Sexual Assault on Children: The Decadence and Destruction of Social Fabrics and Health

Nirmalya Kumar Sinha[1], Sumandev Chakrabortty[2], Uday Basu Roy Chowdhury[3], Paramita Karan[4], Rama Das[5], Sankar Kumar Acharya[6], Priyanka Mundra[7] and Dulal Chandra Das[8]

[1]Dept. of Nutrition Raja N.L Khan Women's College Midnapore, West Bengal, India
[2]Midnapore Medical College Midnapore, West Bengal, India
[3]Dept. of Forensic Medicine & Toxicology Midnapore Medical College, Midnapore, West Bengal, India
[4]Midnapore Medical College Midnapore, West Bengal, India
[5]Dept. of Food & Nutrition Barrackpore Rastraguru Surendranath College Barrackpore, West Bengal, India
[6]Dept. of Agricultural Extension Bidhan Chandra Krishi Viswavidyalaya Kalyani, West Bengal, India
[7]Midnapore Medical College Midnapore, West Bengal, India
[8]K.D. College of Commerce & General Studies Midnapore, West Bengal, India
E-mail: [1]nksinhakgp@gmail.com, [2]sumandevc@gmail.com, [3]udayfsm@gmail.com, [4]karanparamita@rediffmail.com, [5]ramadasbpd@gmail.com, [6]acharya09sankar@gmail.com, [7]priyankabelda21@gmail.com, [8]dulalrio@yahoo.co.in

Abstract—*Child sexual abuse is one of the most serious health problems throughout the globe and increasing rapidly day by day. Sexual assault leaves a permanent scar in the mind and on the body of the victim and this is happening greatly in the child victims. This social menace not only affecting the victim, but the entire family also put into the shame and humiliation. The majority of sexual assault cases not focused actually to avoid social stigma. In a case control study thirty two sexually victim girls and seventy four non victim girls from Paschim Medinipur District have been studied with the active participation of Dept. Forensic Medicine & Toxicology, Midnapore Medical College. The height, weight and body mass index (BMI) of each children were investigated. The significant result represented that the height, weight and BMI is higher among the victim girls. The other site of the revelation depicts the harshest reality that 43.75 per cent of the victims have been forced to continue the same tyranny followed by their first ever experienced of being molested or raped. Among the offenders 25.00 per cent were boyfriends, 18.75 per cent common friends, 6.25 per cent teachers, 21.88 per cent relatives or neighbours and 28.13 per cent were unknown to her. Only a stern action against the offenders offer the remedy, we need to have a community barracking, legal impositions, and child empowerment, either in policy or in implementation.*

Keywords*: Child sexual abuse; Social stigma, Body mass index; Body weight.*

1. INTRODUCTION

Child Sexual Abuse (CSA), a serious public health problem **[1]**, has become one of the most high-profile crimes **[2]** internationally with great magnitude affecting the children of all ages, sexes, races, ethnicities and socioeconomic classes **[3]**. About 20% women have been sexually abused globally in their childhood **[4]**. The rates of self-disclosed abuse for the girls in the different continents of about 20.2%, 11.3%, 21.5%, 13.5%, 13.4%, 20.1% were reported from Africa, Asia, Australia, Europe, South America, USA/Canada, respectively **[5]**. The prevalence of CSA was also high in India **[6]** while Andhra Pradesh, Assam, Bihar and Delhi reported the highest percentage of sexual abuse **[7]** and according to the National Crime Records Bureau (NCRB), 2011, Delhi was said to the country's rape capital and Madhya Pradesh earned the dubious distinction of rape state **[8].** But due to the social stigma the actual information was often unreported, unrecognized, and untreated **[9].** It has been reported that among all the CSA victims, 56% were referred to the police, 31% to the public prosecution and only about 8% reached the court **[10]**. The under-reporting of CSA by victims is a serious problem which is responsible for the enormous suffering of victims and perpetrators get the chance to continue his offending **[11]**.

