

**Original Research****Clinical Presentations Of Child Abuse: What Are The Warning Signs In Medical Consultations In Some Referral Hospitals In Yaoundé?**

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**Abstract:****Background:**

The practitioner must recognize both the warning signs of child abuse and collaborate in the prevention of its consequences. The general objective of our study was to report the different clinical presentations of abused children received in some referral hospitals in Yaoundé that could be used as warning signs in medical consultations.

**Method:** A retrospective cross-sectional study was conducted in some referral hospitals in Yaoundé from January 1, 2015 to December 31, 2019, i.e. 5 years. All records of children under 18 years of age who were victims of abuse were included in our study consecutively. Statistical analysis was done using Epi-info TM version 7.2 software.

**Results:** Female children were the most frequently abused (121; 91.7%) with an age range of 0-14 years (125; 94.0%). The main reasons for medical consultation were the request for human immunodeficiency virus testing (105; 69.1%) and the suspicion of sexual assault (81; 53.3%). The most frequent traumatic lesions were lacerations (67; 59.3%) with the anogenital area (98; 86.7%) as the main body location.

**Conclusion:** Improving the diagnosis of child abuse by studying clinical signs would be crucial in the fight against this scourge in our context by considering the infectious risk, the suspicion of sexual assault and anogenital lesions as the main warning signs.

**Key words:** Sevice, Children, Clinical Presentation, Alert, Cameroon

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## Introduction

Every year, one out of every two children in the world is physically, sexually, or psychologically abused, resulting in trauma, disability, or death, (1). Child abuse refers to all forms of physical and/or emotional maltreatment, sexual abuse, neglect or negligent treatment, or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity, within the context of a relationship of responsibility, trust or power (2). The protection of children is particularly incumbent on all institutions and individuals who have children in their care (3). The plurality of clinical presentations is due to the different risk factors that should raise the alarm in order to put in place preventive measures to protect children (4). The clues to suspect child maltreatment are as much anamnestic as they are based on a thorough physical examination that may already reveal evidence of abuse. The practitioner must recognize both the warning signs, vulnerability and clinical signs whose diagnosis remains complex and often requires a multidimensional approach (medical, social, psychiatric, educational, and judicial) (5). However, it is sometimes difficult to distinguish between "deserved" punishment and abuse. Abandonment takes various forms that can lead to the death of the child (infanticide practices). The advocacy work of some international organizations has led to improved diagnostic skills in recognizing and detecting child abuse (6). The medical examination most often reveals hymenal trauma, almost half of which is made up of old lesions, and post-traumatic shock that can lead to mutism (7, 8). Cases of infectious contamination with the human immunodeficiency virus, for example, are sometimes reported (8). Child abuse has deleterious effects on the physical and mental health of children in adulthood (2). The treatment of child abuse faces many obstacles (8-10). These consequences are often

disastrous and costly for both the child and society, hence the need to detect clinical signs of abuse early and to collaborate in the prevention of their consequences through early and appropriate care (3). The general objective of our study was to report the different clinical presentations of abused children received in some referral hospitals in Yaoundé that could serve as warning signs in medical consultations.

## Methodology

### Type and location of study

A retrospective cross-sectional study was conducted in a few referral hospitals in the city of Yaoundé in Cameroon on child abuse recorded in the consultation and hospitalization departments of the said hospitals. The reference hospitals selected were: the « Centre Hospitalier et Universitaire de Yaoundé (CHUY) », the Centre Mère et Enfant de la Fondation Chantal Biya (CME/FCB), the Hôpital Gynéco-Obstétrique et Pédiatrique de Yaoundé (HGOPY) and the Centre Hospitalier d'Essos (CHE). These four hospitals aim to provide quality care, serve as educational support, promote research and limit medical evacuations.

### Study duration/period

Data were collected over a 5-year period from January 1, 2015 to December 31, 2019. The study duration was from November 1, 2019 to May 31, 2020, or 07 months.

### Study population

All records of children under 18 years of age who were hospitalized, seen in consultation, or in the emergency department who were victims of abuse during the study period were included in our study. Records with inadequate information on the circumstances of possible physical and/or emotional trauma were excluded.

