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Islamic Trauma Healing: Initial Feasibility and Pilot Data

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Abstract: Effective interventions for trauma-related psychopathology exist but there are considerable barriers to access and uptake by refugee groups. There is a clear need for culturally appropriate and accessible interventions designed in collaboration with refugee groups. Islamic Trauma Healing is a lay led, group intervention specifically targeting healing the mental wounds of trauma within local mosques. Using Prophet stories and turning to Allah about traumatic experiences, this program incorporates cognitive and exposure principles into an Islamic-informed intervention. In Study 1, following a community event describing the program, 39 Somali participants completed a brief trauma screening and interest measure. In Study 2, pre- to post-group pilot data related to PTSD, depression, somatic symptoms, well-being, and satisfaction was examined for men's and women's groups ($N = 13$). Qualitative analysis of group and leader feedback was conducted. Both studies suggest a strong perceived need and match with the Islamic faith for the intervention, with large effects from the pre- to post-group ($g = 0.76$ to 3.22). Qualitative analysis identified themes of community, faith integration, healing, and growth. The program was well-received by participants and offers a promising model for the delivery of trauma-focused intervention to Muslim refugee communities.

Keywords: refugees; asylum seekers; trauma; religion; capacity-building

1. Introduction

A civil war in Somalia emerged in 1991 as a result of sociopolitical discord and conflict between indigenous clans. According to the United Nations High Commissioner for Refugees (UNHCR), approximately 470,000 Somalis were initially displaced following the onset of civil war [1]. Moreover, governmental instability and continued fighting have led to the displacement of many Somalis in the intervening years. The UNHCR estimated that there were 1.2 million Somali refugees worldwide by the end of 2015 [2].

The growing number of Somali refugees entering the international community in recent decades provides an indicator of the demand for culturally aligned mental health services, because rates of chronic conditions such as posttraumatic stress disorder (PTSD) and depression are considerably higher for those from war-torn regions like Somalia. These regions are often known for interpersonal violence and other human rights violations. Trauma exposure through various phases of the migration process place Somali refugees at-risk for psychological adjustment problems upon arrival in a host

country [3]. Moreover, increasing rates of mental health concerns have been found for those exposed to cumulative trauma [4]. In one U.S. survey, 46% of the Somali community in Minneapolis reported clinical levels of depression and PTSD. Indeed, these rates are higher than for refugees from other parts of Africa, potentially reflecting the greater trauma load and famine experienced by Somalis [5].

There are several barriers to providing mental health interventions that meet the unique needs of the Somali refugee communities. Principal challenges include stigma, explanatory models of illness that differ from Western biomedical conceptualizations, and limited access to care models that meet the perceived needs of the community [6,7]. Somali perceptions of mental illness have traditionally been dichotomized into categories of “sane” and “insane”, with less severe forms of emotional distress going under-recognized or being significantly stigmatized.

Moreover, Somalia has a predominantly devout Muslim culture, resulting in Somalis often seeking religiously-based interventions as first-line treatments [7]. Islam is seen as a way of life that informs daily interactions and beliefs about health and wellness. Somali culture places emphasis on bonds within the community, and the mosque often serves as the locus of communal activities. For many Somali refugees, consulting with an Imam and reading the Quran will be the first step in resolving distress long before treatment is sought from a healthcare professional. However, it remains unclear how effective organized and non-organized religious activities alone are at buffering against posttraumatic psychological problems within this group [8]. It is important to develop evidence-based paradigms that align well with the teachings of the Qur’an and community activities of the mosque to address the mental health needs of the Somali refugee community via means that align with their foundational beliefs and worldviews.

Effective PTSD treatments do exist, and strong evidence exists supporting the efficacy of exposure- and cognitive-based psychotherapy. These trauma-focused interventions encourage those with PTSD to approach trauma-related memories and reminders, and challenge maladaptive trauma-related beliefs. They are well grounded in emotional processing theory [9] and inhibitory learning processes [10], where repeatedly approaching trauma reminders, shifting the meaning of the trauma, and shifting views about oneself and others are core principles. Efficacy has been replicated across multiple randomized controlled trials with men and women, including refugees, asylum seekers, and individuals in sub-Saharan Africa [11]. However, these interventions are typically conducted individually, use extensively trained providers (e.g., doctoral level psychologists, two weeks in-person training for lay providers), and do not include explicit religious content. Furthermore, few trauma-focused programs for refugees have been tested in randomized controlled trials and fewer still have used a religiously informed framework [12–16]. No program has utilized an explicitly Islamic focus despite approximately 23% of the world’s population practicing this religion [17]. These are significant barriers to dissemination for those who identify as Muslim and may be wary of Western mental health treatment approaches. Thus, to address these barriers, we have developed an intervention that incorporates the empirically supported elements of well-validated PTSD treatments (i.e., exposure and cognitive restructuring) within an Islamic framework.