Higher risk of exposure to CSA was found among girl children and adolescent girls who were living in one-parent household, with a chronic disability in previous episodes of CSA **[12,13],** and, subsequently, resulted in the short and long-term consequences to the abused child, the family and to the society **[10]**.

The victims of the CSA have experienced various adverse effects on the psychological (Axis I and II disorders) **[6,14]**, physical (gastrointestinal) complaints **[6,15]**, behavioural (maladaptive and impulsive) **[6,14,16]**), suicidal behaviour **[6,14,16]**, and interpersonal well-being **[6]** in the adolescent and adult. They are found to be prone to sexually transmitted infections such as HIV **[17]**.

The present study was initiated with an aim to identify the relationship between the victim and the assailant and also to

determine the nutritional status of children with suspected abuse since it relates to health risk.

2. MATERIALS AND METHODS

A case-control and survey based study was carried out among the thirty two CSA victims who had been brought for examination in the Dept. of Forensic Medicine and Toxicology, Midnapore Medical College, Midnapore. The control group was comprises of seventy four girls from the neighboring children, siblings, relatives with same economic status and age group that of CSA victim cases but had not exposure to CSA.

The study was conducted by a registered doctor and health professionals during January 2015 to December 2015. It was approved by the Institutional Research Ethics Committee. The history was supplied by the police and as narrated by the victims during the examination. The cases where history was incomplete were discarded from the purview of the present study. The researcher explained the study to the potential participants prior to the study. The anonymity of the participants was kept reserved. Total 32 cases which fulfilled the above criteria were studied, entered in a proforma prepared for the purpose.

The score of socio-economic status was determined as per revised Kuppuswami's socioeconomic status scale [18].

All anthropometric measurements were made by the trained professionals using the standard techniques [19]. Height was measured using Martin's anthropometer. Body weight of lightly-clothed subjects was recorded to the nearest 0.5 kg on a weighing scale (Doctor Beliram and Sons, New Delhi, India). Body mass index was used to assess the nutritional status of the mother. Body mass index=weight in kg / (height in meter)^2 [20].

The statistical analyses were done by using the SPSS for Windows statistical software package (SPSS Inc., Chicago, IL, USA, 2001). Normally distributed data were tested by Kolmogorov-Smirnov test. The group means were tested using student's t test. Pearson's chi-square test was used to determine significant differences within categories. P value <0.05 is considered statistically significant.

3. RESULTS

Majority (53.53%) of victims was 11-15 years, and Fig. 1 shows the distribution of age [Fig. 1].

Age of menarche was studied among the victim girls. In 28.13% of cases menarche occurred in 12 years followed by 18.75% of cases in 13 years [Table-1].

The mean of weight and height of the cases in the study group were 39.59±8.89 kg and 148.47±8.90 cm respectively where as among controls 35.02±7.95 kg and 144.30±10.34 cm [Table 2]. BMI of the studied cases and controls were 17.73±2.90 kg/m^2 and 16.62±2.44 kg/m^2 respectively. The significance difference was observed in all the anthropometric parameters viz. weight (t=2.622; P<0.01), height (t=1.983; P<0.05) and BMI (t=2.035; P<0.05) among the cases and controls. The prevalence of underweight and overweight were 40.63% and 6.25% respectively among the cases and 54.05% and 3.00% among the controls [Table 3].

Among the offenders 25.00 per cent were boyfriends, 18.75 per cent common friends, 6.25 per cent teachers, 21.88 per cent relatives or neighbours and 28.13 per cent were unknown to her [Fig. 2]. It is also shocking that nearly 20% of the offenders were also below 18 years [Fig. 3]. There were three cases where the offenders were more than two and gang rape took place [Fig. 4].

