

Analysis of Sexual Assault Survivors in a Tertiary Care Hospital in Delhi: A Retrospective Analysis

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ABSTRACT

Introduction: Rape and abuse of women are common occurrences, which, many a times go unspoken due to social stigma or fear of retribution. Rape is a crime not against a single human being but against the entire humanity. For granting justice to the rape survivor it becomes necessary that such matters are properly presented before the Courts of Law. Healthcare workers play an important role in this regard because they are the first person who examine the rape victims. They prepare a documented record of medical condition of rape victim and do relevant sample collection.

Aim: The objective of this study is to analyse demographic and event characteristics of rape victims who presented to the Emergency Department in tertiary care, Delhi after sexual assault.

Materials and Methods: Data was retrospectively collected from the medico legal register of the Department of Obstetrics and Gynecology between June 2010 to December 2013.

Result: We noted a marked increase in the number of cases. Mean age of victims was 17 and most belonged to the lower socio-economic strata of the society. Use of sedatives and physical trauma was not common. Victims often knew the perpetrator of the event. Most (58%) of them reported within one day of the incident. Major degrees of perineal tears were seen in young victims.

Conclusion: By understanding the demography of the sexual assault victims, we need to train our doctors for proper evidence collection not just in a government set up but also in private clinics, to help rape victims get justice and proper medical treatment.

Keywords: Medico legal, Rape, Victims

INTRODUCTION

Rape is a crime not just against a single person but against the entire humanity. According to the American Medical Association rape is the most underreported crime in the world [1]. Most of the studies highlight the fact that the number of cases reported to the casualty for medical care and evidence collection is just the tip of the iceberg. Rape is defined world wide as sexual intercourse without the victim's will or consent. According to a report published by the U.S. Bureau of Justice [2] in August 2013, Lesotho (country in Africa) has the highest rate of rape (91.6 per one lakh population) in the whole world. Comparatively, India has a lower rate i.e. 1.8 per one lac population. Such low rate does not reflect that we have a lesser number of rapes but the fact that we have a large population which decreases the overall rate ratio. Here, we have done a retrospective analysis of the sexual assault survivors to analyse the prevalence of sexual assaults in the society, incidence to reporting time, relationship of the assailant with the victim and severity of the injury. There are few analysis Indian data published before but none with so many reported cases. We also found a few studies done in different parts of the world. By publishing this study we intend to increase the understanding of demography of the rape victims and analysing the victim- perpetrator relationship and circumstances, specially by doctors who are often the first people to examine such victims.

MATERIALS AND METHODS

Our study was retrospectively done in a tertiary care hospital (Hospital, Delhi). It was based on data procured and analysed from the medico legal register from June 2010 to December 2013. The medico legal register carries the details of case history, recorded by

the trained gynecologists, which is based on the details disclosed by the victim about the incident and it also carries the details of physical examination. In this study our aim was to analyse the prevalence of sexual assault in our society, demographic pattern of the victims, incidence to reporting time, relationship of the assailant with the victim, number of episodes of assault and need of gynaecological surgery for any injuries. The pregnancy test result was also included. In Gynae casualty, qualified gynaecologist performs clinical and forensic examinations of sexually assaulted victims according to "SAFE (Sexual Assault Forensic Evidence) kit protocol" when the victim is presented either by the investigating police officer or if the victims presents herself directly after the incident for medical care.

RESULTS

This study has analysed data of sexual assault victims reporting to the casualty of Tertiary Care from June 2010 to December 2013. There were total 221 cases.

In six months of 2010, from June to Dec, there were total 23 cases reported, which rose upto 76 cases in the year 2011, falling to 31 in 2012 and again went up to 91 cases in 2013.

[Table/Fig-1] shows the age incidence of the victims. Though, majority of the victims were more than 20 years of age, 9% of the victims were below the age of 5yrs, the youngest being 1yr and 6 mnths.

Majority of these victims were of the poor socio-economic status, uneducated and unmarried.

Our study showed that 51% of victims were restrained. Use of sedatives was not commonly seen (17% of total victims).

[Table/Fig-2] shows the number of times a victim was assaulted.

