Original Article

A Retrospective Study on the Socio-Demographics Characteristics and Awareness Levels among Adolescent Sexual Assault Victims

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Conflict of Interest: None
Received: 09.01.2026
Accepted: 17.03.2026
www.banglajol.info/index.php/JSSMC

ABSTRACT:

Background: *Sexual assault among adolescents is a major medico-legal and public health concern in Bangladesh. Their physical and emotional vulnerability, coupled with limited awareness and inadequate access to support services, creates significant barriers to reporting and receiving timely care. The objective of this study was to assess the Socio-Demographic Characteristics and Awareness Levels among Adolescent Sexual Assault Victims at Dhaka Medical College, Dhaka.*

Materials and Methods: *This retrospective cross-sectional study analyzed medico-legal records of 236 female adolescent victims of sexual assault, aged 10–19 years, who were reported to Dhaka Medical College, Dhaka, between January 2020 and December 2024. Data were extracted regarding socio-demographic characteristics, place and circumstances of the incident, history of first sexual exposure, time of reporting, and awareness of early medical examination. Descriptive statistical analysis was performed. Continuous variables were expressed as mean ± standard deviation (SD), while categorical variables were summarized as frequency (n) and percentage (%) and presented as tables and figure.*

Results: *Most victims were in the 16–19-year age group (110, 46.6%) and the majority were students (145, 78.8%). A large proportion of the victims belonged to lower socioeconomic backgrounds (148; 62.7%), and 102 (43.2%) had an education level up to the secondary level. Incidents most commonly occurred at the accursed residence (106, 44.9%), and in more than half of the cases, the perpetrator was an intimate partner (120, 51%). A history of first sexual exposure was present in 180 cases (76.3%). Most victims presented after more than 72 hours of the incident (118, 50%), indicating delayed reporting. Additionally, only 38 victims (16.1%) demonstrated adequate awareness of the importance of early reporting.*

Conclusion: *The majority of victims are female students, frequently assaulted by individuals known to them. Awareness regarding sexual safety and legal protection is low, and many adolescents present late for forensic examination. Strengthening preventive education, improving community protection mechanisms, and enhancing medico-legal response systems are essential to address this issue effectively.*

Key Words:
Adolescent, Sexual Violence, Perpetrator, Retrospective , Socioeconomic status
Running Title: Adolescent Assault & Awareness Study

[J Shaheed Suhrawardy Med Coll 2025; 17(1): 16-20]
DOI: https://doi.org/10.3329/jssmc.v17i1.92320

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Introduction

Adolescent sexual assault is a significant medico-legal and public health concern in Bangladesh. Adolescents, defined as individuals aged 10–19 years, are particularly vulnerable due to their physical immaturity, emotional dependence, and limited awareness of sexual safety and legal rights 1. Sexual assault during adolescence can result in serious physical, psychological, and social consequences, including trauma, disruption of education, and stigmatization 2Globally, studies indicate that a substantial proportion of adolescents experience sexual violence before adulthood 3. In Bangladesh, cultural norms, stigma, and inadequate awareness often delay reporting, compromising timely medical care and forensic evaluation 4. Evidence suggests that assaults frequently occur in familiar settings, often perpetrated by acquaintances or close contacts, with many victims presenting late due to fear, shame, or lack of knowledge about reporting procedures 5, 6.Socioeconomic factors significantly influence both vulnerability to assault and access to timely support. Adolescents from lower socioeconomic backgrounds may face unsafe environments, limited education, and restricted access to protective services .7 Awareness regarding personal safety, sexual rights, and the importance of early medical evaluation is generally low, contributing to delayed presentation and sub-optimal medico-legal outcomes 8. Despite these concerns, data on adolescent sexual assault victims in Bangladesh, particularly regarding socioeconomic status and awareness levels, remain limited. Most existing studies focus on adults or general sexual violence, leaving a knowledge gap about adolescents' specific risk profiles, reporting behavior, and awareness 9 Understanding these factors is crucial for developing preventive interventions, strengthening community protection mechanisms, and improving medico-legal response systems. Assessing socioeconomic characteristics and awareness levels of adolescent sexual assault victims provides essential information for identifying at-risk populations, planning targeted educational programs, and enhancing timely medico-legal support. This is particularly important in Dhaka, where adolescent population density is high, and reported cases of sexual assault are increasing. This study aimed to evaluate the socioeconomic characteristics, awareness levels, and reporting patterns among adolescent sexual assault victims attending Dhaka Medical College, to inform preventive strategies and strengthen medico-legal intervention.

Materials and Methods

Study Design and Setting:

A retrospective cross-sectional study was conducted at the Department of Forensic Medicine, Dhaka Medical College, Dhaka.