Table 1: Age at menarche among the cases and controls

Age group	Cases	Controls
8 years	0 (0.00)	1 (1.35)
9 years	0 (0.00)	3 (4.05)
10 years	2 (6.25)	7 (9.46)
11 years	3 (9.38)	11 (14.86)
12 years	9 (28.13)	12 (16.22)
13 years	6 (18.75)	9 (12.16)
14 years	2 (6.25)	3 (4.05)
15 years	2 (6.25)	2 (2.70)
16 years	1 (3.13)	0 (0.00)
Can't recall	2 (6.25)	6 (8.11)
Not started	5 (15.63)	20(27.03)

Table 2: Differences anthropometric parameters among cases and controls

Anthropometric parameters	Cases N=32	Controls N=74	t
Weight (kg)	39.59±8.89	35.02±7.95	2.622**
Height (cm)	148.47±8.90	144.30±10.35	1.983*
BMI (kg/m2)	17.73±2.90	16.62±2.44	2.035*
Statistical significance at *P<0.05; **P<0.01 level			

Table 3: Nutritional status among cases and controls

Nutritional status	Cases	Controls
Undernutrition	13 (40.63)	40 (54.05)
Normal	17 (53.13)	33 (44.59)
Overnutrition	2 (6.25)	1 (1.35)
χ^2=3.045;P>0.05		

