

Original Article

Two-Years Retrospective Study of Medicolegal Cases at Sir Salimullah Medical College, Dhaka

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Abstract

Background: Medicolegal cases of sexual offences encompass behaviours such as verbal sexual harassment, compulsion, and forced penetration. Sex-related crimes are the most heinous and degrading of all the crimes. The most vulnerable demographic to this crime is still women and children. A significant public health issue is the startling increase in the incidence of sexual assault on a global scale.

Objective: The current study's goal was to identify the medicolegal findings of sexual offence victims in order to highlight the procedure's obvious flaws.

Materials and Methods: The data acquired from Sir Salimullah Medical College, Hospital between January 2022 and December 2023 was prepared rigorously. Informed written consent, four copies of passport-size photos, the victim herself, the authority's requisition, and a third person female attendant, collected information on 166 victims, including the cause, location, time, and date of the examination.

Results: 61.5% of the patients were between the ages of 11 and 20. 130 cases (80.2%) out of 162 were unmarried. The majority were students (44.6%) and housewives (20.5%). Significant monthly variations were discovered by the study, with January, March, and April showing the highest values.

Conclusion: Collectively evidence is a crucial responsibility for doctors. Insufficient medical evidence frequently contributes to a low conviction rate. Because of this, it is vitally important to conduct a proper and suitable physical examination in situations of sexual offence, and the analysis of preserved biological specimens like blood and semen frequently provides essential evidence in modern criminal investigations.

Keywords: Medicolegal; Victim; Rape; Retrospective study.

Introduction

Any sexual act, attempt to obtain a sexual act 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," is what the World Health Organization (WHO) defines as

sexual violence.¹ One type of natural sexual crime that occurs frequently worldwide is rape. Rape is a legal word and not a diagnosis that the examining physician should make.² Rape is the illegal sexual contact between a man and a woman without the woman's agreement, against her will or with her assent gained by coercion, fear, or deception, or with any women under the age of fourteen.³ Rape can occur at any age. However, minors are more likely to be raped because they are less resistant and because it is believed that having sex with a virgin will cure venereal diseases.⁴ According to the Bangladesh Penal Code six different aspects of special considerations are laid down.⁵ Rape occurs when the penis is little penetrated within the vulva, such as when the glans barely passes through the labia, with or without semen leaking out or the hymen rupturing.⁶ According to The Penal Code-376, the punishment for rape is either life in prison or ten years in prison with a fine; however, in the case of a wife, the punishment is either two years in prison or a fine, or both.⁷ Sexual crimes like rape can happen to anyone at any age. Due to the superstitious idea

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that having sex with a virgin would cure sexually transmitted diseases (STDs), children are frequently the victims. A female is more likely to be a virgin if she is younger.⁸ Under Section 160 of the Criminal Procedure Code of 1898, women are not permitted to be called to the police station for questioning.⁹ A raped woman even has the right to record her statement in front of the magistrate in secret so that no one else can overhear it. Additionally, she is free to record her statement in private with a female constable or a police officer. Police officers are required by section 164 of the Criminal Procedure Code to respect the victim's privacy without making her feel anxious in front of large crowds.¹⁰ According to Section 228-A of the Indian Penal Code, disclosing a victim identify is illegal.¹¹

Materials and Methods

This retrospective study was carried out between January 2022 and December 2023 in the Department of Forensic Medicine at Sir Salimullah Medical College and Mitford Hospital in Dhaka, Bangladesh, while adhering to ethical guidelines. Rape victims who consented to undergo medicolegal examinations were listed as alleged sexual assault victims. Within the time frame (January 2022 to December 2023) stated above, victims of alleged rape cases were referred for medicolegal examinations. Following a physical examination, the presence or absence of symptoms of forcible sexual contact was determined by the radiological and microbiological reports. The differences in the occurrence of violence against women over the months of the year were meticulously examined using a single-factor analysis of variance (ANOVA). Finding out if there were any statistically significant variations in the average frequency of violence over various months was the aim of this well-planned analytical procedure. A comprehensive analysis employing the Pearson correlation coefficient was conducted in order to investigate the intricate relationship that exists between age and the likelihood of cases being filed. A predetermined alpha threshold ($\alpha < 0.05$) was used to determine statistical significance for the ANOVA test and Pearson correlation analysis. The specific objective of this analytical endeavour was to measure the direction and strength of the naturally occurring linear association between age and the probability of filing cases. If the computed p-values were less than this predetermined threshold, the results were carefully regarded as statistically significant in accordance with standard statistical procedures.

