

A Facility-Based Secondary Data Analysis of Sexual Assault Cases at Tertiary Care Hospital, Tripura

Shauni Gope^{1*}, Juthika Debbarma², Pranab Choudhury³

¹Junior Resident, Dept of Forensic Medicine and Toxicology, AGMC & GBPH, Tripura, India

²Associate Professor, Dept of Forensic Medicine and Toxicology, AGMC & GBPH, Tripura, India

³Associate Professor, Dept of Forensic Medicine and Toxicology, AGMC & GBPH, Tripura, India

*Address for Correspondence: Dr. Shauni Gope, Junior Resident, Dept of Forensic Medicine and Toxicology, AGMC & GBPH, Tripura, India

E-mail: shaunigope@gmail.com

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ABSTRACT

Background: Sexual assault has become a universal phenomenon with significant physical and mental health issues. Women, children and young males are the most vulnerable group to this social evil. Sexual offences are a global issue, severely impacting victims' physical and mental health. Approximately 1 in 3 women face sexual violence globally, with India reporting rising cases, including those under the POCSO Act. Swift medical examinations and evidence collection are crucial for justice. This study examines sexual assault cases in a Tertiary Care Hospital to raise awareness and suggest preventive measures.

Methods: To analyse the profile of sexual assault cases & to determine the various factors associated with such cases including socio-demographic profile, victim-assailant relation etc, a retrospective cross-sectional study has been conducted in the Department of Forensic Medicine & Toxicology at a tertiary care Hospital, Tripura. Data were obtained from official medico-legal reports of consenting victims and accused individuals, compiled, and tabulated for analysis.

Results: In this study 144 accused and 56 victims of sexual assault were included. Two were male victims. The majority (42.36%) of accused were in the 21-30 years age group and the majority (60.71%) of victims were in the 11-20 years age group. Maximum (76.43%) victims were unmarried. Majority of cases the alleged accused were boyfriends. 32.14% of cases reported for medical examination within 3 days.

Conclusion: This study concluded that sexual assault affects victims' psychological and social well-being. Addressing stigma, promoting awareness, timely reporting, counseling young victims, and enforcing strict anti-rape laws are crucial for justice and societal support.

Key-words: Sexual Assault, Victim, Accused, Social stigma, Awareness

INTRODUCTION

In the present era, sexual offence has become a universal phenomenon with significant physical and mental health issues^[1,2]. A sexual assault is any sexual act that a person did not consent to do or is forced into against their will and includes rape or other sexual offences such as groping, forced kissing or child sexual abuse^[3].

Such offences are increasing day by day and may cause acute depression among victims, so justice is required for the protection and preservation of the dignity of the victims^[2]. According to WHO, approximately 1 in 3 women will experience sexual violence in their lifetime. Botswana recorded the highest rape statistics in the world with a rate of 96.87 per 100,000 population. Oman and Bermuda reported the lowest rape rates^[4-8].

In India, sexual assault, rape and trafficking of children and women are taking place every day^[5]. In April 2013, the Indian Parliament introduced amendments to S. 375 IPC^[7]. From July 2024 it has been changed to 63 of BNS^[4]. According to the NCRB 2022 report, the rate of crime against women per lakh women population has increased from 64.5 in 2021 to 66.4 in 2022. 30.8% of

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cases had been booked under the Protection of Children from Sexual Offences (POCSO) Act, 2012 [9]. Women, children and young males are the most vulnerable group to this social evil [10,12].

In the case of sexual assault, medical examination along with collection of samples from the victims and accused with a lesser time interval between incident and examination will increase the chances of getting evidence which will further help the court in proceeding towards justice [5,13-16].

Hence, the present study was carried out to study the profile of sexual assault cases brought to this Tertiary Care Hospital. The study findings may help to raise awareness and find remedial measures to bring down the incidence of such cases.

MATERIALS AND METHODS

Research Design- This retrospective cross-sectional study was conducted on all the alleged sexual assault cases that came to the Department of Forensic Medicine & Toxicology, Agartala Government Medical College & GBP Hospital, Tripura for medical examination from 1st January 2019 to 31st December 2023. Data were collected from the official medico-legal reports of the accused and victim who gave consent for examination and were assembled and tabulated.

