

## CHILD SEXUAL ABUSE AND POSSIBLE HEALTH CONSEQUENCES AMONG SECONDARY SCHOOL STUDENTS IN URBAN TANZANIA

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### ABSTRACT

**Background:** Child sexual abuse (CSA) is a global public health concern especially in developed countries and where legal measures take unprecedented time. The aim of this study was to estimate the prevalence of different forms of CSA, and the perceived health consequences among secondary school students in Tanzania.

**Methods:** A cross-sectional survey was performed in Dar es Salaam using a random sample of 15 public and 8 private schools, each having participants from one randomly selected class. A self-administered questionnaire was supervised by research assistants to collect data and. Multivariate logistic regression analysis was used to identify CSA risk factors the perceived health consequences.

**Results:** A total of 827 girls (61%) and 532 boys (39%) with a median age of 16 years participated. Those who experienced at least one incident of sexual abuse in their life time.were 376 (27.7% n=1359). Prevalence of any CSA and forced penetrative sex among boys and girls was 26% and 30% and 8.7% and 9.8% respectively. Of those exposed to CSA, 20% were exposed at least four times..

**Conclusions:** CSA constitutes a public health problem in Tanzania. Awareness of sexual abuse incidents and associated health consequences need to be introduced to respective teaching curricula

### BACKGROUND

Child sexual abuse (CSA) is one form of maltreatment that children face, others being child

neglect, physical and psychological abuse but all broadly grouped in to contact and non-contact forms. These incidents violate human rights as well as social and cultural norms<sup>1</sup>. Worldwide, developed and developing countries recognize CSA as a concern.

In Europe, CSA among those younger than 16 years varies between 1-15% for boys and 6-36% for girls<sup>2</sup>, whereas in Brazil the prevalence is 4.0% among children aged 14to 18 years and incidents were three times higher among girls (5.6%) compared to boys (1.6%). Being over 12 years, the risk of abuse increased among girls and decreased among boys. However, life-time consultations for mental health services increased among clients reporting sexual abuse before 12 years of age<sup>3</sup>.

A survey among college students using mental health services in China found that 22% of women and 15% of men had a history of CSA before reaching 18 years of age, concluding that CSA contributes to mental health consequences in which more girls (11%) than boys (7.3%) were exposed to contact sexual abuse<sup>4</sup>.

A cross-sectional survey of CSA conducted in 2005 among high school students in Ethiopia reported 69% (51% verbal sexual harassment, 18% sexual intercourse). The survivors' health consequences included unwanted pregnancy (7.2%) sexually transmitted diseases (5.9%), suicidal ideation (2.3%), suicide attempts (1.8%) and sexual dysfunction (1.4%)<sup>5</sup>.

A national survey on violence against 13-24 year olds by UNICEF and Centre for Disease Control (CDC) found that 28% of girls and 13% of boys experienced some form of sexual violence before their 18<sup>th</sup> birthday. Mostly reported incidents were sexual touching and attempted sexual intercourse<sup>6</sup>. The aim of this study was to estimate the magnitude, prior knowledge, risk factors, disclosure patterns, actions taken and self-rated health and correlates of CSA among secondary school students in Temeke District.

## **METHODS**

### **Study design**

This cross-sectional survey took place in April and May 2010 among forms I and II secondary school children in a random sample of secondary schools in Temeke District, Dar es Salaam.

### **Study area**

The study was conducted in Temeke of Dar es Salaam region in Tanzania, that has a multi-ethnic population of over 800,000 population originating from all over Tanzania and majority of whom live in the peri-urban part of the district.

### **Participants**

The target population constituted secondary school students in 32 private and 38 public of Temeke District. For the sake of obtaining parental consent for participation, the study only involved day school students who daily reach their parents/guardians. A sampling frame of secondary schools in the 24 wards of Temeke was obtained from the District Education Office. Each of the selected schools had one class from forms I and II classes (ninth and tenth grades) randomly selected to participate in the survey.

### **Survey instrument**

The survey instrument was a questionnaire having 44 close-ended questions eliciting questions on socio-demographic history of exposure to any form of CSA, disclosure pattern, perpetrator characteristics, and measures taken. Few questions on self-rated health were added as applied by UNICEF violence against children survey conducted in Namibia and Tanzania<sup>6</sup>.

