#### **ORIGINAL ARTICLE**

# Demography of victims of sexual assault: A prospective study in south Odisha

# Sunil Kumar Murmu<sup>1</sup>, Dhritiman Nath<sup>2</sup>

1 Assistant Professor, Department of Forensic Medicine and Toxicology, Pandit Raghunath Murmu Medical College & Hospital, Baripada, Odisha, India 2 Associate Professor, Department of Forensic Medicine and Toxicology, VSS Institute of Medical Sciences and Research (VIMSAR), Burla, Odisha, India

## Abstract

Sexual assault is a heinous form of physical coercion that involves use of violence by an individual upon another, mostly women and children. It is a type of abuse that inflicts torture and consequently, physical, psychological and social trauma. This prospective study was conducted on 206 victims of sexual offence who presented for examination to the Department of Forensic Medicine and Toxicology in a Medical College and Hospital in South Odisha between October 2013 and September 2015. Natural sexual offences constituted 56.80% of cases where 55.82% of cases were between the age group of 12 – 18 years and 82.04 % were Hindus. Most of the cases (50.48%) occurred in rural settings and 36.89% were literate upto the higher secondary level. Most of the victims (36.89%) were students, 84.47% were unmarried, 68.44% came from nuclear families, 55.83% of the victims were acquainted to the assailants as a lover or boyfriend. Most of the victims (33.02%) were reported after more than 1 month of incidence and time elapsed between incidence and medical examination for most victims (65.05%) was more than 72 hours.

# **Keywords**

Sexual assault; Sex offence; South Odisha

### Introduction

Sexual assault refers to a type of sexual behaviour or act that is threatening, violent, forced, coercive or exploitative and to which a person has not given consent or was not able to do so. It inflicts torture and consequently, physical, psychological and social trauma. Globally, 35% of women have experienced some form of physical or sexual violence. About 20% of women and 5–10% of men have been victims of sexual violence in their childhood. NCRB reported a staggering 36735 cases in India in 2014 alone.

Sexual assault is regarded as a serious health and human rights problem. Grossly under- reported in India, it reflects the prevalent crime scenario and the status of women in society. Morbidity due to sexual assault is an emerging public health problem.

We have taken up this study due to the concern about the growing number of such cases in India. We hope that the data retrieved may be used to update the knowledge base and undertake better policy making decisions by the concerned authorities.

## **Materials and Methods**

This prospective study was conducted on 206 victims of sexual

#### **Corresponding Author**

Dr. Dhritiman Nath (Associate Professor) Email address: dhritimannath@hotmail.com Mobile number: +91 8903733042

#### Article History

Received: 31<sup>st</sup> August, 2020; Revision received on: 14<sup>th</sup> April, 2021

Accepted: 18th May, 2021

offence in the Department of Forensic Medicine and Toxicology in a Medical College and Hospital in South Odisha between October 2013 and September 2015. The inclusion criteria was victims of alleged rape cases, victims of alleged kidnapping cases, victims accompanying parents/relatives/guardians, victims of alleged anal intercourse (sodomy) cases. The exclusion criteria was victims coming only for Ossification test, victims who does not consent for examination, victims booked under PITA/ Prostitution cases.

History was obtained from the victims, police and accompanying relatives and entered in a pre-designed performa (case record form). The treatment records were also perused for admitted patients.

# Results

During the 1<sup>st</sup> year (October 2013 – September 2014), out of 109 cases, 5 were male and 104 females. In the 2<sup>nd</sup> year (October 2014 – September 2015), 2 cases were male and 95 cases were females. Across the two year period, a total of 206 victims of sexual assault were recorded. Seven of these individuals were male, and 199 were females.

Most of the cases were natural sexual offences (117 cases or 56.80%). Unnatural sex offences were most rare (7 cases or 3.39%). (Table 1) Majority of the victims (115 or 55.82%) belonged to the adolescent age group of 12-18 years. Minimum age of an alleged victim was 4 years. No victim of age more than 45 years was found in our study. (Table 2)

Majority of the victims (82.04%) were Hindus, while 15.05% of the victims were Christians, and 2.91% were Muslims. Most of the cases (50.48%) were from rural areas, followed by semiurban areas (36.41%) and lastly the urban areas (13.11%).

