Review Article

Integration of Services for Victims of Child Sexual Abuse at the University Teaching Hospital One-Stop Centre

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Objective. To improve care of sexually abused children by establishment of a “One Stop Centre” at the University Teaching Hospital.

Methodology. Prior to opening of the One Stop Centre, a management team comprising of clinical departmental heads and a technical group of professionals (health workers, police, psychosocial counselors lawyers and media) were put in place. The team evaluated and identified gaps and weaknesses on the management of sexually abused children prevailing in Zambia. A manual was produced which would be used to train all professionals manning a One Stop Centre. A team of consultants from abroad were identified to offer need based training activities and a database was developed.

Results. A multidisciplinary team comprising of health workers, police and psychosocial counselors now man the centre. The centre is assisted by lawyers as and when required. UTH is offering training to other areas of the country to establish similar services by using a Trainer of Trainers model. A comprehensive database has been established for Lusaka province.

Conclusion. For establishment of a One Stop Centre, there needs to be a core group comprising of managers as well as a technical team committed to the management and protection of sexually abused children.

1. Introduction

Zambia is a landlocked country located in Southern Africa with a population of about 10.8 million. Fifty one percent of the population is made up of women and children. Over 70% of the population lives below the poverty datum line [1]. The Gross Per Capita Income is $630, and 13% of central government expenditure is allocated to health care (UNICEF Zambia Statistics). According to the Zambia Demographics and Health Survey in 2007, it is estimated that 14.3% of the sexually active age group (15–49) is living with Human Immunodeficiency Virus (HIV) [2], 12.3% males and 16.1% females.

Children have been much affected by the HIV/AIDS epidemic in Zambia, where over 30,000 children are HIV positive [3]. While perinatal transmission accounts for the majority of new pediatric HIV infections, in countries such as Zambia, where HIV prevalence is high, sexual exposure remains an important risk factor in children in the post weaning period. While HIV transmission rates attributable to sexual abuse are unknown, pediatric victims of sexual abuse are at a higher risk of HIV transmission due to physical trauma and due to the fact that multiple exposures often occur prior to discovery of the abuse [4] In a pilot study conducted at the University Teaching Hospital (UTH) in Lusaka, Zambia in 2003, 99% of sexually abused children
reporting to the gynecology ward were females, which also places them at a higher risk for HIV acquisition [5].

Although epidemiologic data for the prevalence of child sexual abuse (CSA) in Zambia is not available [6], Murray et al. found that CSA is a significant concern in the community in Lusaka. Defilement was mentioned by 40% of women and 30% of children asked to list problems affecting children in the community [7]. Among the children interviewed, this was the most frequently mentioned problem. In 2007, Slonim-Nevo and Mukuka surveyed 3,360 adolescents (defined as age 10 to 19 years) and found that 9% of adolescents reported a family member touching their breasts or genitals, 3% reported sexual intercourse, 2% reported oral sex, and 1% reported anal sex by a family member. Females were more likely to have been touched sexually than their male counterparts, but males were more likely to have had sexual intercourse or oral sex with a family member.

Literature from countries surrounding Zambia documents the existence of a CSA epidemic in the region. Prevalence studies rely on cross-sectional study design, most often surveying school children about their experiences of sexual abuse. In a review article of child sexual abuse in subsaharan Africa, Lalor et al. report that between 3.2 and 7.1% of all respondents report unwanted or forced sexual intercourse before the age of 18 years [8]. Jewkes et al. surveyed 11, 735 South African women between the ages of 15 and 49 years about their history of rape during childhood. Overall, 1.6% reported unwanted sexual intercourse before the age of 15 years of age. 85% of child rape occurred between the age of 10 and 14 years and 15% between the ages of 5 and 9 years [9]. In a study in Zimbabwe, Birdthistle reports that among unmarried, sexually active adolescents, 52.2% had experienced forced intercourse at least one time. 37.4% of first sexual intercourse acts were forced [10]. In a study of 487 university students in Tanzania, 11.2% of women and 8.2% of men reported unwanted sexual intercourse. The average age at the time of abuse was 13.6 years [11]. Collings and Madu [6] surveyed a sample of 640 female university students in South Africa and found that 34.8% had experienced contact sexual abuse before the age of 18 years. Another study among high-school students in South Africa [12], found that almost 20% were victims of parental or guardian sexual abuse. Additional research suggests that the prevalence of child sexual abuse in subsaharan Africa is similar to other countries across the world [8].

