

[Ernestina Coast](#), [Tiziana Leone](#) and Alankar Malviya Gender-based violence and reproductive health in five Indian states

Book section

Original citation:

Originally published in Nakray, Keerty, (ed.) Gender-based violence and public health: international perspectives on budgets and policies. New York, NY : Routledge, 2012.

© 2012 [Routledge](#)

This version available at: <http://eprints.lse.ac.uk/46132/>

Available in LSE Research Online: January 2013

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LSE Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the URL (<http://eprints.lse.ac.uk>) of the LSE Research Online website.

This document is the author's submitted version of the book section. There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

Gender-based violence and reproductive health in Five Indian States

Dr Ernestina Coast (LSE), Dr Tiziana Leone (LSE) and Alankar Malviya (UNAIDS)

Dr Ernestina Coast is a Senior Lecturer in Population Studies in the Department of Social Policy, LSE and is a Deputy Director of LSE Health. Her research focuses on the inter-relationships between social context and demographic behaviour, including reproductive health, using a combination of quantitative and qualitative methods.

Dr Tiziana Leone is a Lecturer in Demography in the Department of Social Policy, LSE and a Senior Research Fellow, LSE Health. Her area of expertise is reproductive and maternal health in low income countries, focusing on Brazil and India. She uses quantitative methods and works on demographic and statistical modelling of mortality and health outcomes.

Alankar Malviya is the UNAIDS Adviser in Monitoring and Evaluation for Nepal and Bhutan, and has previously worked with the Government of Madhya Pradesh (India) and UNDP. He was the National Project Coordinator of CHARCA , a nine UN agency joint initiative, working in 6 states of India to reduce gender based vulnerabilities to HIV/AIDS.

Introduction

Gender-based violence (GBV) is a global public health concern that has only relatively recently received significant research and policy attention (Mayhew and Watts 2002; Campbell 2002). It is one of the most common forms of violence globally and includes physical, sexual, emotional and economic violence. Much more research on GBV is conducted in high income settings rather than middle and lower income countries, although this is changing rapidly (Hackett 2011; Archer 2006; Verma and Collumbien 2003). In India the issue has been highlighted with the Protection of Women from Domestic Violence Act in 2005 (Kaur and Garg 2008).

Multi-country analyses by the World Health Organisation suggest that at least 15 percent of women experience sexual or physical intimate partner violence, with levels above 70 percent in some settings (Heise and Garcia - Moreno 2002). Issues of definition notwithstanding (Burge 1998), GBV remains under-reported and international comparisons are affected by differential attitudes towards violence. It is difficult to measure because in most societies violence is highly stigmatised, with shame for the victim. Data can come from the abused individual, the abuser, or witness(es) to the abuse. Under-reporting, is, however, common and there are differences in reporting by men and women (Jejeebhoy 2002).

Most evidence about domestic violence in India is based on reports from married and/or pregnant women. The distribution of studies across India is uneven, with studies from the east least well represented (Babu and Kar 2009). There is much less evidence on sexual and psychological violence compared to physical violence (Babu and Kar 2009). A few studies are based on reports of men about perpetration of sexual violence (Martin et.al. 1999; Duvvury et.al. 2002; Stephenson et.al. 2006). There is also evidence that the mode of data collection can impact on the reported levels of violence (Rathod et.al. 2011).

Studies from India suggest a relatively high prevalence of gender-based violence and estimates vary widely, from 18 percent to 70 percent, reflecting in part a wide variety of methodologies (Martin et.al. 1999; Duvvury et.al. 2002; Stephenson et.al. 2006, Visaria 2000; Hassan 2005; Jeyaseelan et.al. 2007; Krishnan 2005). However, it is likely that there are regional variations in violence prevalence, as nationally representative surveys – such as the NFHS suggest considerable variation between states (International Institute for Population Sciences 2007).

Data from the International Crime Victimization survey, cited in the World report on Violence and Health reports that 1.9 percent of women aged 16 and above in Bombay (India) report having been sexually assaulted

in the last five years (Morrison and Orlando 2004). Forty percent of women in India in a six state study reported physical assault by a male partner (World Health Organisation 2005), and prevalence of lifetime physical IPV in India is estimated to be approximately 40% (Kumar et.al. 2005). Recent estimates of lifetime partner violence among ever-married women are 39.7 percent for all type of violence (emotional physical or sexual) (Sharma 2010). A study of 2,000 pregnant Indian women found that 30.7 percent of women who had not wished to have sex had been forced to do so (Chhabra 2008) . A separate study, also of pregnant women attending an antenatal clinic suggests self-reported physical, psychological and sexual violence in as the last year at 14 percent , 15 percent and 9 percent, respectively (Varma 2007). A survey of 397 women in rural South India reported that 34 percent of women had ever been hit, forced to have sex by their husband, or both (Krishnan 2005). Analysis of NFHS3 estimated the national prevalence of domestic violence in Indian and identified lifetime experience of several physical violence and sexual violence at 10 percent and 8 percent respectively for ever-married women aged 15 to 49 years old (Dalal and Lindqvist 2010). However, trends in levels of gender-based violence in India are conflicting, suggesting not only are Indian women becoming more liberated but that there is more violence against women possibly as a male response to increasingly “modern” attitudes among Indian women (Simister and Mehta 2010).

