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Evaluation of Mental Health First Aid training program in Bangladesh: A modified Delphi study

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Abstract

Background

Bangladesh, like other low-resource countries, faces a shortage of a trained mental health workforce to meet its population's mental health needs adequately. The ongoing COVID-19 pandemic has further aggravated this. Mental health first aid (MHFA) is an internationally recognized training program that has been operating in Bangladesh since 2015. It offers a potential way to reduce the mental health treatment gap and skills shortage by training laypeople to help support individuals with mental health issues. The present study evaluated the effectiveness of MHFA training in Bangladesh.

Methods

An online modified Delphi study was conducted consisting of two rounds of a self-administered survey and a consensus workshop. A five-step logic framework was used to develop questionnaire statements (n=111) that consisted of 'general,' 'I,' and 'social impact' statements around the seven MHFA aims. The statements were constructed in English and adapted in Bangla. The expert panel consisted of 20 participants trained in the MHFA program. Participants anonymously stated their opinion on 111 round-1 statements and then on 27 low agreement statements in round-2. The consensus workshop facilitated a group discussion where participants explained their views on the low consensus items.

Results

The consensus ranged from 61.5% (Aim 3: Promote recovery of good mental health) to 100% (Aim 7: To improve own health and well-being) with an overall consensus of 83.8%. 'Social impact' items produced the most (50%) disagreements. Participants' comments reflected 12 themes of MHFA's effectiveness in fostering and promoting mental health individually and socially. There were nine themes of disagreement reflecting individual, sociocultural, and political barriers to the implementation of MHFA in Bangladesh. Participants made recommendations for the MHFA and mental health initiatives in Bangladesh to increase mental health awareness, acceptance, and support in society.

Conclusion

MHFA training offers Bangladesh and other low-and-middle-income countries a potential solution to tackle mental health burden at individual and societal levels and the additional challenges that the COVID-19 pandemic poses to mental health.

Background

Mental illness is common [1] with a high disease burden [2]. Globally, the lifetime prevalence of mental disorders is 29.2% [3], contributing to 32.4% of years lived with disability and 13% of disability-adjusted life years [4]. In fact, experts now consider mental ill-health as the leading cause of disability worldwide [5]. The weak and vulnerable global mental health situation has worsened due to stress, trauma, and acute socio-economic problems caused by the COVID-19 pandemic [6, 7]. The mental health crisis is even more severe in low-and-middle-income countries, such as Bangladesh, where the healthcare system is broken due to inadequate resources, poor governance, flawed planning, and lack of political commitment [8–10].

In Bangladesh, a South Asian country, around 164.6 million people, the eighth largest population globally, live in 147570 square kilometers [11]. It is an enormous challenge to meet the needs of such a massive number of people [12]. Though the country's constitution considers health care support as a fundamental right of each citizen, the vast majority of the people do not receive essential mental health care [13]. Relevant research evidence is scarce; the only source of detailed information on mental health dates to 2005 [14]. At the time of this report, it was estimated that 16.1% of the adult population had a diagnosed mental health disorder, yet only 0.5% of the national health budget was spent on mental health services. The continued limited access to mental health services suggests that this number is an underestimation [15], and a more recent study found that 92.3% of people with a mental illness do not receive treatment for their mental health condition [13]. Recognizing the need to overhaul the weak mental health system, the Bangladesh government has taken initiatives to modernize the country's mental health strategic plans and policies [16]. Various mental health advocacy groups, non-governmental organizations, and media are also playing

active roles in promoting mental health [15]. Despite all the efforts, it remains a huge challenge to ensure sufficient financial and human resources to meet people's mental health needs, most of whom live in rural areas where stigma and superstition are deep-rooted [17]. Therefore, focusing solely on providing mental health support might be inadequate if mental health literacy remains low [18].

A potential way to address the mental health treatment gap is to train lay people to be aware of and support individuals with mental health concerns [10, 19]. Mental Health First Aid (MHFA) is a training course of this type. It was developed emulating the conventional first aid model with the belief that members of the public can be trained to improve their mental health literacy and provide initial support to people in mental health crises [20]. The training program aims to:

1. preserve life where a person may be at risk of harm to themselves or others.
2. provide help to prevent the mental health issue from becoming more serious.
3. promote recovery of good mental health.
4. provide comfort to a person with a mental health issue.
5. raise awareness of mental health issues in the community.
6. reduce stigma and discrimination.' [21]

The MHFA program has a global presence. Up to April 2021, over four million people in 24 countries received the training [22]. Studies in high-income countries found reduced stigma, enhanced psychological well-being, confidence, and improved knowledge, skills, and attitudes about mental illnesses among people trained in MHFA [23, 24]. Although research in low-and middle-income countries, such as India and Nepal, suggests that the training could promote mental health awareness and societal action [25, 26], the evidence is insufficient [27].

Innovation for Wellbeing Foundation (IWF), a non-profit organization, launched the MHFA program in Bangladesh with MHFA England assistance in 2015 [28]. In addition to the six MHFA aims, MHFA Bangladesh also aims to improve the first aiders' mental health and well-being [29]. IWF has adapted the training and its materials, initially in English, to Bangla [29]. Currently, six courses are offered: five-day MHFA trainer training, two-day standard MHFA, two-day youth MHFA, two-day MHFA for the workplace, one-day mental health champion, and half-day mental health awareness [29]. Apart from educating general people on mental health, IWF emphasizes MHFA training for teachers, students, and primary health care providers [29]. The training is interactive and activity-based, where participants learn the basics of mental health and how to provide initial mental health support [29, 30]. IWF has trained 62 national trainers, 2000 MHFAiders, and 5000 mental health champions to date [29]. The courses are non-profit, but fees are charged to cover training expenses [29].

