

## ARTICLE | OPEN ACCESS

## A Retrospective Study of Alleged Rape Victims at Forensic Medicine Department of Dhaka Medical College, Bangladesh

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**ABSTRACT:** *Background:* Sexual assault against women is one of the most common crimes in Bangladesh. *Objective:* The purpose of the present study was to find out the medico-legal findings of rape victims and to analyze the data concerning socio-demographic characteristics, the relationship between accused and victim, medico-legal examination and evaluate the role of forensic examination in dealing with sexual assault cases. *Methodology:* This was a retrospective study done in the department of Forensic Medicine, Dhaka Medical College, Dhaka, Bangladesh, from 1<sup>st</sup> January 2018 to 31<sup>st</sup> December 2018 with maintaining ethical issues. The data was retrieved from police forwarding letter; history revealed by the victim during an examination, medico-legal certificates, and results of forensic laboratory examination of the exhibits. *Results:* We carried out a retrospective study of 404 alleged rape victims in 2018. We found that 51.9% of cases were sexually abused although a high vaginal swab for spermatozoa was found to be negative in all cases. In this study, the majority (47%) of the victims were 14-17 years of age and 59% of the victims were unmarried. 43.3% of the victims were students and 44.5% were known to the victims. *Conclusion:* Through investigation, medico-legal findings of rape victims were identified and verified to inquire and match with the accuser correctly. Forensic examination aided the police in correctly solving such cases.

**Keywords:** Alleged, Rape Victim.



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## INTRODUCTION

The circumstances in which the act of coitus or attempted coitus may render a man liable to the charge of rape vary slightly from state to state but the basic features of various state laws are essentially the same.<sup>1</sup> The word “rape” is derived from the Latin term “rapio” which means to seize. Thus, rape implies forcible seizure.<sup>2</sup> Rape is generally defined as unlawful sexual intercourse by a man with any woman against her will, without her consent, or with her consent when it has been obtained by unlawful means e.g. fraud, putting her in fear of death or hurt, dragging or impersonation.<sup>1</sup> Even a slight touch of the penis with a vulva is considered “rape”. No age is immune to rape. But children are more frequently

raped due to their less resistance along with the belief that venereal diseases are cured by sexual intercourse with a virgin.<sup>3</sup> In many cases, positive physical findings may not be found in the alleged rape. Rape can be secure without causing any injury and as such negative evidence does not exclude rape.<sup>1</sup> The doctor should mention only the negative facts but should not give his opinion that rape has not been committed. Corroboration by an eyewitness or circumstantial evidence is necessary for such cases.<sup>4</sup> Rape is a serious public health and human rights problem with both short and long-term consequences on women’s physical, mental, sexual, and reproductive health.

## METHODS

This retrospective study was conducted on 404 cases of sexual assault received for examination at Dhaka Medical College, Dhaka, Bangladesh during the year 2018, with maintaining ethical issues. The details pertaining to socio-demographic factors such as age, sex, religion, marital status, profession, place of incidence, relationship with accused, the time interval between last incidence and medico-legal examination, and results of different exhibits submitted for forensic examination. After physical examination, radiological findings, and microbiological report opinion was given on whether the signs of forceful sexual intercourse were present or not.

## RESULTS

In the present study, 404 cases of rape were examined during the period from January 2018 to December 2018.

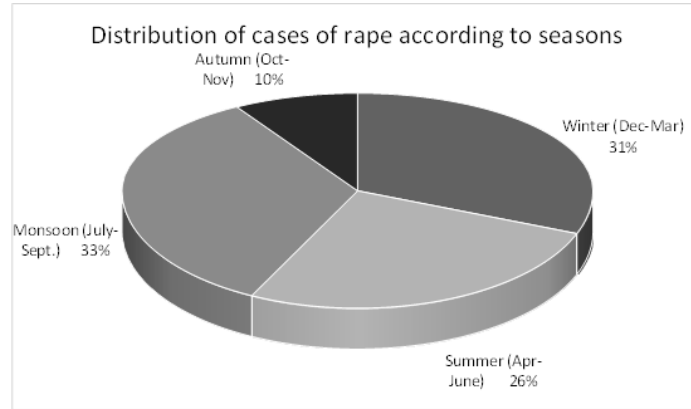
Table 1 showed that 47% of the victims belonged to the 14 to 17 years age group followed by 18 to 30 years of age (29.7%) Most of the victims were Muslim 350 (86.6%) followed by Hindu 50 (12.3%), Buddha 4 (0.99%) & Christian 1 (0.24%). 240 (59%) victims were unmarried. The majority of the victims 175 (43.3%) were students followed by housewives 84 (20.7%).