Gender-based violence is a product of social context (Boyle et.al. 2009), and has been traditionally condoned and culturally sanctioned in India - albeit with regional normative variations (Sharma 2005; Segal 1999; WHO 2002; see also Mitra; Duggal and Deosthali in this volume). Men report that they are justified in physically hurting their spouse under certain circumstances, reflecting relatively high levels of tolerance to violence in general in India (Martin 2002; Ravindran and Balasubramanian 2004; Jejeebhoy 1998). This is reflected in women’s attitudes towards violence, which are ingrained and socially reproduced. Analyses of National Family Health Survey data (2005) ⁱin rural South India show that 96 percent of women believe that intimate partner violence is acceptable in at least one circumstance (Sturke 2008). More than four out of every five women surveyed in a village in Karnataka reported that they would “accept it quietly” if their husband beat them (Rao

1997). Qualitative studies demonstrate the wide range of impacts of intimate partner violence in India (Rao 1997; Panchanadeswaran and Koverola 2005)

The determinants of gender based violence in India have been studied in a variety of ways. Analyses of the Indian National Family Health Survey suggest social gradients in the reported experience of violence, with women from poorer households, with no education and from marginalised castes more likely to report IPV (Boyle et.al. 2009; Ackerson and Subramanian 2008). In general, increased socio-economic status is associated with lower likelihood of IPV in India, based on analyses of the Male Reproductive Health Survey (Martin et.al. 2002, Koenig et.al. 2006) and other surveys (Babu and Kar 2009, Panda and Agarwal 2005). Lower dowry levels are associated with significantly higher subsequent risks of violence in India (Rao 1997, Jejeebhoy and Cook 1997). Intergenerational transmission of violence has been described as a “systematic” association with the prediction of a girl subsequently experiencing domestic violence as a woman (Koenig et.al. 2006). Indian women who witness their fathers beat their mothers were at increased risk of spousal physical violence (Jeyaseelan et.al. 2007). The role played by alcohol consumption, has also been noted in an Indian context (Rao 1997).

Women tend not to seek help for the violence they experience, often because they do not know that the services are available (Leela 2008; Chibber et.al. 2011; Dutta 2000). Where help is sought, either through the police or health services, the likelihood is that the service provider will have received little or no specialist training in dealing with cases of IPV (Chibber et.al. 2011, Bush 1992; Majumdar 2004). Individual physician attitudes in India affect the reporting or identification of violence (Chibber et.al. 2011).

What are the health implications? Evidence from India reflects global patterns, and shows implications for murder (Shaha and Mohanthy 2006), suicide (Vizcarra 2004; Paltiel 1987), attempted suicide (Chowdhary and Patel 2008), mental ill-health (Kumar 2005, Varma et.al. 2007, Vizcarra et.al. 2004, Chowdhary and Patel,

Chandra et.al. 2009), poorer health outcomes for women and their children (Martin et.al. 1999, Stephenson et.al. 2006, Ackerson and Subramanian 2008; Chowdhary and Patel 2008, Jejeebhoy 1998, Mahapatro et.al. 2011; Sudha and Morrison 2011; Sudha et.al. Weiss et.al. 2008), marital satisfaction (Maitra and Schensul 2002) and HIV risk (Panchanadeswaran et.al. 2007 Go et.al. 2003). Reproductive tract infections (RTIs) account for a large burden of disease in low income settings because of their role in making HIV transmission more effective and because of their impact on reproductive and child health (Aledort 2006). RTIs refer to three different types of infections: endogenous; iatrogenic; and, sexually transmitted. Endogenous infections (e.g.: candidiasis and bacterial vaginosis) are the most common RTIs globally and result from an overgrowth of organisms normally present in the vagina. Iatrogenic infections occur due to a medical procedure (e.g.: IUD insertion when instruments have not been properly sterilised) introducing the infection. Finally, sexually transmitted infections, of which there are approximately thirty (including HIV) are transmitted through sexual activity with an infected partner (Germain et al, 1992). Diagnosis and treatment of RTIs in low resource settings tends to be delayed or inadequate, leading to higher rates of complications. Evidence suggests that considerable proportions of women in India have RTIs, with between 10 and 60 percent of women reporting symptoms indicative of RTIs. Further, domestic violence has substantial social and economic costs that impact at the individual, household, community and national levels (Menon -Sen and Shiva Kumar 2001, Heise et.al. 1994). The financial costs of GBV range from direct costs (including health care, judicial and social services) to indirect costs (including lost productivity from paid and unpaid work and foregone lifetime earnings from mortality due to GBV) (Morrison and Orlando 2004).

Policy options include changing of cultural norms (Ackerson and Subramanian 2008; see also Jewkes; Western and Mason and in this volume), increased economic and educational opportunities for men and women (Boyle et.al. 2009; Ackerson and Subramanian 2008), increased public health and clinical programmes that target intimate partner violence (Chowdhary and Patel 2008) , integration of violence prevention efforts within programmes that target women's empowerment (Sturke 2008), the need to screen for IPV in other clinical

settings (Chandra et.al. 2009, Chandrasekaran et.al. 2007; see also Breckenbridge and James in this volume), increased training for service providers (Chibber et.al. 2011), the development of services to help women who are victims of intimate partner violence (Jeyaseelan et.al. 2007), and community-level interventions that challenge the normative role of violence against women (Koenig 2006).

In our study we address three questions. Firstly, what levels of violence – both intimate partner and other forms of gender-based violence - are reported by women and girls? Secondly, how do men and women perceive differences in sexual rights? Finally, what are the links between socio-demographic characteristics and health-related outcomes (RTIs) for women that report experiencing violence?

Methods

We analyse quantitative data collected in 2007, collected in five districts in India (Kanpur, Kishanganj, Bellary, Guntur and Aizawl). A multi-stage random sampling procedure was used to identify and select respondents. Individual household were randomly sampled from a recently completed household list. Households were not interviewed if neither a female aged 13-24 nor a male aged 15-29 were recorded as household members. Strategies to assure the quality of sampling and data collection included the listing of all households in a Primary Sampling Unit (PSU) immediately prior to the fieldwork in order to reduce sampling error and the use of both male and female interviewers. We analyse data collected from 2,363 girls and women aged 13-24 years and 1,365 boys and men aged 15-29 years, and analysed all of the districts together.

Limited qualitative data were collected from focus group discussions (n=30) conducted with a range of key informants and community members. For many of the focus group discussions, unfortunately, verbatim transcripts were not produced. Instead, only facilitator summaries were collected. In our analyses below we only include evidence from those focus group discussions where verbatim transcripts were collected. The transcripts were reviewed by two of the authors (EC and AM), and memos made of the key themes that emerged. Transcripts were not coded, and discussion of key themes was based on comparison of thematic

description. We include the qualitative evidence here as supplementary to the quantitative data to explore some of the socio-cultural norms and perceptions around gender-based violence.