Community involvement and support are essential to achieve the MHFA goals [31]. As such, the program seems to fit well with Bangladesh, a collectivist society characterized by social ties, mutual dependence, and group affiliation [32]. However, the Bangladesh MHFA training remains unevaluated. We do not know whether MHFA is effective in helping to address the country's mental health needs. It is possible that the training requires modifications or external support to contribute effectively to the country's mental health field. We carried out the present study to address these issues. We investigated the effectiveness of the MHFA Bangladesh program with respect to its content, structure, and outcomes and the facilitating and inhibiting factors associated with achieving MHFA goals in Bangladesh.

Methods

Study design

We undertook a modified Delphi study to evaluate the MHFA Bangladesh training program using surveys delivered via the online platform – Qualtrics^{XM}. The modified Delphi design was considered most appropriate for the study's multifaceted and complex nature as it addresses the potential limitations of conventional Delphi and facilitates collecting both quantitative and qualitative data in an online format, important during the Covid-19 pandemic. We completed two rounds of self-administered questionnaire surveys and then arranged a consensus workshop to understand the Delphi results further.

We obtained online ethics approval (Ref.: 2020-3448) from the University of Lincoln Research Ethics Committee due to the suspension of ethics committees in Bangladesh because of the pandemic and an absence of an online ethics approval process. The National Institute of Mental Health hospital's ethics committee in Dhaka later endorsed (Ref.: NIMH/admin/2020/739) the ethics approval.

Development of MHFA Delphi questionnaire

We used a five-step logic framework methodological approach [34] to construct Delphi statements (Figure 1). The statements focussed on the seven core aims of the MHFA training program in Bangladesh and were constructed in English. For each of the seven aims, we specified the intended outcomes of MHFA training (Step 1), the demonstrable evidence that would emerge from the training (Step 2), the actions of first aiders that would produce the evidence (Step 3), the knowledge, skills, and attitude of first aiders that are required to lead to those actions (Step 4), and the training content of MHFA required to improve first aiders' knowledge, skills, and attitude (Step 5).

The five steps generated 252 statements about the MHFA training and 176 statements about mental health first aiders. To avoid repetition and to ensure appropriate representation of ideas, the statements were divided into 'general,' 'I,' and 'social impact' groups. General statements were formulated in Steps 1 and 5; they were about the objectives and contents of MHFA training. 'I' statements came from Steps 3 and 4; they were about the knowledge, skills, attitude, and actions of first aiders. 'Social impact' demonstrable evidence statements were about the effects of MHFA initiatives in society; they were prepared in Step 2. This produced 111 statements: 39 'general', 42 'I', and 30 'social impact' statements. A four-point Likert scale was used to assess the level of agreement/disagreement with each statement. Participants were also able to record comments and explanations to support their responses in free text boxes after each statement.

Piloting and translation protocol

In order to ensure that the questionnaire was accessible to all participants, an extensive translation and piloting process was undertaken in a seven-stage process (Figure 2).

Stage I: The statements were developed by three members of the research team who were experts in mental health in Bangladesh and included the Lead of the MHFA Bangladesh program and two experienced MHFA trainers (MR, UK, and AH).

Stage II: The first English version was piloted with five participants (four females; mean age = 46.6 years, SD = 12.9), who were trained in MHFA and proficient in both Bangla and English languages. This helped us ensure that an online survey would be accessible and user-friendly. After their feedback, the English questionnaire was revised for comprehension.

Stage III: Two bi-lingual (in Bangla and English) and mental health subject matter experts translated the English questionnaire into Bangla.

Stage IV: The two Bangla translations were then compared, and the best version for each statement was selected. In some cases, the Bangla statements were edited to improve their conceptual and semantic equivalence.

Stage V: The Bangla version of the questionnaire was piloted online among the same five participants who had provided initial feedback on the English version. Their feedback was used to revise the Bangla statements further.

Stage VI: The revised Bangla questionnaire was given to three independent bi-lingual mental health subject matter experts, who were external to the research team, to translate the questionnaire to English. They had no access to the English version of the questionnaire and were also blind to each other.

Stage VII: The back-translated statements were then compared with the original English statements and discussed among the research team and the three 'back translators' to reach a consensus on the final wording of the Bangla statements.

Expert panel

Our expert panel consisted of 20 participants (13 females; mean age = 38.5 years, SD = 10.6 years) who had undergone MHFA training and were mental health first aiders. They were from a wide range of backgrounds (the public, private and non-profit sectors) and included mental health professionals, health professionals, community and social workers, and individuals with lived experience.

Data collection

A member of the research team (PPM) communicated with the participants and coordinated the Delphi rounds. Before starting the study, participants attended an online meeting where the research team members explained the aims and conduct of the research. Participants also received written instruction, and they were told that their responses would be anonymous in rounds 1 and 2 of the Delphi.

A Qualtrics link was emailed to each participant, and they were advised to use the same digital device for completing the survey to avoid technical complications and allow their responses to be automatically saved. Participants received PDF copies of both the Bangla and English questionnaires by email, which allowed them to become familiar with the statements before responding in the Qualtrics platform. Before completing the survey, participants completed an electronic consent form. Demographic information, including age, gender, occupation, education, and the number of hours of MHFA training they received, was collected and stored separately by the study administrator.

Delphi round-1 survey and analysis

Participants were informed that the survey would take on average 90 minutes to complete and were given a deadline of four days. Participants' responses were analyzed to determine the percentage of agreement for each statement. There is no recognized guideline to define an appropriate level of agreement in a Delphi study [35]. Some studies accepted 51% (e.g., McKenna, 1994), whereas other studies adopted 90% (e.g., Hart et al., 2009) agreement levels to achieve consensus. Given that we have a single expert panel, and the study aims to evaluate one specific program that of MHFA in Bangladesh, we decided on a level of 80% agreement [35] in the round-1 survey. Statements that failed to reach the 80% level were administered in Delphi round-2. Additionally, participants' comments were analyzed to decide whether further revision of the statements was required to facilitate agreement among participants.

Delphi round-2 survey and analysis

In round-2, participants received anonymized statistical feedback on statements (n= 27) where the 80% agreement threshold was not reached in round-1. These statements were included in the round-2 Delphi questionnaire to allow participants to reconsider their responses. In this round, participants were asked to comment as to the underlying rationale for their response.

