BRIDGING THE GAP: A SYSTEMATIC REVIEW OF BARRIERS AND STRATEGIES IN MENTAL HEALTH SERVICE DELIVERY FOR RURAL COMMUNITIES

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ABSTRACT

Background: Mental health is an important component of overall well-being, yet access to mental health services is still very limited in rural and remote areas compared to urban areas. This article aims to explore the key challenges in accessing mental health services in rural areas and provide evidence-based recommendations to address them, Methods: This research used a systematic literature review method with a qualitative approach. Primary data was obtained from scientific articles published between 2016 and 2024 in databases such as PubMed, ScienceDirect, ProQuest, and Google Scholar. Articles were selected using PRISMA, a total of 15 articles were analyzed in the systematic review, **Results:** Results show that the main challenges in accessing mental health services in rural areas include: (1) Geographic Isolation and Infrastructure Deficits, (2) Socioeconomic Barriers and Financial Constraints, (3) Stigma and Cultural Misconceptions, (4) Lack of Integrated Care Systems (5) Potential Role of Local Culture and Resilience, Conclusions: Improving access to mental health services in rural areas requires a multi-pronged approach that addresses both supplyand demand-side barriers. This includes strengthening human resources, leveraging technology, reducing stigma, fostering interdisciplinary collaboration, and incorporating local cultural strengths into care models. Without systematic and sustainable interventions, disparities in mental health services will continue to widen, threatening the goal of equitable and inclusive health development.

Keywords: Agronursing, Mental Health, Psychosocial Problems, Rural Population

Introduction

Mental health is a critical component of overall well-being and quality of life. However, access to mental health services remains disproportionately limited in rural and remote areas compared to urban settings (Saxena et al., 2021). According the World to Health Organization (2022), nearly one in ten people globally suffer from a mental disorder, yet more than 70% of those

affected in low- and middle-income countries receive no formal treatment. This disparity is even more pronounced in rural communities where geographic, socioeconomic, and systemic barriers converge to restrict access to essential mental health care.

In many rural regions, mental health services are either unavailablex or concentrated in urban centres, requiring individuals to travel long distances for care (Tarlow et al., 2019). In addition, there is a



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severe shortage of trained mental health professionals such as psychiatrists, psychologists, and psychiatric nurses in these areas (Patel et al., 2018). As a result, primary healthcare providers who often lack specialized training are left to manage complex mental health conditions with limited support.

Stigma surrounding mental illness also plays a significant role in preventing individuals from seeking help. Cultural misconceptions and fear of discrimination discourage many from disclosing symptoms or engaging with available services (Corrigan et al., 2014; Thornicroft al., 2016). Moreover, economic et constraints further limit access, especially among marginalized populations who may not afford transportation, medication, or consultation fees without financial assistance (Ferrari et al., 2019).

These challenges are compounded by weak integration between different levels of the healthcare system. Referral between community-based pathways specialist mental health clinics and services are often poorly developed or (Huang et al., non-existent 2022). Consequently, patients face fragmented care that fails to meet their comprehensive psychosocial needs.

Despite these obstacles, there is growing recognition of the importance of context-specific solutions that incorporate local knowledge, leverage technology, and strengthen the capacity of existing healthcare workers. Telehealth, task-sharing models. and community-based interventions have shown promise in improving mental health outcomes in underserved rural areas (Islam

et al., 2022; Totten et al., 2024; Willmot et al., 2023).

Therefore, understanding the unique barriers faced by rural populations is essential for developing effective strategies that promote equitable access to mental health care. This article aims to explore the key challenges in accessing mental health services in rural areas and provide evidence-based recommendations for addressing them.

Methods

This research used a systematic literature review method with a qualitative approach. Primary data was obtained from scientific articles published between 2016 and 2024 in databases such as PubMed, ScienceDirect, ProQuest, and Google Scholar. Search keywords included: rural mental health, psychosocial barriers, mental health access in remote areas, multidisciplinary mental health team, dan challenges in rural nursing practice. Boolean operators ("AND", "OR") were used to combine terms for better search results.

Inclusion and Exclusion Criteria

Articles were included if they:

- Focused on mental health access in rural or remote areas
- Were peer-reviewed and written in English or Indonesian
- Provided empirical data or detailed case studies

Articles excluded were:

- Editorials, commentaries, or opinion pieces without empirical data
- Studies focusing solely on urban populations



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Non-scientific sources or duplicate publications

Data Extraction and Synthesis

Data were extracted systematically using a standardized form covering author(s), year of publication, country, methodology, key findings, and implications. Themes were identified and organized into categories reflecting common challenges faced in rural mental health service delivery.