Study Population:

The study included medico-legal records of 236 female adolescent victims aged 10–19 years reported as sexual assault cases between January 2020 and December 2024.

Inclusion Criteria:

- The study included 236 female adolescent victims (aged 10–19 years) attending for medico-legal examination at Dhaka Medical College.
- Complete records of Medico-legal examination reports

Exclusion Criteria:

- Incomplete case files
- Non-adolescent victims

Data Collection:

Data were extracted from official medico-legal registers and reports, including:

- Socio-demographic variables
- Place of incident
- Time of reporting
- Awareness indicators
- Forensic examination findings

Data Analysis:

Statistical analysis: Data analysis was carried out by Statistical Package for the Social Sciences (SPSS) for windows, version 25. Results for numerical data were expressed as mean±standard deviation (SD). Results for categorical data were expressed as frequency (number) and percentage (%) presented as tabulated and graphical form.

Results:

A total of 236 adolescent girls aged 10–19 years were examined for alleged sexual assault during the study period. The majority of victims were in the 16–19-year age group (110, 46.6%), followed by 13–15 years (84, 35.6%). Most victims belonged to lower socioeconomic families (148, 62.7%), followed by middle socioeconomic status

(72, 30.5%). Regarding occupation, the majority were students (145, 78.8%), followed by factory/low-skill workers (63, 26.7%) and domestic workers (28, 11.9%). In terms of education, the largest group had secondary-level education (102, 43.2%), followed by primary education (78, 33.1%) and higher secondary education (30, 8.5%). In most cases, the perpetrator was a known person, predominantly an intimate partner (120, 51%), followed by neighbors or acquaintances (47, 19.9%) and relatives (28, 12%). Incidents most frequently occurred at the accused's residence (106, 44.9%), followed by hotels or friends' houses (70, 29.7%) and the victim's home (35, 14.8%). A history of first sexual exposure was reported in 180 cases (76.3%). Most victims presented after more than 72 hours of the incident (118, 50%), indicating delayed reporting. Awareness of early reporting was low, with only 36 victims (16.1%) demonstrating awareness, while the majority (198, 83.9%) had no knowledge of timely reporting.

Table 1: Age Distribution of Adolescent Victims (n = 236)

Age Group (years)	Frequency (n)	Percentage (%)	Mean Age ± SD (years)
10–12	42	17.8	
13–15	84	35.6	
16–19	110	46.6	
Total	**236**	**100**	**15.8 ± 2.1**

Table 2: Socio-Demographic, Incident and Time of reporting of Adolescent Victims (n = 236)

Variable	Category	Frequency (n)	Percentage (%)
Education	No schooling	26	23.7
	Primary	78	37.3
	Secondary	102	30.5
	Higher Secondary	30	8.5
Socioeconomic Class	Low SES	148	62.7
	Middle SES	72	30.5
	High SES	16	6.8
Occupation	Students	145	78.8
	Domestic worker	28	11.9
	Factory /low-skill worker	63	26.7
Place of Incidence	Accused's house	106	44.9
	Hotel / friends house	70	29.7
	Victim's house	35	14.8
	Madrasa/School	25	10.6
History of First Exposure	Present	180	76.3
	Absent	56	23.7
Time of Reporting	<24 hours	34	14.4
	24–72 hours	84	35.6
	>72 hours	118	50.0

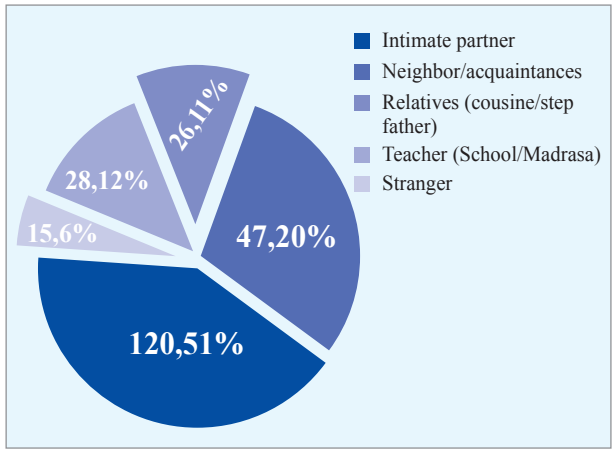

Figure-1 Distribution of Perpetrators in Adolescent Sexual Assault Cases (n =236)

Table 3: Awareness Levels Among Adolescent Victims (n = 236)

Awareness Indicator	Present (n, %)	Absent (n, %)
Good Touch / Bad Touch Awareness	62 (26.3%)	174 (73.7%)
Awareness of Consent	48 (20.3%)	188 (79.7%)
Awareness of Legal Rights & Reporting	38 (16.1%)	198 (83.9%)
Awareness of Safe vs. Unsafe Persons	54 (22.9%)	182 (77.1%)

