

# **Al-Azhar International Medical Journal**

Volume 3 | Issue 4

Article 2

4-1-2022

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Mahmoud Mohamed Department of forensic medicine and clinical toxicology- Al-Azhar university, dr.mahmoud.kamal.so7.new@gmail.com

Magdy Ismail Forensic Medicine and Clinical Toxicology department, Al-Azhar Faculty of Medicine, Egypt, magdyesmail.6@azhar.edu.eg

Mohamed Asasa Forensic Medicine and Clinical Toxicology department, Al-Azhar Faculty of Medicine, Egypt, mohamedasasa.6@azhar.edu.eg

Ahmed Kayed Forewsith Medicine and Alinion & Text of the Angle of Medicine, Egypt, medkayed.6@azhar.edu.eg Part of the Medical Sciences Commons, Obstetrics and Gynecology Commons, and the Surgery

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# How to Cite This Article

Mohamed, Mahmoud; Ismail, Magdy; Asasa, Mohamed; and Kayed, Ahmed (2022) "Cross-Sectional Study and Descriptive Statistical Analysis During a Period of Time of One Year Extending From the Beginning of January to the End of December 2020 of Alleged Child Sexual Abuse Cases in Cairo Governorate in Egypt," *Al-Azhar International Medical Journal*: Vol. 3: Iss. 4, Article 2. DOI: https://doi.org/10.21608/aimj.2022.104227.1641

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Forensic Medicine

# Cross-Sectional Study and Descriptive Statistical Analysis During a Period of Time of One Year Extending from the Beginning of January to the End of December 2020 of Alleged Child Sexual Abuse Cases in Cairo Governorate in Egypt

Mahmoud K. Mohamed<sup>1,\*</sup> MSc., Magdy A. Ismail<sup>1</sup> MD., Mohamed F. Assasa<sup>1</sup> MD. and Ahmed S. Kayed<sup>1</sup> MD.

\* *Corresponding Author:* Mahmoud K. Mohamed

Dr.mahmoud.Kamal.so7.new@gmail.com

## ABSTRACT

Received for publication November 10, 2021; Accepted April 01, 2022; Published online April 01, 2022.

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doi: 10.21608/aimj.2022.104227.1641

<sup>1</sup>Department of Forensic Medicine and Clinical Toxicology, Faculty of Medicine, Al-Azhar University, Cairo, Egypt. **Background:** Child sexual abuse is a common offensive aspect of children's rights worldwide. Immature Childs are liable for more abuse as they are not able to produce any defend action against the assailant due to immature cognitive and body development.

**Aim of the work:** To recognize the number of alleged child sexual abuse that presented to Forensic Medicine Authority in Cairo Governorate of Egypt during one year extending from January to December 2020.

**Patients and Methods:** The present study included 254 cases of alleged child sexual abuse that were examined in the Forensic Medicine Authority in Cairo Governorate during 2020, for medicolegal evaluation. The abused children were interviewed for evaluation of the circumstances of the assault. General and local examinations (examination of the genitalia and anal region with legal documentation) were done and documented.

**Result:** This study showed that female cases were predominant than male cases (59.9 % and 40.1% respectively) with a predominance of adolescent females followed by school and preschool age groups (45.7%, 30.7%, and 23.6% respectively). Cases of west Cairo predominate other districts (32.6%). The low socioeconomic society represents 56.3% versus high socioeconomic society cases which represents 43.7%. Anal abuse was the most common site of sexual abuse injury among female cases (40.3%).

**Conclusion:** Females in adolescent age at low socioeconomic districts were representing the higher proportion among the studied group.

Keywords: Alleged abuse; Child assault; Sexual abuse.

**Disclosure:** The authors have no financial interest to declare in relation to the content of this article. The Article Processing Charge was paid for by the authors.

Authorship: All authors have a substantial contribution to the article.

