

1. History of SHARPZ

1.1. Brief Rationale For and History Of SHARPZ:

SHARPZ the home of TF-CBT in Zambia

History of SHARPZ: The Serenity Harm Reduction Programme Zambia (SHARPZ) is a registered community service organization: REGISTRATION NUMBER: ORS/102/35/3875. It has its immediate roots in a project owned by ZEC (Zambia Episcopal Conference). **Serenity Harm Reduction Programme Zambia (SHARPZ)** was founded, under the umbrella of the Capuchin Franciscan Friars in Zambia in 2007.

1.2. SHARPZ Vision

To provide mental health services, addressing problems associated with harmful use of alcohol and other drugs as well as with other forms of psychological distress, in Zambia.

1.3. SHARPZ Mission Statement

The goal of SHARPZ is to be a collaborative agency, offering a comprehensive alcohol and other drug service as well as focused psychological assistance that can contribute to the promotion of mental health, and to the prevention and reduction of harmful substance use.

1.4. Objectives of SHARPZ.

- To provide community centred services for problem-drinkers / users and their families.
- To develop a network of relationships with relevant stakeholders who are also addressing issues of wellness, mental health and harm reduction consequent to alcohol and drug misuse in Zambia.
- To provide a training and educational experience to health care workers (e.g. addiction counsellors, social workers, outreach workers and doctors) that foster a holistic approach to health as well as to the assessment and treatment of alcohol and drug misuse.
- To work with others in preventing alcohol and drug misuse by participating in advocacy, public educational initiatives and health promotion programmes.
- To provide intensive residential programmes that addresses the needs of people with more severe alcohol and drug problems.
- To collaborate with employees and employers in developing prevention and treatment approaches and workplace policies that promote the mental health and wellness of all personnel (e.g. Employee Assistance Programme)

- To liaise with others in providing services to youth with substance misuse problems.
- To build up a cadre of harm reduction therapists capable of offering an ethical and effective service to individual clients.

In pursuit of these objectives, SHARPZ adopted a public health approach to drug and alcohol issues. It sought to develop evidenced based interventions to address, not just issues stemming from harmful substance use, but those that contributed to it, such as childhood trauma.

The context of SHARPZ's Services

There is easy access to alcohol in contemporary Zambia. Recent political and economic shifts in policy have inadvertently contributed to the circumstances that favour the decline of traditional restraints on unhealthy drinking patterns. There are more than a dozen breweries in the Lusaka area at present. Foreign beverages are commonplace on supermarket shelves. Retail outlets, both licensed and unlicensed, are everywhere and their customers very often include significant numbers of underage drinkers.

Drug availability The growing number of people detained on charges of drug trafficking suggests a deteriorating situation in matters of drugs abuse figures support the contention that there is cross-border drug-trafficking; that the country is used as a transit point for drug traffickers; and that an increasing number of Zambians have exposure to hard drugs.

Women have been identified as a population that is vulnerable to the noxious consequences of alcohol misuse. Many pregnant women in Zambia believe that by drinking opaque beer they will deliver a healthy, fat baby, despite the evidence to the contrary. It is reported that women who are seen drinking are considered disreputable and suffer stigmatization. Others use alcohol as a means to cope with stress, marital disturbance, and as a way of dealing with the problems that arise from physical, emotional and sexual abuse.

Youth are caught in a poverty trap that has harmful consequences for their future. Many are using alcohol and drugs as a way of anaesthetizing the economic and social stress that disturbs them and as a coping mechanism. The issue of youths and alcohol has been a common media discussion topic.

This analysis of the Zambian context, in relation to substance abuse, makes sense of the interventions being developed by SHARPZ at the present time.

1.5. Track Record of SHARPZ

While SHARPZ has been influenced in its development by the social and medical realities of the response to the HIV/AIDS pandemic in Zambia, it has not been a prisoner to that horizon. However, in a Zambian context it is important to note how SHARPZ's concerns and efforts coincide with those of other organizations engaged in the fight against the spread of the HIV virus. Since opening its doors to clients, in 2007, we estimate that 25%+ of the clients who have passed through our programmes have been PLHIV's. Some of these clients have been members of the general public, others referrals from TASINTHA, (The NGO that supports commercial sex workers), others from BAREFEET (The NGO that addresses the problems of Street KIDS through Theatre), and still others from the Home Based Care (H.B.C.) programme at Ng'ombe and the Drug Enforcement Commission (D.E.C.). All our programmes - whether educational, prevention or treatment - include an exploration of the "Interconnected Risks" associated with substance abuse, and that includes a review of clients' sexual habits and their practice of safer sex behaviours.

1.6. SHARPZ'S Harm Reduction Approach

While SHARPZ's programmes may contribute to strengthening the response to the challenges of HIV/AIDS; it holds the potential to contribute to the management of alcohol and drug misuse among members of the general public, since it is guided by a **Public Health / Harm Reduction Approach** to health care. This approach proposes that there are three dimensions to the reality of drug and alcohol abuse that need to be targeted, in order to design meaningful intervention schedules: THE AGENT (the substance); THE HOST (the person with a susceptibility to misuse) and THE ENVIRONMENT (family/community of which the person is a part). A public health approach addresses issues related to all three components. In keeping with the spirit of Harm Reduction Philosophy, SHARPZ does not advocate a one-programme-suits all approach to harmful substance use, but it facilitates 12 step inspired programmes for clients who wish to follow a total abstinence path on the road to recovery.