Islamic Trauma Healing is a lay-led small-group intervention consisting of six 2-h sessions that specifically target healing mental wounds of trauma by integrating empirically-supported cognitive and exposure-based techniques with Islamic principles central to spiritual, social, family, and work life. A main emphasis of Islamic Trauma Healing is that sessions take place within a local mosque, as this is where many community members go to seek guidance and support. A task-shifting, lay-led group format was chosen to promote community building and reconciliation, to acknowledge trauma’s pervasive impact in the community, and to facilitate wider implementation in mosques and other non-clinical community settings. In the context of global mental health, task shifting refers to the strategy of addressing health service gaps by moving tasks from highly trained healthcare providers to other individuals with less training and fewer qualifications (e.g., lay community members). Given that many non-Western cultures, including Somalia, espouse spiritually-based beliefs regarding mental health and the existence of psychological disorders, the program is not

referred to as “therapy” or “treatment” for “mental illness”. However, it provides participants with the core intervention techniques of Prolonged Exposure (PE) via a framework of Islamic principles and practices. Sessions begin with community building (e.g., shared tea, incense, supplication), followed by using prophet narratives (e.g., discussing faith during hard times through the Prophet Job [Ayyub]) to present psychotherapeutic Islamic principles (e.g., cognitive restructuring), and exposure therapy techniques (e.g., psychoeducation, turning to Allah about the trauma). In Study 1, community interest data is presented following community educational events about the Islamic Trauma Healing Program. In Study 2, we examined pilot data from pre- to post-intervention, including group member satisfaction and qualitative analysis.

2. Study 1: Community Interest in Islamic Trauma Healing Program

Study 1 examined community interest in the program, using a trauma exposure, PTSD screen, and general interest questions.

2.1. Methods: Community Interest (Study 1)

Participants: Community Interest (Study 1)

Twenty-five Somali men and 14 women ($N = 39$) who attended a community informational event in a large metropolitan city completed the anonymous survey. These events focused on the impact of trauma on the Somali community, and provided information about the Islamic Trauma Healing groups. Flyers approved by the Institutional Review Board were used to invite members of the community to the event. Participants were over 18 years of age, with 68.4% self-identified as being “older” rather than “younger”. Assessing age dichotomously in this way was the preference of Somali collaborators on the project, who felt that asking for specific age was a sensitive topic among some individuals in the community. All participants identified Somalia as the country of family origin; approximately 76% of the sample reported having been born in Somalia.

Measures: Community Interest (Study 1)

The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) [18] was used to assess for probable PTSD. The PC-PTSD-5 contains a brief trauma screen, scored “yes” or “no”, and five DSM-5 PTSD items rated for the past month. A score of 3 or more (i.e., 3 “yes” responses) indicated the presence of probable PTSD.

Perceived need was assessed by asking, “How much need is there for trauma healing in the Somali Community,” ranging from 0 (*no need*) to 6 (*high need*). Interest in the Islamic Trauma Healing Program was assessed by asking, “Are you interested in participating in a trauma healing group”, rated from 0 (*not interested*) to 6 (*very interested*).

Procedures: Community Interest (Study 1)

Study procedures were reviewed by an Institutional Review Board, which granted a waiver of consent for the anonymous survey. Two community events were held (March 2016, October 2017), the first at a local mosque and the second at a local community center, with invited speakers including the Imam, head of the Somali Health Board, head of a Somali community organization [D.L.], and members of the investigational team [L.Z., B.G., E.M.]. At this event, individuals were invited to complete an anonymous survey containing basic demographic information, the PC-PTSD-5, and ratings of perceived need and interest in the program. Prior to the survey, a brief description of the purpose and content of the survey was presented. Items were written in both English and Somali, with an audio link in Somali. The survey was completed via a mobile device with headphones. After the survey, participants listened to a program about the mental health implications of trauma exposure and information about the Islamic Trauma Healing program.