### **Data collection**

To make participants recognize CSA incidents, one student from each participating class was asked to read a scenario from a local newspaper that described a sexual offence involving a child. Students were then asked to respond to the rest of the questionnaire on the basis of how they understood the scenario. The filled questionnaires and the loose sheets were collected separately by research assistants.

### **Data analysis**

Data were analysed using SPSS computer software. Pearson's  $\chi^2$  test was used to identify significant differences in background characteristics between boys and girls. Bivariate and multivariate logistic regression analyses were performed to identify risk factors for any form of CSA and calculating odds ratios (OR) with their corresponding 95% confidence intervals (CI).

### **Ethical issues**

Muhimbili University Ethical Clearance Committee approved this study. Permission to conduct the survey was granted by Ministry of National Education and Vocational Training (MoEVT), Temeke Regional and District Education Authorities and the Council Health Management Team (CHMT). Permission was also sought from ward secretaries, the selected schools, parents, and students prior to the data collection process. Before commencement of data collection, the participants were informed about the study objectives and they were further informed that their participation was voluntary.

Students were seated apart to avoid accessing each other's responses. The students were given appointments to meet a male assistant medical officer and a female registered nurse specialized in psychiatry to respond to their need. Eighty students including 55 girls 25 consulted the clinicians amongst whom 20 girls were booked for monthly follow-up at the clinic.

## **RESULTS**

Of the 1610 students who collected parental consent forms, 1410 (88%) were granted permission to participate amongst whom 51 students (30 boys and 21 girls) declined to participate thus remaining with 1359 (84%) (Fig 1). The median age was 16 years (range 13-22) among boys and 15 years (range 12-25) among girls. Most (86%) students' parents were married. Significantly more mothers (62%) than fathers (43%) had primary only education or no education ( $p=0.011$ ).

Twenty six percent of girls and 30% of boys ( $p=0.063$ ) reported incidents of CSA. Being forced to watch pornographic materials was the most common sexual abuse incident reported

more by boys (26%) than girls (19%;  $p=0.008$ ). A significantly higher proportion of girls had been forced to “look at males’ genitalia” ( $p<0.001$ ) whereas 0.8% of boys and 3.5% of girls “reported that fingers or objects were introduced into their body” ( $p=0.002$ ). Forced penetrative sex was reported by 9.1% of the students (9.8% of boys, 8.7% of girls;  $p=0.30$ ) (Table 1). Of the 376 students who reported being exposed to sexual abuse incidents, 28% were exposed to one incident, 52% to 2-3 incidents, and 20% to four or more incidents.

Three of four girls (76%) and two of three boys (66%) disclosed their CSA incident. One third disclosed to teachers, one fourth to their family, and one fourth to friends. There was no significant difference by sex (Figure 2). The risk for ever being sexually abused was higher in the 15-17 year age group (OR 1.6, 95% CI: 1.1-2.3) compared to the 12-14 year age group and the 18-25 year age groups (OR 1.5; 95% CI: 0.9-2.7). Perpetrators of sexual abuse ranged from neighbors to peers and friends (Fig 3). Compared to those with excellent/very good health, the risk of involvement in penetrative sex increased threefold (OR=2.7; 95% CI 1.6-4.6) for those who rated their health as good and nine fold (OR=9.4; 95% CI 5.7-16) for those who rated their health as poor.

### Perceived health consequences

Serious health consequences of sexual abuse were reported (Fig 4). Among boys, 7.0% of the non-abused, 26% of the abused, and 35% of those exposed to forced penetrative sex rated their health as fair/poor. The corresponding figures for girls were 6.3%, 41% and 53% respectively.

Similarly, experience of penetrative sex was associated with severe health consequences. Girls had higher rates of suicidal thoughts. Among boys, suicidal thoughts were present in 3.0% of the non-abused, 10% of the ever abused, and 12% of those exposed to forced penetrative sex. The corresponding figures for girls were; 7.1% of the non-abused, 15% of the ever abused and 26% of those forced penetrative sex (Figure 5). However, suicidal attempts were reported by 1.1% of the non-abused, 1.9% of the ever abused and 0% of boys those exposed to forced penetrative sex. The corresponding figures for girls were 2.1%, 3.7%, and 6.9% respectively.