Results

The majority of participants belonged to the 11–20 years age group, accounting for 61.5% (n=102) of the sample. This was followed by the 21–30 years age group, comprising 24.7% (n=41). Smaller proportions were observed among the 5–10 years (4.8%, n=8) and 31–40 years (7.8%, n=13) age groups, while only 1.2% (n=2) of participants were in the

41–50 years category. Out of 166 cases we observed 50(30.1%) were married while remaining 116 (69.9%) were unmarried. In our study, the majority (97.6%) were Muslims, whereas the only (2.4%) were Hindus. In our observation, no data were found among Christians or Buddhists. This study involved a number of participants in a variety of occupations, and the highest percentage of instances were observed among students (44.6%) and housewives (20.5%). Whereas, teachers had the lowest number (1.2%).

Table 1: Socio-demographic characteristics

Variables	Number (%)
Age group (Years)	
5-10	8 (4.80)
11-20	102 (61.50)
21-30	41 (24.70)
31-40	13 (7.80)
41-50	2 (1.20)
Marital Status	
Married	50 (30.10)
Unmarried	116 (69.90)
Religion	
Muslim	162 (97.60)
Hindu	4 (2.40)
Occupation	
Student	74 (44.60)
House wife	34 (20.50)
Servant	22 (13.30)
Service	21 (12.60)
Unemployed	9 (5.40)
Business	4 (2.40)
Teacher	2 (1.20)

The most frequently cited reason was breach of promise (31.9%), followed by deception (22.3%) and threat (21.7%). Kidnapping accounted for 16.3% of the cases, while intoxication was reported in 6% of instances. Gang rape was the least reported reason, representing 1.8% of the total cases.

Table 2: Reason behind the occurrence

Reason	Number (%)
Breach of promise	53 (31.90)
Threat	36 (21.70)
Kidnapping	27 (16.30)
Intoxication	10 (6.0)
Deceive	37 (22.30)
Gang rape	3 (1.80)

Table 3 shows the distribution of cases according to findings. The majority of cases showed signs of sexual intercourse (80.7%), while no sign of sexual intercourse was observed in 9% of cases. Forceful acts were reported in 6.1% of cases, and pregnancy was identified in 3.6%. The least reported finding was assault, accounting for 0.6% of the total.

Table 3: Distribution according to findings

Findings	Number (%)
Forceful	10 (6.10)
Sign of sexual intercourse	134 (80.70)
No sign of sexual intercourse	15 (9.0)
Pregnant	6 (3.60)
Assault	1 (0.60)

In 2022, we conducted an observation of the police stations and found the first number 01 case in Keraniganj. Table 4 below included the list of police stations.

Table 4: Police station wise distribution

Police stations	Total count
South Keraniganj	21 (12.65)
Bongshal	6 (3.60)
Jatrabari	44 (26.50)
Kodomtoli	14 (8.40)
Hazaribagh	8 (4.80)
Keraniganj Model Thana	40 (24.10)
Kotwali	8 (4.80)
Dohar	6 (3.60)
Gandaria	5 (3.0)
Nawabganj	6 (3.60)
Chawkbazar	5 (3.0)
Sutrapur	1 (0.6)
Wari	2 (1.2)

Data was presented as numbers with percentages in parentheses.

The majority of instances were observed in January (17.5%), with only a small number occurring in November (3.6%). As seen in Table 5 below, our cases were distributed by month.

Table 5: Month wise Distribution

Month	Number (%)
January	29 (17.50)
February	15 (9.0)
March	21 (12.70)
April	20 (12.0)
May	12 (7.20)
June	14 (8.40)
July	7 (4.20)
August	9 (5.40)
September	15 (9.0)
October	10 (6.0)
November	6 (3.60)
December	8 (4.80)

Data was presented as numbers with percentages in parentheses.

