BMC Psychology

RESEARCH Open Access

Tele-mental health for frail older adults in rural Bangladesh: a phenomenological study

Ridwana Maher Manna[1*], Md Hafizur Rahman[1], Pradip Chandra[1], Nasimul Ghani Usmani[1], Tamanna Majid[1], Jesmin Mahmuda Juthi[1], Fatema Shahrin[1], Sadia Afrose Shams[1], Fahmida Afroze[1], S. M. Hasibul Islam[1], Mohammad Sohel Shomik[2], Anisuddin Ahmed[1], Shams El Arifeen[1], Ahmed Ehsanur Rahman[1] and Aniqa Tasnim Hossain[1]

Abstract

Background Frail older adults in rural Bangladesh face a high burden of unmanaged depression and anxiety due to limited access to mental health care. Tele-mental health services offer a promising alternative to address these gaps. This study explored how frail older adults cope with mental health challenges and assessed a facility-based tele-mental health intervention, including its acceptability, barriers, adoption, appropriateness, and provider insights on feasibility and sustainability.

Methods We conducted a qualitative phenomenological study in 3 rural districts of Bangladesh. Purposive sampling was used to recruit frail older adults (≥ 60 years) with depression and anxiety, alongside psychologists and medical officers engaged in tele-mental health counselling. Data were collected between March and June 2025 through 12 in-depth interviews with older adults and 8 key informant interviews with service providers using semi-structured guideline.

Results Older adults often viewed emotional distress as part of aging and coped through prayer and daily routines. Stigma, low awareness, and practical barriers especially for women hindered access to mental health care. Those who used the tele-mental health counselling service, initially skeptical, later found it helpful and encouraged peers to attend. Providers described the service helpful for underserved older adults but identified gaps in infrastructure, awareness, and integration with the public healthcare system.

Conclusion Participants described facility-based tele-mental health counselling as acceptable and appropriate for frail older adults, meeting their needs and preferences for privacy, empathy, and culturally familiar coping. So, improving support for this group requires reducing stigma, raising awareness, and integrating services into routine primary healthcare.

Keywords Depression, Anxiety, GAD-7, PHQ-9, Frail, Tele-mental health, Bangladesh

Aniqa Tasnim Hossain is a senior author.

*Correspondence:
Ridwana Maher Manna
ridwana.manna@icddrb.org
[1]Maternal and Child Health Division, International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka 1212, Bangladesh
[2]Nutrition Research Division, International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka 1212, Bangladesh

© The Author(s) 2026. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/4.0/.

Introduction

Frailty has emerged as a critical geriatric syndrome characterised by a progressive decline in physiological reserves and resilience. This condition, marked by increased vulnerability to minor stressors, predisposes older adults to adverse outcomes, including functional impairment, hospitalisation, and early mortality. Globally, frailty affects around 10.7% of older adults, but the prevalence is significantly higher in South Asia (25–65%) [1, 2]. In Bangladesh, over 60% of adults aged 60 years and above experience moderate to severe frailty, with functional decline often starting by 55 years, amid a rapidly rising elderly population projected to reach 17.2 million by 2025 [2, 3].

Frailty affects not only physical but also mental health, yet the mental health dimension remains largely neglected. Declining coping capacity in frail older adults often leads to depression and anxiety, which if unaddressed may result in disability or even suicide, exacerbated by stigma and limited access to mental healthcare [1, 4]. In Bangladesh, depression and anxiety affect an estimated 81.6% of older adults but remain widely underdiagnosed and inadequately managed [5]. Despite this significant burden, mental health remains sidelined, overshadowed by physical health [2, 6].

Older adults often internalise emotional distress as a normal part of aging, leading to low recognition of symptoms and delayed or avoided help-seeking [7]. Moreover, this growing population receives less mental health attention than youth, with many trials excluding those over 65 or with comorbidities. This results in a lack of evidence-based strategies to manage late-life depression and anxiety [8].

Major barriers to seeking professional mental health care among older adults include stigma, older age, cost, and limited education [9]. These challenges are high in rural and disadvantaged communities, where access to healthcare is limited and social support systems are weak [10]. Even though barriers exist, many still seek professional care when it is available and accessible [11]. Recent efforts by the Government of Bangladesh, such as establishing Well-being Centers and expanding services through the National Institute of Mental Health (NIMH), point towards a growing commitment to mental health. This facility-based tele-mental health services through Well-being Centre, build on these efforts and may offer a promising solution to address specialist shortages and mobility limitations in rural settings [12].