In order to understand the quality of the data collected in the quantitative survey, the authors interviewed some of the interviewers who had conducted the survey. In particular, we focused on those questions that either the interviewer had been uncomfortable in asking, or the respondents had been uncomfortable to answer. It is worth noting that two questions in particular were identified as being particularly problematic for both the interviewer to ask, and the respondent to answer:

“How often your husband/ partner have sex with you when you are not willing?”

“If you say no to sexual intercourse what is your husband’s/ partner’s reaction?”

Our conclusions are impressionistic and tentative, but support work from elsewhere that questionnaire-based interviewing about the reporting of such behaviours is likely to result in under-reporting of these topics. The analyses below should be interpreted in the light of this possible under-reporting.

Sample characteristics

The socio-demographic characteristics of the quantitative survey are shown in Table 1, and includes a range of respondents in terms of marital status, employment, level of education and place of residence (urban vs. rural).

Table 1: Sample characteristics (percentage distribution)

	Female (n=2,363)	Male (n=1,365)
Age group		
- <15	11.4	-
- 15-19	42.0	32.3
- 20-24	46.6	43.8
- 25-29	-	37.0
Marital status		
- Currently married	54.0	45.5
- Never married	45.7	54.4
- Other (unspecified)	0.3	0.1
Years of schooling		
- 0	17.3	14.2
- 1-8	39.1	29.5
- >8 years	43.9	56.3
Occupation		
- Homemaker/student	82.8	27.9
- Family farm/business	3.5	26.6
- Daily wage	10.5	28.1
- Salaried job	1.1	9.2
- Other	1.9	8.1
Parity		
- 0	70.4	-
- 1	11.1	-
- 2	11.2	-
- 3	4.6	-
- >3	2.7	-
Place of residence		
- Urban	22.8	15.5
- Rural	77.2	84.5

Over half (54 percent) of the women were married and most (89 percent) aged over 15. The majority lives in rural areas (78 percent) and 17 percent have received no schooling. Most women are either homemakers or students (83 percent), with 30 percent having at least one child.

Gender-based violence

We asked all women, married and unmarried, whether they had ever (either as a child or as an adult) been forced to have sexual intercourse or perform any other sexual acts against her will. This question was asked in

order to try to estimate ever experience of sexual violence (Table 2), and 1.9 per cent (n=45) of respondents refused to answer this question.

Table 2: Reported experience of sexual violence in our sample (percentage distribution)

	Currently married	Never-married women
Sexual violence		
Lifetime report (n=2358)	3.1	1.8
Perpetrator (n=57)		
- Current husband	38.5	0
- Former husband	2.6	0
- Current /former boyfriend	43.6	27.8
- Relative	10.3	33.3
- Friend/acquaintance	2.6	0
- Family friend	0	5.6
- Employer/work colleague	2.6	0
- Stranger	0	22.2
- Other	0	11.1
Sexual violence in the last 12 months (n=52)	41.2	27.8
Ever sought help for sexual violence (n=20)	33.3	40.0

A supplementary question was asked of women who had reported ever experience, and responses suggest that respondents were referring to relatively recent events in their lifetime ever-reporting, with 41 percent and 28 percent respectively of currently married and never married women reporting experiences in the last 12 months. For currently married women the reported perpetrators are overwhelmingly known to the respondents, including current/former husbands and boyfriends and other relatives. Higher levels of stranger as perpetrator are reported by never married respondents.

Focus group discussions with key informants drawn from a range of positions (e.g.: village committee members, health service workers, peer group facilitators, etc.) showed perceptions that gender-based violence was perceived to be a problem for specific population sub-groups, in particular those identified as being *Dalit*. This refers to groups traditionally referred to as “untouchable” in the Indian caste system. Whilst discrimination based on the caste system has been abolished under the Indian constitution, not the caste system itself, prejudice and discrimination against *Dalit* communities continues to be widespread in India.

“Here, sexual violence is there in the *Dalit* colony...we can observe such type of violence. Most of the *dalit* people are taking alcohol at evening time”

(Panchayat chairwoman)

“these (*Dalit*) men are used to drinking alcohol and then beating the women but still the women surprisingly are justifying such behaviour due to lack of job of their husbands”

(male ex-army)

In many of the key informant focus group discussions, the link between multiple behaviours – sexual violence and alcohol consumption was attributed to *Dalit* communities. A clear example of the “othering” of stigmatised and taboo behaviour by people in positions of relative power. Interestingly, in focus groups of women, alcohol consumption was discussed as an issue related to violence against women, but was not attributed to specific groups:

“women are facing violence more within their home than community...drinking habits of husbands is mainly responsible for beating up wives in our community”

(female, focus group participant, Bellary)

In order to more fully understand the prevalence of gender-based violence, we also included questions on non-sexual violence experienced by women and girls (Table 3).

Table 3: Reports of non-sexual violence in the preceding 12 months (percentage distribution)

	Currently married	Never-married women
Non-sexual violence		
Report of being mistreated by anyone in the last 12 months?	21.3	22.0
- pushed		
- punched	36.9	41.9
- kicked	26.6	27.5
- verbal	17.0	11.0
- other abuse	35.4	36.4
	4.4	6.8
If reported abuse in the last 12 months, who was involved?*		
- Mother / mother-in-law		
- Father / father-in-law	32.0	27.4
- Step mother	17.6	12.2
- Step father	1.1	2.5
- Child/ sibling	0.4	1.3
- Boyfriend/husband	6.3	40.1
- Other relative	51.8	5.0
- Teacher/employer	9.9	20.7
- Stranger	0.7	0.4
- Refuse to state	7.7	5.1
	2.6	0.8
If experienced abuse, sought help?	24.1	14.5
If sought help, from where?		
- Women's Group (<i>Mahila Mandals</i>)	14.9	7.9
- CBO/NGO	6.0	5.3
- Peer support group	29.9	47.4
- Women's Court (<i>Nari Adalat</i>)	0	0
- Local government (<i>Panchayat Raj</i>)	32.8	21.1
- Police	1.5	5.3
- Health service	0	0
- Other / not stated	21.5	25.7

*Totals add to more than 100% as multiple responses permitted.