Discussion

In the majority of underdeveloped nations, sexual assault is a neglected public health concern, and the number of people reporting sexual assault is probably considerably lower.¹² Ten to fifty percent of female victim's claim having been sexually assaulted. Police investigate sexual offences with the utmost rigour, second only to murder, despite the fact that they are both frequent and extremely serious crimes.¹³ Because of its serious effects on victims' physical and mental health, sexual assault is a widespread issue that has been the focus of much research. The shockingly high rate of sexual assault is a problem in many countries, including Bangladesh. According to Odhikar, a human rights organization in Bangladesh, between 2001 and 2019, at least 14,718 persons experienced sexual assault. Of those, 6,900 were women and 7,664 were children. Additionally, 2,823 incidents had a large number of offenders.¹⁴ Many incidences of sexual assault go unreported due to societal shame, legal barriers, and a lack of support for survivors.¹⁵ Predators of sexual violence against women have increased to include strangers, acquaintances, family members, instructors, friends, colleagues, and other non-partner people, when formerly it was restricted to cohabiting, marriage, or other personal relationships.¹⁶ According to another survey, 90% of Bangladeshi garment workers claim that their jobs are having a detrimental effect on their health, and 80% had either witnessed or experienced sexual abuse and

harassment at work.¹⁷ Bangladeshi police records indicate that violence against women (VAW) is a serious problem. Rape is the second most common type of VAW reported, with harassment connected to dowries being the most prevalent.¹⁸ The pattern, intensity, and length of the violence, as well as the kind of perpetrator, all affect the impact of such violence. The effects of sexual assault can be severe and enduring, resulting in physical harm, psychological distress, and emotional trauma for the victims. Post-traumatic stress disorder (PTSD), anxiety, and depression are among the mental health conditions that victims of sexual assault are more prone to experience. In addition, sexual assault can result in STIs, unintended pregnancies, and bodily harm such as cuts, bruises, and fractures.¹⁹ Victims may experience severe psychological effects, leading to post-traumatic stress disorder with a wide range of symptoms, such as trouble sleeping, poor appetite, flashbacks, feelings of numbness, anger, shame and denial, avoidance behavior, and problems in relationships and sexual interactions. In the worst situations, depression can result in suicidal thoughts and actual suicide.²⁰ The American Medical Association (1995) stated that the most underreported crime is sexual violence. According to a 2007 government report in England, research estimates indicate that between 75 and 95 percent of rape incidents go unreported to the police.²¹ The police conduct investigations into sexual assault, a common and extremely serious crime, with a level of severity second only to that of murder.²² Because women are weaker than men in patriarchal societies, violence against them is more common than any other crime, including rape.²³ Many of the issues that victims of rape encounter are connected to the fact that law enforcement, hospitals, and courts are enormous bureaucracies. Loss and neglect are felt by victims. They discover that the police station, emergency room, or courthouse has its own timetable and procedures, which are frequently established more for the convenience of the employees than for the benefit of the public it is meant to serve.²⁴ Social stigma, prejudice over marriage prospects, press attention, judicial embarrassment, skepticism about local law enforcement, and the possibility of losing the affection and respect of society are the main causes of the underreporting of sexual assault cases.²⁵ Addressing the issue of sexual assault underreporting is a massive task that requires a comprehensive approach. The government of Bangladesh plays a vital role in this respect by accelerating court cases and expanding the number of

forensic DNA labs in every district. The results of this study show how urgently a number of focused activities, such as public awareness campaigns, infrastructure improvements, and legal reforms, are needed. Organizing coordinated actions at the individual, community, and governmental levels is the only way to achieve meaningful progress towards creating a society that is safer and more just for everyone. Addressing the underreporting of sexual assault incidents is morally required.

Conclusion

In both primary and newspaper data, rape victims are treated as socially cursed and denied societal advantages. Physically frozen emotions, nightmares, fear, lack of confidence, and a sense of powerlessness are common psychological symptoms of rape victims. Other societal repercussions include marriage dissolution, family deprivation, deterioration, a decline in one's reputation, and a sense of social acceptance. Victims of sexual assault are children and young women. The majority of victims showed up 72 hours after the sexual assault, and genital cleansing is a significant barrier to identifying the attackers. Therefore, in the majority of cases, there were expected to be no indications of violent sexual activity. None of the high vaginal swab specimens in our investigation contained spermatozoa. Thus, early reporting without genital washing and the use of contemporary medical technology, such as DNA identification, may aid in the detection of perpetrators.

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Conflict of Interest

The author declares that there is no conflict of interest.

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