Quality assessment

To assess the quality of articles, appropriate JBI critical appraisal tools were used in the systematic review. Research that fulfilled 60% of the JBI checklist was included in this review. Articles were critically screened and selected by two reviewers, and articles of uncertain quality were reassessed by reviewers to determine the suitability of inclusion criteria in the review.

Search Outcomes

A total of 1.930 articles were obtained from searches in four databases using predetermined keywords. Based on the abstract review and title, 1200 articles appropriate. Researchers were not identified 300 duplicated articles. A total of 430 articles obtained were analyzed based on the full-text. There are 15 articles were following JBI, included in the inclusion and exclusion criteria in this review. The reason 415 articles were not included in this review was article does not meet methodology, language, or year of publication criteria. The literature selection process is illustrated in Figure 1 using PRISMA flowchart, with a summary of articles that met the systematic review criteria explained in Table 1 (attached).

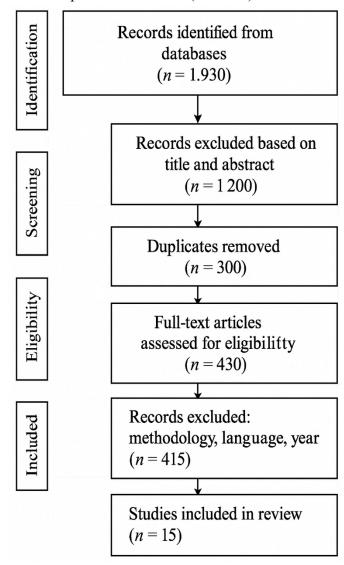


FIGURE 1. PRISMA flowchart for systematic review



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TABLE 1. Summary of articles included in the study (n=15)

No.	References	Country	Data	Description	Sub Theme	Main Theme
			Analysis Method			
1	Das et al. (2024)	India	Literature review	Few mental health	Limited Infrastructur	Geographic Isolation and
2	Patel et al. (2018)	Global	Literature review	facilities, nurses lack psychiatric training	e & Human Resources	Infrastructure Deficits
3	Graves et al. (2023)	United States	Multivariate regression analysis	Long distances and poor	Geographical Distance	
4	Wang et al. (2024)	United Kingdom	Cross-section al survey	transportation infrastructure		
5	Muthelo et al. (2024)	South Africa	Qualitative study	Negative societal	Social Stigma	Stigma and Cultural
6	Thornicroft et al. (2016)	Global	Systematic review and meta-analysis	perceptions of mental disorders		Misconceptions
7	Cornejo et al. (2017)	Global	Literature review	Requires cross-sectoral coordination	Complexity of Psychosocial	
8	Govender et al. ((2019)	South Africa	Cross-section al survey		Problems	
9	Barnes et al. (2023)	United States	Randomized controlled trial (RCT)	High treatment costs and	Economic Barriers	Socioeconomic Barriers and Financial
10	Ferrari et al. (2019)	Global	Meta-analysis of randomized controlled trials (RCTs)	limited health insurance		Constraints
11	MacLeod et al. (2021);	Global	Literature review	Health workers work alone and are overloaded	Professional Isolation	Lack of Integrated Care Systems
12	Mapelli et al. (2020)	Italy	Observational study			
13	Saxena et al. (2021)	United Kingdom	Qualitative study	Minimal budget allocation and special priorities for rural areas	Lack of Mental Health Policy	



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14	Islam et al.	Bangladesh	Narrative	Patient	Local	Potential Role
	(2022);		review	resilience	Cultural	of Local
15	Veronica	Global	Literature	through	Potential	Culture and
	Bernacchi		review	cultural		Resilience
	&			values		
	Alexandria					
	(2021)					

Results

on an analysis of 15 Based peer-reviewed articles retrieved from databases such as PubMed (6 articles), ScienceDirect (5 articles), ProQuest (3 articles), and Google Scholar (1 article) it was found that access to mental health services in rural areas faces various social. structural, geographical, systemic challenges. There were eight sub themes found in the article. The findings were categorized into five main themes as follows:

Geographic Isolation and Infrastructure Deficits

Articles by Graves et al. (2023) and Wang et al. (2024) show that mental health facilities are very rare in rural areas. In many cases, there is only one psychiatric hospital to serve a large population. In addition, health workers such as nurses often do not have adequate psychiatric training, so patients only receive intervention when their condition is already severe.