Inclusion and Exclusion criteria

Inclusion criteria

- This study included those who had a medico-legal history of sexual assault and consenting to examination.
- This study was included those participants who aged 10 years and above.

Exclusion criteria

- Participant who had insufficient medico-legal documentation.
- Participant who refused consent for medical examination or data usage in research.

Statistical Analysis- To conduct this study, it has used SPSS, R, or Python for statistical computations and graphical representations. This study described categorical variables such as age groups, marital status, urban vs. rural distribution, and educational levels.

Ethical Clearance- Ethical clearance was obtained from the Institutional Ethical Committee (IEC) of AGMC & GBP Hospital.

RESULTS

In the present study, a total of 218 medico-legal reports (144 accused and 74 victims) with alleged history of sexual assault was observed. Out of 74 victims, 56 victims gave their consent for examination. Maximum number of accused (29.17%) were found in 2019. Maximum number of victims (37.50%) were found in 2023. All the accused were male and among the victims 54 were female and 02 were male victims (Table 1).

Table 1: Year-wise distribution of accused and victim cases

Year	Number of Accused	Percentage of accused (%)	Number of victims	Percentage of victims (%)
2019	42	29.17	12	21.43
2020	29	20.14	8	14.29
2021	12	8.33	7	12.50
2022	22	15.28	8	14.29
2023	39	27.08	21	37.50

The majority (61 no, 42.36%) of the accused were in the 21-30 years age group and the majority (34 no, 60.71%) of victims were in the 11-20 years age group (Fig. 1).

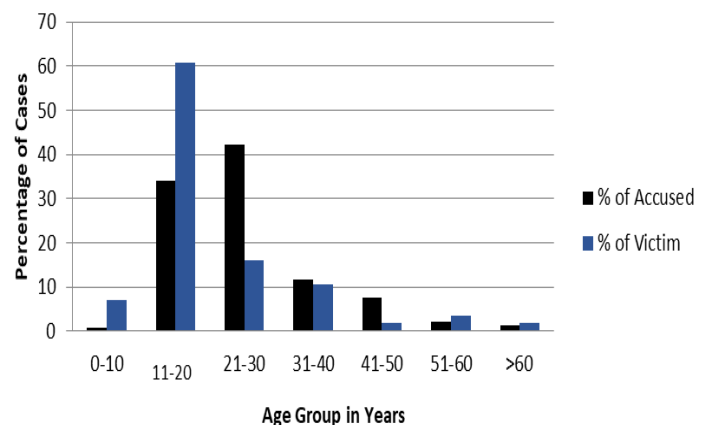


Fig. 1: Age distribution of accused persons & Victims

A total of 76.43% of victims were unmarried and 6.9% of victims were widows. The majority (57.64 %) of accused persons were unmarried (Fig. 2).