Consensus workshop

The consensus workshop took place online via Zoom in order to facilitate a group discussion of any statements that may not have achieved the 80% agreement threshold. It was attended by 19 participants. A summary of Delphi rounds 1 and 2 results was presented at the beginning of the workshop, and the statements for discussion were categorized into three themes: MHFA training, its social impact, and mental health policies. Relevant statements were presented to the participants who spontaneously shared their thoughts about them, including recommendations to overcome mental health barriers. Follow-up questions were asked to clarify ambiguous information and to facilitate participation. The workshop facilitator ensured that all participants had the opportunity to talk.

Data processing and statistical analysis

Delphi rounds 1 and 2 data were analyzed to calculate the percentage of statements that reached the 80% consensus in MHFA aims and the five-step logic framework. An inductive-semantic thematic analysis [38] was performed to examine participants' comments in Delphi rounds and consensus workshop to identify the themes explaining why some statements failed to reach the criterion consensus and their recommendations for MHFA and mental health initiatives in Bangladesh.

Results

Level of consensus among participants

Table 1 shows the level of agreement with each of the aims of MHFA in relation to the five-step logic framework used to develop the questionnaire. All the participants agreed that the MHFA program had improved their health and well-being (Aim 7). There was also agreement based on the 80% consensus threshold that the training contributed to ensuring safety when someone's life was at risk due to mental illnesses (Aim 1; 95.24%) and prevented mental health issues from worsening (Aim 2; 95%). Two aims were close to consensus: the training contributed to increasing mental health awareness (Aim 5; 73.68%) and reducing stigma and discrimination (Aim 6; 75%). However, promoting good mental health (Aim 3) and comforting people with mental health issues (Aim 4) did not reach the consensus with agreement rates of 61.5% and 66.7%, respectively.

Consensus analysis for the five-stage logic frameworks shows that the agreement was 100% with the statements on achieving MHFA objectives and developing the knowledge, skills, and attitude required for attaining them. The consensus threshold was also reached for the items on MHFA training (93.6%), first aiders' actions (95.2%), 'general' statements about the

Table 1 Percentage of consensus on Delphi statements (n=111) for MHFA aims and five-stage logic frameworks

	7 MHFA aims and number of items reached consensus (% of consensus)					
	MHFA training n=31 (%)	Knowledge, skill & attitude of first aiders n=21(%)	Actions of first aiders n=21(%)	Demonstrable evidence n=30(%)	Objectives achieved n=8 (%)	Total n=111(%)
(1) Preserve life where a person may be at risk of harm to themselves or others	9 (100)	3 (100)	4 (100)	2 (66.7)	2 (100)	20 (95.2)
(2) Provide help to prevent the mental health issue from becoming more serious.	5 (100)	5 (100)	5 (100)	3 (75)	1 (100)	19 (95)
(3) Promote recovery of good mental health	1 (100)	3 (100)	2 (66.7)	1 (20)	1 (100)	8 (61.5)
(4) Provide comfort to a person with a mental health issue	—	1 (100)	—	0 (0)	1 (100)	2 (66.7)
(5) Raise awareness of mental health issues in the community	3 (100)	5 (100)	4 (100)	1 (16.7)	1 (100)	14 (73.7)
(6) Reduce stigma and discrimination	8 (80)	1 (100)	1 (100)	4 (57.1)	1 (100)	15 (75)
(7) To improve own health and well-being	3 (100)	3 (100)	4 (100)	4 (100)	1 (100)	15 (100)
Total (%)	29 (93.6)	21 (100)	20 (95.2)	15 (50)	8 (100)	93 (83.8)

content and objectives of MHFA training (94.9%), and 'I' statements regarding the knowledge, skills, attitude, and actions of the first aiders (97.6%). However, the agreement rate was low (50%) for the 'social impact' statements about MHFA training effects on society. The findings suggest that MHFA Bangladesh has progressed significantly towards its aims. However, 'social impact' demonstrable evidence statements indicated that the training's influence on broader society was limited, with the highest level of disagreements (50%) amongst this group of statements.

Qualitative thematic analysis of the MHFA program in Bangladesh

Two members of the research team (AH and UK) independently coded the comments in Delphi rounds and the expert panel meeting transcript to identify themes from participants' opinions on the MHFA Bangladesh program. The analysis found 12 themes relating to the positive contributions of MHFA training to individuals and society and ten themes explaining low consensus and participants' disagreements with some statements. While explaining the disagreements, participants suggested various initiatives for MHFA and other mental health activities to impact society more. These are described in the section on recommendations.

Themes relating to the positive contributions of MHFA training

Empathy and non-judgmental skills

Participants' learning about empathy and non-judgmental skills in MHFA training helped them to support other people. One participant noted, "*After MHFA program, I have become a more sensitive person to empathize with the experiences people go through with mental health issues*." Another participant mentioned, "*Non-judgmental listening was a huge part of our training; how to listen to people was taught through various activities. I have certainly developed a general attitude to hear people out nonjudgmentally*."

Understanding and taking care of own mental health

Participants' understanding of and ability to take care of their mental health improved after attending the MHFA training. A participant commented, "*It worked for me like magic as I was suffering from some psychological issues for two long years*." Another participant reflected, "*I was in a bad situation with my mental health. After the training, I realized that my over-thinking attitude was the problem, and now I can identify my problem and work on it*."

Providing mental health support to friends, colleagues, and families

The MHFA training equipped the participants to provide mental health support to their friends, colleagues, and family members. One participant shared, "*One of my family members has severe anxiety. Now* (as I am trained in MHFA) *we all try to help him*." Another participant mentioned, "*Now I provide mental health support to others if required. I provided MHFA Training to the factory mid-level management. Now they act as mental health first aiders for their workers and families*." MHFA helped the recipients as one participant stated: "*one of my colleagues is now in a good situation as I tried to help him with some knowledge that I gathered from MHFA*."