Results from Das et al. (2024) and Patel et al. (2018) confirmed that long distances to mental health facilities are a major barrier for rural communities. Poor road infrastructure and lack of public transportation make routine visits or emergency interventions difficult,

especially for patients with chronic disorders.

2. Stigma and Cultural Misconceptions

Issues such as domestic violence, child trauma, and teenage pregnancy require a cross-sectoral approach (Muthelo et al., 2024); Thornicroft et al., 2016). However, coordination between health, legal and education authorities is still weak, resulting in suboptimal handling. In addition, some communities perceive the problem as something to be ashamed of.

Several articles mention social stigma as a significant factor that prevents individuals from seeking mental health help (Muthelo et al., 2024); Thornicroft et al., 2016). Patients fear being ostracized by society, especially in rural environments that tend to be homogeneous and traditional. This leads to treatment delays and social isolation.

3. Socioeconomic Barriers and Financial Constraints

High medical costs and lack of health insurance are major obstacles for the poor (Ferrari et al., 2019). Barnes et al. (2023) found that transportation costs, medicines, and doctor consultations are often unaffordable for cancer survivors and pregnant adolescents in rural areas.

4. Lack of Integrated Care Systems

One of the significant systemic challenges in the provision of mental



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health services in rural areas is the lack of specific and sustainable mental health policies. Mapelli et al. (2020) and MacLeo et al. (2021) reported that health centre staff work in isolation and face high workloads without supervision. Lack of professional support leads to their low ability to effectively address psychosocial issues.

Many developing and middle-income countries do not have specific national action plans for the development of mental health services in rural areas. Even when such policies exist, budget allocations and implementation are often insufficient or uneven. Mental health policies tend to be urban-centric, while rural areas are rarely prioritized in mental health sector strategic planning (Saxena et al., 2021; World Health Organization, 2022). This has led to a lack of mental health infrastructure development, limited training of primary health care workers in mental health care and poor integration of mental health in basic health programs.

5. Potential Role of Local Culture and Resilience

Islam et al. (2022); Veronica Bernacchi & Alexandria (2021) noted that some patients show resilience through local cultural values, yet this potential is untapped in the formal service system. Cultural integration in mental health interventions could be an innovative solution if further developed.

Discussion

The findings of this study reveal that access to mental health services in rural areas is significantly hindered by a combination of geographic, socioeconomic, cultural, and systemic

barriers. These challenges are not isolated but rather interrelated, creating a complex web that limits the availability, affordability, and acceptability of mental health care for rural populations.

1. Geographic Isolation and Infrastructure Deficits

One of the most persistent issues identified was the lack of proximity to mental health facilities. In many rural regions, individuals must travel long distances to access even basic mental health services (Graves et al., 2023). This aligns with findings from other studies showing that physical distance reduces the likelihood of seeking help and increases treatment dropout rates (Huang et al., 2022). The limited number of mental health professionals exacerbates this issue, as rural communities often have fewer than one psychiatrist per million people (Patel et al., 2018).

Telemedicine and mobile clinics have been proposed as viable solutions to overcome these geographic disparities. A study by Totten et al. (2024) found that significantly telepsychiatry improved service coverage in remote areas, especially when integrated into primary healthcare systems. However, implementation requires investment in digital infrastructure and training for local providers.

Socioeconomic Barriers and Financial Constraints

Financial constraints were another key barrier to accessing mental health services. Many participants reported inability to afford transportation, medication, or consultation fees without financial assistance. This finding is consistent with global evidence indicating



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that out-of-pocket expenses disproportionately affect vulnerable groups such as low-income families and adolescents (Ferrari et al., 2019).

Expanding health insurance coverage and implementing targeted subsidies can alleviate some of these burdens. According to World Health Organization (2022),countries integrate mental health into universal health coverage schemes report better treatment outcomes and higher service utilization among rural populations.

3. Stigma and Cultural Misconceptions

Cultural stigma surrounding mental illness emerged as a major deterrent to service uptake. Participants expressed about being concerns judged discriminated against if they sought help, particularly in tightly knit rural communities. Thornicroft et al. (2016) highlight similar patterns globally, noting that stigma remains a critical barrier to early intervention and recovery.

Community-based awareness programs involving local leaders, religious figures, and peer educators have shown promise in reducing stigma. Islam et al. (2022), demonstrated that culturally adapted interventions led to greater engagement and adherence among women experiencing postnatal depression in rural South Asia.

4. Lack of Integrated Care Systems

A significant system-level challenge was the weak integration between primary healthcare and specialist mental health services. Referral systems were often fragmented or absent, leading to discontinuity of care. Huang et al. (2022) emphasize that integrated models where mental health is embedded within

general health care are more effective in rural settings.

