ORIGINAL ARTICLE

Study of Socio-Demographic Profile of Sexual Assault Survivors at A Tertiary Care Centre

Ahmad F, Ali K, Saeed S.

Assistant Professor, Assistant Professor, Professor, 1-3. Department of Forensic Medicine, Jawaharlal Nehru Medical College, AMU, Aligarh.

Abstract:

The Forensic examination following sexual assault has two principal goals i.e. to provide comprehensive health care and to collect evidences. In India, in 2020, of the total rape cases investigated by police, 82.2% of cases were filed and 39.3% were found guilty. The low conviction rate often reflects a lack of coordination between law enforcement and survivors. This study is based on the record of sexual assault victims who were brought for medico-legal examination. Total 47 cases of survivors of sexual assault were examined in the SAFE unit of Forensic Medicine department over the span of 2 years. The present study shows that instances of a sexual offence are higher in younger age females especially among those who belong to lower socioeconomic status. The most common genital injury reported was vaginal followed by fossa navicularis/fourchette. Proper training of healthcare workers and the use of improvised examination techniques not only aids in the acquisition of knowledge but it may also assist survivors in the administration justice.

Keywords: Sexual assault; Rape survivors; Sexual assault Forensic examination unit.

Introduction:

As India is one of the fastest growing / developing nation in the world which have biggest democracy and the highest number of police personal, still a heinous crime against women and children like sexual assault/rape are increasing exponentially. The strict preventive measure has already been planned and implemented for such cases, but the desired result is not up to the mark. Atrocious crime like sexual assault is entrenched in our society and affects the certain group disproportionately. Women belonging to low socioeconomic status are more prone to such crime. Regrettably, the terror of sexual assault limits the social, emotional and economic development of women in society.\(^1\)

The fear of assault effect their social exercises such as the way they dress, their relation to men, their choice to be at home, and the way they make use of open space and group offices. Women who lack adequate economic resources to meet their basic needs, particularly young girls, can resort to negotiating essential goods with sex. Sexual assault scares people across the globe and demoralizes communities. In India, in 2020, of the total rape cases investigated by police, 82.2% of cases were filed and 39.3% were found guilty. The low conviction rate often reflects a lack of coordination between law enforcement and survivors.²

The primary purpose of the investigation is to acquire and establish accurate and relevant information about the crime. In the course of the investigation, the respect and courtesy of the victim should be given priority. The highest numbers of sexual assaults are committed by persons associated with the victim (e.g.

Corresponding Author

Kashif Ali

Email: alikashif568@yahoo.in Mobile No.: 9986468326

Article History

DOR: 26.03.22; DOA: 23.09.22

friend, relative, spouse, companion, ex-boyfriend etc.). This is a crime that could frighten, embrace, and life devastating and vicious to the survivors. The socio-economic background of both victim's family and the accused has a direct bearing on sexual offences, particularly for its reporting.

Material and Methods:

A 2 years prospective study was conducted by identifying and reviewing all sexual assault cases that presented at the Sexual assault forensic examination unit attached to department of Forensic Medicine of JNMCH, A.M.U, Aligarh from October 2019 to December 2021. This study is based on the record of sexual assault survivors who were brought for medico-legal examination. To achieve this objective, a documentary data collection form was compiled to capture the relevant information from survivors. The details regarding age, socioeconomic status, marital status, place of incidence and relationship with the assailant were noted. The data was entered on the predesigned datasheet and tabulated.

Results

Total 47 cases of survivors of sexual assault were examined in the SAFE Unit of Forensic Medicine department over the span of 2 years. In this study, we found that most of the survivors were from age groups 6-10 years (38.3%) and 11-15 years (19.1%) as shown in Table 01. The youngest victim was 6 months old while the age of the oldest was 35 years. 32 cases (68%) were reported from rural background while 15 (32%) were from urban. Among them most of the survivors were unmarried 37 (78.7%) while only 9 (19.1%) of the survivors were married and 01 was widow as shown in Table 03.

In Table 02, most of the assailants were known to the survivors in which neighbors (24 cases) were the commonest accused followed by the boyfriend (5 cases), closed relatives (5 cases), stepfather (4 cases) while in 7 cases the offender was unknown to the survivor. In 15 cases (32%) incidence occurred in the open

field and 14 cases (29.8%) occurred in victim's house followed by secluded place (7 cases, 14.9%) and relative's house (6 cases, 12.8%). Both parents were working in case of 31 survivors while single parent was working in 11 cases (Table 03).