2. Facts and Figures

Since SHARPZ opened its doors to offering services around alcohol, other drugs and mental health services using a public health approach, it has witnessed a growing number of clientele who are seeking related services. SHARPZ currently has twenty members of staff and collaborate with six external clinical resource personnel.

No.	SHARPZ Department Unit	Number of SHARPZ Personnel
1	Clinical	7
2	Programmes	4
3	Administration	3
4	JHU R01 RCT	6
	Total	20

In keeping with its public health commitments, SHARPZ delivers services across a continuum of care, ranging from health enhancement to full treatment. Modalities of treatment include residential and day programs which use individual, group and systemic approaches to therapy. Additionally, SHARPZ addresses the interconnected risks that render people vulnerable to substance use. SHARPZ has developed a menu of Cognitive Behavioral based services that include:

1. Drug and Alcohol Awareness Program for Schools,
2. Community Outreach to Churches and Youth Groups,
3. 5-DAY Basic Awareness Training for Drug and Alcohol,
4. Community Alcohol Teams Zambia (CATZ) Program,
5. Community Based / Semi Residential 100 day program,
6. Group Treatment,
7. Individual and Family Therapy for Substance Abuse,
8. Child Safeguarding and Protection Training Program,
9. Information, Education and Communication (IEC) Materials and Advocacy, and
10. Trauma Focused Cognitive Behavioural Therapy.
11. Additional programmes consist of advocacy and research, fellowships such as Alcoholics Anonymous, Coda and Al Anon.

The graphs below depict the number of client's that have benefited from SHARPZ between 2012 and 2014 programmes. Figure 1 shows client's statistics under SHARPZ for the period of January to September 2014.

figure 1.

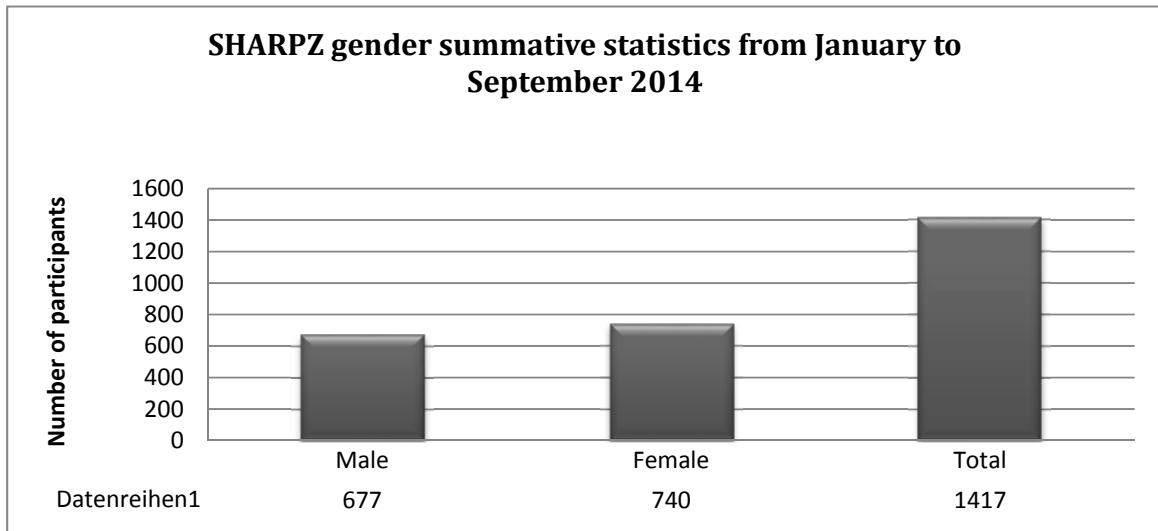


Figure 2 below shows client's statistics under SHARPZ aggregated into their respective age group for the period of January to September 2014.

figure 2.