Age	Percentage of victims
0-5 years	9%
5-10 years	13%
10-15 years	25%
15-20 years	23%
>20 years	30%

[Table/Fig-1]: Age incidence

No of episodes	Percentage of victims
1	42%
2-5	24%
>5	34%

[Table/Fig-2]: No of episodes

No of accused	Percentage of victims
1	85%
2-5	13%
>5	2%

[Table/Fig-3]: No of assailants

Relation to victim	Percentage of victims
Known to victim	64%
Related to victim	14%
Not known to victim	22%

[Table/Fig-4]: Known to victim

Incident to reporting time	Percentage of victims
<6 hrs	28%
6 hrs to 1 day	30%
1 day to 1 week	19%
1 week to 1 month	11%
>1 mnth	12%

[Table/Fig-5]: Incident to reporting time

Type of injury	Number of victims
General injury	27
Breast injury	22
Perineal injury	27
Fresh hymenal injury	15
Old hymen tear	71
Vaginal injury	7
Anal injury	6

[Table/Fig-6]: Type of injuries

Majority of victims were assaulted only once. But there were 34% of victims who were assaulted many times. These were mostly those who were raped over months mostly by family members or close relatives or some close friend or known to of the family.

[Table/Fig-3] shows the nature of the accused. In 85 % of the cases the victim was assaulted by a single person while 15% were cases of gang rape (i.e. assaulted by more than two assailants). In 2% cases there were five or more assailants.

[Table/Fig-4] shows that the accused was a relative of the victim in 14% of cases (Father-12, brother in law-8, uncle-4, step father-3, brother-2, father in law-2). Another 64% of the accused were also known to the victims, they being a friend, colleague, landlord, etc. 22% of the accused were unknown to the victims.

[Table/Fig-5] shows the incident to reporting time. 58% of cases were those who presented to the casualty within 24hrs. Earlier reporting to the casualty helps in proper forensic sample collection as the sperms are mostly found in the vagina or the endocervical mucus examination. No sperms are found after 5 days.

Most of the patients had penovaginal (86%) penetration. There was history of peno oral sex in 4% of cases. Peno anal penetration was seen in 3% of cases. No history of penetration was present in 7% of cases. There were also cases of fingering. With the recent criminal law amendment offences like fingering and other types of penetration have also been included in the definition of sexual assault. Foreign body (stick) was used only in one case.

When the survivors were examined and a urine pregnancy test was done, 6% were found to be pregnant. Some of these pregnancies were alleged to be due to the act of assault and they had presented to the casualty months after the assault mainly because they needed MTP.

Maximum patients were willing for examination but 10 % refused examination. This was either because they were presenting long after the incident and knew examination will not help them as there would be no forensic evidence available. There were those who did not want to relive the humiliation by again stripping and getting examined by a medical professional.

[Table/Fig-6] shows the types of injuries these victims presented with. Out of the total 221 cases, only 200 victims allowed examination, other 21 victims did not give consent for examination. Out of the total examined victims, 13.5 % of victims presented with any sign of general injury. Breast injury was seen in 11 % of victims and perineal injury seen in 13.5% of victims. Fresh hymen injury was present in 7.5% of cases while 35.5% had old healed hymen tear present. The presence of fresh vaginal injury was seen in 3.5% of cases (Previously the examiner used to record the type if hymen and comment on old tears of the hymen present. But the current day recommendation says that the examiner should comment on the hymen only if there is any sign of fresh injury or bleeding from the hymen). Anal and rectal injury was seen in 3% of victims.

Only 3% of the victims are those who required any major procedure like rectovaginal fistula repair or third degree perineal tear repair in the emergency OT under anaesthesia. These were mostly under the age of 10 (child victims). Two survivors required colostomy for major gut injury.

DISCUSSION

The incidence of cases of sexual assault reporting to our hospital has gradually increased over last few years. Its not only because of the fact that the actual crime rate has increased but also for the fact that people are more aware after extensive media coverage of various cases and coming forward to seek justice. Here, we are comparing our study results with reported world literature in following table [Table/Fig-7].

Victims covered by this study mostly belonged to lower socio-economic status and are uneducated. Most of the victims were young and unmarried in our study. In contrast to our observation; Masho SW et al., [11] reported that sexual assault victims were mostly divorced, separated or widowed. According to the study done by Soumyajyoti et al., [9] maximum(63%) of cases were unmarried.

Use of restraint was seen in 51% of case and use of sedatives or intoxication was not very common. In an analysis of 1076 cases of sexual assault by Riggs N et al.,[7], force was used in 80% of reported assaults, and in 27% of cases a weapon was present. In the study by Saint Martin P et al.,[3], drug-facilitated assault was suspected in 2.9% of the cases. Namita et al., [10] stated that the act was committed under threat of great bodily harm or death in 4% of cases.