Previous studies have explored factors associated with mental health among older adults in both rural and urban settings [13, 14]. However, there is a notable gap in qualitative evidence that captures the lived experiences of this population. In particular, no study has examined the mental health of frail older adults who receive services from tele-mental health centres in resource-limited settings in Bangladesh. This study aimed to explore the understanding and coping mechanisms of frail older adults in relation to mental health conditions within tele-mental health centres. In addition, the perspectives of healthcare providers offers important insights into the feasibility and sustainability of integrating these services into the public health system. Understanding these real-life experiences, needs, and barriers is essential for informing the design of effective interventions that can improve mental health care for vulnerable older populations in similar contexts.

Methods

Study design and participants

This study was guided by an interpretivist paradigm to understand the meaning and experiences of individuals within their social and cultural contexts. We employed a phenomenological research design with frail older adults (≥ 60 years) who accessed tele-mental health services through "Well-being Centres," as well as with the healthcare providers. Using purposive sampling, we selected older adults who had attended at least one counselling session and psychologist identified them for the follow-up session. Before taking the follow-up counselling, field attendant assessed for the frailty criteria using the Gerontopole Frailty Screening Tool and all elderly participants screened for depression and anxiety using the Patient Health Questionnaire (PHQ-9) and the Generalised Anxiety Disorder scale (GAD-7) [15–18]. Frail older participants were considered as eligible if they found the presence of symptoms (cut-off score of 10 for both PHQ-9 and GAD-7) for depression and anxiety [16]. Additionally, frail older adults with severe cognitive impairment, inability to consent, or serious medical conditions were excluded from the study. To capture heterogeneity in experiences, we ensured variation in age (more than 60 years) and gender. Additionally, healthcare providers were purposively selected to include both project-assigned psychologists and facility-based medical officers representing different professional roles in tele-counselling. A total of 20 participants were included for the interview: consistent with the eligibility criteria, a small number of service recipients were older adults aged over 60 years. Among them, a total 12 frail older were included in the in-depth interviews (IDIs), along with four psychologists and four medical officers in key informant interviews (KIIs).

Study setting

The study was conducted at three rural public healthcare facilities in northern Bangladesh: in district hospital at Netrokona and Dinajpur and in Upazila Health Complex, at Chirirbandar sub-district of Dinajpur district (Map

