PREVALENCE OF POST-TRAUMATIC STRESS DISORDER AMONG SEXUALLY ABUSED CHILDREN OF THE CHILD SEXUAL ABUSE CENTRE AT UNIVERSITY TEACHING HOSPITAL, ZAMBIA

BY

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A thesis submitted to the University of Zambia in partial fulfilment of the requirements for the degree of Master of Medicine in Psychiatry

THE UNIVERSITY OF ZAMBIA

LUSAKA

2016
I, Maria Anna Akani, of 597 Meanwood Ibex Hill, Lusaka, declare that this thesis represents my original work. This work has not been previously submitted for a degree, diploma or other qualification at this or another University.

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This dissertation of Maria Anna Akani has been approved as partial fulfilment of the requirements for the award of the Degree of Masters of Medicine in Psychiatry by the University of Zambia.

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Prevalence of Post-traumatic Stress Disorder among Sexually Abused Children of the Child Sexual Abuse Centre at UTH, Zambia

Child Sexual Abuse (CSA) is a problem in many countries in the world including Zambia with various studies pegging the prevalence at 3 to 17% for boys and 8 to 31% for girls (Barth, Bermetz, Heim, Trelle & Tonia, 2013). The effects of CSA are both physical (genital trauma, contraction of infections, pregnancy, etc) and psychosocial (emotional dysregulation, bed wetting, regression of milestones, relational problems, poor self-esteem and other psychiatric diagnosis such as depression, eating disorders, substance misuse disorders, dissociative anxiety disorders, anxiety disorders, posttraumatic stress disorder (PTSD), etc). However, physical effects which often heal without any further sequel are often given more attention than psychosocial effects which may last up to several years (Bernard, Peters and Makoroff, 2006; Cohen, Deblinger, Mannarino & Steer, 2004; Fossati, Madeddu, & Maffei, 1999; Hevey & Kenward, 1989; Maniglio, R., 2009).

Aim: This study was done to determine the prevalence of posttraumatic stress disorder among sexually abused children from the child sexual abuse centre at University Teaching Hospital and to describe relevant aspects of it.

Materials and Methods: Children aged 4 to 15 years were recruited at their one month reviews. Demographic details and abuse characteristics were obtained from the centre records while the Child PTSD Symptom Scale (CPSS) was used to assess for PTSD (Foa, Johnson, Feeny & Treadwell, 1999). Two way analysis and multivariate analysis were used to analyse association.

Results and Discussion: There were 192 participants in the study with only 3 boys. Teenagers constituted almost half the study population with median age = 13, mean age = 11, mean age for boys = 11. Ninety eight percent of the referrals were from the Police. All the abusers were males with neighbours, boyfriends and non-relative adults constituting over 50% of the abusers in the study. Sexual abuse by boyfriends was significantly high although the abuse by the neighbour scored the highest. Penile penetration was the main feature of the abuse with only one in twenty abusers being reported to have used condoms. Physical Force was the main mode of engagement used on the children. The prevalence of PTSD was 33.3 % with 9 % of
the children presenting with severe impairment. There was an association between PTSD diagnosis and functional impairment and re-experiencing and hyper-arousal cluster of PTSD symptoms. There was no association between the type of coercion used (force, playful coaxing, etc) to lure the children and the development of PTSD.

**Conclusion and Recommendations:** Prevalence of PTSD is high among sexually abused children. Most of the sexual abuse involves unprotected penetrative sex. The police should be included in planned care for CSA victims.
To my children

Ethan and Ariana
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## Abbreviations and Acronyms

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<thead>
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CBCL</td>
<td>Child Behaviour Checklist</td>
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<tr>
<td>CBT</td>
<td>Cognitive Behavioural Therapy</td>
</tr>
<tr>
<td>CPSS</td>
<td>Child Post-traumatic stress disorder Symptom Scale</td>
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<tr>
<td>CRS</td>
<td>Catholic Relief Services</td>
</tr>
<tr>
<td>CSA</td>
<td>Child Sexual Abuse</td>
</tr>
<tr>
<td>DSM-III-R</td>
<td>Diagnostic and Statistical Manual of Mental Health Disorders version III revised</td>
</tr>
<tr>
<td>DSM-IV</td>
<td>Diagnostic and Statistical Manual of Mental Disorders version IV (4)</td>
</tr>
<tr>
<td>EC</td>
<td>Emergency contraception</td>
</tr>
<tr>
<td>EMDR</td>
<td>Eye Movement Desensitisation and Reprocessing</td>
</tr>
<tr>
<td>GAD</td>
<td>Generalised Anxiety Disorder</td>
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<tr>
<td>GBV</td>
<td>Gender Based Violence</td>
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<tr>
<td>HPA</td>
<td>Hypothalamic-Pituitary-Adrenal</td>
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<tr>
<td>NGOs</td>
<td>Non-governmental organisations</td>
</tr>
<tr>
<td>PCOE</td>
<td>Paediatric Centre of Excellence</td>
</tr>
<tr>
<td>PEP</td>
<td>Post exposure prophylaxis</td>
</tr>
<tr>
<td>PRP</td>
<td>Personal and Relationship Profile</td>
</tr>
<tr>
<td>PTSD</td>
<td>Post-traumatic Stress Disorder</td>
</tr>
<tr>
<td>PTSD-RI</td>
<td>Posttraumatic Stress Disorder – Reaction Index</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmitted Infections</td>
</tr>
<tr>
<td>TES</td>
<td>Traumatic Event Scale</td>
</tr>
<tr>
<td>TF-CBT</td>
<td>Trauma focused – Cognitive behavioural therapy</td>
</tr>
<tr>
<td>UCLA</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>UTH</td>
<td>University Teaching Hospital</td>
</tr>
<tr>
<td>UNZA</td>
<td>University of Zambia</td>
</tr>
<tr>
<td>VSU</td>
<td>Victim Support Unit</td>
</tr>
<tr>
<td>ZDHS</td>
<td>Zambia Demographic Health Survey</td>
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<td>ZP</td>
<td>Zambia Police</td>
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1 INTRODUCTION

1.1 Background

Child sexual abuse (CSA) “involves forcing or encouraging a child to take part in sexual activity” (ed. Gowers 2005, p.257) and may include penetration of the vagina, anus, mouth by the penis, fingers or other objects and non-penetrative activities. Non-penetrative sexual activities may include attempts to do any of the above listed but also fondling with or without clothes on, exhibitionism, watching others engage in sexual acts and pornography. Of prime importance is the fact that the child is unable to give informed consent for these activities (Hevey & Kenward, 1989). Emerging research has also been capturing data on child sexual abuse without physical contact such as that involving text messages, social media and internet. Kleoess, Beech and Harkins (2014) in their review paper refer to the increase in reports of online solicitation and exploitation experienced by children and adolescents associated with the proliferation of internet access and use with reduced cost, increased convenience and privacy. With the technological advances in the country and internet access becoming widespread, this will increasingly be a medium of CSA in Zambia as well. Non-contact CSA was beyond the scope of this study and so data in that aspect was not collected.

Meta-analysis of 217 studies done between 1980 and 2008 (Stoltenborgh, IJzendoorn, Euser & Bakermans-Kranenburg 2011) looking at global prevalence of CSA puts it at 127/1000. A more recent meta-analyses (Barth, Bermetz, Heim, Trelle & Tonia 2013) from 24 different countries worldwide that looked at 55 studies over the period of 2002 to 2009 puts the prevalence at 3 to 17 percent for boys and 8 to 31 percent for girls. Lalor (2004) noted that there is little information about CSA in sub-Saharan Africa (SSA) apart from information from South Africa. Lalor (2004, p. 3) also proposed that a “reason that the sexual abuse of children may not have received more attention in SSA is the range of competing social problems affecting children, such as war, disease, poverty, hunger and homelessness.” From the literature he reviewed, penetrative sexual abuse was reported by approximately five percent of the sample. In Zambia, national gender based violence (GBV) statistics of 2011 from the Victim Support Unit (VSU) of the Zambia Police (ZP) indicate that there were 1939 cases of defilement of children and 2396 in 2012. ZP records from previous years also show that child sexual abuse reports increase annually. The
Zambia Demographic Health Survey (ZDHS, 2007) shows that 15 percent of girls aged 14 years and below have experienced sexual violence already at some point in their lives. It is evident from the above statistics that CSA is a global problem but it is also a Zambian problem. Women and children themselves all list child sexual abuse as one of the major problems the community in Zambia is facing (Murray, Haworth, Semrau, Singh, Aldrovandi, Sinkala, Thea and Bolton 2006).

Furthermore, the CSA problem is said to be under-estimated because few actually get official recording. ZDHS (2007) data shows that of 47 percent of the women who were referred to the hospital actually got to the hospital. The others were lost to follow up. Some reasons for under-reporting include, a child being too young to understand and recognise the abuse, too afraid to tell, the child’s report is not believed when told, family may conceal for fear of humiliation, (Taylor 1989, p. 42) police station may not facilitate reporting of the case, etc. Hevey & Kenward (1989) noted that the associated stigma and distress also makes participants reluctant to participate in CSA studies. CSA prevalence studies are also a challenge because researchers have never quite defined CSA in uniform terms (Collin-Vezina, Daigneault & Herbert 2013; Gowers 1996; Stoltenborgh, et al 2011; Taylor 1989). “CSA experiences vary greatly over multiple dimensions including, but not limited to: duration, frequency, intrusiveness of acts perpetrated, and relationship with the perpetrator (Collin-Vezina, et al 2013, p. 1). Some researchers have been broad and included even indecent exposure while some data like the Zambia Police statistics refer to only penetration (also called ‘carnal knowledge’) according to the law (Act No. 15 of 2005). Also, the different ages of legal consent in the countries affect the results. These varying definitions make it difficult to compare among different studies. However, even from reports that refer to only penetration, CSA prevalence is still high enough to be a concern.

The definition of CSA is cardinal to this research as a broad definition might be over-inclusive while a lean one might miss important aspects of abuse. Unfortunately, a major challenge in definitions is the law in many African countries which mostly only refers to penetration. Zambia is included in this list (Act No. 15 of 2005). Lately, there has been revision in statutory laws in several African countries to include conduct that was previously classified as ‘indecent assault’ to ‘rape.’ Also redefined, is the way sex among children is being reviewed to
consensual and non-consensual as opposed to criminalising it to simply ‘defilement’ or ‘indecent assault’ (Thompson & Simmonds 2012). In this study, sexual abuse is as defined in the introductory sentence and “"child" means a person below the age of sixteen years.” (Definition of child - As amended by Act No. 15 of 2005). This is because all official data and records and any relevant interventions in Zambia are collected with this perspective in mind.

1.1.1 Effects of Child Sexual abuse (CSA)

Common physical complaints related to CSA include bleeding, rash, pain or discharge in the genital and/or anal area and dysuria (Bernard, Peters and Makoroff 2006), pregnancy, sexually transmitted infections (STIs) and physical injuries resulting from violent attack by the assailant (Hevey & Kenward, 1989). However, physical injuries usually heal with no future complications (Hevey & Kenward, 1989) unless there is contraction of a disease, profound secondary injury when forcibly trying to penetrate in very young children or use of force to overcome the victim. Psychosocial effects have longer lasting repercussions. Gowers (2005, p. 261) says, “There are likely to be long-term consequences for the child’s psychosocial development, and emotional abuse and neglect are likely to have a worse long-term prognosis than physical abuse.” Psychosocial effects may include impulse control, affect regulation, relational problems with peers, attentional problems, delusions, hallucinations, delay in language development, self-injurious behaviour (scratching, hitting, self-laceration, biting, etc) and soiling or enuresis even after they had previously been continent (Collin-Vezina, et al 2013; Gowers 2005; Murray, et al 2011). Putnam (2003, cited in Gowers 2005) lists psychiatric disorders that can possibly result such as borderline personality disorder, somatisation disorder, major depression (and dysthymia), substance misuse disorders, dissociative identity disorder and related dissociative conditions, bulimia nervosa (and other eating disorders) and post-traumatic disorder (PTSD). These emotional, psychological injuries with their accompanying physiological response often last longest, sometimes up to years (Cohen, Deblinger, Mannarino & Steer 2004; Maniglio 2009; Fossati, Madeddu, & Maffei 1999) and yet they are the ones with the least attention in Zambia. Why is it least attended to? The researcher proposes that this is probably due to:
• Ignorance – people do not know that there are serious psychiatric and psychological complications that can result from such an experience that may have lifetime repercussions
• People know but underestimate the impact.
• People know but are not equipped to help. They are helpless and do not know where to refer for further assistance
• Other priorities. Lalor (2004, p. 3) puts it as “…competing social problems affecting children, such as war, disease, poverty, hunger and homelessness.”