In the second quarter of 2003, Zambian police handled 300 cases of child rape, and some experts believe that for every case reported another 10 go unreported [13]. The number of reported cases and the realization that these cases were likely to be the tip of an iceberg, in combination with high HIV prevalence led to the identification of the need to establish a comprehensive multidisciplinary centre to increase public awareness of child sexual abuse and to improve management of sexually abused children with an emphasis on preventing HIV acquisition.

In Zambia, most reported Child Sexual Abuse (CSA) cases come to the attention of medical personnel because of symptomatic Sexually Transmitted Diseases (STDs). Limited services were offered for sexually abused youth and no postexposure prophylaxis (PEP) was available in the public sector. In 2003, a pilot study was conducted at the University Teaching Hospital (UTH) to investigate the feasibility of giving PEP to sexually abused children in Zambia. The study was done within the department of Obstetrics and Gynaecology. In this study, 23% of eligible children were able to complete a 28-day course of PEP [5]. Prior to this study, there was a lack of awareness of child sexual abuse and a lack of recognition of child sexual abuse cases. No specific points of service for child sexual abuse were available. There were no protocols for how to address the needs of victims, and there was poor or no coordination between the various professionals involved in the management of sexually abused children.

UTH is situated in Lusaka, the capital of Zambia with a population close to 2 million [1]. UTH houses the only medical school in the country and the schools of Registered Nurses and Midwifery. Most of the professionals in Zambia; medical personnel, social workers, psychiatrists, psychologists, lawyers, and magistrate, are found in Lusaka. It was therefore important that a One Stop Centre with a multidisciplinary approach be established in Lusaka. The One Stop Centre would then act as a centre for developing appropriate protocols for the management of child sexual abuse in Zambia as well as become a training institution for the rest of the country.

The diagram below (Figure 1) depicts the previous system for management of a child who had been sexually abused, along with some of the associated flaws and potential delays due to the lack of a centralized, coordinated service. When a child had been sexually or physically abused, the majority are reported either to the victim support unit within the police or, if the child had been physically injured or had a medical symptom, for example a genital discharge, or to a local health facility. A few children presented to a nongovernmental organization such as the Young Women’s Christian Association (YWCA). The processing goals of a child sexual abuse case involved care and protection of the child, investigation of the background to the abuse, and apprehension and prosecution of the offender. As a result, the child was likely to have been interviewed (and even examined or “inspected”) on more than one occasion, often by people without the requisite skills. All too often the result was that the child was further traumatized, and the guardian and child were put much inconvenience when both were already highly distressed. The need to visit multiple sites for evaluation also led to critical delays in the administration of PEP as well as an increased risk of loss-to-follow-up.

Clearly, efforts towards the development of systems and training of professionals to more adequately work with sexually abused youth were in need. The literature suggests that one stop centres decrease the trauma experienced by the child and the caregiver [14, 15]. Developing a centre that encompasses all aspects of care required for sexually abused children is likely to reduce the strain of reporting on families and assure proper follow-up care. The University Teaching Hospital in Lusaka undertook the mission to develop a One-Stop Centre to address the multidisciplinary needs of
sexually abused youth. This paper will present the process of implementing such a center in a low-resource environment, and discuss the challenges and lessons learned.

2. Methodology

The UTH proposed an intervention with a multidisciplinary approach to increase and improve case reporting, management and services for child sexual abuse patients with special emphasis on HIV prevention. A management team was put in place composed of clinical heads from the departments of pediatrics, obstetrics and gynecology, and surgery. The team evaluated the management of sexually abused children prevailing in Zambia and identified gaps and weaknesses in the medical management, legal framework, and media reporting. A technical team composed of members of the Zambia Society for the Prevention of Child Abuse and Neglect (ZASPCAN) comprising a doctor, a psychiatrist, a psychologist, a lawyer, a police officer, and a journalist was tasked to review Zambian laws pertaining to child sexual abuse, review the existing protocols on the medical management of child sexual abuse, review the literature on management of traumatized children, and lastly, to review the reporting on child sexual abuse in both electronic and print media. After a comprehensive consultative process with local and international professionals, strengths and weakness of the existing system were identified. In order to address many of the problems identified with the system, the One-Stop Centre, a multidisciplinary clinic where families could access all necessary services in one child-friendly location, was proposed.

