

**CRISIS PREPAREDNESS AND MANAGEMENT TRAINING IN
BANGLADESH THROUGH CROSS-CULTURAL TECHNIQUES**



Thesis Submitted To The Department Of Educational And Counseling
Psychology,

University Of Dhaka, In Partial Fulfillment Of The Requirement For

Ph.D. In Educational And Counseling Psychology

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for the degree of

DOCTOR OF PHILOSOPHY

Approved by:

Shaheen Islam, Ph.D.

Designation

Supervisor

Certificate

This is to certify that thesis entitled, “Crisis Preparedness and Management Training in Bangladesh Through Cross-Cultural Techniques,” University of Dhaka, Dhaka, in partial fulfillment of the requirements for the degree of DOCTOR IN PHILOSOPHY IN EDUCATIONAL AND COUNSELLING PSYCHOLOGY DEPARTMENT, embodies the result of a piece of bona fide research work carried out by Joanne Byron Registration No. 40/2016/17 under my supervision and guidance. No part of the thesis has been submitted for any other degree or diploma.

I further certify that such help or source information, as been availed of during the course of this investigation has duly been acknowledged.

Dated
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Shaheen Islam, Ph.D
Supervisor
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Counselling Psychology

Declaration

*I hereby declare that the thesis entitled “**Crisis Preparedness and Management Training in Bangladesh through Cross-Cultural Techniques**” submitted to the University of Dhaka, Bangladesh for the degree of Doctorate of Philosophy is based on my research work carried out under the supervision of Dr. Shaheen Islam, Professor, Department of Counseling and Education Psychology, University of Dhaka. The material embodied in this thesis is original and has not been submitted in part or in full for any other degree, diploma, or title recognition of any university.*

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Dedication

As our paths crossed, I believe my story brought me to you. It is through our shared vision of caring and compassion to others in need that has cemented our professional relationship. I am forever grateful for being afforded the opportunity to develop and implement a most needed crisis program in Bangladesh. It is through your effort, dedication, and guidance that we have been able to provide services to those affected by crisis events. It has been an honor to view your strength of service and to be brought into your fold to participate in making a difference.

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Ministry of Disaster Management and Relief, and the People's Republic of Bangladesh, as individuals we are all responsible for the welfare of mankind, to traverse great distances when needed, and to make a difference to those who have suffered psychological trauma. Our partnership is an acknowledgement that we can share ideologies and a commitment to improve mental health. Thank you for your support and the opportunity to share my knowledge and skills in crisis response and trauma stabilization in the great country of Bangladesh.

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Abstract

Bangladesh has experienced a variety of natural (i.e., flood, cyclone) and manmade (terrorism) disasters. To date, the consequences of these disasters have not been widely recognized and responded to within the mental health realm. The goal of this research was to investigate crisis response techniques used in the reduction of mental health disorders in the aftermath of a traumatic event. Further, crisis intervention programs, such as PREPaRE and NOVA with an emphasis on cross-cultural techniques were examined for use in the development of a crisis response program specific for the country of Bangladesh. The study details the development of the Crisis Preparedness and Management for Mental Health (CPM-MH) program and the evaluation of four CPM-MH workshop trainings conducted in Dhaka, Bangladesh between 2017 and 2018. Pre-tests and post-tests, and program evaluations were analyzed for 95 participants of Bengali decent with English as a second language having attended Crisis Preparedness and Management for Mental Health five-day workshops. A Bangla speaking co-facilitator was used for summary of material and training assistance. Results indicated a significant decrease in anxiety when required to conduct a crisis intervention and a significant increase in knowledge of the variables impacting crisis response. Further, results yielded a significant increase for a positive attitude in crisis preparedness and management activities, and a significant increase in knowledge and characteristics of a crisis event. Qualitative data analysis of the three open-ended questions on program evaluations indicated common themes from participants related to knowledge of the presenter, strength

of the training process, crisis-training techniques, introduction to new concepts, relevancy of crisis training for the community, training conducted in both English and Bangla, and additional days to the current training. After successful participants completion of the training program, the implementation of the CPM-MH training program contributed to building local and national capacity for crisis responders to deliver effective psychological intervention for crisis stabilization to survivors of disasters. There is a critical need for the continual activation of psychosocial support and increased manpower for community-based volunteers as well as a standardized protocol and mechanisms for crisis response at a country and city level.

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Crisis Preparedness and Management Training for Mental Health
in Bangladesh through Cross-Cultural Techniques

Chapter 1: Introduction

As crisis is a state of emotional turmoil or an acute emotional reaction to a powerful stimulus, such as confronting death, serious injury, or some other physical threat, it is necessary to address those individuals who have been victimized (Mitchell, 2001). A variety of crises can affect individuals in different ways as they experience a range of emotions. As individuals are unique, differing ways of coping are manifested with these traumatic events to preserve a stable emotional balance. It is when typical coping mechanisms breakdown, that affected individuals search for replacement coping skills (Mitchell, 2001). Although individuals view traumatic events through their own mental filter, there is a commonality of emotions on a continuum that can be addressed through the use of crisis responding. A traumatic event may be experienced by one individual or a group, but a disaster impacts an entire community. How one individual or community experiences trauma may differ significantly from the experience of another individual or community (Bowman & Roysircar, 2011). Therefore, it is necessary to provide crisis preparedness for mental health programs developed specific to experiences and cultures of the community.

In countries like Bangladesh, there is inadequate knowledge and practice about crisis response and management, specifically to disaster mental health. Consequently, there may be limited to no mental health resources for the provision of necessary psychosocial support, which may lead to mental health

disorders such as depression, anxiety, or post-traumatic stress disorder. By providing a research-based crisis preparedness and management program sensitive to culture, recovery from trauma can be initiated immediately often reducing mental health disorders (Chowdhury, Quraishi, & Haque, 2006). In consideration of trauma stabilization, integration of the crisis response team with the network of various governmental and non-governmental organizations permits services to be implemented effectively.

Experience of Crisis

There is a need to stabilize trauma survivors as they may experience a range of emotions: anxiety, pain, fear, grief, horror, anger, shock, flashbacks, hopelessness, isolation, and disconnectedness. Pre-disaster risk factors, such as prior mental health difficulties, female gender, and younger age may elevate the traumatic reaction, which also increases the need for stabilization. Elevated vulnerability of children may attribute to a lack of coping skills as compared to the level of trauma experienced. Additional pre-disaster/trauma factors linked with an increase in psychopathology are: low social support, low socio-economic status, personality characteristics (e.g., worry, neuroticism), and avoidance coping (Goldman & Galea, 2014).

Crisis intervention provides immediate assistance that an individual in crisis requires in order to reestablish psychological equilibrium. Effective responses, through post-disaster intervention, can mitigate risk and assist with emotional recovery (Everly & Mitchell, 2000). There has been a significant level of worldwide awareness of the mental health impact after natural or manmade

disasters with the area of psychological first aid having its origin from World War I, World War II, and the Holocaust Disaster research evolved in the 1940's (Goldmann & Galea, 2014). Utilizing a proactive rather than a reactive approach to a crisis is a significantly better approach in effectively dealing with a crisis event (Wyatt & Silver, 2015). According to Lindell, Lerner, & Volpe, "A proactive approach to a crisis is one that is organized, planned and practiced and more likely results in a response that can have a dramatic effect on reducing the short- and long-term consequences of the crisis on the individuals" (p. 96). In contrast, a reactive approach is impulsive in nature without being thought out in its entirety. Without adequate planning and skill development, crisis response can be deemed as less effective when addressing the urgent and perhaps the extended needs of victim survivors of a traumatic event (Lindell, Lerner, & Volpe, 2012).

The adoption of mental health support programs has increased to address the psychological consequences of traumatic events through policy reform and capacity building to meet the needs of those who have been traumatized (Bateman & Henderson, 2014). Provision of mental health support programs post trauma must have at their basic tenet a foundation based on principles, policies, and procedures that afford individuals safety, validation, dignity, self- efficacy, and hope (Bateman & Henderson, 2013). Specialized crisis response provides a framework for the reduction of immediate distress and enhancing short- and long-term functioning (Schultz & Forbes, 2014). According to Brock, Nickerson, Reeves, Savage, & Woitaszewski (2011), effective programs are those that are comprised of the dissemination of knowledge, effective teaching for the

promotion of skilled responders, and active learning with the culmination of improved attitudes regarding crisis intervention and workshop satisfaction.

Cultural Barriers to Mental Health: Although the development of mental health support programs have provided a sound foundation to meet the needs of individuals post trauma, research has indicated that cultural barriers may hinder access to services (Lowenthal, Mohamed, Mukhopadhyay, Ganesh, & Thomas, 2012). The influence of culture cannot be overlooked as it plays a vital role in determining how individuals cope with stress, engage in crisis management, and access mental health crisis services after a traumatic event. Assessing cultural background, specific to the vulnerability of individuals and communities at large, includes a review of factors, such as social values, traditions, and connectedness to the community. Stigmas related to receiving mental health services continue to exist within communities with negative connotations to those who seek mental health services. Pathways to care may also face barriers in the form of family ties, religion, and language. Family ties and religion have a significant cultural impact related to openness to mental health services with religion and cultural views forming an individual's reactions to trauma. Religion is often used as alternative way to minimize symptoms of trauma. An additional barrier to accessing mental health services resides in the area of language. Not only is there a diversity of languages within one country but also sharing a similar language does not imply commonality on culture (Jogia, Kulatunga, Yates, & Wedawatta, 2014).

Improvising and modifying existing techniques to be culturally mindful of diversity can remove many barriers. According to Rosen, Greene, Young, & Norris (2010), the development of programs that focused on culturally appropriate activities better serve individuals post trauma. The Crisis Counseling Assistance Training Program (CCP) developed by FEMA delivers a robust model of a culturally competent disaster mental health service with its foundation in psycho-education and brief counseling. The importance of training crisis responders in cultural competence is absolutely necessary for successful crisis resolution to acknowledge and respect the importance of community's strengths, ideals, beliefs, and resources post disaster (Arunotai, 2008). Knowledge informed and strength-based programs, such as CCP increase the ability of individuals post trauma to access services, recognize available personal and community resources that will assist in the recovery process. Such programs adapt interventions and strategies to meet the needs of the trauma affected individuals in relation to their culture.

Crisis Intervention and Crisis First-Aid

Crisis intervention involves several types of methodology that provide early intervention strategies to minimize the adverse impact and to assist positive recovery. Essential elements are comprised of the provision of safety, consecutiveness, self-efficacy, and hope provided by trained lay providers (Schultz & Forbes, 2014). Psychological First Aid is a term that refers to early intervention by layman and mental health professionals to address the immediate needs of trauma survivors who require crisis stabilization (North & Pfefferbaum, 2013). In response to the increased number of traumatic events and disasters, the

numbers of mental health professionals have been insufficient to meet community needs. As a result, the method of service delivery has been modified to encompass trained to crisis response volunteers to assist with rebuilding individual and, hence, community resiliency.

Large-scale disasters confirm the need for crisis intervention embedded in the management of these traumatizing events (Jacobs, Cray, Erickson, Gonzalez, & Quevillon, 2016). Limited psychological resources provide the opportunity to train layman in assisting with individuals who have experienced unexpected events. According to Phipps, Byrne, & Deane (2007), volunteer crisis responders are a valuable resource. Comparative studies indicate para-professionals succeed in commensurate clinical outcomes to mental health professionals (National Biodefense Science Board, 2008 and North & Pfefferbaum, 2013). Consequently, numerous ‘psychological first aid’ or crisis intervention programs have been developed.

“Psychological first aid,” as used in this context. Refers to psychological support that is both used to improve one’s own resilience and is provided by non-mental health professionals to family, friends, neighbors, co-workers, and students. Psychological first aid focuses on education regarding traumatic stress and on active listening. The term also incorporates more sophisticated psychological support given by primary care providers to their patients. Properly executed, psychological first aid is adapted to the needs of each group or community (i.e., group

of people with shared interests) implementing it, ensuring that the psychological first aid that is introduced in the community does not conflict with the worldview of the group. It also emphasizes the inclusion of effective strategies for psychological support that may be specific to that group. This is done in concert with a representative community committee that helps to ensure responsiveness to the specific community. Psychological first aid includes understanding one's role; the difference between anticipate stress reactions and traumatic stress; how to engage in active listening; when and where to refer individuals for assessment and intervention; and the importance of supervision, ethical behavior, and self-care. (National Biodefense Science Board, 2008, p.12)

Crisis Events. Throughout history, individuals have been presented with various stressful events that come in many different forms. Individuals and communities have been impacted by natural, manmade, and nonintentional traumatic events such as the instability of weather and the volatility of those who perpetrate harm on them. Trauma results from sudden onset events such as cyclones and floods as well as mass shootings. Disasters in Southeast Asia are predicted to increase due to sea level rises that will escalate flooding and storm surges, particularly within coastal communities (Matthews, 2018). "Historical statistics would suggest that Bangladesh is one of the most disaster-prone countries in the world, with great negative consequences being associated with various natural and

human-induced hazards” (Disaster Management Bureau, 2010). People of vulnerable communities develop coping capacities with each disaster and with recovery assistance; survivors can employ these capacities (Wisner, Gaillard, & Kelman, 2012).

Property damage, casualty of lives, and loss of crops have negatively impacted people residing on coastal Bangladesh due to climate change and inclement weather. Climate change has created challenges with increased health risks, forced relocation from homes, and loss of livelihoods. In the framework of repeated destruction from cyclones and hurricanes, disaster preparedness and response are directed to alleviate the structural damage of disasters in Bangladesh. Further, preparation is focused on identifying adaptive capacity for basic needs for those confronted with various natural disasters (Ashraf & Shaha, 2016). Although Bangladesh has demonstrated its resiliency to endure climate risks and severe weather conditions, the focus of this adaptability has been on the physical rehabilitation rather than mental health.

In April 2013, the people of Bangladesh experienced a manmade trauma when an engineering disaster which occurred with the collapse of a nine-story building. The “Rena Plaza tragedy” killed 1125 people with 2000 sustaining injuries (Hossain, Hahar, Nauyan, Ema, & Alve, 2013). The impact of trauma following disasters has the capability of exacerbating risk factors such as divorce, loss of family members, or past psychiatric illness and many result in Post-Traumatic Distress Disorder (PTSD). Participation in a crisis intervention program after a traumatic event has a number of

benefits with the possibility of: relief from mental stress, minimizing the chance of PTSD, gaining life satisfaction comparable to pre-trauma, and adaptability to a 'new normal' (Chen, et.al., 2013).

In July of 2016, the worst human induced trauma occurred in Gulshan Thana, an affluent neighborhood in Dhaka, the capital of Bangladesh. Gulshan, a residential area, houses many of the city's restaurants, shopping venues, and schools with the majority of embassies residing in this location. Five militants entered the Holey Artisan Bakery café with homemade bombs, pistols, and machetes and took foreigners and locals hostage with a death toll of 20 (Daily Star, 2016). In addition to the survivors, many people in the community had been eyewitnesses or viewed the carnage through televised exposure.

In August 2017, the Myanmar military initiated genocide of its Rohingya people who resided in their county. Men, women, and children died by being burned alive, shot, hacked or clubbed to death, or thrown into the river to drown. Children were not spared and many women suffered rape. The results of this 'ethnic cleansing' lead to 6700 Rohingya murdered; including 730 children less than 5 years old and 362 Rohingya villages were partially or completely destroyed (Amnesty International, 2018). The Rohingya people who were able to escape the violence in Myanmar sought refuge in Bangladesh. Despite Bangladesh being confronted with its own traumatic events and monetary constraints, the Ministry of Disaster Management and Relief (MoDMR) organized the Rohingya settlement in Cox's Bazar, a town on the southeast coast of Bangladesh where refugees were

able to arrive on foot or boat.