**Table 1: Socio-demographic Profile of a Case of Rape Victims (n=404)**

Category	Frequency	Percentage
<b>Age group (in years)</b>		
0-6	20	4.95%
07-13	30	7.43%
14-17	190	47.03%
18-30	120	29.70%
31-40	31	7.67%
41-60	10	2.48%
Above 60	3	0.74%
Total:	404	100.00%
<b>Religion</b>		
Muslim	350	86.63%
Hindu	49	12.13%
Buddha	4	0.99%
Christian	1	0.25%
Total:	404	100.00%
<b>Marital status</b>		
Unmarried	240	59.41%
Married	100	24.75%
Widow	4	0.99%
Divorced	60	14.85%
Total:	404	100.00%
<b>Profession</b>		
Students	175	43.32%
Housewives	84	20.79%
Government employees	8	1.98%
Private sector employees	4	0.99%
Factory worker/labour	35	8.66%
Servant/household work	30	7.43%
Preschooler below 5 yrs	7	1.73%
Mentally retarded/deaf and damp	10	2.48%
Physically handicapped others	12	2.97%
Information not available	39	9.65%

Total:	404	100.00%
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Government employees were 08 (1.98%), & workers 30 (7.42%) Pre-schooler below 5 years 07 (1.73%). Private sector employees were 04 (0.99%), factory workers & labor 35 (8.66%) servants & household



**Figure 1: Distribution of Cases of Rape According to Seasons (n=404)**

Most commonly rape was reported in monsoon 132(32.6%) and winter 125 (30.9%) followed by summer 107 (26.4%) and autumn 40 (9.9%). During our study, the highest number of cases were reported during September (32.6%) (Figure 1).

**Table 2: Distribution of Cases Rape According to the Place of Incidence**

Place of incidence	Frequency	Percentage
Victims home	87	21.5%
Accused's home	150	37.1%
Third person's home	25	6.1%
Open air (fields/Jungle)	64	15.8%
Hotel	40	9.9%
Car/vehicle	8	1.9%
Under construction building	9	2.2%
School campus	2	0.49%
Other places	20	4.9%
<b>Total</b>	<b>404</b>	<b>100%</b>

Table 2 shows that the commonest site of rape was the house of the accused in 150 (37.1%) cases followed by the house of the victim in 87 (21.5%). In 180 (44.5%) cases rape was committed by a close friend/lover while in 100 (24.7%) cases assailant was unfamiliar to the victims (Table 3). The majority, almost 185 (45.7%) of the victims were examined on the second day followed by 3rd day (Table 4). 60 (14.8%).

**Table 3: Distribution of Case of Rape According to Relationship to Accused**

Relation to accused	Frequency	Percentage
Close Friends/lover	180	44.55%
Neighbor	35	8.66%
Unfamiliar person	100	24.75%
Familiar person	41	10.15%
Relative	21	5.20%

Father	05	1.24%
Stepfather	03	0.74%
Brother	01	0.25%
Grandfather	01	0.25%
Brother-in-law	10	2.48%
Father-in-law	01	0.25%
Data not available	06	1.49%
<b>Total:</b>	<b>404</b>	<b>100%</b>

**Table 4: Distribution of a Case of Rape According to Alleged Incidence and Medical Examination**

Time interval	Frequency	Percentage
Same day	16	3.96%
Second day	185	45.79%
3rd day	55	13.61%
4th to 7th day	18	4.46%
After 1 week to 1 month	20	4.95%
Beyond 1 month	30	7.43%
Data not available	80	19.80%
<b>Total</b>	<b>404</b>	<b>100%</b>

Table 5 shows that hymen was found intact in 40 (9.9%), ruptured with an old tear is common in 239(59.1%) ruptured/torn with a recent tear in 30

(74%), and absent in 60 (14.8%). Table-7 showed that no spermatozoa were found in any specimen of a high vaginal swab.