The first two problems listed above are to be dealt with in this study.

1.1.2  Posttraumatic Stress Disorder (PTSD)

Of particular interest in this study, is PTSD, as an after effect of CSA. Several studies support the fact that PTSD can occur as a result of CSA or rape (Cohen, et al 2004; Sadock & Sadock 2007; McGill 2007; Murray, et al 2011, etc). PTSD is a psychiatric disorder which was only recognised in 1980 when it was included in DSM III (Scott & Stradling, 1992). “It is a condition marked by the development of symptoms after exposure to traumatic life events. The person reacts to this experience with fear and helplessness, persistently relives the event, and tries to avoid being reminded of it” (Sadock & Sadock 2007, p. 612). A diagnosis is only made when symptoms last for a month or more and when the symptoms themselves are severe enough to disrupt areas of a person’s life such as family, work and/or health. The trauma or traumatic life event (also called stressor) is an experience that is life threatening or overwhelming enough to affect any regular person such as a serious accident, rape, war, natural disaster, torture and so on. Reliving of the experience is through dreams or flash backs which are accompanied by autonomic hyper-arousal as though the person were re-experiencing the event again. As a result the person will try to avoid any reminders of the event (avoidance). Such a person may also experience anxiety, depression, poor concentration and cognitive difficulties.

PTSD was first noted in war victims. The estimated life time prevalence is 8 percent, though 5 to 15 percent may have subclinical presentations. The prevalence has ranged from 5 to 75 percent in high risk groups that have experienced traumatic events. The condition is most prevalent in young adults though it can present at any
age. Men tend to experience PTSD (5 to 6 percent) less than women (10 to 12 percent). The type of traumas they experienced, according to history, also tended to be different. For men, the traumatic events were usually combat related while for women it was usually physical or sexual assault related. As for children, it was proposed that it mostly occurred among children that were behaviourally inhibited. A few other important risk factors include duration, severity and proximity of an individual to the trauma, genetic predisposition, presence of other mental disorders (such as depression, anxiety, etc), recent stressful changes in life and history of childhood trauma.

Sadock & Sadock (2007, p. 615) further summarise PTSD diagnostic criteria as cited from Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Text revision (DSM IV TR) as below:

“A. The person has been exposed to a traumatic event in which both of the following were present:

1. The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
2. The person's response involved intense fear, helplessness, or horror. 
   Note: In children, this may be expressed instead by disorganized or agitated behaviour.

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.
2. Recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content.
3. Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children, trauma-specific re-enactment may occur.
4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
5. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:
   1. efforts to avoid thoughts, feelings, or conversations associated with the trauma
   2. efforts to avoid activities, places, or people that arouse recollections of the trauma
   3. inability to recall an important aspect of the trauma
   4. markedly diminished interest or participation in significant activities
   5. feeling of detachment or estrangement from others
   6. restricted range of affect (e.g., unable to have loving feelings)
   7. sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)

D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
   1. difficulty falling or staying asleep
   2. irritability or outbursts of anger
   3. difficulty concentrating
   4. hyper vigilance
   5. exaggerated startle response

E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.

F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

*Specify if:*

**Acute:** if duration of symptoms is less than 3 months

**Chronic:** if duration of symptoms is 3 months or more

*Specify if:
With delayed onset: if onset of symptoms is at least 6 months after the stressor"

1.2 Rationale

CSA is a major social and public health problem in Zambia. Of the 612 survivors who reported to the police facilities in a population council study that took place at police station (Keesbury, Zama, & Shreeniwas, 2009), over 49 percent of them were aged 14 and below. However, research in CSA in peer reviewed journals is rare south of the Sahara and mainly from South Africa (Murray, et al, 2001). Research on PTSD among sexually abused children is even less. Prevalence of PTSD in Zambia or at the CSA centre is not known and neither are the common characteristics in Zambia known. Most assistance available in Zambia focuses on medical management such as treatment of STIs, emergency contraception, etc. and do not include psychological or psychiatric assessment. It is inevitable that the magnitude of psychological and psychiatric complications arising from child sexual abuse be known in order to justify relevant interventions in management. No such study has ever been done. This study goes some way in closing this gap by focusing on PTSD, which is one of the common after effects of CSA on children. Presentation of findings will enhance knowledge in the area and possibly influence policy and practice.

1.3 Aim

To determine the prevalence and characteristics of PTSD among sexually abused children of the CSA Centre at the University Teaching Hospital (UTH), Zambia

1.4 Specific Objectives

- To determine the prevalence of PTSD among the CSA centre population
- To describe the characteristics of the CSA centre population in the study
- To describe CSA characteristics in the study population
- To identify common symptoms of PTSD seen among CSA centre children
1.5 Ethical Considerations

Assent was obtained first from all the child participants in the study before continuing with consent of the adults (Zambia National Health Research Act of 2103). Signed informed consent was, thereafter, obtained from all the parents/guardians of the child. The interviews took place in confidential rooms specially made for this purpose at the CSA centre.

There were no invasive procedures to be carried out on respondents. Participation in the study was purely voluntary and respondents were free to withdraw from the study (interview) at whichever point without negative consequences. All raw data records are currently secured in a locker to maintain confidentiality and processed data has codes for participants that cannot be linked to their identity. Participants were also allowed to take a break at any point during the testing process.

Children who were identified to have PTSD were referred for care at the CSA Centre where there are trained trauma counsellors. Those with severe PTSD were also referred to a psychiatrist for additional pharmacotherapy.

Submission to ERES Converge IRB was done for ethical clearance and approval of the project.
2 LITERATURE REVIEW

2.1 General Effects of Child Sexual Abuse

Hevey and Kenward (1989) reviewed various research work done in CSA and elaborately documented the physical and psychosocial effects.

Physical effects:

“range from reddening and soreness of the anal or vaginal opening through to bleeding, bruising, tearing and other forms of abrasion… in addition to injury, children who are sexually abused are vulnerable to sexually transmitted diseases…..and about 10 percent become pregnant. Some young children have been known to die as a direct result of the physical effects of sexual abuse, or of the panicked reactions of their abusers….” (Hevey & Kenward 1989, p. 212).

The authors noted that most physical harm healed without complications.

Psychosocial effects that Hevey and Kenward (1989) report from their findings include a wide range of emotion such as fear, anger, hostility, depression, guilt and shame. In the long term, depression was the most prevalent emotion. Accompanying behaviour may include listlessness, lethargy, bad posture, social withdrawal, truancy, irritability, poor attention, anxiety, aggression, running away from home, delinquent behaviour and may typically show inappropriate sexual behaviour. They also included psychosomatic symptoms which present as non-specific symptoms such as sleep disturbances, abdominal pains, headaches and exacerbation of pre-existing conditions like asthma, hives, eczema, etc. Hevey and Kenward (1989) also cited Tufts (1984) who found the most vulnerable age range being 7 – 13 with incidence as high as 40% being classified as seriously disturbed. As adults, CSA survivors may have relational problems when dating or in marriage and even in parenting which may cause them to distance themselves from their children. Hevey and Kenward (1989) also proposed several factors have been associated with a worse outcome on the psychological trauma such as:

- Multiple incidents – those that had several abuse incidents or had abuse occur longer
- Father figures – such as father, step father or guardian
- Multiple abusers – those that were abused by more than one person
- Use of force
- Male sex offender
- Age of perpetrator is older or with a bigger age gap than the victim
- Negative response to disclosure

Like other reviewers doing work in CSA (Davis & Siegel 2000; Dyregrov & Yule 2006), Hevey and Kenward (1989) recognised one challenge of doing a review being the various definitions of sexual abuse used in studies. They also noted that most of the data comes from clinical populations either undergoing therapy or referred for some major problem. “Large scale properly controlled research studies based on screening ‘normal’ populations for previous histories are few and far between and have separate problems to do with willingness to report and the length of time that may have elapsed since the abuse took place” (Hevey & Kenward 1989, p. 211). Even though this review was done years ago, this latter challenge is still applicable to current research work available. Similarly, our study uses a clinical population which brings its own limitations.

2.2 PTSD as an effect of CSA

Chivers-Wilson (2006) in the United States of America (USA), reviewed the psychological, biological and sociological factors and treatments regarding sexual assault and PTSD. Chivers-Wilson (2006) noted that the lifetime prevalence of PTSD among sexual assault survivors (50 percent) was a lot higher than the national prevalence of the disorder (7.8 percent). The author concluded that this was an indication that the then current therapies used for PTSD related to sexual assault were ineffective since PTSD is an example of a problem resulting from lack of full recovery. Chivers-Wilson (2006) argued that increased understanding and knowledge of psychological, biological and sociological domains of sexual assault trauma would help develop more effective treatment. The author thus goes in depth proposing that the Hypothalamic-Pituitary-Adrenal (HPA) axis dysregulation may explain the functional and structural abnormalities observed in PTSD symptoms. Different pharmacotherapies that intervene at different points in the pathophysiology were discussed. The psychology of PTSD and related cognitive factors were also discussed referring to treatments such as group therapy, psychodynamic therapy, cognitive behavioural therapy (CBT) and Eye Movement Desensitisation and
Reprocessing (EMDR) as effective and useful to many. The author concludes by stating that the psychological, biological and sociological treatments and impacts should not be mutually exclusive. Rather, the biopsychosocial approach is more effective in holistic treatment. This is certainly not the regular model of treatment of sexual assault victims in clinics and general hospitals in Zambia. The article is very informative, detailed and well researched.

In Sweden, researchers (Wijma, Soderquist, Bjorklund, & Wijma 2000) found an association between a presentation of unexplained chronic, pelvic pain and a history of abuse. This was in a prevalence study that was looking at PTSD in patients presenting in the gynaecological ward and prevalence of a history of physical or sexual abuse as separate events. The study also looked at whether a history of abuse and presence of PTSD affected frequency of clinic visits and general satisfaction with clinical care. A total of 694 participants were recruited to the study and divided into abused and non-abused based on reported history of abuse. Information concerning history of abuse (nature, intensity, frequency, duration, type of abuse, etc) and frequency and quality of health care visits (including patient satisfaction) were obtained using questionnaires. PTSD was assessed using the Traumatic Event Scale (TES). A hundred and seventy one (26 percent) of the patients had history of sexual and/or physical of abuse while 15 percent of these specifically had history of sexual abuse. Three-quarters of these 15 percent actually experienced this sexual abuse in childhood. Using DSM IV criteria, 17 percent of these 171 patients with abuse histories were diagnosed with PTSD. There was a relationship between a history of physical and sexual abuse in childhood and PTSD presence in the patients. Also, those that experienced the abuse both as children and as adults were more likely to develop PTSD but there was no relationship between PTSD and abuse in adulthood alone. Patients with PTSD had more visits at the hospital than those that had also had a history of abuse but did not have PTSD. There was significantly less satisfaction with medical services in the last clinic visit by those with PTSD than those without. The study concluded by implying that good clinical practice would involve, for those in obstetrics and gynaecology, asking about abuse history and screening for PTSD. Though this study was done in adults, it is interesting to note that abuse that occurred in childhood had a higher PTSD outcome than those whose abuse occurred in adulthood. One limitation of the study is reliance on childhood
accounts of abuse. Another limitation of the study, perhaps, was that the patient’s perspective about satisfaction with care may have been affected by asking about the abuse.

2.3 Characteristics of CSA

In a two year follow up study done on a clinical sample to determine the social and emotional outcomes of CSA in Turkey (Ozbaran, Erermis, Bukusoglu, Bildik, Tamar, Ercan, et al 2009), 20 children with a history of CSA were recruited. These participants consisted of 9 girls and 11 boys aged from 5 to 16 years. The study was done at a Turkish university hospital where these children were seen as severe or emergency forensic cases. Assessment and data collection were done through semi-structured interviews which were conducted by a child psychiatrist using DSM IV diagnostic criteria and the Child Behaviour Checklist (CBCL). Sixty percent of the participants were from nuclear families while the rest came from separated or divorced families. In addition, 60 percent of the participants had only one sexual abuse incident. All the abusers were male and related to the victims. The most common sexual abuse vaginal penetration (n = 6), followed by anal penetration (n = 5) whereas frottage, molestation and/or touching the genitals of the child and lastly, masturbating in front of the child or forcing the child to participate in masturbation was comparable (n = 3 in all three instances). Results show that at first psychiatric evaluation, 35 percent of the children had PTSD as commonest disorder. Also prevalent among these children was major depression (10 percent) and generalised anxiety disorder (10 percent). Children from the divorced/separated families had higher scores for behavioural problems. However the was no statistical significance between a psychiatric diagnosis and type or classification of sexual abuse, duration of abuse and socio-demographic details. Following the two year period of treatment, none of the children had any PTSD or psychiatric diagnosis. A limitation of the study was the small sample size which could have further affected the lack of significance in the named associations above. The study population in this case is that of severe cases of sexual abuse or emergency forensic cases. It is not clear what is considered severe. These participants may not be comparable to our study in that regard.