The level and type of reporting of abuse is remarkably similar between currently married and never married women, reporting 21 per cent and 22 per cent, respectively. The most commonly reported type of abuse in the last 12 months is pushing. The reported perpetrator of this abuse vary according to whether ever-married, with husbands the most frequently reported for married women and siblings for never-married women.

“she is dumped by her in-laws due to not bringing any dowry...now her situation is worse at her natal family, her brother harasses her a lot after the death of her parents”

It is possible that reporting of mistreatment by unmarried women includes some reporting of “normal” sibling behaviour – including that of much younger siblings who might push and shove their older siblings – childhood behaviour that does not necessarily constitute “mistreatment”. Such reporting issues need to be taken into effect, and the data interpreted cautiously. Both married and never-married women report older women – either mother-in-law or mother – as the second most common category of abuse perpetrator in the preceding 12 months. Minorities of women sought any help for mistreatment, and if they did seek help, married women reported approaching local government (*Panchayat Raj*) most frequently compared to never married women who were more likely to seek peer group support.

The focus group discussions frequently referred to examples where the community knew about cases of gender-based violence, but the victim was unable to act against her perpetrator:

“a woman in my village was severely beaten by her husband. He kicked and punched her until the wife lost her consciousness and the woman was unconscious for four hours....other women of the village suggested the woman to file a complaint report of this incident and assured her of their support. But the woman refused them by saying that it is her family matter and that she cannot file a report against her husband”

(female shop owner)

A further set of questions focused on married men and women’s’ and unmarried men’s responses to questions about the frequency of experience or perpetrating forced sex. The categories of “often” and sometimes” are deliberately vague and impressionistic, and do not correspond to some specified amount of reported behaviour e.g.: weekly versus monthly. Irrespective of nuances in how people understood the nuances of the differences

between “often” and “sometimes”, more than one third (26.7 percent) of currently married women are reporting forced sex in their current marriage. The responses from currently married women need to be interpreted with caution, as 27.7 percent of women refused to answer this question, reflecting the issues raised in our interviews of the interviewers, and we suggest that these levels represent an under-reporting of the extent of forced sex within marriage. This is corroborated by married women’s responses to a hypothetical question about what would happen if they did refuse sex, with 36.7 percent of women reporting that they would be forced to have sex. Mindful of the biases likely to be introduced by men responding to questions about behaviour that is socially aberrant, even if it is socially sanctioned, nearly a quarter of all married men reported that they had had sex with their wife when she was unwilling (Table 4) (see also Mitra in this volume). This proportion is likely to be an under-reporting of the true levels of non-consensual marital sex.

Table 4: Gendered differences in responses to forced sex (percentage distribution)

Forced sex in marriage/relationship	Currently married women	Currently married men (n=617)	Never married men who are sexually active (n=211)
How often does your husband have sex with you when you are not willing? / how often do you have sex with your partner when she is not willing?			
- Often	7.2	1.9	0
- Sometimes	29.5	22.4	1.4
- Never	35.6	75.7	47.9
- Missing answer	27.7	0	50.7
If you say no to sex, what is your husband’s / your reaction?			
- Do not have sex	54.5	75.5	86.3
- Forces or blackmail to have sex	36.8	16.2	2.9
- No sex but beat up	5.1	0.5	0
- Beat up and goes to other women	0.8	0.8	0
- Goes to another woman	1.0	1.1	1.0
- He is angry	1.6	-	-
- Missing answer / other	0.3	5.8	9.8

Men and women – both married and unmarried – were asked questions about their perceptions about what women and men *should* do in marriage (Table 5). The distribution of responses by gender and marital status are very similar, with both married women and men saying that a wife should just accept it if her husband is having

an affair (14 percent and 14. percent, respectively), with slightly lower proportions for unmarried men and women (11.5 percent and 10.4 percent, respectively).

“When I am not ready for sex with my husband, it does not make any difference for him....he comes home and wants sex...sometimes even if I am not feeling well I can’t say no as I am afraid he will beat me up”

(Female, focus group participant, Guntur)

Table 5 : Gendered differences in attitudes towards violence (percentage distribution)

	Women		Men	
	Currently married	Never married	Currently married (n=621)	Never married (n=743)
What do you think a wife should do if her husband is having an affair? She should...				
- Accept it	14.5	11.5	14.7	10.4
- Protest	68.4	67.3	72.3	68.6
- Seek divorce	14.6	17.3	7.7	15.6
- Try to understand	0.5	0.5	-	-
- Beat him	0.2	0.6	-	-
- Other			5.3	5.4
Do you think a woman has the right to refuse sex?				
- Strongly agree	-	-	25.8	20.6
- Agree	78.9	77.1	55.6	63.0
- Somewhat agree	15.5	14.9	12.2	10.4
- Disagree	5.2	6.9	4.8	3.6
- Strongly disagree	-	-	1.3	1.5
- Do not know	0.5	1.1	0.2	0.9

NB: The questionnaires for men and women included differently scaled Likert scales, so some response categories were not collected for women (-)

A significant minority of both men and women report that they do not think that a woman has the right to refuse sex, although the substantial majority report that it is acceptable to refuse sex. What is interesting is the spread of responses across different “strengths” of category – with male and female respondents replying that they “agree” or “somewhat” agree that a woman has a right to refuse sex, suggesting that there are scenarios where respondents feel that a woman has less of a right to refuse sex. Male focus group participants were sometimes

relatively sanguine about the justification for violence of husbands towards their wives, reflecting strong socially-sanctioned behaviours

“if the wife is not listening to things or she is doing something which her husband doesn’t like...he tells her for many times...if she doesn’t listen to him, what is left then? At that situation you can’t blame a husband for beating or scolding his wife”

(male, focus group participant, Kanpur)

When we consider the patterns of forced sex reporting by socio-demographic characteristics, we find that more than three quarters (77 percent) of women with more than 8 years’ schooling report partner has never had sex with them when they were unwilling compared to just 45 percent of women with no schooling.