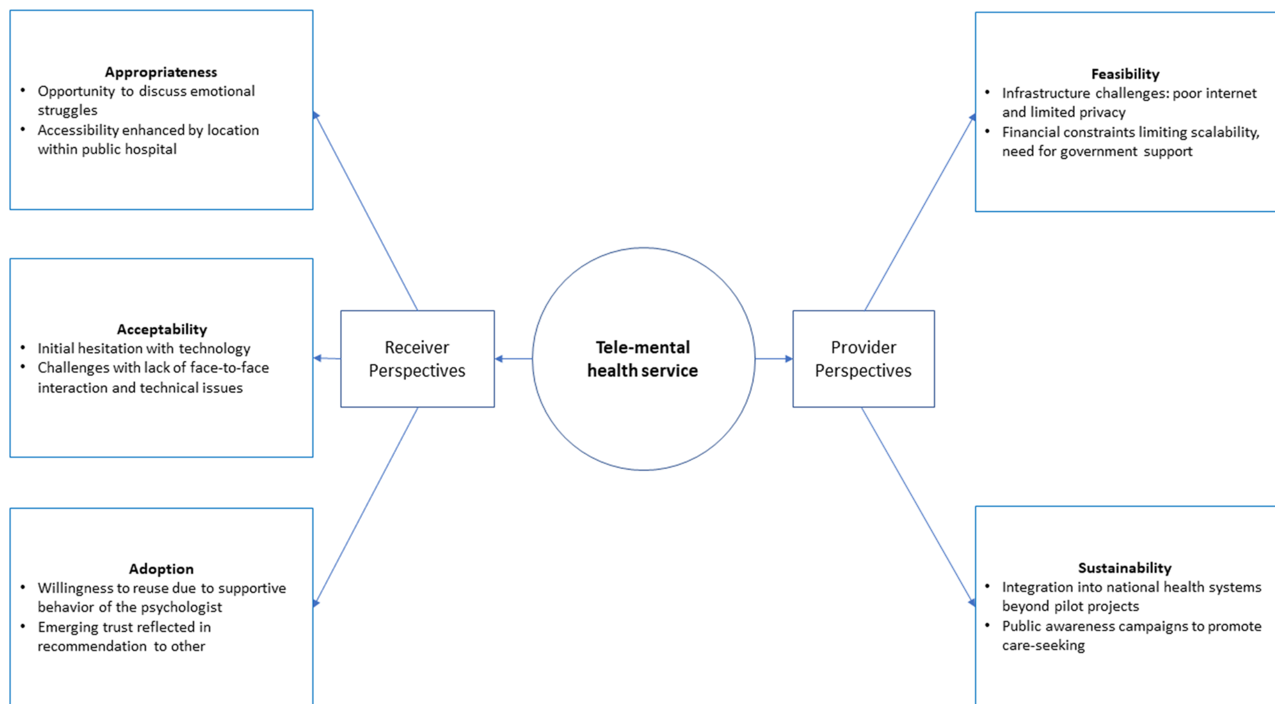

Fig. 1 WHO implementation thematic framework

provided in online supplementary Appendix-1). These sites are part of an ongoing tele-mental health intervention implemented by the Non-Communicable Disease Control (NCDC) programme of the Ministry of Health and Family Welfare (MoHFW), with technical support from icddr, b. The intervention, known as the "Well-being Centre," offers video-based mental health counselling services to underserved populations [12].

Data collection

Data were collected during March to June 2025 by trained psychologists and a qualitative experienced research assistant (RA). Psychologist engaged in counselling at the Well-being Centres, conducted IDIs with older adults using a semi-structured guide that captured understanding and coping mechanisms of mental health. In addition, interviews on experiences of counselling services were conducted by the research assistant from the frail older adults after receiving their counselling sessions. In parallel, a research assistant, trained in qualitative research and interviewing skills, conducted KIIs with the psychologists and medical officers using separate semi-structured guides. All interviews were audio-recorded and supplemented with brief field notes. Demographic information was also collected during each interview. Saturation was considered to have been achieved when further interviews did not yield any new insights related to the study objectives. This process assessed through continuous and iterative review of the transcripts, during which recurring themes were observed and no additional novel ideas emerged, indicating that both code saturation and meaning saturation had been reached [19].

Data collection tool

The semi-structured interview guide was developed based on the World Health Organization's (WHO) implementation research framework [20]. This framework informed the design and structure of the data collection process, focusing on both individual experiences and system-level factors influencing mental health service delivery and use.

Four core themes with seven domains guided the tool development based on the current evidence, aligned with the study objectives and background framing of the WHO implementation framework (Fig. 1). Older adult participants were asked about: Coping with emotional distress, Acceptability, Adoption, Appropriateness, and Barriers to accessing care from the patient perspective. Healthcare providers and psychologists were asked about: Feasibility, Sustainability, and Barriers to accessing care from the provider's perspective. The domains were defined as follows: acceptability (how people feel about using tele-mental health services), adoption (whether participants have adopted tele-mental health services and their experiences), appropriateness (whether tele-mental health services are considered suitable), feasibility (how easy or difficult participants find using tele-mental health services), and sustainability (whether tele-mental health services are perceived as viable in the long term). Further details of the thematic framework and

interview guidelines are provided in the online supplementary material appendix 2 & 3 accordingly. The tools were reviewed by a psychologist and an anthropologist to refine their clarity, cultural appropriateness, and contextual sensitivity.

Data analysis

Audio-recorded interviews, supplemented with brief field notes, were transcribed verbatim by a research assistant (RA) trained in social anthropology. All transcripts were anonymised and reviewed for accuracy by the original interviewer.

Thematic analysis followed a largely deductive approach, structured around key implementation domains (acceptability, adoption, appropriateness, feasibility, and sustainability). Within these domains, inductive coding was applied to capture unanticipated insights emerging from participant narratives. Braun and Clarke's six-phase framework like familiarisation, coding, theme identification, review, definition, and synthesis was applied using NVivo version 14 [21]. Bengali quotes were translated into English, preserving meaning. Triangulation was achieved by comparing perspectives across participant groups to enhance credibility.

Positionality and reflexivity

To enhance credibility and address positionality, we built rapport with participants by clarifying our backgrounds, motivations, and study aims, encouraging open and honest dialogue. Findings were critically reviewed with domain experts to strengthen analytical validity and reliability.

Ethical approval and consent of participation

Ethical approval was taken from the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr, b) Institutional Review Board (protocol PR-22103) on 27 May, 2024. The study adhered to the principles outlined in the Declaration of Helsinki. Their participation had entirely voluntary, and their willingness was provided with an informed consent.

Results

We interviewed a total of 20 participants. Among them, twelve were frail older adults who utilised the tele-mental health services and eight were healthcare providers. Among the eight healthcare providers, four were psychologists who provided counselling to the patients through the tele-mental health system, and four were medical officers who were involved in direct in-person primary healthcare, mental healthcare and referred patients to the tele-mental health system.

The descriptions of demographic characteristics of the user participants and psychologists & healthcare providers provides in online supplementary appendix 4 and 5 accordingly.