Wolfe, Sas & Wekerle (1994) in Canada did a study to determine factors associated with the development of PTSD among victims of CSA. The sample (n = 90) was
recruited from a child witness preparation programme. It consisted of 21 males and 69 females and the mean age was 12.4 years. Almost all the offenders were known to the child (91.1 percent) with the most frequent offender being non-family members (including baby sitters, neighbours, teachers, etc). The most frequent relative offender was the father or step-father (25.6 percent). Over half (51.2 percent) the children reported use of force or threats as the coercion used. Regarding sexual abuse characteristics, 52.2 percent reported sexual touching that included masturbation and fondling of genitals, a third experienced vaginal, oral or anal intercourse with the perpetrator, 10 percent had simulated or attempted and indecent exposure was reported in the remaining 3.3 percent. Regarding frequency of sexual abuse, 44.7 percent of the children that reported a history of only one incident while 15.3 percent were in the highest frequency bracket (incidences over 20 times). Assessment of PTSD was done using a 10-item checklist based on DSM III R. The most frequent symptoms were those of avoidance. The PTSD prevalence in this study was high (48.9 percent). This is higher than most studies or the previous study we just looked at (Ozbaran, et al, 2009). It is possibly because the study population was mainly children who were in the middle of police investigations (86 percent were police referrals) to lay charges against the perpetrators. Laying a charge itself may be indicative of the severity of the abuse or the process of it, through the various systems, may cause re-traumatisation. Results also showed that female gender, age below 12 years, duration of abuse more than a year and use of force or threats as coercion were significantly likely to be diagnosed with PTSD. Limitation of this study is that assessment was done with a non-standardised tool. In our study, the CPSS, which is a validated and standardised tool was used to assess for PTSD.

2.4 Southern-African Studies

In South Africa, Suliman, Kaminer and Seedat (2005) reviewed PTSD and trauma assessment tools and studies for children and adolescents that were in current use in South Africa at the time. Their review showed that trauma exposure rates in adolescents and children in South Africa ranged from 40 percent to 100 percent while PTSD rates ranged from 6 percent to 22 percent. Suliman, Kaminer and Seedat (2005) also recognised the difficulty in comparing studies because of the different assessment techniques and methodologies. This study gives a lot of helpful information because it was done in SSA. The study focuses on PTSD in the general
population of children and adolescents as opposed to our study that is specifically on sexual assault victims. Though this study was done in sub-Saharan Africa, it was not carried out in a developing country and was done in a culture different from Zambia. The PTSD prevalence rate in Zambia in the general population may not be comparable but a South African study is the closest similarity to Zambia compared to the others above. It is useful to note the highest prevalence rates were among sexual assault victims in females.

In South Africa again, specifically, Cape Town, Jasson (2009) looked at the prevalence of PTSD among persons with intellectual disability in mixed population of adults and children and compared those with intellectual disability and had history of sexual assault. There were 27 participants in each of the two groups all from the Cape Mental Health Society. The Child PTSD Checklist was used to assess PTSD in participants and DSM-IV TR to obtain information from caregivers. Jasson (2009) found that there were more PTSD symptoms and a higher rate of PTSD diagnosis among those that had a history of sexual assault. There was no significant difference in PTSD diagnosis when the symptoms were either self-reported or care-giver reported. Jasson (2009)’s study is comparable to the study to be under-taken because it is one of the few studies in SSA looking at sexual abuse and PTSD. The results may not be comparable because the age range in her study was not restricted to children and the population was one which had intellectual disability as the primary characteristic in common. However, the principle that sexual assault is related to increased prevalence of PTSD may be generalizable to the study in question.

In another Cape Town study in South Africa (Matthews, Abrahams & Jewkes, 2013) aimed at exploring mental health adjustment of children Post sexual assault in South Africa, 30 children from two sexual assault centres were followed up in a four to five month period in which three separate interviews were conducted on child and caregiver alike. Children’s adjustment post sexual assault was assessed using activity-based worksheets adapted from standardised scales that have been used in various South African studies. Depressive, anxious and PTSD symptomatology was assessed using the Child Depression Inventory form, Children’s Manifest Anxious Scale and Child PTSD Checklist respectively. The PTSD symptoms were categorised as re-experiencing, hyper-arousal and avoidance based on the DSM IV criteria. Care-seeking behaviour, circumstances of the sexual abuse, responses from
the police and the caregiver’s perception were obtained using semi-structured interviews. Matthews, Abrahams and Jewkes (2013) focused on girls and considered an age range of 8 to 15 years. The mean age was 13.5 years old. The perpetrator was known to the client 73 percent of the time with the most frequent being an acquaintance. In 26 (87 percent) of the children, the abuse incident had occurred only once. In the initial assessment, depressive and anxious symptomatology were found in about a third and half of the children respectively. PTSD had the highest prevalence with about two-thirds of the children showing full symptoms and 29 percent showing partial symptomatology. At third interview (following treatment), there was a significant decrease in depressive and anxious symptomatology (to 13 percent and 23.3 percent respectively) but PTSD symptomatology remained virtually unchanged. The study supports reports that the likelihood of developing PTSD post sexual is higher than with other types of traumatic experiences. Findings also suggest that the parent or guardian support is essential in the recovery process of the victims. Results also imply that there are inadequacies in the current care system at the two centres. The main limitation of this study is the small population size although doing a study to such depth and follow up can be challenging to achieve with large numbers. Of note is that they excluded those participants that stated that the intercourse was consensual and those with learning disabilities. This exclusion was not done in our study.

2.5 Zambia Studies

In Zambia, scanty data was available for both child sexual abuse and much less for PTSD. One of the few studies available relating to sexual abuse was one done to model integrated care for rape and defilement (Keesbury, Zama & Shreeniwas, 2009). The study focused on having police give emergency contraceptive (EC) pills to survivors of sexual assault. Policemen at the VSU were trained to give EC which gives protection within 120 hours of intercourse. There were 5 Copperbelt police stations identified for this study. At a Ndola police station, from 2006 to 2008, 49 percent of the sexual abuse victims were less than 14 years of age while and 85 percent were less than 19 years of age. Following this intervention, there was a 95 percent increase in referrals to the hospital, 45 percent increase in incident reporting at the station from the community. One reason a respondent proposed for this increment was that the community realised that there was actually help being
received after reporting at the station. Interestingly, the emphasis on the model care is on the integrated approach which is multi-disciplinary. However, emphasis is on HIV transmission and pregnancy. It may have been beyond the scope of this study that little mention is made of the psychological trauma that may even need lifelong care.

Another study (Mbagaya, Oburu and Bakermans-Kranenburg, 2013) that gives some information on posttraumatic stress symptoms in Zambia was a multicentre study done in Zambia, Kenya and the Netherlands that looked at how Posttraumatic stress symptoms (PTSS) mediate the relationship between childhood maltreatment and symptoms of psychopathology. The study targeted university students totalling 862 with 182 from Zambia, 375 from Kenya and 305 from the Netherlands. The study design was a retrospective cross-sectional study and data collection was done using standard questionnaires. Aside from the questionnaire used to collect demographic details, the Personal and Relationship Profile (PRP) was used to collect child physical abuse history and neglect history. The PRP was also used to assess for the following psychopathologies considered in this study: criminal tendencies, borderline personality symptoms, depressive symptoms and PTSS. Results showed prevalence of child physical abuse for Zambia, Kenya and Netherlands as 40 percent, 42 percent and 3 percent respectively with neglect prevailing at 59 percent, 54 percent and 42 percent respectively. The odds of physical abuse in Kenya and Zambia were much higher than Netherlands. Bivariate analysis also showed those that scored high on physical abuse also scored high on neglect. There was a significant association between neglect and all the psychopathological symptoms being investigated in this study in the Kenyan population while it only accounted for higher scores on the borderline personality symptoms and depression scale for Zambia. For the Dutch sample, there was a relationship between higher scores in borderline personality symptoms, depressive symptoms and criminal tendencies and neglect. Neglect prevalence was high in both Zambian and Kenyan samples but was not associated with PTSS as much as the Dutch sample. This may be due to cultural concept of what is expected by the students from their guardians or parents. In the Zambian and Kenyan samples, the main psychopathology that was associated with physical abuse was criminal tendencies. PTSS was chosen to be a mediator between neglect and child abuse on one hand and psychopathological symptoms on the other because PTSS has been seen to arise following trauma on one hand and on the other.
hand, PTSS has also been seen to affect the social and psychological functioning of a person. PTSS was seen to mediate physical abuse and psychopathology almost consistently in the Kenyan and Dutch population but not in the Zambian population. It was not clear why the Zambian picture was different. Research needs to be done. Also, PTSS mediated the association between neglect and psychopathological sequelae in the Netherlands but not in Zambia and Kenya. The prevalence of PTSS was not presented in the article explaining this study. It would have been interesting to compare it with our study.

Most relevantly, a study (Familiar, Murray, Gross, Skavenski, Jere & Bass 2014) was done in Lusaka and Kafue in Zambia to describe the PTSD symptom profile and exposure to traumatic experiences of orphan and vulnerable children. It had 343 participants recruited through the Catholic Relief Services HIV palliative care programmes. The UCLA Child Posttraumatic Stress Disorder – Reaction Index (PTSD-RI) was used to collect trauma and posttraumatic distress history. This tool initially had 20 trauma related symptoms but was locally adapted and validated (Murray, et al 2011) resulting in an additional 38 items. The age range was from 5 to 18 years old with a mean age of 11.9 years and females comprising 53.1 percent. The average number of various traumas in the study population was 4.17. The frequency of the traumas was similar between the sexes except that significantly more males gave a history of having been in an accident. The prevalence of PTSD in this study was 58.9%. Adolescents were more likely to have more severe PTSD than the younger children but the difference was not statistically significant. The mean number of reported trauma related symptoms was 15.9 with comparable results between sexes and ages. The number of traumas a child had experienced did not significantly predict the severity of PTSD. The study also showed symptomatology of PTSD being a continuous construct. The Familiar, et al (2014) study will be helpful in comparing with PTSD findings in our study since the population is also Zambian children with a similar culture as our study. It is also a very recent study.
3 **Methodology**

3.1 **Study Design**

Cross-sectional study (descriptive type)

3.2 **Study Site**

The location of the study was in Lusaka, Zambia at UTH, CSA centre. The CSA centre, also known as the ‘One Stop Centre’ is housed in the Paediatric Centre of Excellence (PCOE) building in a place considered to have minimal foot traffic. It was established on 26th April, 2006 with the aim of improving care of child victims of sexual abuse as a result of a consultative process that comprised of clinical heads of departments and relevant professionals (health workers, psychosocial counsellors, police, lawyers and media) that had identified care gaps (Chomba, Murray, Kautzman, Haworth, Kasese-Bota, Kankasa, et al, 2010). Care for the victims is thus multi-disciplinary in nature and the centre is equipped with various resources such as a one-way mirror interview room to minimise on presence of other service workers such as the police and counsellors who may take notes from the observation room. Because of the shortage of doctors, the centre is managed by a clinical officer trained in medical and forensic examination although two doctors are constantly consulted. The two doctors also deal with court cases and complicated cases. The centre, in addition, has a female police officer, a social worker and three nurses that work there.

The centre receives about a hundred cases each month. For example, for three months for the period May to July, 2014, they had received 109, 100 and 84 patients respectively. From August, 2013 to July, 2014 (which constitutes a year), 1225 children were seen, 19 percent aged five years and below. Most of the children (59 percent) were aged from 11 to 15 years.

3.3 **Participants**

**Inclusion Criteria**

Children aged 4 to 15. Only children aged seven years and above had the diagnostic tool directly administered to them (Appendix C). Those below seven years were assessed through the caregiver’s diagnostic tool (Appendix D).
Exclusion criteria: Those below four years old because assessment tool only applied to those four years and above. The upper limit excluded those 16 years and above. This is because the age cut off for patients seen at the CSA was as per definition of ‘child’ according to the Laws of Zambia which considers only those below 16 years (Act No. 15 of 2005).