We find similar patterns of the normalisation and socialisation of gender-based violence when we consider responses to questions about people’s understandings of the risks of HIV infection. Both men and women think that women are at higher risk of contracting HIV/AIDS (75.5 percent and 51.9 percent respectively), and report that coerced sex is a contributing factor (69.34 per cent and 68.6 per cent, respectively).

Men and women were asked about their experience of symptoms associated with RTIs. Using logistic regression, we modelled the determinants and risk factors of women who

- reported any RTI symptoms
- reported having experienced forced sex
- reported mistreatment (as defined above)

in the 12 months preceding the survey.

Increasing education lowers the risk of reporting RTI symptoms (Table 6), as does wealth. Wealth appears to be a protective factor for reporting RTI symptoms, with the risk decreasing as the wealth quintile increases. Being Muslim or belonging to a general caste increases the risk of reporting RTI symptoms. District of residence was significant for the risk of reporting RTI symptoms, with Kishangani reporting the highest risk. The findings for caste (often used as a proxy for socio-economic status) contrast with those for wealth in ways that were unexpected, however there was no significant interaction between caste and wealth. Age, parity and marital status were not significant predictors for the reporting or RTI symptoms.

Table 6: Logistic regression of factors associated with violence and health outcomes

Variable	RTI symptoms reported		Report of mistreatment		Report of forced sex	
	Odds Ratio	S.E.	Odds Ratio	S.E.	Odds Ratio	S.E.
Age						
<15	ref					
16-19	1.25	.179.14	.792	.134767	6.417*	4.804
19-22	1.08	0	.907	4	6.82**	7.430
22-25	1.18	.191	.716	.191886	7.189*	5.872
				7		
				.174847		
				4		
Years of schooling	.94***	.015	1.029*	.016	.983	.039
Number of children	1.01	.06388	947	.064	.772	.140
		71				
Marital status						
Married	ref					
Divorced/Widowed/separated	0.90	.723	4.082	4.558	4.623	5.507
Never-married	1.16	.172	.885	.153	1.282	.449
Caste						
General	ref					
Scheduled Caste	.60***	.104.10	.885**	.153	3.343	1.849
Scheduled Tribe	.55***	8	2.462***	.578	4.402	2.618
Other backward caste	.77*	.117	1.380**	.196	2.209*	1.138
Religion						
Christian	ref					
Muslim	3.20***	.870	.155***	.058	1.142	.760
Hindu	1.35	.291	.362***	.123	.963	.438
Experienced mistreatment						

	Yes No	Ref .260***	.036				
District		Ref		NS		ref	
Kishanganj		.190***	.027			1.835*	.658
Kanpur		.072***	.012			1.390	.594
Aizawl		.252***	.036			.778	.331
Bellary		.119***	.018			.392	.225
Guntur		.124***	.039			1.686	1.30
Champhai							
Wealth quintile		.80***	.05097 82	2.206024***	.178625 8	8103019	.128158 2

S.E. Standard Error

Ref Reference group

*** = $p < .000$, ** = $p < .005$, * = $p < .05$

We constructed a similar model with mistreatment in the preceding 12 months (but not forced sex) as the outcome variable. Results showed that wealthier women are significantly less likely to report mistreatment than poorer women, echoing findings from the RTI symptom model. Analogously, women with more than 8 years' education were significantly less likely to report mistreatment than uneducated women. Religion was also significant again, with Christians less likely than both Muslims and Hindus to report a mistreatment. Caste did not appear to be a significant predictor of the experience of mistreatment. No significant variation was reported by district.

Finally, we modelled the risk factors for women who reported forced sex in the 12 months preceding the survey. Only age and caste were significant in this model, with increasing age bring linked to an increasing risk and the Scheduled Tribes and Castes showing a significantly higher risk of experience of forced sex in the preceding 12 months.

Discussion

Our findings – both quantitative and qualitative – provide further support for the endemic experience of gender-based violence in Indian society. By collecting information on the experience of different forms of violence, including forced sex by an intimate partner and physical abuse in general from over two thousand women and

girls in five Indian districts, this study represents a substantial body of evidence. We cannot quantify the impact of stigma on under-reporting and non-disclosure of some behaviours, but suspect that under-reporting is present in our data, reflecting findings from elsewhere about the reporting of IPV and socially (un)desirable behaviour in general (Hawthorne effect in survey responses).

Our evidence shows that tolerance towards gender-based violence is relatively high, with an absence of social sanctions for men that resort to violence, supporting findings from other studies (Martin et.al. 2002, Go et.al. 2002). Both men and women report that there are times when it is justified for a woman to experience violence, underlining the pervasive and normalised position of violence towards women and girls. The perpetrators of sexual violence are, by and large, husbands (see also Mitra in this volume).

Marriage continues to be assumed to be a setting in which policies, policymakers and service providers (both health and police) assume that women are safe and protected. Ever-increasing evidence suggests that this is far from the case. Indeed, for many women, marriage represents entry into a socially-sanctioned setting where violence against them can take place, both by their husband and his extended family.

There are several reasons why individual socioeconomic status may be associated with the likelihood of women reporting RTIs. It is possible that this reflects differentials in access to and use of treatment, with poorer women more likely to have untreated and long-term symptoms. The finding that increased socio-economic status is associated with lower likelihood of mistreatment is largely consistent with other evidence from India on the socioeconomic patterning of gender-based violence (Ackerson and Subramaniam 2007, Koenig et.al. 2006). Our data do not, however show statistical support for higher likelihood of forced sex with decreased socio-economic status, reflecting findings from elsewhere in India (Koenig et.al. 2006). Such findings underline the need for research which helps us to understand the pathways through which violence – of different kinds – is affected by socio-economic and cultural change.