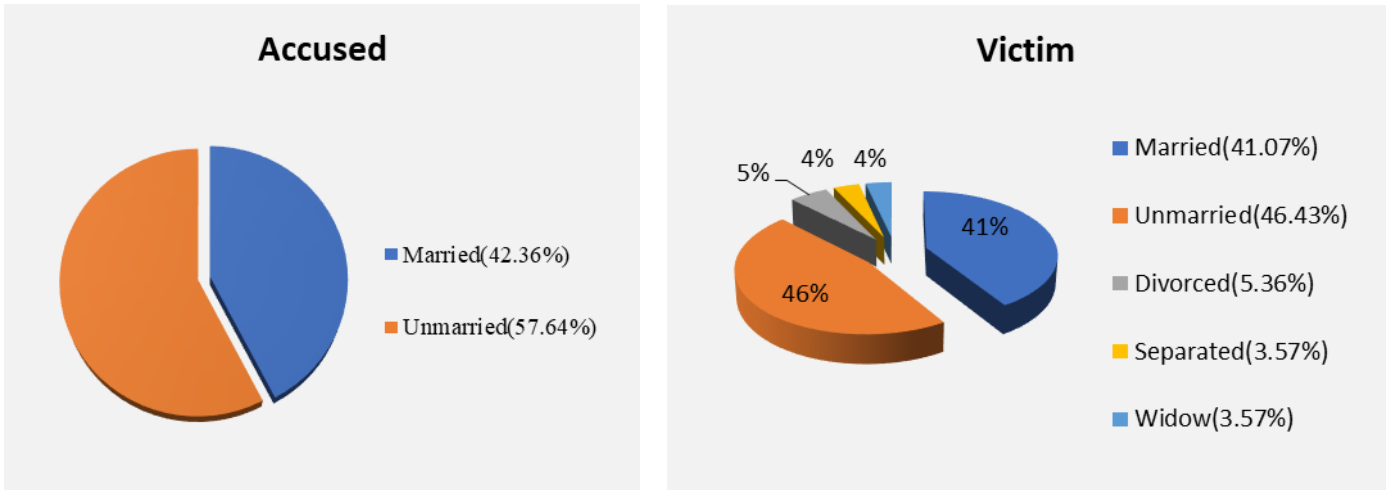


Fig. 2: Marital status

Out of 56 victims, 36 cases (64.29%) were from urban and 20 cases (35.71%) were from rural areas. Out of 144 male accused cases, 96 cases (66.67%) were from urban and 48 cases (33.33%) were from rural areas. Five cases were brought with a history of gang rape. A total of 22

males were involved in gang rape. There were 5 cases of gang rape. Out of these, in 1 case, 9 accused persons were involved, in 2 cases, 3 accused persons were involved in each case, in 1 case 5 accused persons were involved and in 5th case 2 accused were involved (Fig. 3).

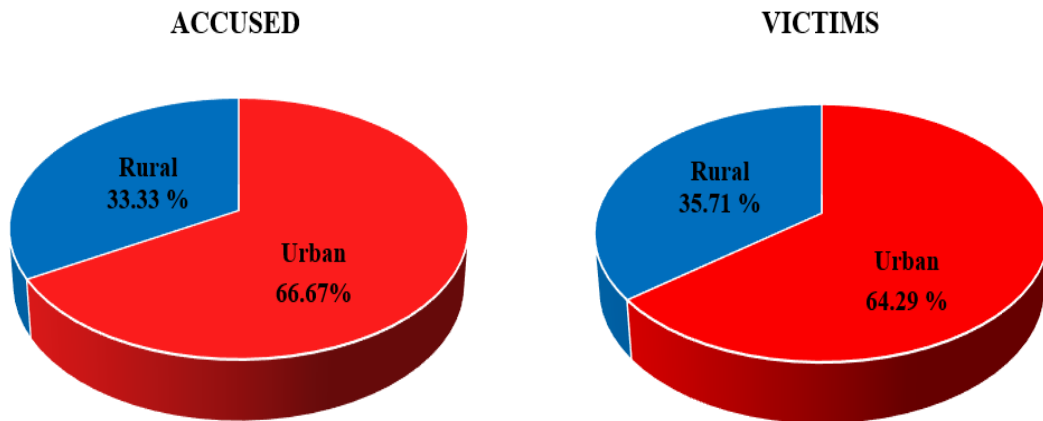


Fig. 3: Address type

Most victims (89.29%) and accused (83.33%) were Hindus (Fig. 4).