3.4 Sample size

The ideal sample size was 246 as calculated using Open Epi version 2 formula at an estimated prevalence of 20%, 95% confidence levels and precision of +/-5%. Using the manual calculation, the sample size was 245.75. Note the equation used for the manual calculation below:

\[
N = \frac{Z^2 \times P(1-P)}{d^2}
\]

where N= Sample required

\(Z= \) Z statistic (usually 1.96)

\(P = \) the expected prevalence (conservative 0.2)

\(d = \) acceptable accuracy range (+/- 0.05)

This formula was used to calculate sample size in this study because it is ideal for an unmatched cohort (Hulley, Cunnings, Browner, Grady and Newman, 2007)

3.5 Sampling Method.

Convenient sampling was used. Whichever client that met the inclusion criteria and accepted to be in the study was recruited. The process is illustrated in figure 1 below.

*Figure 1: Sampling process*

Figure showing the sampling process and the final sample size in the study.
Of the 246 participants required for the study, only 209 (85 percent) were recruited despite adding an extra 60 percent of time allocated for data collection. The challenge in attaining the targeted sample size was that despite the actual number of children who went to the child sexual abuse centre being in the period of interest being 875 (A. phase in figure 1. above), only 768 (B. phase in figure 1. above) were aged from 4 to 15. Out of these 768 potential participants of the study, 248 (32.2 percent) are the only ones that honoured their one month reviews (C. phase in figure 1). It was not possible recruit all the participants because some declined, while sometimes the clinic was too busy for the nurses to recruit people for the study. Furthermore, nine percent of the 209 records (D. phase in figure 1.) had to be dropped out because their hospital records were incomplete and lacked vital information required for analysis in this study. The total population used for analysis in this report stands at 192 (Phase E in figure 1. above).

3.6 Data Management

Data collection tools: CPSS (Appendix C and Appendix D), CSA centre records (Appendix E and F). The CSA centre records included all relevant demographic information and additional information relating to the abuse. Hence, there was no need for any additional questionnaire (See Appendices listed above).

The Child PTSD Symptom Scale (CPSS)

The CPSS is a 24 item scale used to measure PTSD severity in children. There is a self-report version for children aged 7 to 18 years and a care –giver version for those aged four to six years. The CPSS has 17 items that correspond to DSM-IV symptoms. Self-report may take 10 minutes (Foa, Johnson, Feeny & Treadwell, 2001) while administration by therapist or clinician may take about 20 minutes (Foa, et al, 2001). From a cut-off of 10, higher scores indicate greater functional impairment.

Following its use on school age children who survived the 1994 Northridge, California earthquake, the psychometric properties showed test-retest reliability, high internal consistency and high convergent validity (Foa, et al, 2001).
Khort, Jordans, Toll, Luitel, Maharjan and Upadhaya (2011) tested the CPSS among children in Nepal and found that it showed good psychometric properties (AUC = 0.77, sensitivity = 0.68, specificity = 0.73, cut-off score ≥ 20). Items that showed significant discriminant validity include flashbacks (CPSS.3), nightmares (CPSS.2), traumatic amnesia (CPSS.8), easily irritated at small matters (CPSS.14), and feelings of a foreshortened future (CPSS.12). In conclusion, the CPSS showed cross-cultural validity. This is especially cost-effective.

Variables

Dependent Variable: PTSD

Independent Variables:

Social demographic variables
- Age
- Sex
- Education
- Orphan status

Sexual Abuse Variables
- Presenting complaint
- Coercion used
- Abuser
- Abuse characteristics

PTSD variables
- Functional impairment
- History of other trauma
- Symptoms of PTSD

Data Analysis.

Excel windows 8 version was used to process data to produce descriptive statistics on demographic characteristics. This was a one way analysis to show distribution for each variable. Since the study population did not show a normal distribution curve for age, the age is summarised using the median and interquartile range. The categorical variables have been presented with percentages and numbers.
Using STATA, a two way analysis was used to look for associations between PTSD and exposures of interest. The chi square test was used to assess group differences for categorical variables. Final analysis was done using the multivariate logistic regression.

**Data Quality Assurance**

The CPSS tool selected has been tested for both construct and content validity in cross cultural settings (Khort, et al, 2011). It is also available in both Nyanja and Bemba versions. The staff that were collecting data were trained in interviewing children and were the very staff at the CSA centre who are familiar with dealing with children. They are also trained in trauma focused counselling specifically for children so that where need arose for any client to obtain services following assessment it was given. The CPSS was administered to the client even though they could read to guarantee uniformity.

Potential sources of bias that were identified are listed below with possible solutions:

- **Observer bias.** Eliminated by use of CSA centre staff who were competent to administer the tool and also by use of a screening tool as opposed to clinical criteria for diagnosis of PTSD using the DSM IV.
- **Instrument bias** reduced by translation into Bemba and Nyanja and by using a tool with both construct and content validity.
- **Subject bias** may have occurred because of difficulty in reporting, presence of guardian, exaggeration in view of litigation, etc. Also, those that come for one month review might have been different from those that did not. This is only a possible source.

A potential source of confounding is that those that may be involved in ‘child play’ may not be separable from those abused by peers. That is to say, those that were involved in sexual activity with another minor or teenager who does not necessarily qualify to be called a child (16 years and over) according to the laws of Zambia were not excluded. Also, older adolescents who were willing participants in intercourse were also included in the study. Some of these adolescents end up in the study because their parents/guardians brought them to the CSA centre forcibly after knowledge of their sexual activities. Those that have
experienced other sources of trauma are already identified at the CSA through questionnaires unless they withheld the information

3.7 Procedure

All participants were recruited at their one month appointment. That meant, at the start of the study, all those that fitted the criteria and were coming in for their one month reviews were potential participants to be recruited. Those who were presenting at the centre within the period of the research were given one month appointments as regular appointments and called within the week of their review date as a reminder. At the end of their regular review, they were invited to participate in the study.

Two members of staff at the CSA centre who handle their regular in-takes were trained on how to administer the test. Both members have been trained in trauma focused cognitive behavioural therapy (TF-CBT) and were equipped to handle further care once a child with PTSD was been identified. This is already in their line of work. The members of staff had prior experience in administering PTSD tests as they had participated in a 38-Item test (Murray et al, 2011) in the recent past and also administered the test. The same staff were responsible for the regular identification of children that needed TF-CBT.

3.8 Study Duration

Table 1: Study Duration

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<td>Data collection</td>
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<td>Data analysis</td>
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<td>Dissertation write-up &amp; review</td>
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<td>Submit final dissertation</td>
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4 RESULTS

4.1 Study Population

The study population was 192. Figure 2 below shows the age distribution of the population. It can be seen that 49 percent of the population were teenagers with the highest age population contribution coming from those aged 15 (21 percent) and the lowest being those aged six (three percent). There were only three boys in the population aged 5, 12 and 14 (Figure 3) that represented two percent of the population. The mean age of the study population was 11 years. The population was not normally distributed as expected because there was a lower limit cut off (4 year and above) and an upper limit cut off (below 16 years). The median age was 13 years with an interquartile range of 8 and 14.

Over half of the children were of primary level education (53 percent) and 28 children were of pre-school level (Figure 4). The children that were double orphaned were seven percent while three quarters of the children had both parents (Figure 5). The mother accompanied the child in half the instances (Figure 6) while the aunt was the next most frequent person that accompanied the child.

![Age Distribution](image_url)

*Figure 2: Age Distribution*
**Figure 3: Gender Distribution**

**Figure 4: Level of Education**
Figure 5: Parent Status

Figure 5 shows children’s parent status, whether orphaned or not.

Care Giver Relationship to Child

Figure 6: Care giver Relationship to Child

Figure 6 shows the relationship of the caregiver who took the child to the CSA centre to the child.

The care giver that accompanied the child is also the person that most likely gave information on behalf of the child (caregiver information) on the PTSD and trauma screens. The child was likely accompanied by the mother one in two times (Figure
Results show that 82 percent of the caregivers that accompanied the children were living with the child at the time of the abuse (Figure 7).

Figure 7: Caregiver Living Status at time of Abuse

Figure 7 shows the percentage of caregivers that were living with the child at the time of abuse.

Almost all the referrals were from the police station (Figure 8). These constituted ninety eight percent of the data obtained.

Figure 8: Referral Distribution

Figure 8 shows the referral pattern.
4.2 Characteristics of Sexual Abuse

The results of this study showed that in all the cases established, the abusers were males, and it was noted that neighbours (24 percent) and boyfriends (20 percent) were the common persons identified (Figure 9). However, cases of incest (14 percent) were reported in which uncles were the commonest perpetrators. Penile penetration was commonly reported at 69 percent of the cases (Figure 10) and only five percent of the victims reported condom use. Apart from penile penetration, the next two commonest features of the abuse was that they allowed the victim to see them naked (58 percent) and that object or finger penetration was also done (49 percent). Most of the clients were abused at least twice (Figure 11). The population with at least two incidents of sexual abuse made almost half of the whole study population.

*Figure 9: Abuser Statistics*

*Figure showing the abusers identified in the study*
Figure 10: Abuse Characteristics

Figure 10 shows the frequency of the different modes of the sexual abuse.

No. Times Abused by Same Abuser

Figure 11: Frequency of Abuse – Same Abuser

Figure 11 shows abuse incidents.

Findings further show that 58 percent of the children presented within 72 hours since the last abuse (Figure 12). In 84 of the cases, physical force was used to achieve submission (Figure 13) followed by gentle coaxing. The most frequently given complaint at the time of first presentation is genital pain although half children did not have any presenting complaint (Figure 14).
Figure 12: Abuse reported within 72 hours of Last Occurrence

Figure 12 shows percentage of abuse incidences that occurred within 72 hours.

Figure 13: Abuser Methods of Engagement

Figure 13 shows coercion used by the perpetrator to achieve submission of the child.
Figure 14: Presenting Complaint

Figure 14 shows the presenting complaint at first presentation at CSA centre.
4.3 Posttraumatic Stress Disorder

The prevalence of PTSD was found to be 32 percent (Figure 15) with higher prevalence being among the teenagers (Table 2) although the association was not statistically significant on further analysis (Table 3). The mean age for the three boys was 11 and none of them had PTSD (Table 2). The most common symptom of PTSD was an avoidance symptom in which the child avoided activities, people or places that reminded them of the event. The least common was that of being easily startled (Figure 16). The PTSD symptoms from the CPSS were later classified into clusters based on the DSM IV TR i.e. avoidance, re-experiencing and hyper-arousal for the purpose of analysis in this study. Results showed an associated between the presence of re-experiencing and hyper-arousal and the development of PTSD in the victim (Table 3). There were no children that had developed PTSD that did not have avoidance symptoms.

![CPSS - Score Distribution](image)

*Figure 15: Child PTSD Score Distribution*

*Figure showing prevalence of PTSD*
Figure 16: Child PTSD Symptoms - global

Figure showing symptom pattern in the whole study population (both those that ended up with PTSD and those that did not) where the key is as follows:

<table>
<thead>
<tr>
<th></th>
<th>upsetting thoughts/images</th>
<th>avoid activities people/places that remind about event</th>
<th>trouble falling or staying asleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>bad dreams/nightmares</td>
<td>forgetting important part of the event</td>
<td>irritable/fits of anger</td>
</tr>
<tr>
<td>S2</td>
<td>feeling like event was recurring</td>
<td>reduced interest in doing things</td>
<td>trouble concentrating</td>
</tr>
<tr>
<td>S3</td>
<td>upset when you remember</td>
<td>feeling distant from people around</td>
<td>overly careful</td>
</tr>
<tr>
<td>S4</td>
<td>physiological feelings when you remember</td>
<td>inability to experience strong feeling</td>
<td>jumpy/easily startled</td>
</tr>
<tr>
<td>S5</td>
<td>avoid thinking/talking/feelings about event</td>
<td>feeling negative about future plans/hopes</td>
<td></td>
</tr>
</tbody>
</table>

Figure 17 below show the results of the trauma screen in the participants. Although the participants who had PTSD scored their traumatic experiences with greater intensity, the frequency pattern with those who did not have PTSD was similar. The two most frequent traumatic experiences the children listed are having their private parts touched and being forced to have sex. The traumatic events were classified into four groups, namely accidental injury/natural disaster (S1, S2, S10), observed violence (S6, S7, S12, S14), experienced violence (S3, S4, S5, S13) and sexual abuse (S8, S9) for the purpose of further analysis. There was no association between PTSD diagnosis and all the first three listed groups of trauma types but all the children who had PTSD had a history of sexual trauma. Approximately 10 percent of the participants did not report sexual abuse in their history (Figure 17).
Figure 17: Traumatic Events

Figure showing a list of traumatic events that were screened for in the participants and frequency of their occurrence in their lives where:

<table>
<thead>
<tr>
<th></th>
<th>Natural disaster</th>
<th>Observed family violence</th>
<th>Attacked</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td>Serious accident/injury</td>
<td>Observed community violence</td>
<td>Seeing someone attacked</td>
</tr>
<tr>
<td>E3</td>
<td>Robbed by threat</td>
<td>Private parts touched</td>
<td>Scary medical procedure,</td>
</tr>
<tr>
<td>E4</td>
<td>Experienced family violence</td>
<td>Forced/pressured sex</td>
<td>War</td>
</tr>
<tr>
<td>E5</td>
<td>Experienced community violence</td>
<td>Seeing sudden/violet death</td>
<td>Other</td>
</tr>
<tr>
<td>E6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E10</td>
<td></td>
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<td></td>
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<tr>
<td>E11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Seventeen percent of the children did not have any form of functional impairment (Figure 18). Despite the prevalence being at 32 percent, the level of impairment seems to have been higher than the prevalence. Those that had severe and moderate impairment in functionality were more likely to end up with a PTSD (Table 3). The most frequent area of functional impairment was that of general happiness and the least was in the area of saying prayers (Figure 19). In the preliminary analysis, there was an association between PTSD and older age of the children. Further analysis, however, did not show this association (Table 3).
Figure 18: Degree of Functional Impairment

Figure 21 shows the functional impairment pattern of the participants where severe refers to a score of 5 to 7, moderate is 3 to 4 and mild is 1 to 2.