Many Rohingya, after suffering systematic dehumanizing conditions, arrived in Bangladesh with only the clothes they were wearing with little or no money. Few have had the benefit of any education and 80% of the Rohingya were illiterate (Human Rights Watch, 2018). Approximately one million Rohingya refugees currently reside in Bangladesh's Cox's Bazar District and are considered the fastest growing group of refugees worldwide (UN Women, 2018). Many Rohingya were severely traumatized with many agencies throughout the world offering assistance. Basic needs such as food, clothing, and shelter took precedence over mental health needs during this crisis.

Traumatic events not only claim lives but also may affect survivors with lasting negative effects on mental health. When trauma occurs, people may be displaced from their homes, and may experience physical or psychological challenges often causing or exacerbating mental health difficulties. Traumatic stress has the ability to compromise an individual's coping skills. Understanding that these emotions are typical responses to extraordinary circumstances allows for cognitive reframing. By addressing immediate mental health needs, the utilization of crisis intervention is considered the best strategy to building resilience for further traumatic events (Ehlers & Clark, 2016). If attention is not directed to the mental health needs of those affected by traumatic events, communities are limiting survivors' ability to surmount adversity. As resiliency is the ability to surmount adverse conditions through a process that

focuses on the reduction of mental health damage experienced in the present and future it is absolutely necessary to reduce the emotional turmoil.

Chapter 2: Literature Review

The previous level of mental health support in Bangladesh has been inadequate both in policy and in practice; however, with the establishment of scientific literature on trauma and the increased awareness of states and countries, a move toward an adoption of a mental health support system would provide comprehensive services within a disaster and crisis training with capacity building. As a component of disaster management efficient and effective psychosocial support would be provided in the context of disasters and traumatic events. According to Satapathy (2012), psychosocial interventions assist individuals, communities, and families to rebuild human capabilities and repair social solidarity while sustaining their dignity and independence. Psycho-social support through interventions promotes social well being, enhances coping capacities, reduces stress, and assists in the prevention of adverse psychological impairment.

International training for issues specific to mental health and interventions to individuals exposed to trauma postulated a core value system to enhance the crisis responders to meet their ethical obligation (Weine, et. al., 2002). Value systems provide crisis responders a connection to humanity by respecting human rights and culture. Basing trauma training in scientific and professional knowledge provides an understanding of the compromises and conflicts that arise when engaged in trauma response. It is necessary to acknowledge the validity of

various views and concerns related to trauma, which may be accomplished through the advancement of open dialogue between different entities on trauma viewpoints, and assimilating various trauma perspectives and positions in the pursuit of what is beneficial to providing trauma support.

In the development of a crisis program for Bangladesh, crisis intervention theory and western adapted programs assisted in the development of the Crisis Preparedness and Management for Mental Health (CPM-MH) program. Specific crisis models, which utilized crisis intervention techniques relevant to natural and manmade disasters and sensitivity to cultural diversity were reviewed and modified as necessary. National Organization of Victim Assistance Young, 2002), PREPaRE (Brock, Nickerson, & Reeves, 2009), and Roberts 7 Stage Crisis Intervention (Roberts, 2000) permitted utilization of cross-cultural techniques and were combined with strategies for active listening, assessing and responding in crisis intervention, and activities related to responding to trauma and were considered useful formats for assisting in the mitigation of risk factors and to promote emotional recovery.

Crisis Intervention Programs

First in review was NOVA, which provided a Crisis Response Team (CRT) and was comprised of individuals trained in a group format to provide education and trauma mitigation after of a small or large-casualty traumatic incident. Crisis response is based on the premise of group crisis intervention for: safety and security, ventilation and validation, and prediction and preparation. A key factor in participating in NOVA's mission is to defend the dignity and

provide compassion for those affected by crime and impacted by a crisis with the support of trained responders representing a diversity of vocations and contexts (Young, 2002).

Second, PREPaRE provided school-based mental health and other educational professionals the training protocol to fulfill the necessary roles and responsibilities in their participation on a school safety teams and crisis teams. Specifically, the PREPaRE model emphasizes that, as members of a school safety and crisis team, school mental health professionals must be involved in the following specific hierarchical and sequential set of activities: P—Prevent and PREPaRE for psychological trauma; R—Reaffirm physical health and perceptions of security and safety; E—Evaluate psychological trauma risk; P—Provide interventions; a—and; R— Respond to psychological needs; and E—Examine the effectiveness of crisis prevention and intervention. Specifically, the PREPaRE curriculum describes crisis team activities as occurring during the four states of a crisis: (a) prevention, (b) preparedness, (c) response, and (d) recovery (Brock, Nickerson, & Reeves, 2009).

Lastly, Roberts 7 Stage Crisis Intervention included a wide-ranging crisis intervention system that may be used by individuals, small and large groups, and communities. The first stage is Pre-crisis preparation. This encompasses stress management education, stress resistance and crisis reduction training. The second stage is disaster or a large-mass incident, as well as community support programs including informational briefings and community meetings. The third stage is comprised of small groups where defusing or discussions occur. The small

groups are conducted within hours of a crisis assessment, triaging and mitigating acute symptoms. The fourth stage had extended small group discussions known as Critical Incident Stress Debriefing (CISD). CISD are structured group discussions that typically occur one to days post crisis to reduce or remove acute symptoms, evaluate the need for follow-up and, if required, provide a post-crisis closure. The fifth stage was one-on-one crisis intervention during the course of the full range of the crisis. The sixth stage was the family crisis intervention and organizational consultation. The final stage was the follow-up and referral procedure for evaluation and treatment, if necessary (Roberts, 2000).

Based on the review of the NOVA, PREPaRE, Roberts 7 Stage Crisis Intervention, and current Psychological First Aid literature, a comprehensive framework with a series of steps provided for the development of Crisis Preparedness and Management for Mental Health. Key components provided the foundation for CPM-MH such as: a) early intervention as defined by providing crisis intervention services within one to two weeks of the traumatic event; b) crisis intervention services developed to be provided in a structured format, which includes pre-response preparation, crisis intervention services, information dissemination, and cultural diversity and sensitivity (Everly, Hamilton, Tyiska, & Ellers, 2008).

Further, to determine a participant's mastery of skills at the conclusion of a crisis training program, assessment tools were reviewed to include pre- and post-tests, and rubrics to measure crisis knowledge, crisis intervention attitudes, and acquisition of crisis skills. The PREPaRE school-based mental health pre-

and posttest was reviewed. Test format contains three items to measure attitudes toward crisis intervention, four items assessing knowledge of crisis intervention, four items measuring preparedness and management of a crisis, and 14 items assessing crisis preparedness and management in response to a crisis. The multiple choice quantitative pre- and posttests are administered to measure the extent to which the learning objectives have been mastered by participants (Brock, et. al., 2011).

A second type of measure, rubric, was reviewed based on the ability to observe performance of participants' skills acquisition and competency. Rubrics have emerged as one of the most popular assessment tools for their adaptability to meet diverse criteria. The ability to quantify mastery of skills through arithmetic calculations producing a numerical value allows participant's to review strengths and areas needing improvement. Further, direct methods, such as demonstrations, simulations, and portfolios provides a description of what is expected at each score level (Hafner & Hafner, 2003).

Current Gaps in Research

Currently there are no standardized crisis intervention programs in Bangladesh to address traumatized individuals who have been impacted by a traumatic event or research supporting the efficacy of crisis intervention programs. The promotion and study of interventions utilizing non-clinical psychological support for those exposed to traumatic events is needed in underdeveloped countries having limited or no access to these services (Nahar et.al., 2014). With crisis intervention at the non-clinical level being linked to a

reduction in mental health disorders after a traumatic event, Bangladesh would be able to identify mental health disorders requiring clinical intervention. According to Nahar et. al. (2014), an estimated 5-10% of the population serviced for non-clinical intervention demonstrated a reduction in the need for further mental health services.

CPM-MH Program Development Rationale

The rationale for the development of CPM-MH was an inclusive approach to mitigating trauma with the reduction of or amelioration of cultural impact. By identifying the range of various types of psychological first aid programs with a narrowed cultural focus, it allowed capitalization of the program's strengths for minimal cultural impact. Creating a quality program was not without its challenges, as western interventions may not always be translated to different cultures with the necessary understanding of salient local expressions and customs. In addition to the impact of culture on the crisis curriculum, cultural competence of crisis responders is necessary to facilitate effective communication with individuals who have experienced a traumatic event (Weissbecker, Hanna, El Shazly, Gao, & Ventevogel, 2019). According to Weissbeck, et.al. (2019), universally used guidelines to respond to the needs of individuals who have been impacted by trauma include the following: a) germane contextual information (e.g., culture-specific principles and beliefs, customs specific to death and grief, attitudes toward mental health support); b) trauma experience (e.g., viewpoint of causation and anticipated consequences); and c) psychosocial wellbeing (e.g., coping strategies and community mental health resources). Further awareness

must also be directed to: the possibility of negative perceptions arising from receiving psychological first aid, the concern as to how emotions will be labeled, and types of coping mechanisms. A deficit in mental health literacy may also compound the ability to provide psychological first aid to populations not having knowledge or previous access to these types of psychological services.

Despite the numerous and diverse psychological first aid models, it is evident from the review of the literature that many programs have commonality in intervention techniques. As traumatic events have psychological consequences, research has focused on characteristics of trauma rather than the cause due to the commonality of responses linked to either experience (Goldmann & Galea, 2014). Core principles of Psychological First Aid include providing: a sense of safety for participants, small groups with co-facilitators where participants are afforded the opportunity to share their emotions, psycho-education and mindfulness, and problem solving (Hechanova, Manaois, & Masuda, 2019). An additional innovative approach was embedded in a graduate school program for MSW students to enable assistance to traumatized clients via a trauma certificate program. Conceptual and ethical principles of the program were evaluated through self-ratings in relationship to the efficacy in working with traumatized individuals and communities of variable ages and demographics. Further, specific areas of the trauma theory were articulated as to their relevance in practical use. Trainers reported a positive outcome as to knowledge and skills the participants of the training program had received and further suggested increased awareness and networking regarding trauma (Bussey, 2008).

Designing a crisis intervention program for Bangladesh utilizing cross-cultural techniques was accomplished through a series of five steps. First, goals and objectives were selected incorporating crisis intervention protocol and techniques from existing trauma programs. Second, a manual was developed to provide foundational information and to serve as a reference guide. Third, a knowledge base for crisis reactions specific to developmental levels of individuals was provided. Fourth, the role of crisis responders was identified. Finally, fifth, shared expertise used to advance culturally relevant trauma training in psychological first aid.

CPM-MH Program Development

The core curriculum of the CPM-MH program focused on training in psychological first aid to meet the needs of individuals exposed to trauma. Volunteer participants would include mental health professionals and layman whose crisis knowledge and skills could be developed or expanded. Training would include knowledge of crisis responses according to developmental level, competence in active listening skills with well-developed communication respective of empathetic ability, cultural sensitivity to address the needs of diverse populations, and identification of atypical trauma responses. Teaching skills establishes the ability to provide interventions to minimize trauma impact, problem-solving strategies to reduce problematic circumstances, education of positive coping strategies and supplant the possible use of negative strategies, ethical guidelines for crisis responders to do no harm in their delivery of services, and self-care. Self-care is necessary to minimize burnout and vicarious

traumatization leading to ineffectiveness.

In comparison to Everly, Phillips, Kane, & Feldman (2006), the CPM-MH model utilizes the following group counseling approach: a) an introduction to the group leaders; b) state the purpose of the group; c) state the duration of the group session; d) discuss and provide behavioral boundaries, clarify expectations, provide safety and security; e) ask for clarification or correction of the presented facts, which provides an opportunity for group participants to engage, but to do so freely; and f) teach: as the group process unfolds the group facilitator offers psycho-educational information that normalizes trauma responses, provides reassurance and techniques for coping and stress management, and engages with the group to identify signs and symptoms that may need further attention.

Facilitators using the CPM-MH model are taught the following: a) 'to listen to the story' of the trauma or disaster situation through ventilation and provide support through validation by normalization, reassurance, and information relates to trauma responses; b) support the accepted group cohesion and resiliency and highlight the possible role that group members can assume in providing support to one another; c) aid participants in linking with informal support systems, such as family, friends, and coworkers or more formalized support systems, including local mental health programs, faith-based resources; d) conclusion/closure provide summarization, prediction and preparation with the provision of continued resources as needed with the facilitator sharing their availability at the conclusion of the session; and e) promote self-care essential through debriefing, which provides an opportunity to debrief with each other, and

to prioritize rest, relaxation, and support when needed.

Self-care training is imperative as it provides the necessary avenue where crisis responders in their listening capacity learn that they may not be able to restore trauma survivors with the sense of safety and security experienced pre-trauma event. As a result, volunteers have experienced guilt and self-blame (Bowman & Roysircar, 2011). Crisis responders who engage in self-care may continue to be resilient by being made aware of their positive characteristics and external resources. When self-care is neglected, signs of stress may be exhibited. To minimize the impact of stress associated with crisis response, a debriefing protocol and personal monitoring through evaluation for vicarious traumatization, compassion fatigue, or burnout is necessary (Bowman & Roysircar, 2011).

Training initiatives provide an evaluative process identifying the successful completion of training objectives including participant observation of active listening skills and comprehension of training knowledge and methods while engaging in a simulated crisis situation. According to Jacobs, Gray, Erickson, Gonzalez, & Quevillon (2016), varied studies reported the benefit of using active listening with an increase in psychological support. In addition, the use of active listening provides the listener with an increased perception of being supported by the speaker (Weger, Bell, & Robinson, 2014). The utilization of active listening assist in building a sense of empathy from the speaker to the listener, and a connectedness between the speaker and the listener.

Based on the current research, the development of CPM-MH as a stalwart crisis intervention program included providing a rigorous training of volunteers

for crisis response to assist survivors of a traumatic event or disaster. Crisis responders are vital to those immediately affected by the traumatic event as well as other trauma/disaster volunteers (e.g., emergency and humanitarian workers) who experience trauma through prolonged exposure to disturbing events and trauma narratives. Crisis responder volunteers are confronted with challenges such as engaging in a sustained crisis response involving multiple days of response. Prior to participating in crisis intervention programs, volunteers are confronted with questions regarding if they are able and willing to respond to a crisis in a variety or nontraditional settings, if they can adequately provide services during unpredictable situations and adverse conditions, and if they can be released from family and work responsibilities for the time required to respond to the specific crisis.

The CPM-MH incorporates pre- and post-tests adapted from the PREPaRE program to ensure that the training is beneficial in acquiring knowledge and skills, and assessing attitudinal changes. Program evaluation from the PREPaRE program provides feedback of information for program enhancement. Documentation of successes and challenges provides the data for lessons learned to improve training format. Continual update of new crisis intervention information enhances future training. Follow-up support through a refresher course and master trainer guidance during a crisis event provides support and supervision. Those who successfully complete the course are placed on a volunteer list and are eligible to volunteer through CPM-MH when needed.

The restoration of well being of communities affected by disasters and

trauma is a key component of the disaster relief services provided. A central tenant of CPM-MH, as with Psychological First Aid is providing a supportive and compassionate presence to minimize psychological distress (Everly & Flynn, 2005). By incorporating viable crisis interventions through cross-cultural techniques, the goal of the CPM-MH training program was to build local capacity for volunteers and to select participants to provide psychological management for those affected by a myriad of trauma (Ng, et. al, 2009).

CPM-MH Manual Development

Providing a core knowledge base through the development of a manual allowed for a foundation prior to and during training and a reference tool to be used during crisis response. The American Counseling Association, American Red Cross, Crisis Intervention Handbook (2005), National Association of School Psychologists, National Association of PTSD, National Organization of Victim Assistance, National Aging I & R Support Center, and International Traumatology Institute Information were instrumental in providing information in the development of the Training for Crisis Preparedness and Management for Mental Health Manual (Byron, 2018). Other information taken from a variety of websites and books was also credited and incorporated to assist in expanding the knowledge base related to crisis response.

