



Epidemiological Study of Patterns Sexual Offences in Tripura Medical College

KEYWORDS

Sexual assaults, poorly analysis of medical evidences, low conviction rate of criminals, younger groups are vulnerable.

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ABSTRACT *Sexual offences are the most heinous crimes against women and children. It is the most barbarous and humiliating and the women and children remain most vulnerable group of this crime. Preservation of biological evidences of sexual offences are the important task and ethical duties of doctors. Poor medical evidences are often responsible for low conviction rate of criminals.*

Introduction

Sexual offences are the acts of sexual intercourse with a second person or an animal to obtain sexual gratification. The law and customs of the society permits heterosexual intercourse between a man and his own wife as provided by the nature. Among the all crimes sexual offences are the most barbarous and humiliating. Women and children are the most vulnerable group of the crime. The alarming rise in the rate of sexual assault worldwide represent a major public Health problem¹.

In USA, an estimate one in every four woman and children², in Nigeria four out of every ten women are victims of sexual assaults³. In South Africa, the incidence of rape approximately 300 out of 100,000 population⁴. In India over the last five years, showing sexual cases increasing and decreasing the trends with increase of 6.6% in the year 2000 over the year 1999 and decline of 2.5% in the year 2001, a total of 16,075 (1.6 per 100,000 population cases of child rape were reported all over the India. It shows that 11.2%, 19.5% of total crime are against women and children respectively. The Delhi is the 5th rank for the incidence of rape cases against women and 1st for the on the children (0.8%) per 100,000 population⁵.

Collecting and preserving the evidences in sexual offence cases is of crucial importance in medical profession for the documentation in the court of law and to trace the actual criminal. Careful examination of biological specimens such as blood, semen, saliva often yields vital evidence for identification of a person in cotemporary criminal investigation and to give the major part of conclusion of the cases⁶. In this present study, the incidence and patterns of sexual offences in Tripura Medical College & Dr. BRAM Teaching Hospital along with the demographic variables, physical and genital examination findings of victims and results of medical evidences collected are presented.

Material and Methods

During the study period (January 2010 to December 2015) a total 67 victims of sexual offence were brought by police to the emergency block of Tripura Medical College for medical examination. From 9 am to 4 pm the victims were examined by the department of Forensic Medicine and Toxicology and after 4 pm to next day morning, were examined by Department of Obstetric & Gynaecology. Details pertaining to the age, sex, religion, literacy, socio-economic status, place of incidence, number of assailants, relation-

ship of assailants with victims, findings of physical and genital examination and results of evidence collected during the examination were noted below. Carefully collection and analysis of preserved biological specimens are yielding the vital evidences for identification of person in criminal investigations. Victims of 11-20 years of age groups are most vulnerable and dangerous for sexual assault.

Results

A total 67 victims of sexual offences cases were brought by police in the emergency block for medical examination. Out of 67 cases of rape victims, all are the female victims; no case of male victim (sodomy) was reported during the study period. The age of the victims ranged from 3-49 years, but the most effected group was 11-20 years (67.16%) and followed by 21-30 years (11.94%) of victims (Table-1).

Fifty eight victims were Hindu (86.56%), Muslim victims were 9 (13.43%) and no other religion were reported in this study, 9 victims (13.43%) were married and 57 victims (85.07%) were unmarried (Table-2).

Maximum number of victims, 31 (46.26%) were illiterate, 14 (20.89%) were studied from class I- Class V (20.89%). Low socioeconomic status of victims 59 (88.05%) were involved in sexual assaults (Table-3).

The vast majority of victims knew their assailants. In 29 (43.28%) cases they were acquaintance, in 7 (10.44%) cases assailants were stranger, in 16 (23.88%) cases they were closed friend and in 2 (2.89%) cases victims were blood related (father) to her assailants. The commonest sites of sexual offences were in victims house 33 (49.25%) followed by some isolated places or jungle 23 (34.32%) (Table-4).

In 49 (73.13%) cases there were invalid consensual sexual intercourse followed by forcible rape 15 (22.38%) and no case of unnatural offence was found. (Table-5).