2.2. Results: Community Interest (Study 1)

Prevalence of Trauma Exposure and PTSD

Of the 39 participants, 23.1% ($n = 9$) reported experiencing at least one DSM-5 Criterion A trauma. Re-experiencing symptoms of nightmares or intrusive thoughts about the event were reported by 15.4% of respondents ($n = 6$), and 33.3% ($n = 13$) reported avoidance symptoms (e.g., avoiding reminders). With respect to hyperarousal symptoms, 25.6% ($n = 10$) reported being constantly on guard or easily startled, while 15.4% ($n = 6$) endorsed being numb or detached from others, activities, or surroundings. Finally, 17.9% ($n = 7$) reported feeling guilty or unable to stop blaming themselves or others for the event or any problems related to the event. In terms of probable PTSD, 17.9% of the sample ($n = 7$) met the threshold of three of five symptoms in the last month.

Perceived Need and Interest in Islamic Trauma Healing Program

The perceived need for the program was rated as high ($M = 5.23$, $SD = 1.61$, range 0 to 6). Similarly, personal interest in the program was also rated as high ($M = 4.49$, $SD = 2.09$, range 0 to 6).

Finally, as can be seen in Table 1, men showed slightly higher interest in the trauma healing groups than women, and the presence of self-reported avoidance and hyperarousal symptoms were associated with higher ratings of community interest. The presence of a negative mood and cognitive symptoms were the PTSD symptoms most associated with a probable PTSD diagnosis.

Table 1. Correlations among Demographic Factors, PTSD Symptoms, and Perceived Program Interest.

	1	2	3	4	5	6	7	8	9	10	11
1. Gender (0 = <i>male</i> , 1 = <i>female</i>)	-										
2. Age (0 = <i>younger</i> , 1 = <i>older</i>)	−0.23	-									
3. Somalia Born (0 = <i>no</i> , 1 = <i>yes</i>)	−0.27	−0.01	-								
4. Criterion A Trauma (0 = <i>no</i> , 1 = <i>yes</i>)	−0.10	0.19	−0.25	-							
5. PTSD Re-exper (0 = <i>no</i> , 1 = <i>yes</i>)	−0.13	0.17	−0.10	0.49 *	-						
6. PTSD Avoidance (0 = <i>no</i> , 1 = <i>yes</i>)	−0.15	−0.01	−0.12	0.37 *	0.60 *	-					
7. PTSD Hyperarousal (0 = <i>no</i> , 1 = <i>yes</i>)	0.07	−0.02	0.05	0.31	0.40 *	0.33 *	-				
8. PTSD Mood (0 = <i>no</i> , 1 = <i>yes</i>)	0.02	0.17	−0.10	0.34 *	0.41 *	0.30	0.56 *	-			
9. PTSD Cognitions (0 = <i>no</i> , 1 = <i>yes</i>)	−0.07	0.12	−0.10	0.40 *	0.54 *	0.38 *	0.49 *	0.73 *	-		
10. Possible PTSD Dx (0 = <i>no</i> , 1 = <i>yes</i>)	0.07	0.12	−0.06	0.40 *	0.54 *	0.38 *	0.64 *	0.91 *	0.83 *	-	
11. Perceived Need of Program (0–6)	−0.11	0.09	−0.21	0.06	−0.11	0.09	0.04	0.22	−0.16	−0.03	-
12. Interest in Program (0–6)	−0.34 *	0.06	−0.03	0.26	0.30	0.41 *	0.43 *	0.22	0.16	0.26	0.40 *

Note. * $p < 0.05$, PTSD symptoms (re-experiencing, avoidance, hyperarousal, mood, and cognitions) and probable diagnosis (3 or more symptoms) were based on the Primary Care PTSD Screen for DSM-5 (PC-PTSD-5).

3. Study 2: Pilot Study of Islamic Trauma Healing

Study 2 explored pre to post changes in PTSD severity, somatic symptoms, depression, well-being, and satisfaction related to the Islamic Trauma Healing program in a small pilot study examining the initial feasibility of the program. After the program, focus groups were conducted to explore the perceived strengths and weaknesses of the program.