The CPM-MH manual content included an introduction to crisis preparedness and management through an overview of crisis and trauma, the development of a crisis, individuals in crisis, and assisting individuals in crisis. Understanding how a variety of crises can affect individuals in different ways

with a commonality of emotions providing an opportunity for stabilization of traumatic reactions and the opportunity to expand coping skills both internally and externally would be a key premise to crisis comprehension.

Long-term stress reactions experienced by trauma survivors in relation to Post Traumatic Stress Disorder (PTSD) could be studied to explore the characteristics of PTSD and coping skills in relation to emotional outcomes. Grief and sorrow in the context of surviving a traumatic event could provide information specific to anticipatory grief, traumatic grief, and duration of grief with incorporation of suggestions and techniques.

Crisis reactions across developmental levels could provide an understanding as to how a survivors' ability to cope is largely determined by age. Expectation of reactions in children, adults (including the elderly), and the disabled is necessary to provide interventions matched with trauma survivors experiences. Further, it is necessary to address trauma in the realm of cultural perspective and how traumatic events are interpreted and expressed emotionally. How one identifies themselves with their primary support groups provides the foundation for recovery through familial and community resources.

Trauma and spiritualism addresses the importance of spirituality in the cultural context in the aftermath of a traumatic event through belief and hope. As traumatic events are an attack to our meaning systems, our assumptions about the world are compromised with a need for restoration of our consistent belief system. Information related to the elements of crisis intervention that adheres to ethical principles safeguards that trauma survivors do not experience further

emotional harm.

Foundation skills that ensure a rights-based approach include good communication skills through active listening, empathy, and as highlighted in the NOVA model providing safety and security, ventilation and validation, and prediction and preparation. Group intervention techniques expand on individual intervention while assisting trauma survivors gain cognitive control through an understanding of what occurred and how to cope. Coordinating a crisis response team following the NOVA model assists in planning immediate and long-term needs in the community, gives support to the local caregivers, and provides guidelines in selecting appropriate crisis response team members for deployment. In addition, roles of team members are delineated as to how to respond with the necessary tools and protocol, and strategies in responding to a traumatic event.

As communities address the immediate crisis, there is a quest for information locally and at times worldwide. Understanding of how the media responds to a traumatic event or a disaster provides strategies to manage the media in crisis situations, which may assist trauma survivors and communities who feel violated. How crisis responders handle the media is essential to providing a foundation of trust with those effected by the unexpected traumatic events. Lastly, an awareness to crisis caregivers and stress reactions highlights how to handle stress reactions, burnout, vicarious victimization or countertransference, and compassion fatigue. Information in isolation is not adequate for crisis responders to apply crisis techniques. Although knowledge provided through a manual permits for an enhanced crisis response foundation, it

is necessary to participate in a crisis response program to enhance manual knowledge and apply learned techniques.

Purpose of the Study

Given the significant increase of trauma experienced in underdeveloped countries, it is imperative to examine crisis intervention programs that may be incorporated in the development of a crisis response program specific for the country of Bangladesh. When crisis intervention resources are unavailable or limited in countries afflicted with natural disasters and manmade events, crisis survivors are reported to exhibit a higher level of vulnerability (Nahar, et.al, 2014). Most often, due to financial constraints, physical needs receive a higher priority compared to crisis intervention for mental health due to financial constraints. Bangladesh is one such country that does not have a crisis intervention program despite its having the highest mortality rate in the world due to natural disasters. The geographical location of the country makes it vulnerable to cyclones, floods, and monsoons. Weather conditions are predicted to remain constant in the upcoming years, leading the citizens of Bangladesh to continuously experience the trauma of these events. In conjunction with natural disasters, man-made events also plague Bangladesh. A crisis intervention program for mental health might prove beneficial to the citizens of Bangladesh, assisting in the mitigation of the negative psychological impact of trauma (Atkins, & Burnett, 2016). According to Ali, Hatta, and Azman (2013), crisis interventions that build capacity in the Bangladesh community also promote risk reduction for mental health difficulties. Although the Government of Bangladesh

has provided proactive measures for disaster mitigation for disasters, a committee to explore the need for mental health crisis teams in in the aftermath of traumatic events has not been initiated. As a result, crisis teams have not been formed for the management of psychosocial trauma occurring in a disaster Choudhury, Qurashi, & Haque (2006).

The Bangladesh community would benefit from a crisis intervention program, which would provide assistance for individuals or groups experiencing extreme distress. Crisis responders could assist trauma survivors cope and return to a previous level of physical or emotional functioning. Through short-term professional support, the immediate crisis or problem would be addressed. Prompt and focused interventions aid in the prevention of serious long-term trauma to those affected by crisis (Flannery & Everly, 2000). The intervention is temporary, active, and supportive. With the implementation of crisis techniques, the traumatized person reclaims external control over his or her life and begins to live his or her new normal. The goal of intervention is to assist with successful crisis resolutions, which results in positive mental health (Wyatt & Silver, 2015).

The purpose of crisis response teams is to respond to trauma caused by natural and/or manmade crisis events by supporting community members through group or individual crisis intervention. These teams provide training to community caregivers in ongoing crisis intervention for groups and individuals, and post-trauma counseling skills (Friedman, Rose, & Koskan, 2011). According to Tint, McWaters, & van Driel (2015), well-developed crisis training skills assist

communities minimize acute stress factors originating from disaster and increase adaptive capacities of individuals in the community. Communities gain strength, become better prepared when confronted with future adversity related to future threats of harm. Evaluation studies of mental health training found an improvement of mental health knowledge, increased confidence in providing mental health support, and reduced stigma in obtaining mental health services (Jorm, Kitchener, Fischer, 2010).

Finally, the efficacy of the non-clinical training of crisis responders with the newly developed Crisis Preparedness and Management for Mental Health (CPM-MH) program was analyzed following training members of the public in 2018 and 2019. CPM-MH utilized multi-modes of conventional psychological first aid and crisis intervention strategies from the NOVA (Young, 2002), PREPaRE (Brock, Nickerson, & Reeves, 2009), and Roberts' 7 Stage Crisis Intervention (Roberts, 2000) models, which were modified for cultural aspects.

Based on the purpose of the study, the following hypotheses were examined:

Hypothesis #1. A statistically significant difference between pre- and post-training on the Crisis Intervention Attitude scale will report less anxiety when required to conduct a crisis intervention.

Hypothesis #2. A statistically significant difference between pre- and post-training on the Crisis Intervention Knowledge Scale will report an increased knowledge of the variables influencing crisis response.

Hypothesis #3. A statistically significant difference between pre- and post-

training in Bangladesh on the Crisis Preparedness and Management Attitudes Scale will report a more positive attitude regarding participating in the preparation and management of a crisis.

Hypothesis #4. A statistically significant difference between pre- and post-training between Crisis Preparedness and Management Knowledge Scale will report an increase in knowledge of the characteristics of a crisis event, crisis responses, and crisis skills.

Chapter 3: Method

The study represents data analysis using data from 95 participants from four CPM-MH training workshops, including one pilot workshop. The purpose of this study is to evaluate CPM-MH program training outcomes through the examination of whether participants obtain crisis skills, crisis knowledge, and positive crisis attitudes as a result of the participation in the training. This section describes the dataset, including participant recruitment and demographics, research design and procedures, and data collection process and measures used. Further, the statistical analyses for each research question are explained.

Setting and Participants

The current study was conducted in Dhaka, Bangladesh, which included Bengali participants, with English as a second language. Participants were recruited prior to the commencement of each of the four crisis training workshops after the approval from the University of Dhaka Ethics Committee. The program developer/facilitator provided information regarding informed consent to participate in the research.

Recruitment. The pilot training workshop participants were selected to participate in the CPM-MH training by the Department of Disaster Management under the Ministry of Disaster Management and Relief, Government of People's Republic of Bangladesh ($n = 22$). The remaining workshop participants were selected by Department of Disaster Management under the Ministry of Disaster Management and Relief, Government of People's Republic of Bangladesh and the University of Dhaka's Education and Counseling department as follows: workshop #2: $n = 25$; workshop #3: $n = 24$; and workshop #4: $n = 24$. Of the 96 participants, a total of 95 agreed to participate and consent was obtained. Participants for the CPM-MH four training programs were 95 adults who completed the training program. One individual declined to participate in the study, but did complete the CPM-M training

Sample participants ranged in age from 20 to 66 years old with 51.6% of the participants 20 to 41 years old and 68.4% males and 31.6% females. The occupations of the participants were as follows: 64% government service; 21% private sector; 6% nongovernment official (NGO); and 8% university students. The average number of participants who had previous crisis intervention training was 24% with 18% having crisis experience. See Table 1.

Procedure

The study used a six-day pilot program ($n = 22$) with one monolingual female facilitator who provided training in English. Translation in Bangla was provided upon request through one designated participant. The CPM-MH manual, PowerPoint, and all forms were provided in English. Further, the

participants were selected solely by the Department of Disaster Management under the Ministry of Disaster Management and Relief, Government of People's Republic of Bangladesh. The remaining workshop participants were selected by Department of Disaster Management under the Ministry of Disaster Management and Relief, Government of People's Republic of Bangladesh and the University of Dhaka's Education and Counseling department (workshop #2: $n = 25$; workshop #3: $n = 24$; workshop #4: $n = 24$) to participate in the five-day crisis training.

Table 1

Crisis Preparedness and Management for Mental Health Participants Demographics (n = 95)

Demographics	Number	Percentage
Age at Time of Training		
20 – 29	17	18.0
30 – 39	26	27.6
40 – 49	32	33.8
50 – 59	17	18.2
60 – 69	3	3.30
Gender		
Male	65	68.4
Female	30	31.6
Occupation		
Government Service	61	64.2

Table 1 (continued)

Crisis Preparedness and Management for Mental Health Participants Demographics (n = 95)

Demographics	Number	Percentage
Nongovernmental Official (NGO)	6	6.30
University	8	8.40
Private	20	21.1
Training		
Mental Health	24	24.2
Crisis	18	18.9

A CPM-MH participant who successfully graduated from the crisis-training program as a crisis responder and who also trained as a CPM-MH trainer was selected to become a co-facilitator to provide crisis training in Bangla in a shadow format. In other words, the monolingual (English) program developer/facilitator provided information in manageable segments with the female co-facilitator interpreting in Bangla or for clarification of material as needed.

Training participation. The participants in the six-day pilot (workshop #1) and the remaining three five-day CPM-MH trainings (workshops #2 - #4) engaged in seven-hour per day workshop sessions with lunch and two breaks provided. Extension of the lunch break was provided on the one day of prayer. Participants who resided some distance from the training location or where travel was impacted by traffic congestion were provided with lodging and meals on site.

On the first day of each of the four trainings and prior to the commencement of the training, all participants involved in data collection were directed to write their name and an assigned four-digit code on the pre-test form. The assigned four-digit code was used to link the pre-test, the post-test and the program evaluation questionnaires as names were removed to provide anonymity prior to data analysis. The program developer/facilitator documented the assigned numbers corresponding to participant names should the participant forget their code. The participant roster with codes was placed in a confidential location.

On the concluding day of the four trainings and prior to dismissal, all participants involved in data collection were directed to write their name and assigned code on the post-test and program evaluation forms. Participants were directed to complete the post-test without referring to the training material.

All study participants were provided the following forms in English with verbal interpretation provided in Bangla upon request: written informed consent to participate in research (See Appendix A, Informed Consent to Participate in Research: Crisis Preparedness and Management for Mental Health in Bangladesh via Cross-Cultural Intervention Techniques). All forms were completed in English. A brief overview of CPM-MH training program focused on reviewing: a) purpose of the training; b) expected skill development; and c) crisis response protocol.

Program implementation. Program developer/facilitator followed a standardized method for all participants in the crisis training workshops through the CPM-MH program. All four workshops included: basic crisis knowledge; active listening; crisis procedure; planning for intervention; crisis simulation (e.g.,

1:1, small and large group role-plays); crisis resolution; ethics; and self-care.

The CPM-MH training protocol for day one consisted of: a) sharing goals and objectives; b) describing basic assumptions of a crisis event; c) discussing types of trauma experiences and adaptive capacities of individuals; d) explaining dimensions of emotions and stress reactions in a crisis situation; and e) describing the grief and loss process. The second day of crisis training consisted of: a) describing the crisis reactions in relation to developmental levels, including the disabled; b) discussing the cultural impact and spiritual dimension of trauma; c) introducing active listening techniques; d) and engaging in the active listening activity. All participants had the opportunity to engage in the active listening activity. Participants were randomly selected in pairs to practice active listening with the remaining participants in observance. Each participant in the pair alternated using active listening skills while the other participant shared an event. The facilitator and co-facilitator provided guidance as needed.

The third day of crisis training consisted of: a) informing participants how to prepare emotionally and physically to become a crisis responder; b) describing the stages of a counseling relationship; c) introducing crisis intervention techniques; d) understanding crisis intervention guidelines; and e) explaining the roles of crisis team members. The fourth day of crisis training consisted of: a) discussing the impact and handling of the media during a crisis event; b) describing the necessary steps required to respond to a crisis event; and c) engaging in an activity for the development of a crisis response plan for communities in crisis. The participants were randomly assigned to a group of

four or five and provided a crisis vignette (e.g., plane crash, hurricane, mass shooting, and hotel fire) and a response plan for communities in crisis worksheet. Groups were provided a 20 minutes time limit to complete the worksheet. At the conclusion of the allotted time, one participant was selected by the group to present the answers to the response plan for communities in crisis worksheet. At the conclusion of the activity, the code of ethics crisis responders are required to follow was reviewed.

The previously assigned groups and the assigned crisis vignette remained the same for all crisis activities. The fifth day of training consisted of: a) engaging in the small group crisis intervention activity. During the simulated small groups, each participant was afforded the opportunity to be the group facilitator with all remaining participants in observance. The CPM-MH facilitator and the co-facilitator provided immediate feedback and guidance as needed; b) engaging in the simulated 1:1 crisis intervention activity. Random pairs were selected to engage in the simulated role play based on their assigned crisis vignette with all the remaining participants in observance; c) providing information on death notification; and d) describing the stress reactions of crisis responders and coping strategies.

Materials

All participants were provided the same standardized training material including a CPM-MH manual (Byron, 2018), a copy of the PowerPoint crisis training presentation, and supplemental educational handouts. The supplemental handouts included: diagramming a disaster by type; strategies for children with

special needs; the effects of trauma on different age groups; disaster and trauma responses of children; children's reactions to trauma; 1:1 crisis counseling; group crisis intervention process; active listening; what to say/not to say; post-trauma/disaster stress; basic information on ways of coping; tips for relaxation, and code of professional ethics. Also used were crisis vignettes (e.g., flood, fire, shooting, plane crash).

The CPM-MH manual, First Edition was developed by the program developer through the compilation of the review of literature on crisis. The manual's use was intended for a participant's reference to expand on crisis knowledge and to support the understanding of the crisis training. Chapters of the CPM-MH manual provided an introduction to crisis preparedness and management encompassing crisis trauma, development of a crisis, and assisting individuals in crisis.

Response to trauma through internal and external factors, and long-term stress reactions with grief and loss information was also included. Developmental responses of crisis across the ages, cultural perspective with the impact of trauma, and information on trauma and spiritualism was included in the manual to expand knowledge of key components needed to address when responding to a crisis response. Crisis techniques through active listening, small and large group intervention, and individual sessions following the PREPaRE and NOVA model allowed for information in coordinating a crisis response team. Most importantly, the Code of Ethics for Crisis Responders was included. Lastly, managing the media in crisis situations, crisis caregivers and stress reactions, and the crisis

aftermath are also issues included for review.