Figure 19: Functional Impairment - Global

Figure showing the frequency areas of functional impairment in the group with PTSD.
Table 2: PTSD and Non-PTSD Comparison

<table>
<thead>
<tr>
<th>Variable</th>
<th>PTSD negative (n = 128)</th>
<th>PTSD positive (n = 64)</th>
<th>$X^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>0</td>
<td>1.52</td>
</tr>
<tr>
<td>Female</td>
<td>125</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger (4 – 7 years)</td>
<td>35</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Older (8 – 12 years)</td>
<td>29</td>
<td>19</td>
<td>11.49</td>
</tr>
<tr>
<td>Adolescent (13 – 15 years)</td>
<td>57</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Unspecified</td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in school</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Preschool</td>
<td>26</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>61</td>
<td>40</td>
<td>10.00</td>
</tr>
<tr>
<td>Secondary</td>
<td>26</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Never been to school</td>
<td>10</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Orphaned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not orphaned</td>
<td>98</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>19</td>
<td>12</td>
<td>3.63</td>
</tr>
<tr>
<td>Double</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Unspecified</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Coercion used</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Force</td>
<td>61</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Not used/Unspecified</td>
<td>67</td>
<td>26</td>
<td>2.35</td>
</tr>
<tr>
<td>Playful Coaxing</td>
<td>30</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Not used/Unspecified</td>
<td>98</td>
<td>48</td>
<td>0.06</td>
</tr>
<tr>
<td>Presenting complaint</td>
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<td></td>
</tr>
<tr>
<td>Given</td>
<td>59</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Not given</td>
<td>69</td>
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<td>Traumatic Events</td>
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<tr>
<td>Accidental injury</td>
<td>7</td>
<td>8</td>
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</tr>
<tr>
<td>Not exposed</td>
<td>121</td>
<td>56</td>
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</tr>
<tr>
<td>Observed attack/injury</td>
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<td>32</td>
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</tr>
<tr>
<td>Not exposed</td>
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<tr>
<td>Experienced attack/injury</td>
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<td>14</td>
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<tr>
<td>Not exposed</td>
<td>106</td>
<td>50</td>
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<tr>
<td>Sexual abuse</td>
<td>116</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Not exposed</td>
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<td>0</td>
<td>6.40</td>
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<td>PTSD Symptoms</td>
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<tr>
<td>Re-experiencing</td>
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<td>63</td>
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<tr>
<td>Not present</td>
<td>65</td>
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<td>45.81*</td>
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<tr>
<td>Avoidance</td>
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<td>64</td>
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<tr>
<td>Not present</td>
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<td>17.78</td>
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<tr>
<td>Autonomic hyper-arousal</td>
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<tr>
<td>Not present</td>
<td>82</td>
<td>5</td>
<td>54.48*</td>
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<tr>
<td>Functional Impairment</td>
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<tr>
<td>None (0)</td>
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</tr>
<tr>
<td>Mild (1-2)</td>
<td>60</td>
<td>16</td>
<td>31.08*</td>
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<tr>
<td>Moderate (3-4)</td>
<td>36</td>
<td>35</td>
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</tr>
<tr>
<td>Severe (5-7)</td>
<td>7</td>
<td>12</td>
<td></td>
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</tbody>
</table>

* $p < 0.05$
* $p \leq 0.001$

Table showing comparison of demographic, sexual abuse and PTSD characteristics between the PTSD group and the Non-PTSD group
<table>
<thead>
<tr>
<th>Category</th>
<th>Crude Odds Ratio</th>
<th>Crude P value</th>
<th>Adjusted Odds Ratio</th>
<th>Adjusted P Value</th>
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<td></td>
<td></td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>3.28</td>
<td>0.020</td>
<td>2.07</td>
<td>0.269</td>
</tr>
<tr>
<td>2</td>
<td>3.33</td>
<td>0.009</td>
<td>2.74</td>
<td>0.100</td>
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<td><strong>Education</strong></td>
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<td>-</td>
<td>-</td>
</tr>
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<td>1</td>
<td>3.58</td>
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</tr>
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<td>0.578</td>
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<td><strong>Orphaned</strong></td>
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<td></td>
</tr>
<tr>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>1.47</td>
<td>0.347</td>
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<td>2</td>
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<td>9</td>
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<tr>
<td><strong>Force</strong></td>
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<td></td>
</tr>
<tr>
<td>-</td>
<td>1.61</td>
<td>0.127</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Playful</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>-</td>
<td>1.09</td>
<td>0.918</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Presenting complaint</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1.03</td>
<td>0.980</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Accidental</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>2.46</td>
<td>0.095</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Observed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1.00</td>
<td>1.000</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Experienced</strong></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>-</td>
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<td>0.434</td>
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<td></td>
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<tr>
<td>-</td>
<td>64</td>
<td>0.000</td>
<td>36.7</td>
<td>0.001</td>
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<tr>
<td><strong>Arousal</strong></td>
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<td></td>
<td></td>
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<tr>
<td>-</td>
<td>21.03</td>
<td>0.000</td>
<td>12.30</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Impairment</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>6.67</td>
<td>0.056</td>
<td>5.27</td>
<td>0.160</td>
</tr>
<tr>
<td>2</td>
<td>24.31</td>
<td>0.002</td>
<td>13.58</td>
<td>0.025</td>
</tr>
<tr>
<td>3</td>
<td>42.86</td>
<td>0.001</td>
<td>30.58</td>
<td>0.009</td>
</tr>
</tbody>
</table>

NB. Where category for Age group, 0 = 4-7 years, 1 = 8-12 years and 2=13-15 years, for Education levels, 0 = Not in school, 1 = preschool, 2 = primary, 3 = secondary and 4 = never been to school, for Orphaned, 0 = not orphaned, 1 = single orphan, 2 = double orphan and 9 = unspecified, and for Impairment 0 = none, 1 = mild, 2 = moderate and 3 = severe
5 DISCUSSION

5.1 Summary of Key Findings

The prevalence of PTSD was 33.3 percent with 9 percent of children presenting with severe impairment. Almost half of the study population consisted of teenagers with a median age of 13. Ninety-eight percent of the cases referred to the CSA centre were referred by the police. All abusers were males with the most frequent abusers being neighbours, boyfriends and non-relative adults. Most of the abuse involved penile penetration and unfortunately, condom use was only reported once in five percent of the cases. Physical Force was the main mode used to engage the children in sexual intercourse. There was a positive association between the diagnosis of PTSD and the presence of re-experiencing and hyper-arousal set of symptoms. All the children who had PTSD had avoidance symptoms. PTSD diagnosis was also associated with severity of functional impairment.

5.2 Participants

The CSA centre study population was characterised by female children and only three boys making up two percent of the study population. This is significantly low compared to other studies. For example, in Barth, et al (2012)’s review of 55 studies from 24 countries, the estimated prevalence range for CSA for boys was 3 to 17 percent and 8 to 13 percent for girls. This would entail an approximate 30 percent representation of males in the CSA centre study population. Other studies have also had higher numbers of males in their studies (Ozbaran, et al, 2009; Wolfe, et al, 1994). The assumption for this low representation could be that Zambia is a male dominant heterosexual society and as such sodomy maybe rare since it is also an offence liable to imprisonment according to the laws of the country (Act No. 15 of 2005). It may also be that boys may not come forth or be brought forth because of the associated shame. The idea of male dominance can also be supported by the fact that all the abusers in the study were males. A study in Turkey (Ozbaran, et al 2009) also showed a similar trend (i.e. all abusers being male) regardless of the sample size.
of 20. In America, a study done in California, with most of the perpetrators being males (91.7 percent), showed that there was still a small number of female perpetrators (8.3 percent) (Negriff, Schneiderman, Smith, Schreyer & Tricket, 2014).

About half of the study population consisted of teenagers. This finding relates very well with results that showed that the 20 percent of the abusers were boyfriends. In a number of cases, the teenagers were unwilling to give detailed information about their abusers because they had consensual sexual intercourse and feared legal implications on their boyfriends. This could be attributed to the fact that in some instances the caregivers were the ones that reported the abuse and therefore the evidence was scanty. This occurrence is comparable with a study done in South Africa (Matthews, Abrahams & Jewkes). Their study had a much smaller sample size (30) and a narrower age range of participants (8 to 15 years) in comparison to our study.

The ZDHS report showed that children with primary level education (22 percent) were more likely to be sexually abused than those who had not been to school (14 percent). In the current study, 53 percent of the participants were in primary school which is more than double the ZDHS results while those that had never been to school were seven percent. A possible reason for this variation is that the children in this study may have had more psychosocial support than the children in the ZDHS study. The proposal that those of primary level of education were more likely to be abused was not statistically significant in our study.

Only six percent of the study population were double orphans. This finding is contrary to literature that states that the absence of one or both parents comes with an increased risk of sexual abuse (Ozbaran, et al, 2009). The proposed explanation for this picture in our study is that only the children with good social support such as both parents made it to this point in the journey. Since almost all the referrals were from the police (98 percent), the basic process that a child went through is illustrated in Figure 19 below:
In figure (20) above, each of those five points after the sexual abuse were potential drop out points for the victim. The assumption is that only a child with good social support could go through with this process, i.e. end up at the CSA centre and return for their one month reviews up to the point of recruitment into the study. In support of this assumption, in half of the reporting instances, these children were accompanied by their biological mother. Good social support helps to both cushion the trauma (probably less PTSD) and complete the process of follow up at the CSA centre thus increasing likelihood of recruitment in the study. Capturing a wider diversity of clients would perhaps have entailed recruitment at community centres, community health centres or school counsellor offices.

The results of this study seem to suggest that the Police are the first responders in cases of CSA. This assumption may further be supported by the fact that less than one percent of the cases were referred to the CSA by a medical facility or doctor and only one person was referred directly from the community by a care giver or parent. This finding is consistent with a Zambian study done in Ndola (Keesbury, Zama & Shreeniwas, 2009) where 91 percent of the sexual abuse victims first reported to the police. The findings are vital in planning integrated care as was demonstrated by the Keesbury, et al (2009) study. The Keesbury, et al (2009) study further shows that less than half of those that reported to the police followed through and later reported at a health facility. It would be worthwhile to investigate whether a police station is indeed a primary reporting site following disclosure in a home (or otherwise). Considering that Zambia is a religious community, the Church may also be a first
respondent in CSA. If the Police station is not the primary reporting site, it would be important to bridge the gap between the community centres, community health centres, school counsellor offices and churches and whatever other primary sites that would be identified and the CSA centre at the hospital in order to minimise the dropout rate. The police station may not be a very child friendly place for reporting of sexual abuse in certain circumstances but perhaps those that end up at the police station may be those that are motivated by litigation. Community awareness of services that can be obtained from the hospital such as post exposure prophylaxis (PEP) and emergency contraception (EC) may be lacking. In view of this, it is essential that community centres are available where children can report abuse of any kind and families can get support. Integrated care will be vital at the first point of contact. Some Zambian communities have some non-governmental organisations (NGOs) that promote child protection and that are child friendly environments. The results of this study, however, do not reflect any direct relationship between NGOs and the CSA centre.