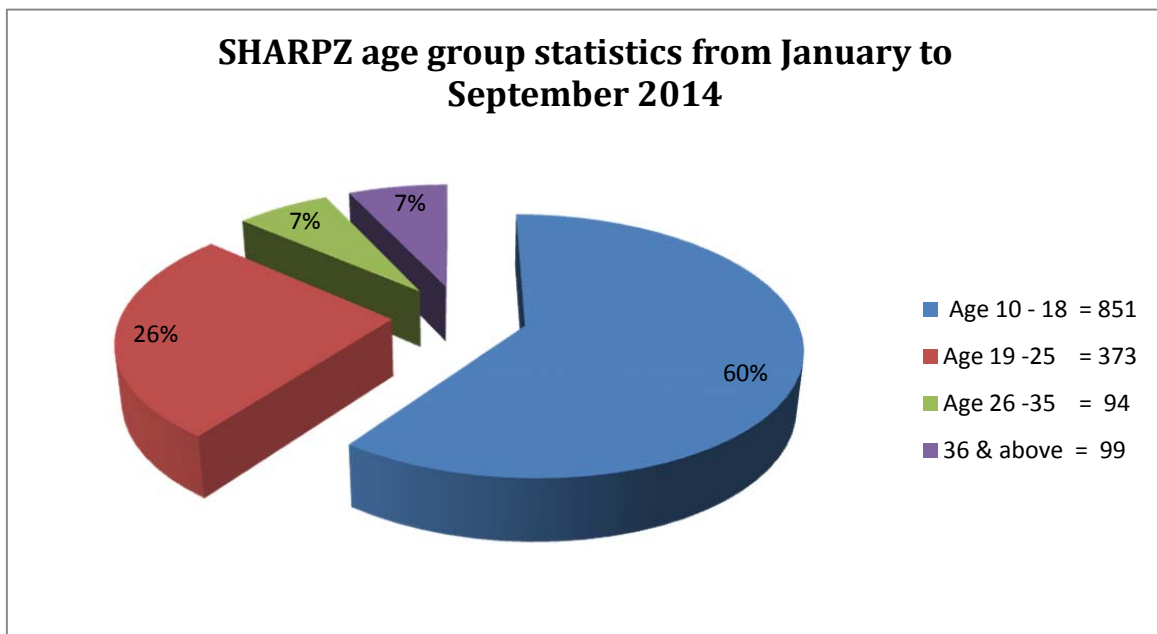


Figure 3 shows client's statistics under SHARPZ for the period of January to December 2013.

figure 3.

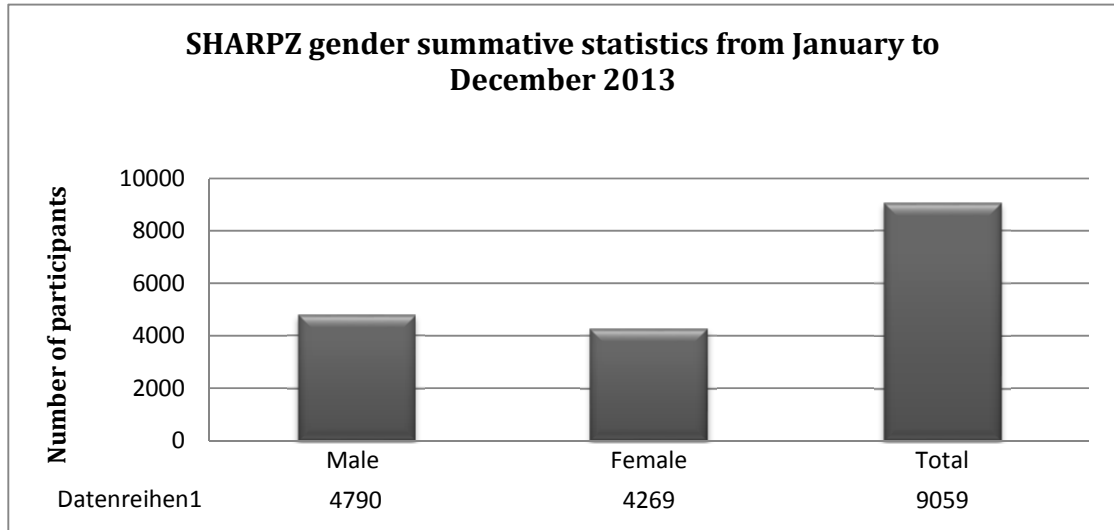


Figure 4 below shows client's statistics under SHARPZ aggregated into their respective age group for the period of January to December 2013.

figure 4.

