

## ORIGINAL RESEARCH

# A Study on Sexual Assault Victims and Associated Factors at a Tertiary Care Centre of a North-Eastern State of India: A Retrospective Study

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## Abstract:

Sexual assault is a significant crime worldwide, irrespective of different cultures and religions. Most cases are unreported, yet it is a common, frequent and vital public health issue in developed and developing countries. Medico-legal examinations play an important role in determining the clinical and circumstantial evidence against this heinous crime, which helps appropriately present the incident before the courts of Law. This present paper aims to evaluate the socio-demographic profile of the alleged sexual assault victims and the medico-legal characteristics of the event and determine the factors affecting those incidents. A hospital record-based retrospective study was conducted on all the alleged sexual assault victims. Strict confidentiality was obtained in managing data extracted for the study from the hospital records. The ethical clearance was obtained. A gradual rise in the frequency of cases of sexual assault is noticed every year. Age-wise distribution showed that 69.1% of cases were in the age group of 11-20 years. Out of 835 victims, the majority, 89.8%, were Hindus, and 85.4% cases were unmarried. Accused relatives' houses were the most common place of the incident (31.1%). Most of the alleged victim girls (63.4%) reported having eloped with their boyfriends. Among the victims, 30% reported being force applied, while almost 2% said getting molested. Old hymenal tears were found in most cases (138/267). Sexual assault has lots of risk factors that affect the victim's physical and interpersonal relationships adversely. Hence, the associated influential factors should be considered to initiate preventive measures and control this sensitive public health issue.

**Keywords:** Sexual violence; Rape; Genital injury; Intimate partner violence; Eloping women.

## Introduction:

The World Health Organization (WHO) has defined sexual violence as any sexual act or attempt to obtain a sexual act or unwanted sexual comments or advances or acts to traffic or otherwise directed against a person's sexuality using coercion by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work.<sup>1</sup> Sexual assault is a form of sexual violence, unwanted sexual contact. Here, a person intentionally sexually touches another person without consent or coerces or physically forces them to engage in a sexual act against their wish.<sup>2</sup> It includes child sexual abuse, groping; forced vaginal, anal, or oral penetration or drug-facilitated sexual assault; or the person's torture in a sexual manner.<sup>2</sup> Sexual violence occurs all over the world. In most countries, little research has been conducted on this sensitive issue. Among all other violent crimes, sexual assault remains the

most underreported.<sup>3</sup> As per WHO, about 30% of women worldwide have been subjected to either physical or sexual violence by an intimate partner or non-partner sexual violence in their lifetime. African, Eastern Mediterranean and South-East Asia regions were reported to have the highest sexual or physical violence rates against women.<sup>4</sup> Studies suggest that one in three women might experience sexual violence with their close partner in different countries, including India.<sup>5-7</sup> According to The United Nations Children's Fund (UNICEF) reports, worldwide, almost 1 in 10 girls below 20 years have been forced to engage in sex or perform other sexual acts.<sup>8</sup> Many studies revealed that one in four adolescent girls account for their first sexual experience as forceful or against their will.<sup>9-12</sup> Sexual violence has a tremendous impact on the physical and mental health of the victim and causes bodily injury. It causes sexual and reproductive health problems at immediate and long-term costs.<sup>11,13-16</sup>

As per the latest report from the National Crime Records Bureau (NCRB) India, the total reported crime against women in India increased from 3 lakh 59 thousand in 2017 to 4 lakh in 2019, and Assam shared 7.4% of those crimes. Overall, 15.4% of the rape victims in India were also reported to be below 18 years.<sup>17</sup> Proper presentation of this type of crime before the courts of law is necessary for granting justice to rape survivors. Advancement of

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**Table 1. Place of occurrence and age of the victim.**

