The Epidemiological and Clinical Profile of Sexually Abused Children: A Hospital-Based Study

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Abstract

Introduction: Child sexual abuse is an extensive health and societal problem as even the lowest prevalence of child sexual abuse includes a huge number of victims who still need to be considered. Africa has the highest prevalence of child sexual abuse yet still with a paucity of literature on the subject matter.

Objective: Describe the epidemiological and clinical profile of children victim of sexual abuse reported at the Yaounde Gynaeco-obstetric and Pediatric Hospital (YGOPH).

Methods: A hospital based cross sectional descriptive study was conducted from January 1st, 2017 - December 31st, 2019 at the Yaounde Gynaeco-Obstetric and Pediatric Hospital. Consultation files were examined and identified cases of child sexual abuse (CSA) recruited. Epidemiological and clinical data of included participants were treated using a pre-established questionnaire. Collected data were entered and analysed using SPSS (Statistical Package for Social Sciences) software version 26.0 with p-values calculated following a one variable binomial sampling.

Results: In total, data was assessed from 51,331 paediatric consultation files of which 127 cases of child sexual abuse met our inclusion criteria. The prevalence of child sexual abuse was 0.25%. Most victims of child sexual abuse were of the female gender (92%) from single parenting homes (36.8%) (p < 0.05) within two age groups < 5years (32.9%) and 10-15 years (32.9%). Perpetrators were in majority males (84%) of age ≥18 years (72.4%) and were persons known to the victims (73.7%) who proceeded by taking advantage of the victims’ trust. Vaginal penetration (57.9%) with vaginal lesions (59.2%) were the most encountered cases which were placed on highly active anti-retroviral prophylaxis however with poor clinical follow-up (35.5%) as the patients did not turn-up for their visits.

Conclusion: Child sexual abuse though not addressed as a matter of urgency, yet it is a problem with a gradual upward trend in our community most especially as perpetrators are persons we are familiar with. Thus, a call for greater vigilance with regards to the guidance we leave our children with.
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Keywords
Sexual Abuse, Prevalence, Victims, Perpetrators, Child, Cameroon, Africa

Abbreviations
CSA: Child Sexual Abuse; YGOPH: Yaounde Gynaeco-Obstetric and Pediatric Hospital

Introduction
Child sexual abuse is the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violate the laws or social taboos of society. Child sexual abuse is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person [1].

Child sexual abuse has family and societal risks factors. Family risk factors may include low family support and/or high stress, poverty, low parental education, single parenting, parental substance abuse, domestic violence. Societal risk factors include unemployment, war zones, overcrowding, poverty, lower maternal education, and drug abuse among perpetrators [2].

The impact sexual abuse has on the development of a victimised child is a major call for concern, which are dependent on a number of factors including the age of the victim at the time of assault, the frequency and extent of the abuse, the relationship of the victim with the abuser (incest has the worst outcomes), the use of force, the presence of severe injury, and the number of different perpetrators. These outcomes include but not limited to dropping out of school, persistent posttraumatic stress disorder, psychiatric diagnoses, tendency toward physical and sexual re-victimization, teen motherhood, drug abuse, self-destructive behaviour, anxiety, poor self-esteem, substance abuse, sexual maladjustment and even death [2-4].

The aim of this study was to describe the epidemiological and clinical profile of children victim of sexual abuse reported at Yaounde Gynaeco-obstetrics and Paediatric Hospital.

Method
This study took place at the Yaoundé Gyneco-Obstetric and Paediatric Hospital. It is a reference hospital principally centred on mother and child health care. The departments which are operational in this health facility include: Gynaecology/Obstetrics, Paediatrics, Paediatric Surgery, Anaesthesia and Resuscitation, Ophthalmology, Otorhinolaryngology, Emergency, Anatomopathology, Radiology and Medical Imaging, Acupuncture and Physiotherapy. It recently started an adolescent clinic which takes care of the health problems of children aged 10-19 years.

This was a hospital based cross sectional descriptive study with a study period from January 1st, 2017 to December 31st, 2019.

Participants for this study were children who were reported to have been sexually abused, and confirmed by a team of physicians at the YGOPH upon consultation.