The first edition of the CPM-MH manual was provided in English to participants of the pilot crisis-training workshop. The second edition of the CPM-MH manual was translated in Bangla and provided to participants in crisis training workshops #2, #3, and #4. Contents of the CPM-MH, Second Edition manual was altered to include the following: a) Chapter sequences for better flow of information placing the art of active listening prior to crisis intervention techniques; b) removal of redundant information for group crisis intervention procedure; and c) additional chapter discussing recovery processes in the crisis aftermath (see Appendix D). Participants were provided the CPM-MH manual in English upon request. A bilingual individual fluent in Bangla and English independently read the content of the manual and translated it from English to Bangla and then translated back to English for back translation.

Measures

Multiple measures were used for program evaluation including pre-test, post-test, and program evaluation (quantitative and qualitative). CPM-MH pre-test and post-test was adapted from the PREPaRE model of pre- and post-test measurement with the program evaluation duplicated with permission (Brock, et. al., 2011). Quantitative and qualitative data summarized in this report included 95 workshops evaluations and 95 pre- and post-tests as one participant declined to be part of the study.

Pre-Test and Post-Test. The instrument was modified from the PREPaRE pre-test and post-test (Brock, Nickerson, & Reeves, 2009). The CPM-

MH pre-test and post-test is a 25-item rating scale that assesses four areas: 1) crisis intervention attitudes; 2) crisis intervention knowledge; 3) crisis preparedness and management attitudes; and 4) crisis preparedness and management knowledge. The first area, crisis intervention attitudes, is comprised of three questions that measure levels of anxiety and fear. The second area, crisis intervention knowledge, is comprised of four questions that assess increased crisis knowledge. The third area, crisis preparedness and management attitudes, is comprised of four questions that measure the reduction in the level of anxiety in how participants feel about participating in crisis intervention as a responder. The fourth area, crisis preparedness and management knowledge, is comprised of 14 questions that assess crisis knowledge in how participants feel about participating in crisis preparedness and management activities (Appendix B Training for Crisis Preparedness and Management for Mental Health Pretest/Posttest Questions).

Crisis Intervention Attitudes, and Crisis Preparedness and Management Attitudes questions were rated on a five-point scale from not at all to extremely. Crisis Intervention Knowledge, and Crisis Preparedness and Management Knowledge were rated on four multiple-choice answers.

Program Evaluation. The CPM-MH program evaluation form was duplicated from the PREPaRE model (Brock, Nickerson, & Reeves, 2009). The program evaluation consisted of 10 questions on a Likert scale from 1-4 with 1 = strongly disagree and 4 = strongly agree and three open-ended questions (Appendix C Training for Crisis Preparedness and Management Program for

Mental Health Program Evaluation).

Research Design for Analysis. A design was implemented using pre-test prior to training and post-test after training (see Table 2).

Table 2

Research Design

Group	Pre-Test	Training	Post-Test
Group 1	X1	T1	X1
Group 2	X2	T2	X2
Group 3	X3	T3	X3
Group 4	X4	T4	X4

Chapter 4: Results

Piloting of the Module and Changes Made

Quantitative Analysis

Participants' crisis intervention attitudes and knowledge, and crisis preparedness and management attitudes and knowledge were examined pre-and post-crisis training to measure improvement in attitudes and knowledge. Pilot Group #1 data was analyzed by using the Statistical Program for the Social Sciences (SPSS) version 24. Specific to individual question analysis, only significant differences will be embodied in the text.

Hypothesis #1 was supported as a statistically significant difference between pre- and post-crisis training as participants reported less anxiety when required to conduct a crisis intervention as reported on the Crisis Intervention Attitude scales. A contrast analysis with paired comparisons between pre-test vs.

post-test attitudes for Pilot Group #1 Crisis Intervention Attitudes yielded a significant difference, $t(21) = -3.35, p < .001$ indicated a reduction in the level of reported anxiety in how participants felt about participating in crisis intervention as a responder (See Table 3).

Hypothesis #2 supported a statistically significant difference between pre- and post-training on the Crisis Intervention Knowledge Scale for an increased knowledge of the variables influencing crisis response. A contrast analysis with paired comparisons between pre-test and post-test attitudes for Pilot Group #1 Crisis Intervention Knowledge yielded a significant difference, $t(21) = -.548, p < .001$ indicating a significant increase in the level of crisis intervention knowledge (see Table 3).

Hypothesis #3 did not support a statistically significant difference between pre- and post-training on the scores of the Crisis Preparedness and Management Attitudes Scale. Participants did not demonstrate a more positive attitude regarding participating in the preparation and management of a crisis. Pre-test vs. post-test attitudes for Pilot Group #1 Crisis Preparedness and Management Attitudes yielded no significant difference, $t(21) = -5.53, p < .05$ indicating participants did not demonstrate a change in how they felt about participating in crisis preparedness and management activities (see Table 3).

Hypothesis #4 supported a statistically significant difference between pre- and post-training on the scores of the Crisis Preparedness and Management Knowledge Scale demonstrated an increase in knowledge of the characteristics of a crisis event, crisis responses, and crisis skills. A contrast analysis with paired

comparisons between pre-test vs. post-test attitudes for Pilot Group #1 Crisis Preparedness and Management Knowledge yielded a significant difference, $t(14) = -4.02, p < .001$ indicating a significant increase in knowledge in how participants felt about participating in crisis preparedness and management activities (see Table 3).

Table 3

Pilot Group #1 Participants' Crisis Intervention Attitudes and Knowledge Total Pre-Test vs. Post-Test scores

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
Domains	N	M	SD	M	SD			
Crisis Intervention Attitudes	22	10.04	2.49	12.31	2.81	-3.352	21	.003**
Crisis Intervention Knowledge	22	12.86	1.28	3.00	1.11	-.548	21	.000**
Crisis Preparedness & Management Attitudes	22	12.86	2.09	15.45	2.38	-5.533	21	.589
Crisis Preparedness & Management Knowledge	15	6.13	2.26	7.86	1.50	-4.026	14	.001**

Note: * $p < .05$ ** $p < .001$

Changes in Attitudes

Individual items on the Crisis Intervention Attitudes and Preparedness and Management Attitudes were analyzed to investigate the performance of the groups.

Pilot Group #1. Paired samples t -test was used to determine whether there was a significant difference in the pre- and post-crisis training crisis intervention

attitude questions. A contrast analysis with paired comparisons between pre-test vs. post-test attitudes for the level of anxiety during a crisis yielded a significant difference, $t(21) = -4.00, p < .001$ indicated a reduction in the level of fear about making a mistake during a crisis (see table 4).

Table 4

Pilot Group #1 Participants' Crisis Intervention Attitudes From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
1. How anxious would you feel if you were required to conduct a crisis intervention?	22	3.41	.854	4.05	1.29	-1.952	21	.064
2. How fearful are you that you might make a mistake during a crisis intervention?	22	3.00	1.19	3.91	1.06	-4.004	21	.001**
3. How confident are you in your ability to know what to do if you were required as part of a crisis response team?	22	3.64	1.21	4.36	0.79	-2.402	21	.026

Note: All items on a 1 - 5 scale, with higher scores indicating more positive attitudes.

* $p < .05$ ** $p < .001$

Paired samples t -test for Pilot Group #1 was used to determine whether there was a significant difference in the pre- and post-crisis training preparedness and management attitude questions. A contrast analysis with paired comparisons between pre-test vs. post-test attitudes for the level of preparedness prior to a crisis yielded a significant difference as participants reported an increase in crisis

preparedness knowledge, $t(21) = -4.90, p < .001$; more confident in their ability to collaborate in the development of a crisis response plan, $t(21) = -4.948, p < .001$; and increased enthusiasm to collaborate with others in the development of a crisis response plan, $t(21) = -3.846, p < .001$ (see Table 5).

Table 5

Pilot Group #1 Participants' Preparedness and Management Attitudes From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
1. How knowledgeable are you about crisis prepared-ness and management?	22	2.27	0.82	3.32	0.71	-4.90	21	.000**
2. How confident are you in your ability to collaborate with others to develop crisis response management plan?	22	3.09	0.75	3.77	0.75	-4.948	21	.000**
3. How enthusiastic are you to collaborate with others to develop a comprehensive crisis response plan?	22	3.05	1.17	3.95	0.89	-3.846	21	.001**
4. How important do you feel crisis prepared-ness and management knowledge skills are in today's society?	22	4.45	0.59	4.41	0.66	-3.70	21	.715

Note: All items on a 1 - 5 scale, with higher scores indicating more positive attitudes.

* $p < .05$ ** $p < .001$

Changes in Knowledge

Individual items on the Crisis Intervention Knowledge, and Crisis

Preparedness and Management Knowledge was analyzed to investigate the performance of the pilot group.

Pilot Group #1 participant responses indicated significant increases in crisis intervention knowledge as determined by paired samples *t*-test to determine whether there was a significant difference in the pre- and post-crisis training. A contrast analysis with paired comparisons between pre-test vs. post-test crisis intervention knowledge yielded a significant difference, $t(21) = 2.160, p < .05$ indicated an increased knowledge of strategies when responding to a crisis (see Table 6).

Table 6

Pilot Group #1 Participants' Crisis Intervention Knowledge From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
1. Which sets of variables are most powerful in determining the number of individuals likely traumatized by a crisis event?	22	1.32	0.47	1.36	0.49	-.370	21	.715
2. Which of the following is a community-wide trauma-inducing event that requires a crisis team?	22	1.32	0.47	1.32	0.47	.000	21	1.000
3. Crisis Team: What behavior guidelines are to be followed?	22	1.18	0.39	1.18	0.39	.000	21	1.000
4. Which strategy for responding to a crisis generally involves the following activities?	22	1.32	0.47	1.14	0.35	2.160	21	.042*

Note: All items on a 1 - 4 scale, with higher correct scores indicating increased knowledge.

* $p < .05$ ** $p < .001$

Paired samples *t*-test for Pilot Group #1 was used to determine whether there was a significant difference in the pre- and post-crisis training preparedness and management knowledge questions. A contrast analysis with paired comparisons between pre-test vs. post-test attitudes for the level of preparedness prior to a crisis yielded a significant difference as participants reported an increase in active listening skills, $t(21) = 5.631, p < .001$; and identifying psychological triggers after a crisis event, $t(21) = 2.160, p < .05$ (see Table 7).

Table 7

Pilot Group #1 Participants' Preparedness and Management Knowledge From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
1. Identify four characteristics of a crisis event.	22	1.41	0.59	1.55	0.51	-.826	21	.418
2. Which of the following is not one of the elements of promoting psychological safety in CPM?	22	1.91	0.29	1.95	0.21	-.568	21	.576
3. In the dimension of emotions, what impacts recovery from immediate trauma?	22	1.64	0.65	1.86	0.35	-1.742	21	.096
4. Acute Stress Disorder includes the following?	22	1.18	0.50	1.23	0.42	-.326	21	.747

Table 7 (continued)

Pilot Group #1 Participants' Preparedness and Management Knowledge From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
5. What is not a viable component for survivors as they navigate grief and loss?	22	1.36	0.58	1.59	0.50	-1.418	21	.171
6. Prior to death notification, what are the general guidelines for notification procedure?	22	1.18	0.39	1.05	0.21	1.8	21	.083
7. Group crisis intervention techniques include the following goals of group work.	22	1.95	0.21	1.73	0.55	1.742	21	.96
8. The process of ventilation is comprised of?	22	1.32	0.47	1.27	0.45	.370	21	.715
9. Key issues for facilitators of a crisis intervention group include all of the following except?	22	1.32	0.71	1.41	0.50	-.624	21	.540
10. For crisis responders, exposure to repeated events leads to being vulnerable to long-term stress reactions such as?	22	1.41	0.50	1.32	0.47	.810	21	.427

Table 7 (continued)

Pilot Group #1 Participants' Preparedness and Management Knowledge From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
11. Active listening skills include the following except?	22	1.18	0.39	1.18	0.39	5.631	21	.000**
12. A stage not in counseling relationship is?	22	1.64	0.49	1.41	0.50	2.017	21	.057
13. Cultural perspective on trauma are defined by the following except?	22	1.73	0.45	1.73	0.45	.000	21	1.000
14. Intrusive memories are generally triggered by the following.	22	1.23	0.42	1.05	0.21	2.160	21	.042*

Note: All items on a 1 - 4 scale, with higher correct scores indicating increased knowledge.

* $p < .05$ ** $p < .001$

Reliability Analysis

Participants were provided a pre- and post-test to measure crisis intervention attitudes and knowledge, and crisis preparedness and management attitudes and knowledge. The Crisis Intervention Attitudes Scale consisted of 3-items, the Crisis Preparedness and Management Attitudes Scale consisted of 4-items, the Crisis Intervention Knowledge Scale consisted of 4-items, and the Crisis Preparedness and Management Knowledge Scale consisted of 14-items. As

this measure was developed for western use, items were analyzed by using Cronbach's Alpha for reliability by groups with participants in Pilot Group #1.

Analysis of pre-test Crisis Intervention Attitudes for Pilot Group #1 appeared to have questionable internal consistency, $\alpha = .63$. In contrast, post-test Crisis Intervention Attitudes Scale appeared to have good internal consistency, $\alpha = .85$ (see Table 8).

Table 8

Cronbach's Alpha for Internal Consistency of Crisis Intervention Attitudes for Group #1

Pilot Study

Question	Pre-Test	Post-Test
1. How anxious would you feel if you were required to conduct a crisis intervention?	.39	.89
2. How fearful are you that you might make a mistake during a crisis intervention?	.47	.17
3. How confident are you in your ability to know what to do if you were required as part of a crisis	.47	.62

The reliability analysis on the pre-test for the Crisis Intervention Knowledge Scale showed the test to reach questionable reliability, $\alpha = 0.66$. One of the four items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. Retaining item 3 would increase the alpha to $\alpha = 0.76$. The post-test Crisis Intervention Knowledge Scale score indicated an unacceptable reliability, $\alpha = 0.53$. One of the four items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. Retaining item 1 would increase the alpha to $\alpha = 0.66$ (see Table 9).

Table 9

Cronbach's Alpha for Internal Consistency of Crisis Intervention Knowledge for Group

#1 Pilot Study

Table 9 (continued)

#1 Pilot Study

Question	Pre-Test	Post-Test
1. Which sets of variables are most powerful in determining the number of individuals likely traumatized by a crisis event?	.31	.09
2. Which of the following is a community-wide trauma-inducing event that requires a crisis team?	.69	.54
3. Crisis Team: What behavior guidelines are to be followed	.12	.22
4. Which strategy for responding to a crisis generally involves the following activities?	.69	.52

On the pre-test for the Crisis Preparedness and Management Attitudes Scale, results indicated unacceptable internal reliability, $\alpha = .39$. In comparison, the post-test for the Crisis Preparedness and Management Attitude Scale appeared to have good internal consistency, $\alpha = .79$. All items within the Crisis Intervention Attitude Scale and Crisis Preparedness and Management Attitudes Scale appeared to be worthy of retention (see Table 10).

Table 10

Cronbach's Alpha for Internal Consistency of Crisis Preparedness and Management

Attitudes for Group #1 Pilot Study

Question	Pre-Test	Post-Test
1. How knowledgeable are you about crisis preparedness and management?	.04	.47

Table 10 (continued)

*Cronbach's Alpha for Internal Consistency of Crisis Preparedness and Management**Attitudes for Group #1 Pilot Study*

Question	Pre-Test	Post-Test
2. How enthusiastic are you to collaborate with others to develop a comprehensive crisis response plan?	.29	.68
3. How important do you feel crisis prepared-ness and management knowledge skills are in today's society?	.30	.58

On the pre-test and post-test for the Crisis Preparedness and Management Knowledge Scale, results showed the tests to reach unacceptable reliability, $\alpha = 0.50$, $\alpha = 0.28$, respectively. All pre- and post-items do not appear worthy of retention (see Table 11).