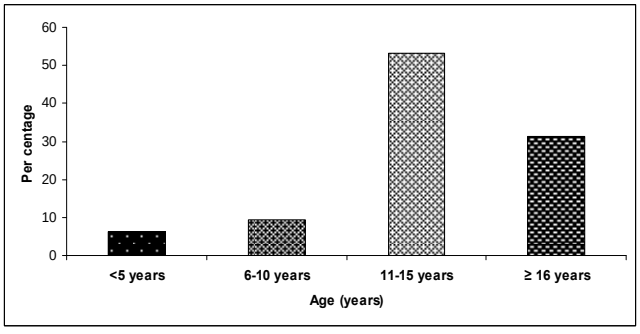

Fig. 1: Age distribution of child victim

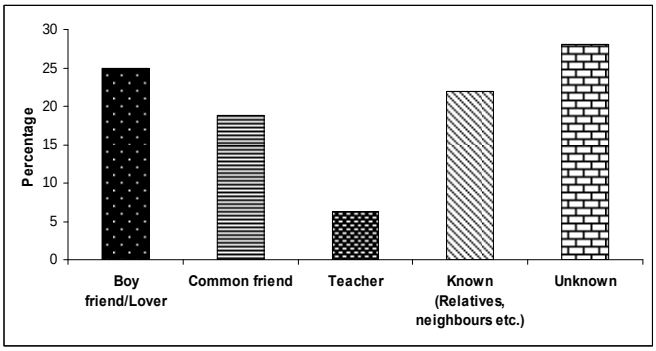

Fig. 2: Relationship of the offenders and the victim

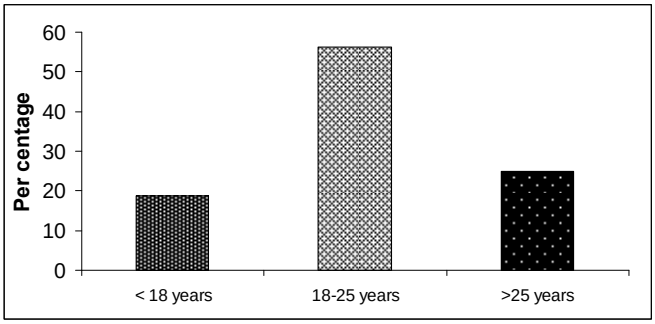

Fig. 3: Age distribution of the offenders

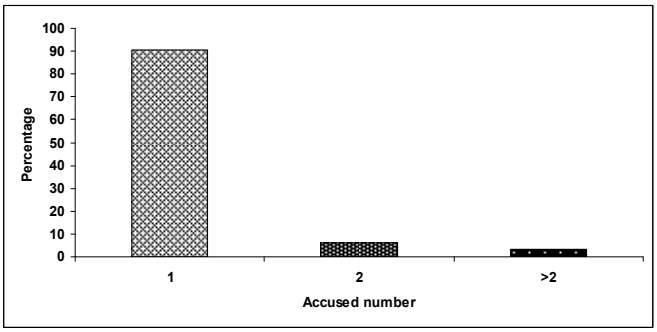

Fig. 4: Number of offenders in a case

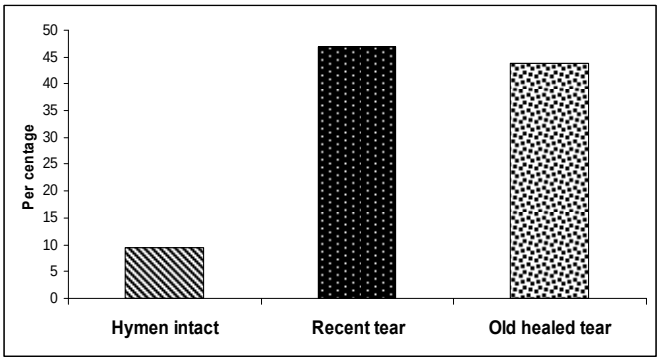

Fig. 5: Pattern of hymen tear of the victims

In 46.88% cases there was evidence of recent tear of hymen, where as 43.75% showed old healed tear and intact hymen was noted in 9.38% [Fig. 5].

4. DISCUSSION

CSA is a common problem in our society [21]. It is increasing day by day in our country, reflecting the Western influence in our society. Sexual offences aptly take the form of sexual violence, which sometimes cause severe and irreparable damage to the physical and mental health of the victims. Its impact on mental health can be equally being serious as that of physical injury. Sexual offences, when they assume the form of sexual violence may lead to murder, suicide, and acute depression of victims.

The risk for sexual abuse tends to rise after puberty. It is similar to the findings of a study in Sri Lanka [22]. Similar to previous studies [22], the offender was known (71%) in most of these instances. This could have been due to the easy access towards the children by the known perpetrators. Most common perpetrator was boyfriend (25%). They frequently had vaginal intercourse with girls above 10 years without the consent of the victim.

Fresh tear of the hymen was observed in 46.88% of cases. This is lower than the previous study conducted in West Bengal [23]. The other site of the revelation depicts the harshest reality that 43.75 per cent of the victims have been forced to continue the same tyranny followed by their first ever experienced of being molested or raped.

The significant result represented that the height, weight and BMI is higher among the victim girls. It may suggest that there may be suggested that the children having higher values of high weight and BMI has become the worst victim to child abuses. But there is no signification association between nutritional status and victimization in this study which suggest that there may be some other factors that are responsible for victimization of the child.

5. CONCLUSION

CSA is an extensive problem and even the lowest prevalence includes a huge number of victims. Only a stern action against the offenders offer the remedy, we need to have a community barracking, legal impositions, and child empowerment, either in policy or in implementation.

6. ACKNOWLEDGEMENTS

The authors are thankful to Dr. Tamal Kanti Ghosh, Principal, Midnapore Medical College, Midnapore, West Bengal, India for technical support and Dr. Jayasree Laha, Principal, Raja N.L. Khan Women's College, Midnapore, West Bengal, India

for constant encouragement throughout the study. The authors also thank all the human participants who participated in this study.

REFERENCES

[1] Mendelson T, Letourneau EJ. Parent-Focused Prevention of Child Sexual Abuse. Prev Sci. 2015;16(6):844-52.

[2] Elgendy IS, Hassan NA. Medicolegal study of child sexual abuse in greater Cairo, Egypt, during a 7-year period: 2005-2011. Am J Forensic Med Pathol. 2013;34(4):335-41.

[3] Collin-Vézina D, Daigneault I, Hébert M. Lessons learned from child sexual abuse research: prevalence, outcomes, and preventive strategies. Child Adolesc Psychiatry Ment Health. 2013;7(1):22.

