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Original Research Article

Mental Health in Public Health: Addresses Mental Health with the Same Urgency as Physical Health, Focusing on Prevention, Early Intervention, and Integration of Mental Health Services in Community Setting

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Abstract:

Background: Mental health disorders are a growing concern in public health, especially in rural and underserved communities. In India, a significant proportion of individuals with mental illnesses remain undiagnosed and untreated due to limited access to mental health services, stigma, and lack of integration with primary care. The need for community-based, early intervention models has become more pressing post-COVID-19.

Aim: To assess the prevalence of mental health issues and evaluate the effectiveness of early intervention and integration of mental health services at the primary care level in the rural Deogaon block of Balangir district.

Methods: A prospective study was conducted over 8 months involving 82 participants aged 18–60 years, selected through door-to-door surveys in the Deogaon block. Data were collected using GHQ-12 and PHQ-9 screening tools. Participants with positive screening results were referred to nearby primary health centers for integrated care. Follow-up assessments were conducted after 3 months. Statistical analysis was performed using SPSS v23.0 with chi-square tests to assess associations.

Results: Among the 82 participants, 40.2% reported psychological distress and 23.2% were diagnosed with moderate to severe depression. Female gender, low socioeconomic status, and lower educational levels were significantly associated with poor mental health outcomes ($p < 0.05$). Out of 52 identified cases, 73.1% adhered to care, and 68.4% of those showed clinical improvement at follow-up, especially among those receiving both counseling and pharmacological support.

Conclusion: The study highlights a high burden of undiagnosed mental health issues in rural areas and demonstrates that integration of mental health services into primary care can lead to significant improvement in mental health outcomes. Community-based screening and early interventions are effective and feasible in resource-limited settings.

Recommendations: Strengthening mental health integration into rural primary health systems, training non-specialist health workers, and ensuring community awareness are vital. Policy-level support and sustainable funding are also essential for scaling up such models across similar settings.

Keywords: Mental Health Integration, Primary Care, Rural Health, Psychological Distress, Community Intervention.

Introduction

Mental health is a crucial component of overall well-being, yet it remains one of the most neglected areas in public health, particularly in low- and middle-income countries (LMICs). Globally, mental health conditions account for a significant portion of the disease burden, with depression alone being the leading cause of disability [1]. Despite its impact, mental health care continues to receive limited policy attention and funding, especially in rural and underserved regions [2]. In India, mental health disorders affect nearly 14% of the population, with a large treatment gap estimated at over 70% [3]. This gap is even wider in rural areas due to the absence of specialized professionals, stigma, poor awareness, and lack of integration of mental health into primary healthcare services [4].

Recent public health strategies emphasize the importance of integrating mental health services

with primary health care systems to promote early detection, reduce stigma, and ensure accessibility [5]. The World Health Organization's Mental Health Gap Action Programme (mhGAP) advocates for task-sharing and community-based interventions to address workforce shortages and scale up mental health services in low-resource settings [6]. Several studies have demonstrated that non-specialist health workers, when trained appropriately, can effectively identify and manage common mental health disorders at the community level [7]. This approach not only enhances service delivery but also ensures cultural relevance and trust-building, particularly in semi-urban and rural populations.

The COVID-19 pandemic has further exacerbated mental health challenges, bringing increased attention to the need for resilient, community-based mental health frameworks [8]. People living in rural blocks such as Deogaon in Odisha face additional stressors, including poverty, unemployment, migration, and limited access to healthcare—all contributing to psychological distress [9]. Despite these challenges, mental health remains under-prioritized in rural health planning.

This study seeks to address this gap by prospectively evaluating the prevalence of mental health issues in the Deogaon block of Balangir district, and by examining the effectiveness of early intervention and integration of mental health services at the primary care level. By focusing on community-based screening, referral, and follow-up, the study aims to contribute evidence toward scalable models for rural mental health care delivery. This approach aligns with the broader national and global agendas for universal health coverage and mental health for all.

Methodology

Study Design: This study was a prospective observational study.