3.1. Methods: Pilot (Study 2)

Participants: Pilot (Study 2)

One group of women ($n = 7$), with three female group leaders, and one group of men ($n = 6$), with one male group leader, participated in the pilot six-session intervention. All members were of Somali background and of the Islamic faith. This sample was distinct from that in Study 1.

In terms of trauma exposure and allowing for multiple categories, 42.9% reported a physical assault, 71.4% reported military combat or living in a war zone, and 14.3% reported experiencing a serious accident. Five female group members completed pre-group measures and seven completed post-group measures, with the group averaging seven participants across sessions. Although six male group members signed informed consent forms, only two completed pre-group measures and three completed post-group measures, with the group averaging three male participants across sessions. The men's group had an enthusiastic group leader who had many men sign informed consent forms ($n = 6$), but only three who attended groups with data from two at pre and data from three at post. We reported in the sample all who signed consents and not a more conservative number for all who attended the first group.

Islahul Qulub: Islamic Trauma Healing Program

The program was designed for separate men's and women's groups of five to seven members, with two lay leaders of the same sex as group participants. A manual for the trauma healing program was developed [19], with content reviewed by the local Imam. The program was constructed so that the lay leader training, comprised of two 4-h trainings, focused on teaching discussion leading skills, with the manual content providing more of the direct therapeutic work. The manual contains a description of types of trauma exposure and common reactions, as well as Islamic principles related to reconciliation and healing. Session-by-session content is provided within the manual. Each session includes time for community building rituals (e.g., sharing tea or coffee), spiritual preparation using a brief supplication written by the local Imam, prophet narratives and subsequent group discussion relevant to trauma healing, and a closing again using a brief supplication also written by the Imam. The key components of the program are prophet narratives, which are intended to target cognitive content, and turning to Allah about the trauma, which is intended to target trauma memories. These components are described in further detail in the following paragraphs.

Prophet narratives and group discussion. Prophet narratives are brief synopses of the prophet's life, including scripture verses, and group questions that mirror the theme of the session that are designed to facilitate cognitive restructuring. Prophet narrative content and questions shift from the presence and purpose of suffering to healing and reconciliation for oneself, others, and the larger community. These include: Session 1, Faith During Hard Times Prophet Job (Ayyub); Session 2, Trials Build Strength Prophet Joseph (Yusuf); Session 3, Overcoming Fear Prophet Moses (Moses); Session 4, Redemption of Self and Others Prophet Jonah (Yoonus); Session 5, Faith, Courage, and Hope for the Future Prophet Abraham (Ibraheem); and Session 6, Reconciliation Prophet Muhammad [peace be upon him]. Prophet narratives are read aloud (5–10 min) by the group leaders. Four questions then facilitate a group discussion related to the theme.

Turning to Allah in Dua and group discussion. Beginning in the second session, participants spend time in individual prayer, turning to Allah in Dua about their trauma. Of note, the term 'Dua' refers to a form of prayer and supplication common in Islam. The term 'prayer' is used illustratively, as it has varied meanings within Islamic practice. The manual specifically uses the term "turning to Allah

in Dua” to describe the expectations of this time. This prayer time is conceptualized as an adapted form of imaginal exposure to the traumatic memories. In Session 1, a rationale for turning to Allah is provided. This rationale is included in session 2, with the inclusion of instructions about how to select a trauma memory, and an example prayer is provided. Individual Dua with Allah lasts approximately 15–20 min. Group leaders monitor the prayer time and individually address any potential problems as they emerge (e.g., checking of phone rather than prayer). As the intervention progresses, content of the prayer shifts from simply focusing on what happened to turning to Allah about feelings and thoughts experienced during the trauma, to turning to Allah about the hardest parts, and finally to thanking and praising Allah for what was learned through the trauma and through revisiting it in Dua. Following individual prayer, four questions related to the theme of the session are used to facilitate group discussion and allow group leaders to generally assess adherence to the prayer time. Participants are encouraged to talk in the group about their experience while turning to Allah in Dua but are reminded to not directly share their traumatic experiences.