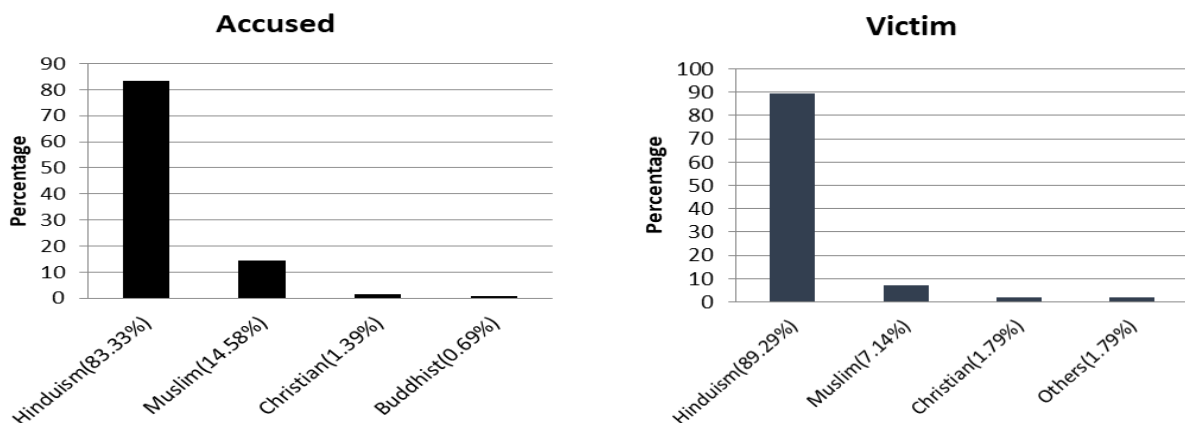


Fig. 4: Religion Status

Maximum victims were educated up to higher secondary (33.93%) and the maximum accused were educated up to primary (45.14%) (Table 2).

Table 2: Victims and Accused Educational Status

Education	Victim (%)	Accused (%)
Illiterate	1.79	1.39
Primary	12.50	45.14
Middle	17.86	10.42
High school	25	13.19
Higher Secondary	33.93	15.97
Graduate	5.36	12.50
Studying in Nursery	3.57	1.39

The majority of victims were students (64.29%) and the majority of accused persons were businessmen (27.78%) (Fig. 5).

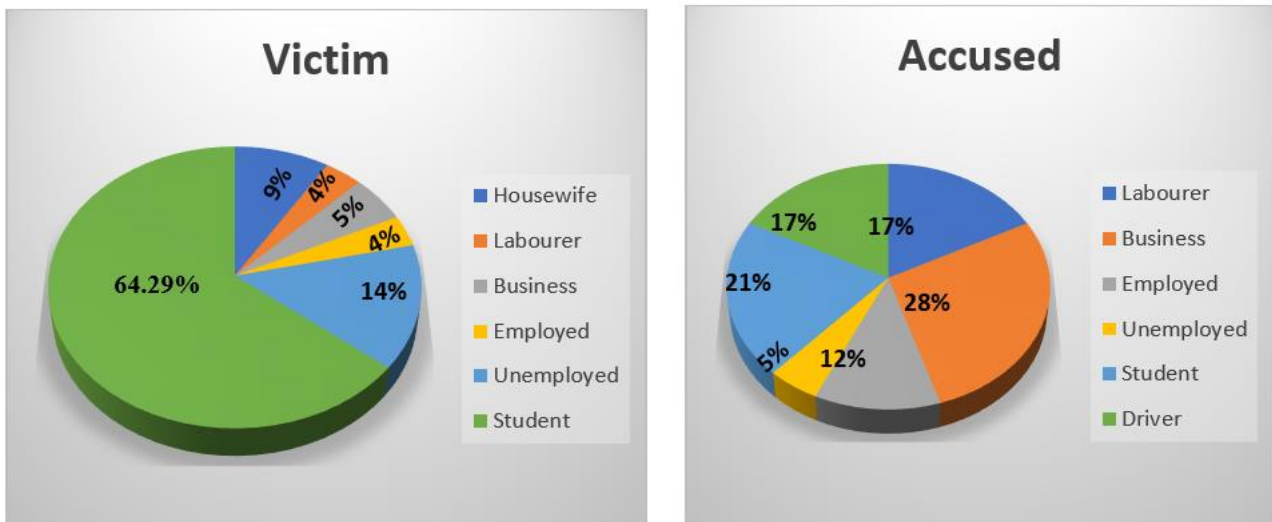


Fig. 5: Occupational Status

Maximum incidents happened at the house of the accused (Fig. 6).