Providing mental health support during crises

Participants found MHFA useful in supporting people with mental health issues during the coronavirus pandemic. One participant stated, "*I started to provide MHFA support to people in March (2020) during the ongoing pandemic. So, what happened is, their coping became better. My MHFA support also helped them to decide whether there was a need for professional help*." Another participant mentioned, "*When I received the training, I was not very clear. But when I started to practice MHFA, it became more clear to me, and I became more confident to deal with any emergency associated with self-harm or harming others*."

Ability to provide mental health support in various settings

Participants viewed the MHFA training enabled them to provide mental health support in various settings. One participant pointed out, "*We can effectively apply MHFA training in many areas, such as health and education. It is very effective*."

Increased mental health awareness among other people

Participants pointed out that their MHFA activities have positively contributed to mental health awareness at their homes and workplaces. One participant commented, "*People are aware nowadays. My friends and relatives ask for information from me*

regarding mental health services when they require." Another participant mentioned, "*I can see that people are more aware, at least around me. And I would say the impact is due to the MFHA training that I had*."

Improved social relationships

Participants found that their MHFA initiatives improved the service recipients' social life. One participant said, "*After receiving the (MHFA) training and mental health support from our team and me, many married adolescents from Gaibandha, Kurigram, and Nilphamri are now better able to maintain personal and social relationship with friends and family*."

Change in attitude about mental health

Participants found that their MHFA activities contributed to change people's perception of mental health. One participant reported, "*Now* (due to my MHFA initiatives) *my surrounding people respect individuals with mental health issues*." Another participant shared, "*My mother used to say there is nothing called mental health, but now she learns from me and tells her siblings to take care of their children's mental health as they are going through teenage life*."

Motivating people to learn about mental health

Participants' MHFA actions encouraged others to learn about mental health. One participant mentioned, "*The people who received MHFA support from me are now wanting to take MHFA training. It clearly says they received some good help*."

Increased mental health initiatives at work

MHFA training enabled the participants to promote mental health initiatives at work. One participant said, "*In our office, we have established a mental health and well-being network. Through that, I am trying to promote mental health issues more systemically. Since I am a certified mental health first aider, it empowered me to negotiate mental health issues with my senior management.*" Another participant shared, "*when the mental health first aiders created the awareness, we had a meeting with the management. We informed them about the importance of mental health and asked them to include some questions about mental health status in the company's quarterly performance survey, and they agreed with us*."

A common platform to promote mental health

The training provided a shared understanding and goals to bind the participants together to give MHFA support in society. A participant stated, "*This mental health training helps me in two ways. Number one is to get connected with like-minded people and the peer group we have formed, and it allows us to exchange our ideas (about mental health) with each other.*"

Reaching people at the grass-root level

Participants agreed that the MHFA could potentially help people at the grass-root level. One participant commented, "*It* (MHFA*) is a nice and precious tool that can be applied to reach the people at the grass-root level*."

Themes to explain low consensus and disagreements with Delphi statements

Social stigmas are the barriers to mental health initiatives

The majority of the participants disagreed with the 'social impact' statements as they found social stigma a major barrier against changing public perception of mental health issues. One participant commented, "*Still, there are stigmas around mental health in all spheres of life…… people are going through harsh treatments as soon as it comes to mental health issues. People take it as a disgrace to talk to a psychiatrist*."

Low mental health literacy in society

Low mental health literacy in society was a barrier to advocate MHFA initiatives as one participant stated: "*I think a long way to go; people are not aware of the signs and symptoms of distress* (associated with mental health issues)."

Inadequate mental health research

Participants disagreed with the statements on providing evidence-based information to promote mental health due to a lack of mental health research in Bangladesh. One participant mentioned, "*Yes, we can provide global research-based evidence. The research evidence for our country is insufficient*." For the same reason, they disagreed with the statements evaluating MHFA initiatives. One participant commented, "*I know I have spread mental health knowledge at my workplace. I am doing it personally, but I cannot claim that people are accepting mental health issues more as a result of my initiatives. I cannot claim it without* (research) *evidence, no matter how close people in my surroundings are*."

Lack of access to mass media to promote mental health

Participants disagreed with the statements about using mass media to advocate mental health to the broader society. One comment pointed out, "*I did use my network and workplace to do advocacy for mental health. I did not have access to promote mental health in mass media*."

MHFA is not a priority at the policy level

Participants indicated that policymakers are yet to prioritize MHFA. One participant described, "*I was present in … meeting. In the mental health part, I explained and proposed MHFA for service providers. They noted it down, but I feel people were not very much interested in it*." As policy supports were lacking to promote MHFA initiatives at the societal level, participants disagreed with 'social impact' statements.

Lack of necessary infrastructure

Participants commented that the proper utilization of the MHFA program required adequate infrastructure, such as dedicated mental health clinics, mental health services, qualified workforce, etc., which are scarce in Bangladesh, especially in rural areas. One participant pointed out, "*One big problem perhaps is infrastructure. We have better infrastructure for physical health support compared to mental health*."

Lack of institutional support

Participants disagreed with the 'social impact' statements as they explained that institutional assistance with logistics and finance was largely unavailable to provide MHFA to more people. One participant mentioned, "*We are doing all these* (i.e., providing mental health support) *as individuals, as personal trainers. We are trying to do something, but institutional support is much needed to do these*." Another participant agreed to this view and shared her experience using MHFA in a program supported by her organization. According to her, "*it is easier to work in the area of mental health when an organization supports us. In my case, our organization has a program where we* (use MHFA to) *provide mental health support to married adolescents. From that side, I can say that because I have an organization banner and a specific program, I have managed to reach a large number of young people, and then we were able to train them* (in MHFA)."

Low accessibility and availability of mental health services

Some participants viewed that MHFA's impact on society was limited because mental health services were expensive and not easily accessible. One participant commented, "(Mental health facilities are) *relatively better than before, but not sure about the quality. The poor people have little access to mental health services*." Another comment pointed out, "*Mental health care services are available, but sometimes they are not affordable*."