In 7 (10.44%) cases victims had extra genital, 11 (16.41%) genital and 4 (5.97%) cases victims had combined extra genital and genital injuries. Rupture of hymen was found 45 (67.16%) (Table-6).

There were 3 (4.47%) cases were gang rape and maximum 3 assailants were involved in one case. The swabs collected from 33 cases and showed positivity of spermatozoa only 2 (2.98%) cases (Table-7).

Table-1
Distribution of age of rape victims of sexual offences cases

Age(Years)	Female(N=67)	Male(N=0)	Total Number	%
0 - 10	5	0	5	7.46
11 - 20	45	0	45	67.16
21 - 30	8	0	8	11.94
31 - 40	5	0	5	7.46
41 - 50	3	0	3	4.47
>50	0	0	0	0.00

Table-2
Religion and Marital status of Rape victims

Religion	Victims(N=67)	%
Hindu	58	86.56
Muslim	9	13.43
Christian	0	0.00
Sikh	0	0.00
Married	9	13.43
Unmarried	57	85.07
Widow	1	1.49

Table-3
Literacy and Socioeconomic status of rape Victims

Education(Class)	Number	%
Illiterate	31	46.26
Class I – Class V	14	20.89
Class VI – Class IX	13	19.40
Class X – Class XII	7	10.44
Above class XII	2	2.98
Low Socioeconomic	59	88.05
Middle Socioeconomic	5	7.46
High Socioeconomic	3	4.47

Table-4
Relationship of Assailants with Victims and places of occurrences of sexual offences

Types of relationship	Number	%	Places of incidences of sexual offences		
			Places of occurrence	Number	%
Acquaintance	29	43.28	Victim's House	33	49.25
Stranger	7	10.44	Accused House	8	11.94
Neighbour	13	19.40	Relative house	3	4.47
Closed friend	16	23.88	Isolated places/Jungle	23	34.32
Blood relation	2	2.98			

Table-5
Distribution of types of offences and patterns of injuries on victims of sexual offences

Types of offences	No.(N=67)	%	Pat-terns of injuries	No.(N=67)	%
Forcible rape	15	22.38	Extra genital	7	10.44
Invalid consensual Rape	49	73.13	Genital	11	16.41
Attempted Rape	3	4.47	Extra genital & genital	4	5.97
Unnatural sexual offences	0	0.00	Hymen ruptured	45	67.16

Table-6
Distribution of Assailants and Victims of sexual offences in gang rape

Number of Victims	Number of Assailants
1	3
1	3
1	2
Total (4.47%)	8(Two assailant on each case)

Table-7
Results of Laboratory Tests of specimens collected from Victims

Test performed	No.(N=67)	+ve	%
Microscopic examination of spermatozoa	33	2	2.98
Acid Phosphate	33	0	0.00
Florence Test	33	0	0.00
Barberior Test	33	0	0.00
Hanging drop preparation	2	0	0.00

Discussion

Sexual offences one of the most heinous crime against women and children. The various social Organizations and women Welfare Organizations, legal and administrative steps have taken by the Government to give protection to the women and children against such crimes. Sexual assault is a neglected public health issue in most of the developing countries and there is even smaller percentage of reporting sexual assaults⁷. Only 10- 50% female victims report such assaults⁸. The under reporting of sexual assault is due to various social stigma and delay in the administration of justice⁹.

In the previous study, all the victims were female and no male victim was found. The results are in agreement with the study of Sagar¹⁰, Bhardwas et al,¹¹ Grossing et al,¹² Riggs et al,¹⁵ 17% victims were assaulted with anal intercourse.

Bhardwas et al¹¹ and Malhotra et al⁷ found that majority of victims were in the age group of 13 – 20 years (40.70%), in Du Munt et al¹³ study, victims were of age group of 15 – 20 years and in the study of Islam et al¹⁴ victims were between 11 – 20 years (70.42%) and majority of assailants were in the age group of 21 - 25 years (37.60%). In the study conducted, minimum age of victim was 3 years and maximum age was 49 years. Hence no age is considered to be safe from rape. Person belonging to extremes of age group cannot physically resist and defend themselves from sexual assaults¹⁷.