Majority of victims (36.89%) were educated upto higher secondary school level followed by primary school level educated (35.44%). Only 18 victims (8.74%) were college educated. (Table 3)

Majority of cases included students (36.89%) followed by unemployed individuals (32.52%) and labourers and maids (16.99%). Only 3.89% cases were reported from employed category. Most of the victims (50.97%) were from the lower socio-economic status population, followed by middle socio-economic status (47.09%) and lastly higher socio-economic status (1.94%). Most of the victims were unmarried (84.47%), while 13.59% were unmarried. Only 2 cases (0.97%) of divorced or widowed ladies were reported. Majority of the victims (141 or 68.44%) belonged to nuclear families. 33 (16.02%) victims were staying in joint families and 32 victims (15.54%) were staying alone.

Majority of the offenders (180 or 87.38%) were acquainted with the victims. Among them, lovers or boyfriends (115 or 55.83%) constituted more than the half of study population. Total strangers were reported in only 10 cases (4.85%) and 16 cases (7.77%) involved 2<sup>nd</sup> degree relatives. (Table 4)

The most common place of occurrence of alleged cases of sex offence were indoors in 161 cases (78.16%) and outdoors in 45 cases (21.84). Most of the victims (33.02%) reported 1 month after occurrence. Only 14.57% cases were reported immediately. (Table 5) Table 6 enumerates the time period between occurrence of the sexual offence and the day of medical examination. Time durations are categorized according to the period of spermatozoa survival inside the vaginal canal or uterine cavity. Most of the cases were produced for examination after 72 hours. Only 22 victims (10.68%) were produced within 24 hours. Majority of victims had consensual sex i.e. 154 (75.24%) and the rest non-consensual. The reasons behind consensual sexual act were false promises of marriage (51.61%) and love affairs (47.10%). Among non-consensual sex offence cases, 88.24% of victims were physically forced with ill intent. Possible reasons behind it would be loneliness, seduction or revenge for any past conflict.

Table 1: Distribution of sexual assaults as per manner of occurrence

Type of Sexual Offence Cases	n (%)	%
Natural Sex Offences	117	56.80
Kidnapping only	26	12.62
Kidnapping with Sex Offence	44	21.36
Unnatural Sex Offence	07	3.39
Cheating (Eloping) Cases only	12	5.83
Total	206	206

Table 2: Age distribution of the sexual assault victims

Age in years	n	(%)
0-12	14	6.8
12-18	115	55.82
18-30	71	34.47
30-45	6	2.91
>45	0	0
Total	206	100

Table 3: Educational status

Educational status	n	(%)
Illiterate	35	16.99
Primary	73	35.44
Higher secondary	76	36.89
College & above	18	8.74
School yet to attend	4	1.94
Total	206	100

Table 4: Relation of victim with offender

Relationship		N	(%)
Own relatives	First degree relatives	0	0
	Second degree relatives	16	7.77
Strangers	Strangers		4.85
Acquaintance	Lover /Boy Friend	115	55.83
	Friends (Close friends, Class mates, Staffs & Colleagues etc.)	36	17.48
	Neighbours	19	9.22
	Tuition Master	10	4.85
Total		206	100

Table 5: Time elapsed between incidence and reporting

Time Period elapsed	N	(%)
Within 24 hours (Immediately)	30	14.57
Within 1 week	64	31.06
Within 1 month	44	21.35
After 1 month	68	33.02
Total	206	100

Table 6: Time elapsed between incidence and medical examination

Time duration	n	(%)
≤24 hours	22	10.68
>24 hours - ≤72hours	44	21.36
>72hours	134	65.05
Denied or cannot recalled	6	2.91
Total	206	100

## Discussion

A total of 433 cases were brought for examination to our department: 207 cases from 1<sup>st</sup> October 2013 to 30<sup>th</sup> September 2014 and 226 from 1<sup>st</sup> October 2014 to 30<sup>th</sup> September 2015, respectively. Number of victims selected for the study as per the criteria laid down under materials and methods were 109 and 97 cases respectively, totalling 206 cases for the entire study period.

Out of the 206 cases under study, 96.6% were females (199 cases) and only 3.4% (7 cases) were males. All the males were victims of unnatural sexual offence and below the age of 18 years. On further analysis, it is also observed that the number of female victims increased by almost 2.5% whereas there was a reduction in the number of male cases by about 2.5% from the preceding year. It was observed that natural sex offence is highly prevalent in this region (56.80%) followed by kidnapping with sex offence in 21.36% and kidnapping only in 12.62% of cases. After amendment of POCSO Act, 2012 the total number cases registered under POCSO Act was 117 which is about 56.8% of total study population. The study showed an increase in 4.28% of cases registered under POCSO Act from the previous year.