Discussion

The present study of 236 adolescent girls (10–19 years) evaluated at Dhaka Medical College between 2020 and 2024 reveals important patterns in socio-demographics, perpetrator relationships, reporting behavior, and forensic findings many of which align with findings from both regional (Indian subcontinent) and international research. First, the vulnerability of adolescents especially older adolescents to sexual assault has been consistently documented. A global review demonstrated considerable variation in lifetime and past-year sexual violence, confirming that adolescent girls remain a high-risk group worldwide 10. Similar patterns have been observed in India, where studies among victims below 18 years reported that most victims were in mid-adolescence and that known perpetrators were common 11. In our study, most perpetrators were known to the victims, predominantly intimate partner or acquaintances. This is consistent with findings from multiple Indian forensic studies showing that offenders are often trusted individuals rather than strangers 12,13 These results challenge the common misconception that sexual assault is predominantly committed by unknown assailants; instead, they highlight

emotional manipulation, familiarity, and deceptive practices such as false promises of marriage as recurrent mechanisms of coercion. Reporting delays were also significant. Only a minority of victims presented within 24 hours; most sought medico-legal care later. Similar delays have been documented in Indian cohorts, where late presentation was strongly associated with few or no acute genital findings 14. An Ethiopian hospital-based study likewise reported substantial delays, attributed to fear, stigma, and limited legal awareness 15 The impact of delayed reporting is evident in forensic outcomes. In our sample, old Hymeneal tears were more common than fresh injuries. International forensic literature has repeatedly demonstrated that delayed examinations often reveal healed lesions rather than acute trauma 16,17 A Nigerian adolescent rape study also reported low rates of acute genital injuries, emphasizing that the absence of fresh tears does not exclude sexual assault, particularly in cases involving familiar perpetrators or repeated abuse 18. Socioeconomic disadvantage also emerged as a key vulnerability factor. A large proportion of victims in the present study belonged to lower socioeconomic groups with limited education a trend similarly observed in South-East Ethiopian and multiple LMIC studies 19. Global evidence further indicates that sexual violence disproportionately affects adolescents from marginalized or economically constrained backgrounds 20 Although psychosocial dynamics were not directly assessed in this retrospective design, prior literature consistently underscores the influence of trust, emotional dependence, and low awareness of sexual rights in adolescent victimization21, 22

The findings of this study show that sexual assault in adolescents is rarely a violent attack by a stranger. Most cases involve people the victim knows, often with subtle pressure or coercion. Reporting is often delayed, and many victims have healed genital injuries, which makes forensic investigation challenging.

Conclusion:

This study shows that adolescent sexual assault remains a serious yet often hidden problem. Most victims were from lower socioeconomic backgrounds and were assaulted by people they already knew. Delayed reporting was common, which reduced the chance of detecting recent genital injuries. These findings underline the need for greater awareness, earlier reporting, and improved access to adolescent-friendly medico-legal and support services. Strengthening prevention programs and ensuring timely care are essential to protect adolescents and support justice.

Limitations and Considerations

• As this was a retrospective study based only on medico-legal records, many cases especially non-physical abuse or those who never sought examination were likely missed, causing selection bias.

• Cultural and social stigma in Bangladesh may inhibit disclosure, so many assaults likely remain unreported; hence, our findings likely reflect only a fraction of total occurrences.

• Our study does not include male adolescents, or non binary youth; but international research shows sexual violence affects all genders, though girls/women are at higher risk .

Recommendations:

• Implementation of school based sexual safety education and awareness programs, focusing on consent, rights, and reporting mechanisms.

• Community outreach to improve awareness of early medico-legal examination and reduce stigma around reporting, especially for assaults by acquaintances or relatives.

• Strengthening of medico legal and psychosocial support services to ensure timely, supportive and thorough care for victims

Acknowledgment:

We would like to express our sincere gratitude to Prof. Dr. Kazi Golam Mukhlesur Rahman, Head of the Department of Forensic Medicine & Toxicology, Dhaka Medical College, Dhaka for his continuous support and valuable guidance throughout the data collection process. His inspiration and mentorship greatly strengthened the quality of this work.

Funding:

This study was self-funded by the authors.

Conflict of Interest:

The authors declare that they have no conflict of interest.

Ethical Approval:

Ethical approval was obtained from the Ethical Review Committee (ERC) of Dhaka Medical College, Dhaka, Bangladesh (IRB-DMC/2025/119 Date: 04/06/25). All necessary measures were taken to ensure that the identities of the victims were not disclosed.

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