#### **INTRODUCTION**

Child sexual abuse (CSA) is a worldwide health problem with cruel and tragic occurrence with a severe violation of a child's rights, health and protection. It was believed to be a rare problem, and only present among low socioeconomic level, but experts agree that child sexual abuse exists in all socioeconomic groups. Because of increasing the public awareness about CSA, there were a greater reporting of other types of neglect or abuse.<sup>1</sup>

Immature Childs are liable for more abuse as they are not able to produce any defend action against assailant due to immature cognitive and body development. In addition, child assault occurs in closed area where the assailants may be a member of the family, friend or neighbour.<sup>2</sup> Sexual assault to children occur when an undeveloped child is obligated in sexual activity where the child cannot agree or give consent. Sexual abuse may occur as oral-genital, genital, or anal contact. However, exhibitionism, voyeurism, or using the child in the production of pornography are considered non- contact child abuse.<sup>3</sup>

Injury from child sexual abuse depending on the age and general built of the child and the degree of force used. Child sexual abuse may cause internal lacerations and bleeding in severe cases, and damage to internal organs that, in some cases, may cause death.<sup>4</sup>

This work aimed to recognize the number of alleged child sexual abuse cases in Cairo Governorate in Arab republic of Egypt during a period of time of one year extending from the beginning January to the end of December, 2020.

### PATIENTS AND METHODS

Type of the study of the present work is a descriptive cross section study. It was designed to assess the children who exposed or alleged sexual abuse cases and were referred to the Forensic Medicine Authority in Cairo Governorate of Arab Republic of Egypt during a period of time of one year extending from January to December/ 2020, for Medico-Legal evaluation. This study has been approved from Ethics Committee of the Faculty of Medicine, Al-Azhar University, Cairo, Egypt.

#### Medicolegal examination:

#### History

The abused children were interviewed for evaluation of the state of the assault, as the manner of abuse, number of the assailant (s), location and frequency of assault (s).<sup>5</sup>

**General body examination:** All alleged cases were evaluated for general and local signs of sexual abuse. All visible injuries were photographed and documented properly.

### Local examination:-

Examination of the genitalia and anal region:-

**In female children**, Local examination of perineum include (the pubic area, perineum, clitoris, labia majora, labia minora, posterior fourchette, and hymen) for recent or old injuries.

**In Male children**, male genitalia was carefully examined for any evidence of abuse.

# The examined children were divided according to findings to:

**Negative finding cases:** at which there is no evidence to prove sexual assault.

**Positive finding cases:** proved by presence of any injuries which appropriate with the history. Sexual assault among children is confirmed by the detection of any visible violence that prove abuse acts.<sup>6</sup>

#### Statistical analysis:

The collected study data were statistically, tabulated and graphically presented. The data were analyzed through SPSS for Windows version 10. Nominal variables were reported as frequency and percentages.

#### RESULTS

**Gender:** Female cases exposed to sexual abuse (59.9 %) were predominate than male cases (40.1%) (Fig.1).

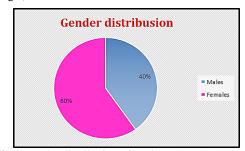


Fig.1: gender distribution of study cases

As regard age group :Adolescent group (>12y) were the most sexual abused children followed by school and preschool age groups (45.7%, 30.7% and 23.6% respectively) (Table 1).

Number	Number of victim cases (N=245)		
Age group	Ν	%	
Preschool <6y	60	23.6	
School 6-12y	78	30.7	
Adolescents >12y	116	45.7	

**Table 1:** age grouping distribution of study cases.

**Demographic distribution:** Cases of west Cairo predominates other districts followed by north Cairo then south while the lowest number of cases was found in east part of Cairo (Fig.2).

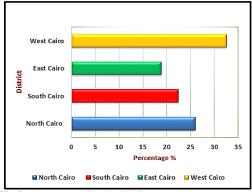


Fig.2: Demographic distribution among study cases

**Assailant victim relationship:** Familial assailants in our study represents only 13% while 87% of assailants were extrafamilial assailants, neighbours were the highest assailants ; 54.3% followed by strangers 28.4% while friends represent only 4.3% of assailants (Fig 3).

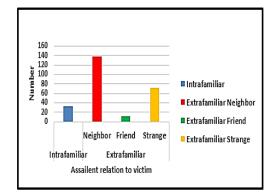


Fig.3: assailant relationship to the victim.

**Age- sexual abuse findings:** Adolescents more than 12 years old showed more sexual abuse then those between 6-12 years old and those with least findings were in preschool age (Table 2).

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Number	Number of cases		
Relation		No.	%
Abuse	Preschool <6y	11	7
finding	School 6-12y	58	37.2
0	Adolescents >12y	87	55.8

 Table 2: Sexual abuse findings in relation to age groups.

**Local injuries finding in relation to sex:** Anal sexual abuse was the most common site of sexual abuse injury among female cases (40.3 %) (Fig 4).