The most vulnerable age group was 12-18 years comprising of 55.82% cases followed by the age group of 18-30 years (34.47%), 6.8% victims were in the age group 0-12 years and 2.91% victims were in the age group 30-45 years. The minimum age of the alleged victim recorded was 4 years. No victim of age more than 45 years was found in our study. Studies conducted by Manzoor et al.<sup>4</sup>, Arif et al.<sup>5</sup>, Haider et al.<sup>6</sup> and Nowsher et al.<sup>7</sup> reported similar findings. Sahu et al. reported that the most commonly affected age group was 16-19 years (60.8%). Similarly, Ganguly et al. also found 71% cases of victim for the age group between 6-15 years.

It was observed in our study that female victims represented 96.6% of cases and the male victims 3.4% of cases. All the males were victims of unnatural sexual offence. Similar results were observed by Bhowmik and Chaliha <sup>10</sup>, Tamuli et al. <sup>11</sup> and Bandyopadhay et al. <sup>12</sup> However, in Turkey Hüdaverdi observed that 82.1% were female and 17.9% male victims. This

study reported greater number of male victims compared to our study.<sup>13</sup> Similarly, Irum and Arshad in Pakistan reported 67% females and 33% male victims.<sup>14</sup>

In our study, 82.04% cases were Hindus,15.05% cases Christians and 2.91% cases Muslims respectively. Different authors across India had observed similar findings. Hinduism is the major religion in India and hence, a greater number of cases among the Hindu community. On the contrary, Al-Azad et al. in Bangladesh, Arif et al. in Pakistan had reported a Muslim preponderance. 5.17

In our study, a rural predominance (50.48%) of cases were observed. Similar findings were also observed in Bangladesh by Abdul. <sup>18</sup> In a similar study in South Africa, Phaswana et al. reported that most of the victims were from urban areas which contradicts our results. <sup>19</sup> In India, rural population is larger than that of the urban population. Therefore, it is evident that cases from rural background would be more than that of the urban areas.

In our study, majority of victims (36.89%) were educated up to higher secondary level followed by primary - level educated (35.44%). 16.99% victims were totally illiterate and 8.74% victims were highly educated. Our findings correspond to studies by Abdul <sup>18</sup> in Bangladesh, El-Elemi et al. <sup>19</sup> in Egypt, Phaswana et al. in South Africa. <sup>20</sup> In contrast, Manzoor et al. <sup>4</sup> in Pakistan, and Sahu et al. <sup>8</sup> reported that the majority of victims were illiterate.

In our study, majority of the victims were students (36.89%) followed by unemployed (32.52%) and laborers including maids (16.99%). It was also observed that 9.71% of victims were married housewives and rest 3.89% belonged to employed category.

Manzoor et al.<sup>4</sup> in his study done in Pakistan and Abdul in Bangladesh noted that majority of the victims were unemployed (82.4%) and students (50%) respectively.<sup>18</sup> Similar studies conducted in India by Bhowmik and Chaliha <sup>10</sup> and Tamuli et al. <sup>11</sup> in Guwahati, Das et al. <sup>16</sup> in West Bengal and Kumar et al. reported that students were the common victims of sexual offence which is at par with our findings.<sup>21</sup> In Odisha, Sahu et al. also reported that most of the victims were unemployed (84.7%).<sup>8</sup> Students were more prone to sexual assault because of a lack of sex education in our society.

Almost half of study population fell under low socioeconomic category (50.97%) followed by medium category (47.09%) and a few were included in the high socioeconomic bracket (1.94%). Our findings coincide with that of other studies.<sup>5,17</sup>

Out of 206 victims examined, 84.47% were unmarried, followed by 13.59% married, 0.97% divorced and 0.97% widows. From this data, it is concluded that sexual offences are more common among unmarried girls. Manzoor et al. <sup>4</sup> in Pakistan, El-Elemi et al. <sup>19</sup> in Egypt, Phaswana et al. in South

Africa also reported similar findings. However, some authors had obtained different findings. Haider et al. reported that majority of the victims (58.6%) were married. Similarly, Suri et al. observed that married victims (96%) outnumbered unmarried. Most of the victims of unmarried group were adolescents and sexually active. Due to less psychological maturity, they might not have been able to protect themselves from acquaintances or strangers.