It was established that in order to implement the One-Stop Centre, there needed to be identification and training of the professionals who manage sexually abused children. A manual for the management of sexually abused children [16] was produced which will be used to train all professionals staffing a One-Stop Centre. The team reviewed available literature locally, regionally, and internationally. The draft manual was circulated to key personnel in the medical, psychosocial, police, legal, and media communities to review and validate the various components to see that they were in compliance with both the social norms and standards of care as well as provided protection to the children. Contents of the manual included the following.

2.1. Medical. In this section, the medical interview and the physical examination of a sexually abused child were covered, as well as how to complete medical legal forms and the collection of forensic specimens. HIV testing and counseling, treatment and management of STIs, medical complications seen with CSA, and Post-Exposure Prophylaxis (PEP) administration were also included. Emphasis was placed on rapid HIV identification and testing and counseling of those presenting within 72 hours of the abuse in order to provide prompt Post-Exposure Prophylaxis (PEP) (Figure 2).

2.2. Psychosocial/Mental Trauma. The psychosocial component of the manual included safety/confidentiality procedures, psychosocial manifestations of sexual abuse, short- and long-term effects of the abuse, posttraumatic stress disorder (PTSD), disclosure and reasons for refusal to disclose the sexual abuse, and challenges in child counseling.

2.3. Legal and Police Component. Included in this section were; definitions of CSA, definition of a child, children's
2.4. Media Component. Prior to the development of the manual, child sexual abuse was reported in the media without following any guidelines. Children’s names and photographs were frequently included in the mass media. The manual provided guidelines on accurate reporting and principles on ethical reporting of children. Though in other countries reporters do not form part of the team in Child Advocacy Centres (CAC), they were included in the technical team as hostile reporting was damaging children both physically and mentally. Media representatives were also considered important in increasing public awareness of child sexual abuse to increase the number of cases that were being reported.

2.5. Trainings. Once the manual was completed, trainings utilizing the new manual were conducted for the professionals who would be staffing the One-Stop Centre.

2.6. Public Sensitization. As CSA is widely believed to be underreported and most cases presented only after symptoms or complications developed, a series of public sensitization activities, including school debates, were conducted to increase public awareness of child sexual abuse and to increase awareness of the importance of early reporting and where to report.

2.7. Setting Up the One Stop Centre. In most western countries, Child Advocacy Centers (CACs) are not located within medical institutions and offer a more comprehensive package to include physical abuse as well as child neglect [17, 18]. We chose to establish the multidisciplinary centre within the pediatric department because most of the sexually abused children came to the attention of the health workers because of medical complications [5] and in order to offer PEP to abused children, which was only available at the UTH. The centre would not provide services for isolated physical abuse cases nor neglected children.

The One-Stop Centre was established in the pediatric department on 26th April 2006. A location was selected where there is minimal foot traffic and there are no conspicuous notices indicating its function to help preserve the
confidentiality of the children and their guardians attending the center. The Centre included a physical examination room and several interview rooms including one with a two-way mirror, microphone, and speakers which allows one person to interview (usually a medical person) the child whilst the police officers and counselors take notes from another room. Special care was taken to provide comfortable and child-friendly waiting facilities (TV set, toys, and educational materials).

Since there is an extreme shortage of doctors, the clinical officer trained in forensic and medical examination abroad was appointed to coordinate the medical management at the centre. In western countries, a pediatrician or equivalent would have the responsibility of examining these children. The clinical officer is supported by a director who is a senior pediatrician and a middle-grade doctor. The clinical officer examines the child, prescribes medications as indicated for the sexually abused children, and refers to the consultant if assistance is needed. The Centre is also staffed by one police officer from the Victim Support Unit section of the local police, one social worker, and three nurses.

To round out the multidisciplinary vision of the One-Stop centre, the director and psychiatrist began working with Boston University to add a range of psychosocial assessment tools to strive for comprehensive, multidisciplinary assessments as documented in the literature as the “gold-standard” in child sexual abuse care. The assessments were chosen based on results from a local qualitative study conducted [7] in Lusaka as well as local input from psychiatrists, mental health professionals, nurses, and clinical officers.

