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# Study Of Physical Impact Of Sexual Assault On Victims.

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#### **ABSTRACT**

This prospective descriptive study conducted in the Department of Forensic Medicine at a tertiary healthcare teaching institute aimed to investigate physical impact of sexual assault on victims. The study, spanning 18 months, included 142 victims who met the inclusion criteria. Results revealed a significant concentration of victims in the age group of 11 to 20 years (63.38%), emphasizing the vulnerability of adolescents and young adults. Incidents predominantly occurred in rented houses (30.99%) and accused houses/areas (27.46%), highlighting the importance of preventive measures in private settings. A higher proportion of victims originated from rural areas (57.75%), raising awareness about potential socio-economic factors contributing to vulnerability in these regions. Delays in seeking medical examination were observed, with 27.46% presenting after one month, indicating challenges in timely response and evidence collection. Moreover, 7.75% of victims were diagnosed with pregnancy post-assault, emphasizing the need for comprehensive reproductive healthcare. This study provides critical insights for developing targeted interventions and support systems, aiming to address the diverse challenges faced by sexual assault victims.

**Keywords**: sexual assault, socio-demographic profile, physical impact, forensic medicine, reproductive healthcare.

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### **INTRODUCTION**

Worldwide about 20% of women have been sexually abused in their childhood [1, 2]. A high rate of sexual assault is found in other Asian countries as well. In Japan 60% of women suffer sexual violence [3] while 25% of women in India [4] and 53-62% of women in Bangladesh and 19% in North Carolina, United States [5] are victimized at times.

Sexual offence can be defined as sexual intercourse or sex-relatedacts performed in a way which is against the provision of the law of the land [6-9]. Sexual violence affects millions of women worldwide cutting across cultural and religious barriers. Sexual assault on female victims is a major global health, legal and human rights concern. In recent years, there has been an alarming rise in ratio of sexual assaults in India [9]. Cultural and religious doctrines have profound impact on individuals and must be considered when treating the sexual assault victim. There may be a general distrust of medical and law enforcement personnel who play vital roles in the aftermath of a sexual assault [10].

#### **METHODOLOGY**

The present study was a prospective descriptive study carried out in the department of Forensic Medicine at a tertiary healthcare teaching institute to investigate physical impact of sexual assault on victims. The study area encompassed the Department of Forensic Medicine, while the study population consisted of patients meeting the defined inclusion criteria.

The inclusion criteria comprised all sexual assault victims reported during the study period, seeking examination and treatment at the casualty of the tertiary healthcare center. Additionally, the victims needed to provide consent for inclusion in the study. Exclusion criteria were applied to sexual assault victims who denied consent for examination or inclusion in the study. The sample size was determined based on the sexual assault victims reported during the study period at the tertiary healthcare center, resulting in the inclusion of 142 victims in the study.

The study followed a descriptive observational design and spanned a duration of 18 months. The research methodology involved the examination of alleged sexual assault victims brought by the police for medical examination at the Department of Forensic Medicine and the Department of Obstetrics and Gynecology of the tertiary healthcare center. The examination was jointly conducted by doctors from both departments. Furthermore, victims referred from nearby hospitals who were allegedly sexually assaulted were also included in the study after obtaining proper consent. The examination procedure included history-taking, general physical examination, and local genital examinations.

#### RESULTS

Out of 142 victims 90 (63.38%) were from age group between 11 to 20 yrs. Followed by 28 (19.72%) between 21 to 30 yrs. 12 (8.45%) between 31 to 40 yrs, 08 (5.63%)  $\leq$ 10yrs and 06 (4.23%)  $\geq$ 40yrs.

Incident in which 44 (30.99%) were rented house followed 39 (27.46%) were accused house/area, 22 (15.49%) victims house, 16 (11.27%) open places/roadside, 10 (7.04%) hostel, 07 (4.93%) relative house, 2 (1.41%) school and temple each.

Table 1: Distribution of victims according to Residence of victim(n=142)

Residence of victim	Frequency (N)	Percentage (%)
Rural	82	57.75
Urban	60	42.25
Total	142	100.00

The above table shows that out of 142 victims 82 (57.75%) were from rural area followed by 60 (42.25%).

