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Domestic violence against women: An investigation of hospital casualty records, Mumbai

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Introduction and objectives

Domestic violence against women is increasingly recognised as a major health and social problem in India. It is also a concern for public health. Not only is violence against, women widespread, deeply entrenched, silently borne, and relatively impervious to women's situation, but also attitudes uniformly justify wife beating, and few women would opt out of an abusive marriage (Jejeebhoy, 1998) (Jejeebhoy and Cook, 1997). At the same time, there is a dearth of information on the magnitude and patterns of domestic violence against women in India, particularly by way of community based data. Facility based data-from police, court, hospital, and NGO records do exist, but these data remain scattered, poorly maintained, and seldom

The objective of the paper is to explore faculty based data from one source, the casualty department of one public hospital in Mumbai city (J.J. Hospital) for their insights into possible domestic violence. The intention is to draw up a profile - limited though it might be of the patterns and determinants of violence against women, as assessed from routine hospital records. The aim is also to demonstrate that a scrutinization of casualty registers can throw up insights into domestic violence against women, and to challenge health facilities to use (or supplement) these data to detect, and provide appropriate counselling and other services to women victims of-domestic violence.

Studies based on emergency department admissions have been carried out in other settings. One study was conducted among female trauma patients at an emergency room in Philadelphia (McLeer and Anwar, 1989). Routine records in this study suggest that some 6 % women trauma patients had been battered; this proportion increased to 30% after an intervention in which staff were sensitised,

and new protocols instituted for identifying battered women. In another such study in Denver, injuries of 12 % of women with a current male partner were attributed to domestic violence (Abbott and others, 1996). A similar study in Australia whose sample comprised women attending the emergency department only between 8 a.m. and midnight, observed that only two percent of women attended the hospital as a direct result of an incident of domestic violence, although one quarter of them admitted to having experienced domestic violence in the past (Bates and others 1995).

Major and well-known limitations of such a design (applicable to any facility-based study) are evident in all facility-based studies. For example, such studies are handicapped by the absence of a denominator, and hence an inability to indicate the proportion of women in any community who suffer domestic violence. Nor do they enable attention to community norms regarding domestic violence against women. Such studies also omit the large majority of women, who suffer violence in some form, but are not compelled by injury or desperation to seek help; in other words, these studies are restricted to women who, represent "the tip of the iceberg" only; for example, one study observes that while the injuries suffered by 12% of women visiting the emergency room related to domestic violence, over half of women attending the emergency room reported that they had experienced domestic violence at some point in their lives (Abbott and others, 1996). Another concern is the limited scope and quality of data. On the one hand, few women are willing to admit that their injuries resulted from domestic violence. On the other hand, neither recording systems nor physicians recording routine admissions are sensitive enough to probe and elicit data on domestic violence; concerted efforts at developing sensitive reporting protocols, for example, effected a six fold increase in reported cases of wife battering (McLeer and Anwar, 1989).

Data

Recognising these inherent limitations, this study examines evidence from existing data from one public hospital in Mumbai (J.J.Hospital). The hospital is medium sized, situated in south central Mumbai, and caters to the relatively low income, largely mixed Hindu and Muslim populations residing in its vicinity.

Typically, the point of entry for all emergency cases arriving at any hospital is the Casualty Department. Details of all accident, injury, bum, or poison cases are, moreover, maintained in a separate register, known as the Emergency Police Register (EPR). This register records both life-threatening and relatively less serious injuries, and the patients whose information is recorded in these registers are either treated in the casualty department, or in other departments as out-

patients and then allowed to return home, or if warranted, admitted as in-patients, usually to such departments as surgical, trauma, burns and OB & GYN. Data collected in this study refer to all women whose cases were recorded in the emergency Police Record register of the JJ Hospital during the year 1996. Data drawn thus are typical of all public hospitals in the city that serve casualty cases. Only existing records are analyzed, and no attempt has been made to interview women, or their families.

A well-known limitation of facility based studies is the paucity of appropriate data available from them. EPR registers typically do not contain much socio-economic data, aside from age, religion, and area of residence. But they are rich in such other information as the time of the incident, and the time at admission, the kind of assault and type of instrument used, part of the body injured, and it's severity, and the kinds of treatment received. On occasion, supplementary information pregnancy status, or information on who accompanied the woman to the hospital is also recorded.

Classification of injured women

A total of 833 women visited the casualty department during 1996 with a variety of injuries: assault, accidental falls, burns, and attempted suicides. This paper deals with 745 of these women who were aged 15 or more. Table 1 classifies women by cause of injury, as specified in the registers. As Panel I shows, almost half of the fifteen percent had consumed poison, 11% had suffered burns, and 9 % had suffered a fall. 'The remaining 21% had suffered traffic and other accidents.