Few numbers of MHFAiders

Participants pointed out that the number of first aiders in Bangladesh is too small to impact society. One participant explained, "*As Bangladesh is a densely populated country, the number of people trained in MHFA is small compared to the overwhelming population. So more people should be trained in MHFA*."

Forgetting MHFA information

Some participants failed to recall whether they learned certain information during the MHFA training and therefore disagreed with some training statements. One participant commented, "*I do not recall any information regarding this*."

Recommendations for the MHFA Bangladesh program

Incorporating Bangladeshi data and research findings into MHFA training

Participants recommended incorporating more information on psychosocial and medical mental health services and relevant research data in Bangladesh. They commented that "*The data of Bangladesh is less*" and "(trainees) *get a basic idea about the available services but not a total picture of what is available locally*."

Establishing a communication network for MHFAiders

Participants suggested establishing a common social and communication platform for all MHFAiders, which would help them share their experiences and facilitate their MHFA contributions. One participant commented, "*….regarding the fact that we are not being able to create an impact…….what experiences are we facing on the ground?.....it is not easy to remove stigmas…….if we could have strengthened our network, then we would have a better answer for these questions*."

Arranging refresher training

Participants also emphasized the necessity of refresher training as one mentioned, "*While training evaluation and feedback are there, there is an absence of refresher course or CPD* (continuous professional development)."

Developing MHFA online resources

Some participants advocated for MHFA online resources as one stated: "*I will suggest giving separate referral information online so that they can be shared with others easily when required*."

Recommendations for mental health initiatives in Bangladesh

In Delphi rounds and consensus workshop, participants made the following suggestions to promote mental health, but these are beyond what MHFA alone can do and influence.

Running more mental health awareness programs

A strong recommendation was to carry out more awareness programs on mental health issues. One participant commented, "*I want to emphasize mostly on* (mental health) *awareness……at the workplace, at the school level, in the media, and raising awareness everywhere… so that people can move forward on their own*."

Incorporating mental health topics in the academic curriculum

A way forward can be to include mental health topics in the academic curriculum, as one participant pointed out: "*I think we should put special attention on school and textbook curriculum and teachers' training*."

Giving mental health social recognition

Participants emphasized the necessity of a shared understanding and recognition of mental health in society. One participant stated, "*Unless every actor in society does not share the same value regarding the importance of mental health, it will not achieve its expected results*."

More dialogues on mental health

Participants suggested that people need to exchange their views on mental health as a participant pointed out: "*We have to have a lot more dialogue regarding this matter*."

Mental health initiative requires a collective effort

Participants stressed that well-planned and collective efforts are needed to improve the mental health situation of the country. One participant mentioned, "*Different organizations are working in different ways. I think it is high time to stand on the same platform to improve and spread it*". Participants viewed that the government's roles are essential in this matter as a participant indicated: "*for larger implications, definitely financial commitment is needed from the government. The private sector can also play a big role, and how we can mobilize that might be a strategy which we can do at the policy level*."

Research-based mental health initiatives

Participants recommended research to be an integral part of mental health initiative as stated in a comment: "(We) *need more capacity building initiatives, materials, and research to create awareness of mental health in society*."

Social welfare policies for mental health

Participants emphasized that mental health services should not become a business. One participant commented: "*I want to put that, who are working on national mental health policy, they should strengthen people's organizations, not mental health market. Not make it a profit-generating business*."

Discussion

Main findings

The present study examined the MHFA Bangladesh program as a whole, including its effectiveness in achieving MHFA goals, impeding factors limiting its potential, and ways to address the barriers. Further, we ensured that the translation techniques we used to discuss mental health and MHFA strengthened the interpretation of data in the context and culture of Bangladesh. The strength of our approach is absent in previous MHFA studies, particularly in low-and -middle-income countries.

We found participants reported the training enhanced their understanding of mental health issues and helped develop empathy, non-judgmental attitudes, and mental health support skills. The training equipped participants to deal with their own and other's poor mental health in everyday life and during crises. Previous studies conducted in developed countries also found similar positive effects of MHFA training [39, 40]. Participants suggested that the program could potentially reach and motivate different sections of society to promote mental health and improve quality of life. An earlier study reported similar findings that MHFA training was suitable in a multicultural community [41].

The training's impact fell short when the aims were broader to include society, which is evident in the quantitative data on 'social impact' demonstrable evidence statements. Participants identified societal stigma and low mental health literacy as impeding MHFA's contribution to mental health awareness in the population. This finding is consistent with a previous study that reported that negative attitudes towards mental health can restrict the beneficial effects of MHFA [42]. Participants mentioned that low priority of mental health in media, research, institutions, and policy decisions limited MHFA initiatives and impacts in Bangladesh. Though Bangladesh recently prepared a Mental Health Policy and National Mental Health Strategic Plan 2020-2030, they are yet to be implemented [15]. Due to the shortage of mental health professionals and facilities in Bangladesh [43], participants found providing information about appropriate professional support to individuals with mental health issues and encouraging them to receive those supports challenging. In line with previous research reports [14], participants pointed out existing mental health services are expensive, and most of them are located in cities, making them practically inaccessible for people living in rural areas.

Limitations

A limitation of our study is that the findings are based on the opinions of one expert panel of MHFAiders, which allows one to question the results' implications and generalizability. However, it is to be noted that the study participants were heterogeneous with respect to their age, gender, occupation, education, and MHFA experiences. This diversity in their background created scope for multifarious opinions and reduced the possibility of obtaining narrow perspectives. The modified Delphi design also provided a richness to the findings and allowed participants to identify and explain undefined factors pertinent to MHFA implementation and, more generally, about mental health initiatives in Bangladesh. These findings were consistent with the MHFA literature [23, 24, 27]. Alternative study designs using randomized controlled procedures with follow-up phases would enable causal conclusions about the training to be drawn.