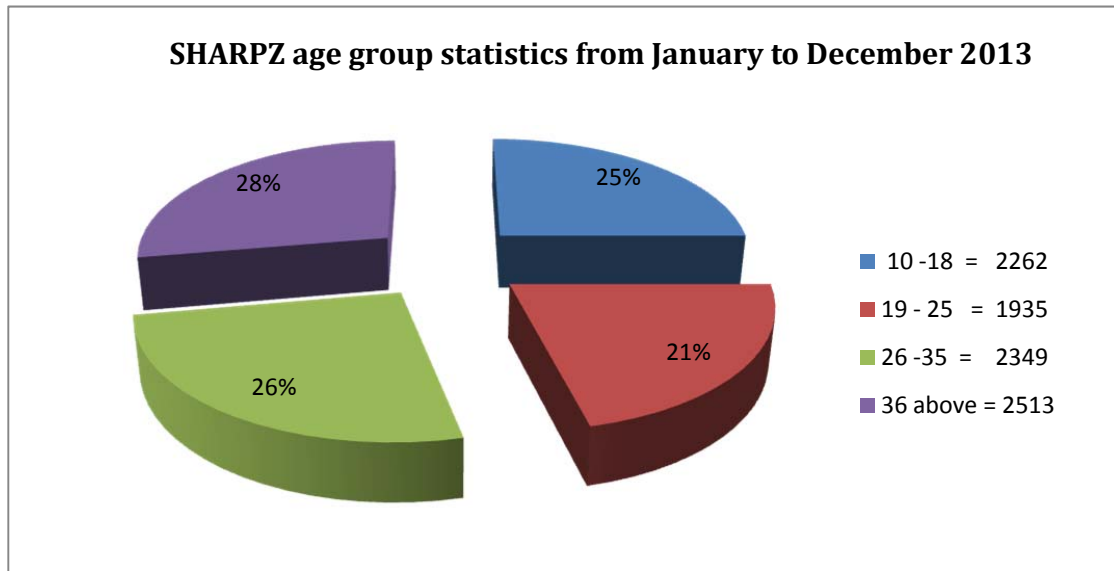
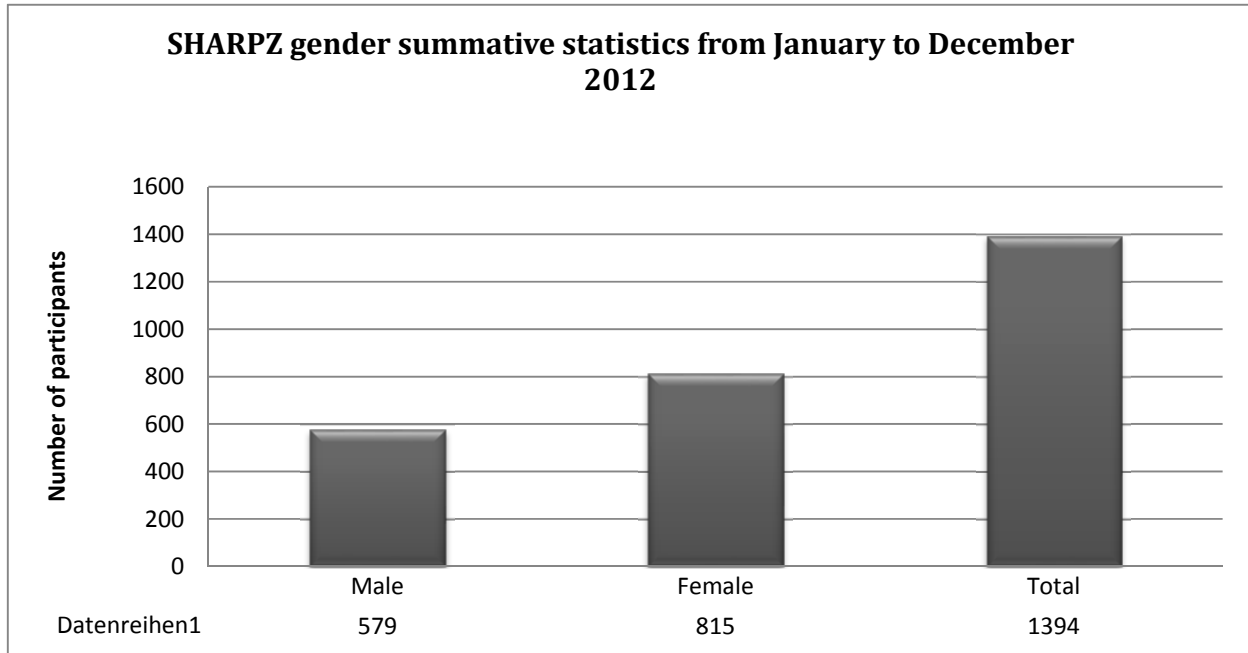


Figure 5 shows client's statistics under SHARPZ for the period of March to September 2012.

figure 5.



N:B The statistics depicted in figures 3,4 & 5 above excludes the [257] children who were reached under the RCT study between 2012 and 2013 which is captured under RCT project .

2.1 The range of issues addressed with clients

Although the main focus of SHARPZ intervention is providing treatment and rehabilitation services to individuals and families that experience harmful use of alcohol and other drugs, we also take into consideration other psychological stressors and risks associated with harmful use. Evidence of various forms of problems for which clients receive treatment at SHARPZ include experiences of traumatic events in life time, depression, schizophrenia, family dysfunctions, behaviour disorders, professional misconduct, co-dependency issues, developmental challenges, sex addiction and substance abuse, marital and relationship problems. However our most concentrated efforts have been directed towards addressing issues related to childhood trauma. The story of the effort is outlined in the following account of Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) services at SHARPZ.

3. Details of SHARPZ TF-CBT approach

In 2007, the Applied Mental Health Research group from John Hopkins University [AMHR-JHU] came to Zambia and started work in collaboration with the Ministry of Health [MoH] and the University of Zambia [UNZA]. A qualitative study was conducted to find out what kind of challenges children and adolescents suffer from in relation to mental health and risk behaviours. Findings indicated that there were no specific interventions which were offered to children and adolescents who experienced such mental health problems apart from Psychosocial Counselling. Since 2007, SHARPZ partnered with AMHR-JHU and began with community based needs assessment to understand the mental health problems, and priorities of the local population. Trauma and grief were identified as the major problems in the community and problems for which few [if any] services were available [Murray et al., 2009]. Following the qualitative study, the AMHR-JHU team reviewed the treatment literature to identify intervention options that could be adapted to the Zambian context to treat these problems.

Based on this review and consultation with local health professionals and mental health experts, an evidence-based therapy called Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) was selected (Murray et al., 2013; Bolton et al., DIME manual, module 6). At this stage the first bunch of Trauma Focused Cognitive Behavioural [TF-CBT] counsellors were trained by AMHR-JHU team and started to conduct a feasibility study. It was at this point that five SHARPZ staff were recruited to start participating in TF-CBT activities. Four out of five were trained as TF-CBT counsellors and the fifth one took a role of a supervisor. When the feasibility study was implemented successfully, the AMHR-JHU team took a step further and recruited another bunch of 20 participants who had skills in counselling from various organisations which were offering counselling services to children and trained them in TF-CBT skills. Again, 1 SHARPZ staff was recruited and was trained as a TF-CBT counsellor.