Table 11

*Cronbach's Alpha for Internal Consistency of Crisis Preparedness and Management**Knowledge for Group #1 Pilot*

Question	Pre-Test	Post-Test
1. Identify four characteristics of a crisis event.	-.02	-.39
2. Which of the following is not one of the elements of promoting psychological safety in CPM?	.03	-.08
3. In the dimension of emotions, what impacts recovery from immediate trauma?	-.12	-.19
4. Acute Stress Disorder includes the following?	-.01	.30
5. What is not a viable component for survivors as they navigate grief and loss?	.52	-.02
6. Prior to death notification, what are the general guidelines for notification procedure?	.77	.48
7. Group crisis intervention techniques include the following goals of group work?	.02	.08

Table 11 (continued)

*Cronbach's Alpha for Internal Consistency of Crisis Preparedness and Management**Knowledge for Group #1 Pilot*

Question	Pre-Test	Post-Test
8. The process of ventilation is comprised of?	.40	.30
9. Key issues for facilitators of a crisis intervention group include all of the following except?	.06	.10
10. For crisis responders, exposure to repeated events leads to being vulnerable to long-term stress reactions such as?	.48	.30
11. Active listening skills include the following except?	.16	.24
12. A stage not in counseling relationship is?	.08	.06
13. Cultural perspective on trauma are defined by the following except?	.06	.22
14. Intrusive memories are generally triggered by the following.	.62	.48

Qualitative Analysis

Qualitative data analysis was obtained through the CPM-MH Program Evaluation form that was provided to participants at the conclusion of the crisis training. The evaluation form included three open-ended questions. All participants completed 10-question evaluation survey of the crisis training, which included three open-ended questions. Of the three open-ended questions, two participants in pilot group #1 left one question blank. Several themes emerged for each of the questions, however, only those themes occurring 10% or more are discussed.

Pilot Group #1. The first question, “What are the strengths of the workshop?” yielded over one half (55%) of the CPM-MH workshop participants

reporting the presenter was a significant strength of the training process (e.g., knowledgeable, experienced, organized). Another theme was noted for the crisis training technique of role-playing (10%), where the presenter provided scenarios to apply learned skills (e.g., active listening, crisis intervention strategies). Participants noted a growth (23%) in their crisis intervention knowledge and being introduced to new concepts (e.g., crisis interventions, what is a crisis situation) with a 23% response for the relevancy of crisis training for the community (e.g., the need for addressing mental health in the community, relevant to the disaster impact). An appreciation by participants was put forth (10%) for the training schedule and time management of the presenter (e.g., adherence to schedule) with the presenter providing an informative, structured, and clear objective (14%) to meet the training goals (see Table 12).

The second question, “What suggestions do you have to improve this workshop?” yielded 41% of workshop participants expressing that the training be conducted in both English and Bangla (e.g., enhanced comprehension). Additionally, participants perceived it would be beneficial (10%) that additional days be added to the current training format (e.g., additional role playing, expanded intervention training) (see table 12).

The third question, “What specific crisis presentation and/or intervention knowledge and skills did you develop that will assist you with future crisis responses?” yielded a 50% increase in skills and strategy acquisition (e.g., effective crisis intervention techniques) with a 41% increase in participants active listening skills (e.g., ‘I’ messages, positive regard) and an appreciation for the

opportunity to practice and receive constructive guidance. Related to the CPM-MH manual, participants referred to crisis resources as beneficial to their learning (18%) (see Table 12).

Table 12

Group #1 Pilot Frequency Responses to Program Evaluation Questions

Open-ended CPM-MH Program Evaluation Questions	Pilot Group #1 Frequency Percentage
Question 1: What were the strengths of the workshop?	
Presenter/teaching techniques	55
Role Play	10
Introduction of new crisis concepts/knowledge	23
Practical/Relevant need for community	23
Time management/schedule	10
Presentation/structure/clear process	14
Question 2: What suggestions do you have to improve this workshop?	
Training in English & Bangla	41
Additional days for training	10
Question 3: What specific crisis presentation and/or intervention knowledge and skills did you develop that will assist you with future crisis responses?	
CPM-MH skills/strategies	50
Active listening skills	41
CPM-MH Manual	18

n = 22

Changes Made to CPM-MH Training

Modifications to Group #2, #3, and #4 included reducing the crisis training session from six to five days, the use of a Bangla speaking co-facilitator, and making revisions to the CPM-MH manual. The CPM-MH, Second Edition revision included the translation of the manual into Bangla with the English version provided upon request, expansion of active listening techniques, and additional to include Crisis Aftermath (See Appendix F). Further, chapters within the manual were re-organized for logical flow to follow the crisis-training schedule (see Appendix D).

Main Study of Efficacy of the Module

Quantitative Analysis

Participants' crisis intervention attitudes and knowledge, and crisis preparedness and management attitudes and knowledge were examined pre-and post-crisis training to measure improvement in attitudes and knowledge. Data were analyzed by groups #2, #3, #4 with all data analyzed by the Statistical Program for the Social Sciences (SPSS) version 24. Specific to individual question analysis, only significant differences will be embodied in the text.

Hypothesis #1 was supported as a statistically significant difference between pre- and post-crisis training as participants reported less anxiety when required to conduct a crisis intervention as reported on the Crisis Intervention Attitude scales. A contrast analysis with paired comparisons between pre-test vs. post-test attitudes for Groups #2, #3, and #4 Crisis Intervention Attitudes yielded a significant difference, $t(72) = -8.31, p < .001$ indicating a reduction in the level of reported anxiety in how participants felt about participating in crisis

intervention as a responder (see Table 13).

Hypothesis #2 supported a statistically significant difference between pre- and post-training on the Crisis Intervention Knowledge Scale for an increased knowledge of the variables influencing crisis response. A contrast analysis with paired comparisons between pre-test and post-test attitudes for Groups #2, #3, and #4 Crisis Intervention Knowledge yielded a significant difference, $t(69) = -2.68, p < .05$ indicating a significant increase in the level of crisis intervention knowledge. Therefore Hypothesis 2 was only supported for Groups 2, 3, and 4 and not the pilot group (see Table 13).

Hypothesis #3 supported a statistically significant difference between pre- and post-training on the scores of the Crisis Preparedness and Management Attitudes Scale, which demonstrated a more positive attitude regarding participating in the preparation and management of a crisis. A t-test contrast analysis with paired comparisons between pre-test vs. post-test attitudes for Groups #2, #3, and #4 Crisis Preparedness and Management Attitudes yielded a significant difference, $t(72) = -8.09, p < .001$ indicating a significant reduction in the level of anxiety participants felt about participating in crisis preparedness and management activities. Thus, the Hypothesis 3 was supported for an increase in participants' positive attitudes when participating in the preparation and management of a crisis (see Table 13).

Hypothesis #4 supported a statistically significant difference between pre- and post-training on the scores of the Crisis Preparedness and Management Knowledge Scale demonstrated an increase in knowledge of the characteristics of

a crisis event, crisis responses, and crisis skills. A contrast analysis with paired comparisons between pre-test vs. post-test attitudes for Groups #2, #3, and #4 Crisis Preparedness and Management Knowledge yielded a significant difference, $t(63) = -5.92, p < .001$ indicating a significant increase in knowledge in how participants felt about participating in crisis preparedness and management activities. Therefore, Hypothesis 4 was supported for all groups (see Table 13).

Table 13

Group #2, #3, #4 Participants' Crisis Intervention Attitudes and Knowledge Total Pre-Test vs. Post-Test scores

Question Domains	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
Crisis Intervention Attitudes	73	10.35	2.32	13.08	2.13	-8.318	72	.000**
Crisis Intervention Knowledge	73	13.06	2.06	15.86	2.42	-8.098	72	.000**
Crisis Preparedness and Management Attitudes	70	2.27	1.25	2.68	1.08	-2.685	69	.009*
Crisis Preparedness and Management Knowledge	64	5.46	1.96	7.17	2.29	-5.923	63	.000**

Note: * $p < .05$ ** $p < .001$

Changes in Attitudes

Individual items on the Crisis Intervention Attitudes and Preparedness and

Management Attitudes were analyzed to investigate the performance of the groups.

Group #2, #3, #4. Paired sample *t*-test was used to determine whether there was a significant difference in the pre- and post-crisis attitude questions. A contrast analysis with paired comparisons between pre-test vs. post-test attitudes for the level of anxiety during a crisis yielded significant differences in the reduction of anxiety. Participants reported being significantly less anxious when required to conduct a crisis intervention, $t(72) = -8.12, p < .001$; less fearful about making a mistake while implementing a crisis intervention, $t(72) = -4.52, p < .001$; and more confident in their ability to respond to a crisis event, $t(72) = -6.41, p < .001$ (see Table 14).

Table 14

Group #2, #3, #4 Participants' Crisis Intervention Attitudes From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
1. How anxious would you feel if you were required to conduct a crisis intervention?	73	3.25	1.03	4.41	.84	-8.122	72	.000**
2. How fearful are you that you might make a mistake during a crisis intervention?	73	3.27	1.08	4.03	.95	-4.527	72	.000**
3. How confident are you in your ability to know what to do if you	73	3.84	0.97	4.64	.67	-6.419	72	.000**

Table 14

Group #2, #3, #4 Participants' Crisis Intervention Attitudes From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			

were required as part of a crisis response team?

Note: All items on a 1 - 5 scale, with higher scores indicating more positive attitudes.

* $p < .05$ ** $p < .001$

Group #2, #3, #4. Paired samples *t*-test was used to determine whether there was a significant difference in the pre- and post-crisis training preparedness and management attitude questions. A contrast analysis with paired comparisons between pre-test vs. post-test attitudes for the level of preparedness prior to a crisis yielded a significant difference as participants reported an increase in crisis preparedness knowledge, $t(72) = -13.851, p < .001$; more confident in their ability to collaborate in the development of a crisis response plan, $t(72) = -5.241, p < .001$; and increased enthusiasm to collaborate with others in the development of a crisis response plan, $t(72) = -4.214, p < .001$ (see Table 15).

Table 15

Group #2, #3, #4 Participants' Preparedness and Management Attitudes From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
1. How knowledgeable are you about crisis	73	2.29	0.71	3.71	0.73	-13.581	72	.000**

Table 15 (continued)

Group #2, #3, #4 Participants' Preparedness and Management Attitudes From Pre-Test to Post-Test

Question	Total N	Pre-Test M	SD	Post-Test M	SD	t	df	Significance Level
preparedness and management?								
2. How confident are you in your ability to collaborate with others to develop a crisis response management plan?	73	3.05	0.79	3.74	0.83	-5.241	72	.000**
3. How enthusiastic are you to collaborate with others to develop comprehensive crisis response plan?	73	3.44	0.89	3.96	0.82	-4.214	72	.000**
4. How important do you feel crisis preparedness and management knowledge skills are in today's society?	73	4.29	0.71	4.45	0.76	-1.538	72	.128

Note: All items on a 1 - 5 scale, with higher scores indicating more positive attitudes.

* $p < .05$ ** $p < .001$

Changes in Knowledge

Individual items on the Crisis Intervention Knowledge, and Crisis Preparedness and Management Knowledge were analyzed to investigate the performance of the groups.

Group #2, #3, #4. Paired sample *t*-test was used to determine whether there was a significant difference in the pre- and post-crisis intervention knowledge as determined by paired samples *t*-test to determine whether there was

a significant difference in the pre- and post-crisis training. A contrast analysis with paired comparisons between pre-test vs. post-test knowledge yielded significant difference in the ability to identify the need for a crisis response team in the wake of a community-wide traumatic event, $t(72) = 2.017, p < .001$ (see Table 16).

Table 16

Group #2, #3, #4 Participants' Crisis Intervention Knowledge From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
1. Which sets of variables are most powerful in determining the number of individuals likely traumatized by a crisis event?	73	1.40	0.49	1.34	0.55	.705	72	.483
2. Which of the following is a community-wide trauma inducing event that requires a crisis team?	73	1.51	0.50	1.36	0.58	2.017	72	.047*
3. Crisis Team: What behavior guidelines are to be followed?	73	1.38	0.51	1.36	0.51	.424	72	.673
4. Which strategy for responding to a crisis generally	73	1.38	0.51	1.33	0.62	.575	72	.567

Note: All items on a 1 - 4 scale, with higher correct scores indicating increased knowledge.

* $p < .05$ ** $p < .001$

Group #2, #3, #4. Paired samples t -test was used to determine whether

there was a significant difference in the pre- and post-crisis training preparedness and management knowledge questions. A contrast analysis with paired comparisons between pre-test vs. post-test knowledge yielded a significant difference as participants reported an increase in acquisition of group crisis intervention techniques, $t(72) = 3.133, p < .05$; increase in active listening skills, $t(72) = 6.896, p < .001$; and cultural perspectives on trauma, $t(72) = 3.397, p < .001$ (see Table 17).

Table 17

Group #2, #3, #4 Participants' Preparedness and Management Knowledge From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
1. Identify four characteristics of a crisis event.	73	1.67	0.47	1.60	0.52	.869	72	.388
2. Which of the following is not one of the elements of promoting psychological safety in CPM?	73	1.96	0.20	1.99	0.11	-1.000	72	.321
3. In the dimension of emotions, what impacts recovery from immediate trauma?	73	1.78	0.41	1.84	0.37	-.815	72	.418
4. Acute Stress Disorder includes the following?	73	1.29	0.45	1.22	0.53	.897	72	.373
5. What is not a viable component for survivors as they navigate grief and loss?	73	1.56	0.50	1.58	0.49	-.184	72	.854

Table 17 (continued)

Group #2, #3, #4 Participants' Preparedness and Management Knowledge From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
6. Prior to death notification, what are the general guidelines for notification procedure?	73	1.12	0.33	1.10	0.44	.424	72	.673
7. Group crisis intervention techniques include the following goals of group work.	73	1.79	0.40	1.56	0.52	3.133	72	.003*
8. The process of ventilation is comprised?	73	1.42	0.49	1.37	0.48	.942	72	.349
9. Key issues for facilitators of a crisis intervention group include all of the following except?	73	1.62	0.54	1.59	0.54	.331	72	.741
10. For crisis responders, exposure to repeated events leads to being vulnerable to long-term stress reactions such as?	73	1.48	0.50	1.51	0.62	-.351	72	.726
11. Active listening skills include the following except?	73	1.84	0.44	1.27	0.47	6.986	72	.000**
12. A stage not in counseling relationship is?	73	1.56	0.52	1.45	0.52	1.424	72	.159
13. Cultural perspective on	73	1.84	0.37	1.53	0.68	3.397	72	.001**

Table 17 (continued)

Group #2, #3, #4 Participants' Preparedness and Management Knowledge From Pre-Test to Post-Test

Question	Total	Pre-Test		Post-Test		t	df	Significance Level
	N	M	SD	M	SD			
trauma are defined by the following except?								
14. Intrusive memories are generally triggered by the following.	73	1.27	0.60	1.18	0.56	1.021	72	.311

Note: All items on a 1 - 4 scale, with higher correct scores indicating increased knowledge.

* $p < .05$ ** $p < .001$

Reliability Analysis

Participants were provided a pre- and post-test to measure crisis intervention attitudes and knowledge, and crisis preparedness and management attitudes and knowledge. The Crisis Intervention Attitudes Scale consisted of 3-items, the Crisis Preparedness and Management Attitudes Scale consisted of 4-items, the Crisis Intervention Knowledge Scale consisted of 4-items, and the Crisis Preparedness and Management Knowledge Scale consisted of 14-items. As this measure was developed for western use, items were analyzed by using Cronbach's Alpha for reliability by groups with participants in Group #2, #3, and #4.

Group #2, #3, #4. Analysis of pre-test Crisis Intervention Attitudes for appeared to have questionable internal consistency, $\alpha = .62$. In contrast, post-test

Crisis Intervention Attitudes Scale appeared to have good internal consistency, $\alpha = .82$ (see Table 18).