Impact for policymakers

The content and structure of the MHFA Bangladesh program can help promote mental health literacy, self-care, and lay people's ability to provide early mental health support to individuals in mental health crises. This is congruent with global mental health views that cross-cultural adaption of mental health models should consider local needs and empower communities to promote mental health [44]. To further enhance the impact of training, initiatives such as refresher courses and strengthening networks of professionals delivering MHFA training are needed, as well as monetary and policy-related support from government and multi agencies. An evidence-informed approach is required to accelerate Bangladesh's overall mental health initiatives.

Conclusion

MHFA Bangladesh is an effective training program to promote mental health literacy, enhance one's mental health, and train lay people to provide initial support to individuals with mental health issues in the community. With assistance from government and others, the program can alleviate the psychosocial and economic costs of the mental health treatment gap and the public mental health impact of COVID-19 in Bangladesh and potentially in other low-and-middle-income countries.

Declarations

Ethics approval and consent to participate

We obtained ethics approval from the University of Lincoln Ethics Committee (Ref.: 2020-3448), which the National Institute of Mental Health hospital's ethics committee in Dhaka endorsed (Ref.: NIMH/admin/2020/739). Participants were given a participant information sheet approved by the ethics committees, informing them of their tasks and rights. They voluntarily signed an online consent form to participate in the study.

Consent for publication

Participants consented to mention their names in the acknowledgment section.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Competing interests

MoR, AUH, UK, and PPM are involved in the MHFA Bangladesh program. The remaining authors declare that they have no competing interests.

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Authors' contributions

All the authors contributed to the design of the study. AUH, UK, and MoR prepared the questionnaire, which SG, SA, and MaR reviewed and endorsed. SA built and managed the Qualtrics survey. SA, AUH, UK, and MR facilitated the consensus workshop. PPM communicated with participants and coordinated the Qualtrics surveys, and translated and transcribed the consensus workshop. AUH, UK, and SA processed and analyzed data. AUH wrote the manuscript. SG, SA, CB, MaR, UK, and MoR reviewed and provided comments on the manuscript. All the authors read and approved the final manuscript.

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References

1. Kessler RC, Aguilar-Gaxiola S, Alonso J, Chatterji S, Lee S, Üstün TB. The WHO World Mental Health (WMH) Surveys. Psychiatr (Stuttg). 2009;6:5–9.
2. Kessler RC, Aguilar-Gaxiola S, Alonso J, Chatterji S, Lee S, Ormel J, et al. The global burden of mental disorders: An update from the WHO World Mental Health (WMH) Surveys. Epidemiol Psichiatr Soc. 2009;18:23–33.
3. Steel Z, Marnane C, Iranpour C, Chey T, Jackson JW, Patel V, et al. The global prevalence of common mental disorders: a systematic review and meta-analysis 1980–2013. Int J Epidemiol. 2014;43:476–93.
4. Vigo D, Thornicroft G, Atun R. Estimating the true global burden of mental illness. Lancet Psychiatry. 2016;3:171–8.
5. PAHO. Mental health problems are the leading cause of disability worldwide, say experts at PAHO Directing Council side event. Pan American Health Organization / World Health Organization. 2019. https://www.paho.org/hq/index.php?option=com_content&view=article&id=15481:mental-health-problems-are-the-leading-cause-of-disability-worldwide-say-experts-at-paho-directing-council-side-event&Itemid=72565&lang=en. Accessed 15 Feb 2021.
6. Torales J, O'Higgins M, Castaldelli-Maia JM, Ventriglio A. The outbreak of COVID-19 coronavirus and its impact on global mental health. Int J Soc Psychiatry. 2020;66:317–20.
7. Oldham MA, Hitchins A, Nickels MW. Mental Health, COVID-19, and the Invisible Pandemic on the Horizon. Mayo Clin Proc. 2021;96:287–90.
8. Al-Zaman MdS. Healthcare Crisis in Bangladesh during the COVID-19 Pandemic. Am J Trop Med Hyg. 2020;103:1357–9.
9. Burgess R. COVID-19 mental-health responses neglect social realities. Nature. 2020. doi:10.1038/d41586-020-01313-9.
10. Kola L. Global mental health and COVID-19. Lancet Psychiatry. 2020;7:655–7.
11. Bangladesh Bureau of Statistics. Statistical Pocketbook 2019. 2019. http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/d6556cd1_dc6f_41f5_a766_042b69cb1687/2020-05-20-11-49-1f4b467955de85be60941c27650e3f66.pdf. Accessed 6 Feb 2021.
12. Streatfield PK, Karar ZA. Population Challenges for Bangladesh in the Coming Decades. J Health Popul Nutr. 2008;26:261–72.
13. National Institute of Mental Health. National mental health survey of Bangladesh, 2018-19: Provisional fact sheet. 2020. https://www.who.int/docs/default-source/searo/bangladesh/pdf-reports/cat-2/nimh-fact-sheet-5-11-19.pdf?sfvrsn=3e62d4b0_2. Accessed 29 Apr 2021.
14. World Health Organization RO for S-EA. WHO-AIMS report on mental health system in Bangladesh. 2007. https://www.who.int/mental_health/bangladesh_who_aims_report.pdf?ua=1. Accessed 29 Apr 2021.