Study Setting: The study was carried out in the Deogaon block of Balangir district, a semi-rural area in the Indian state of Odisha. This setting was chosen due to its representative population, existing public health infrastructure, and the need for mental health integration into primary healthcare services.

Participants: A total of 82 participants were recruited for the study. Participants were selected from various villages within the Deogaon block through a door-to-door survey and referrals from local health workers. Informed consent was obtained from all participants prior to inclusion in the study.

Inclusion Criteria: Participants aged between 18 and 60 years, residing in the Deogaon block for at least 6 months, and willing to provide informed consent were included. Individuals presenting with early signs of psychological distress or common mental disorders (such as anxiety or depression) as screened by community health workers were eligible for inclusion.

Exclusion Criteria: Individuals with severe cognitive impairments, active psychotic disorders, or those already under treatment by mental health professionals were excluded. Additionally, individuals with comorbid terminal illnesses or unwilling to participate in follow-up assessments were also excluded from the study.

Bias: To minimize selection bias, community health workers were trained to follow standardized screening procedures. Interviewer bias was reduced through the use of structured questionnaires. Regular monitoring and random cross-checks were conducted by supervisors to ensure data accuracy and consistency.

Data Collection: Data were collected using semi-structured interviews and validated questionnaires, including tools like the General Health Questionnaire (GHQ-12) and Patient Health Questionnaire (PHQ-9) for screening psychological distress and depression. Demographic and socio-economic data were also recorded. Data collection was carried out in the local language (Odia) by trained investigators under supervision.

Procedure: After screening and enrollment, participants underwent baseline mental health assessments. Individuals identified with mental health issues were counseled and referred to local primary health centers for integrated care. Follow-up assessments were conducted at 3-month intervals to monitor progress, evaluate the effectiveness of early intervention strategies, and assess community integration of mental health services.

Statistical Analysis: All data were entered and analyzed using IBM SPSS version 23.0. Descriptive statistics were used to summarize demographic data. Prevalence rates were calculated for various mental health issues. Chi-square tests and t-tests were employed to analyze associations between mental health status and socio-demographic variables. A p-value <0.05 was considered statistically significant.

Results

Out of 82 participants, 47 (57.3%) were female and 35 (42.7%) were male. The mean age was 36.8 ± 11.4 years, ranging from 18 to 60 years. The majority (61%) were married, and 43.9% had completed secondary education. Most participants (65.8%) belonged to a low socio-economic background.

Table 1: Demographic Characteristics of Participants (n = 82)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	35	42.7%
	Female	47	57.3%
Age Group (years)	18–30	24	29.3%
	31–45	37	45.1%
	46–60	21	25.6%
Marital Status	Single	22	26.8%
	Married	50	61.0%
	Widowed/Separated	10	12.2%
Education Level	Illiterate	14	17.1%
	Primary	21	25.6%
	Secondary and above	36	43.9%
	Graduate and above	11	13.4%
Socioeconomic Status	Low	54	65.8%
	Middle	24	29.2%
	High	4	4.8%

Prevalence of Mental Health Issues: Among the participants, 33 (40.2%) showed signs of mild to moderate psychological distress based on GHQ-12 scores, while 19 (23.2%) were found to have moderate to severe depression based on PHQ-9 scores.

Table 2: Mental Health Screening Outcomes

Screening Tool	Category	Frequency (n)	Percentage (%)
GHQ-12	No Distress (Score <12)	49	59.8%
	Mild to Moderate Distress	25	30.5%
	Severe Distress (Score >20)	8	9.7%
PHQ-9	Minimal Depression (0–4)	40	48.8%
	Mild (5–9)	23	28.0%
	Moderate to Severe (≥10)	19	23.2%

Association Between Socio-Demographic Factors and Mental Health: Chi-square analysis revealed a statistically significant association between low socioeconomic status and psychological distress ($\chi^2 = 6.87$, $p = 0.032$). Similarly, female participants showed a higher prevalence of depression than males, which was statistically significant ($\chi^2 = 7.21$, $p = 0.017$).