Intake interviews are conducted with the caregiver and child separately (if the child is able). Information on demographic characteristics and abuse history is collected. A medical/laboratory panel includes the following tests: rapid HIV antibody tests, Rapid Plasma Reagin, pregnancy, Hepatitis B, and forensic specimens (High vaginal swab for wet prep, gram stain and culture to identify gonorrhea, trichomonas, and spermatozoa). Mental health assessments for the youth include the Post-traumatic stress disorder—Reaction Index, the Strengths and Difficulties Questionnaire, and My Feelings About the Abuse. This last measure specifically examines the construct of shame, which is considered to be critical in the Zambian culture. The mental health assessment administered to the caregivers about the abused child is the Child Behavior Checklist.

A systematic flow has been designed to promote excellence in the care of sexually abused youth.

1. Family registers at UTH main desk and receives a treatment form

2. The family is then directed to the One Stop Centre where they are greeted by the social worker and/or nurses counselors. Youth and their caregivers are immediately asked if the abuse happened within the last 72 hours. If the abuse occurred within 72 hours of presentation and the child is HIV negative on rapid test, the child is eligible for PEP.

(a) If abuse occurred within 72 hours, the child is immediately brought to a nurse to take the necessary blood tests, and administer PEP if appropriate. If the child is pubertal, in addition to PEP, they are given emergency contraception. After blood tests and PEP administration, the intake forms and the questionnaire for assessment of level of trauma are completed by the nurse or social worker. A physical exam is completed by the clinical officer and/or the consultant, and the UTH treatment form and police medical forms are completed.

(b) If abuse did NOT occur within 72 hours, the child/care-giver is interviewed by one of the staff, blood tests are performed, a physical exam of the child is conducted and the UTH treatment and police form (issued at the centre) are completed by the clinical officer. The police officer stationed at the centre also completes the relevant portion of the police form.

(c) If a child is HIV positive, they are referred to the Paediatric Antiretroviral Therapy (ART) Clinic for further assessment, management, and follow up.

(d) If a child is found to be pregnant, she is referred to the Antenatal and/or Prevention of Mother to Child HIV Transmission (PMTCT) clinic for further assessment, management, and follow up.

Drugs used for PEP were Zidovudine 240 mgs/m² in combination with Lamivudine 4 mg/kg (Combivir) twice daily for 28 days. No syrups were available initially leaving the very young children without any PEP options until later when syrup formulations were made available. Initially, a two-drug regimen was recommended as effective [19] though currently a 3-drug regimen is in place in accordance with current guidelines.

2.8. Support. To gain support from local policy makers (parliamentarians, Ministry of Health, local and international organizations) several meetings were held to explain the concept of a One-Stop Centre to emphasize the need for multidisciplinary care for sexually abused youth and to request financial support for such a centre.

2.9. Monitoring and Evaluation. A data collection and management system was developed with help from Boston University, and a Monitoring and Evaluation Specialist was put in place. Monthly reports are provided to the UTH as well as biannually to funders.

In the period between January 2006 and December 2008 2863 children attended the One-Stop Centre. The One-Stop Centre has improved the followup of children, with 52% of eligible children completing a 28-day course of PEP, compared to 23% in the pilot study conducted in Zambia in 2004-2005 (Table 1) [5].
availability of Antiretrovirals (ARVs) within the public sector. The most difficult task was to find a team which was prepared to allocate time not only to training but also to spearheading the implementation process. These professionals were already overburdened with treating the severely ill due to the HIV/AIDS pandemic and had little time to take on other equally important duties. It is hoped that as the number of medical professionals increase and once a critical number of professionals have been trained, abused children will be able to receive services in the primary health centres, and the UTH centre will assume a coordinating and training role and act as a referral centre for complicated cases. The establishment and training of the team would not have been possible without collaboration, funding, and technical assistance from international organizations and individuals. With their assistance, protocols to guide the operations of the One-Stop Centre were developed. For this, the local team reviewed available data, and with technical assistance from outside sources, adapted it to meet the local needs. The main goal of the One-Stop Centre was to protect sexually abused children from acquiring HIV infection. The drugs used for PEP are those used in the treatment of HIV and AIDS. The budget for ART is limited to treatment rather than prophylaxis. This is a huge challenge as currently there is a shortage of drugs for those who require treatment.

4. Conclusions and Recommendations

One stop centres have proved to be effective in improving the management of sexually abused children [20–22]. This paper demonstrated a process used to develop such a centre in a low-resource environment. In order to establish a One Stop Centre in a developing country, it is important to get the support of the relevant stakeholders (policy makers, lawyers, magistrates, police, health workers, and influential networks in the communities). Mobilization of financial resources is essential in the initial stages as most medical systems in developing countries are overburdened with acute illnesses with no resources to invest in preventative strategies such as HIV/AIDS. The one-stop centres should be established within a health institution where the majority of patients initially present, and the concentration of senior health care providers is based, who would then be responsible for developing and modifying protocols, training health care workers based in rural areas, and maintaining a database.