Task-sharing models, where non-specialist healthcare workers deliver evidence-based mental health interventions under supervision, have been successfully implemented in several low-resource contexts (Patel et al., 2018; Totten et al., 2024). These models not only improve access but also enhance workforce capacity at the community level.

5. Potential Role of Local Culture and Resilience

Interestingly, despite the barriers, some participants demonstrated resilience through informal support networks and traditional coping mechanisms. Bernacchi et al. (2021) argue that integrating these culturally rooted strengths into formal care systems could improve service acceptability and effectiveness.

This suggests a need for mental health policies that are not only evidence-based but also culturally responsive. Training healthcare workers in cultural competence and involving local communities in program design can lead to sustainable mental health more interventions in rural areas.

Systematic and sustainable interventions are urgently needed to avoid widening gaps in mental health services. Several strategic recommendations are suggested:

- 1. Human Resource Capacity Building: Basic psychiatry training for nurses in rural areas.
- 2. Telehealth Development: Use of telemedicine technology for remote psychosocial consultation.
- 3. Collaborative Network Strengthening: Establishing a referral system and



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- cooperation between health centers, hospitals, and social institutions.
- 4. Integration of Local Culture: Using community values and strengths as part of the therapeutic approach.
- 5. Policy Advocacy: Encouraging the government to improve access to mental health services in rural and remote areas.

Conclusion

Improving access to mental health services in rural areas requires a multi-pronged approach that addresses both supply- and demand-side barriers. This includes strengthening human resources, leveraging technology, reducing stigma, fostering interdisciplinary collaboration, incorporating local cultural strengths into models. Without care targeted, evidence-based interventions, the gap in mental health service provision will continue to widen, undermining efforts achieving toward universal health coverage and mental health equity.

References

Barnes, L. L., Dhana, K., Liu, X., Carey, V. J., Ventrelle, J., Johnson, K., Hollings, C. S., Bishop, L., Laranjo, N., Stubbs, B. J., Reilly, X., Agarwal, P., Zhang, S., Grodstein, F., Tangney, C. C., Holland, T. M., Aggarwal, N. T., Arfanakis, K., Morris, M. C., & Sacks, F. M. (2023). Trial of the for Prevention MIND Diet Cognitive Decline in Older Persons. New England Journal of Medicine, 389(7), 602-611. https://doi.org/10.1056/nejmoa23023 68

- Cornejo, C., Cuadros, Z., Morales, R., & Paredes, J. (2017). Interpersonal coordination: Methods, achievements, and challenges. *Frontiers in Psychology*, 8, 1–16. https://doi.org/10.3389/fpsyg.2017.01 685
- Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest, Supplement*, *15*(2), 37–70. https://doi.org/10.1177/15291006145 31398
- Das, A., Sarkhel, S., Brahma, A., & Akula, V. (2024). Development of mental health human resources for mental well-being. *Indian Journal of Psychiatry*, 66, S391–S402. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry 639 23
- Ferrari, M., Hunt, C., Harrysunker, A., Abbott, M. J., Beath, A. P., & Einstein, D. A. (2019). Self-Compassion Interventions and Psychosocial Outcomes: a Meta-Analysis of RCTs. *Mindfulness*, 10(8), 1455–1473. https://doi.org/10.1007/s12671-019-0 1134-6
- Govender, D., Naidoo, S., & Taylor, M. (2019). Knowledge, attitudes and peer influences related to pregnancy, sexual and reproductive health among adolescents using maternal health services in Ugu, KwaZulu-Natal, South Africa. *BMC Public Health*, 19(1), 1–16. https://doi.org/10.1186/s12889-019-7 242-y
- Graves, J. M., Abshire, D. A., Mackelprang, J. L., Dilley, J. A., Amiri, S., Chacon, C. M., & Mason, A. (2023). Geographic Disparities in the Availability of Mental Health