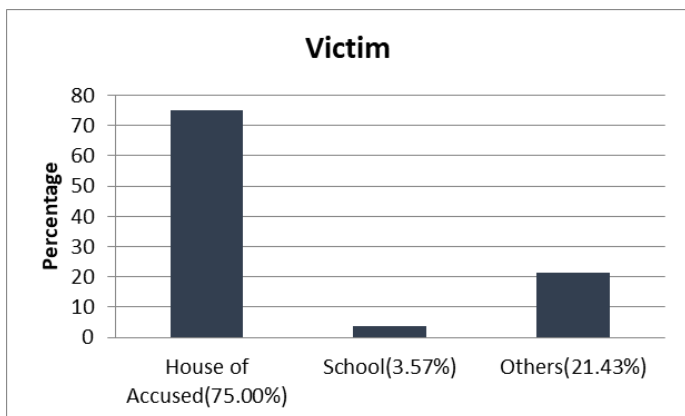


Fig. 6: Place of incidents

One victim (1.79%) reported for medical examination on the same day of the incident. 6 numbers of victims (10.71%) were examined on 2nd day, 12 victims (21.43%) were examined on 3rd day and 2 victims (3.57%) were examined on 4th day. 10.71% reported on the 5th -7th day of the incident. More than 4 weeks interval was found in 17 cases (30.36%). In the case of the accused, 35 (24.31%) were examined on 2nd day and 24 (16.67%) were examined on 3rd day. 20.14 % were examined more than 4 weeks of interval. Among the 56 victims, 49 victims gave their consent by themselves and in 7 cases guardians gave the consent as they were minors (Table 3).

Table 3: Time interval between Incident and medical examination

Time interval	Number of victims	% of victims	Number of accused	% of accused
Same day	1	1.79	0	0
2 nd day	6	10.71	35	24.31
3 rd day	12	21.43	24	16.67
4 th day	2	3.57	5	3.47
5 th -7 th day	6	10.71	12	8.33
1-2 week	10	17.86	20	13.89
2-3 week	1	1.79	10	6.94
3-4 week	1	1.79	9	6.25
>4 weeks	17	30.36	29	20.14

Majority, 39 cases (69.64%) of the alleged accused were boyfriends followed by the acquaintance 7 cases (12.50%) and friend 3 cases (5.36%). In one case, the

accused was father. Among all the cases of victims only 5 cases had external injuries on their bodies (Fig. 7).

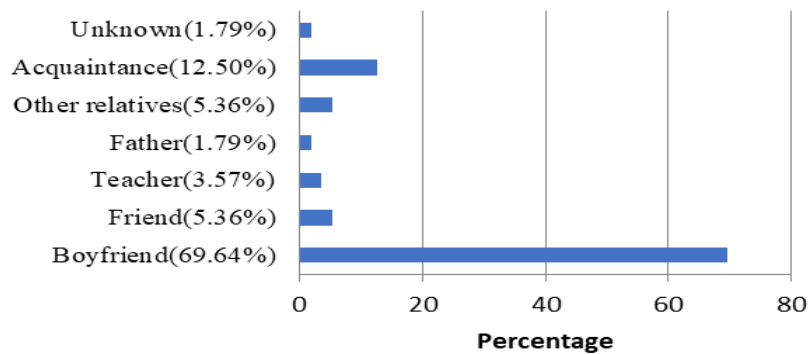


Fig. 7: Relation of accused with victim

Hymen had an old tear in 58.18 % of cases and a fresh tear in 5.45 % of cases. Hymen was intact in 7.27% and thick fleshy & tags in 23.64%. In 2 cases (3.7%) there were injuries over labia majora and minora. Perineal injuries were found in one case. In the case of male victims (2 cases), anal injuries were found (Fig. 8). 41 vaginal swabs were taken among which 5 tested positive

for the presence of spermatozoa and 11 reports are pending. 4 urethral swabs were taken and all were negative for spermatozoa. 1 anal swab was preserved in the male victim case and it tested negative for the presence of spermatozoa. In accused persons, 5 penile swabs were taken and one report was positive for the presence of vaginal cells.