Not surprisingly, few women would, without sensitive probing and counselling, implicate their husbands or other family members as perpetrators of the violent incident. Hence, this paper has had to adopt a fairly liberal definition, on the basis of supplementary information available in the casualty registers. Domestic violence is classified now as (a) definite (b) possible and (c) unlikely, as seen in Table 1.

Table 1: Types of injuries reported, adult women 15 + attending the casualty department of JJ Hospital, 1996.

		Number	Percentage
I	**Classification of casualty attendance**		
	Assault	332	44.6
	Falls	67	9.0
	Burns	79	10.6
	Consumption of poison	112	15.0

	Vehicle, other accidents	155	20.8
II	**Classification by domestic violence status**		
1	**Definite case of domestic violence: perpetrator reported**	**167**	**22.4**
a	Assault by husband, other family member, or "known" person	164	22.0
b	Set on fire by husband	3	0.4
2	**Possible cases of domestic violence**	**330**	**44.3**
a	Assault; no information on perpetrator	138	18.5
B	Burn; stove burst or other cause	70	9.4
c	Attempted suicide	122	16.4
	Consumption of poison	112	15.0
	Assault on self	4	0.5
	Set herself on fire	6	0.8
3	**Unlikely case of domestic violence**	**67**	**9.0**
	All falls, reported accidental	67	9.0
4	**Definitely not cases of domestic violence**	**181**	**24.3**
a	Assault by outsiders	26	3.5
B	Vehicle and other accidents	155	20.8
	TOTAL	**745**	**100.0**

Definitely domestic violence: A definite case of domestic violence is one in which the injury is clearly attributed to the husband, other family member or a "known" person. Over one in five women (22.4%) fall into this category: 164 women were, assaulted by their, husband, other family, or a "known" person, and three women reported that their husbands had set them on fire.

Possibly domestic violence: A possible case of domestic violence includes women who refused to report the name of the perpetrator of the incident, whether assault, or burn. Also classified, as possible cases of domestic violence are women who have resorted to attempted suicide, since much of this relates to harassment and abuse. Almost half of all women (44%) fall into this category. They include (a) 138 women who had suffered assault, but refused to give the name of the perpetrator; (b) 70 women who suffered "accidental" bums, and (c) 122 women who were recorded as having attempted to kill themselves, 112 by consuming poison, six by setting themselves on fire, and 4 by wounding themselves.

Unlikely cases of domestic violence: Falls were difficult to classify: all were reported as accidental, and hence we have classified them separately as unlikely cases of domestic violence. A total of 67 women, or 9% of all women who reported accidentally falling down stairs, tripping, and so on.

Definitely unrelated to domestic violence: Finally, traffic and train accidents, accidents occurring in the work place, as well as assaults reported to have been committed by outsiders have been distinguished as clearly lying outside the realm of domestic violence. About one quarter of all women fall into this category: 21% for vehicle and other traffic accidents, and four percent as a result of assault by outsiders.

In contrast to women, not only do, more men visit the casualty department for injuries, but also, they visit for a quite distinct set of injuries. Table 2 reports on data drown from one register, randomly, representing the first quarter of 1996. Information on a total of 159 men aged 15 or more is available. Data are classified by cause of injury, as specified in the registers. The loading cause of injury is assault by an outsider, experienced by almost two in five cases (38%). One quarter was treated in the casualty department for alcohol abuse. And almost one-third (31 %) were treated for various accidents - largely traffic (18%) and falls (9%). Only 4%, compared to 16% among women, visited as a consequence, of attempted suicide.

Table 2: Types of injuries reported, adult men 15+, attending the casualty department of JJ Hospital, first quarter, 1996(a)

	Number	**Percentage**
Alcohol consumption	41	25.8
Attempted suicide	6	3.8
Consumption of poison, assault on self (b)		
Assaults	62	39.0
Assault by outsider	61	38.4
Assault by family member	1	0.6
Accidents	**50**	**31.4**
At home (burn, other) (c)	2	1.3
Fall	14	8.8
Vehicle/train/road accidents	28	17.6
Injury or accident at work	6	3.8
TOTAL	**159**	**100.0**

Data are drawn from one of four register covering the period; The register was randomly selected

Consumption of poison: 5; assault on self: 1

Accidents at home: burn: 1; other: 1

Profile of injured women

Few data is available in the Emergency Police Register on socio-economic or demographic characteristics of patients treated in the casualty department. Information on gender, religion, and age is almost always available. Other data such as pregnancy status, and Person accompanying the injured person, are less uniformly recorded, and hence cannot be analysed.