During this period a pilot study was conducted to validate TF-CBT treatment in Zambia. Thereafter, the AMHR -JHU team proposed a Randomized control Trial [RCT] in order to validate the effectiveness of TF-CBT treatment among children and adolescents in Lusaka-Zambia. Considering the long standing collaboration and partnership between SHARPZ and AMHR-JHU team, SHARPZ was selected as a partner to undertake the RCT study. From 2012 to 2013, the two partners successfully implemented the RCT in which 257 children benefited. Clinical background of the same study is available online at the following website link:

<http://www.clinicaltrials.gov/ct2/show/NCT01624298?term=Trauma+Focused+Cognitive%2C+Zambia&rank=1>

SHARPZ integrates TF-CBT work in its day to day delivery of services in a number of ways. In the first place, over a long period of time SHARPZ have experienced a lot of cases in dealing with adolescents related to alcohol and substance abuse. At face value, 50% of

adolescents who are referred to SHARPZ present with alcohol and other drugs problems as their major concerns. However, our therapeutical experience working with this particular population reveals that harmful use of alcohol and other drugs is just a symptom of major underlying issues. Mostly these adolescents have experienced a lot of traumatic events in their lifetime and just use alcohol and other drugs as a coping mechanism.

Traumatic experienced included but not limited to death of parents due to HIV/AIDS pandemic and then children are taken care of by other extended families where they experience different forms of abuses such as physical, psychological, verbal, economic, sexual, and emotional as well as neglect. Apart from extended families, adolescents equally experience similar forms of violence or abuses within their local communities namely; violent crime, physical, death of loved ones, sexual chronic illnesses just to name but a few. Therefore SHARPZ therapists time and again draw a lot of skills from TF-CBT to address such issues facing adolescents.

Additionally, SHARPZ use TF-CBT skills in other therapeutical settings such as group work and whenever there is partial residential and community treatment programmes for youths harmfully using alcohol and other drugs. It is also important to notice that TF-CBT under SHARPZ programmes does not only benefit individual adolescents but also other family members and significant others who find time to be part of family therapies offered at SHARPZ. Likewise, as SHARPZ roll out programmes to schools and communities, certain components of CBT have been integrated into some curricula which are used in our outreach and training programmes. Thus we can affirm that SHARPZ has integrated TF-CBT treatment approaches in its delivery of different interventions.

4. RCT by John Hopkins

4.1. RCT Background

Trauma has been identified as a major issue that affects children and adolescents in Lusaka, Zambia. Trauma and its related symptoms impact a child's ability to function, increase the likelihood of problems in adulthood, and may lead to an increase in HIV risk behaviors. Our objective was to test the effectiveness of a mental health treatment that addresses trauma and its related symptoms in children and adolescents.

4.2. Trial Description

A two-arm wait list Randomized Controlled Trial of Trauma Focused Cognitive Behavioral Therapy (TF-CBT) was conducted in five community settings in Lusaka Zambia. Children between the ages of 5 and 18 years who experienced at least one traumatic event and reported significant symptoms (score of 38 or above on the PTSD-RI) were enrolled from five community sites and randomized to TF-CBT or wait list control condition. Post

assessments were completed 4 to 5 months following baseline assessment. Outcomes were measured using locally adapted and validated versions of the Post Traumatic Stress Disorder Reaction Index (PTSD-RI) and a locally developed function scale. Secondary outcomes included HIV risk behaviors and parental report on child's symptoms and functioning.

4.3. Intervention

Children randomized to the treatment arm received 10-16 weekly sessions of TF-CBT. TF-CBT is an evidence-based treatment developed in the U.S. for use with children and adolescents between the ages of 5 and 18 who have experienced a traumatic event and subsequent symptoms. The treatment was adapted for use in Zambia (Murray et al, 2013b).

4.4. Results

Baseline assessments were completed by 298 children and adolescents. All participants who were eligible (n=257) agreed to participate in the trial. Of the 257, 131 were randomly assigned to TF-CBT and 126 to the control group. There was a statistically significantly larger decrease from baseline to post-assessment in average trauma score ($p<.0001$) and average functioning impairment score ($p<.0001$) among the TF-CBT group compared to the wait-list control group. The effect size, calculated using Cohen's d statistic, was 2.41 for trauma symptoms and 0.32 for functional impairment.

4.5. Conclusions

TF-CBT proved to be an effective treatment for children and adolescents with trauma symptoms in Lusaka, Zambia as delivered by lay counselors. Furthermore, the study demonstrated that it is feasible to conduct a randomized controlled trial on mental health interventions for children in low and middle resource contexts.

4.6. Objective and Aims of this Study

Experiencing a traumatic event can significantly impact a child's overall wellbeing, mental health symptoms and functioning as well as their development into healthy functioning adults. The initial work by AMHR suggests that TF-CBT could be a culturally appropriate and accepted drug-free option to mitigate these problems. However, to date, TF-CBT is the only intervention in Zambia truly testing its effectiveness. The current study had the following objective and specific aims:

Study Objective: To determine the effectiveness of Trauma Focused Cognitive Behavioral Therapy (TF-CBT) in treating traumatized children and adolescents in Zambia.