In the present study, majority of victims(86.56%)were Hindu and finding was agreement with the study of Fimate et al¹⁶ (57%). Majority of victims were illiterate (46.26%). Islam et al¹⁴ reported that majority of victims were illiterate. In this study, majority of Victims (88.05%) were found in low socioeconomic status.

In the present study majority of victims were known to their assailants (Acquaintance 43.28%, closed friend were23.88%) and 10.44% assailants were stranger. Similarly findings have been observed by Fimate et al¹⁶ of the victims and assailant relationship, acquaintance (69.7%), and stranger (25.6%). While Islam et al¹⁴ reported that in the majority of cases of victims knew the assailants. Strangers have been reported as the common assailants in the study of Okonkwo et al¹³ (49.2%). Riggs et al¹⁵ (39%) and Dumont et al¹³ (49.2%). Malhotra et al reported that rape by

person acquitted with victims is common for girls less than 10 years. Rape or assault by strangers increased significantly with age. Grossin et al reported that in half of the cases of victims examined within 72 hours, the assailants were stranger, while in those examined after 72 hours the assailant was mainly father (30%).

The most common site of offences was the victim's houses (41%) as reported by Grossin et al¹² and Okokwo et al¹³ and in the present study it was (49.25%). Majority of victims in this study were brought for medical examination after 5th days. In the grossin et al¹², the victims presented for medic et al¹³ within 72 hours, in Du Mont et al¹³ the victims (40.1%) reported within 2 – 6 hours, while Islam et al¹⁴ reported that 23.7% of victims reported within 72 hours after incident.

There was invalid consensual sexual intercourse in 73.13% cases as found in this study. More than one assailant was involved in 4.47% cases (present study), 20% cases in Riggs et al¹⁵ and 10% cases in Grossin et al¹².

Killing after sexual act could be either in panic or destroy a witness of crime¹⁷. Only 20% cases of murder are committed by the urge of sexual gratification¹⁸. Victims being under influence of alcohol (39%) and drugs (12%) was reported by Okonkwo et al¹³ and DuMontet al¹³ (alcohol 41.7%). Though it was not found in this study.

In the present study, 10.44% victims had extra genital injuries, 16.41% had genital injuries and 5.97% had combined extra genital and genital injuries. Rupture of hymen was found 67.16% cases of victims and maximum cases were old rupture. Islam et al¹⁴ reported extra genital injuries in 91 cases, rupture of hymen in 38.9% cases with fresh tear in fourchette in 2–6% of cases. Malhotra et al¹⁷ reported genital injuries in 33.3% cases. DuMunt et al¹³ reported injuries on bodies of victims in 64.2% cases. Grossin et al¹² reported general body trauma in 39.1% and genital trauma in 35.11% cases examined within 72 hours, 6.3% and 19.5% cases examine after 72 hours respectively. Riggs et al¹⁵ found general body trauma in 67% cases and genital injuries in 53% cases. Absence of genital injuries in the victims examined could be due to various reasons. Majorities of the victims were adults with prior sexual activities. Genital injuries are common in children and post menopausal women. The nature and time of assault determines whether injuries would normally be expected.¹⁹ The absence of physical injuries may not contradict the allegation of sexual assault. Rapidly healing injuries can be missed in cases with delayed examination or there may be false allegation.²⁰ Similarly, value of examination immediately following an alleged incident is limited by the fact that bruises may not become apparent for at least 48 hours.

Swabs collected from 33 cases of victims and showing positivity for spermatozoa in 2(2.98%). Riggs et al¹⁵ reported that evidence of sperm and semen in 48 cases. Davies and Wilson(1974)²¹ observed that seminal blood group antigens could be detected on swabs collected within 48 hours, acid phosphatase upto 2 days, choline within 3 days after sexual intercourse. The absence of sperm may be attributed to any of the following causes like erectile dysfunction, impotence, premature ejaculation, prolonged postcoital intercourse, oligospermic or orchidectomised assailants, penetration, use of condoms or spermicidal agents and menstruation and vaginal inflammation^{21,22}.

This study highlights the importance of addressing rape as a public health issue and focuses on the demographic profile of victims and accused of sexual assault cases.

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