### Discussion

In this study, more CSA incidents were reported by boys (30%) compared to girls (26%) even when it came to penetrative sex incidents the proportion of boys (9.8%) outnumbered that of girls (8.7%). One in every 5 survivors of penetrative sex got exposed at least four times (22%). A similar observation was made by Madu and Peltzer<sup>9</sup> in South Africa, from a classroom survey of 14-30 year old students (mean age 19 years) reporting a CSA prevalence of 56% among boys and 53% among girls. However other studies found the opposite. McCrann et al<sup>7</sup> in a study involving first- and third-year students at a university in Tanzania, which estimated the CSA prevalence before 18 years of age to be higher among girls (31%) compared to boys (25%). Also Anderson and co-workers<sup>22</sup> performed a school survey of CSA in eight countries in sub-Saharan Africa in 2003 and repeated it again in 2007 in the same countries with South Africa and Tanzania being added. The overall prevalence was 25% among boys and 28% among girls and the corresponding figures for Tanzania were 32% among boys and 43% among girls, highest among the 10 countries. A possible explanation for the higher estimate than in our study is that in their study as they did not seek parental informed consent, parents who could be abusers may have denied consent for their children.

Three hundred seventy six survivors disclosed their abuse incidents featuring more girls (76%) than boys (66%). The confidants to whom disclosure was made included teachers, family members, and/or friends. One of every three perpetrators was a neighbour, and one of every five perpetrators was a teacher. A nationwide cross-sectional study<sup>10</sup> of violence against 13-24 year old children conducted one year earlier that the current study estimated 13% of boys and 28% of girls to be survivors of CSA. However, interviewer administered questionnaire was used in obtaining information by research assistants. This might have hindered openness of the participants.

With regard to variation of CSA, a study conducted in Europe by Halperin et al<sup>10</sup> in a sample of 68 classes from 17 schools in Switzerland found a prevalence of any abuse of 11% among boys and

34% among girls. Figures for forced penetrative sex were 1.0% for boys and 5.6% for girls. In the same country, from 2009-2010 a population-based cross-sectional study using self-reported computer-assisted questionnaire involving 6787 ninth grade students found that experiencing at least one incident of CSA was reported by 40% of girls and 17% of boys. Physical contact without penetration was reported by 15% and 4.8% of boys and girls respectively while contact with penetration was reported by 2.5% and 0.6% of girls and boys respectively<sup>9</sup>. In Malaysia, Singh et al<sup>11</sup> distributed a self-administered questionnaire to nursing students and medical assistant trainees at a paramedical school and reported the prevalence of any abuse to be 2% among boys and 8% among girls.

Formulating questions on types of sexual abuse is not easy. Most research only measures any sexual abuse and forced sexual intercourse/penetrative sex. The most prevalent form of sexual abuse in the current study was being forced to look at pornography. The overwhelming increase in private and public owned media channels may not abide to ethics in the absence of monitoring by law-enforcement mechanisms hence transmitting sessions which are not children friendly. Pornography was perceived to propel sexual offence crimes in the same community where the study was conducted<sup>12</sup>.

Forced penetrative sex was reported by 9.8% of boys and 8.7% of girls. Similar estimates were reported by McCrann et al<sup>21</sup> (8.8% among boys, 11% among girls), while Ajuwon et al<sup>13</sup> found a lower prevalence (5.8% among boys and 4.4% among girls) based on face-to-face interviews of secondary school students in Nigeria.

Being forced to look at perpetrator's genitalia was the second most common type of sexual abuse incident in this study. This was also the second commonest reported type of sexual abuse by 23% of boys and 8.9% of girls in a national cross-sectional survey of high school students in Kuwait that aimed to elicit different forms of abuse of children<sup>14</sup>.