We can consider the pathways through which caste might operate to explain some of the relationships that we identify in our data. Caste was significantly associated with the reporting of forced sex, but not significantly associated with the experience of mistreatment. We have no reason to assume that there is a selection effect by caste for the reporting to these different behaviours, although we can speculate that if mistreatment is so endemic and ingrained, women might be less likely to report it as mistreatment? Caste has been associated with stress, in particular the absence of opportunities for men and women who are in scheduled classes (Krishnan 2005). It is worth reiterating that this perception is strongly held by key informants involved in the focus group discussions. However, we must be cautious as to what extent these perceptions of “others” is reflecting reality, or simply perpetuating how scheduled castes (or *Dalits*) are perceived by society more generally.

Our evidence shows a significant educational gradient for both the reporting of RTI symptoms and the experience of gender-based violence, reflecting a common pattern found elsewhere in India (Babu and Kar 2009). Evidence from elsewhere in India suggests several reasons why violence may be associated with lower education, including the ability of women who have formal education to be able to settle dispute in ways that do not involve physical violence (Ackerson and Subramanian 2008). Alcohol consumption was a key theme that emerged from the qualitative work, as being an important contextual factor for women’s experience of violence, and our work underlines findings from elsewhere in India about the relationships between alcohol and violence (Jeyaseelan 2007, Rao 1997, Go et.al. 2003).

It is also possible that women with higher levels of education are more likely to be able to influence the unacceptability of violence in general. Our data are limited by the fact that we do not know the educational status of the husbands of the women included in our survey, so we cannot speculate as to whether reduced experience of gender-based violence is due to the influence of the husband’s education as well. It has been

suggested that men who have less education than their wives are more likely to feel threatened by this inequality in educational status, and resort to violence in order to deal with this threat (Krishnan 2005).

Gender-based violence remains a major, socially acceptable behaviour, with a range of health outcomes, in Indian society. Evidence suggests that women with higher levels of education (and also often higher socioeconomic status) are reducing their tolerance towards gender-based violence, meaning that individual-level improvements in education may only operate to reduce GBV at the aggregate, community level. We do not suggest simplistically that female education has a strong protective effect on the risk of experiencing gender-based violence. Evidence from elsewhere in India shows that the influence of female education operates through changing community- and society-level factors that reduce the acceptability of gender-based violence in general (Boyle et.al. 2009).

For many Indian women, particularly the poorest, their only dealing with formal government services is through primary healthcare institutions for antenatal and delivery care. We suggest, as others have done (Babu and Kar 2009) that routine screening and treatment for violence is a first critical step in dealing with this major public health issue, affecting both physical and mental health outcomes (Chandra et.al. 2009) . It is not simply an issue of providing the screening services, but also of making sure that health care providers take the issue seriously (Chibber et.al. 2011, Hamad 2009; see also Duggal and Deosthali in this volume).

Alcohol consumption was a key theme that emerged from the qualitative work, as being an important contextual factor for women's experience of violence, and our work underlines findings from elsewhere in India about the relationships between alcohol and violence (Jeyaseelan et.al. 2007, Rao 1997, Go et.al. 2003).

Despite substantial legislative changes recently in India, the low levels of reporting and sentencing mean that these laws remain "paper tigers" (Jeyaseelan et.al. 2007; see also Duggal and Deosthali in this volume) (p. 667).

Without the adequate collection and reporting of data on gender-based violence – whether through crime rates or health system data – means that the continued under-reporting of gender-based violence will reinforce the lack of attention that it is afforded (Hackett 2011). Unless gender-based violence is counted, it will continue not to count.

Limitations

Quantitative surveys, administered by an interviewer using a long questionnaire, are not necessarily the best way to collect valid and reliable data on very sensitive topics including the reporting of RTI symptoms and forced sex, both within and outside of marriage. However, substantial interviewer training was conducted, including pilot interviews, in order to try to ensure that the highest quality data were collected. Discussions with interviewers reported that some women were actually relieved to be able to discuss these issues; indeed it was the first time that they had disclosed these experiences to anyone else. Several interviewers reported that women felt that they could talk about these issues with a stranger (the interviewer) in ways that they could not normally disclose in their community or peer group, echoing findings from elsewhere (Krishnan 2005). The cross-sectional study design precluded our ability to establish causal effect. Both male and female interviewers were used in order to try to minimise the social distance between the respondents and the interviewer, but especially in situations where very poor and uneducated women were interviewed, the social distance between the interviewer and the respondent is very large. The questionnaires were only produced in English, and whilst every effort was made to ensure that interviewers were able to communicate in the respondents' preferred language, it is likely that at some points, nuance and meaning was lost in translation. Despite these limitations, our study provides valuable data on gender-based violence from a range of settings in India

References

- Ackerson, L.K. and S.V. Subramanian, (2008) *State Gender Inequality, Socioeconomic Status and Intimate Partner Violence (IPV) in India: A Multilevel Analysis*. Australian Journal of Social Issues, **43**(1): p. 81-102.
- Aledort, J.E., Ronald, A. Rafael, M. Girosi, F. Vickerman, P. Le Blancq, S. Landay, A. Holmes, K. Ridzon, R. Hellmann, N. Shea, M. and Peeling, R. (2006) *Reducing the burden of sexually transmitted infections in resource-limited settings: the role of improved diagnostics*. Nature, p. 59-72..
- Archer, J., (2006). *Cross-Cultural Differences in Physical Aggression between Partners: A Social-Role Analysis*. Personality and Social Psychology Review, **10**(2): p. 133-153.
- Babu, B. and S. Kar, (2009) *Domestic violence against women in eastern India: a population-based study on prevalence and related issues*. BMC Public Health, **9**(1): p. 129.
- Boyle, M.H., Georgiades, K. Cullen, J. and Racine, Y. (2009) *Community influences on intimate partner violence in India: Women's education, attitudes towards mistreatment and standards of living*. Social Science & Medicine, **69**(5): p. 691-697.
- Burge, S.K., (1998) *How do you define abuse?* Archives of Family Medicine, **7**: p. 31-32.
- Bush, D.M., (1992) *Women's Movements and State Policy Reform Aimed at Domestic Violence against Women; A Comparison of the Consequences of Movement Mobilization in the U.S. and India*. Gender and Society, **6**(4): p. 587-608.
- Campbell, J.C.(2002) *Health consequences of intimate partner violence*. Lancet, **359**: p. 1331-1336.
- Chandra, P., V. Satyanarayana, and M. Carey, (2009) *Women reporting intimate partner violence in India: Associations with PTSD and depressive symptoms*. Archives of Women's Mental Health, **12**(4): p. 203-209.