Table 3 presents a profile of injured women. The JJ Hospital serves a population of roughly 4,00,000, residing in the areas of Nagpada, Kamathipura, and Byculla. These areas have a large concentration of Muslim residents, and hence, it is no surprise that Muslims constitute, 44% of women treated in the casualty department over the year 1996. What is mildly notable is that Muslims are somewhat more likely to fall into the category of deliberate assault that Hindus, suggesting either that they are somewhat more likely to suffer domestic violence, or that they are more likely than Hindus to identify the perpetrator. In contrast burn victims are predominantly Hindu (76%)

Table 3: Profile of Women aged 15+ presenting in Casualty Department (EPR) by likely domestic violence status, women attending the casualty department of JJ Hospital, 1996

		ALL	Definite	Possible				Unlikely	Not domestic violence
			Assault & burn	Total	Assault	Burn	Attempted suicide	Falls	Accident, assault by outsider
	NUMBER	**745**	**167**	**330**	**138**	**70**	**122**	**67**	**181**
1	Religion								
	Hindus	52.9	41.9	57.6	50.0	75.7	55.7	67.2	49.2
	Muslims	44.0	52.7	40.9	49.3	22.9	41.8	28.4	47.5
	Christians, others	3.1	5.4	1.5	0.7	1.4	2.5	4.5	3.3
2	Age								
	15-19	10.1	7.2	12.4	8.7	11.4	17.2	10.4	8.3
	20-24	20.9	19.8	24.2	12.3	31.4	33.6	16.4	17.7
	25-29	18.0	25.1	17.3	20.3	11.4	17.2	9.0	16.0
	30-34	14.9	16.2	16.1	16.7	20.0	13.1	13.4	12.2
	35-39	11.1	12.0	12.7	18.8	14.3	4.9	9.0	8.3
	40-44	6.8	9.6	5.8	8.7	0.0	5.7	1.5	8.3
	45-49	4.4	3.6	3.9	2.9	5.7	4.1	4.5	6.1
	50-59	5.5	2.4	2.7	3.6	2.9	1.6	13.4	10.5
	60 and	7.1	3.6	3.3	5.1	2.9	1.6	20.9	12.2

	above								
	N/A	1.1	0.6	1.5	2.9	0.0	0.8	1.5	0.6
3	Admission time								
	2100 - 2259	14.4	15.6	14.8	18.8	11.4	12.3	11.9	13.3
	2300 - 0359	18.3	18.6	20.0	18.1	20.0	22.1	13.4	16.6
	0400 - 0559	1.5	2.4	.06	0.0	2.9	0.0	1.5	2.2
	0600 - 1159	14.1	15.6	11.8	12.3	12.9	10.7	25.4	12.7
	1200 - 1759	34.8	34.1	34.2	38.4	34.3	29.5	32.8	37.0
	1800 - 2059	15.7	11.4	17.3	11.6	17.1	23.8	14.9	17.1
	NR	1.3	2.4	1.2	0.7	1.4	1.6	0.0	1.1

The age profile shows clearly that cases of definite and possible domestic violence cases tend to fall in the ages 15-39: about 80% of both definite and possible domestic violence cases tend to fall in these ages. Well over 40% fall into the ages 20-29 (45% and 42%, respectively), and this proportion goes up to 51% of all women who attempted suicide. In contrast, women who reported falls are considerably older: 58 % are aged 15-39, and 34 % aged 50-or more. A relatively similar age distribution is reported by women whose, injuries were clearly unrelated to domestic violence.

Timing of the violent incident

Also recorded in the Emergency Police Register is the time of the incident and admission. In about me third of all cases, the time that the incident occurred has not been reported, hence we rely here on the timing of the admission to shed light on average, a delay of upto one hour between the time of the incident and of admission. Hence we may assume that all incidents that occurred between the hours of 10 p.m. and 5 a.m. will be admitted to the casualty department between 11 p.m. and 6 a.m. Results suggest that over one in five (21 %) cases of both definite and possible domestic violence occur at night, between the hours of 11 p.m. and 5 a.m. Falls, in contrast, are less likely to occur in these hours (15%).

Description of injuries

Data recorded in emergency registers gives some idea of the extent of injuries suffered and the ways in which injuries occurred. Table 4 describes the injuries women have suffered. Among definite cases of domestic violence, the majority (44%) was kicked, beaten. punched, bitten choked or strangled; 19% were assaulted with a stick, rod, or other blunt instryments and 16% with a Knife or blade. Only four percent admitted deliberate burning.

