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A Qualitative Examination of the Potential for Delivering Mental Health Care Services in Bangladesh Using Digital Technologies

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Abstract

Bangladesh is a lower-middle-income country with a severe shortage of mental health services due to a scarcity of mental health experts, limited mental health literacy, and community stigma. Online provision of mental health care services in other low and middle-income countries has addressed issues such as service availability, accessibility, mass awareness of services, and stigma. The purpose of this study was to learn about stakeholders' perceptions of the potential of digital media-based mental health care delivery in strengthening Bangladesh's mental health system.

Introduction

Seven psychiatrists and eleven people with lived experience of mental health issues participated in in-depth online interviews. In addition, two online focus groups with ten psychologists and nine mental health entrepreneurs were held. The audio transcriptions were subjected to a thematic analysis to identify themes. Stakeholders perceived that the benefits of digital media-based mental health services included the potential to increase mental health service awareness, availability, and accessibility. Participants suggested that existing pathways be rehabilitated, that social media be used to raise awareness, and that strategies that integrate various digital-based services be implemented to strengthen the mental health system and foster positive mental health-seeking behaviours be implemented. Mental health (MH) conditions are a major public health concern, accounting for 32.4 percent of years lived with disability (YLDs) and 13 percent of disability-adjusted life-years (DALYs) worldwide A recent systematic review found that South Asian countries had a higher prevalence (14.2 percent) of common mental health disorders (CMHD) than the rest of the world, with depressive disorders accounting for 9.8 million DALYs. Low- and middle-income (LMIC) countries' mental health care systems are inextricably linked to [1-5] and embedded in larger social and economic settings, resulting in significant disparities in access for community members. Lack of awareness, stigma, government apathy, inadequacy in health system infrastructure, limited policy considerations, and MH professional shortages all contribute to these gaps in the MH care system. This is also true in [7,8] Bangladesh, where the MH care system faces complex challenges due to limited financial resources: 0.5 percent of the total health budget is set aside to ensure MH services .With a small number of MH professionals and few service facilities and hospitals, the availability of MH services is inadequate. Rural primary and secondary healthcare facilities are lacking in MH care services, with the majority of MH services centralised in urban areas . A lack of MH training for nurses and community health workers in primary care [6,9] settings leads to missed or inadequately managed cases of mental disorders. Furthermore, a lack of mental health literacy has resulted in individual and community stigma, which has an impact on MH help-seeking behaviour at the community level (Arafat et al., 2021). These issues pose significant barriers to the provision of MH services in Bangladesh, as well as in other LMICs Other LMICs' perspectives support the potential for online availability of MH information and services to address Bangladesh's scarcity of MH human resources and lack of MH services.

Subjective Heading

The widespread use of digital media has provided opportunities for many countries to increase mental health awareness and service. For example, blogs on various websites, social media platforms, and smartphone apps have been used to disseminate self-help information and [10] increase mental health literacy During crises such as pandemics and natural disasters, the effectiveness of digital media-based solutions has been demonstrated in China, India, Singapore, Australia, and many other countries During the COVID-19 pandemic, China offered telemedicine and psychoeducation via various online platforms such as We Chat as well as Tencent QQSimilarly, before and after the COVID-19 pandemic, the Australian government provided psychosocial support services via text messaging, online chat platforms, telephone, videoconference, online group chat, self-help platforms, e-mail, websites, and mobile apps for common mental health issues, self-harm, and suicide .In the United States, podcasts have been used to provide and acquire mental health-related information in an accessible and educational manner by both mental health specialists and the general public .A systematic review also reported on the promising contribution of digital technology in LMICs. The review discussed the successful use of teleconferencing, mobile apps, web-based screening tools, and online platforms in many developing countries, including India. Evidence suggests that some LMICs have successfully used digital technology to raise awareness, screen, diagnose, and treat common mental health disorders in larger populations. Bangladesh has implemented a number of digital health services to promote and protect public health, including mental health, which has grown in popularity since the COVID-19 pandemic (Islam et al., 2021a). The introduction of digital health services such as telemedicine, remote data collection, surveillance, follow-up and human resource development demonstrates the potential for a larger-scale service roll-out. Since

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2020, artificial intelligence-based mobile apps and tele-psychotherapy services delivered via e-mail, text messaging, and audio or video. before and after the COVID-19 pandemic, the Australian government provided psychosocial support services via text messaging, online chat platforms, telephone, videoconference, online group chat, self-help platforms, e-mail, websites, and mobile apps for common mental health issues, self-harm, and suicide .In the United States, podcasts have been used to provide and acquire mental health-related information in an accessible and educational manner by both mental health specialists and the general public .