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Table 2: Distribution of victims according to time interval betweenincidence and medical examination (n=142)

Time interval	Frequency (N)	Percentage (%)
6 to 15 hours	02	01.40
16 to 24 hours	18	12.68
1 to 3 days	23	16.20
3 to 7 days	30	21.13
7 to 15 days	18	12.68
15 to 30 days	12	08.45
>1 month	39	27.46
Total	142	100.00

The above table shows that time interval between incidence and medical examination in which 39 (27.46%) with more than 1 month followedby 30 (21.13%) with 3 to 7 days, 23 (16.20%) with 1 to 3 days, 18 (12.68%) with 7 to 15 days and 16 to 24 hours. Only 02 (01.40%) time interval between 6 to 15 hours.

Table 3: Distribution of victims according to Assault resulted inpregnancy (n=142)

Pregnancy	Frequency (N)	Percentage (%)
Yes	11	07.75
No	131	92.25
Total	142	100.00

The above table shows that assault resulted in pregnancy in which 11 (7.75%) victims diagnosed with pregnancy after assault.

## **DISCUSSION**

The findings of this prospective descriptive study focused light on various aspects related to sexual assault victims, including their age distribution, the location of the incidents, residence patterns, time intervals between the incident and medical examination, and the occurrence of pregnancy as a consequence of assault.

The age distribution of the victims reveals that a substantial proportion, 63.38% (90 individuals), fell within the age group of 11 to 20 years. This demographic trend aligns with existing literature, which often highlights the vulnerability of adolescents and young adults to sexual assault. The prevalence decreases with increasing age, with 19.72% (28 individuals) between 21 to 30 years, 8.45% (12 individuals) between 31 to 40 years, 5.63% (8 individuals) aged 10 years or younger, and 4.23% (6 individuals) aged 40 years or older. This distribution emphasizes the urgent need for targeted preventive measures and support systems for the younger age groups.

The location of the incidents is a crucial aspect of understanding the context of sexual assaults. The majority of incidents occurred in rented houses (30.99%) and accused houses/areas (27.46%), emphasizing the prevalence of assaults within private or familiar settings. This underscores the importance of creating awareness and implementing safety measures within these environments. Additionally, incidents occurring in victims' houses (15.49%), open places/roadsides (11.27%), hostels (7.04%), relative houses (4.93%), schools (1.41%), and temples (1.41%) highlight the diverse settings in which sexual assaults take place, necessitating a comprehensive approach to prevention and intervention. The residence distribution indicates that a higher proportion of victims (57.75%) hail from rural areas compared to urban areas (42.25%). This finding prompts an exploration of potential factors contributing to the higher vulnerability of rural residents, such as socio-economic conditions, access to education, and awareness of rights and support services. Addressing these factors can be instrumental in designing targeted interventions for different demographics [11-13].



The time interval between the incident and medical examination is critical for both forensic evidence collection and the well-being of the victims. The study reveals that a significant number of victims (27.46%) sought medical examination more than a month after the assault, potentially impacting the collection and preservation of forensic evidence. Efforts should be directed toward reducing delays in reporting and providing accessible healthcare services to victims promptly. The varying time intervals, ranging from 6 to 15 hours to over a month, highlight the challenges in standardizing the process and emphasize the need for flexible and efficient response mechanisms [14].

The occurrence of pregnancy as a result of assault is a distressing aspect of the study. The data show that 7.75% of the victims diagnosed with pregnancy after assault. This finding underscores the immediate medical and psychological needs of victims, including access to emergency contraception and comprehensive reproductive healthcare. It also emphasizes the importance of a victim-centered approach in the legal and healthcare systems to address the multifaceted consequences of sexual assault.

#### CONCLUSION

In conclusion, this study provides valuable insights into the socio-demographic profile and physical impact of sexual assault on victims. The findings underscore the need for targeted interventions, awareness campaigns, and improvements in the healthcare and legal systems to address the diverse challenges faced by sexual assault victims. The study's limitations, such as potential underreporting and biases, should be acknowledged, and future research should explore additional factors contributing to sexual assault and its impact on victims. Ultimately, fostering a society that prioritizes prevention, support, and justice is paramount in mitigating the pervasive issue of sexual assault.

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