In this study, among the 376 abused children, 3.1% of boys and 2.3% of girls did not disclose the perpetrator. Four of five girls and half of the boys were abused by a male perpetrator. The most common perpetrators were neighbours, teachers, peers, and family members. The same categories are mentioned in most studies but the percentage distributions vary. In Ethiopia, 36% of perpetrators were unrecognized and only 16% were neighbors<sup>5</sup>. In Nigeria<sup>15</sup>, boyfriends, neighbours and schoolmates constituted 87% of the perpetrators according to the survivors' parents. In Switzerland<sup>10</sup>, the pattern differed with 93% of girls and 87% of boys having a male perpetrator. The most common perpetrator for boys was a family acquaintance (67%) and for girls it was a stranger (73%).

Poor self-rated health was the strongest risk factor of CSA. As these results are based on a cross-sectional study, poor self-rated health is likely a consequence of the sexual abuse exposure. Poor self-rated health was more prevalent among the abused compared with those not abused, and among those exposed to forced penetrative sex compared to those exposed to any abuse.

The association between CSA and suicidal thoughts and attempts is confirmed in many studies. Brown et al<sup>16</sup> analysed the global school-based student health survey performed with 13-15-year old students in Namibia, Swaziland, Uganda, Zambia, and Zimbabwe. They found that children who were ever physically forced to have sexual intercourse had doubled the risk for considering and planning suicide. Suicidal attempts were also described to be more than twice among survivors of CSA in a retrospective study conducted from 1995-1997 among 17337 people in San Diego, California<sup>17</sup>. CSA was a strong risk factor for suicidal thoughts and attempts among women in many of the WHO multi-country study sites<sup>18</sup>.

Poor self-rated health was more prevalent among girls than boys in Temeke study. This may indicate differences in types and severity of abuse and/or that having experienced abuse entails greater shame and stigma for girls than boys. CSA has, therefore far reaching impact for the development of individuals and the country in general.

But in this study, low social economic status (SES) was associated with CSA. There was less of CSA incidents among the very rich/ rich compared to students who rated their SES as being poor/very poor. Among the poor/very poor, victimization was almost double among students reporting sexual abuse (197, n=376) compared to those with no history of abuse (278, n=983) (OR 2.5, 95% CI: 1.5-3.9). The association between CSA and poverty has also been described in Ontario, Canada, where a study using a community-based sample was conducted to examine the prevalence of childhood physical and sexual abuse. They found out that up-bringing in urban setting, living in poverty and young maternal age at the time of the first child's birth predicted childhood physical and sexual abuse<sup>19</sup>.

### CONCLUSIONS

The proportion of secondary students involved in CSA including forced penetrative sex in Temeke, an urban part of Tanzania was high in which

one in every three perpetrators was a relative or and one in every five perpetrators was a teacher. The society is being informed that the two protectors of children's rights have forgotten their roles as parents, turning to offenders.

### RECOMMENDATIONS

1. Students' awareness of sexual and reproductive health rights knowledge need to be imparted to them early either through the school curricula or using targeted medium which will be at their reach.
2. Survivors also need to be encouraged to disclose and report abuse incidents for action.
3. There is a need to mobilize the community and to raise awareness of the seriousness of the situation among authorities, such as the police and health services.
4. Since teachers/instructors were among the reported perpetrators of CSA incidents, the MOEVT should step up education of teachers' ethics.