Among the possible cases of domestic violence, prominent causes of injury included beating and kicking etc (34%), assault with a stick, rod, etc (23%), consumption of various poisonous substances (28%, including pesticides (12%), rat poison (8%) chemicals and sleeping pills (8%), and stove burst (15%)

Table 4: Description of injuries, women aged 15+, by likely domestic violence status, Women attending the casualty department of JJ Hospital, 1996

		Definite	**Possible**				**Unlikely**
		Assault & burn	**Total**	**Assault**	**Burn**	**Attempted suicide**	**Falls**
	Number	171	326	138	66	122	67
1	**Part of body injured**		**(a)**			**(a)**	
	Head, face, eyes, nose, neck	55.6	62.1	65.2	59.1	40.0	47.8
	Head	18.7	12.6	16.7	22.7	30.0	23.9
	Face	29.2	23.6	35.5	37.9	30.0	29.9
	Eyes	10.5	6.1	12.3	3.0	10.0	4.5
	Nose	4.1	4.3	6.5	4.5	20.0	3.0
	Neck	5.3	11.3	9.4	31.8	30.0	0.0
	Chest, back, abdomen	22.8	26.4	21.7	77.3	50.0	3.0
	Chest	12.9	17.8	8.0	65.2	40.0	0.0
	Back	6.4	11.0	8.0	30.3	50.0	1.5
	Abdomen	9.9	15.3	8.0	53.0	40.0	1.5
	Arms or legs	41.5	36.8	37.0	89.4	100.0	31.3
	Arms	33.3	29.1	29.0	71.2	80.0	16.4
	Legs	12.3	19.3	8.7	66.7	70.0	17.9
2	**How injured**						
	Blunt instrument, stick, iron rod, belt, etc	19.3	10.1	23.1	N/A	0.0	n.a
	Sharp instrument, knife, blade	16.4	9.2	18.2	n.a	3.3	n.a
	Slapped, kicked, strangled, bit, choked	43.9	14.7	33.6	n.a	0.0	n.a
	Fell from height	n.a.	0.0	n.a	n.a	0.0	26.9
	Tripped, fell over	n.a	0.0	n.a	n.a	0.0	58.2
	Deliberately set on fire, acid burn	4.1	1.8	n.a	0.0	4.9	n.a
	Stove burst, gas cylinder burst, accident	n.a	14.7	n.a	72.7	0.0	n.a

	Consumed rat poison	n.a	7.7	n.a	n.a	20.5	n.a
	Consumed sleeping pills, overdose	n.a	4.0	n.a	n.a	10.7	n.a
	Consumed chemicals poison	n.a	3.7	n.a	n.a	9.8	n.a
	Consumed pesticide poison	n.a	12.3	n.a	n.a	32.8	n.a
	No answer	20.5	23.3	25.2	27.3	18.0	14.9
3	**Type of injury**						
	Abrasion	25.7	14.4	33.3	0.0	0.8	16.4
	Contusion	35.7	15.6	37.0	0.0	0.0	22.4
	Laceration	3.5	2.1	4.3	0.0	0.8	1.5
	Contusion and laceration	24.0	8.9	19.6	0.0	1.6	28.4
	Fracture	1.2	0.9	2.2	0.0	0.0	7.5
	Profuse bleeding	7.6	5.2	11.6	0.0	0.8	6.0
	Semi-conscious	0.0	4.3	0.0	3.0	9.8	0.0
	Unconscious	0.0	8.3	0.7	19.7	10.7	7.5
	If burn < 40%	(b)	n.a	n.a	31.8	(c)	n.a
	If burn 41 - 60%	(b)	n.a	n.a	27.3	(c)	n.a
	If burn 61 - 80%	(b)	n.a	n.a	16.7	(c)	n.a
	If burn 81 - 100%	(b)	n.a	n.a	16.7	(c)	n.a
4	**Extent of injury**						
	Medium or serious (d)	12.8	43.4	9.4	60.6	24.6	11.9

Excludes poison cases

Of the seven cases of wife - burning, 3 received burns on more than 80% of their bodies, one of 60% - 80% and one under 40%; information on the remaining two was not available

Of the six cases of attempted suicide by self immolation, 4 received burns on more than 80% of their bodies, and one on 60% - 80%; information on the remaining case was not available

For poison cases, all who were semi or unconscious; for burn cases all whose burns exceeded 33% of their bodies.

