health may further contribute to the high burden of depression among adolescents [10,14].

Community-based studies among adults in West Bengal reported that more than one-third of adults experienced depressive symptoms, with female gender, rural residence, and lower educational status being significant determinants [4]. These findings are consistent with evidence from the Global Burden of Disease Study and the National Mental Health Survey of India, which report higher prevalence of depression among women and socioeconomically disadvantaged groups [14,15]. Gender disparities in depression are often attributed to unequal social roles, economic dependence, caregiving responsibilities, and exposure to psychosocial stressors, all of which are prevalent in many parts of West Bengal [16].

Postpartum depression was identified as a major concern among women in urban West Bengal, with nearly one-third of postpartum mothers experiencing depressive symptoms [4]. Determinants such as primiparity, low birth weight of the newborn, marital conflict, and lack of family support were strongly associated with postpartum depression. These findings are consistent with systematic reviews from India and other low- and middle-income countries, which highlight inadequate social support and obstetric stressors as key contributors to maternal depression [17,18]. The protective role of financial independence observed in the reviewed study further underscores the importance of women's empowerment and economic stability in promoting maternal mental health.

The elderly population in West Bengal demonstrated consistently high levels of depression across different settings, including urban slums, hospital-based samples, and elderly individuals with chronic diseases [5–7]. Depression among older adults was associated with older age, female gender, living without a spouse, unemployment or retirement, low income, and reduced physical activity. These findings are in line with earlier studies showing that ageing-related social isolation, loss of social roles, chronic morbidity, and functional dependence significantly increase the risk of depression in later life [19]. In urban slum settings, the combined effects of poverty, poor living conditions, and limited access to health services further exacerbate mental health problems among the elderly [8].

Patients with chronic medical conditions, particularly diabetes and hypertension, exhibited a high prevalence of depression. Diabetic patients showed significantly higher depressive symptoms compared to non-diabetic controls, with associations observed for insulin therapy, disease complications, cardiovascular comorbidities, and low socioeconomic status [6,8]. These findings support the well-established bidirectional relationship between depression and chronic diseases, wherein depression adversely affects disease management and outcomes, while chronic illness contributes to psychological distress [20,21]. Integrating mental health screening into chronic disease management programs is therefore essential to improve both psychological and physical health outcomes.

Contextual and crisis-related factors, particularly the COVID-19 pandemic, played a significant role in shaping mental health outcomes in West Bengal. Adolescents exposed to COVID-19 infection or death within the family had higher odds of depression, while elderly individuals experienced increased depressive symptoms due to income loss, unemployment, and social disruption [3,5]. Similar patterns have been reported globally, highlighting the vulnerability of already at-risk populations during public health emergencies [22]. These findings emphasize the importance of incorporating mental health support into disaster preparedness and response strategies.

Across all reviewed studies, female gender consistently emerged as a key determinant of depression. Low socioeconomic status, limited education, poor family support, and social isolation were also recurrently associated with depressive symptoms. These determinants reflect broader social and structural inequalities that influence mental health outcomes. As highlighted by global mental health literature, addressing depression requires a multisectoral approach that extends beyond clinical care to include social protection, education, gender equity, and community support systems [12,22].

Despite the strengths of the reviewed evidence, certain limitations must be acknowledged. Most studies were cross-sectional, limiting causal inference. The use of different screening tools and cut-off scores contributed to variability in prevalence estimates. In addition, geographic representation across West Bengal was uneven, with limited data from certain rural and tribal areas. These gaps highlight the need for longitudinal, population-representative studies using standardized diagnostic methods to better understand the trajectory and determinants of depression in the state.

In summary, the revised discussion underscores that depression is highly prevalent in West Bengal and is shaped by a complex interplay of sociodemographic, psychosocial, health-related, and contextual factors. The consistently high burden across vulnerable groups such as adolescents, women, the elderly, and individuals with chronic diseases indicates a substantial unmet need for mental health services. Strengthening community-based screening, integrating mental health care into primary, maternal, and chronic disease services, and addressing underlying social determinants are critical steps toward reducing the burden of depression in West Bengal [20].

CONCLUSION

This systematic review compiled PubMed-indexed evidence on the prevalence and determinants of depression in West Bengal and demonstrated that depression is a substantial and widespread public health concern across the life course. The included studies showed that depressive symptoms are common among adolescents, community-dwelling adults, postpartum women, elderly populations, and individuals living with chronic medical conditions such as diabetes and hypertension. Overall prevalence varied across studies due to differences in population groups, settings (urban, rural, slum, hospital), and screening tools used, but consistently indicated a high burden, with particularly elevated levels reported among adolescents and older adults.

The determinants of depression identified across studies reflect a multifactorial pattern. Female gender emerged as a consistent risk factor in multiple populations, suggesting persistent gender-based vulnerability linked to social roles, economic dependence, and psychosocial stressors. Socioeconomic disadvantage, low educational status, and rural residence were repeatedly associated with depression, highlighting the influence of structural and contextual inequalities. Family and psychosocial factors—including marital conflict, lack of family support, social problems within households, and substance use—were strongly associated with depression in adolescents and postpartum women, emphasizing the central role of social support and family environment in mental health outcomes. Health-related factors such as chronic illness, low physical activity, and disease complications contributed significantly to depression among elderly and chronic disease populations, supporting the need for integrated mental-physical healthcare models. Contextual shocks such as the COVID-19 pandemic further intensified depressive symptoms, particularly among adolescents and elderly individuals, indicating that vulnerable populations require targeted psychosocial support during public health emergencies. Although the review provides important evidence, it also highlights key gaps in the available literature. Most studies were cross-sectional, limiting causal interpretation. The use of varied screening tools and cut-off scores restricted comparability of prevalence estimates and prevented pooled meta-analysis. In

addition, geographic representation within West Bengal was uneven, indicating the need for more district-level, community-representative studies using standardized diagnostic approaches.

In conclusion, depression in West Bengal is highly prevalent and driven by interconnected sociodemographic, psychosocial, and health-related determinants. Strengthening routine screening at schools, primary health centres, maternal and child health services, and chronic disease clinics, alongside community-based mental health promotion and referral systems, is essential. Future research should prioritize standardized measurement, broader geographic coverage, and longitudinal designs to better understand causal pathways and to guide effective, context-specific prevention and intervention strategies for reducing the burden of depression in West Bengal.

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