**Figure 1: Distribution of students by age and sex**

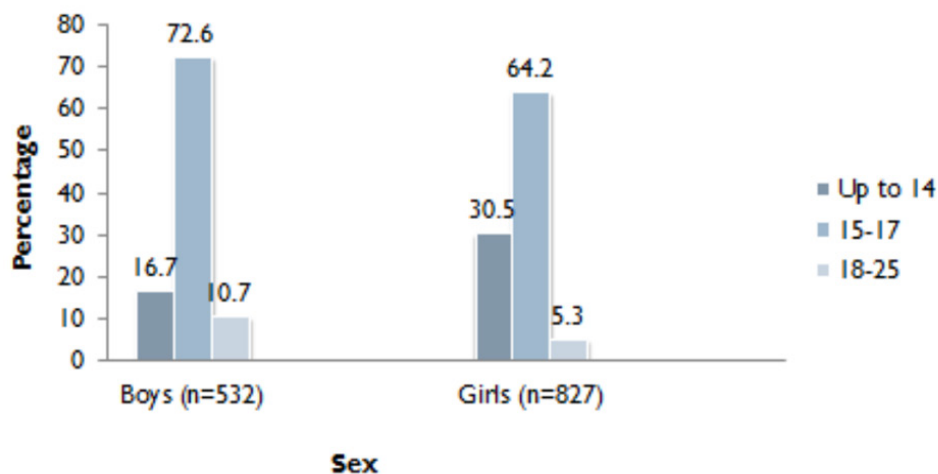


Fig 2: Confidants to whom disclosure was made

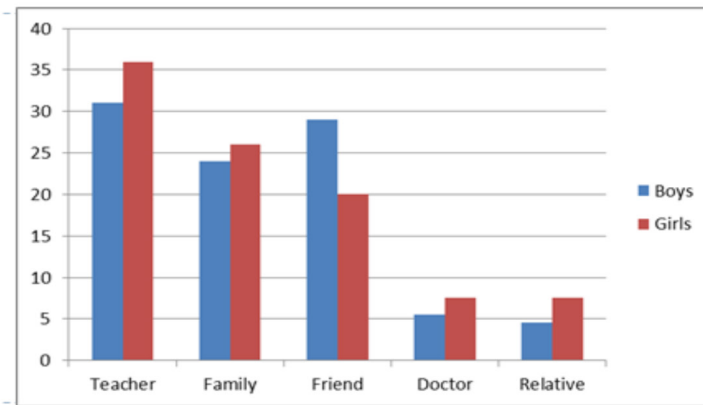


Fig 3: Perpetrators of sexual abuse incidents

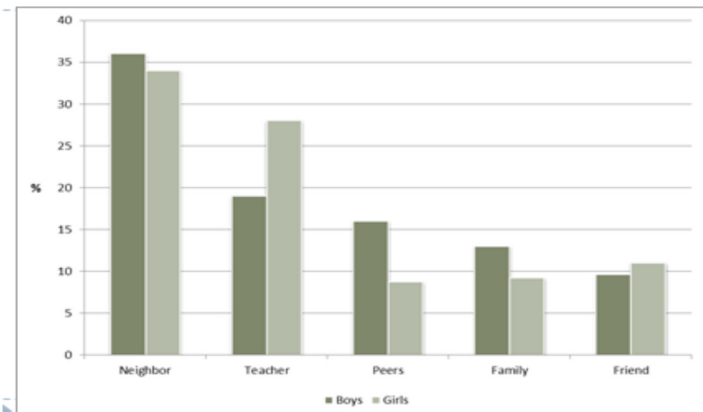


Fig 4: Fair/poor self-rated health and abuse status

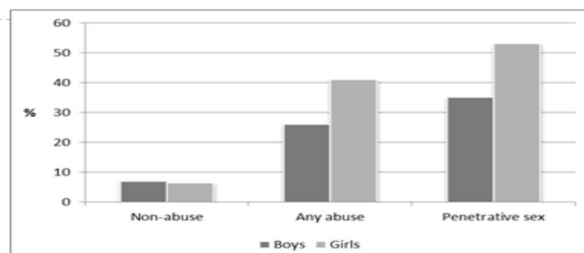
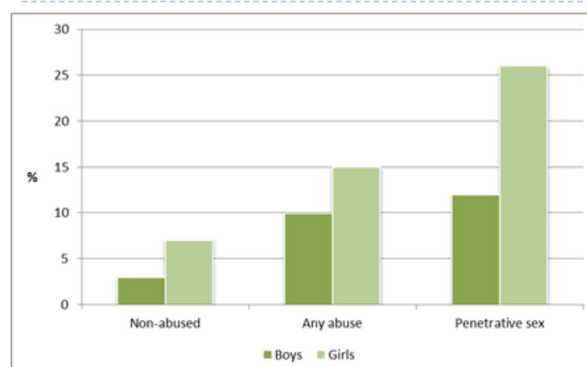


Fig 5: Suicidal thoughts



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