Thematic analysis of the interviews generated four main themes reflecting outcomes. Each theme contained sub-themes capturing perspectives of participants and healthcare providers. The results are presented below, organised by themes and sub-themes:

Theme 1: Understanding and managing emotional distress in later life (coping mechanism)

Many participants perceived emotional distress as an expected and often unavoidable part of aging, influenced by declining health, social withdrawal, loss of loved ones, and changing household relationships. These experiences were often accepted silently as "just part of getting old" rather than actively addressed. A participant shared:

> *"Worry and sadness are part of growing old. We all carry these silently. What can we do? My body hurts, my relatives, friends are gone, and children are busy with their lives. I just sit alone with my thoughts now. There is no point in sharing these feelings, how many days do I have left anyway?" — Participant 1, age 65 years, female, depression.*

Alongside this perception, participants actively employed various coping strategies to manage emotional distress. Spirituality played a central role, engaging in religious rituals, particularly prayer and reading the Quran, offered both comfort and emotional relief. A participant mentioned:

> *"After Fajr prayer, I sit with the Quran. It brings me peace. I sometimes cry as I read, and those tears feel like they wash away the heaviness in my chest. It's like I can breathe again and make my head feel light, feeling like I have cleared my burdens from my mind."— Participant 3, age 72 years, male, depression and anxiety.*

Theme 2: Barriers to seeking mental health service

Participants described widespread social stigma surrounding mental health. They noted that this stigma contributed to a culture of silence, where emotional struggles were kept hidden due to fear of judgment or ignorance. Several participants shared that seeking psychological help might cause others to label them as 'mad' or mentally unstable. The fear of community gossip, misinterpretation, and social exclusion discouraged many from seeking support. One participant mentioned:

> *"In our village… if someone hears that you're going to see a doctor for your mind… they won't think twice before calling you mad, crazy. That word sticks, you*

know? And once they label you like that… they look at you differently. They start whispering behind your back… even the kids stop coming near you. No one wants to be treated like that. So better to stay quiet and keep our problems to ourselves… It's easier than being laughed at or pushed aside."— Participant 11, age 67 years, female, depression.

In addition to stigma, participants highlighted limited knowledge and awareness about available mental health services in rural settings. Despite visiting health facilities for other health issues, they often remained unaware of the Well-being Centre or that mental health counselling was available in government facilities. A participant shared his experience as:

"I used to sit at home alone all day, thinking about my pain… my chest would feel heavy, I felt like I had a heart problem, for I felt anxious and stressed that anything could happen to me anytime. But I never thought there was a doctor for this… One day, my neighbor came and told me about this mental counselling service. I was surprised and did not care, and believed that 'Such a thing exists in our village?' I had been coming to this hospital for my back pain, but never knew there was treatment for the mind, too. If he hadn't told me, I would have never known this. I thought maybe this sadness was normal and just mine to carry till the end."— Participant 8, age 62 years, male, anxiety.

Practical barriers further constrained access. Participants described the burden of high transport costs, long travel distances, and household responsibilities, particularly for women. One participant narrated:

"The hospital is far from our village. I have to take two rickshaws and walk a bit. It costs around 100 BDT. That's a lot for me. If I come here, I won't be able to buy rice, lentils, or oil for the house. And my husband… he doesn't like me coming here. He says, 'What's wrong with you now? You've grown old, not mad.' I also have chores to do at home. Who will cook or sweep if I come for these issues? So, I end up skipping the follow-ups. It's too much for me to manage everything."— Participant 9, age 63 years, female, depression and anxiety.

Psychologists also noted that older women were particularly vulnerable, describing how fear of family judgment limited their openness in early sessions. The internal fear of being misunderstood or shamed restricted self-expression during sessions. A psychologist explained:

"I often see women hesitate during the first session. They look around the counselling room being afraid that someone might overhear. Once they realise we, as psychologists, are here to listen and not judge, they open up, but it takes time, and they are not free at the very first visit. The fear of being judged by their own family is very real."— Psychologist 3.

Providers highlighted several feasibility challenges in implementing the tele-mental health services. They described that low digital literacy among older adults often required additional guidance, while stigma continued to make disclosure of symptoms difficult. Infrastructure issues, including poor internet connectivity and limited private space for counselling, were also noted. A psychologist mentioned:

"Many older patients don't understand how to use a screen. Some keep looking at the door, wondering who's watching them. We have to spend time just to calm them down and explain everything. It's doable but takes more time and effort."— Psychologist 1.