We found that 33 cases (70.2%) reported for medical examination within 1 day and 7 cases (14.9%) reported between 1-3 days of the incident. Delayed reporting were seen in 7 cases (14.9%) (Table 04). In the present study penile penetration was most common and seen in 39 cases (83%) while digital insertion/fingering of genitals was found in 7 cases (14.9%), object insertion was reported only in 1 case. The most common orifice penetrated was vagina and was reported in 34 cases (72.3%) while anal penetration was in 13 cases (27.7%). In 37 cases (78.7%), the number of assailant was one while they were two in 6 cases (12.8%) and more than two in 4 cases (8.5%) as depicted

Table 1: Distribution of cases according to age and background.

Age group of survivor	Rural	Urban	No. of cases	Percentage			
< 5 year	05	01	06	12.8			
6-10 years	14	04	18	38.3			
11-15 years	06	03	09	19.1			
16-20 years	03	01	04	8.5			
21-25 years	02	01	03	6.4			
>25 years	02	05	07	14.9			
Total	32	15	47	100			

Table 2: Distribution of cases according to relationship with the survivor.

Relationshi	No. of cases	
Known	Neighbors	24
	Boyfriend	05
	Colleague	01
	Close Relation	05
	Cousins	01
	Stepfather	04
Ī	07	

Table 3: Distribution of cases according to place of incidence, parent's

occupation and marital status.				
Place of incidence	Accused's house	05		
	Victim's house	14		
	Relative's house	06		
	Open field	15		
	Secluded place	07		
Survivor's parent occupation	Both parent working	31		
	Single parent working	11		
	None working	05		
Marital status of survivor	Married	09		
	Unmarried	37		
	Widow/Divorced	01		

Table 4: Distribution of cases according to reporting time.

Table 4: Distribution of cases according to reporting time.						
Age group	<1 day	1-3 days	3-5 days	5-7 days	>7 days	Total
<5 year	04	02	00	00	00	06
6-10 years	15	02	01	00	00	18
11-15 years	06	01	01	01	00	09
16-20 years	03	00	00	01	00	04
21-25 years	02	01	00	00	00	03
>25 years	03	01	01	01	01	07
Total	33	07	03	03	01	47

in table 05.

Among body injuries, the head injury was common in above 15 years of age while neck injuries were predominant in above 25 years (06 cases) of age. Bite marks were mostly reported in 11-15 years (05 cases) followed by above 25 years (04 cases) of age. Other bodily injuries like injuries over back, thigh, chest and abdomen were common in 6-10 years (14 cases) followed by 11-15 years (06 cases) and above 25 years (05 cases).

The most common genital injury reported was vaginal of which 12 cases were seen in 6-10 years of age group followed by above 25 years (07 cases). Second common genital injury is in fossa navicularis/fourchette comprising of 25 cases which were predominantly seen 6-10 years (10 cases) followed by 11-15 years (06 cases) as shown in table 06.

Discussion:

Sexual assault is a crime of violence that puts victim at risk of physical injury, emotional disturbance, pregnancy and sexually transmitted disease. It leaves permanent scar on mind and body of the victim. Sexual assault is a neglected public health issue in most of the developing countries and there is likely to be even smaller percentage of reporting of sexual assault. We observed that most of the survivors were in the age group of 11 - 15 years (29.41%) and 16 – 20 years (29.41%) followed by age group 21 – 25 years (15.29%). The youngest victim was 6 months old and oldest was 35 years old. Similar findings were noted by other author also. 4-6 These findings suggest that younger age group is more vulnerable for sexual assault. It is easy for the accused to rape younger women as she would not resist much to defend herself. In our study majority of the cases belonged to rural background (32 cases) while 15 cases were reported from urban as in Indian scenario the parenting is not good in rural areas and low socio-economic group and frequently children are playing outside home, therefore they are easily targeted for any sex related offence.7

Table 5 : Distribution of cases according to type of penetration, orifices penetrated and number of assailants.

penetrated and number of assariants.						
		No. of cases	Percentage			
Type of	Penile	39	83			
penetration	Digital	07	14.9			
	Object	01	2.1			
Orifices	Vaginal	34	72.3			
penetrated	Anal	13	27.7			
	Oral	00	00			
No. of assailants	One	37	78.7			
	Two	06	12.8			
	>Two	04	8.5			

Table 6: Distribution of cases according to pattern of injuries.