15. World Health Organization. Bangladesh WHO Special Initiative for Mental Health Situational Assessment. 2020. https://www.who.int/docs/default-source/mental-health/special-initiative/who-special-initiative-country-report---bangladesh---2020.pdf?sfvrsn=c2122a0e_2. Accessed 6 Feb 2021.
16. The Daily Star. Cabinet approves mental health bill. The Daily Star. 2018. https://www.thedailystar.net/city/cabinet-approves-mental-health-bill-1606570. Accessed 9 Feb 2021.
17. Islam A, Biswas T. Mental Health and the Health System in Bangladesh: Situation Analysis of a Neglected Domain. Am J Psychiatry Neurosci. 2015;3:57.
18. Patel V, Thornicroft G. Packages of Care for Mental, Neurological, and Substance Use Disorders in Low- and Middle-Income Countries: PLoS Medicine Series. PLOS Med. 2009;6:e1000160.
19. Patel V. Empowering global mental health in the time of Covid19. Asian J Psychiatry. 2020;51:102160.
20. Kitchener BA, Jorm AF. Mental health first aid training for the public: evaluation of effects on knowledge, attitudes and helping behavior. BMC Psychiatry. 2002;2:10.
21. MHFA England. What is Mental Health First Aid? In: Adult Mental Health First Aid Manual. MHFA England; 2016. p. 22–3.
22. International MHFA Programs. Mental Health First Aid International. https://mhfainternational.org/international-mental-health-first-aid-programs/. Accessed 16 Feb 2021.
23. Morgan AJ, Ross A, Reavley NJ. Systematic review and meta-analysis of Mental Health First Aid training: Effects on knowledge, stigma, and helping behaviour. PLOS ONE. 2018;13:e0197102.
24. Maslowski AK, LaCaille RA, LaCaille LJ, Reich CM, Klingner J. Effectiveness of Mental Health First Aid: a meta-analysis. Ment Health Rev J. 2019;24:245–61.
25. Hofmann-Broussard C, Armstrong G, Boschen MJ, Somasundaram KV. A mental health training program for community health workers in India: impact on recognition of mental disorders, stigmatizing attitudes and confidence. Int J Cult Ment Health. 2017;10:62–74.
26. Jha A, Kitchener BA, Pradhan PK, Shyangwa P, Nakarmi B. Mental Health First Aid Programme in Nepal. J Nepal Health Res Counc. 2012; doi:10.33314/jnhrc.v0i0.344.
27. Jorm AF, Kitchener BA, Reavley NJ. Mental Health First Aid training: lessons learned from the global spread of a community education program. World Psychiatry. 2019;18:142–3.
28. The Daily Star. Mental Health First Aid, Bangladesh launched. 2015. https://www.thedailystar.net/city/mental-health-first-aid-bangladesh-launched-76598. Accessed 9 Feb 2021.
29. Innovation for Wellbeing Foundation. 2021. https://iwellbeing.org/bn/mhfa-first-page. Accessed 9 Feb 2021.
30. Jorm AF, Kitchener BA, Kanowski LG, Kelly CM. Mental health first aid training for members of the public. Int J Clin Health Psychol. 2007;7:141–51.
31. Gillinson S, Horne M, Baeck P. Radical efficiency: Different, better, lower cost public services. London, England: National Endowment for Science Technology and the Arts; 2010. https://www.scie-socialcareonline.org.uk/radical-efficiency-different-better-lower-cost-public-services/r/a11G00000017wlbIAA. Accessed 15 Nov 2020.
32. Hofstede G, Hofstede GJ, Minkov M. Cultures and organizations: software of the mind; intercultural cooperation and its importance for survival. Rev. and expanded 3. ed. New York: McGraw-Hill; 2010.
33. Innovation for Wellbeing Foundation. Mental health first aid. 2020. https://www.iwellbeing.org/bn/menu-content/5. Accessed 5 Jul 2020.
34. Sartorius RH. The Logical Framework Approach to Project Design and Management. Eval Pract. 1991;12:139–47.
35. Jorm AF. Using the Delphi expert consensus method in mental health research. Aust N Z J Psychiatry. 2015;49:887–97.
36. McKenna HP. The Delphi technique: a worthwhile research approach for nursing? J Adv Nurs. 1994;19:1221–5.
37. Hart LM, Jorm AF, Kanowski LG, Kelly CM, Langlands RL. Mental health first aid for Indigenous Australians: using Delphi consensus studies to develop guidelines for culturally appropriate responses to mental health problems. BMC Psychiatry. 2009;9:47.
38. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3:77–101.

39. Hadlaczky G, Hökby S, Mkrtchian A, Carli V, Wasserman D. Mental Health First Aid is an effective public health intervention for improving knowledge, attitudes, and behaviour: A meta-analysis. Int Rev Psychiatry. 2014;26:467–75.
40. Burns S, Crawford G, Hallett J, Hunt K, Chih HJ, Tilley PJM. What's wrong with John? a randomised controlled trial of Mental Health First Aid (MHFA) training with nursing students. BMC Psychiatry. 2017;17:111.
41. Morawska A, Fletcher R, Pope S, Heathwood E, Anderson E, McAuliffe C. Evaluation of mental health first aid training in a diverse community setting. Int J Ment Health Nurs. 2013;22:85–92.
42. Narayanasamy MJ, Thomson L, Coole C, Nouri F, Drummond A. Investigating the barriers and facilitators to implementing mental health first aid in the workplace: a qualitative study. J Ment Health Train Educ Pract. 2020;16:164–78.
43. Ahmed SM, Alam BB, Iqbal Anwar, Tahmina Begum, Rumana Huque, Jahangir AM Khan, et al. Bangladesh health system review. In: Naheed A, Krishna Hort, editors. Health systems in transition. WHO Press; 2015.
44. Burgess RA, Jain S, Petersen I, Lund C. Social interventions: a new era for global mental health? Lancet Psychiatry. 2020;7:118–9.