68.44% of victims belonged to nuclear families, 16.02% to joint families and 15.54% of victims were staying alone or separated from family members. Similar study by Das et al. in Kolkata reported that 54% of victims belonged to nuclear families and 46% belonged to joint families.<sup>21</sup> Another study conducted by Suri et al. in Delhi reported that 48% of victims were living away from their families.<sup>22</sup>

78.16% of cases occurred indoors including the victim's own house (28.16%), accused's house 6.31%, relative's 8.74% and 34.95% in other places like hotels, hostels etc. 21.84% cases occurred outdoor. Similar, findings were also observed by Hüdaverdi in Turkey when he reported 36.9% of sexual assault cases in victim's own home. Similarly, Al-Azad et al. also found that most of the incidents (36.95%) occurred in victim's house. However, studies by Barman and Nabachandra in Manipur and Kumar et al. Paperted that the most common site of offence was at the accused's house or his relative's house. The high incidences of indoor occurrence especially in the victim's own house may be due to restrictions imposed on females to not go outside and subsequent advantage taken by the offenders when females are left alone back home. It may also be due to consensual sex in the absence of family members or relatives.

In our study, we observed that majority of offenders (87.38%) were acquainted with the victims for a variable time period; lover or boyfriend constituted more than the half of study population (55.83%). Total strangers were involved only in 4.85% of cases. No case of 1<sup>st</sup> degree relative was registered as offender. We deduced that in 95.15% of cases, the offenders were known to the victims and in the rest, the perpetrators were strangers. Manzoor et al. <sup>4</sup>, Arpana et al. <sup>15</sup> and Kumar et al. reported similar findings. <sup>16</sup> Close proximity to the victim was used influence the victim in many cases. However, Hüdaverdi in Turkey and El Elemi et al. in Egypt reported that the perpetrators were not known to the victims in most of the cases. <sup>13,20</sup>

Most of the victims (33.02%) reported 1 month after the occurrence followed by 31.06% reporting between 1 to 7 days and 21.35% between 7 days to 1 month. Only 14.57% of victims reported within 24 hours of the occurrence. Sohail and Arshad observed that the average time of reporting was as early as 2 hours and as late as 240 days. Han et al. found that reporting time after the event of rape varied from 6 hours to 2

months.24

Time period between incidence and medical examination was categorized according to the possibility of survival of spermatozoa inside the vaginal canal or uterine cavity. Most of the cases were produced for examination after 72 hours of occurrence i.e. 65.05% cases. Tamuli et al., in their study, noted that 23% of the victims were examined on 3<sup>rd</sup> day after the incidence. The delayed reporting and medical examination of the victims was due to social stigma, possibility of resolving the matter through village gram panchayat initially, being considered promiscuous and responsible for incident, attendant humiliation and shame, embarrassment caused by appearance and cross examination, publicity in press, risk of losing love and respect from society, friends and that of her husband if married.

In our study 75.24% of victims had admitted to have given consent for the sexual act whereas in 24.76% of victims, offence was committed without consent. This data is similar to the observation of Barek in Bangladesh, who found that maximum incidences were consensual (73.86%).<sup>18</sup> Bandyopadhay et al. <sup>5</sup> and Arif et al. <sup>12</sup> had documented 4-6% of cases of non-consensual sex offence by administering alcohol or drug intoxication. Contradicting our finding, Suri and Sanjeeda and Kumar et al. found that most of the cases were non-consensual (69% and 60.56% of the victims respectively).<sup>16,22</sup>

## Conclusion

Rape victims usually belong to the adolescent age group of 12-18 years and were mostly unmarried and unemployed. They often do not receive the care and attention they seek and deserve. There is a pressing need to have a well-structured scheme of intervention and assistance for such victims. Such crimes can be prevented by proper education, awareness, training on self-defence and strict enforcement of law and order.

**Ethical clearance:** A prior approval was obtained from the Institutional Ethics Committee

Conflict of interest: None to declare Source of funding: None to declare

## References

- https://www.wnhs.health.wa.gov.au/Our-services/Service-directory/SARC/What-is
- World Health Organization. (2014). Violence against women: intimate partner and sexual violence against women: intimate partner and sexual violence have serious short-and long-term physical, mental and sexual and reproductive health problems for survivors: fact sheet.