Medical officers reported that many patients avoided disclosing mental health symptoms during initial consultations and were hesitant to return for follow-up visits. They linked this to repeated travel costs, lack of family support, and fear of gossip. As one medical officer described:

"Some of them don't return for follow-up visits. Even if we refer them to the well-being center for support. The journey is long, and if the husband or family is not supportive, they do not come back. We see many who start service once but then drop out."— Medical Officer 2.

Theme 3: Facilitators of access and support

Participants highlighted the appropriateness of locating the service within a public hospital felt more convenient and accessible, especially for those with mobility challenges and financial constraints:

"It's good that this service is in the same hospital where I come for check-ups and to see a doctor for my health conditions. If it were somewhere far away or another place, I couldn't go. We are old… how much can we run around? Going to different places for different problems is not possible at this age. I can't walk long. Even coming here is tough. But since this was in the same place, I thought I could manage to come."— Participant 4, age 66 years, female, anxiety.

These findings show that older adults found tele-mental health meaningful because it met emotional needs and offered through public health facilities.

Participants initially expressed hesitation about using a tele-mental health service, mainly due to unfamiliarity with technology and doubts about whether an emotional connection could be made through a screen. However, over the time several participants described feeling heard and respected by psychologists, which helped them open up. Yet, a few noted difficulties due to the lack of face-to-face interaction or technical interruptions. Adoption was evident in participants willingness to continue using the service. Some reported recommending it to others, suggesting that word-of-mouth gradually built trust. As one participant shared:

> *"At first, I didn't understand how talking to a doctor through a screen could help… I began to feel lighter… a weight I was carrying in my chest for so long had finally lifted… I want to talk more and come back again, as she suggested."— Participant 7, age 66 years, female, depression and anxiety.*

While most participants accepted tele-mental health over time, some felt it lacked the emotional connection of in-person care. A female participant shared experience:

> *"This system is good, but still, talking on a screen feels a bit awkward… I am used to seeing doctors face-to-face… sometimes the voice breaks, or I need help with the device… If I could sit in front of the doctor, the treatment would be faster"—Participant 4, age 66 years, female, anxiety.*

Beyond the barriers, some participants adopt the service. They indicated that, they would reuse the service and had already recommended it to others, showing growing trust. This peer endorsement may help increase acceptance in rural areas where word-of-mouth strongly shapes older adult's health decisions. One participant explained:

> *"After I got help, I told my neighbor about it. She was feeling low after her husband died a few months back and was staying alone at home. I told her, 'You should go to this place and talk about what you're going through. You might start to feel better like I did.' I think when someone hears it from a person who has been through the same thing and found help, they believe it more."— Participant 9, age 66 years, female, depression.*

Theme 4: Sustainability of tele-mental health service

Providers suggested that the sustainability of tele-mental health services depended on strong government commitment to expand mental health support. They described the need for recruitment and training of psychologists, continuous capacity building of healthcare staff, and integration of the service into routine health systems rather than reliance on donor-dependent, project-based efforts.

A medical officer mentioned:

> *"This service cannot extend as a pilot or individual project work. If we want it to last, it must be part of our national mental health strategy with regular staff, equipment, and funding."— Medical Officer 4.*

Financial constraints were further described as limiting scalability. Providers emphasised that additional investment would be necessary to ensure the continuation of services. A medical officer said:

> *"Establishing more of these centers will require proper financial planning. The government must increase its budget for mental health if we want this to expand. Otherwise, it will stay limited to a few locations and gradually won't be of value"— Medical Officer 3.*

Providers also suggested that long-term sustainability was linked to expanding services and raising public awareness. A psychologist mentioned:

> *"We need to expand services to hard-to-reach areas and public awareness campaigns especially through social media and other ways to let people know that these services are available."— Psychologist 3.*

Psychologists further emphasised that improving follow-up and client retention was closely connected to greater awareness of the service. They reported that when more people are informed especially through direct outreach and word-of-mouth clients are more likely to return for follow-up and continue their care. One psychologist highlighted:

> *"Many patients don't realise they need to come back to take service for their good. If we spread the message more and send reminders through SMS or calls, follow-ups will increase." — Psychologist 2.*

Discussion

This study offers new insights into how frail older adults in rural Bangladesh experience depression and anxiety and engage with facility-based tele-mental health services. It also reflects provider perspectives on

system-level enablers and barriers, highlighting the cultural, gendered, and structural factors shaping access towards digital mental health service in a low-resource setting like Bangladesh.

Emotional distress as a normalised part of aging

Frail older adults in our study often perceived emotional distress as a natural and inevitable consequence of aging, in contrast to younger populations who may more readily identify and address mental health issues [7]. Many participants attributed sadness or anxiety to deteriorating health, spousal loss, or family-based neglect, viewing these emotions as part of life rather than symptoms requiring care. This internal acceptance contributed to under-recognition and underreporting of mental distress. In Bangladesh, this is especially common among older women, who often face reduced independence and heightened social isolation [2].