Information on on falls once agam gives few clues that would suggest deliberate violence. The large majority report that they fell down stairs or some other height (27%) or tripped etc. including in the bathroom (58%) - given the conditions of

housing in which many chawl and slum dwellers reside, these figures are not on the face of it, suprising.

The head and face were prime targets for abuse, by about three in five victims of definate domestic violence; about two in five report injuries to the legs or arms, and only about one quarter to the body. In contrast to these findings, in-depth studies of women suggest that a prime target for domestic violence is the abdomen and chest parts of the body on which injuries are obviously less likely to be visible. It is possible then that there is a diaproportionate concentration among women who present themselves to casualty department of those with clearly visible injuries, most likely on the face. In contrast, burn victims are most likely to suffer burns on their limbs and bodies, than on their faces.

Types of injuries suffered were largely abrasions, contusions, and, contusions with laceration among women who had suffered assault. Profuse bleeding was suffered by a notable minority of women, including 8% of the definite cases of domestic violence, and 12% of women who suffered assault but did not name the perpetrator. Of interest also is that while 13% of the possible cases of domestic violence were found to be semi- or unconscious, not a single one of the definite cases of domestic violence were - this may well suggest that if brought in a semi-unconscious condition, statement may be more likely to under-report family violence.

A summary measure of the severity of the injury comes from the assessment of the physician. As many as 13% of definite victims of domestic violence have suffered a serious injury. In constrast, among the possible victims of domestic violence: as many as 25 % of the attempted suicide cases, and as many as 61 % of the "accidental stove burst" cases were assessed to be in serious condition.

Summary and conclusions

Although incomplete, inadequate, and inconclusive, data collected in emergency police registers argues strongly for greater sensitivity in recording information on domestic violence against women, and in recognising and providing sensitive counselling and referral to potential victims of domestic violence.

Results suggest that as many as 23% - almost one in four - women can be classified as definite cases of domestic violence. They have either suffered an assault by a family member or 'Known person", or, in a minority of cases, attribute the burns they suffered to their husband or other family member. Another 44% of all women appear to be possible victims of violence: they have either refused to name the perpetrator of the assault (19%), or attributed the burns they suffered to accidental stove burst etc (9%), or were clear cases of

attempted suicide, a measure to which women who have suffered violence and harassment are likely to resort (16%). Hence, certainly one quarter and upto two-thirds of all women reporting to the casualty department may have suffered domestic violence.

Other points that corroborate this suggestion of domestic violence include the fact that disturbing proportions - over one fifth - have suffered the injury in the late hours of the night (between roughly 10 p.m. and 5 a.m) raising futher doubts about their accidental status. Age distributions of women who attended the casualty department suggest, moreover, that large proportions of these women are in the peak reproductive ages, 20-34, a period during which women have little say in their own lives.

Most of the definite cases of domestic violence occurred as a result of beatings, either by slaps, punch and kicks, or with a stick or belt; of knife or blade wounds, or, in a small proportion of confirmed cases, as a result of wife -burning. Attempted suicide claimed 16% of all cases, and these may well have been attenuated by domestic violence and harassment. Most burn victims claimed the burn occurred accidentally while cooking, and a larpge proportion of women who suffered assault refused to identify the perpetrator; undoubtedly some of both these groups of women have concealed the fact that they were deliberatly set on fire.

While cuts and bruises dominate, profuse bleeding and fractures are also evident among assault cases. A disturbing proportion of women have received serious and life threatening injuries one in eight women whose injuries have definitely resulted from domestic violence, one quarter of the attempted suicide cases, and three in five of the "accidental" burns cases, with burns over half of their bodies.

Results clearly suggest domestic violence is a serious but still invisible public health threat. Data that is routinely collected in casualty registers may merely scratch, but remain at present, one of the only sources of information on the subject. Yet this data remains obscure only to be utilized in the rare medico-legal cases. Data recorded in registers tend, moreover, to he superficial, and incomplete. And practitioners who record this data are not even trained to recognize symptoms of abuse, let alone provide sensitive counselling or referral. What is needed is for practitioners to routinely ask all women direct questions about abuse (let alone for example, (Richardson and Feder, 1996). Modification of recordmg formats has enabled considerable improvement m the identification of battered women in at least two studies (Ohm and others, 1996; McLeer and Anwar, 1989). 'The results of this study, while admittedly somewhat speculative, highlight the enormity ofthe problm the need to review data collection systems

and protocols, and the training of providers, and indeed, the urgent need for domestic violence to become integrated into city's public health system.

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