Age group	Place of Occurrence						X2 (p-value)
	Accused house (n=111)	Accused relatives or friends' house (n=362)	Victims house (n=124)	Victim relative or friend's house (n=6)	Hotel or rented house (n=129)	Others (n=103)	
<=10 years (n=50)	17 (34.0%)	0	20 (40.0%)	1 (2.0%)	0	12 (24.0%)	218 (p<0.001)
11-20 years (n=579)	68 (11.7%)	320 (55.3%)	63 (10.9%)	5 (0.9%)	60 (10.4%)	63 (10.9%)	
21-30 years (n=173)	25 (14.5%)	40 (23.1%)	28 (16.2%)	0	54 (31.2%)	26 (15.0%)	
31-40 years (n=27)	1 (3.7%)	2 (7.4%)	8 (29.6%)	0	14 (51.9%)	2 (7.4%)	
>40 years (n=6)	0	0	5 (83.3%)	0	1 (16.7%)	0	

**Table 2. Place of occurrence and eloping.**

Place of occurrence	Whether eloped with the accused		X <sup>2</sup> (p-value)
	No (n=306)	Yes (n=529)	
Accused house (n=111)	73 (23.9%)	38 (7.2%)	594.6 (p<0.0001)
Accused relatives or friends' house (n=362)	6 (2.0%)	356 (67.3%)	
Victims house (n=124)	121 (39.5%)	3 (0.6%)	
Victim relative or friend's house (n=6)	4 (1.3%)	2 (0.4%)	
Hotel or rented house (n=129)	11 (3.6%)	118 (22.3%)	
Other places (n=103)	91 (29.7%)	12 (2.3%)	

**Results:**

A total of 835 cases were included in the study, among which 67.3% reportedly refused medical examination. Among those, 254 (30.4%) cases were reported in 2017, 270 (32.3%) in 2018, and 311 (37.2%) cases in 2019. All the 835 cases were females.

Age-wise distribution of the cases: Most of the victims (69.3%) belonged to the age group 11-20 years. Out of 835 alleged victims, 50 (6.0%) were children aged ten years and below, as shown in Figure 1.

The religion and marital status of the cases: Out of 835 victims, the majority, 89.8% (750/835), were Hindus. Most victims (85.4%) were unmarried. Out of 835, only two victims were divorcees.

Place of incidence: Accused relatives' or their friends' houses were the most common place of the incidents for 43.4%, followed by hotel or rented dwellings in 15.4% of cases. Almost 14.9% of victims reported being assaulted in their own homes. Accused also preferred their own house (13.3%) for the alleged assault, as shown in Figure 2.

An in-depth study of the data showed a significant association between the victim's age and the incident's place (p-value<0.001). Most of the child abuse cases (age≤ 10 years) happened either at the victim's own house (40.0%) or the accused house (34.0%). While among the teenage girls (aged 11-20 years), the assault mainly happened at the accused relatives' or friends' houses (55.3%). Hotels and rented rooms are reported to be the most common places of assault of young and adult women, as shown in Table 1.

**Table 3. Other associated features with the victims.**

Observations	Frequency	Percentage
Force applied:		
No	567	67.9
Yes	250	30.0
Molestation	15	1.8
Medicine	2	0.2
Unpleasant Gest	1	0.1
Accused drinking	11	1.3
Findings at the examination:		
Spermatozoa on vaginal slides	5	0.6
Stains on the clothes of the victims	0	0
Other simple injuries	40	4.8
Pregnancy at the time of examination	48	5.7

**Table 4. Forceful assault among different age groups.**

Age group	Type of force applied.			X <sup>2</sup> (p-value)
	No force applied (n=567)	Force applied (n=250)	Molestation, medicine or unpleasant gest (n=18)	
<=10 years (n=50)	2 (4.0%)	45 (90.0%)	3 (6.0%)	118 (p<0.001)
11-20 years (n=579)	414 (71.5%)	151 (26.1%)	14 (2.4%)	
21-30 years (n=173)	135 (78.0%)	37 (21.4%)	1 (0.6%)	
31-40 years (n=27)	15 (55.6%)	12 (44.4%)	0 (0.0%)	
>40 years (n=6)	1 (16.7%)	5 (83.3%)	0 (0.0%)	