### Procedure in case of child abuse

In each health facility, the circuit of the child in danger or at risk of being so was the same. Indeed, the child could come either from the emergency room, the outpatient clinic or by transfer from one of the pediatric sub-specialties. Whether the case was suspected or confirmed, it was referred directly to the hospital's social center for further investigation. The latter took care of the administrative procedures for the notification of the cases either to the justice system or to the Ministry of Social Affairs, or to the approved centers for the temporary or definitive reception of the child. During the entire procedure, the child was housed in the hospital department that had reported the possibility of abuse or in the care of the social services while awaiting the final verdict.

### Data collection

We examined the files corresponding to the selection criteria in the hospitals' archiving services after obtaining administrative authorizations. The data collected were recorded on a technical form previously filled in and validated with a coding system that guaranteed the anonymity of the participants.

### Study variables

The study variables included sociodemographic data (age, sex, and sibling rank), types of violence, reasons for consultation, and types and location of traumatic injuries to child victims.

### Statistical analysis

The data collected were analyzed using Epi-info TM version 7.2 software. Categorical variables were presented as frequency and percentage. Representations of these variables were made in the form of tables and figures.

### Ethical and Administrative Considerations

All research studies involving human subjects require the acquisition of a research ethics clearance, which we obtained from the institutional research committee of the Faculty of Medicine and Biomedical Sciences. On the

administrative level, each health facility gave its authorization for the study of the files. The confidentiality of the data collected was scrupulously respected.

### Results

#### Flow of our study population

A total of 19,187 children's files were examined, with a proportion of 1.41% (271 children) at risk, distributed as follows 132 (48.70%) victims of violence and 139 (51.29%) at risk.

#### Sociodemographic characteristics

Female children were more often abused (121; 91.7%) than male children (11; 8.3%). Also, 125 children were between 0 and 14 years of age, i.e. more than 94% of the victims, with children between 0 and 5 years of age representing more than half (71; 53.8%). Regarding the position in the siblings, the children most likely to suffer violence with 46 cases (35%) were those in the middle of the siblings (Table 1).

**Table 1.** Distribution of socio-demographic characteristics of our study population

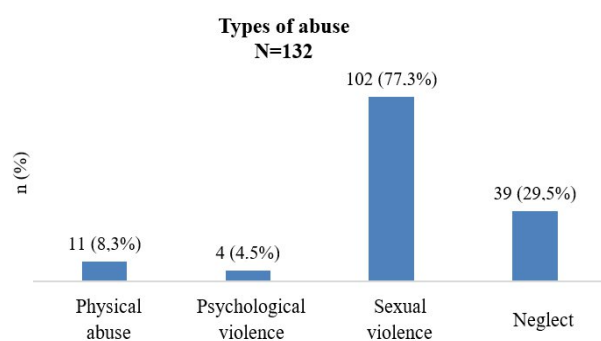
| Variables             | Modalities    | n   | (%)  |
|-----------------------|---------------|-----|------|
| Gender                | Female        | 121 | 91.7 |
|                       | Male          | 11  | 8.3  |
| Age range (years) 0-2 | 0-2           | 31  | 23.5 |
|                       | 3-5           | 40  | 30.3 |
|                       | 6-10          | 35  | 26.5 |
|                       | 11-14         | 19  | 14.4 |
|                       | 15-17         | 7   | 5.3  |
| Position in siblings  | 1st born      | 36  | 27.5 |
|                       | In the middle | 46  | 35.0 |
|                       | Last born     | 20  | 15.0 |
|                       | Only child    | 30  | 22.5 |

#### Types of abuse

The most common type of abuse was sexual abuse (102; 77.3%) followed by severe neglect (39; 29.5%). Physical and psychological abuse were 8.3% (11 cases) and 4.5% (4 cases) respectively (Figure 1).