Measures: Pilot (Study 2)

The following questionnaires were translated and back translated from English to Somali: PTSD Scale—Self-Report for DSM-5 includes a trauma screen with 20 self-report items rated on a four-point scale from 0 (*not at all*) to 4 (*very much*) and is summed to provide a total score [20]; Patient Health Questionnaire-9 for depression symptoms (PHQ-9) is a nine-item self-report measure of depression symptoms with each question rated from 0–3 [21]; Patient Health Questionnaire-15 for somatic symptoms (PHQ-15) is a 15-item self-report assessment of somatic symptoms (e.g., stomach pain, headaches, dizziness), with symptoms are rated as “*not bothered at all*”, “*bothered a little*”, or “*bothered a lot*” [22]; and the WHO-5 Wellbeing Index (WHO-5), which is a five-item self-report of emotional well-being on a 0–5 scale [23]. In addition, a modified version of the Client Services Satisfaction Questionnaire [24] was administered at the last session. The modified Client Services Satisfaction Questionnaire contained five items, scored from 1 (*poor*) to 4 (*excellent*), with a total score ranging from 5 to 20.

Focus Group Questions: Pilot (Study 2)

Participant focus groups were conducted after the last session and were facilitated by the group leaders. Questions were asked in Somali and covered the following topics: (1) what the participant thought of the trauma healing program; (2) what was most liked about the program; (3) where the program needs improvement; (4) barriers for men and women to be involved in the program; and (5) lessons learned from the program. The interviewer took detailed notes and translated them into English. A focus group was conducted for the lay leaders, conducted in English, audio recorded, and transcribed. Qualitative analysis was conducted with data from men and women combined using NVivo 11 Pro [25], with two raters independently analyzing written accounts and then developing consensus.

Procedures: Pilot (Study 2)

Male and female group lay leaders were selected by the last author [D.L.] based on being a community leader, someone with a “heart for healing and reconciliation” (e.g., a person who sees the effects of trauma exposure in his or her community and wants to promote healing and reconciliation) in the Somali community, and willingness to later train additional group leaders. All lay leaders were able to speak and read both Somali and English. All lay leaders signed contracts to be individual investigators affiliated with the respective university, and all procedures were approved by the respective Institutional Review Board. Lay leaders attended two, 4-h training sessions (approximately 6 h actual training, allowing time for arrival and prayer times), where they received the manual and an overview of the program, reviewed and practiced components of group sessions, and identified and problem-solved potential issues. Group leaders also received standardized training on confidentiality and common ethical considerations in facilitating a group. Once trained, the same lay leader ran the groups from the first to the last session. All lay leaders were volunteers.

Participants were recruited through flyers and word of mouth by the lay leaders, focusing on those in need of trauma healing and reporting re-experiencing and avoidance. Participants self-selected into the groups based on these criteria, purposely allowing for a wide range of participants. Data was collected from February 2016 to March 2016. Participants signed informed consent forms, in Somali or English. Questionnaires were completed at the beginning and end of the six sessions. Groups met weekly for two or more hours, with length varying depending on breaks for the call to prayer. After each group, group leaders met with the investigational team [L.Z., B.G., E.M.] for a discussion of the session and supervisory notes. The investigational team, with the exception of D.L., did not attend sessions. A social event was held as a closure ceremony.

3.2. Results: Pilot (Study 2)

Pre- to Post-Intervention Outcomes

Means, standard deviations, and effects sizes using Hedges' g which is corrected for use with small samples are presented in Table 2. As can be seen, there were large effects in the direction of improvement for self-reported PTSD severity overall (especially re-experiencing), somatic symptoms, depression, and well-being. Effects were attenuated (avoidance) or non-existent (hyperarousal/reactivity) for some PTSD clusters, likely due to the low pre-intervention scores on these measures.

Table 2. PTSD, Somatic, Depression Symptoms, and Functioning at Pre and Post Islamic Trauma Healing Groups.

Measures	Pre-Group ($n = 7$)		Post-Group ($n = 10$)		Effect Size Hedges'
	M	SD	M	SD	unbiased g
PTSD Severity (PS-SR-5, 0–80)	11.25	6.41	4.40	5.40	1.12
PTSD Re-experiencing (0–20)	5.67	2.80	1.80	2.57	1.39
PTSD Avoidance (0–8)	0.83	1.17	0.40	0.70	0.44
PTSD Negative Thoughts Mood (0–28)	4.49	4.56	1.40	2.46	0.85
PTSD Hyperarousal (0–24)	0.71	1.11	0.80	1.23	0.07
Somatic Symptoms (PHQ-15, 0–30)	3.27	2.41	1.70	1.57	0.76
Depression Symptoms (PHQ-9, 0–27)	11.57	4.12	1.50	1.84	3.22
General Well-Being (WHO-5, 0–25)	12.29	8.65	21.10	3.73	1.35

Note. PS-SR-5: PTSD Scale—Self Report for DSM-5; PHQ: Patient Health Questionnaire; WHO-5: Wellbeing Index. Scale range is included in the measure column. Scale range is included in parentheses.