5.3 Characteristics of Sexual Abuse

This study highlights the fact that penile penetration is the main characteristic among the children studied although in most instances, the care givers were unaware of the specifics of the abuse going on such as in the form of kissing, oral sex, etc. or the type of coercion used to engage the child in sexual activity. Prevalence of child sexual abuse in Zambia is at 15 percent for those 14 years old and below (ZDHS, 2007). One striking feature was that the care givers did not even know who the abuser was, perhaps because the child was unable to disclose at home. Some adolescents did not give the details of the abuse or abusers perhaps due to discomfort because of the nature of the abuse, fear of litigation of their boyfriends or other unknown reasons. These results compare with findings in other settings where children were not always able to talk about their traumatic experiences to the extent that a therapist would not be aware that a child had been sexually assaulted McNally (1991, cited in Davis & Siegel, 2000). In the Zambian culture for instance, sex is an uncomfortable subject to discuss more so if it is outside matiage because it is associated with shame, and loss of dignity. Similar to other studies, all the perpetrators in the study were male (Negriff, et al 2014; Ozbaran, et al 2009). Furthermore, four out of five children knew their abuser which was comparable with
the Keesbury, et al (2009) study from the Copperbelt in Zambia (74 percent). Many studies show the majority of perpetrators to be known to the victim (Madu & Peltzer 2001; Matthews, et al 2013; Negriff, et al 2014; Wolfe, et al 1998; ZDHS, 2007). The neighbour was the most frequent perpetrator in our study with a frequency of one in every four cases. This impacts on community awareness and intervention on child sexual abuse and community approaches would have to be explored. Awareness and intervention packages will have to include family packages as well because incest accounted for about 14 percent of the cases. Madu and Peltzer (2001) study showed a friend as the most frequent abuser. It was assumed that a ‘friend’ in their case also encompassed ‘boyfriend’. In our study, the boyfriend was the second most frequent perpetrator at 20 percent. The ZDHS (2007), however, reported quite a different picture with boyfriend making up six percent of the perpetrators and the most frequent abuser being a stranger.

Almost two thirds of the clients that came to the CSA centre had been abused within 72 hours. It is possible that the reason there are more of those that followed through is because of PEP and EC interventions that can be done if abuse occurs within the said period of time. This may further be supported by the fact that the majority of the participants (69 percent) reported penile penetration. Most sexual abuse victims will go to the hospital when they feel that there is evidence that can be reported or there is an intervention that can be done. It was surprising though, that almost half the children did not have a presenting complaint. It is unusual that people go to the hospital with no complaint. There is need to explore how this question was presented to the respondents. About a quarter of them complained of genital pain and this was the most frequent complaint. This was less than the expected number because penile penetration was reported in about double the number. However, some of this discrepancy may be accounted for by the fact that the study was unable to tease out those that considered the abuse as playful exploration or loving acts.

It was also noted that about half the children were abused at least twice by the same abuser. Perhaps in the first instance, the child did not report to relevant authorities and only mustered courage the second time it occurred. In many studies, however, a major proportion of their participants gave a history of one abuse incident. (McLean, Morris, Conklin, Jayawickreme & Foa 2014; Ozbaran, et al 2009; Wolfe, et al 1994)
5.4 Posttraumatic Stress Disorder and its Characteristics

The PTSD point prevalence in this study was 33.3%, which is higher than the 20% that was hypothesized. This is higher than the estimated prevalence in the general population because the study population assessed is exclusively a group that experienced sexual abuse mostly as a traumatic act. Since some of the assumed sexual abuse was consensual judging by several comments made by teenagers that they were having an affair or a relationship with the perpetrator, prevalence may have been further lowered.

Generally, the older children had more PTSD than the younger ones. There have been conflicting views about which children are more likely to end up with PTSD – older or younger. Some studies seem to suggest that younger children may have more PTSD because of language development which affects their expression (Miragoli, Procaccia and Blasio 2014). Others have suggested that older children seem to have PTSD more than the younger ones because they make better intellectual appraisal of the situation (Salmon & Bryant 2002). It has been noted that younger children tend to look to their caregiver for their reaction in a situation before they can identify it as a threat. So if the adults conceal their reactions well and do not alarm the children, the assumption is that the event would pass unnoticed. The findings of this study suggest that there was no correlation between age and the development of PTSD.

The symptom frequency pattern between those that ended up with PTSD and those that did not was quite similar. It was difficult to find studies that explain the symptomatology patterns of PTSD in terms of frequency of actual symptoms. A South African study showed mean score for the three groups of symptoms – re-experiencing, avoidance and hyper-arousal. Matthews, Abraham and Jewkes (2013) showed that re-experiencing had the highest mean score when compared in terms of ratios to the total score. Similarly, our study showed an association between re-experiencing symptoms and PTSD diagnosis. Marina (2014) of USA, using the inclusionary approach showed an association between avoidance and numbing symptoms but failed to reach significance using the exclusionary approach. Avoidance showed collinearity with PTSD. Logistic regression for avoidance symptoms and PTSD was not possible because all the children who had PTSD, also had avoidance symptoms. The three most common symptoms stated by the children
were trying to avoid activities, people or places that reminded of the event, having less or no interest in doing things they used to do and having upsetting thoughts or images of the event coming into their heads with the most frequent listed first. The most common area of functional impairment listed was that of general happiness. The next most frequent areas of functional impairment was that of friendship.

Another additional finding was that children in the group without PTSD still ended up with notable functional impairment. This needs further research. Our analysis showed, however, that those with moderate and severe functional impairment, were more likely to end up with PTSD. Use of force or threats has been shown to correlate with development of PTSD elsewhere (Davies & Siegel, 2000; Wolfe, et al, 1994) though there was no statistically significant relationship. All those who had PTSD reported having had sexual assault which is consistent with the idea that those that experience CSA are more likely to develop PTSD than in other types of abuse ((Ackerman, et al 1998; Davis & Siegel 2000; Vezina, et al 2013).
6 Conclusion

Prevalence of PTSD among children who are sexually abused at the CSA centre at UTH was 33.3 percent in the CSA population. These results are significant for policy and practice change in the handling of child victims of sexual abuse. Health care practitioners and those that manage children need to be made aware that presence of re-experiencing, avoidance and hyper-arousal symptoms and presence of moderate and severe functional impairment is an indication for screening for PTSD. It is prudent to refer such a child for further management or specialised care of their psychosocial status. Most of the abuse involves unprotected penetrative sex. It is, therefore, imperative that any claim of CSA be followed up by relevant medical examination and prophylaxis to protect children from STIs and other consequences of unplanned sex. Also, since the Police play a vital role in the process cycle of these children, they should be equipped with mental health first aid skills and they should be taught child friendly approaches to minimise drop outs in the service delivery system.

6.1 Limitations of the Study

- The study was done at the UTH CSA centre as the only centre providing specialised and integrated care for CSA victims in Zambia at the time. Therefore, the results cannot be generalized to a larger population. Also, the study was done in a clinical population which may focus on a certain type of people that already have major problems in one area or another (Hevey & Kenward 1989)
- Not all teenagers may perceive sexual intercourse as abuse even if they may be below consenting age because of the prevalence of early marriages in Zambia.
- The fact that the Zambian law (as earlier discusses) only considers sexual abuse when penetration is involved, it is likely that mostly those that experience penetrative sexual abuse presented at the CSA.
- As noted earlier, only a third of the clients kept their appointments. Those were mostly on PEP. It is possible that those two populations (those on PEP and those that did not qualify or declined) differ in some unique way
6.2 Areas for Further Research

- This was a self-report study where the clients’ responses were not compared to what was found on physical examination, laboratory findings and management. It would be good to compare these responses against these findings.
- A follow up study to see who ended up with chronic course of PTSD, late onset PTSD or complications of PTSD such as such as depression, anxiety, etc would be enlightening.
- Duplication of the study at other centres in Zambia
- Conduct a clinical trial to ascertain which treatment approaches could be used to manage PTSD in terms of the most acceptable and better outcome.
- Identify those that had acute stress reaction and see how many end up with PTSD
- A qualitative study can also be done to explore reasons behind some results.
- In view of increasing technological use and advancement, future research should incorporate non-physical sexual abuse involving text messages, social media and internet.
7 RECOMMENDATIONS

- In a child with history of or suspected sexual assault, re-experiencing symptoms or hyper-arousal symptoms are red flags to screen for the presence of PTSD
- A child with history of sexual assault should be screened for PTSD
- Centres that handle cases of sexual abuse should either be equipped with a child friendly TF-CBT counsellor, or have a dependable referral system that can ensure the child accesses care immediately
- Since it is apparent that the Policeman is almost always the first respondent in the system, Police need to be taught how to give mental health first aid to these children who have experienced trauma.
8 REFERENCES


Amendment Act No. 15 of 2005 of the Laws of Zambia


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Vezina, C, Daigneault, I & Herbert, M 2013, Lessons learned from child sexual abuse research: prevalence, outcomes and preventive strategies, *Child and Adolescent Psychiatry and Mental Health* vol. 7, no. 22, <http://www.capmh.com/content/7/1/22>


Zambia Demographic Health Survey, 2007
APPENDIX A

Information Sheet for Children

I am a medical doctor from the Department of Psychiatry at University of Zambia. I am doing a study about some of the things that happen to children and how they feel after they are not treated the way they should be. I am inviting you to join in this study. If you agree, you will be asked some questions about your experiences in your personal life, about sex and how you feel about those things. You will be asked these questions in a private room we use so that no one can hear what you are saying. The information will be collected to help us to learn how we should treat children like you. If you feel you need any help regarding your feelings, or we find that you should get further help to handle your feelings, a counsellor will be available to help you. You might not like some of the questions that we will ask. But they will give us information that will help us to help you and other children that may have bad experiences as well. If you would rather not answer those questions, that is alright.

When the study is finished, a report will be written about what we will learn. The report will not include your name or that you were in the study.

If you do not want to be in the study, you are free to refuse now. If you start answering the questions and you do not feel like going on, that is alright. You will be allowed to stop. Your parent/guardian knows about the study too.

Do you know how to write? If you can, just put your name in the blank space on the next sheet of paper. If not, you can use a thumb print. You are free to keep this information sheet.

For any questions or comments, please contact:

Contacts
Dr Maria Akani
The Principle Investigator
Department of Psychiatry
University of Zambia
Lusaka

ERES Converge IRB
33 Joseph Mwila Road
Rhodes Park
Lusaka

Tel. No. 0955155633 or 0955155634
Cell No. 0977616426
Assent Form for Children in the PTSD in Children Study

Note that writing your name or printing your thumb on this form indicates that you understand what the study is about and agree to go ahead. Remember that joining the study is up to you and that if you feel you no longer want to continue, you are free to do so.

Please put your name in the blank space below.

I, ____________________, want to be in this study.

Sign here: ________________

Thumb print: ________________

Date: …../……../…….

Witness: ________________

Sign here: ________________

Thumb print: ________________

Date: …../……../…….
APPENDIX B

Information Sheet for Parents/Guardians

PLEASE READ THIS DOCUMENT CAREFULLY. SIGN YOUR NAME ON THE CONSENT FORM PROVIDED ONLY IF YOU AGREE TO PARTICIPATE AND YOU FULLY UNDERSTAND YOUR RIGHTS. YOUR SIGNATURE OR THUMB PRINT IS REQUIRED FOR YOUR PARTICIPATION.

Description of the Study:

I am a medical doctor working in the psychiatry department at UTH. You are being invited to take part in this study about the effects of child sexual abuse on children in Zambia. You will be required to answer questionnaires concerning the sexual experiences that your child (or the child in your care) may have had. We are aware that this may be your first and thus would like you to know more about your experience and what you thought about. The results of the study will help to give more information about how your child and children like your child that may have experienced sexual abuse can be assisted.

Time Involvement: The whole process will take approximately 20 minutes

Risks and Benefits:

- You and your child will not experience any physical harm from participating in this study and your clinical care plan will continue as it should. No privileges will be withdrawn from your care as a result of partaking in this study.
- We cannot guarantee that you will receive any direct benefits from this study though your child will be availed a counsellor and relevant medical services if identified as in need of that. You will also have an opportunity to contribute to information that will help other children in general by participating in this study.