Coping mechanisms rooted in spirituality, routine, and social ties

Participants commonly relied on spiritual and routine-based coping strategies, such as prayer, Quran recitation, or engaging in domestic tasks. These personal mechanisms offered temporary relief in the absence of formal mental health care. Similar patterns have been observed globally in Nigeria [22]; the United States [23] and European [24] where religious and social supports are commonly used by older adults. However, such strategies were not always sufficient, some participants reported persisting or worsening symptoms, including suicidal thoughts.

Stigma, awareness gaps, and structural barriers to access

Despite some relief from personal coping, persistent stigma and low mental health literacy continued to inhibit service uptake. Participants feared being labelled "mad," often concealing their visits by describing them as physical checkups, echoing findings from Bangladesh and other LMICs where mental illness is associated with spiritual weakness or disgrace [25]. Additionally, many were unaware that counselling services were available at facilities they routinely visited for other health concerns reflecting a failure of community-level awareness and integration into routine care [26].

Practical obstacles particularly among women further compounded these issues. Many participants in our study cited long distances, lack of transport, costs, and household obligations as deterrents to seeking care. Moreover, in Bangladesh, only 36% of women report decision-making autonomy in health care, and access remains especially constrained in rural areas [27]. Whereas, older women were especially disadvantaged due to financial dependency and needing approval from male family members to travel. The cultural expectations often prioritise family caregiving over self-care, discouraging help-seeking [3, 28].

Evolving attitudes toward tele-mental health: from skepticism to acceptance

Despite initial hesitation, participants reported growing trust and comfort with tele-counselling after their first sessions. While some doubted whether a remote counsellor could truly understand them, many later appreciated the empathetic listening and respectful interaction. Similar patterns have been observed in rural Australia, where older patients gradually accepted telemedicine after experiencing its human-centered delivery [29].

Peer influence as a key enabler of adoption

As participants became more comfortable with the service, some began actively recommending it to peers. This peer advocacy served as a powerful enabler in closely connected rural communities, where personal recommendations often guide health-seeking behavior. Community support has been shown to increase the uptake of health interventions, particularly when trust in formal systems is low. Thus, the community champions and personal recommendations are key in scaling health interventions [30]. Engaging these community rooted networks could help broaden awareness and uptake of tele-mental health among elders.

Health system-level barriers to feasibility and sustainability

From the provider perspective, feasibility challenges included poor internet connectivity, lack of separate counselling spaces in facilities, and high patient loads limiting time for follow-up [31]. These are common hurdles in integrating mental health into public systems in LMICs [32]. Providers emphasised that in their views, long-term sustainability would require embedding tele-mental health into existing health systems rather than relying on donor-funded projects. Bangladesh's Mental Health Policy (2021) and Strategic Plan (2020–2030) support such integration [3], but operationalising this vision requires funding and resource allocation. These challenges were partly addressed through orientation sessions, private counselling setups where feasible, and leveraging existing facility visits to reduce travel needs.

Currently, mental health receives only 0.5% of the national health budget [25]. Without structural integration and policy support, promising initiatives like the Well-being Centre may fail to scale or endure.

Strengths and limitations

This study focused on a physiologically vulnerable group of older adults with depression and anxiety and incorporated both service user and provider perspectives,

providing rare insights into facility-based tele-mental health in a rural setting. However, the study had certain limitations. First, it captures only the cross-sectional nature of qualitative data, which restricts understanding of how participants' perceptions may evolve over time. Second, small sample size from only three sites may affect transferability. Third, lack of perspectives from non-users or those who dropped out may constrain the interpretation regarding their perception, coping mechanisms, and user experiences of the tele-mental health services. Fourth, we used the Gerontopole Frailty Screening Tool (GFST) in participants aged 60–64 years–a group in which the tool has not been validated that may have led to misclassification of frailty and reduced comparability of findings. Finally, recall bias during follow-up counselling interviews, social desirability bias, and the translation of interview data from Bangla to English may have influenced the interpretation of the findings.

Implications for policy and practice

Our findings indicate several steps to strengthen tele-mental health delivery in Bangladesh and similar LMICs. First, increased budget allocation and implementation of the national Mental Health Policy (2021) and Strategic Plan (2020–2030) are needed to ensure sustainability beyond donor-funded projects. Second, gender-sensitive approaches are required, given the limited autonomy and vulnerability of older women. Policies should include transport subsidies, community outreach, and mobile counselling units to reduce structural barriers. Third, awareness campaigns and integration of counselling into routine facility visits could reduce stigma and improve service uptake. Finally, peer advocacy and engagement of community champions may support adoption in rural settings where trust in formal systems is low. These measures, combined with investments in internet connectivity, private counselling spaces, and workforce capacity, are necessary to embed tele-mental health within public health systems and ensure long-term feasibility.