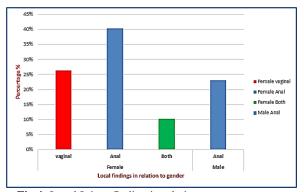


Fig.4: Local Injury finding in relation to sex.

**Vaginal injury:** local examination of vulvo-vaginal region of female victims exposed to sexual assault revealed that hymen injury was the most significant female local injury (48.6%) (Table 3).

Number	N=74	%
Vaginal injury		70
Hymen injury	36	48.6
Labia majora	8	10.8
Labia minora	12	16.2
Vaginal wall	11	14.8
Posterior fourchette	7	9.4

**Table 3:** Vaginal injuries among studied case.

#### DISCUSSION

Child sexual abuse is the enforcement of a child or adolescent in any type of sexual act that he/she is not able to absolutely comprehend, isn't developed for understanding this act, and is not able to consent. Child sexual abuse additionally refers to acts that violate the legal rules of society.<sup>7</sup>

Children especially younger age are more liable to abuse than adolescents due to immature physiological and psychological development. Also, children do not understand any sexual activity due to their immaturity.<sup>8</sup>

Medicolegal examination of the children in cases of CSA in Egypt is often restricted to notified criminal cases.<sup>9</sup> Therefore, for children to disclose their abuse is improbable because of their inability to understand sexual activity with fear of punishment. Also for a year, 254 alleged cases examined in the Forensic Medicine Authority in Cairo Governorate of the Arab

Republic of Egypt to verify their exposure to violence was not acceptable.

Our study showed that, female cases predominate male cases; 102 (40.1%) for males while females were 152 (59.9%). It also showed significant differences in gender distribution between age groups of the included study cases where adolescents (>12y) were the most sexual abused children (116: 45.7%) with a predominance of females in this age group (62.5%). This agreed with study of Singh et al, who revealed that 8 % of males and 20% of females exposed to sexual assault before the age of 18 years worldwide.<sup>10</sup>

This work showed that Cases of CSA in west Cairo predominates other districts followed by north Cairo then south while the lowest number of cases was found in the east part of Cairo which was the same as Abo-Seria et al, study who reported a higher incidence of child sexual abuse in El-Salaam district (9.7%). The least percentage of sexual assault was in the Bolak Dakror district (0.5%).<sup>11</sup>

Also Hilal et al, found that the most common regions in Cairo referring to cases of child abuse were Ain-Shams and Mataria district, Kasr El-Nile had the lowest number of sexually abused victims.<sup>12</sup>

As regards perpetrators our study found they were intrafamilial in only 12.2 % (in 11 cases) while extrafamilial perpetrators were the main perpetrators. Neighbours were the highest abusers (37.8 %) followed by strangers (30%) and adult friends (20%). This coincides with studies of El-Din, Abeer AI Sharaf et al and Kundapur et al, who reported that perpetrators from outside the family were more predominant than from inside.<sup>13,14</sup>

Our study showed that 41 female cases had been exposed to vaginal sexual abuse while 63 female cases had been used anally instead of being assaulted vaginally, and sixteen female children were exposed to both vaginal and anal assault.

The pattern of CSA detected in this study is in agreement Elgendy and Hassan and Abo-Seria et al, who revealed that higher frequency of anal sex occurred in Cairo governorate (37.7% and 55.0% respectively).<sup>11, 15</sup>

Another study conducted by Metwaly et al, in Quena, Egypt reported also similar result of higher frequency of anal sexual assault more than other types of sexual. In contrast Maqsood et al, study reported that vaginal penetration was the most frequent. <sup>16, 17</sup>

In the present study local examination of vulvovaginal region of female victims exposed to sexual assault showed that the most significant female vaginal injury was hymen injury seen in 36 victims (48.6%).

In agreement with Maqsood et al, study which reported, Out of 90.01% hymeneal lesions, 36.36% had fresh hymeneal tears and 56% had old tear in hymen as they had the history of previous sexual act.<sup>17</sup> Sarkar et al, also reported 85.5% cases of hymeneal tears, maximum were of old rupture.<sup>18</sup> 34% had hymeneal lesion and 56% had no fresh tear in hymen in study by Al-Azad et al.<sup>19</sup> Tamuli et al, noted that 5% cases had recent hymeneal tears while intact hymen was seen in 6.65% cases.<sup>20</sup>

#### CONCLUSION

Females in adolescent age at low socioeconomic districts were representing the higher proportion among the studied group.

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