Study name	Type of study	Number of cases studied	Mean age	Incident to reporting time	Accused Known to victim	General injuries	Injuries
St Martin et al., [3] France	Retrospective	756	16.5 years		62.2% of cases		
Luce et al., [4] Wisconsin	Retrospective		Adolescents most common		50% of cases		
Santos JC et al., [5] Lisbon	Retrospective	352	17.5 years	61% within 72 hrs	76% of cases	28 % of victims	31% of cases with genital injury
Hassan et al., [6] Lahore	Retrospective	123		76% reported after 72 hours.	57% of cases	15% of victims	18 % of cases with genital injury
Riggs N et al., [7] Cleveland	Retrospective	1076	25 years		71% of cases	67% of victims	Genital trauma in 53% of cases
Sussane et al., [8] Denmark	Retrospective	184 (>12yrs)	20 years		53% of cases		
Soumyajyoti et al., [9] (West Bengal)	Cross sectional	53	Maximum between 21-30 years		92% of cases		35% of cases with fresh hymen injury
GTBH [10]	Retrospective	50	Majority (62%) between 10- 19 years	40% of cases reported before 24 hrs	66 % of accused known to victim	10% of cases	56% of cases with some genital injury
GTBH(2010-2013)	Retrospective	221	17(majority (48%) between 10-19 years)	68% of cases reported before 72 hrs (58% cases reported within 24 hrs)	78 % of accused known to victim	13% of cases	13% of cases with some genital injury

[Table/Fig-7]: Comparison of our study results with reported world literature

In our study, 34% of the victims were assaulted more than once. In a study done by Soreson et al., [12], multiple victimization was common; of the 433 sexually assaulted respondents, two-thirds reported more than one incident. Our study showed that in 15% of cases more than one assailant was involved. According to Riggs N et al., [7], the number of assailants was greater than 1 in 20% of cases. A study done by Hassan Q et al., [6] in Lahore stated that two or more assailants were involved in 30% cases. Susanne Scherer et al., [8] stated that more than one perpetrator was reported in 11% of cases.

In our study mostly penovaginal penetration was seen and use of foreign body (stick) was seen in just one case. In the study by Riggs N et al., [7], vaginal intercourse was involved in 83% of female victims. Oral assault was involved in 25% of all cases, and anal penetration was involved in 17% (178/1,058) of all cases. Out of all the 221 cases 6 % were found to be pregnant at the time of the assault. Susanne Scherer et al., [8] studied 184 victims in a retrospective analysis and found two of the victims to be pregnant.

When we compare our study to a similar study done by Namita et al., [9] in the same institution we found that the rate of cases reporting to our institution has drastically gone up (221 in three and a half years in contrast to 50 cases in five years). That's a whopping increase from 10 cases a year reported from 2001-2005 to about 62 cases per year from 2010 to 2013. That's a 520% increase in almost eight years. When the age incidence is compared, 62% of cases were between the age group of 10-19 yrs as studied by Namita et al., [9]; whereas, in our study the percentage of victims in the same age group was 48%. The incidence in the age group less than 10yrs is comparable 22% previously as compared to 24% now. The age incidence among age group > 20 yrs has increased from 14% to 30%. Most of the cases were unmarried, knew the perpetrator, sedative use was not common and pregnancy rates were comparable in both the studies. As compared to 14% of cases in previous study where a victim was assaulted more than once there were 34% of cases with multiple assaults in our study. Also as compared to 40% of victims reporting within 24hrs of assault in the previous study we found 58% of victims reporting within 24hrs. It shows an increased awareness among women and their guardians that such cases need to be reported early inspite of the social

stigma attached to it. Another major difference found in both the studies was the fact that previous study showed 56% of cases with genital injury whereas we found 13% of cases with any genital injury in our study; out of which about 50% of cases required examination and /or repair in OT under anaesthesia in both the studies.

CONCLUSION

We have documented that the incidence of sexual assault has increased majorly in just one year, this may be because of the increased reporting of cases because of public awareness. Rape still remains the most underreported crime due to social stigma. We also saw that assault victims are relatively of the young age. In addition, we found that most victims mostly knew their perpetrator. We also found that most of the victims were assaulted by a single person and were victims of single incident of assault. We also conclude that major injuries are seen mostly in young victims. The major drawback of this study is the fact that the report of the forensic samples collected could not be followed up as these reports go directly to the court and are not entered in our medico legal register. So we were not able to analyse and compare the forensic sample reports like the vaginal swab slides with our medical examination findings.

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Date of Submission: **Feb 25, 2014**Date of Peer Review: **May 14, 2014**Date of Acceptance: **Jun 02, 2014**Date of Publishing: **Sep 20, 2014****FINANCIAL OR OTHER COMPETING INTERESTS:** None.