**Table 5. Factors of sexual initiation among different age groups.**

Age group	Factors of sexual initiation			
	Individual factor	Relationship factors	Community factors	Societal factors
<=10 years (n=6)	0 (0.0%)	6 (100.0%)	0 (0.0%)	0 (0.0%)
11-20 years (n=59)	1 (1.7%)	24 (40.7%)	22 (37.3%)	12 (20.3%)
21-30 years (n=51)	1 (2.0%)	9 (17.6%)	2 (3.9%)	39 (76.5%)
31-40 years (n=12)	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (100.0%)
>40 years (n=2)	0 (0.0%)	1 (50.0%)	0	1(50.0%)
Total (n=130)	2 (1.5%)	40 (30.8%)	24 (18.5%)	64 (49.2%)

Most of the victim girls (63.4%) reported having eloped with their boyfriends, which resulted in the incident happening either at the accused relative or friend's house (67.3%) or hotel and other rented dwellings (22.3%) where they take shelter after eloping. The  $\chi^2$  test revealed a significant association between eloping and the place of occurrence (p-value <0.001), as shown in Table 2. Two incidents were reported at the tea garden: one at school, one at the cinema hall, the accused shop, and one roaming.

Other associated features: 30% reported force applied, while almost 2% reported being molested. A total of 48 cases were reported to be pregnant at the time of examination, and 40 were detected with other injuries, as shown in Table 3.

Most of the child victims (45/50) reported force being applied for assault. Similarly, women of the higher age group reported being forced to use them. Molestation was primarily reported among teenage girls. The victim's age was a significant factor for violent sexual assault, as shown in Table 4.

Victim reporting sexual initiation: A total of 130 participants reported factors of sexual initiation. In most of the cases, the incident (6.3%) has resulted from extramarital affairs. At the same time, close relatives and kidnappings were the second most reported cause of the assault. Nine cases were gang-raped, and

twelve cases were the victim of domestic violence. While close relatives committed 4 out of the 50 assault cases among children below ten years, one each was committed by father and brother.

Among the alleged victims of the age group 11-20 years, kidnapping (21), close relatives (16) and gang rapes (6) were the commonly reported cases as compared to others. Extramarital affairs (37) were mainly reported among young women in the 21-30 years (37).

Age-wise distribution of the factors of sexual initiation revealed that all of the child victims were assaulted by their close relatives, including brothers and fathers. While most of the adolescent girls were primarily assaulted by their closed relationships (40.7%), community factors like kidnapping (37.3%) and societal factors like extramarital affairs and gang rapes etc. (20.3%) were also reported among them. Most of the women above >20 years of age assaulted at a societal level resulted from extramarital affairs, as shown in Table 5.

Genital injuries: Out of 266 victims who were visually inspected for genital injuries during the medical examination, 181 (68%) were found to have hymeneal tears. The genital injuries were mostly old hymeneal tears (51.9%) and carunculae hymnals (10.1%), as shown in Figure 3. Only 6% of victims reported having recent hymeneal tears. Hymen was intact in almost 32% of the victims.

The different positions on which the hymen was torn are shown in Figure 4. Six O'clock and three O'clock were the most typical hymenal tear sites in the case of both recent and old tears, implying sexual intercourse was the most probable cause of the hymenal tear at the six o'clock position.

### Discussion:

The present study reflected a steady rise in the cases during the study period, agreeing with the National Crime Record Bureau of India (NCRB) report.<sup>17,21</sup> Studies conducted in different parts of India also showed a similar year-wise increase in the rate of sexual assault cases.<sup>19,22-23</sup> The yearly increase in cases signifies the increase in actual crime rate and the fact that the extensive media coverage and social media influences are helping create awareness against these types of crimes and seek justice by the victims.

The younger age group of 11 to 20 years was found to be at higher risk of sexual assault, which agrees with some studies.<sup>23-27</sup> A significant association between the victim's age and the incident's place of sexual assault was found in the present study. The commonplaces of occurrence for children aged <10 years in the current study were the accused and the victim's home, agreeing with some recent reviews.<sup>28,29</sup> This significant association is because the perpetrator is either a relative, neighbours, step-parents, etc.<sup>30</sup>

A more significant part of sexual violence with teenage girls aged 11 to 20 years occurred at the accused relative's house and friend's house. This may indicate the incidents resulting from the false assurance of marriage given by boyfriends to teenage girls, thus emotionally provoking them to engage in sexual intimacies.<sup>23,25</sup> A recent review also identified age as significant in the occurrence

of anogenital injury. According to the current findings, women  $\leq$  19 years old had the highest risk.<sup>30</sup>