Specific Aim 1: To determine the effectiveness of Trauma Focused Cognitive Behavioral Therapy (TF-CBT) in reducing the severity of mental health symptoms experienced by traumatized children and adolescents in Lusaka, Zambia.

Specific Aim 2: To determine the effectiveness of TF-CBT in reducing HIV risk taking behaviors and increasing coping strategies and health promotion activities of traumatized children and youth in Lusaka, Zambia.

5. Partner Selection and Services in Zambia

For this particular study AMHR partnered with Serenity Harm Reduction Programme Zambia, (SHARPZ) a registered community service and faith based organization. SHARPZ has adopted a public health approach to drug and alcohol issues and is under the umbrella of the Capuchin Franciscan Friars in Zambia.

The AMHR group provided technical assistance to implement this effectiveness trial with the overall goal of moving it into regular programming.

Conceptually, the team of therapists, counselors and community outreach workers at SHARPZ has learnt to see harmful use of substances, mental health issues and other sets of problems – legal, social, political and economic, for example – as interconnected. SHARPZ core focus is addressing substance use issues but also see a broad spectrum of interconnected problems and risks between harmful substance use and other social and psychological realities.

Through its value of the public health approach, its wide range of services and its extensive connections within the community, SHARPZ was very well positioned for collaborating with AMHR in this randomized control trial of TF-CBT for trauma-affected children.

5.1. History of collaboration between AMHR and SHARPZ

SHARPZ has a long-standing relationship with the work of AMHR in Zambia. In 2007 as AMHR began the feasibility study, Dr. Philip Baxter (Executive Director of SHARPZ, May 2007-June 2014), was approached to join a team of supervisors who would provide supervision to the first cohort of TF-CBT counselors. Four staff members from the SHARPZ were enrolled as counselors in training.

Through this process SHARPZ received 2 years of training and supervision in TF-CBT. The extended period of training and practice afforded SHARPZ the opportunity to become familiar with the training, supervision and implementation of TF-CBT as well as AMHR's research methods. When a second cohort of trainees was recruited, SHARPZ responded positively to the request to provide supervision to a subgroup of seven of the trainees.

In 2011, AMHR approached SHARPZ with the possibility to conduct further research on TF-CBT in Zambia. SHARPZ was already established as a local Community Based Organization (CBO) and invested in extending its services to clients, their spouses / partners, their children, and neighbors who were presenting with problems related to a wide range of clinical issues, including trauma.

5.2. Description of TF-CBT

Trauma Focused-Cognitive Behavioral Therapy was developed to help children/youth between 5 and 18 years of age and their families (when available) who have experienced significant emotional and behavioral difficulties following a traumatic event(s) and/or traumatic grief. Traumatic events may include physical and sexual child abuse, rape or assault, exposure to domestic or community violence, serious accidents, natural or human disasters, violent crime, violent or sudden death, or any other experience that creates threat or fear. The child/youth may actually experience the event, witness the event, or have a close loved one who experienced the event. In TF-CBT, children and parents learn new skills to help process thoughts and feelings related to traumatic life events; manage and resolve distressing thoughts, feelings, and behaviors related to traumatic life events; and enhance safety, growth, parenting skills, and family communication.

6. ASSESSMENTS

6.1. Primary Outcome Measures

6.1.1. Trauma Symptoms

Post-Traumatic Stress Disorder- Reaction Index (PTSD-RI)-identifies specific traumatic events a child has experienced or witnessed, and the associated symptoms to such stressors. (Steinberg et al., 2004) The PTSD-RI has been translated into three local Zambian languages (Nyanja, Bemba and Tonga) and validated in Zambia (Murray, et al., 2011a). The measure included 38 symptoms for which participants were asked to respond how often they experienced each within the past month. Response options were on a Likert scale ranging from 0 (never) to 4 (most of the time).

6.1.2. Functional Impairment

Functional impairment was measured using locally-developed scales following AMHR's DIME methodology (Bolton, et al., 2013). Items were tasks that respondents in the prior qualitative study reported doing regularly to care for themselves, their families, and/or communities (e.g. going to school, going to fetch water) (Murray et al, 2006). Respondents reported current difficulty compared to others (from 0 "No difficulty" to 4 "Often cannot do").

6.2. **Secondary outcome Measures**

6.2.1. HIV Risk Behaviours

The World AIDS Foundation (WAF) questionnaire measures risky sexual activity and attitudes and beliefs about sexual risk behaviors. The measure was developed and used with adolescents in South Africa, and modified for use in this study (Sikkema et al., 2004).

6.3. **Substance Use**

An abbreviated version of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was used to evaluate the children and adolescents exposure to and experience with harmful substances such as alcohol, smoking and marijuana (World Health Organization, 2009). Children were asked first about their lifetime usage of particular substances. If the respondent answered positively then children were prompted to answer an additional six questions regarding their substance use functional impairment related to their use.

6.4. **Parent Report on Child's Symptoms**

Parents and guardians were given the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) a standardized measure developed and validated initially in the West but now used in many countries and cultures. This measure asked parents/guardians to report on a range of behavioral and school problems, somatic complaints, depression and anxiety symptoms that a parent/guardian may see in their child. The Child Behavior Check List (CBCL) was translated and validated in Zambia during previous studies.