Conclusion

This qualitative study highlights how frail older adults in rural Bangladesh experience depression and anxiety and how they perceive a facility-based tele-mental health service. Participants and providers described the service as acceptable and appropriate in this setting, while pointing to constraints in connectivity, private counselling space, awareness, and health-system integration. Future work should focus on strengthening infrastructure, integrating services within routine primary care, and evaluating uptake and retention at scale. These findings provide context-specific insights to inform scale-up and implementation of facility-based tele-mental health services like the Well-being Centre, but do not establish effectiveness.

Abbreviations

NIMH	National Institute of Mental Health
IDIs	In-depth interviews
KII	Key informant interviews
NCDC	Non-Communicable Disease Control
MoHFW	Ministry of Health and Family Welfare
icddr,b	International Centre for Diarrhoeal Disease Research, Bangladesh
PHQ-9	Patient Health Questionnaire
GAD-7	Generalised Anxiety Disorder scale

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s40359-026-04420-w.

Supplementary Material 1.

Authors' contributions

RMM conceptualised the study and developed the initial draft of the manuscript, with support from MHR and PC. PC interpreted the analysis under the guidance of TM. JMJ, FS, SAS, and FA contributed to the conducting interview. NGU, TM, JMJ, FS, SAS, FA, SMHI, MSS, AA, SEA, and AER thoroughly reviewed the manuscript and provided critical feedback. ATH supervised the study design, implementation, and research activities as a senior author.

Funding

The study was funded by the Non-Communicable Disease Control (NCDC) division of the Ministry of Health and Family Welfare (MoHFW) of the Bangladesh Government (Grant number: GR-02525, GR-02393, GR-02226), and the Department of Foreign Affairs, Trade and Development (DFATD), Canada through Advancing Sexual and Reproduction Health and Rights (AdSEARCH), Grant number: GR-02063.

Data availability

Data will be available upon reasonable request.

Declarations

Ethics approval and consent to participate

Ethical approval was taken from the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr, b) Institutional Review Board (protocol PR-22103). All the participants have given written informed consent prior to the enrolment in the study.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 24 September 2025 / Accepted: 19 March 2026
Published online: 21 March 2026

References

1. Collard RM, Boter H, Schoevers RA, Oude Voshaar RC. Prevalence of frailty in community-dwelling older persons: a systematic review. J Am Geriatr Soc. 2012;60(8):1487–92.
2. Mistry SK, Ali A, Yadav UN, Ghimire S, Anwar A, Huda MN, et al. The burden of non-disabled frailty and its associated factors among older adults in Bangladesh. PLoS ONE. 2023;18(11):e0294889.
3. Mazumder H, Murshid M-E, Faizah F, Hossain MM. Geriatric mental health in Bangladesh: a call for action. Int Psychogeriatr. 2020;32(5):667–8.
4. Alexopoulos GS. Depression in the elderly. Lancet. 2005;365(9475):1961–70.
5. Sarker AR. Health-related quality of life among older citizens in Bangladesh. SSM - Mental Health. 2021;1:100031.
6. Rahman MM, Hamiduzzaman M, Akter MS, Farhana Z, Hossain MK, Hasan MN, et al. Frailty indexed classification of Bangladeshi older adults'