[4] Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. Laneet: 2002;360(9339):1083-88.

[5] Stoltenborgh M, van IJzendoorn MH, Euser EM, Bakermans-Kranenburg MJ. A global perspective on child sexual abuse: meta-analysis of prevalence around the world. Child Maltreatment. 2011;16(2): 79–101.

[6] Singh MM, Parsekar SS, Nair SN. An epidemiological overview of child sexual abuse. J Family Med Prim Care. 2014;3(4):430-5.

[7] Ministry of Women and Child Development, Govt. of India. Study on Child Abuse: India. 2007. New Delhi: Kriti. 2007.

[8] Bhowmik K, Chaliha R. A Descriptive One Year Study on the Alleged Male and Female Victims and Accused of Sex Crimes. J Indian Acad Forensic Med. 2011; 33(3): 214-220.

[9] Davis DW, Pressley-McGruder G, Jones VF, Potter D, Rowland M, Currie M, Gale B. Evaluation of an innovative tool for child sexual abuse education. J Child Sex Abus. 2013;22(4):379-97.

[10] Al-Mahroos F, Al-Amer E. Reported child sexual abuse in Bahrain: 2000-2009. Ann Saudi Med. 2011;31(4):376-82.

[11] Leclerc B, Wortley R. Predictors of victim disclosure in child sexual abuse: Additional evidence from a sample of incarcerated adult sex offenders. Child Abuse Negl. 2015;43:104-11.

[12] Mansbach-Kleinfeld I, Ifrah A, Apter A, Farbstein I. Child sexual abuse as reported by Israeli adolescents: social and health related correlates. Child Abuse Negl. 2015;40:68-80.

[13] Martin EK, Silverstone PH. How Much Child Sexual Abuse is "Below the Surface," and Can We Help Adults Identify it Early? Front Psychiatry. 2013;4:58.

[14] O'Brien BS, Sher L. Child sexual abuse and the pathophysiology of suicide in adolescents and adults. Int J Adolesc Med Health. 2013;25(3):201-5.

[15] Sonneveld LP, Brilleslijper-Kater SN, Benninga MA, Hoytema van Konijnenburg EM, Sieswerda-Hoogendoorn T, Teeuw AH. Prevalence of child sexual abuse in pediatric patients with chronic abdominal pain. J Pediatr Gastroenterol Nutr. 2013;56(5):475-80.

[16] Lin D, Li X, Fan X, Fang X. Child sexual abuse and its relationship with health risk behaviors among rural children and adolescents in Hunan, China. Child Abuse Negl. 2011;35(9):680-7.

[17] Thornton CP, Veenema TG. Children Seeking Refuge: A Review of the Escalating Humanitarian Crisis of Child Sexual Abuse and HIV/AIDS in Latin America. J Assoc Nurses AIDS Care. 2015;26(4):432-42.

[18] Mishra D, Singh HP. Kuppuswami's socio-economic status scale – A revision. Indian J Pediatr. 2003; 70: 273-274.

[19] Lohman TG, Roche AF. Anthropometric Standardization Reference Manual. Chicago: Human Kinetics Books.1988.

[20] Suryakantha AH. Community Medicine With Recent Advances, 2nd ed., New Delhi: Jaypee Brothers Medical Publishers (P) Ltd. 2010.

[21] Sinha NK, Roychowdhury UB, Das DC, Chakraborty S, Maity S, Karan P. Sexual abuse and murder of a minor girl: A Case study. Indian J Forensic Commun Med.2015;2(4):251-4.

[22] Vidanapathirana M. Child Sexual Abuse; a Medico-Legal Analysis. Int J Med Toxicol Forensic Med. 2014;4(3): 91-97.

[23] Roy Chowdhury UB, Bose TK. Rape: Its medicolegal and social aspect. J Indian Acad Forensic Med. 2008;30(2):69-71.