6.5. **Site Selection**

Five of SHARPZ community partners were selected by the Executive Director of SHARPZ as study sites. Sites were selected based on their existing partnership with SHARPZ, location

in Lusaka, current work with children and adolescents, availability of 1-2 staff members to train in the assessment measures and participate as an interviewer to conduct baseline assessments for the study, availability of counselors to dedicate at least two days to this work, and diversity among sites' scopes of work given the study interest in looking at the feasibility of implementing the activities within different service providers (i.e. schools, community organizations, etc.).

The five sites chosen were:

- 1) ***Barefeet (Thornpark)***, a community based organization that works in compounds throughout Lusaka and elsewhere in Zambia since 2006. The organization uses live arts to engage street youth in a 12-week psychosocial, educational and prevention program.
- 2) ***Ng'ombe Home Based Care (HBC)***, a community-based organization located in Ng'ombe compound Lusaka. Ng'ombe HBC uses volunteer caregivers to identify children and families living in Ng'ombe compound who are infected or affected by HIV and in need of support services including nutrition, support groups, referrals and/or medical care.
- 3) ***Kaunda Square Ministry of Health Clinic***, a Zambian Ministry of Health Clinic providing primary care at the community level for residents of Kaunda Sq. Lusaka.
- 4) ***City of Hope***, a community school and residential program that provides vulnerable children living in the area of Makeni, Lusaka with free education through their skills center and community school. In addition, City of Hope also has a residential center for girls who have been abused or who can no longer live with their families.
- 5) ***Saint Paul's School***, a community-based school in Chipata compound Lusaka with an enrolment of 800 children and adolescents. Through support of the Archdiocese of Lusaka, St. Paul's provides education for children living in Chipata up to grade 10.

This study was designed to expand SHARPZ and SHARPZ partners' capacity to treat more children with therapy by increasing both the number of counselors trained and each counselor hours dedicated to counseling.

Eleven assessors were identified by the partnering organizations and subsequently interviewed by the AMHR and SHARPZ team. Each partner site had 1-3 assessors depending on their availability and perceived need at the site. 11 assessors participated in the full training along with the two data entry students and SHARPZ study personnel (Program Manager and Monitoring and Evaluation Officer). Throughout the study, assessors were responsible for consenting and assenting all participants and conducting the initial baseline assessment using the validated assessment measures. Assessors were also the point of randomization in the study, meaning that they informed families if they must wait for the intervention or receive the intervention immediately. The assessors also

conducted regular monitoring of the wait list control group. This entailed meeting or calling the individual once a month to assess for safety issues, symptom assessment and referral needs. Following the intervention or wait period the assessors also assisted in the completion of post assessments.

6.6. Training of Counselors in TF-CBT

Twenty counselors were trained in TF-CBT. Eleven of the 20 counselors trained were selected from five of SHARPZ partner sites. Of the 20 counselors trained, two were from Barefeet, two from St. Paul's School, two from the Ministry of Health Clinic and three from City of Hope. Ng'ombe HBC could not identify any staff available to train as counselors but were kept in the study given their interest, need and current referral system for treatment of children at SHARPZ. The remaining 12 counselors were hired part time to work on the project under SHARPZ in order to assist in seeing cases at all five partner sites.

Training and supervision was based on the apprenticeship model for training lay counselors (Murray et al., 2011b). Training occurred during a two-week live training led by US-based trainers (doctoral level psychologist and Masters level Social Worker trained as trainers in TF-CBT). The training was conducted in April 2012 and ran from 8am – 5pm each day for 10 days in Lusaka, Zambia. The training was multi-faceted and covered the following topics:

- i. an outline of the implementation plan of the study,
- ii. a background of evidenced based treatments for traumatized children and trauma and related mental health symptoms,
- iii. a complete overview of ethical issues and responsibilities,
- iv. an in-depth protocol on handling of high risk cases including protocol for suicidal/homicidal ideation,
- v. training and practice on the eight components of TF-CBT which include Psycho-education, Relaxation, Affective Modulation, Cognitive Processing, Trauma Narrative, Cognitive Reprocessing, Co-joint Session and Enhancing Skills, and
- vi. a review of cultural issues including how to integrate HIV education and HIV risk prevention into each component.

The training was done through a variety of methods including didactic explanations, demonstration role-plays and small-group role-plays. Participants were assigned homework each evening to review selected material from the day's training and were given a quiz each morning to confirm comprehension of the previous day's information.

Two supervisors were selected to provide clinical supervision for the counselors. The first supervisor has worked with AMHR since their initial study in 2007. The second supervisor was selected from the group of counselors given her strong understanding of the model and clinical skills. Supervisors were given an additional 1-2 hours of training each day. The training was on general and TF-CBT specific supervisory skills including: running of supervision group and agenda setting; safety protocols for high-risk cases; monitoring of clinical cases; confidentiality and its limits; case identification; specific methods used in TF-CBT supervision; vicarious trauma and how to identify and manage this in supervisees; and problem solving techniques for clinical challenges with counselors and clients.