Figures

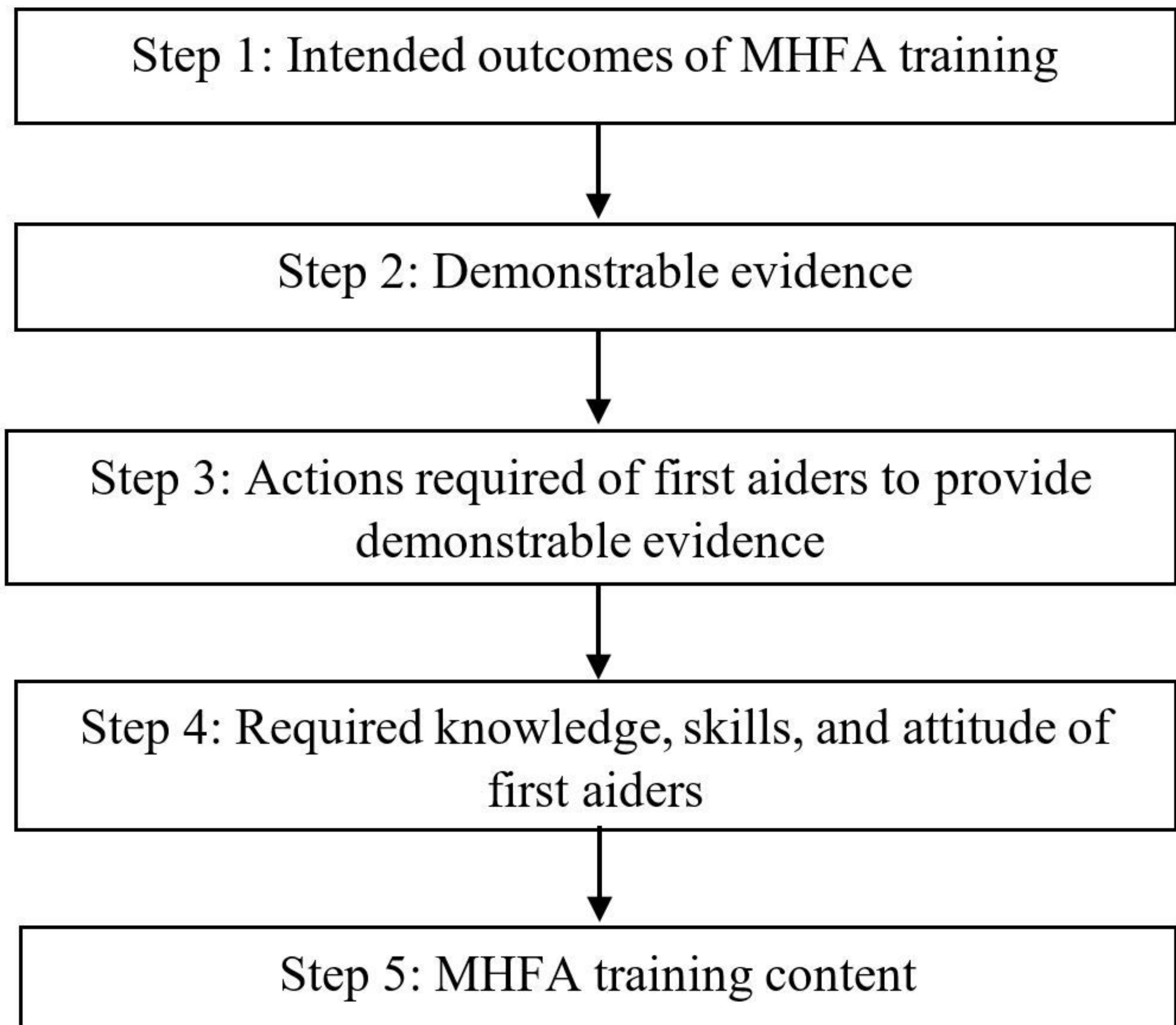

Figure 1

The five-step logic framework used to construct Delphi statements

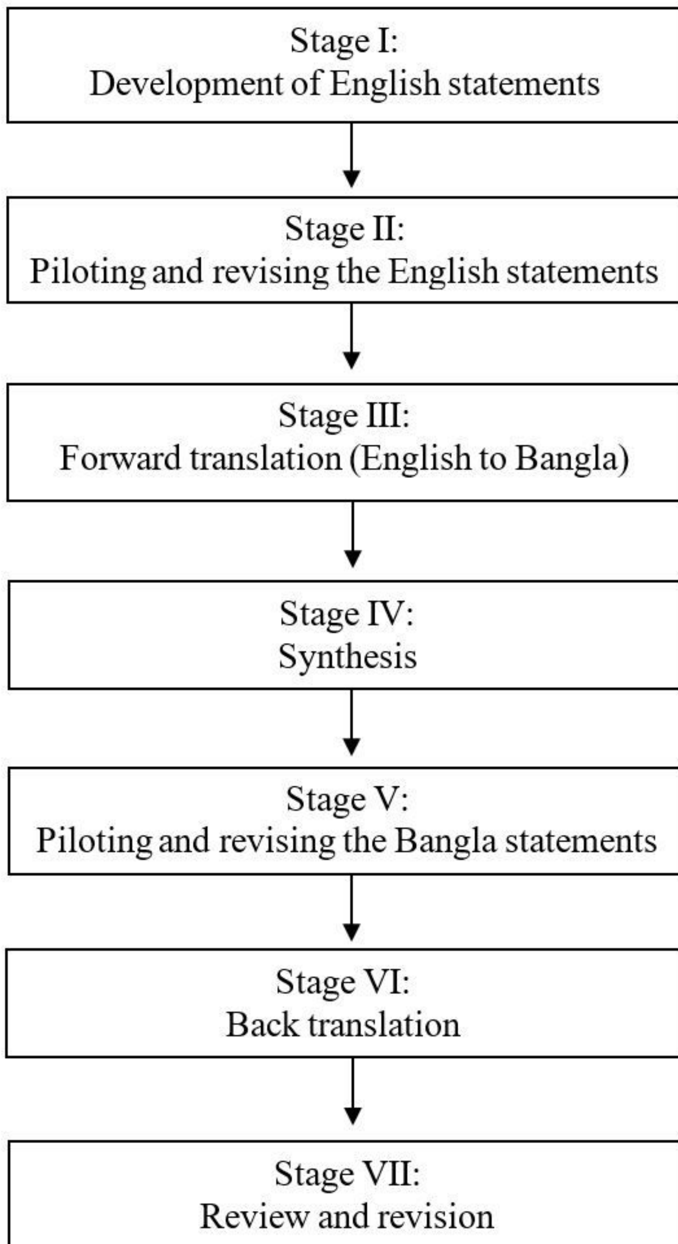

Figure 2

Piloting of questionnaire and translation protocol