#### Reasons for medical consultation

The reasons for consultation leading to the registration of a child victim of abuse were



**Figure 1.** Distribution of types of abuse in our study

more cases related to the request for screening of the human immunodeficiency virus (HIV), i.e. 69.1% (105) of the cases and those related

to the suspicion of sexual assault, i.e. 53.3% (81) of the cases. In addition, there were also cases of consultation for exploration of general, pulmonary and digestive signs, respectively 31.6% (48), 19.7% (30) and 19.1% (29) of cases. Delayed weight and height (35; 23.0%) and dropout (27; 17.8%) were also found (Figure 3).

### Traumatic injuries

The most frequent types of traumatic injuries were lacerations (67; 59.3%), followed by hematomas, damaged hymen and hemorrhage with 26 cases (23.0%), 21 cases (18.6%) and 20 cases (17.7%) respectively.

**Table 2.** Distribution of reasons for consultation, types of trauma, diagnosis of abuse

| Variables                         | Modalities             | Number | Percentage (%) |
|-----------------------------------|------------------------|--------|----------------|
| Reasons for consultation (N=152)  | abandonment            | 27     | 17.76          |
|                                   | sexual assault         | 81     | 53.29          |
|                                   | dehydration            | 23     | 15.13          |
|                                   | stature-ponderal delay | 35     | 23.03          |
|                                   | physical trauma        | 26     | 17.11          |
|                                   | behavioural disorder   | 3      | 1.97           |
|                                   | HIV serology           | 105    | 69.08          |
|                                   | general signs          | 48     | 31.58          |
|                                   | pulmonary signs        | 30     | 19.74          |
|                                   | digestive signs        | 29     | 19.08          |
|                                   | other                  | 28     | 18.42          |
| Types of trauma (N=113)           | burns                  | 1      | 0.88           |
|                                   | hematoma               | 26     | 23.01          |
|                                   | hemorrhage             | 20     | 17.70          |
|                                   | damaged hymen          | 21     | 18.58          |
|                                   | tear                   | 5      | 4.42           |
|                                   | leucorrhoea            | 6      | 5.31           |
|                                   | laceration             | 67     | 59.29          |
|                                   | fracture               | 2      | 1.77           |
|                                   | other                  | 9      | 7.96           |
| Evoked diagnoses of abuse (N=113) | ano-genital            | 98     | 86.73          |
|                                   | head                   | 5      | 4.42           |
|                                   | thorax                 | 2      | 1.77           |
|                                   | upper limb             | 2      | 1.77           |
|                                   | lower limb             | 11     | 9.73           |
|                                   | abdomen                | 2      | 1.77           |

### Body location of traumatic injuries

The physical location of abuse was more in the anogenital area with 98 cases (86.7%) (Table 2).

### Management of the case

Biological tests were requested in most cases (131; 93.6%). On the other hand, only 32 cases (24.2%) were hospitalized compared to 100 cases (75.8%) who were not. However, 62.1% (82) of the victims received psychological care (Table 3).

**Table 3.** Distribution of medical management of abused children in our study

| Variables                      | Modalities | n   | %    |
|--------------------------------|------------|-----|------|
| Reports requested              | Imagery    | 8   | 5.7  |
|                                | Biology    | 131 | 93.6 |
|                                | No reports | 1   | 0.7  |
| Hospitalization of the patient | Yes        | 32  | 24.2 |
|                                | No         | 100 | 75.8 |
| Psychological support          | Yes        | 82  | 62.1 |
|                                | No         | 47  | 35.6 |
|                                | Not known  | 3   | 2.3  |

### Discussion

Child abuse, far from being a myth in our context, deserves to be studied by identifying vulnerability factors that can lead to appropriate multidisciplinary management. The general objective was to report the different clinical presentations of abused children received in some referral hospitals in Yaoundé that can serve as warning signs in medical consultation. From a sociodemographic point of view, the results of our study showed that female children were more likely to be abused than males (91.7% versus 8.3%), resulting in the most frequent type of abuse, i.e. sexual abuse (77.3%). In addition, physical and psychological abuse were 8.3% and 4.5% of cases, respectively. These figures contrast with those of the European situation both in terms of the sex of the child, where there were as many boys as girls in France, and in terms

of the type of violence, sexual abuse was 19.1%, physical abuse 22.9% and psychological abuse 29.1% (11, 12). However, the high frequency of girls may also be explained by the fact that in Africa, not only are female children more exposed to sexual violence, but physical violence (which affects both boys and girls) is used and considered a method of education by both parents and teachers (13, 14).