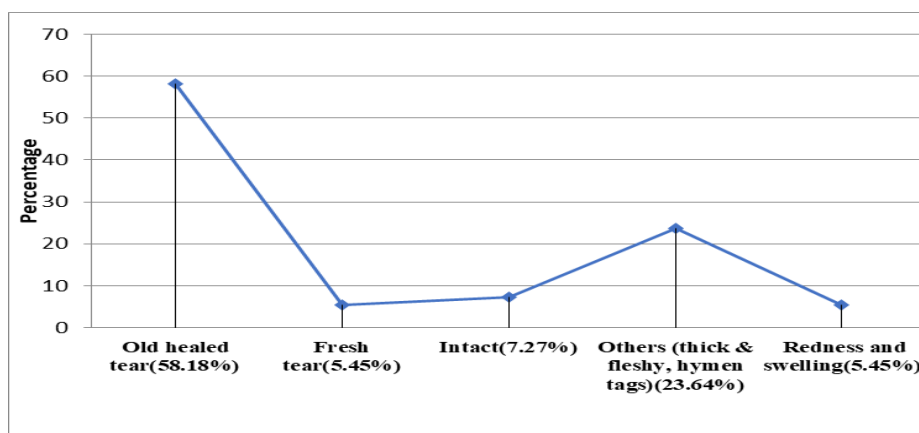


Fig. 8: Findings on Hymen

DISCUSSION

In the present study, most of the accused, 61 cases (42.36%) were in the age group of 21 to 30 years. The youngest accused was 10 years old and the oldest was 68 years. Findings are like that by Kumar *et al.* (55.3%)^[13] and Shinge *et al.* (58.5%)^[17]. Maximum of the victims (60.71%) were in the 11-20 years age group which is consistent with that of Tamuli *et al.*^[2], Sarkar *et al.*^[10], Islam *et al.*^[18], Hasan *et al.*^[19], Bhardwaj *et al.*^[20], and Chowdhury *et al.*^[21]. Sharma *et al.* also found that the most common target age group of victims of rape were 15-18 years^[22]. Similarly, adolescent victims were the most common (76.9%) in the study of Malhotra and Sood^[23]. Bhowmik and Chaliha found 18-20 years as the most common age group involved^[24]. This shows that younger males were in major numbers involved in the sexual assault activity and adolescent girls are more affected as victims^[13].

Tamuli *et al.*^[2], Bhoi *et al.*^[6], and Bhowmik *et al.*^[24], Sukul *et al.*^[25] observed respectively that 77%, 63%, 77.83%, and 66.93% of victims were unmarried. Similarly, in the present study, 76.43% were unmarried victims. So, the incidence of sexual assault is more in unmarried girls. In the present study victims from urban areas (64.29%) outnumbered those from rural areas (35.71%). Findings are consistent with the Bhoi *et al.*^[6] study (58.84%). But it is not consistent with Kumar *et al.*^[13] study where a maximum number of victims (58%) were from rural areas. In Tamuli *et al.*^[2] and Bhowmik *et al.*^[24] studies, male victims were 2% and 1.06% respectively with alleged anal intercourse. This is by the present study that 1.79% were male victims. Maximum victims were educated up to a higher secondary level (33.93%) which is consistent with Tamuli *et al.*^[2] study and Verma *et al.*^[5] study.

Most of the victims were Hindus (82.29%) which is like Sarkar *et al.* (68%)^[10] and Aggarwal *et al.* (47.6%) study^[11]. Most victims were students (64.29 %). A study by Bhoi SB *et al.* showed 62.26% and Kumar *et al.* showed 48.5% of victims were students^[6,13]. Tamuli *et al.*^[2] also observed that 193 victims were students out of 382. This reveals that the students are more vulnerable. The rented house was the most common place of incidents, as the victim girls eloped with the boyfriend and stayed there. Tamuli *et al.*^[2] and Bhoi *et al.*^[6] also found similar results. Whereas the study by Sarkar *et al.*^[10] and Grossin *et al.*^[26] reported that most of the incidences

occurred at victim homes which is not consistent with the present study.