Participation Rights:

- Participation in this study is purely voluntary so that if you decide to withdraw at any point, there will be no consequences to you.
- Also know that you are not obliged to answer questions that you may deem sensitive or uncomfortable. The interview will be carried out in a private room to ensure confidentiality.
- All personal identifying information will be kept confidential and the data sheets will be kept in secured lockers in accordance with the standards of the ERES Converge IRB. If the results of this study are required for publication as we hope, your identity will still be kept private.
- For any questions, please contact:

Contacts

Dr Maria Akani
The Principle Investigator
Department of Psychiatry
University of Zambia
Lusaka

ERES Converge IRB
33 Joseph Mwilwa Road
Rhodes Park
Lusaka
Tel. No. 0955155633 or 0955155634
Caregiver Consent form for PTSD in Children Study

Note that writing your name or printing your thumb on this form indicates that you understand what the study is about and agree to proceed. If you do, please append your signature below.

Signatures

I………………………………………… have read and understood the above information.

Participant Sign:………………………….. Date……………………

Participant’s thumb Print:________________________

Witness Sign:…………………………

Witness thumb print:________________________ Date:……/………/……

Researcher Sign:………………………….. Date:……/………/……
APPENDIX C

Trauma Screen + CPSS

Name______________________________ Date______________

Stressful or scary events happen to many kids. Below is a list of stressful and scary events that sometimes happen. Mark YES if it happened to you. Mark No if it didn’t happen to you.

1. Serious natural disaster like a flood, tornado, hurricane, earthquake, or fire. □ Yes □ No
2. Serious accident or injury like a car/bike crash, dog bite, sports injury. □ Yes □ No
3. Robbed by threat, force or weapon. □ Yes □ No
4. Slapped, punched, or beat up in your family. □ Yes □ No
5. Slapped, punched, or beat up by someone not in your family. □ Yes □ No
6. Seeing someone in your family get slapped, punched or beat up. □ Yes □ No
7. Seeing someone in the community get slapped, punched or beat up. □ Yes □ No
8. Someone older touching your private parts when they shouldn’t. □ Yes □ No
9. Someone forcing or pressuring sex, or when you couldn’t say no. □ Yes □ No
10. Someone close to you dying suddenly or violently. □ Yes □ No
11. Attacked, stabbed, shot at or hurt badly. □ Yes □ No
12. Seeing someone attacked, stabbed, shot at, hurt badly or killed. □ Yes □ No
13. Stressful or scary medical procedure. □ Yes □ No
14. Being around war. □ Yes □ No
15. Other stressful or scary event?
   Describe: ________________________________ □ Yes □ No

Which one is bothering you the most now? ____________________

If you answered NO to all of the above questions, STOP
If you answered YES to any of the above questions, please complete the rest of this form.

When the event happened what were your feelings?

Afraid I would die or be hurt badly. □ Yes □ No
Afraid someone else would die or be hurt badly. □ Yes □ No
Helpless to do anything. □ Yes □ No
Ashamed or disgusted. □ Yes □ No
CHILD PTSD Symptom Scale (CPSS) - 7-17 years

Mark 0, 1, 2 or 3 for how often the following things have bothered you in the last two weeks:

0       Not at all
1       Once a week or less
2       2 to 4 times a week
3       5 or more times a week

1. Having upsetting thoughts or images about the event that came into your head when you didn’t want them to. 0   1   2   3
2. Having bad dreams or nightmares. 0   1   2   3
3. Acting or feeling as if the event was happening again. 0   1   2   3
4. Feeling upset when you think about or hear about the event. 0   1   2   3
5. Having feelings in your body when you think about or hear about the event.
   (Heart beating fast, upset stomach, breaking out in a sweat) 0   1   2   3
6. Trying not to think about, talk about or have feelings about the event. 0   1   2   3
7. Trying to avoid activities or people, or places that remind you of the event. 0   1   2   3
8. Not being able to remember an important part of the upsetting event. 0   1   2   3
9. Having much less interest or not doing the things you used to do. 0   1   2   3
10. Not feeling too close to the people around you. 0   1   2   3
11. Not being able to have strong feelings (being able to cry or feel really happy). 0   1   2   3
12. Feeling as if your future hopes or plans will not come true. 0   1   2   3
13. Having trouble falling or staying asleep. 0   1   2   3
14. Feeling irritable or having fits of anger. 0   1   2   3
15. Having trouble concentrating. 0   1   2   3
16. Being overly careful (checking to see who is around you). 0   1   2   3
17. Being jumpy or easily startled. 0   1   2   3

Please mark YES or NO if the problems you marked interfered with:

1. Saying prayers  ☐ Yes ☐ No  5. Schoolwork  ☐ Yes ☐ No
2. Doing chores  ☐ Yes ☐ No  6. Family relationships  ☐ Yes ☐ No
3. Friendships  ☐ Yes ☐ No  7. General happiness  ☐ Yes ☐ No
4. Hobbies/Fun  ☐ Yes ☐ No
Trauma Screen + CPSS - Caregiver Completed

Child Name ___________________________  Date ____________  Side 1

Stressful or scary events happen to many kids. Below is a list of stressful and scary events that sometimes happen. Please answer to the best of your knowledge. Mark YES if it happened to your child. Mark NO if it didn't happen to your child.

1. Serious natural disaster like a flood, tornado, hurricane, earthquake, or fire. ☐ Yes ☐ No
2. Serious accident or injury like a car/bike crash, dog bite, sports injury. ☐ Yes ☐ No
3. Robbed by threat, force or weapon. ☐ Yes ☐ No
4. Slapped, punched, or beat up in your family. ☐ Yes ☐ No
5. Slapped, punched, or beat up by someone not in the family. ☐ Yes ☐ No
6. Seeing someone in the family slapped, punched or beat up. ☐ Yes ☐ No
7. Seeing someone in the community slapped, punched or beat up. ☐ Yes ☐ No
8. Someone older touching your child’s private parts when they shouldn’t. ☐ Yes ☐ No
9. Someone forcing or pressuring sex, or when your child couldn't say no. ☐ Yes ☐ No
10. Someone close to your child dying suddenly or violently. ☐ Yes ☐ No
11. Attacked, stabbed, shot at or hurt badly. ☐ Yes ☐ No
12. Seeing someone attacked, stabbed, shot at, hurt badly or killed. ☐ Yes ☐ No
13. Stressful or scary medical procedure. ☐ Yes ☐ No
14. Being around war. ☐ Yes ☐ No
15. Other stressful or scary event? Describe: ___________________________ ☐ Yes ☐ No

Which one is bothering your child the most now? _____________

If you answered NO to all of the above questions, STOP
If you answered YES to any of the above questions, please complete the rest of this form.

What were your child’s feelings when the event happened?

Afraid s/he would die or be hurt badly. ☐ Yes ☐ No

Afraid someone else would die or be hurt badly. ☐ Yes ☐ No

Helpless to do anything. ☐ Yes ☐ No

Ashamed or disgusted. ☐ Yes ☐ No

Please complete both sides of this document if you answered YES to 1-15.
Child PTSD Symptom Scale CPSS (4-17 years) Caregiver Completed

Mark 0, 1, 2 or 3 for how often the following things have bothered your child in the last two weeks:

<table>
<thead>
<tr>
<th>Mark</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not at all</td>
</tr>
<tr>
<td>1</td>
<td>Once a week or less</td>
</tr>
<tr>
<td>2</td>
<td>2 to 4 times a week</td>
</tr>
<tr>
<td>3</td>
<td>5 or more times a week</td>
</tr>
</tbody>
</table>

1. Your child having unwanted, upsetting thoughts or images about the traumatic event. 0 1 2 3
2. Your child having bad dreams or nightmares. 0 1 2 3
3. Your child acting or feeling as if the event were happening again. 0 1 2 3
4. Your child feeling upset when s/he thinks about or hears about the event. 0 1 2 3
5. Your child having feelings in the body when thinking or hearing about the event. (Heart beating fast, upset stomach, breaking out in a sweat). 0 1 2 3
6. Your child trying not to think about, talk about or have feelings about the event. 0 1 2 3
7. Your child trying to avoid activities or people, or places that remind you of the event. 0 1 2 3
8. Your child not being able to remember an important part of the upsetting event. 0 1 2 3
9. Your child having much less interest or not doing the things s/he used to do. 0 1 2 3
10. Your child not feeling too close to the people around him/her. 0 1 2 3
11. Your child not being able to have strong feelings (being able to cry or feel really happy). 0 1 2 3
12. Your child feeling as if his/her future hopes or plans will not come true. 0 1 2 3
13. Your child having trouble falling or staying asleep. 0 1 2 3
14. Your child feeling irritable or having fits of anger. 0 1 2 3
15. Your child having trouble concentrating. 0 1 2 3
16. Your child being overly careful (checking to see who is around). 0 1 2 3
17. Your child being jumpy or easily startled. 0 1 2 3

Please mark YES or NO if the problems above interfered with the following:

1. Saying prayers ☐ Yes ☐ No 5. Schoolwork ☐ Yes ☐ No
2. Doing chores ☐ Yes ☐ No 6. Family relationships ☐ Yes ☐ No
3. Friendships ☐ Yes ☐ No 7. General happiness ☐ Yes ☐ No
4. Hobbies/Fun ☐ Yes ☐ No
APPENDIX E

University Teaching Hospital Child Sexual Abuse Clinic (CSAC)
Intake Form - ADULT

Begin Interview Here: Whenever possible, push the informant for his/her best guess. Whenever a question says to specify, please do so. Do not write the child or adult's name anywhere on this form. There are sections of text to be used as guidelines for what you should say to introduce the various sections of this interview.

Interviewer: Child sexual abuse is, unfortunately, a problem found across the entire world. It cuts across all countries and types of families and communities. These questions that will help us understand the child's difficulties and help us determine what kind of services we can offer the child.

Demographics:
1. How old is the child right now? [ ] [ ] Years [ ] [ ] Months
2. Child's Gender: [ ] Male(0) [ ] Female(1)
3. What is your relationship to the child?
   [ ] Biological Mother (1)
   [ ] Biological Father (2)
   [ ] Adoptive Mother (3)
   [ ] Adoptive Father (4)
   [ ] Grandmother (5)
   [ ] Grandfather (6)
   [ ] Sister (16 or older) (7)
   [ ] Brother (16 or older) (8)
   [ ] Auntie (9)
   [ ] Uncle (10)
   [ ] Neighbor (11)
   [ ] Teacher (12)
   [ ] Other
   If other please Specify: __________________________
4. Who referred you to this clinic?
   [ ] Medical Facility/Doctor(1)
   [ ] Police(2)
   [ ] Parent/caregiver-relative(3)
   [ ] Friend(4)
   [ ] Victims Support Unit (V SU) (5)
   [ ] Other (9999) Please Specify: __________________________

Custody:
5. Does the child live with you? [ ] Yes(1) [ ] No(0)
   5a. If yes, for how long? [ ] [ ] [ ] [ ] Years [ ] [ ] [ ] [ ] Months [ ] [ ] [ ] [ ] Weeks [ ] [ ] [ ] [ ] Days
   5b. Is the child an orphan? [ ] Yes(1) [ ] No(0) If yes, [ ] Single(1) [ ] Double(2)
6. Was the child living with you at the time of this most recent sexual abuse? [ ] Yes(1) [ ] No(0)
7. What grade is the child currently in?
- Preschool (0)
- Primary (1)
- Secondary (2)
- Not currently in school (000)
- Never been in school (000)
- Other: (999) Please Specify:

8. What is the presenting complaint?
- Genital Pain (1)
- Abdominal Pain (2)
- Discharge (3)
- Bleeding (4)
- Genital itching (5)
- Bruising (6)
- Behavior change (7)
- None (0)
- Other (999) Please Specify:

Interviewer: In asking you the following questions, we are trying to determine how counselors can best help sexually abused children and caregivers. We want to understand how children and adults handle the trauma of child sexual abuse. Therefore, we will be asking questions about both you and the child. If you are uncomfortable with any of them, you are not required to answer them. During the interview, feel free to stop me and ask questions about anything that is not clear. It is important that you understand that there are no right or wrong answers so please try to answer truthfully.