63.4% of women reported having eloped with their boyfriends, sheltered at accused relative or friend's houses (67.3%) or hotel and other rented dwellings (22.3%), showing a significant relationship with the place of occurrence. This intimate partner sexual violence is the most typical and one of the most critical risk factors for women concerning their susceptibility to sexual assault, according to the report of WHO.<sup>1</sup>

In 30% of cases, the force was applied, revealing that women's first sexual experience is usually unwanted and forced, as reported in various studies.<sup>11,12</sup> Forced sexual instigation and coercion during adolescence is in agreement with many studies.<sup>12,32,33</sup> Force application with 91.8% of the children  $\leq$ 10 years agree with the research outcome. 34 Women (83.3%) aged >40 also revealed the force application during the incident. A significant association between age and application of force ( $p < 0.001$ ) was observed in the study. The present study indicates that children and older women were more vulnerable to violent sexual assaults as most of the incidents were non-consensual. At the same time, violent assaults were less prevalent among teenage or young women as they may fall prey to false hopes of marriage and a better future given by the assailant, particularly by boyfriends or love affairs. As children are too young to resist and do not even understand the act's consequences, they are forced to be involved in sexual activities during the assault. Whereas adolescent and adult alleged victims sometimes may complain of it as sexual assault even if the relationship was not forceful and relatively consensual due to breach of trust.<sup>18</sup>

The factors of sexual initiation revealed that all (100%) perpetrators of child sexual abuse are acquainted with the children, mostly their close relatives, including brother and father, which is in concurrence with a study.<sup>35</sup>

A majority of 67.3% of the sexual assault victims in the present study refused medical examination. This may be due to fear of social stigma, losing marriage chances, being considered uninhibited and responsible for the incident, and attendant humiliation and shame. The refusal of medical examination may also be due to the subsequent embarrassment caused by the appearances during cross-examination in court, media publicity, and the risk of losing love and affection from society, friends, and her husband, if married, agrees with some studies.<sup>23,36</sup>

Most women have not experienced a severe physical injury except for simple injuries in 40 (4.8%) cases. Similar studies in other parts of the country reported higher levels of physical injuries. Delayed reporting of cases for medical examination may be the reason for not having pieces of evidence of substance bruises or physical injuries.<sup>19,23</sup> The genital injury prevalence of 68% in the present study is relatively higher than various other studies where the investigator reported a lower prevalence in the range of 20% to 40%.<sup>18,19,37,38</sup> The majority of the victims of the current study had old hymenal tears, and only 6% of the victims had recent tears, concordant with another study.<sup>19</sup> The most common site of genital injury in the current study was the hymenal tear at 6 o'clock. The hymen is usually torn posteriorly at



the 6 o'clock position following the first act of coitus, agree with a review.<sup>39</sup> Lack of injuries in most cases highlights the importance of all concern that injury is not the conclusive finding to give a final opinion of sexual violence, according to a recent study.<sup>40</sup>

Genital injuries have tremendous forensic significance from both legal and ethical points of view. It is also essential to know that the absence of genital injuries does not exclude sexual assault. The healthcare professional must be sensitive, understanding the legal formalities in forensic examination and its subsequent evaluations of the evidence to opine a case examined.

Children and young girls are more vulnerable to being sexually assaulted and most of the time at their own homes by close relatives. The introduction of early sex education in the curriculum, making children aware of their private parts, parents teaching their children about good and bad touch, and exposure to self-defence courses at an early age may help the children resist this kind of crime.

### Conclusion:

Despite the advancement of education, awareness and amendments of stringent laws against heinous crimes, sexual assault cases are still rising continuously. Early reporting of the crime for medical examination helps accelerate the judicial process. The parents need to be more aware and protective towards the girl child as girls of lower age groups are more vulnerable to being assaulted at their own houses. Along with stringent laws against this type of heinous crime, proper education and awareness programmes regarding women's rights, health care facilities, and judiciary procedures may help women fight against this social evil. While defining preventive measures for better managing the issues, the law enforcement authority may consider the risk factors evaluated in this study.

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