- 3. NCRB 2014, Crime in India 2014 Statistics, Ministry of Home Affairs, Government of India. Web Site: http://ncrb.gov.in
- Manzoor I, Hashmi NR, Mukhtar F. Medico-legal Aspects of Alleged Rape Victims in Lahore. J Coll Physicians Surg Pak. 2010.20(12), 785-789.
- Arif M, Ahmed M, Hanif F. Natural Sexual Offences; medicolegal assessment in Punjab. Professional Med J. 2014;21 (5):980-986.
- Haider A. A Study of Female Sexual Offences in the Year 2013 at DHQ Hospital Dera Ismail Khan. Ann Pak Inst Med Sci. 2010.10(4), 187-192.
- 7. Ali N, Akhter S, Hossain N, & Khan NT. Rape in Rural Bangladesh. Delta Med Coll J. 2015. 3(1), 31-35.
- Sahu, G, Mohanty S, Dash JK. Vulnerable victims of sexual assault. Med Sci Law. 2005. 45(3), 256-260.
- 9. Ganguly RP, Patra KK, Jha T, Bhattacharya AR, Sarkar D. Sexual assault and its medical, medicolegal, and social aspects--a retrospective study. J Indian Med Assoc. 2010. 108(10), 682-690.
- 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), 0971-0973.
- 11. Tamuli RP, Paul B, Mahanta P. A statistical analysis of alleged victims of sexual assault a retrospective study. J Punjab Acad Forensic Med Toxicol. 2013. 13(1), 7-13.
- Bandyopadhay S, Ghosh S, Adhya S, Pal K, Dalai CK. A Study on Sexual Assault Victims Attending a Tertiary Care Hospital of Eastern India. J Dent Med Sci.2013.
- 13. Küçüker H. Analysis of 268 child and adolescent victims of sexual assault and the legal outcome. Turk J Pediatr. 2008.50(4), 313-316.
- 14. Sohail I, Arshad M. Ethics in Examining Victims of Sexual Assault. J Surg Pak. 2014.19, 4.

- Arpana S, Vineeta G, Kavita Y. A retrospective study of alleged female victims of sexual abuse. Indian J Appl Res. 2015. 5(6), 677-680.
- 15. Kumar SP, Sharma A, Sehgal AK, Rana AS. A Study of Sexual Assaults in Northern Range of Himachal Pradesh. Int J Med Toxicol Forensic Med. 2014. 5(2 (Spring)), 64-72.
- Al-Azad MAS, Raman Z, Ahmad M, Wahab MA, Ali M, Khalil MI. Socio-demographic characteristics of alleged sexual assault (rape) cases in Dhaka city. J Armed Forces Med Coll. 2012. 7(2), 21-24.
- Barek AA study on pattern of Alleged Rape cases at SBMC, Barisal. Anwer Khan Mod Med Coll J. 2010. 1(1), 15-18.
- Phaswana TD, Van der Westhuizen D, Krüger C. Clinical factors associated with rape victims' ability to testify in court: a recordsbased study of final psychiatric recommendation to court. Afr J Psych. 2013. 16(5), 343-348.
- El-Elemi AH, Moustafa SM, Hagras AM. Reported cases of female sexual assault over 5years period in Suez Canal area, Egypt: Demographic study. Egyptian J Forensic Sci. 2011. (3), 118-123.
- 20. Das I, Chakraborty A, Batabyal S, Sukul B, Dhar G. A study on the Socio-demographic profile of the victims of sex offences attending the Department of Forensic Medicine of a Tertiary Care Institute of Kolkata, West Bengal. IOSR-JDMS.2013. 11(4), 43-47.
- Suri S, Khan S. An analytical study of rape in Delhi. Int J Educ Psychol Res.2013. 2, 60-68.
- 21. Barman DD, Nabachandra H. Pattern of sexual assault cases in Manipur. J Forensic Med Toxicol. 2014. 31(1), 67-70.
- Khan M, Aziz S, Qamar N, Memon JQ. Frequent factors for women and children subjected to sexual assaults presenting at Jinnah Postgraduate Medical center, Karachi. J Pak Med Assoc. 2014. 64(6), 649-652.