In the present study, one victim (1.79%) reported for medical examination on the same day of the incident. 32.14 % of victims were examined within three days of the incident which is by that by Tamuli *et al.* (23%), Sukul *et al.* and Verma *et al.* (30%)^[2,25,5]. But contrary to the Santos *et al.* study and Aggarwal *et al.*^[11] study where 61% and 76% of victims were examined within three days of the incident respectively. In the present study, 10.71% reported on the 5th-7th day of the incident which is like Kumar *et al.* (12.9%)^[13] and contrary to Verma *et al.* (50%)^[5]. In the present study, 40.97% accused were examined within three days of the incident which is consistent with the Kumar *et al.* study (63.2%). The reason for late reporting is mainly due to fear of victims and their parents, social stigma, communication gap and some situations when victims elope with their boyfriends and their subsequent refusal to marry after some time.

In the present study, 69.64 % were boyfriends of victims followed by acquaintances and other relatives in 12.50% and 5.36% of cases respectively. Verma *et al.*^[5] found that in 66.6% of cases, the accused were friends/boyfriends and 12.24% were neighbours. Tamuli *et al.* found 77% of the perpetrators were known to the victim^[17-20]. Sarkar *et al.*^[10] found nearly half the victims in the study the assailant was known to the victim. In the present study, the maximum cases were having love affairs, then eloped with boyfriends and cases filed by guardians or betrayal issues. In contrast, Bhoi *et al.*^[6] and Aggarwal *et al.*^[11] found that 41.68% and 42.9% were acquaintances respectively. Here acquaintance was more dangerous as compared to other relations.

In the case of hymenal injuries, it was observed that 58.18% were old healed tears, 5.45% were fresh tears and 7.27 % were intact. Tamuli *et al.*^[2] found 5% recent hymenal tears and 6.65% cases of intact hymen^[21-24]. Sukul *et al.* also found 6.9% cases of recent hymenal tear and 6.9% cases of intact hymen^[25]. Sarkar *et al.* reported hymen rupture in 85% of cases, the majority of which were old tears^[10]. Islam found hymenal tears in 38.9% of cases with fresh tears in the fourchette in 2.6% of cases^[18]. Grossin *et al.*^[26] in his study found hymenal lesions only in 11% of cases. Bhowmik *et al.* found 8.88% cases of intact hymen and 1.97% cases of recent tears of the hymen^[24]. These are consistent with our findings.

Another study by Verma *et al.* [5] found 5.4% of injuries on the genitals.

Sarkar *et al.* collected swabs from 73 victims which showed positivity for spermatozoa in 8 cases [10]. In the present study, 41 vaginal swabs were taken among which 5 were positive for the presence of spermatozoa and 11 reports are awaited. Late reporting decreases the chance of getting positive reports and hampers the collection of vital evidence. This will hinder the law enforcement authority in the investigation of the cases [27].

CONCLUSIONS

Sexual assault hampers psychological, physical, behavioural and interpersonal relations between victims and others in society. The present study reflects that unmarried younger age group victims are most vulnerable to sexual assault with the perpetrators being their boyfriends and acquaintances. Moreover, social stigma and fear result in late reporting of cases thereby decreasing the chances of delivering justice in the court of law. Young victims should be counselled about the good and bad touch. Stringent punishment of the perpetrators by the court will instil faith in society. Awareness and encouragement to report such cases and to support these victims with the participation of society and strategic implementation of anti-rape laws are the key factors in dealing with this social evil.

CONTRIBUTION OF AUTHORS

Research concept- Shauni Gope, Juthika Debbarma, Pranab Choudhury

Research design- Shauni Gope, Juthika Debbarma, Pranab Choudhury

Supervision- Juthika Debbarma, Pranab Choudhury

Materials- Shauni Gope, Juthika Debbarma, Pranab Choudhury

Data collection- Shauni Gope, Juthika Debbarma, Pranab Choudhury

Data analysis and Interpretation- Juthika Debbarma, Pranab Choudhury

Literature search- Shauni Gope, Juthika Debbarma, Pranab Choudhury

Writing article- Shauni Gope, Juthika Debbarma, Pranab Choudhury

Critical review- Juthika Debbarma, Pranab Choudhury

Article editing- Shauni Gope, Juthika Debbarma, Pranab Choudhury

Final approval- Juthika Debbarma, Pranab Choudhury

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