We proceeded by going through all the consultation registers of the hospital to identify cases of sexual abuse. A list was then constituted to this regard; with which we went through the files at the level of archives of the hospital. All the files of gender based violence specifically sexual abuse were retained and treated by using a pre-established questionnaire.

Included in our study were participants;
- Aged below 18 years
- Who consulted at the YGOPH post sexual abuse and confirmed to have been abused sexually from January 1\textsuperscript{st}, 2017- December 31\textsuperscript{st}, 2019

We excluded the following from our study:
- Eligible participants whose files could not be found
- Eligible participants whose files had missing information such as a clear narrative of the
incident and sociodemographic profile of the perpetrator.

Our minimum sample size was determined using the Cochran’s formula as our study was a descriptive study.

Sample Size = \frac{Z_{1-\alpha/2}^2 \times P(1-P)}{d^2}

Where;
Z_{1-\alpha/2} = 1.96 \text{ (critical ratio of significance, which corresponds to 95 \% confidence interval)}
\alpha = 0.05 \text{ (level of significance)}
P = (2,05 \%) \text{Prevalence of CSA from a previous in Cameroon by Menick et al 1998 [5].}
d = 0.05 \text{ (error margin at 5 \%)}
n = \text{minimum acceptable sample size (For this study n=31)}

Data was collected using a pre-established questionnaire and entered into SPSS version 26.0. The data were analysed using SPSS version 26.0 based on study objectives. Quantitative data were expressed as means ± standard deviation (SD) or median while qualitative data were summarised in frequency tables with counts and percentages and p-values calculated following a one variable binomial sampling.

Results
We observed a gradual but continuous increase in the prevalence of child sexual abuse from 0.21 \% in 2017 to 0.28 \% in 2019 (Table-1).

The period prevalence of child sexual abuse was 0.25\% for our study period which was obtained as follows; The prevalence was the percentage of the ratio of the total number of sexual abused cases (127) to total number of pediatric consultations within the period of study (51,331).

The mean age of the victims of abuse was 7.75 ± 4.58 years predominantly of the female sex 92.1\% \text{ (p=0.000)}, living with single parents 36.8\% \text{ (p=0.008)} of mean age 34.56 ± 9.42 years and of non-liberal profession 43 \text{ (56.6\%)}. Perpetrators were mostly males 84.2\% \text{ (p=0.000)}. They were of age ≥ 18 years 55 \text{(72.4\%)} with mean age of 23 ± 9.23 years. Perpetrators were persons known to the victims of the abuse 73.7\% \text{ (p=0.000)} and consumers of drugs 50 \text{(65.7\%)} (Table-2).

The most common form of child sexual abuse was vaginal penetration (57.9\%) closely followed by fondling (28.9\%). Most of the cases were orchestrated once (75.0\%). Incident of the abuse frequently took place at victim’s home (52.6\%) and only reported most at times 7 days after the day the incident occurred (36.8\%). In majority of cases, victim’s trust was taken advantage of (76.3\%) (Table-3).

Most cases presented with bruises at the vulva 45 \text{(59.2\%)}, peri-vaginal bleeding 28 \text{(36.8\%)} and hymeneal lesions 27 \text{(35.5\%)} (Table-4).

All cases were negative for HIV screening 76 \text{(100\%)} at first consultation, with only 35.5\% of cases who presented for check-ups at 4 weeks after initial screening and were all negative. Cases that were systematically placed on highly active antiretroviral therapy for four weeks, represented less than half of the total number of cases enrolled in the study (47.3\%).

Discussion
Our study found a prevalence of 0.25 \% which was far less than the values obtained by Mbassa Menick et al in 1998 of 2.05 \% at the Center for Mother and Child Protection in Yaoundé for a period of five years [5]. They later on in 2002 obtained a prevalence of 15.9 \% in a study conducted in schools in Yaoundé [6].