- Chandrasekaran, V., Krupp, K. George, R. and Madhivanan, P. (2007) *Determinants of domestic violence among women attending an human immunodeficiency virus voluntary counseling and testing center in Bangalore, India*. Indian Journal of Medical Sciences,. **61**(5): p. 253-262.
- Chhabra, S., *Sexual violence among pregnant women in India*. (2008) The Journal of Obstetrics and Gynaecology Research,. **34**(2): p. 238-241.
- Chibber, K.S., S. Krishnan, and M. Minkler, (2011) *Physician practices in response to intimate partner violence in Southern India: Insights from a qualitative study*. Women & Health,. **51**(2): p. 168-185.
- Chowdhary, N. and V. Patel, (2008) *The effect of spousal violence on women's health: Findings from the Stree Arogya Shodh in Goa, India*. Journal of Postgraduate Medicine,. **54**(4): p. 306-312.
- Dalal, K. and K. Lindqvist, (2010) *A National Study of the Prevalence and Correlates of Domestic Violence Among Women in India*. Asia-Pacific Journal of Public Health,.
- Dutta, M., (2000) *Women's Employment and its Effects on Bengali Households*. . Journal of comparative family studies,. **31**(2): p. 217-229.
- Duvvury, N., M. Nayak, and K. Allendorf, (2002) *Domestic Violence in India 4: Exploring Strategies, Promoting Dialogue. Men Masculinities and Domestic Violence in India: Summary Report of Four Studies*., ICRW: Washington DC.
- Germain, A., Holmes, K., Piot, P., and Wasserheit, J. (eds) (1992) *Reproductive Tract Infections: Global Impact and Priorities for Women's Reproductive Health*. New York: Plenum Press.
- Go, V.F., Sethulakshmi, C. Bentley, M. Sivaram, S. Srikrishnan, A. Solomon, S. and Celentano, D. (2003) *When HIV-Prevention Messages and Gender Norms Clash: The Impact of Domestic Violence on Women's HIV Risk in Slums of Chennai, India*. AIDS and Behavior,. **7**(3): p. 263-272.
- Hackett, M., (2011) *Domestic violence against women: statistical analysis of crimes across India*. Journal of comparative family studies, **42**(2): p. 267-288.
- Hamad, N.B.,(2009) *Exploring the health care needs of women who experience violence in Utta Pradesh, India*., LSTM: Liverpool p. 74.

- Hassan, F., Sadowski, L. Bangdiwala, S. Vizcarra, B. Ramiro, L. De Paula, C. Bordin, I. and Mitra, M. (2004). *Physical intimate partner violence in Chile, Egypt, India and the Philippines*. . Inj Control Saf Promotion,. **11**: p. 111-116.
- Heise, L. and C. Garcia-Moreno, (2002) *Violence by intimate partners*, in *World Report on Violence and Health*, E.G. Krug, et al., Editors., World Health Organization: Geneva.
- Heise, L.L., J. Pitanguy, and A. Germain (1994) *Violence against women: The hidden health burden.*, in *World Bank Discussion Paper.*, World Bank: Washington.
- IIPS, *National Family Health Survey (NFHS-3), 2005–06: India Volume I*. (2007), International Institute for Population Sciences (IIPS): Macro International. : Mumbai.
- Jejeebhoy, S.J. and R.J. Cook, (1997) *State accountability for wife-beating; the Indian challenge*. Lancet,. **349**: p. SI10-SI12.
- Jejeebhoy, S.J., (1998) *Associations between wife-beating and fetal and infant death: impressions from a survey in rural India*. Studies in Family Planning,. **29**(3): p. 300-308.
- Jejeebhoy, S.J., (2002) *Convergence and divergence in spouses' perspectives on women's autonomy in rural India*. Studies in Family Planning, **33**(4): p. 299-308.
- Jejeebhoy, S.L., (1998) *Wife-beating in rural India: a husband's right?* Economic and Political Weekly,. **33**: p. 855-862.
- Jeyaseelan, L. Kumar, S. Neelakantan, N. Peedicayil, A. Pillai, R. and Duvvury, N. (2007) *Physical Spousal Violence Against Women In India: Some Risk Factors*. Journal of Biosocial Science,. **39**(05): p. 657-670.
- Kaur, R. and S. Garg, (2008) *Addressing domestic violence against women: an unfinished agenda*. . Indian J Commun Medicine,. **33**: p. 73-76.
- Koenig, M.A., Stephenson, R. Ahmed, S. Jejeebhoy, S. and Campbell, J. (2006), *Individual and Contextual Determinants of Domestic Violence in North India*. American Journal of Public Health,. **96**: p. 132-138.

- Krishnan, S., (2005) *Gender, caste, and economic inequalities and marital violence in rural South India*. Health Care for Women International,. **26**(1): p. 87-99.
- Kumar, S. Jeyaseelan, L. Saradha, S. Ahuja, R. (2005) *Domestic violence and its mental health correlates in Indian women*. The British Journal of Psychiatry,. **187**: p. 62-67.
- Leela, V., (2008) *Violence against women in India: is empowerment a protective factor?* Economic and Political Weekly,. **43**(48): p. 60-66.
- Mahapatro, M., Gupta, R. Gupta, V. and Kundu, A. (2011) *Interpersonal violence as risk factor for women's sexually transmitted infection and reproductive health consequences in India: a community based study*. Journal of Public Health: p. 1-5.
- Maitra, S. and S.L. Schensul, (2002) *Reflecting diversity and complexity in marital sexual relationships in a low-income community in Mumbai*. Culture, Health & Sexuality,. **4**(2): p. 133-151.
- Majumdar, B., (2004) *Medical and nursing students' knowledge and attitudes toward violence against women in India*. Education Health,. **17**(354-364).
- Martin, S.L., Moracco, K. Garro, J. Tsui, A. Kupper, L. Chase, J. and Campbell, J. (2002) *Domestic violence across generations: findings from northern India*. International Journal of Epidemiology,. **31**(3): p. 572.
- Martin, S., Kilgallen, B. Tsui, A. Maitra, K. Singh, K. and Kupper, L. (1999) *Sexual behaviors and reproductive health outcomes: associations with wife abuse in India*. JAMA,. **282**(20): p. 1967-1972.
- Mayhew, S. and C. Watts, (2002) *Global rhetoric and individual realities: linking violence against women and reproductive health*, in *Health policy in a globalising world*, K. Lee, K. Buse, and S. Fustukian, Editors., CUP: Cambridge. p. 159-180.
- Menon-Sen, K. and A.K. Shiva Kumar, (2001) *Women in India: How free? How equal?*, Office of the United Nations Resident Coordinator in India.: New Delhi.