Abandonment also appears in our study as one of the most experienced abuses by children. In Europe between the 17th and 20th centuries, the birth of children to unmarried or adulterous mothers found no place in families. This situation of abandonment was linked to the fact that this was a time when there was a stigma attached to births outside of marriage (considered illegitimate) (15). With an African society that has remained traditional, cases of abandonment can be frequent. Moreover, with poverty still present, if not increasing, in Africa, with the increase in unwanted pregnancies and births, and with maternal mortality still too high, one can think that the number of abandonments tends to increase (15). Children under 15 years of age were the most affected by violence (94.7%), with a high concentration among children aged 0 to 5 years, accounting for more than half of the cases (53.8%). With a higher frequency of girls, we can reasonably link this proportion of age to the type of abuse "sexual violence", a figure twice as important as the African average of 30 to 40% for girls under 15 years of age (16). In France, 75% of child victims of violence were under 3 years of age. According to the WHO, the worldwide death rate from abuse among children aged 0 to 4 years is approximately 5.2 per 100,000 and is half that for children aged 5 to 15 years (1). The high concentration in children under the age of 0 to 5 years can be explained by the difficulty of expression and the high presence of children in this age category at home. Concerning the position in the siblings, according to our study,

children in the middle position are the most affected with 35% of the cases and younger children are the least affected with 15% of the cases. However, 77.5% of cases of violence were in families with siblings. In studies carried out in Europe, violence occurred in almost 50% of cases when there were siblings (17, 18). Concerning trauma, the reasons for consultation leading to the identification of abuse, we find mostly HIV serology tests at 69.1% and consultations for sexual assault at 53.3%, which translates into a strong predominance of anogenital location of traumatic lesions at 86.7% of cases. Other reasons for consultation include general signs (weight loss, anorexia, and asthenia), pulmonary signs and digestive signs, which indicate that these abused and probably abandoned children are underfed or malnourished. The most frequent visible symptoms of this violence are lacerations, haematomas and haemorrhages, as well as hymen decay, tears, leucorrhoea and burns. Elsewhere, especially in France, the symptomatology of alopecia in patches caused by hair pulling, hand or finger marks, difficulty in walking or sitting in the case of sexual abuse. Psychologically, abuse can lead to a loss of interest in the social environment (with a rather distrustful attitude accompanied by anxiety and passivity) or to stunted growth, leading to a false diagnosis of intellectual disability or organic disease (18, 19). In general, these signs should be able to alert both health care personnel and civil society to the suffering of the children. In more than 3 out of 4 cases, the children who were victims of violence in our study were not hospitalized. However, the majority of the victims received psychological support with 62.1% of the follow-up.

### Conclusion

The majority of abused children were girls under 14 years of age. The request for HIV testing was the most common reason for consultation. Concerning the trauma of the victims, the main lesion was lacerations located

at the anogenital level, reflecting the importance of sexual violence in medical consultations. Psychological care, being an essential therapeutic means to limit the intergenerational consequences, seems to be still little adopted in our context, as only 6 cases out of 10 benefited from it. The improvement of the diagnosis of child abuse through the study of clinical signs would be crucial in the fight against this scourge in our context considering the non-negligible part of the infectious risk and the anogenital localization of lesions which seemed to be the main warning signs.

### Conflicts of interest

The authors declare that they have no conflicts of interest.

### Contribution of the authors

MEGUIEZE Claude-Audrey designed the study. ABBA-KABIR Haamit and NSEME ETOUCKEY Eric conducted the data collection. VOUNDI VOUNDI Esther carried out the statistical analysis. LOWE NANTCHOUANG Jacqueline Michèle, NGAPOUT Rainatou, MEKONE NKWELE Isabelle KOKI NDOMBO Paul critically read the manuscript. MEGUIEZE Claude-Audrey wrote the manuscript. All the authors gave their approval for the publication.

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