**Table 5: Condition of Hymen**

Hymen	Frequency	Percentage
Hymen intact	40	9.90%
Hymen ruptured/torn old tear	239	59.16%
Hymen ruptured/torn recent tear	30	7.43%
Hymen absent	60	14.85%
Denied for MLE	35	8.66%
<b>Total</b>	<b>404</b>	<b>100%</b>

## DISCUSSION

Most common crime all over the world and violates our cultural of religious values. The number of cases of sexual violence could be higher because many victims do not report it for the reason that they are ashamed, embarrassed, and afraid of being blamed by the Community where they live.<sup>5</sup> In our study, rape was most commonly observed in young girls in the age group of 14-17 years, the majority of them being unmarried and students. Most of the victims that showed in table 1 were Muslim 350 (86.6%), followed by Hindu 50 (12.3%) Buddha 4 (0.99%) & Christian 1 (0.24%). In our study, the common site of offense was the house of the accused in 150 (37.1%) cases followed by the house of the victim in 87 (21.5%) cases. Our findings are consistent with the study of Pal *et al.* who reported the house of the accused as a common site of offense in 31.42%.<sup>6</sup>

Cases followed by the house of the victim in 20.0% of cases. This may be due to the reason that the majority of the victims were either kidnapped or eloped under the pretext of marriage and taken to the accused's home in our study. Sarkar *et al.* and Grossin *et al.* reported the house of victims as a common site of assault in 41.1%. Cases followed by house of accused in 28.9% of cases.<sup>7, 8</sup> Arif *et al* reported commonest place of offense was isolated place in 66.2% of cases followed by house of accused in 17.5% of cases.<sup>9</sup> In 180 (44.5%) cases, rape was committed by familiar persons while in 100 (24.7%) cases assailant was unfamiliar to the victims. Our study is in association with the study of Bandyopadhyay *et al.* who reported that in 89% of cases, the alleged assailants were familiar to the victims while unfamiliar in 11% of cases.<sup>10</sup> According to National Crime Records Bureau (NCRB) statistics 2014, 86% of rapes involved an assailant that was

known to the victim.<sup>11</sup> In our study, we observed that most of the alleged accused 180 (44.5%) were friends of the victims & neighbors in 35 (8.6%) cases. Our study contrasts with the study of Pal *et al.* who reported that in 54.28% of cases, the accused were close friends and known to the victim & in 20% of cases strangers were involved.<sup>6</sup> From this study, it can be concluded that most of the alleged rapes are committed by a person known to the victim. In our study 41 (10.1%) cases, victims were raped by family members, while 21(5.1%) victims were sexually assaulted by relatives.

The time duration between rape and medico-legal examination is very important to establish the case. The present study showed that a maximum number of victims 185 (45.7%) were examined on the second day of rape and 20 (4.9%) after a month of rape. In a study by Arif *et al.* 24.3%, of victims were examined on the second day of incidence and 17.5% were examined after a month of rape, which is in accordance with our study. 37.93% of victims were examined on the second day of incident in a study by Haider *et al.*<sup>12</sup> While Pal *et al.* reported that 42.85% of cases were examined on the second day of the incident.<sup>6, 7</sup> A study on victims of sexual offenses in South Delhi by Sarkar *et al.* reported that 10% of the victims were examined on the same day of assault while in our study 16 (3.9%) cases were examined on the same day.<sup>13</sup> In our study 185 (45.7%) cases were reported early for medical examination, while Tamuli *et al.* found that only 23% of cases were reported early for medical examination.<sup>14</sup> This finding highlights the time of reporting for medico-legal examination, after the sexual assault which is very important for the establishment of rape, but a majority of victims were reluctant to report because of embarrassment, shame, fair & social stigma & feelings of guilt. In our study, the old hymeneal tear was found in 239 (59.1%) female victims & recent tear in 30 (7.55%) female victims. Hymen was found to be intact 40 (9.9%) cases & absent in 60 (14.8%). Pal *et al.* found a hymeneal tear or rupture of the hymen in 88.57% of cases and hymen intact in 11.42% of cases.<sup>6</sup> Arif *et al.* observed old hymeneal tears in 77.6% & fresh tears in 22.3% of cases. In our study 60 (14.85%) cases of Hymen are absent & 35 (8.66%) cases were denied for Medico-legal examination.<sup>9</sup> When 404 cases evidence of sperm was not found in any of the 404 examined cases. The timing of the collection of evidence may be crucial in identifying sperm.

Rape was found Positive in 51.9% of cases. In four (0.9%) cases it was not possible to give a final opinion as to whether the victim was sexually assaulted or not. Other studies have reported 0-11% incidence of pregnancy among sexual assault victims.<sup>12, 13</sup>

## CONCLUSION

The study led us to the conclusion that the most vulnerable age group belonged to the age of 14-17 yrs. Most commonly, rape was committed by a person familiar to the victim. The majority of the victims were examined after 2 days to within one month after rape. That is why signs of forceful sexual intercourse were supposed to be absent in maximum cases Delay in medical examination resulted in the loss of vital trace evidence. Health professionals have a large role to play in supporting the victims of rape both mentally & physically. Along with the medical man criminal justice functionaries, investigating agencies, and media people, non-governmental organization researchers should play their role to eliminate sexual violence from the society.

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