physio-psychosocial health and associated risk factors- a cross-sectional survey study. BMC Geriatr. 2021;21(1):3.
7. Lutz J, Van Orden KA. Sadness and Worry in Older Adults: Differentiating Psychiatric Illness from Normative Distress. Med Clin North Am. 2020;104(5):843–54.
8. The Lancet P. Global Burden of Disease 2021: mental health messages. Lancet Psychiatry. 2024;11(8):573.
9. Elshaikh U, Sheik R, Saeed RKM, Chivese T, Alsayed Hassan D. Barriers and facilitators of older adults for professional mental health help-seeking: a systematic review. BMC Geriatr. 2023;23(1):516.
10. Arafat SMY, Giasuddin NA, Mazumder AH. Access to Mental Health Care in Bangladesh—Current Status, Potential Challenges, and Ways Out. In: Arafat SMY, Kar SK, editors. Access to Mental Health Care in South Asia: Current Status, Potential Challenges, and Ways Out. Singapore: Springer Nature Singapore; 2024. pp. 29–55.
11. Sarker AR, Zabeen I, Khanam M, Akter R, Ali N. Healthcare-seeking experiences of older citizens in Bangladesh: A qualitative study. PLOS Global Public Health. 2023;3(2):e0001185.
12. Hossain AT, Rahman MH, Manna RM, Akter E, Islam SMH, Hossain MA, et al. Enhancing Access to Mental Health Services for Antepartum and Postpartum Women Through Telemental Health Services at Wellbeing Centers in Selected Health Facilities in Bangladesh: Implementation Research. JMIR Pediatr Parent. 2025;8:e65912.
13. Rahman M, Khan M, Fattah T, Tasnim Z, Das PR, Prattay KMR, et al. Prevalence and associated risk factors for depression, anxiety, insomnia, and loneliness among the geriatric population in Bangladesh: a cross-sectional study. BMC Psychiatry. 2025;25(1):1102.
14. Tabassum T, Suzuki T, Iwata Y, Ishiguro H. Depression and Associated Factors Among the Elderly Population in an Urban Tertiary Geriatric Hospital in Bangladesh. Gerontol Geriatr Med. 2023;9:23337214231178145.
15. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001;16(9):606–13.
16. Rahman MH, Manna RM, Usmani NG, Chandra P, Al Mamun MA, Amin MR, et al. Depressive, anxiety symptoms and their co-occurrence among women seeking antenatal care in Bangladesh. Sci Rep. 2025;15(1):17137.
17. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006;166(10):1092–7.
18. Vellas B, Balardy L, Gillette-Guyonnet S, Van Abellan G, Ghisolfi-Marque A, Subra J, et al. Looking for frailty in community-dwelling older persons: the Gérontopôle Frailty Screening Tool (GFST). J Nutr Health Aging. 2013;17(7):629–31.
19. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. Qual Quant. 2018;52(4):1893–907.
20. Peters DH, Tran NT, Adam T, Alliance for Health P, Systems R, World Health O. Implementation research in health: a practical guide. Geneva, Switzerland: World Health Organization; 2013.
21. Terry G, Hayfield N, Clarke V, Braun V. Thematic analysis. In: Willig C, Stainton-Rogers W, editors. The SAGE Handbook of Qualitative Research in Psychology. 2nd ed. SAGE; 2017. pp. 17–37.
22. Adedeji IA, Lawal SA, Aluko-Arowolo S. Qualitative Analysis of Coping Strategies Among Older Persons During COVID-19 Lockdown in Nigeria: Considerations for Community Health Promotion. Community Health Equity Res Policy. 2024;44(3):253–63.
23. Harris GM, Allen RS, Dunn L, Parmelee P. Trouble won't last always: religious coping and meaning in the stress process. Qual Health Res. 2013;23(6):773–81.
24. Beckman L, Gustavsson J. Coping strategies for increased wellbeing and mental health among older adults during the COVID-19 pandemic – a Swedish qualitative study. Aging Soc. 2025;45(4):617–35.
25. Faruk MO. Community-Based Mental Health Services in Bangladesh: Prospects and Challenges. World Social Psychiatry. 2022;4(3):187–92.
26. Funk M, Saraceno B, Drew N, Faydi E. Integrating mental health into primary healthcare. Ment Health Fam Med. 2008;5(1):5–8.
27. Mustafiz RB, Chowdhury SSA, Kundu S, Munaf NB, Sharif AB. Determinants of healthcare decision-making autonomy among Bangladeshi women: mixed-effect logistic regression analysis. BMC Womens Health. 2025;25(1):192.
28. Sajjad A, Shah S, Abbas G, Aslam A, Randhawa F, Khurram H, et al. Treatment gap and barriers to access mental healthcare among women with postpartum depression symptoms in Pakistan. PeerJ. 2024;12:e17711.
29. Reid CJ, Church C. Investigating Inpatient Acceptance of a Unique Telemedicine Service Trialled in the Acute Ward in Rural Australia. J Patient Experience. 2025;12:23743735241311716.
30. Wade V, Eliott J. The role of the champion in telehealth service development: a qualitative analysis. J Telemed Telecare. 2012;18(8):490–2.
31. Astete Cornejo J, Cruz-Ausejo L, Cainamarks Alejandro J, Burgos-Flores MA, Ambrosio-Melgarejo J, Rosales Rimache J, et al. Barriers and limitations to the development of a telemental health service for workers in Peru- A user-centered approach. PLoS ONE. 2025;20(4):e0321401.
32. Zimba CC, Akiba CF, Matewere M, Thom A, Udedi M, Masiye JK, et al. Facilitators, barriers and potential solutions to the integration of depression and non-communicable diseases (NCDs) care in Malawi: a qualitative study with service providers. Int J Mental Health Syst. 2021;15(1):59.

Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.