| YGOPH | Registered consultations | Cases of CSA | Prevalence (%) |
|-------|--------------------------|--------------|----------------|
| 2017  | 14,699                   | 31           | 0.21           |
| 2018  | 17,897                   | 44           | 0.25           |
| 2019  | 18,735                   | 52           | 0.28           |
| Total | 51,331                   | 127          | 0.25           |
which was higher than what they had earlier found. As such the relative lower prevalence obtained could probably be explained by the shorter study period of our study. Most cases of child sexual abuse are not reported at the level of the alth structures, which correlates with the findings of Human rights watch; 2013 reporting that only 25 % of sexually abused children had opened up to someone about the incident [7]. The upward trend in the prevalence of child sexual abuse was similar with findings of other studies such as that conducted by Menick et al in 2002 in schools in Cameroon that found a prevalence of 15.9 %, against 2.05% in 1998 [5,6]. Also, Behere et al found an increase in the prevalence of child sexual abuse in India between 2010 and 2011 to be 24 % [8]. This increasing trends could be due to increasing urbanization and promiscuity in the different homes as well as, little or no disclosure of already existing cases of child sexual abuse that only creates a conducive environment for further abuses. The age of victims was found in two age groups; <5 years and [9-15] years giving us a mean age of 7.87 ± 4.28 years which was in concordance with general trends following findings from previous studies [5,9,10]. Females were most victimized representing 92.1% against 7.9 % males in line with the findings of Singh et al, 2014 and Menick et al, 1998 who reported that victims were more often girls than boys: 95.2 % against 4.8 % respectively [6,9]. The victims were from homes with large family size (36.8 %), single parenting (36.8 %) and of non-liberal profession (56.6 %) which are elements in favour of poor socio-economic background that accounts for twice the chances of being sexually abuse [11].

Table-2: Sociodemographic profile of perpetrators

| Variable                  | Number (n=76) | Percentage (%) |
|---------------------------|---------------|----------------|
| **Level of education**    |               |                |
| Nursery                   | 4             | 5.3            |
| Higher education          | 4             | 5.3            |
| Illiterate                | 9             | 11.8           |
| Primary                   | 17            | 22.4           |
| Secondary                 | 42            | 55.3           |
| Sub-urban                 | 11            | 14.5           |
| **Residence**             |               |                |
| Rural                     | 15            | 19.7           |
| Urban                     | 50            | 65.8           |
| **Profession**            |               |                |
| Liberal                   | 11            | 14.5           |
| Unemployed                | 16            | 21             |
| Non liberal               | 19            | 25             |
| Student                   | 30            | 39.5           |
| **Relationship with victim** |            |                |
| Friend                    | 1             | 1.3            |
| Sibling                   | 1             | 1.3            |
| Aunty                     | 1             | 1.3            |
| Teacher                   | 2             | 2.6            |
| Cousin                    | 3             | 3.9            |
| Father                    | 4             | 5.3            |
| Classmate                 | 5             | 6.6            |
| Step-parent               | 5             | 6.6            |
| Uncle                     | 9             | 11.8           |
| Stranger                  | 20            | 26.3           |
| Neighbour                 | 25            | 32.9           |
| **Drug consumption**      |               |                |
| Tobacco                   | 0             | 0              |
| Alcohol                   | 22            | 28.9           |
| N/A                       | 26            | 34.2           |
| Alcohol and tobacco       | 28            | 36.8           |
Table 3: Characteristics of child sexual abuse

| Variable                        | Number (n=76) | Percentage (%) |
|---------------------------------|---------------|----------------|
| **Type of sexual abuse**        |               |                |
| Kissing                         | 2             | 2.6            |
| Oral sex                        | 2             | 2.6            |
| Anal sex                        | 2             | 2.6            |
| Masturbation                    | 4             | 5.3            |
| Fondling                        | 22            | 28.9           |
| Vaginal sex                     | 44            | 57.9           |
| **Place of incident**           |               |                |
| School                          | 4             | 5.3            |
| Bush                            | 6             | 7.9            |
| Roadside                        | 6             | 7.9            |
| Neighbour’s place               | 20            | 26.3           |
| Home of victim                  | 40            | 52.6           |
| **Number of incidents**         |               |                |
| Thrice                          | 3             | 3.9            |
| Twice                           | 5             | 6.6            |
| More than thrice                | 11            | 14.5           |
| Once                            | 57            | 75             |
| **Duration of abuse**           |               |                |
| Days                            | 3             | 3.9            |
| Years                           | 3             | 3.9            |
| Months                          | 5             | 6.6            |
| Weeks                           | 8             | 10.5           |
| N/A                             | 57            | 75             |
| **Reported incident**           |               |                |
| 3-7 days afterwards             | 9             | 11.8           |
| Same day it happened            | 19            | 25             |
| 1-3 days after it happened      | 20            | 26.3           |
| ≥7 days                         | 28            | 36.8           |
| **Force/persuasion involved in episodes of CSA** |       |                |
| Used intimidation or adult authority | 26          | 34.2           |
| Used bribes or enticements      | 30            | 39.5           |
| Used threats against victim     | 34            | 44.7           |
| Used physical force             | 48            | 63.2           |
| Took advantage of victim’s trust| 58            | 76.3           |