Program Satisfaction

Overall, participants reported being highly satisfied with the program ($M = 19.60$, $SD = 0.97$, range 17–20). With regard to specific questions, responses were again in the excellent range: “How well do you think the Islamic Trauma Healing program has helped with your trauma-related healing?” ($M = 4.00$, $SD = 0.00$); “How well do you think the Islamic Trauma Healing program will help with community reconciliation?” ($M = 3.90$, $SD = 0.32$); “To what extent did the Islamic Trauma Healing program match with your religious beliefs and cultural practices?” ($M = 4.00$, $SD = 0.00$); “If a friend wanted trauma-related healing and reconciliation, would you recommend this program to him/her?” ($M = 4.00$, $SD = 0.00$); and “Overall, how satisfied are you with the Islamic Trauma Healing program?” ($M = 3.70$, $SD = 0.95$).

Focus Group Content

The qualitative analysis revealed themes of connection to community (23.4%), role of Islam (21.9%), growth (15.7%), and barriers to accessibility (16.9%). Though the prominent themes described below do not necessarily reflect views expressed by all members of the focus groups, the clear majority of comments from both group members and leaders were enthusiastic and positive (e.g., “It is [a] great program”, “I think this a very ... beneficial tool.”). Comments regarding problems or barriers were few (16.9%) and only occurred when explicitly asked, such as, “If it was translated into Somali... Also,

if the Qur'anic verses were Arabic would be great" [Female, Group Member]. Similarly, "The ayas of the Qur'an, instead of just English, having Arabic underneath... it really makes a difference" [Group Leader].

Connection to community. A prominent theme across both group members and lay leaders was connection to community (23.4%), including time for socializing, and group discussion of healing and reconciliation: "I think the program is very helpful for me and my community. Because it has taught [me] to intentionally think of the decisions I make in life and how it will affect those around me." [Female, Group Member]. A part of community was friendship: "They actually mentioned that now they are connected more to everyone. For me, also, I get to know the group members—now they are my friends!" [Group Leader].

Role of Islam. Another theme was the integration of Islam and its connection to Somali values (21.9%). Quotes ranged from, "It's a great program because it is based off of my faith and my culture." [Male, Group Member], and "We like how it uses the history of the prophets, tea and stories, praying and breathing. Taking quiet time to talk to Allah." [Female, Group Member], to "I love the prophet stories...that's my favorite." [Group Leader] and "Moses was forced to leave some country and... immigration... Prophet Muhammad [peace be upon him] has similar experiences to have we are having now... Somalis to the west." [Group Leader].

Growth. Personal growth and future benefits (15.7%) also consistently emerged for both group members and lay leaders: "It has made me feel very comfortable dealing with both my past and my present problems." [Female, Group Member]. Likewise, "I will take all the lessons from the Islamic Trauma Healing and I will use it for the rest of my life. My goal is to teach others all the good things that I've learned from this program." [Female, Group Member], and "As much as I think the participants were learning, I learned from them as well, to be able to look at a different perspective, utilizing the *deen* [religion] itself to heal." [Group Leader].

4. Discussion: Community Interest (Study 1) and Pilot (Study 2)

There is a considerable need for accessible, culturally appropriate interventions designed in collaboration with refugee groups, as these groups are unlikely to seek or to respond to purely Western conventional mental health approaches. Integration of faith-based elements (e.g., values of forgiveness and mercy) may be particularly salient for many trauma-exposed religious communities. For Somalis, insights from Islam and the Quranic readings are seen as curative. This pilot study provides initial data regarding a six-session lay-led manualized group intervention to assist with posttraumatic healing in a U.S.-based Somali refugee community. The model is unique in part due to incorporating exposure and cognitive therapy theory through an Islamic and community-centered paradigm. The intervention was well-received and may operate on themes of community, faith integration, healing, and growth.