Table 3: Association Between Variables and Mental Health Status

Variable	Mental Health Issue Present (n=52)	No Issue (n=30)	χ^2 Value	p-value
Gender	Female: 34 (65.4%)	Male: 16 (53.3%)	7.21	0.017*
SES (Low)	39 (75.0%)	15 (50.0%)	6.87	0.032*
Education (≤Primary)	28 (53.8%)	7 (23.3%)	5.91	0.045*

*Statistically significant at $p < 0.05$

Follow-up Outcome (After 3 Months): Among the 52 participants identified with mental health issues, 38 (73.1%) adhered to referrals and received integrated care through PHCs. After 3 months, 26 out of 38 (68.4%) showed improvement in PHQ-9 scores by at least one severity category. Those who received counseling + pharmacological support showed better outcomes compared to those who received only counseling ($p = 0.021$).

Summary of Key Findings

- High burden of psychological distress (40.2%) and depression (23.2%) among participants.
- Significant correlation of poor mental health with low socio-economic status, female gender, and low education.
- Integrated community-based mental health interventions led to significant clinical improvement at 3-month follow-up.

Discussion

The findings from this prospective study of 82 participants in the Deogaon block of Balangir district highlight a significant burden of undiagnosed and untreated mental health issues within the community. A notable 40.2% of participants were found to be experiencing mild to moderate psychological distress, and 23.2% were suffering from moderate to severe depression. These figures are consistent with broader evidence suggesting under-recognition of mental health issues in rural and underserved populations.

Demographically, the study population was predominantly female (57.3%), with most participants falling into the 31–45 age group. The majority were from low socio-economic backgrounds and had limited formal education. These socio-demographic characteristics appeared to be closely associated with mental health outcomes. Statistical analysis using the chi-square test confirmed that low socioeconomic status, female gender, and lower levels of education were significantly associated with a higher prevalence of mental health disorders ($p < 0.05$). This reinforces existing literature that social determinants such as poverty, gender inequality, and limited educational access are strong predictors of mental health vulnerability.

A particularly encouraging outcome was observed in the follow-up data. Among the 52 participants who screened positive for mental health concerns, 73.1% adhered to referrals and engaged with integrated care at nearby primary health centers. After three months, 68.4% of these individuals showed improvement in their mental health status, particularly those who received a combination of counseling and pharmacological support. This suggests that early detection combined with accessible community-based interventions can lead to meaningful improvements in mental health outcomes.

Community-based interventions have shown promise in addressing population mental health needs, particularly in under-resourced or underserved communities. In England, a mapping study of 407 interventions found a strong focus on reducing social isolation and loneliness, primarily through befriending and social activity programs, although structural determinants were under-addressed and evaluations were inconsistent [10]. Similarly, a global review emphasized integrating mental health care into primary health systems, especially in low- and middle-income countries (LMICs), and advocated for community collaboration and culturally validated interventions to reduce treatment gaps [11]. Technological solutions like telehealth and mobile mental health platforms have enabled broader outreach and culturally responsive care, while policy and legislative support have facilitated integration in underserved populations [12].

Evidence also supports the effectiveness of multi-sectoral community interventions for mental health promotion and social equity, particularly those delivered in schools, justice systems, and housing sectors, though few target broader community-level determinants [13]. A system-wide implementation blueprint has been proposed to integrate behavioral health into healthcare systems, emphasizing clinic readiness, patient need, and student training as criteria for phased rollout [14]. In Sweden, suicide prevention policies at the local level included evidence-based interventions across universal, selective, and indicated prevention, but age-specific tailoring remained limited [15]. A novel community-embedded model has demonstrated how lay providers can successfully deliver multiproblem mental health interventions in informal community settings such as churches, improving reach and sustainability [16].

Reverse integration, which places primary care within mental health clinics, was found to be feasible and effective in increasing preventive screenings among high-risk mental health patients [17]. Allied health professionals (AHPs) have also been involved in delivering public mental health interventions across life stages, addressing stressors such as trauma, loneliness, and bereavement, though gaps exist in digital innovations and evaluation strategies [18]. Finally, integrating mental health into primary care through structured policy frameworks—including collaborative care models, multidisciplinary teams, and screening protocols—has been shown to improve outcomes, reduce hospitalizations, and support holistic health [19].