History of Presenting Problem:

9. Who was the first person the child said something to about this most recent sexual abuse?
- This informant (Non-offending caregiver) (1)
- Other caregiver or guardian (2)
- Other relative (3)
- Non-professional or non-relative (e.g., friend, neighbor, acquaintance) (4)
- Professional (e.g., nurse, doctor, teacher, clinic worker etc.) (5)
- Don't know (000)
- Told no one (6)
- Other (999) Please specify relationship:

10. Please indicate the date of the first disclosure of this most recent sexual abuse.

11. How old was the child when this most recent sexual abuse occurred? (In years)

12. Who sexually abused the child during this most recent event? (Mark all that apply.)
- Father (1)
- Mother (2)
- Non-relative adult (11)
- Grandfather (3)
- Non-relative under 16 (12)
- Grandmother (4)
- Stranger (13)
- Auntie (5)
- Boyfriend (14)
- Uncle (6)
- Multiple people at the same time (15)
- Cousin (7)
- Don't know (000)
- Sibling (8)
- Other (000) Please Specify:
- Relative under 16 (9)

13. Were the abuser(s) male or female? Male (0) Female (1) Both M & F/Multiple abusers (2)

14. Did the abuser live in the child's household during the time of the abuse?
- Yes (1)
- No (0)
- Don't know (2)

15. Did the abuse occur less than 72 hours before now? Yes (1) No (0) Don't know (2)
16. What was your (the informant's) relationship to this abuser at the time of the abuse?
   □ Abuser is not known to informant(0)
   □ Current spouse of informant(1)
   □ Previous spouse of informant(2)
   □ Member of informant's family of origin(3)
   □ Member of informant's family by marriage(4)
   □ Non-relative adult known to informant (e.g., neighbor, acquaintance) (5)
   □ Non-relative child (under 16 years) known to informant(6)
   □ Other (000) Please specify:

17. Since the abuse has been disclosed, has the child had any contact with this abuser?
   □ No(0)
   □ Yes, seen around (e.g., Neighborhood, market, school) (1)
   □ Yes, unsupervised contact(2)
   □ Yes, in court, VSU or at police(3)

18. How did this abuser engage the child in sexual activity and/or keep him/her from telling?
   (Mark all that apply.)
   □ Playful/gentle coaxing (e.g., encouraging or leading on) (1)
   □ Bribes(2)
   □ Commands or Instructions (to do something or not to tell) (3)
   □ Verbal threats(4)
   □ Physical threats(5)
   □ Physical force(6)
   □ Offering alcohol(7)
   □ Don't know(000)
   □ Other (999) Please specify: ____________________________

**Interviewer:** Now I am going to ask you some questions about what this abuser did to the child or had the child do to them. Please answer as best you can and tell me if you just do not know.

19. The abuser let themselves be seen naked and/or had the child remove his/her clothes. (No touching)
   □ Yes(1) □ No(0) □ Don't know(2)

20. While wearing clothes, was there any touching of private parts or any other body part (e.g., breasts or buttocks)?
   □ Yes(1) □ No(0) □ Don't know(2)

21. Without clothes, was there any touching of private parts or any other body part (e.g., breasts or buttocks)?
   □ Yes(1) □ No(0) □ Don't know(2)

22. Was there any kissing anywhere without the child wanting it?
   □ Yes(1) □ No(0) □ Don't know(2)

23. Was there direct genital penetration of the vagina or anus with a finger or object?
   □ Yes(1) □ No(0) □ Don't know(2)

24. Was there any simulated intercourse such as humping, rubbing between the legs, without any attempted penetration?
   □ Yes(1) □ No(0) □ Don't know(2)

25. Was there any oral-sexual contact (mouth to private parts)?
   □ Yes(1) □ No(0) □ Don't know(2)
26. Was there penile penetration of the vagina or anus? □ Yes(1) □ No(0) □ Don't know(2)

26a. If yes to the previous question, was a condom used? □ Yes(1) □ No(0) □ Don't know(0)

27. To the best of your knowledge, how many incidents of sexual abuse has the child experienced from this person? (Encourage informant to estimate the number of incidents.) □□ times

28. To the best of your knowledge, over how long a time period has the sexual abuse with this person occurred? (Encourage informant to estimate the length of time.) □□ years □□ months □□ weeks □□ days

29. In addition to the most recent abuse described above, has the child been sexually abused by anyone else? □ Yes(1) □ No(0) □ Don't know(2)

If they respond "No", please go to Question 33.

30. If yes, what was the relationship of the person(s) who previously sexually abused the child? (Mark all that apply.)
   □ Father(1) □ Relative under 16 (9)
   □ Mother(2) □ Neighbor(10)
   □ Grandfather(3) □ Non-relative adult(11)
   □ Grandmother(4) □ Non-relative under 16(12)
   □ Auntie(5) □ Stranger(13)
   □ Uncle(6) □ Boyfriend(14)
   □ Cousin(7) □ Multiple people at the same time(15)
   □ Sibling(8) □ Other (999) Please Specify: ___________________________

31. Were the abusers male or female? □ Female(1) □ Male(0) □ Both M&F/Multiple abusers(2)

32. What was the child's age at the last incident of the abuse from this other person? □□ Years

Interviewer: I would like to ask you some brief questions about your personal experiences that might have an impact on your response to the child's difficulties. If you are uncomfortable with these questions, please let me know. This information is taken to help us understand how to help children and caregivers in the best way.

33. Have you ever been hit, punched, kicked, thrown, hurt, or threatened with violence by any of the child's abuser(s)? □ Yes, threatened(1) □ Yes, suffered physical violence(2) □ No(0)

34. Have you ever been hit, punched, kicked, thrown, hurt, or threatened with violence by a partner? □ Yes, threatened(1) □ Yes, suffered physical violence(2) □ No(0)

35. Have you ever been hit, punched, kicked, thrown, hurt, or threatened with violence by a family member? □ Yes, threatened(1) □ Yes, suffered physical violence(2) □ No(0)
APPENDIX F

ID Number: CHILD

Date Form Completed

Day
Month
Year

Interviewer Name

University Teaching Hospital Child Sexual Abuse Clinic (CSAC)
Intake Form - CHILD

Begin Interview Here: Whenever possible, push the informant for his/her best guess. Whenever a question says to specify, please do so. Do not write the child or adult's name anywhere on this form. There are sections of text to be used as guidelines for what you should say to introduce the various sections of this interview.

Interviewer: Child sexual abuse is, unfortunately, a problem found across the entire world. It cuts across all countries and types of families and communities. We are going to ask you some questions that will help us understand how to best help you.

Demographics:
1. How old are you right now? [ ] [ ] [ ] 2. Child's Gender: [ ] Male (0) [ ] Female (1)

[] [ ] [ ] Years [ ] [ ] [ ] Months

3. Who referred you to this clinic?
[ ] Medical Facility/Doctor (1)
[ ] Police (2)
[ ] Parent/caregiver/relative (3)
[ ] Friend (4)
[ ] Victims Support Unit (VSU) (5)
[ ] Other (999) Please Specify:

4. Do you currently go to school? [ ] Yes (1) [ ] No (0)

5. If yes, what grade are you currently in?
[ ] Preschool (0)
[ ] Primary (1)
[ ] Secondary (2)
[ ] Not currently in school (000)
[ ] Never been in school (3)
[ ] Other (999) Please Specify:

Interviewer: I am going to be asking some questions now about the bad thing that happened to you. We are trying to learn about the best way to help children like you. I know this is difficult for you to talk about and if you are uncomfortable with any question, you can just tell me and you do not have to answer it. As we are talking, feel free to stop me and ask questions about anything that is not clear. There are no right or wrong answers, so please tell the truth. Do you have any questions?

6. Who was the first person you said something to about this most recent abuse?
[ ] Caregiver that is with you today (1)
[ ] Other caregiver or guardian (2)
[ ] Other relative (3)
[ ] Non-professional or non-relative (e.g., friend, neighbor, acquaintance) (4)
[ ] Professional (e.g., nurse, doctor, teacher, clinic worker etc.) (5)
[ ] Told no one (6)
[ ] Other (999)

Please Specify relationship

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PageMaker
7. When did you first tell them about this most recent abuse? [ ] Day [ ] Month [ ] Year

8. Is this the first time you have been abused? [ ] Yes (1) [ ] No (0) [ ] Don’t Know (2)

9. How old were you when the sexual abuse began? (in years) [ ] [ ]

10. When did the most recent sexual abuse incident occur? [ ] Within 72 hours (1) [ ] Within the last week (2) [ ] Within the last month (3) [ ] Within the past 6 months (4) [ ] Within the past year (5) [ ] Other (999)

11. Who sexually abused you during this most recent incident? (Mark all that apply.)
   [ ] Father (1) [ ] Relative under 16 (9) [ ] Other (999)
   [ ] Mother (2) [ ] Neighbor (10) [ ]
   [ ] Grandfather (3) [ ] Non-relative adult (11) [ ]
   [ ] Grandmother (4) [ ] Non-relative under 16 (12) [ ]
   [ ] Auntie (5) [ ] Stranger (13) [ ]
   [ ] Uncle (6) [ ] Boyfriend (14) [ ]
   [ ] Cousin (7) [ ] Multiple people at the same time (15) [ ]
   [ ] Sibling (8) [ ] Other (999)

12. Were the abusers male or female? [ ] Female (1) [ ] Male (0) [ ] Both M&F/Multiple abusers (2)

13. About how old was the abuser at the time of the most recent incident? (in years) [ ] [ ]

14. Did the abuser live in your home during the time the abuse took place? [ ] Yes (1) [ ] No (0) [ ] Don’t know (2)

15. Since you told about the abuse, have you had any contact with the abuser? (e.g., seeing, talking to, meeting accidentally)? [ ] Yes (1) [ ] No (0) [ ] Don’t know (2)

16. How did the abuser engage you in sexual activity and/or keep you from telling? (Mark all that apply.)
   [ ] Playful/gentle coaxing (e.g., encouraging or leading on) (1)
   [ ] Bribes (2)
   [ ] Commands or Instructions (to do something or not to tell) (3)
   [ ] Verbal threats (4)
   [ ] Physical threats (5)
   [ ] Physical force (6)
   [ ] Offering alcohol (7)
   [ ] Don’t know (000)
   [ ] Other (999)

Now I am going to ask you some questions about what the abuser did to you or had you do to them. Please answer as best you can and tell me if you just do not know.

17. The abuser let themselves be seen naked and/or had you remove his/her clothes.
   (No touching.) [ ] Yes (1) [ ] No (0) [ ] Don’t know (2)
18. While wearing clothes, was there any touching of private parts or any other body part (e.g., breasts or buttocks)? □ Yes(1) □ No(0) □ Don't know(2)
19. Without clothes, was there any touching of private parts or any other body part (e.g., breasts or buttocks)? □ Yes(1) □ No(0) □ Don't know(2)
20. Was there any kissing anywhere without you wanting it? □ Yes(1) □ No(0) □ Don't know(2)
21. Was there direct genital penetration of the vagina or anus with a finger or object? □ Yes(1) □ No(0) □ Don't know(2)
22. Was there any simulated intercourse such as humping, rubbing between the legs, without any attempted penetration? □ Yes(1) □ No(0) □ Don't know(2)
23. Was there any oral-sexual contact (mouth to private parts)? □ Yes(1) □ No(0) □ Don't know(2)
24. Was there penile penetration of the vagina or anus? □ Yes(1) □ No(0) □ Don't know(2)  
24a. If yes to previous question, was a condom used? □ Yes(1) □ No(0) □ Don't know(2)
25. To the best of your knowledge, over how long a time period has the sexual abuse with this person occurred? (Encourage informant to estimate the length of time.) (Enter 99 for "Don't know")
□ □ months □ □ weeks 25a. Number of times abused by this person: □ □
26. In addition to the most recent abuse described above, have you ever been sexually abused by anyone else? □ Yes(1) □ No(2) □ Don't know(3)

Interviewer: If they respond "NO", STOP HERE.

27. How many other people have you been abused by? □ □
28. What was the relationship of the person(s) who previously sexually abused you? (Mark ALL that apply.)
□ Father(1) □ Relative under 16(9) □ Write comments about a child
□ Mother(2) □ Neighbor(10)
□ Grandfather(3) □ Non-relative adult(11)
□ Grandmother(4) □ Non-relative under 16 (12)
□ Auntie(5) □ Stranger(13)
□ Uncle(6) □ Boyfriend(14)
□ Cousin(7) □ Multiple people at the same time(15)
□ Sibling(8) □ Other (999)  
Please Specify: __________________________

29. How many times were you abused by these other people? □ □
30. Were the abusers male or female? □ Female(1) □ Male(9) □ Both M&F/Multiple abusers(2)
31. Did you tell anyone after this previous abuse? □ Yes(1) □ No(2) □ Don't know(2)
If yes, who did you first tell about this previous abuse?
□ Caregiver that is with them today(1)
□ Other caregiver or guardian(2)
□ Other relative(3)
□ Non-professional or non-relative (e.g., friend, neighbor, acquaintance) (4)
□ Professional (e.g., nurse, doctor, teacher, clinic worker...etc.) (5)
□ Told no one(6)
□ Other (999) Please Specify relationship: __________________________