The supervisors were invited to help in role plays and energizers during the training. At completion of the training, the supervisors in training were given a summary of each participant's strengths and areas of weakness to help guide them in their supervision groups.

Following the initial two-week training counselors met in smaller *practice groups* once a week for three hours with their supervisors to review skills that they learned in the live training through role-plays. After several weeks of practice the counselors then took on one practice case in which they received rigorous supervision prior to taking on study cases.

7. TF-CBT Supervision

Once cases started, weekly supervision groups were held where supervisors met with groups of 3-4 counselors for approximately 3 hours. Supervision involved counselors giving a brief account of what they did each session with each client and to receive feedback and/or guidance from the supervisors. During this time supervisors helped counselors problem-solve around difficult cases and issues such as retention, identified and corrected mistakes that occurred in session and explored culturally appropriate activities that could be used to reach the goals of session. Supervision also provided an opportunity for the counselors to learn from each other's cases. Counselors were mandated to attend supervision after every session with their clients.

Each week the TF-CBT local supervisors met with a TF-CBT trainer in person or via skype or phone to go through each case. The trainer would help the supervisor guide cases within fidelity, as well as continue to teach supervision skills such as how to run the group, get through cases, and help teach more challenging components.

8. Participant Eligibility

In order to meet eligibility for participation in this study the child or adolescent had to meet the following criteria:

- 1) 5-18 years old

- 2) lived in one of the five study sites within Lusaka, Zambia
- 3) reported significant mental health problems as measured by the PTSD-RI
- 4) reported experiencing a minimum of one traumatic event
- 5) we're not in current danger of committing suicide and
- 6) The legal guardians of the child were willing and able (mentally competent) to give consent.

For the purposes of the study, 'traumatic events' included:

- a.** Being in an earthquake that badly damaged the building you were in
- b.** Being in another type of disaster like a fire
- c.** Being in an accident, like a very serious car accident
- d.** Being in a place where a war was going on around you
- e.** Being hit, punched, or kicked very hard at home. (DO NOT INCLUDE ordinary fights between brothers & sisters)
- f.** Seeing a family member being hit punched or kicked very hard at home. (DO NOT INCLUDE ordinary fights between brothers & sisters).
- g.** Being beaten up, shot at or threatened to be hurt badly in your community
- h.** Seeing someone in your community being beaten up, shot at or killed.
- i.** Seeing a dead body in your community (do not include funerals).
- j.** Having an adult or someone much older touch your private sexual body parts when you did not want them to.
- k.** Hearing about the violent death or serious injury of a loved one.
- l.** Having painful and scary medical treatment in a hospital when you were very sick or badly injured.
- m.** OTHER than the situations described above, has anything else ever happened to you that was really scary, dangerous or violent?

Clients who had experienced a traumatic event and subsequently exhibited significant trauma symptomatology as evidenced by a score of 38 or above on the previously validated PTSD-RI symptom scale, were invited to join the trial. Exclusion criteria included persons visiting but not living in Lusaka, Zambia, persons who were deemed not mentally competent to give assent or whose legal guardians were not mentally competent to give consent to participate in the intervention, or who were otherwise unwilling or unable to receive an intervention for any reason, persons who were in danger of suicide (as determined on the assessment), and persons who were currently receiving treatment for mental health problems by psychiatrists.

9. Counselor Monitoring

Counselors were responsible for tracking and monitoring of all client sessions from start to finish. Each Friday the program manager determined case assignment for the new treatment cases and those cases were then distributed to the TF-CBT supervisors to be handed out in the next supervision group. When assigned a new case, all counselors were provided with a case file that included:

- 1) a copy of the client's assessment and contact information
- 2) a TF-CBT fidelity checklist and
- 3) client session monitoring forms for each client session.

The counselors were required to use the two monitoring forms to track the progress of the client at the beginning of each session. The fidelity checklist was used to monitor the counselor's fidelity and adherence to the treatment model. Each session they would check off which component of the treatment they completed and what goals of each component they were able to reach. In addition, the counselors would track, on a 4 point Likert-type scale, how well they think they did in meeting the goals of each component.

10. Monitoring of High Risk Cases

In dealing with sensitive issues such as trauma, assessors and counselors may be presented with high-risk cases and/or situations such as suicidal or homicidal ideation, ongoing sexual abuse, and/or on-going physical violence. The management of high-risk cases can be particularly challenging when working in low-resource settings that do not have existing mental health infrastructures such as shelters or child protection agencies. Therefore, all assessors and counselors were trained on a step-wise safety protocol specifically developed for this pilot project. When a situation was identified in which the child's safety was in danger all assessors, counselors and supervisors followed specific steps to ensure their safety

11. Future developments and programmes

At the present moment, SHARPZ and JHU continue their collaboration in developing sustainable and effective approaches that will be integrated into already existing systems of care. The programmes are meant to strengthen prevention, health enhancement, treatment, care and continued support to all beneficiaries throughout Zambia. The current RCT is comparing two approaches TF-CBT and Psychosocial Counselling and effective ways to prevent mental health and HIV risk behaviours among orphans and vulnerable adolescents in Lusaka Zambia. The study is designed to assess and treat 750 orphans and adolescents who will meet criteria for treatment and will be randomized to the two arms in the study either TF-CBT and/or Psychosocial counselling.