It is therefore important that the National Drug Budget takes into account drugs for PEP as this is an important strategy to prevent HIV infection. Future research will need to explore other, more cost-effective regimens of drugs to be used for PEP in poor resource settings, as was done in the PMTCT program. Single-dose nevirapine and short-course zidovudine regimens were identified which were more cost-effective, but also efficacious at preventing maternal to child HIV transmission.

Follow up of children to ensure their completion of a 28-day course of PEP is a great challenge. Currently, when a child qualifies for PEP, a 7-day course of drugs is given, and the child is advised to come for review a week later or earlier if there are any side effects. Upon review, if the child has taken the medication and has had no adverse effects, he/she is given the remaining 21-day course of drugs and scheduled for review again at the completion of treatment. Even though followup improved from 23% to 52% with the establishment of the One-Stop Centre, few children report back on day 28, and negligible numbers return at 3, 6, and 12 months to repeat HIV testing as per protocol. Various methods have been used to encourage the initial 7- and 28-day reviews, such as reminder phone calls and diary cards, with limited improvement (Table 1). One potential barrier to followup is lack of money for transport to the UTH, which is often far from the child’s home. It is hoped that once services have been decentralized to the primary health centres which are based in the community, follow up will improve as it will reduce transport costs to and from UTH.

Police and legal services are grossly limited by shortage of transport and resources, including human resources, required for effective forensic investigations. The legal system is hostile to an abused child in that there are no child-friendly courts, most prosecutors are not familiar with CSA, and doctors are not keen to give expert opinion in court. The One Stop Centre has been trying to address these issues by conducting trainings and seminars for all those involved in the prosecution of child sexual abuse.

3. Continuing Challenges

Considering that one-stop centres do not exist in most poorly-resourced countries [8], the first step was to look at centres established in developed countries and see how they could be adapted to suit the local needs the environment and the limited resources available. Unlike most, One-Stop Centres in developed countries, which are located away from hospitals [17, 18], the center was established within the hospital where most senior medical professionals are found. However, most often, they have to deal with the acutely ill and have little time to audit the performance of the centre. The most significant challenge continues to be a lack of both monetary and human resources in the setting of numerous competing demands. Because of the gaps in the Zambian medical training curriculum which does not include child sexual abuse topics, there was a lack of experienced local medical professionals available to conduct the trainings. For this purpose, consultants with clinical experience in managing sexually abused children from acquiring HIV infection. The one-stop centres should be established within a health institution where the majority of patients initially present, and the concentration of senior health care providers is based, who would then be responsible for developing and modifying protocols, training health care workers based in rural areas, and maintaining a database.

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Defilement Cases</td>
<td>829</td>
<td>955</td>
<td>1079</td>
</tr>
<tr>
<td>No. Eligible for PEP</td>
<td>220</td>
<td>368</td>
<td>435</td>
</tr>
<tr>
<td>No. Completed PEP</td>
<td>92 (41.8%)</td>
<td>208 (56.5%)</td>
<td>239 (54.9%)*</td>
</tr>
<tr>
<td>No. Did not Complete PEP</td>
<td>128</td>
<td>160</td>
<td>196</td>
</tr>
</tbody>
</table>

*The drop in number completing PEP in 2008 is attributed to erratic availability of Antiretrovirals (ARVs) within the public sector.
which would help guide future policies and identify areas where future CSA related research may be needed.

It is not feasible to establish one-stop centers in all places in Zambia as in the present format they would be extremely expensive. In order to create a sustainable program throughout Zambia, the multidisciplinary concept should be adapted to work within the current health care system. In the future, once there is a cadre of health care workers trained in the identification and treatment of child sexual abuse available, the services should be established as close to the community as possible. This is especially important in poorly resourced countries where caretakers may fail to report abuse or be adherent to the followup regimen because of lack of transport funds.

Curricula at the health institutions need to be adapted to include child sexual abuse to ensure professionals are equipped with the knowledge and skills to care for children who have been sexually abused at graduation.

It remains critical for the UTH Centre as well as other large tertiary institutions where the centres are established to gain the support from the government to sustain these necessary services and reduce reliance on external funding.

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References