Age group		< 5	6-10	11-15	16-20	21-25	>25
Body injuries	Head injuries	00	01	01	02	02	02
	Neck injuries	00	00	01	01	02	06
	Bite marks	00	02	05	03	02	04
	Others	02	14	06	01	03	05
Genital injuries	Fossa navicularis/ Fourchette	05	10	06	00	01	03
	Perineal	03	03	04	01	00	02
	Vaginal	04	12	06	03	02	07
	Anal	02	06	03	01	01	00

In about 85.1% cases the accused were known to the survivors and out of 40 known accused, 24 were neighbours. These findings were consisting with other Indian as well as foreign studies.8 These studied prove that women have more danger from their known persons compare to unknown person and also disprove the myth strangers usually commit sexual violence. Findings in our study suggests that majority of the cases of sexual assault were unmarried (37 cases) which is similar to study conducted by other authors. 10 In our study there is no difference noted regarding pattern of place of incidence, almost similar number of cases were reported inside the house (25 cases); open field & secluded place (22 cases). In a study conducted on rape survivors by Roy Chaudhury,8 they found that in most of the cases, the sexual assault occurred outside the house and study conducted by Haridas S et al. 11 and Gangmei Agatha et al. 12 found that the most of these incidences occurred at accused's house which is not in consistent with our study.

In our study we observed that the majority of incidences were among those survivors whose both parents (31 cases) or single parent (11 cases) were working and the reason being that they belong to low socioeconomic class that's why they spend more time outside the house to earn their livelihood so they are not able to give care and attention to their children. Because of their financial condition, they are unable to send their children to school that's why the children remain at home alone which makes them more vulnerable. This suggests that low socioeconomic status is an indicator of social disadvantage; for females, it may independently contribute to the risk of sexual abuse.¹³

We found that 33 cases (70.2%) reported for medical examination within 1 day and 7 cases (14.9%) reported between 1-3 days of the incident. Delayed reporting was seen in 7 cases (14.9%). This delayed reporting is due to fear of society, disbelieving about the case on reporting, transportation and fear of protection. The prime factor being the conservative nature of society and humiliation in talking about unfortunate experience. Additional factor is that the citizens are afraid of being trapped in police case and court proceedings. In the present study peno-vaginal penetration was most common. Fingering of genitals was found in 12.9% and penetration of object in 1.4% cases. Hilden et al., I also reported the similar findings while Geidam et al., I found fingering of genitals in 41.9% of cases. The perpetrator was alone in 78.7% of cases, two in 12.8% and more than two in 8.5% cases.

Among the survivors brought for medical examination, extragenital injuries like the head injury was common in above 15 years of age while neck injuries were predominant in above 25 years (06 cases) of age. Bite marks were mostly reported in 11-15 years (05 cases) followed by above 25 years (04 cases) of age. Other bodily injuries like injuries over back, thigh, chest and abdomen were common in 6-10 years (14 cases) followed by 11-15 years (06 cases) and above 25 years (05 cases). These findings were similar to study by Gray et al., ¹⁶ and Ingeman et al. ¹⁷ Bodily injuries are more common in higher age group because they can offer more resistance as compared to their younger counterparts while genital injuries are more common in younger age groups because of the disproportion of genital size of accused and the survivor. The most commonly encountered genital injuries

among teenagers and women are the posterior fourchette (tense fork shaped band of tissue that connects the two labia minora), labia minora (two small folds of skin within the vestibule of the vulva), hymen (thin fleshy connective tissue that partly covers the vaginal opening) and fossa navicularis (shallow boat shaped depression situated between the vestibule and inferior to the vaginal opening).

The most common genital injury reported was vaginal of which 12 cases were seen in 6-10 years of age group followed by above 25 years (07 cases). Second common genital injury is in fossa navicularis/fourchette comprising of 25 cases which were predominantly seen 6-10 years (10 cases) followed by 11-15 years (06 cases) which is similar to study conducted by Hilden et al¹⁴ and Shinge et al.¹⁸ Since our hospital is a tertiary care center that's why majority of the cases reported here are serious and need specialized medical interventions which are referred from PHC's and district hospitals. Absence of injuries may not contradict the allegation, as absence of general body trauma could be explained by the vulnerability of the victim and by the fact that the assailant could have exercised authority over victim, so that victim offers minimum resistance. Rapidly healing injuries could have been missed in cases with delayed medical examination or may be due to false allegation.