Discussion

Thus, digital technology has the potential to improve mental health conditions in Bangladesh by increasing mental health awareness, improving access to mental health professionals, lowering costs and improving care efficiency, and enabling remote service delivery .Despite the fact that digital mental health initiatives have been implemented, there is still a need to generate evidence about the benefits, potential barriers, and areas for improvement in order to implement better digital mental health services. Despite digital technology's successes, there are significant barriers to and inequities in digital MH care. In Bangladesh, digital MH service delivery inequities worsen due to limited access to digital technology and a lack of therapeutic options for rural and underprivileged populations and health-care providers, as well as data privacy concerns and other organisational challenges. If these barriers are not addressed, MH care inequity will worsen, as will the treatment gap. As a result, identifying these barriers is critical when attempting to increase the availability, accessibility, and affordability of mental health care through digital technology. Experiences and recommendations from relevant MH stakeholders, such as service providers and service users, can aid in the development of evidence-based and [1] need-based digital MH care services. As a result, the purpose of this qualitative study was to investigate the perceived benefits and challenges of digital delivery of MH care services in Bangladesh and to develop recommendations for designing more accessible and available technology-based MH support programmes and services in Ban By analysing the perceptions and insights of MH professionals, entrepreneurs, and service users, this qualitative study attempted to investigate the role of MH care services delivered through digital media in Bangladesh. Among three MH stakeholders and service users, various qualitative interview techniques were used, including key informant interviews (KII), focus group discussions (FGD), and in-depth interviews (IDI). For [1] each participant group, a different recruitment strategy was used. Professional experiences, academic background, and clinical exposure were used to select MH service providers and entrepreneurs. Given the stigma associated with mental illness or seeking mental health services in Bangladesh, PWLE who had received digital MH care services were recruited on purpose from the lead author's existing network of service providers and entrepreneurs in Bangladesh. E-mails with detailed study information were sent to MH service providers (psychiatrists and psychologists) and entrepreneurs. We called the PWLE and were then followed up with an e-mail outlining the study's details. The online sessions started with an explanation of the research objectives and the process of soliciting informed consent. For the study participants, the research team created semi-structured interview guidelines (Appendix B). The questions were designed to elicit participants' views on the role of digital technology in MH care services in Bangladesh. For the purposes of this study, any communication medium that uses one of several encoded machine-readable data formats was referred to as 'digital media,' which included software, digital photos, digital video, web pages, websites, and social media. The lead author conducted all of the interviews and discussions, with assistance from other authors who took notes. Each interview lasted 40-50 minutes, and FGDs lasted an average of 120 minutes. Key informant interviews (KII) were used to gather detailed information from people who had firsthand knowledge and experience with MH and its service delivery in Bangladesh. In-depth interviews (IDI) were used to learn about the experiences of participants who had received online and offline MH care services for conditions such as anxiety, panic attacks, suicidal thoughts, depression, and substance abuse disorders, among others. Pseudonyms are used in reporting to protect the participants' identities. FGDs were held with psychologists and MH entrepreneurs to bring people from similar backgrounds together and generate collective information about the research topic. The psychologists ranged in experience from 7 to 23 years and worked in clinical, educational, or counselling settings. Leading non-government MH organisations were used to select MH entrepreneurs. They were chosen based on their years of service, MH-related social media activities, advocacy, and community involvement. When no new data emerged from the system, data saturation had occurred.

The data was analysed using an inductive thematic analysis approach. The authors began by reading the transcripts of the interviews to become acquainted with the data. The transcripts were then manually coded. The initial thematic codes emerged through an iterative procedure involving several author meetings. To create coding frameworks, the coded data was separated into a data matrix built into Microsoft [1] Excel. Data was coded and entered into a datasheet, where it was organised into themes and sub-themes based on the research objectives. The research team and all co-authors discussed each level of data analysis. Face-to-face sessions, according to service providers, allow them to monitor an individual's emotions by observing their body language. This is difficult to do during an online call because a virtual session makes it difficult to determine whether the client is speaking positively or emotionally. According to the participants, having both service providers and clients present during a session can improve the impact of MH interventions. One of the PLWE added to this insight by sayingWhile digital media offered many benefits in terms of addressing the stigma associated with mental illness it also created opportunities to compound stigma or to exacerbate limited understandings of MH. Seven service providers in this study mentioned that social media might misguide people with misleading information, a trend that was heightened during the pandemic. One psychiatrist emphasized this issue, saying. Reliable technological infrastructure is required for effective digital MH service delivery. Minor power and network outages could have a significant impact on service provision and access. Network outages or signal fluctuations could disrupt the flow of conversations in a session, negatively impacting the experience of people seeking mental health care. Some PWLE and psychologists (n = 4) expressed their dissatisfaction with the device and connectivity issues during critical moments of a session. Three service providers (n = 3) mentioned, for example, that poor internet connections in remote and rural areas make online services inaccessible to many people. When they were able to connect, these issues made the actual session laborious, implying that their usefulness was severely limited. For effective digital MH service delivery, a dependable technological infrastructure is required. Minor power and network outages can have a big impact on service delivery and access. Network outages or fluctuations in signal strength may disrupt the flow of conversations in a session, negatively impacting the experience of people seeking mental health care. During critical moments of a session, some PWLE and psychologists (n = 4) expressed dissatisfaction with the device and connectivity issues. For example, three service providers (n = 3) stated

that poor internet connections in remote and rural areas make online services inaccessible to many people. When they were able to connect, these issues made the actual session time-consuming, implying that their utility was severely limited. Stakeholders emphasized the importance of structured social media usage in preventing the spread of false MH-related information and increasing MH literacy. One of the common recommendations was to start collaborating with other health and mental health service providers to create and share content through their social media platforms. Evidence-based information could thus reach the community. According to one psychologist. purpose of this qualitative study was to investigate the perceived benefits and challenges of digital delivery of MH care services in Bangladesh and to develop recommendations for designing more accessible and available technology-based MH support programmes and services in Ban By analysing the perceptions and insights of MH professionals, entrepreneurs, and service users, this qualitative study attempted to investigate the role of MH care services delivered through digital media in Bangladesh. Among three MH stakeholders and service users, various qualitative interview techniques were used, including key informant interviews (KII), focus group discussions (FGD), and in-depth interviews (IDI). For each participant group,

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software, digital photos, digital video, web pages, websites, and social media.

Conclusion

These participants are advocating for a whole-of-government approach to digital service provision, which could extend far beyond MH services. This relates to broader issues surrounding digital connectivity and the digital divide.

Some service providers devised strategies to overcome connectivity issues and shared that they attend online sessions at primary care facilities from tertiary centers.

Acknowledgement

Conflict of Interest

The authors declare that they are no conflict of interest.

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