- Morrison, A.R. and M.B. Orlando, (2004) *The costs and impacts of gender-based violence in developing countries: Methodological considerations and new evidence.*, World Bank. p. 60.
- Paltiel, F., (1987) *Women and mental health: A post Nairobi perspective.* World health statistics quarterly,. **40**: p. 233-266.
- Panchanadeswaran, S. and C. Koverola, (2005) *The voices of battered women in India.* . Violence against women,. **11**: p. 736-758.
- Panchanadeswaran, S. Johnson, S. Go, V. Srikrishnan, A> Sivaram, S. Solomon, S. Bentley, M. and Celentano, D. (2007) *Using the Theory of Gender and Power to Examine Experiences of Partner Violence, Sexual Negotiation, and Risk of HIV/AIDS Among Economically Disadvantaged Women in Southern India.* Journal of Aggression, Maltreatment & Trauma,. **15**(3/4): p. 155-178.
- Panda, P. and B. Agarwal, (2005) *Marital violence, human development and women's property status in India.* World Development,. **33**(5): p. 823-850.
- Rao, V., (1997) *Wife-beating in rural South India: a qualitative and econometric analysis.* . social science and medicine,. **44**: p. 1169-1180.
- Rathod, S.D., Minnis, A. Subbiah, K. and Krishnan, S. (2011), *ACASI and face-to-face interviews yield inconsistent estimates of domestic violence among women in India: The Samata Health Study 2005-2009.* Journal of Interpersonal Violence,. **26**(12): p. 2437-2456.
- Ravindran, T.K.S. and P. Balasubramanian, (2004) *“Yes” to Abortion but “No” to Sexual Rights: The Paradoxical Reality of Married Women in Rural Tamil Nadu, India.* Reproductive Health Matters,. **12**(23): p. 88-99.
- Segal, U.A. (1999), *Family violence: a focus on India.* Aggression and Violent Behaviour,. **4**: p. 213-231.
- Shaha, K.K. and S. Mohanthy, (2006) *Alleged dowry death: a study of homicidal bums.* Medicine, Science & The Law,. **46**(2): p. 105-110.
- Sharma, A.M., (2010) *Gender, Power and Violence: Intimate Partner Violence among Married Women in India.*, University of California, Los Angeles: United States -- California.

- Sharma, B.R., (2005) *Social etiology of violence against women in India*. Social Science Journal,. **42**: p. 375-389.
- Simister, J. and P.S. Mehta, (2010).*Gender-Based Violence in India: Long-Term Trends*. Journal of Interpersonal Violence, **25**(9): p. 1594-1611.
- Stephenson, R., M.A. Koenig, and S. Ahmed, (2006) *Domestic Violence and Symptoms of Gynecologic Morbidity Among Women in North India*. International Family Planning Perspectives,. **32**(4): p. 201-208.
- Sturke, R.M. (2008), *Women's autonomy and intimate partner violence in rural south India*., The Johns Hopkins University: United States -- Maryland.
- Sudha, S. and S. Morrison, (2011) *Marital Violence and Women's Reproductive Health Care in Uttar Pradesh, India*. Women's Health Issues,. **21**(3): p. 214-221.
- Sudha, S., S. Morrison, and L. Zhu, (2007) *Violence against women, symptom reporting, and treatment for reproductive tract infections in Kerala state, Southern India*. Health Care for Women International,. **28**(3): p. 268-284.
- Varma, D., Chandra, P. Thomas, T. and Carey, M. (2007) *Intimate partner violence and sexual coercion among pregnant women in India: Relationship with depression and post-traumatic stress disorder*. Journal of Affective Disorders,. **102**(1-3): p. 227-235.
- Verma, R.K. and M. Collumbien, (2003) *Wife beating and the link with poor sexual health and risk behaviour among men in urban slums in India*. Journal of comparative family studies,. **34**: p. 61-74.
- Visaria, L., (2000) *Violence against women: a field study*. Economic and Political Weekly,. **35**: p. 1742-1751.
- Vizcarra, B., Hassan, F. Hunter, W. Munoz, S. Ramiro, L. and De Paula, C. , (2004) *Partner violence as a risk factor for mental health among women from communities in the Philippines, Egypt, Chile, and India*. Injury Control Safety Promotion. ,. **11**(2): p. 125-129.

Weiss, H.A., Patel, V. West, B. Peeling, R. Kirkwood, B. and Mabey, D. (2008) *Spousal sexual violence and poverty are risk factors for sexually transmitted infections in women: a longitudinal study of women in Goa, India*. *Sexually Transmitted Infections*,. **84**(2): p. 133-139.

World Health Organisation, (2005) *Integrating poverty and gender into health programmes: a sourcebook for health professionals: module on gender-based violence*.: Geneva. p. 77.

World Health Organisation, (2002) *World report on violence and health*. ., World Health Organisation: Geneva

ⁱThe National Family Health Survey (NFHS 3) is coordinated by the International Institute for Population Sciences (IIPS) under Government of India. It has collected information from a nationally representative sample of 109,041 households, 124,385 women age 15-49 and 74,396 men age 15-54 (International Institute for Population Sciences 2007)