Table 18

Cronbach's Alpha for Internal Consistency of Crisis Intervention Attitudes for Group #2, #3, #4

Question	Pre-Test	Post-Test
1. How anxious would you feel if you were required to conduct a crisis intervention?	.37	.74
2. How fearful are you that you might make a mistake during a crisis intervention?	.47	.74
3. How confident are you in your ability to know what to do if you were required as part of a crisis?	.47	.57

The reliability analysis on the pre-test for the Crisis Intervention

Knowledge Scale showed the test having poor reliability, $\alpha = 0.53$. The post-test Crisis Intervention Knowledge Scale demonstrated an unacceptable reliability, $\alpha = 0.48$ (see Table 19).

Table 19

Cronbach's Alpha for Internal Consistency of Crisis Intervention Knowledge for Group #2, #3, #4

Question	Pre-Test	Post-Test
1. Which sets of variables are most powerful in determining the number of individuals likely traumatized by a crisis event?	.38	.49
2. Which of the following is a community-wide trauma-inducing event that requires a crisis team?	.34	.42
3. Crisis Team: What behavior guidelines are to be followed	.12	-.03

Table 19 (continued)

Cronbach's Alpha for Internal Consistency of Crisis Intervention Knowledge for Group

#2, #3, #4

Question	Pre-Test	Post-Test
4. Which strategy for responding to a crisis generally involves the following activities?	.43	.32

On the pre-test for the Crisis Preparedness and Management Attitudes Scale, results indicated unacceptable internal reliability, $\alpha = .56$. In comparison, the post-test for the Crisis Preparedness and Management Attitudes Scale appeared to have good internal consistency, $\alpha = .77$. All items within the Crisis Intervention Attitude Scale and Crisis Preparedness and Management Attitude Scale appeared to be worthy of retention (see Table 20).

Table 20

Cronbach's Alpha for Internal Consistency of Crisis Preparedness and Management

Attitudes for Group #2, #3, #4

Question	Pre-Test	Post-Test
1. How knowledgeable are you about crisis preparedness and management?	.21	.62
2. How confident are you in your ability to collaborate with others to develop crisis response management plan?	.44	.64
3. How enthusiastic are you to collaborate with others to develop a comprehensive crisis response plan?	.44	.72
4. How important do you feel crisis prepared-ness and management knowledge skills are in today's society?	.30	.33

On the Crisis Preparedness and Management Knowledge Scale pre-test

results showed the tests to reach unacceptable reliability, $\alpha = 0.27$. The Crisis Preparedness and Management Knowledge Scale post-test reached a questionable reliability, $\alpha = 0.65$, (see Table 21).

Table 21

Cronbach's Alpha for Internal Consistency of Crisis Preparedness and Management

Knowledge for Group #2, #3, #4

Question	Pre-Test	Post-Test
1. Identify four characteristics of a crisis event.	-.14	.26
2. Which of the following is not one of the elements of promoting psychological safety in CPM?	.04	-.20
3. In the dimension of emotions, what impacts recovery from immediate trauma?	-.02	-.26
4. Acute Stress Disorder includes the following?	.34	.66
5. What is not a viable component for survivors as they navigate grief and loss?	-.19	-.04
6. Prior to death notification, what are the general guidelines for notification procedure?	.35	.58
7. Group crisis intervention techniques include the following goals of group work?	.04	.09
8. The process of ventilation is comprised of?	.44	.10
9. Key issues for facilitators of a crisis intervention group include all of the following except?	.05	.07
10. For crisis responders, exposure to repeated events leads to being vulnerable to long-term stress reactions such as?	.39	.60
11. Active listening skills include the following except?	-.20	.41
12. A stage not in counseling relationship is?	.21	.32
13. Cultural perspective on trauma are defined by the following except?	-.12	.44
14. Intrusive memories are generally triggered by the following.	-.12	.44

Pilot and Main Study Analysis

A series of one-way between- and within-group analyses of variance (ANOVA) were conducted to explore the influence of crisis training on changes in crisis intervention attitudes and acquisition of crisis knowledge. A one-way between groups analysis of variance was conducted to explore pre-test Crisis Intervention Attitude. Participants were divided into four training groups: Pilot group #1, group #2, group #3, and group #4.

There was a statistically significant difference in pre-test crisis intervention attitude for the four groups $F(3, 91) = 3.65, p < .05$ (see Table 22). Post hoc analysis using the Tukey HSD post hoc criterion for significance indicated the mean score for Group #3 pre-test Crisis Intervention Attitude ($M = 11.38, SD = 2.20$) was significantly different from Group #4 pre-test Crisis Intervention Attitude ($M = 9.25, SD = 2.23$). These results suggest that Group #3 participants demonstrated a more positive attitude toward crisis intervention.

A one-way between groups analysis of variance was conducted to explore Crisis Intervention Attitude post-crisis training. Participants were divided into four training groups: Pilot group #1, group #2, group #3, and group #4. There was a statistically significant difference in post-test Crisis Intervention Attitude for the four groups $F(3, 91) = 2.80, p < .05$ (see Table 22). Post hoc analysis using the Tukey HSD post hoc criterion for significance did not show significant differences between groups.

A one-way analysis of variance (ANOVA) was conducted to explore the pre-test Crisis Preparedness and Management Attitudes score among the groups.

Participants were divided into four training groups: Pilot group #1, group #2, group #3, and group #4. There was not a statistically significant difference at the $p < .05$ level in pre-test Crisis Preparedness and Management Knowledge for the four groups $F(3, 91) = .607, p < .05$ indicating there was no significant differences found between participants in their attitude toward crisis preparedness and management pre-crisis training (see Table 22).

A one-way between groups analysis of variance was conducted to explore the positive change of Crisis Preparedness and Management Attitude post-crisis training. Participants were divided into four training groups: Pilot group #1, group #2, group #3, and group #4. There was not a statistically significant difference at the $p < .05$ level in post-test scores on the Crisis Preparedness and Management Attitude for the four groups $F(3, 91) = 1.81, p < .05$ indicating there was no significant differences found between participants crisis responding and management attitudes post-crisis training (see Table 22).

A one-way between groups analysis of variance (ANOVA) was conducted to explore the acquisition of Crisis Preparedness and Management Knowledge post-crisis training. Participants were divided into four training groups: Pilot group #1, group #2, group #3, and group #4. There was not a statistically significant difference at the $p < .05$ level in pre-test Crisis Preparedness and Management Knowledge for the four groups $F(3, 90) = 1.49, p < .05$ indicating there was no significant differences found between participants in their level of crisis intervention knowledge pre-crisis training (see Table 22).

A one-way between groups analysis of variance was conducted to explore

the acquisition of Crisis Intervention Knowledge post-crisis training. Participants were divided into four training groups: Pilot group #1, group #2, group #3, and group #4. There was not a statistically significant difference at the $p < .05$ level in post-test Crisis Preparedness and Management Knowledge for the four groups $F(3, 89) = 1.85, p < .05$ indicating there was no significant differences found between participants in crisis intervention knowledge gained post-crisis training (see Table 22).

A one-way between groups analysis of variance (ANOVA) was conducted to explore the acquisition of pre-test Crisis Preparedness and Management Knowledge. Participants were divided into four training groups: Pilot group #1, group #2, group #3, and group #4. There was not a statistically significant difference at the $p < .05$ level in pre-test Crisis Preparedness and Management Knowledge for the four groups $F(3, 80) = .52, p < .05$ indicating there was no significant differences found between participants in their level of knowledge pre-crisis training (see Table 22).

A one-way between groups analysis of variance was conducted to explore the acquisition of Crisis Preparedness and Management Knowledge post-crisis training. Participants were divided into four training groups: Pilot group #1, group #2, group #3, and group #4. There was not a statistically significant difference at the $p < .05$ level in post-test Crisis Preparedness and Management Knowledge for the four groups $F(3, 84) = 2.16, p < .05$ indicating there was no significant differences found between participants in knowledge gained post-crisis training (see Table 22).

Table 22

Analysis of Variance of Participants' Pre-Test vs. Post-Test Between Pilot Group #1, Group #2, Group #3, Group #4

Difference (F-value) across the training groups		
Study Items	Pre-Test	Post-Test
Crisis Intervention Attitudes	3.641*	2.796*
Crisis Preparedness and Management Attitudes	.607	1.810
Crisis Intervention Knowledge	1.485	1.848
Crisis Preparedness and Management Knowledge	.519	2.162

df = 3:91

Qualitative Analysis

Qualitative data analysis was obtained through the CPM-MH Program Evaluation form that was provided to participants at the conclusion of the crisis training. The evaluation form included three open-ended questions. All participants completed 10-question evaluation survey of the crisis training, which included three open-ended questions. Of the three open-ended questions, five participants in group #2, #3, and #4 left all three questions blank and nine participants left one question blank. Several themes emerged for each of the questions, however, only those themes occurring 10% or more are discussed.

Group #2, #3, #4. The first question, "What are the strengths of the workshop?" yielded under one half (46%) of the CPM-MH workshop participants stating the presenter was a significant strength of the training process with the crisis training technique of role-playing yielding a score of 24%. A growth of

16% in participants crisis intervention knowledge and introduction to new concepts was reported with a 24% response for the relevancy of crisis training for the community. Training schedule and time management of the presenter was reported as 15% with the presenter providing an informative, structured, and clear objective (24%) to meet the training goals (see Table 23).

The second question, “What suggestions do you have to improve this workshop?” noted 12 % of Participants perceived it would be beneficial that additional days be added to the current training. In contrast to the pilot group #1 where the training occurred in English with minimal translation to Bangla, a CPM-MH crisis trained responder and trainer was used as a co-facilitator and summarized the training session and translated from English to Bangla as needed. Additionally, only two participants recommended the training to be provided in Bangla only (see Table 23).

The third question, “What specific crisis presentation and/or intervention knowledge and skills did you develop that will assist you with future crisis responses?” yielded a 49% increase in skills and strategy acquisition with a 26% participants increase in active listening skills. Related to the CPM-MH manual, participants referred to crisis resources as beneficial to their learning (49%). A substantial increase in the value of the resources was noted between pilot Group 1 and the remaining three groups. These findings may be attributed to the manual being provided in Bangla, expansion of information within chapters (active listening), and providing additional chapter (Crisis Aftermath) within the manual (see Table 23).

Table 23

Frequency Responses to Program Evaluation Questions for Group #2, #3, #4

Table 23 (continued)

Open-ended CPM-MH Program Evaluation Questions	Group #2, #3, #4 Frequency Percentage
Question 1: What were the strengths of the workshop?	
Presenter/teaching techniques	46
Role Play	24
Introduction of new crisis concepts/knowledge	16
Practical/Relevant need for community	24
Time management/schedule	15
Presentation/structure/clear process	24
Question 2: What suggestions do you have to improve this workshop?	
Training in English & Bangla	-
Additional days for training	12
Question 3: What specific crisis presentation and/or intervention knowledge and skills did you develop that will assist you with future crisis responses?	
CPM-MH skills/strategies	49
Active listening skills	26
CPM-MH Manual	28
Group #2, #3, #4 <i>n</i> = 68	

Chapter 5: Discussion

The awareness of mental health issues in the aftermath of a crisis is increasing around the world, especially in Bangladesh. To address mental health issues after traumatic events, crisis response programs provide crisis intervention, problem solving, and education in conjunction with adaptation to communities' needs that build on the strength of the community it is serving. Programs such as community-based Psychological First Aid, Disaster Mental Health, and National Organization of Victim Assistance have a rich history of crisis response and rely on their volunteers to provide crisis intervention services in trauma effected communities (Jacobs, et.al., 2016). However, few articles in the literature search provided information of crisis response assistance for Bangladesh. Interestingly, Bangladesh is a country that does not have a crisis intervention program despite its having the highest mortality rate in the world due to natural disasters (Wisner, Gaillard, & Kelman, 2012).

As a result of the limited knowledge of crisis response techniques, the development of the CPM-MH program for Bangladesh included a format that provided in-depth training in foundation skills, such as identifying stress reactions, active listening and role-playing. Cultural factors related to trauma response, coping skills, spiritualism, and survivor participation was adopted in the development of CPM-MH program with an inclusive approach to mitigating trauma with the reduction of or amelioration of cultural impact (Nahar et. al., 2014). Course materials in English were provided at the beginning of the training course and included a PowerPoint for training and crisis handouts. In addition, a CPM-MH manual was developed and used as a reference for crisis information

and techniques with the training schedule and crisis handouts not included. At the conclusion of the pilot training program, the three subsequent programs were altered with a decrease in training from six- to five-days, the use of a CPM-MH trained Bengali co-facilitator, and a revision to the CPM-MH manual. The CPM-MH manual was translated to Bangla, a chapter regarding crisis aftermath was added, active listening chapter was expanded, and format of the chapters were realigned to mimic the training course. Although the manual was provided at the beginning of the training program, the trainer directive and expectation was for participants to read specific sections of the manual prior to the training each day. This method was selected as a way to provide participants a frame of reference for the crisis material and allow the opportunity to ask questions related to read material linked to the crisis training. Interestingly, all participants did not read the manual with crisis information first presented at the time of training.

The purpose of this study was to evaluate CPM-MH program training outcomes through the examination of whether participants obtained crisis skills, crisis knowledge, and positive crisis attitudes as a result of the participation in the training. A reliable measure for evaluating training participants gains in knowledge and changes in attitudes were assessed using pre- and post-tests (Citraningtyas, Wiwie, Amir, Diatri, & Wiguna, 2017 and Nickerson et. al., 2014). An analysis of Pilot Group #1 pre- and post-tests and Crisis Group #2, #3, #4 indicated increased crisis knowledge and changes in attitudes concerning crisis response. Measure of skills, knowledge, and attitude of the groups increased significantly upon completion of the 5 or 6-day training program. However,

statistical analysis of test items using Cronbach's alpha indicated a low degree of internal consistency for Crisis Intervention Knowledge and Crisis Preparedness and Management. This may be attributed to the complexity of the test questions under the knowledge domains that were provided in English to participants whose first language was Bangla. Despite translation provided, the program developer noted that providing the pre- and post-test in both Bangla and English could have yielded a higher reliability rate.

Based on the program developer who also provided the crisis training for all four groups, practical skills would have been a better indicator of skill obtainment. In contrast to a test, rubrics tell participants what the training expectation are and provide the opportunity for participants to demonstrate their skills (Petkov & Petkova, 2006). As a result, a scoring rubric was developed mid training that addressed targeted skills such as: active listening; nonverbal skills; large group crisis facilitation; one-on-one crisis skills; and small group crisis skills. A score with a numerical value was assigned indicating a pass or fail. The rubric reviewed with the participant post-training with the opportunity to re-take the course should they not meet the qualifying score. Although the rubric was developed during the four training courses, it was not used as a measure to maintain standardization for this study. However, the rubric will be used in future trainings in place of the pre-test and post-test (see Appendix E).

Qualitative data was obtained through three open-ended questions of the CPM-MH Program Evaluation Form. As comparative to the PREPaRE program evaluation, participants expressed satisfaction with knowledge and skill

acquisition, dynamic learning experiences through role-playing, and the presenter (Brock, et. al., 2014). Recommendations were put forth that the program be increased in training days for further skill training (e.g., role-playing) with the continuation of both a monolingual and bilingual facilitator. Interestingly, participants engaged in the dynamic portion of the training using crisis intervention techniques and active listening skills during role-playing did not appear to be influenced by mental health background or previous crisis knowledge. Comparative to participants with no mental health background or previous crisis knowledge, observed skills between participants appeared to be equally developed with few exceptions. Further observation indicated a marked decline in interest by participants who were from high-level positions who could not volunteer in future crisis despite the CPM-MH training.