Conclusion:

The present study shows that instances of a sexual offence are higher in younger age females especially among those who belong to lower socioeconomic status. There is a need for further studies with a bigger sample size so that the high-risk population can be identified and educated effectively. It is obligatory for all health care providers performing forensic examinations to take precise histories and to document comprehensive trauma findings for all survivors of sexual assault. Sexual assault survivor require multidisciplinary care involving Forensic specialist, Gynecologists, Psychiatrist and other specialists depending on the types of injuries encountered. Proper training of healthcare providers and the use of improvised techniques for the examination not only helps in acquiring knowledge as well as increases the confidence of health care workers but can also aid in providing justice to survivors.

Conflict of interest- None.

Source of funding- None.

Ethical clearance- Taken from Institutional Ethical Committee.

References:

- Tackling Violence Against Women: A Study of State Intervention Measures, Ministry of Women and Child Development, Govt. of India 2017. Available from: https://wcd.nic.in/sites/default/files/Final%20Draft%20 report%20BSS_0.pdf(Accessed 12 Feb 2022)
- National Crime Record Bureau, Govt. of India. Crime in India 2020. Available from: https://ncrb.gov.in/sites/default/ files/CII%202020%20Volume%201.pdf (Accessed 12 Feb 2022)
- 3. Bijoy TH, Lepcha OT, Kumar KH Pradip. A study of child rape in Manipur. J Indian Acad Forensic Med

- 2006;28(4):135-137.
- 4. Verma L, Meena SK, Garg V. Socio-demographic profile of victims of sexual assault: A one year study at MBS hospital associated with government medical college, Kota (Rajasthan). IP Int J Forensic Med Toxicol Sci. 2020;5(2):70-73.
- Rani S, Chinmayi Y, Arun M. A Study on the Sociodemographic Profile of the Victims of Sexual Offences: A Retrospective Study. Medico-legal Update. October-December 2020; 20(4):569-57.
- 6. Sujatha PL, Ananda K, Sane MR. Profile of victims of natural sexual offences in South Bangalore. J Indian Acad Forensic Med. 2016; 38(3):274-277.
- 7. Singh MM, Parsekar SS, Nair SN. An Epidemiological Overview of Child Sexual Abuse. Journal of Family Medicine and Primary Care. 2014; 3(4):430–435.
- Roy chaudhury UB, Bose TK, Prasad R. Rape: Its medicolegal and social aspect. Journal of Indian Academy of Forensic Medicine. 2008;30(2): 69-71.
- Santos JC, Neves A, Rodrigues M, Ferrão P. Victims of sexual offences: Medicolegal examinations in emergency settings. J Clin Forensic Med. 2006; 13(6-8):300-3.
- Tamuli RP, Paul B, Mehanta P. A statistical analysis of alleged victims of sexual assault a retrospective study. J Punjab acad Forensic Med Toxicol. 2013;13(1):7–13.
- 11. Haridas S, Nanandkar SDS. Medicolegal study of alleged

- rape victim cases in Mumbai region. Int J Med Toxicology and Forensic Medicine. 2016;6(1):12-22.
- 12. Agatha G, Moirangthem BK. Profile of victims examined under POCSO Act 2012, in JNIMS, Imphal. Int J Health Res Medico Leg Prae. 2019 January;5(1):47-50.
- 13. Sarkar SC, Lalwani S, Rautjir, Bhardwaj DN, Dogra TD. A study on victims of sexual offences in south delhi. J Fam Welf. 2005;51(1):60–6.
- 14. M. Hilden, B. Schei, K. Sidenius, Genitoanal injury in adult female victims of sexual assault, Forensic Sci Int. 2005;154(2-3):200-205.
- 15. A. Geidam, A.E. Njoku, B. Bako, Prevalence and nature of sexual assault among female students in a tertiary institution in Maiduguri, Nigeria a cross sectional study, Int. J. Health Res. 3 (2011). https://doi.org/10.4314/ijhr.v3i4.70422
- 16. Gray K., Seaberg D.C., Wears R.L. The prosecution of sexual assault cases: correlation with forensic evidence. Annals of emergency medicine. 2002 January;39(1):39-46.
- Ingemann-Hansen O., Brink O., Sabroe S., Sorensen V. Legal aspect of sexual violence – Does forensic evidence make a difference? Forensic science international; 2008; 180:98-104
- 18. Shinge S.S., Shrigiriwar M.B., Shrigiriwar M.M. Injury patterns in the victims of rape: Cross sectional study. J.Kar.Med.Leg.Soc. Jul.-Dec. 2013;22(2):8-14.