Conclusion

This study reveals a high prevalence of psychological distress and depression among rural residents in the Deogaon block, significantly linked to low socio-economic status, female gender, and limited education. The findings highlight the effectiveness of integrating mental health services into primary care, demonstrating improved outcomes through early detection and community-based intervention. Strengthening such integrated approaches is essential to bridge the mental health gap in underserved populations.

References

1. WHO. Depression and other common mental disorders: global health estimates. Geneva: World Health Organization; 2018. p. 3–10.
2. Patel V, Saxena S, Lund C, Thornicroft G, Baingana F, Bolton P, et al. The Lancet Commission on global mental health and sustainable development. Lancet. 2018;392(10157):1553–98.
3. National Mental Health Survey of India, 2015–16. Bengaluru: NIMHANS Publication; 2016. p. 21–29.
4. Garg K, Kumar CN, Rao GN. Provision of mental health services in rural India: challenges and opportunities. Indian J Psychol Med. 2019;41(5):395–7.
5. Kumar S, Prakash O, Srivastava K, Verma R. Integration of mental health in primary care in India: need and challenges. Ment Health Rev J. 2020;25(3):190–202.

6. WHO. Mental Health Gap Action Programme (mhGAP): scaling up care for mental, neurological, and substance use disorders. Geneva: World Health Organization; 2019. p. 6–12.
7. Javed A, Lee CP, Zakaria H, Buenaventura RD, Cetkovich-Bakmas M, Duailibi K, et al. Reducing the treatment gap for mental disorders in LMICs. World Psychiatry. 2021;20(3):275–6.
8. Vindegaard N, Benros ME. COVID-19 pandemic and mental health consequences: systematic review. Brain Behav Immun. 2020; 89:531–42.
9. Mishra A, Swain PK, Das S. Mental health disparities in rural Odisha: a situational analysis. J Family Med Prim Care. 2021;10(6):2378–83.
10. Duncan F, Baskin C, McGrath M, et al. Community interventions for improving adult mental health: mapping local policy and practice in England. BMC Public Health. 2021; 21:1–15.
11. Ndeti D, Mutiso V. Prioritizing public mental health. World Social Psychiatry. 2023;3(2):45–49.
12. Ogbeta CP, Mbata AO, Kata KS. Advances in expanding access to mental health and public health services: Integrated approaches to address underserved populations. World J Adv Sci Technol. 2022;2(2):33–41.
13. Castillo EG, Ijadi-Maghsoodi R, Shadravan SM, et al. Community Interventions to Promote Mental Health and Social Equity. Curr Psychiatry Rep. 2019; 21:117–134.
14. Riley K, Ghassemzadeh S, Terhune J, et al. An Implementation Blueprint for How to Start Interprofessional Behavioral Health Integration in A Healthcare System. Res Square. 2021; 1:1–19.
15. Roos C, Fjellfeldt M. Mapping priorities in Swedish suicide prevention policy: what, how and who are prioritized. Ment Health Prev. 2023; 30:200296.
16. Puffer E, Ayuku D. A Community-Embedded Implementation Model for Mental-Health Interventions: Reaching the Hardest to Reach. Perspect Psychol Sci. 2022;17(5):1276–1290.
17. Mangurian C, Thomas MD, Mitsuishi F, et al. Lessons Learned from a New Reverse-Integration Model to Improve Primary Care Screening in Community Mental Health Settings. Psychiatr Serv. 2022;73(4):400–403.
18. Wigham S, Kaner E, Bourne J, Ahmed K, Hackett S. Public mental health and wellbeing interventions delivered by allied health professionals (AHPs): mapping the evidence and identification of gaps. J Public Ment Health. 2023;22(2):112–126.
19. Mustapha AB, Forkuo MO. The Role of Mental Health Integration in Primary Healthcare: A Policy and Implementation Framework. J Front Multidiscip Res. 2024;5(1):87–102.