CPM-MH was demonstrated to be an effective method of crisis response training as all measures reached statistical significance from pre- to post-test. This was the first study to demonstrate the value of CPM-MH training for volunteer crisis responders. This study demonstrated that participants who received CPM-MH training obtained the necessary skills to follow the protocol to respond to a crisis event. The training also increased their attitudes to crisis response and management. These are important findings as crisis responders will be the first to assist in mental health stabilization and identification of those requiring mental health services. Further, the complex role of the crisis volunteer should address that crisis responders may be challenged with multi-layered experiences as volunteers (Bowman & Roysircar, 2011) which

may take on both the role of a survivor and a responder of the traumatic event. Volunteers may also be confronted with barriers of not providing consistency of crisis response due to logistical constraints (i.e., an inability mobilize crisis responders from distant locations). Lastly, retaining volunteers is a topic to be reviewed for sustaining and building capacity of the CPM-MH program.

This study demonstrated the feasibility of using the evidence-based training program through Bangladesh in order to train participants to become crisis responders. The CPM-MH training program was well received by participants, which provided the confidence that securing training participants in different geographic locations will assist in building capacity for the CPM-MH program.

As CPM-MH builds capacity, it is necessary to incorporate continuing education so crisis responders return to formal instruction to remain current in their skills and to assist in gaining new skills. As trauma events change and crisis response evolves, continuous learning allows for the constant expansion of skill-sets through learning and increasing knowledge.

Limitations.

The evaluation of the CPM-MH training program is complicated by three notable factors. Although this study found positive effects for all groups on the four scales comprised of attitude and knowledge, the research design did not provide a dynamic skills assessment through the use of a rubric (Brock, et. al., 2014). An additional limitation included the use of a measure provided in English. It appeared that complex pre- and post-test knowledge-related questions

are difficult for Bengali participants to comprehend despite verbal translation provided as necessary. Lastly, the current study was limited to the selection of participants, as the appointment of participants, were not selected by the trainer. The level of engagement appeared to correlate with the higher the government employment assignment, which may be related to the fact that the participants had other obligations during the training or were not planning to become volunteer crisis responders.

Training Implications.

Findings from this study have a direct impact on further crisis training for volunteers in Bangladesh. The standardized process allows fidelity of training to all participants regardless of education level who can provide community-level crisis interventions for those impacted by trauma, which assists in minimizing psychopathology. Further, the current study expands the research for crisis programs in Southeast Asia, specifically Bangladesh.

Ethical Considerations

It is encouraging that awareness of mental health issues after a crisis event is increasing in Bangladesh. However, unique challenges arise as research and development of programs for crisis intervention are initiated (McCabe, 2014). Crisis intervention programs need their developed to be based on the culture of the people involved (Jogia, 2014) as there are limited research on cross cultural programs in crisis intervention. A crisis intervention program requires cultural relevance to be considered in order to maximize the ability to reduce mental health difficulties. Second, a challenge with language difference with fluidity of

training may be anticipated in the pilot training. Third, individuals who are trained to become crisis responders are required to adhere to their crisis intervention training and scope of knowledge rather than engage in mental health treatment. Fourth, individuals who have received crisis intervention after a crisis event in non-western cultures do not seek out mental health services if needed. Mental health services should be obtainable to those in crisis and therefore be provided. Fifth, individuals exposed to trauma who have limited knowledge of mental health issues may be concerned with being stigmatized in a negative manner and decline further assistance.

Chapter 6: Conclusion

AUDIENCE Bangladesh is a country that is vulnerable to natural disasters and has been provided worldwide support with supplies such as medical supplies and food. Disaster management within and outside of the country has been limited to meeting the basic physical needs of survivors of traumatic events. Concern for mental health needs after a traumatic event is an area that requires organization and support. In the western communities, the mental health of trauma survivors is widely accepted with acknowledgement that crisis intervention reduces traumatic impact (Bowman & Roysircar, 2011). In comparison, Bangladesh does not receive the necessary attention or the acknowledgement of the importance of the psychological impact or mental health consequences of a traumatic event with crisis intervention services perceived as a weakness and thus viewed negatively. The lack of attention may be attributed to a lack of awareness or a limitation in providing knowledge.

The Bangladesh government with its adoption of CPM-MH was provided a protocol to manage trauma-related psychological challenges by establishment of a crisis response team including stakeholders. CPM-MH and operational strategy must be cohesive to ensure effective crisis response. Consistent with the protocol is building capacity through continuation of training of volunteers and trainer of the trainers. Understanding that there will be a need for the flexibility of trainees and trainers as well as time constraints of the trainers. Further, it would be beneficial for the government of Bangladesh to create and sustain a response protocol using CPM-MH to meet the mental health needs of those affected by trauma.

After the development CPM-MH, the focus requires the following: (a) feasibility (ability to implement crisis intervention effectively) and (b) sustainability (durability of the program). Challenges to layman participants were: (a) training layman to implement crisis intervention effectively given the cultural mindset of mental health and (b) will the participants of crisis training retain the knowledge and skills (will crisis response opportunities be made available to them to implement obtained knowledge and skills). Most importantly, there is a need for supervision of volunteers for the viability of the program and CPM-MH will be implemented with fidelity.

The Department of Disaster Management under the Ministry of Disaster Management and Relief was instrumental in the initiative for trauma training, but commitment to policy and protocol is necessary for the longevity of CPM-MH. There is a focus/partnership from the government to provide psychological

assistance after a traumatic event; however, a full commitment to follow through has not been given the necessary attention it deserves in Bangladesh.

The results of the CPM-MH training program research indicated an ability to provide psychosocial support with a crisis intervention training program to increase manpower for community-based volunteers. The critical role of protocol and mechanisms for crisis response through CPM-MH at a country and city level, by the Department of Disaster Management under the Ministry of Disaster Management and Relief, Government of People's Republic of Bangladesh, and other stakeholders is necessary. CPM-MH represents a valuable skill set that is easily applied in the aftermath of a traumatic event. Comparable to psychotherapy, CPM-MH is limited in its scope of mental health services but both serve different functions. It is important to recognize that CPM-MH requires specialized training. Noteworthy is the ability for the integration of CPM-MH in a disaster plan, as it has been validated by the results of the study.

With the implementation of the CPM-MH in Bangladesh, it is necessary that the community be exposed to the nature of crisis response and the access to this program specifically. Media outreach for CPM-MH recognition and accessibility of services may provide a significant effect on crisis resolution in order to minimize crisis responses after a traumatic event.

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Appendix A

Informed Consent to Participate in Research:**Crisis Preparedness and Management for Mental Health in Bangladesh via Cross-Cultural Intervention Techniques**

Purpose: Joanne Byron, S.S.P., NCSP, as a Ph.D. candidate at the University of Dhaka, is collecting data from participants prior to and after completing a comprehensive and evidence-based developed crisis intervention program. You are being asked to give your permission for you to take part in the data collection to evaluate this program.

Procedure: If you agree to participate in this data collection you will be asked to complete a pre-test and post-test to gauge the degree of knowledge and specific skills gained as well as the level of confidence in implementing these skills in the field. Feedback using both structured and semi-structured written responses will be collected.

Risks: You should not experience pain or any problems from helping with this project, though you may experience mild fatigue. If the training is too upsetting, you may withdraw from the study and training at any time.

Benefits: You will directly benefit from helping with this research study by obtaining crisis knowledge, crisis intervention skills, and practice to become a crisis responder. The goal is gather information that may assist people in the future. Research records will not be available to participants.

Consent: Your participation is voluntarily. It is your choice whether or not to participate in the crisis intervention training. You may decide to withdraw from the training at any time. If you decide you do not want to participate, you will not experience any negative consequences. Likewise the examiner has the right to terminate your participation at any point.

Confidentiality: No names or other identifying information will be used in reporting the information gathered in this data collection. All information is confidential. No other person will be able to connect you with your test responses. Your consent form, on which your name appears, will be stored separately from your test responses. The findings from this project may be presented in research articles or research meetings. Your name and answers will not be mentioned.

Contact Information: Any questions you have about this research study and your participation may be addressed to Joanne Byron, S.S.P., NCSP @ mobile: 561-818-7330 or email: jbyron1016@aol.com or Dr. Shaheen Islam, Professor, Department of Educational and Counseling Psychology University of Dhaka @ Office: 9661920-59/7706, mobile: 01911321608.

Print Your Name
Date

Signature of Participant

Appendix B

**Training for Crisis Preparedness and Management for Mental Health
Pretest/Posttest Questions**

Name: _____ Date: _____

Crisis Intervention Attitudes: For each question, circle the letter (A-E) that best describes how you currently feel about participating in crisis intervention.

1. How anxious would you feel if you were required to conduct a crisis intervention?
 - A. Extremely anxious
 - B. Very Anxious
 - C. Anxious
 - D. Just a little anxious
 - E. Not at all anxious

2. How fearful are you that you might make a mistake during a crisis intervention?
 - A. Extremely fearful
 - B. Very fearful
 - C. Fearful
 - D. Just a little fearful
 - E. Not at all fearful

3. How confident are you in your ability to know what to do if you were required as part of a crisis response team?
 - A. Extremely fearful
 - B. Very fearful
 - C. Fearful
 - D. Just a little fearful
 - E. Not at all fearful

Crisis Intervention Knowledge:

4. **CRISIS EVENTS:** Which of the following sets of variables are most powerful in determining the number of individuals likely traumatized by a given crisis event?
 - A. The interaction of the type of crisis (i.e., natural vs. human caused), and the availability of a crisis team and support of disaster and management.
 - B. The interaction of the type of crisis (i.e., human/intentional vs. natural/accidental: and the events predictability, consequences, duration, and intensity.
 - C. The source of threat or injury (i.e., accident vs. aggression), the presence or absence of fatalities, and the availability of a crisis team.
 - D. All of the above.

5. **CRISIS TEAMS:** Which of the following is a community-wide trauma-inducing event

that requires a crisis team?

- A. Incidents that occur within communities where people are strongly affiliated with each other
 - B. Incidents in which there are multiple eye witnesses
 - C. Incidents in which the direct victims have a special significance in the community affected
 - D. All of the above.
6. **CRISIS TEAMS:** Behavior guidelines to be followed:
- A. Team members must follow the rules set by the government
 - B. Team members are NOT required to provide a written report after the crisis response
 - C. Rules are designed to ensure the delivery of high quality services to the community
 - D. All team members should share information with the media
7. **CRISIS TEAMS:** Strategy for responding to a crisis generally involves the following activities:
- A. Team meeting at a designated gathering point
 - B. Team members should meet with each other prior to any other meetings
 - C. Have planning meetings with the emergency response person/people
 - D. All of the above.

Crisis Preparedness and Management Attitudes: For each question, circle the letter (A-E) that best describes how you currently feel about participating in crisis preparedness and management activities.

8. How knowledgeable are you about crisis preparedness and management?
- A. Not at all knowledgeable
 - B. Just a little knowledgeable
 - C. Knowledgeable
 - D. Very knowledgeable
 - E. Extremely knowledgeable
9. How confident are you in your ability to collaborate with others to develop a crisis response management plan?
- A. Not at all confident.
 - B. Just a little confident
 - C. Confident
 - D. Very Confident
 - E. Extremely confident
10. How enthusiastic are you to collaborate with others to develop a comprehensive crisis response management plan?
- A. Not at all enthusiastic
 - B. Just a little enthusiastic
 - C. Enthusiastic
 - D. Very enthusiastic
 - E. Extremely enthusiastic

11. How important do you feel crisis preparedness and management knowledge skills are in today's society?
- A. Not at all important
 - B. Just a little important
 - C. Important
 - D. Very important
 - E. Extremely important

Crisis Preparedness and Management Knowledge: For each question, circle the (A-D).

12. Identify four characteristics of a crisis event:
- A. Sudden, intense, potential to affect an entire community, results in loss of life
 - B. Unpredictable, uncontrollable, extremely negative event, potential to affect an entire community
 - C. Intense, devastating, violent, spontaneous
 - D. Extremely negative event, man-made, difficult to control, results in psychopathology
13. Which of the following is NOT one of the elements of promoting psychological safety of focus to CPM?
- A. Positive behavior supports
 - B. Zero tolerance
 - C. Collaboration
 - D. Enhancing individual resilience
14. In the dimension of emotions, what impacts recovery from immediate trauma?
- A. Stability of survivors equilibrium after the traumatic event
 - B. Previous traumatic event experience
 - C. Ability to ignore the extent of the traumatic event
 - D. Ability to regress and shut off emotions
15. Acute Stress Disorder includes the following:
- A. Avoidance behavior
 - B. Re-experiencing the traumatic event
 - C. Impairment of daily functioning
 - D. All of the above
16. What is NOT a viable component for survivors as they navigate grief and loss?
- A. Make important decisions as they arise
 - B. Allow yourself to experience guilt
 - C. Isolate yourself so not to inflict your pain on others
 - D. Maintain or develop routines
17. Prior to death notification, what are the general guidelines for notification procedure?
- A. What happened
 - B. How did it happen
 - C. When did it happen
 - D. All of the above

18. Group crisis intervention techniques include the following goals of group work:
- A. Peer group validation of individual reactions
 - B. Permit all participants to speak freely of their emotions without boundaries
 - C. Do not affirm shared emotions as it becomes a contaminate
 - D. Allow participants to search out their own support system
19. The process of ventilation is comprised of:
- A. Survivors telling their story
 - B. Anticipating memory and time distortion from survivors
 - C. Survivors share differences that reflect what is important to them at that particular time
 - D. All of the above
20. Key issues for facilitators of a crisis intervention group include all of the following EXCEPT:
- A. Establishment of a temporal anchor
 - B. Reassurance to participants that people care about their plight
 - C. Dissuade spiritual discussions
 - D. Affirmation of hope
21. For crisis responders, exposure to repeated events leads to being vulnerable to long-term stress reactions such as:
- A. Emotional and physical drain
 - B. Erosion of idealism
 - C. Lack of expected rewards
 - D. All of the above
22. Active listening skills include the following EXCEPT:
- A. Restating
 - B. Emotional Labeling
 - C. "You" message
 - D. "I" message
23. A stage NOT in the counseling relationship is:
- A. Establishing rapport/building a relationship
 - B. Clarification/define the problem
 - C. Plan of Action
 - D. Providing necessary directives
24. Cultural perspective on trauma are defined by the following EXCEPT:
- A. Personality
 - B. Language/dialect
 - C. Spirituality
 - D. Birth order
25. Intrusive memories are generally triggered by the following:
- A. Vision, hearing
 - B. Smell and taste
 - C. Touch
 - D. All of the above

Appendix C

**Training for Crisis Preparedness and Management Program
for Mental Health Evaluation**

Evaluation: For each question, circle the number that best describes how you rate the Crisis Preparedness and Management training program. Please use the following key:

1 = *strongly disagree* and 4 = *strongly agree*.