Based on the community survey, the Islamic Trauma Healing program was perceived positively by Somali community members. Both men and women not only identified a strong need for trauma healing, but were also personally interested in participating in a group. These findings are particularly important given the barriers to care that exist within the Somali community, including language and cultural barriers, as well as a lack of trust in providers [26]. Perhaps imbedding the program in the mosque, incorporating *prayer* and scripture as integral components, and having groups led in Somali by Somali lay leaders are critical steps in breaking down some of these known barriers. Rates of trauma exposure and PTSD symptoms were lower than is typically seen in Somali communities [7], though this may reflect the use of a screening measure rather than full assessment of PTSD. When examining relationships between PTSD symptoms and the need for trauma healing, individuals higher in avoidance and hyperarousal reported a stronger interest in the program. Though findings are preliminary and need replication, this may be important in indicating that those who may avoid approaching past traumas may be inclined to join Islamic Trauma Healing groups.

Similarly, pre- to post-intervention pilot data across men's and women's pilot groups suggest that this group program has the potential to be both feasible for promoting trauma healing and acceptable within the Somali community. The program was perceived as helpful for trauma-related healing

and symptoms improved across PTSD, depression, and general well-being. Although magnitude of symptom change was limited by lower initial severity, effect sizes were large, in line with existing trauma-focused interventions. The high perceived need emphasizes the current disconnect between the need and availability of culturally appropriate services. Given the cultural centrality of Islam, including religious concepts may enhance access to trauma-related healing for Somalis.

Focus group feedback was overwhelmingly positive. Qualitative analyses revealed four themes: connection to community, incorporation of Islam, personal growth, and barriers. Almost a quarter of the content was related to the program fostering connection to the community and to others. Given the role of community in Somali culture and the fact that community disruption and the loss of social connectedness is associated with Somali women's distress levels as refugees [27], this feedback is particularly encouraging. The successful integration of Islamic principles was a second prominent theme. Group leaders and participants valued that the program was consistent with their faith. Developing culturally sensitive interventions infused with faith-based components may reduce perception of inconsistency with Muslim faith as a barrier to care [28] and increase utilization.

Although promising, this data is preliminary with small sample sizes and a lack of control conditions (e.g., waitlist control) used in randomized control trials. Indeed a randomized control trial of the intervention would be needed in order to evaluate the program's effectiveness and efficacy. The small sample represents a limitation when interpreting the effect sizes and outcomes observed in this study. Moreover, we present completer data, no intent to treat, and did not utilize any data imputation methods given the small sample size. Another limiting factor is that attendance in the men's group was more sporadic than the women's group, potentially reflecting a difference in recruitment from outside the mosque in the men's group and within the mosque for the women's group. Members of the men's group came to an unfamiliar mosque, where they did not know as many individuals. It is possible that recruitment in the local mosque contributed to recruitment biases, facilitating participation for those already connected to the mosque and a potential barrier for those without such a connection. Also, as the intervention has an explicit focus on Islam, an individual who does not place a value on the lives of the prophets or routinely spend time in prayer may not be a good fit for this intervention. The sample was not selected for clinical levels of PTSD or depression severity, though some reported symptoms in clinical ranges. Future work will need to explore whether the benefits extend to clinical samples. Fidelity to the intervention was not specifically assessed, though supervisors [L.Z., B.G., E.M.] were onsite and provided supervision after each session. Future work will need to assess the adherence and time spent on each component.

In summary, the approach outlined here develops a brief, community-led model that could be easily integrated into mosques, community centers, and refugee programs. The intervention is imbedded within community traditions of tea and sharing within the mosque, utilizing the authority of the Imam as both a supporter of the program and contributor. This new integrated program was well received by group members and lay leaders alike, colloquially referred to as a time for "sipping, sharing, and stories" by group members.

Author Contributions: L.Z., B.G., L.M., and N.F. conceived and designed the feasibility study and pilot trial; L.Z., D.L., B.G., L.M., and N.F. developed the treatment program; D.L. recruited group leaders and helped recruit group members; L.Z., B.G., L.M., and A.F. managed and analyzed the data; and L.Z., B.G., L.M., N.C., and J.B. wrote the paper.

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