Table 4: Clinical presentations post sexual assault*

| Variable                      | Number (n=76) | Percentage (%) |
|-------------------------------|---------------|----------------|
| Peri-anal lesions             | 6             | 7.9            |
| Semen/sperm in the vulva      | 11            | 14.5           |
| Unremarkable                 | 15            | 19.7           |
| Bruises on other body parts   | 19            | 25             |
| Hymeneal tears                | 27            | 35.5           |
| Vaginal bleeding              | 28            | 36.8           |
| Bruises in the vulva          | 45            | 59.2           |

*More than one clinical presentations could be found in a victim, but every clinical presentation was evaluated on the 76 cases we analyzed when expressing in percentage.
Perpetrators of the sexual abuse were of age ≥ 18 years in majority of the cases (72.4 %) with a mean age of 23 ± 9.23 and a median age of 22 years similar to the findings by Koki et al, 1992 [12]. Orchestrators of the acts of sexual abuse were mostly males 64 (84.2 %) against 12 (15.8 %) females giving us a sex ratio of 5.3. This is the general trend as found by Singh et al, 2014 [9]. These perpetrators were mostly students (39.5 %), persons known to the victims of the abuse (73.7 %) and drug consumers (65.7 %) who used as approach the abuse of victims’ trust and physical force [13,14]. These findings were similar to previous findings in Cameroon by Koki et al, 1992, Menick et al 1998, Singh M et al,2014, David et al, 2018, [5,9,12,15].

The nature of child sexual abuse ranged from non-contact to contact sexual abuse. Contact sexual abuse was most frequent comprising vaginal ingress (57.9 %) and fondling (28.9 %). Such were similar findings from previous studies as India recorded a 29.7 % growth rate of rape between 2010-2011 [9]. Previous studies in Cameroon found rape to be the most recurrent form of CSA closely followed by fondling [5,6,12,16].

Clinical findings in this study were unremarkable in 19.7 % of cases. However, some findings comprised of bruises in the vulva (59.2 %), per-vaginal bleeding (36.8 %) and hymeneal tears (35.5 %). As indirect physical marker, we found vaginal discharge in 23.7 % of cases. Koki et al,1992 as well as Foumane et al 2014 had similar findings all in line with findings globally [5,12]. Direct physical markers of child sexual abuse in the genital areas themselves are present in only a minority of cases of child sexual abuse. Those markers that are present may only persist for a short period of time (measured in hours and days). For these reasons, the absence of ‘physical markers of child sexual abuse in the genital area cannot be the basis for dismissing concerns about the possibility that child sexual abuse has occurred. Systems need to acknowledge that as many as 90 % of child sexual abuse cases are not confirmed by physical examination alone [17].

Cases of child sexual abuse recorded, took place over a broad timeline from days to years in some cases. Sexual abuse usually occurs once (69.7 %). The number of episodes of sexual abuse that occurred over days, weeks, months and years were fewer but all four were considerable (30.3 %). The assault took place at the victim’s or the perpetrator’s home similar to the findings of Menick et al. in a group of 269 Cameroonian students, who reported that 43 % of the acts of sexual abuse occurred at the victim’s home and 28.4 % at the perpetrator’s home [5,6], likewise the findings in South Western Nigeria and Tanzania [14,15]. The considerable number of cases that took place repeatedly could be due to the fear of opening up to someone as such giving grounds for further assaults [13].

Conclusion
Child sexual abuse though not addressed as a matter of urgency, yet it is a problem with a gradual upward trend in our community most especially as perpetrators are persons we are familiar with. Thus, a call for greater vigilance with regards to the guidance we leave our children with.

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Competing Interests
All authors have read and approved the final version of the manuscript. The authors have no conflicts of interest to declare.

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