1. The objectives were clearly stated.
0 1 2 3 4
2. The content was clear and understandable.
0 1 2 3 4
3. Workshop materials were well organized.
0 1 2 3 4
4. The trainer was well organized.
0 1 2 3 4
5. Workshop materials facilitated participation among participants.
0 1 2 3 4
6. The trainer facilitated participation among participants.
0 1 2 3 4
7. The workshop increased my knowledge.
0 1 2 3 4
8. I will be able to apply the information/skills learned to my duties.
0 1 2 3 4
9. I recommend this workshop.
0 1 2 3 4
10. I recommend this trainer.
0 1 2 3 4

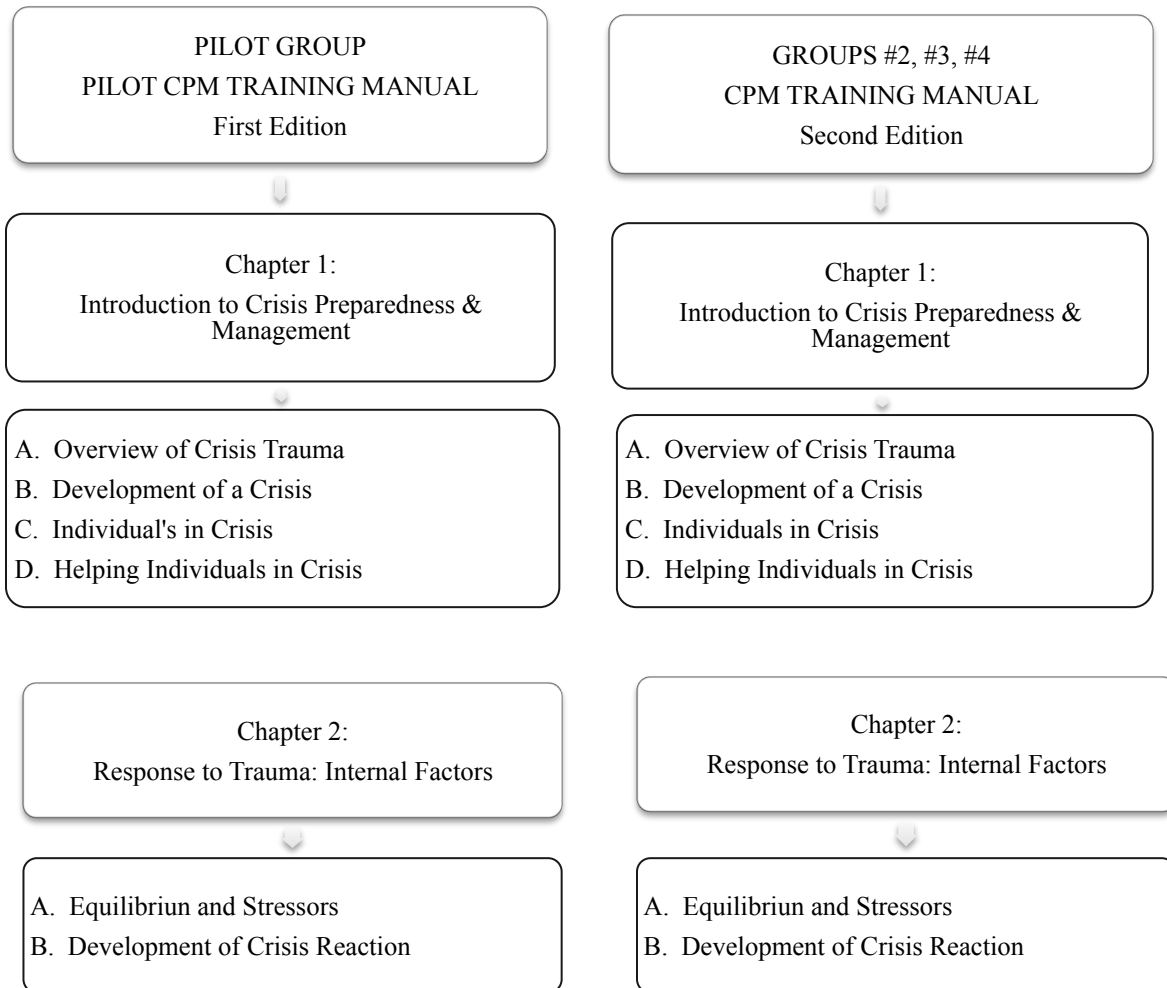
What were the strengths of this workshop:

What suggestions do you have to help us improve this workshop:

What specific crisis prevention and/or intervention knowledge and skills did you develop that will assist with future crisis responses:

Appendix D

Crisis Preparedness and Management Program
for Mental Health Evaluation Manual
Table of Contents



Chapter 3:
Response to Trauma: External Factors

- A. Sensory Inputs from Event
- B. Chronology of the Event & the Individual's Participation in the Chronology
- C. Possible Disaster Impacts

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Chapter 4:
Long-Term Stress Reactions

- A. Introduction
- B. Types of Long-Term Stress Reactions

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Chapter 5:
Grief and Loss

- A. Confronting Grief
- B. Hints for Helping

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- A. Confronting Grief
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Chapter 6:
Crisis Across the Ages

- A. The Continuum
- B. Trauma in Children
- C. Trauma in the Elderly

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- B. Trauma in Children
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Chapter 7:
Cultural Perspectives with the Impact on
Trauma

- A. Understanding Cultural Diversity
- B. Trauma and Culture
- C. Planning for Working with Cross-Cultural Populations

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- A. Understanding Cultural Diversity
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Chapter 8:
Trauma and Spiritualism

- A. The Importance of Spiritualism
- B. Issues of Spirituality Impacting Trauma Survivors
- C. Dialoguing with Survivors Regarding Spiritual Issues

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- A. The Importance of Spiritualism
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Chapter 9:
Elements of Crisis Intervention

- A. Safety and Security
- B. Ventilation and Validation
- C. Prediction and Preparation

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- A. Safety and Security
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Chapter 10:
Group Crisis Intervention Techniques

- A. Introduction
- B. Goals
- C. Scope & Nature of Group Crisis Intervention Services
- D. Description of CPM Protocols
- E. Group Defusing Protocol
- F. Extended Trauma Protocol
- G. Repetitive Intervention Group Protocol
- H. Retrospective Group Crisis Intervention Protocol
- I. Post-Trauma Counseling
- J. Foundations of Post-Trauma Counseling
- K. Elements of Post-Trauma Counseling
- L. Therapeutic Interventions
- M. Counseling Suggestions
- N. Hints for Helping
- O. Helpful Hints for Caregivers

Chapter 10:
Art of Active Listening

- A. Active Listening Skills
- B. Communication

Chapter 11:
Coordinating a Crisis Response

- A. NOVA Community Crisis Response Team
- B. Goals of NOVA
- C. Code of Professional Ethics for Victim Assistance Providers

Chapter 11:
Group Crisis Intervention

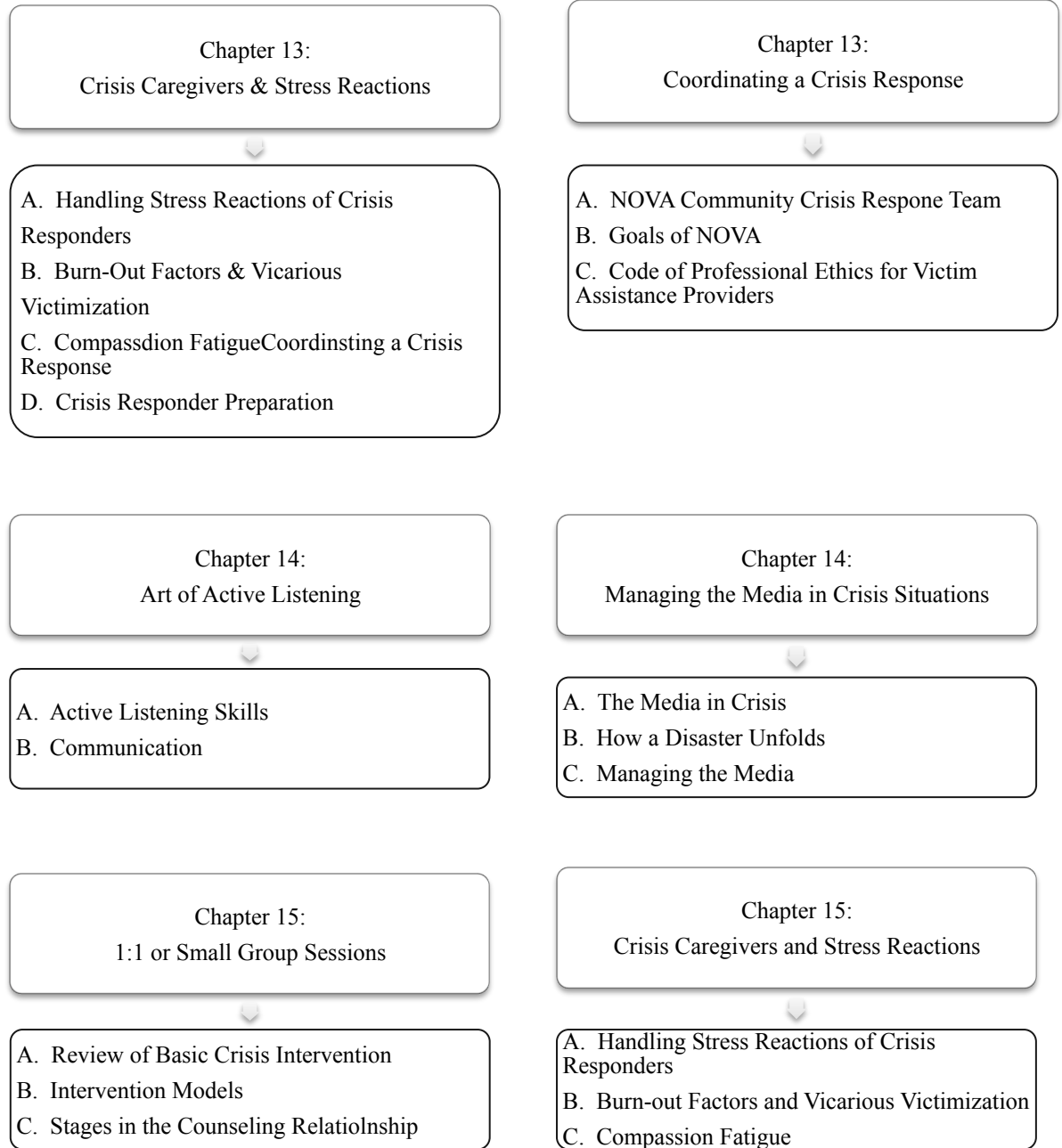
- A. Introduction
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- I. Therapeutic Interventions
- J. Counseling Suggestions
- K. Hints for Helping
- L. Helpful Hints for Caregivers

Chapter 12:
Managing the Media in Crisis Situations

- A. The Media in Crisis
- B. How a Disaster Unfolds
- C. Managing the Media

Chapter 12:
1:1 or Small Group Sessions

- A. Review of Basic Crisis Intervention
- B. Intervention Models
- C. Stages in the Counseling Relationship



Chapter 16:
The Crisis Aftermath



- A. Recovery Takes Time
- B. When the Challenges Are Ongoing

Appendix E

CRISIS PREPAREDNESS & MANAGEMENT FOR MENTAL HEALTH

Foundation Certification Course Scoring Rubric

Observed Crisis Responder Candidate Name:						
Crisis Responder Candidate Signature: (I have received this rubric & am aware of how I will be evaluated)						
Date of Training:			Location of Training:			
SKILLS EVALUATION						
<i>For each of the following sections, rate the observed crisis responder candidate on each item.</i>						
To what extent does the Crisis Responder candidate demonstrate the skills set of Crisis Preparedness for Mental Health						
Circle target skills	0 None/ No skills	1 Partial/ Few skills	2 Most/ Effective skills	3 Optimal/ All skills	Score	Comments
<u>ACTIVE LISTENING:</u> <ul style="list-style-type: none"> • Restating • Summarizing • Minimal Encouragers • Reflecting • Emotional labeling • Probing • Validation • Effective pause • Silence • “I” messages • Redirecting • Listening nonjudgmentally 						
<u>NONVERBAL SKILLS:</u> <ul style="list-style-type: none"> • Eye contact • Posture • Hand movement 						
<u>LARGE GROUP FACILITATION:</u> <ul style="list-style-type: none"> • Introduction Review process/ground rules, introduce facilitators <i>Safety/security</i> Share crisis stories What happened <i>Ventilation/Validation</i> Empower Identify ways to cope with/solve crisis problems <i>Prediction/Preparation</i> Conclusion/Closing Review the emotions & coping strategies Resources 						

Foundation Certification Course Scoring Rubric (continued)

Observed Crisis Responder Candidate Name:						
Circle target skills	0 None/ No skills	1 Partial/ Few skills	2 Most/ Effective skills	3 Optimal/ All skills	Score	Comments
1:1 SKILLS: • Establish rapport • Clarification-define the problem • Ventilation/Validation • Plan of action • Concluding the session						
SMALL GROUP SKILLS: • Establish rapport • Introduction • Ground rules • Clarification-define the problem • Ventilation/Validation • Plan of action • Concluding the session						
Give reassurance						
Speak in volume & pace appropriate for the room size & participants						
Appropriately manages participant interactions (i.e., questions, comments, peer-to-peer interactions)						
Encourage active engagement by participants through use of interactive techniques (i.e., asking questions)						
Use an appropriate tone for the content (i.e., respectful)						
TOTAL SCORE:						
PASSED (17+):			YES:	NO:		
SKILLS EXHIBITED TO BE A BASIC TRAINER			YES:	NO:	REVIEW LATER DATE:	
Provided feedback to Crisis Responder candidate			YES:	NO:		
CPM-MH Trainer signature:						

Foundation Certification Course Scoring Rubric (continued)

17 points or better indicate a passing score.

Areas where participants should have obtained the following scores to become CPM-MH Crisis responder:

DOMAINS	MINIMAL SCORE
1-Active Listening	2
2-Nonverbal Skills	1
3-Large Group Facilitation	2
4-1:1 Skills	2
5-Small Group Skills	2
6-Give Reassurance	1
7-Speak in Volume & Pace	1
8-Appropriately Manage Participants	2
9-Encourage Active Engagement of Participants	2
10-Use Appropriate Tone	2

Appendix F

Changes from Pilot Module to Main Study Module

Chapter	Theme		Sub theme		Time	
	Initial	Change	Initial	Change	Initial	Change
1	Introduction to Crisis Preparedness & Management	No	4	No	3.5	2.0
2	Response to Trauma: Internal Factors	No	2	No	1.0	.50
3	Response to Trauma: External Factors	No	3	No	1.0	.50
4	Long-Term Stress Reactions	No	3	No	1.0	.50
5	Grief & Loss	No	2	No	1.0	1.0
6	Crisis Across the Ages	No	3	No	1.5	.50
7	Cultural Perspectives with the Impact on Trauma	No	3	No	1.0	.50
8	Trauma & Spiritualism	No	3	No	1.0	.50
9	Elements of Crisis Intervention	No	3	No	1.5	1.0
10	Group Crisis Intervention Techniques	Active Listening	15	2	6.0	4.0
11	Coordinating a Crisis Response	Group Crisis Intervention	3	12	1.5	2.0
12	Managing the Media in Crisis Situations	1:1 or Small Group Sessions	3	3	1.0	2.0
13	Crisis Caregivers & Stress Reactions	Coordinating a Crisis Response	4	3	1.0	2.0
14	Art of Active Listening	Managing the Media in Crisis Situations	2	3	.15	.15
15	1:1 or Small Group Sessions	Crisis Caregivers & Stress Reactions	3	3	3.5	2.0
16	N/A	The Crisis Aftermath	N/A	2	1.0	.50

Changes from Pilot Module to Main Study Module (continued)

Chapter	Methods		Materials		Facilitator(s)	
	Initial	Change	Initial	Change	Initial	Change
1	Lecture Demonstration	No	Manual (English) PowerPoint Cups Handouts	Manual (Bangla)	1	2
2	Lecture	No	PowerPoint Handout	No	1	2
3	Lecture	No	PowerPoint	No	1	2
4	Lecture	No	PowerPoint Handout	No	1	2
5	Lecture	No	PowerPoint	No	1	2
6	Lecture	No	PowerPoint Handout	No	1	2
7	Lecture	No	PowerPoint	No	1	2
8	Lecture	No	PowerPoint	No	1	2
9	Lecture	No	PowerPoint Handout	No	1	2
10	Lecture	Lecture Group participation	PowerPoint	Handout	1	2
11	Lecture Group participation	Lecture	PowerPoint Handout	PowerPoint	1	2
12	Lecture	Group participation	PowerPoint	Handout	1	2
13	Lecture	Group participation	PowerPoint Handout	No	1	2
14	Lecture Group participation	Lecture	PowerPoint Handout	No	1	2
15	1:1or Small Group Sessions	Lecture Group participation	PowerPoint Handout	No	1	2
16	N/A	Lecture	N/A	PowerPoint Handout	1	2