Faculty of Nursing, University of Jember, Indonesia

- Services in U.S. Public Schools. *American Journal of Preventive Medicine*, 64(1), 1–8. https://doi.org/10.1016/j.amepre.2022.09.003
- Huang, J., Liu, J., Tian, R., Liu, K., Zhuang, P., Sherman, H. T., Budjan, C., Fong, M., Jeong, M., Kong, X., Hannah, J. H., & Louis, S. (2022). A Next Generation Sequencing-Based cells Protocol Correction: Huang et al . A Next Generation Sequencing-Based. *Cells*, *18*(11). https://doi.org/doi: 10.3390/cells11010010.
- Islam, M. R., Rahman, M. S., & Qusar, M. S. (2022). Community-based decentralized mental health services are essential to prevent the epidemic turn of post-Covid mental disorders in Bangladesh: A call to action. *Health Science Reports*, 5(4), 5–8. https://doi.org/10.1002/hsr2.734
- MacLeod, M., Arp, H. P. H., Tekman, M. B., & Jahnke, A. (2021). The global threat from plastic pollution. *Science*, 373(6550), 61–65. https://doi.org/10.1126/science.abg54 33
- Mapelli, M., Salvioni, E., Bonomi, A., Gugliandolo, P., De Martino, F., Vignati, C., Berna, G., & Agostoni, P. (2020). How Patients With Heart Failure Perform Daily Life Activities: An Innate Energy-Saving Strategy. *Circulation: Heart Failure*, *13*(11), E007503. https://doi.org/10.1161/CIRCHEART FAILURE.120.007503
- Muhorakeye, O., & Biracyaza, E. (2021). Exploring Barriers to Mental Health Services Utilization at Kabutare District Hospital of Rwanda: Perspectives From Patients. *Frontiers in Psychology*, 12(March). https://doi.org/10.3389/fpsyg.2021.63

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- Muthelo, L., Mbombi, M. O., Mphekgwana, P., Mabila, L. N., Dhau, I., Tlouyamma, J., Mashaba, R. G., Mothapo, K., Ntimane, C. B., Seakamela, K. P., Nemuramba, R., Maimela, E., & Sodi, T. (2024). Exploring mental health problems and support needs among pregnant and parenting teenagers in rural areas Of Limpopo, South Africa. BMC Women's Health, *24*(1), https://doi.org/10.1186/s12905-024-0 3040-z
- Patel, V., Saxena, S., Lund, Thornicroft, G., Baingana, F., Bolton, P., Chisholm, D., Collins, P. Y., Cooper, J. L., Eaton, J., Herrman, H., Herzallah, M. M., Huang, Y., Jordans, Kleinman, J. D., Medina-Mora, M. E., Morgan, E., U., Omigbodun, Niaz, О., UnÜtzer, Jü. (2018). The Lancet Commission on global mental health and sustainable development. The Lancet, *392*(10157), 1553–1598. https://doi.org/10.1016/S0140-6736(1 8)31612-X
- Saxena, L. P., Fried, J., Rees, J., & Singh, J. (2021). Understanding participation in community food activities: a synthesis report on motivations, barriers and enablers. https://doi.org/10.13140/RG.2.2.29878.63049/1
- Tarlow, K. R., Johnson, T. A., & McCord, C. E. (2019). Rural Status, Suicide Ideation, and Telemental Health: Risk Assessment in a Clinical Sample. *Journal of Rural Health*, *35*(2), 247–252. https://doi.org/10.1111/jrh.12310
- Thornicroft, G., Mehta, N., Clement, S., Evans-Lacko, S., Doherty, M., Rose, D., Koschorke, M., Shidhaye, R., O'Reilly, C., & Henderson, C. (2016).



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Evidence for effective interventions to reduce mental-health-related stigma and discrimination. *The Lancet*, 387(10023), 1123–1132. https://doi.org/10.1016/S0140-6736(15)00298-6

- Totten, A. M., Womack, D. M., Griffin, J. C., McDonagh, M. S., C., Blazina, Davis-O'Reilly, I., Grusing, S., & Elder, N. (2024). Telehealth-guided provider-to-provider communication to improve rural health: A systematic review. Journal of Telemedicine and *30*(8). Telecare. 1209-1229. https://doi.org/10.1177/1357633X221 139892
- Veronica Bernacchi, & Alexandria, V. (2021). Rural resilience in cancer survivors: conceptual analysis of a global phenomena. *Journal of Rural Nursing and Health Care*, 21(1).
- Wang, R. A. H., Smittenaar, P., Thomas, T., Kamal, Z., Kemp, H., & Sgaier, S. K. (2024). Geographical variation in perceptions, attitudes and barriers to mental health care-seeking across the UK: A cross-sectional study. *BMJ Open*, 14(3), 1–16. https://doi.org/10.1136/bmjopen-2023 -073731
- Willmot, R. A., Sharp, R. A., Amir Kassim, A., & Parkinson, J. A. (2023).Α scoping review community-based mental health intervention for children and adolescents in South Asia. Global Mental Health, 10. https://doi.org/10.1017/gmh.2022.49
- World Health Organization. (2022). *Transforming mental health for all*. https://doi.org/10.1136/bmj.o1593