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Health Care Interventions for Gender-based Violence:  
Formative Research with Primary Care Physicians and Young Married Women  
in Southern India to Explore Feasibility and Specific Needs

by

Karuna Sridharan Chibber

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Public Health

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Nancy Padian, chair  
Professor Meredith Minkler  
Professor Amani Nuru-Jeter  
Professor Lorraine Midanik

Fall 2009

The dissertation of Karuna Sridharan Chibber, titled Health Care Interventions for Gender-based Violence: Formative Research with Primary Care Physicians and Young Married Women in Southern India to Explore Feasibility and Specific Needs, is approved:

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## Abstract

### Health Care Interventions for Gender-based Violence: Formative Research with Primary Care Physicians and Young Married Women in Southern India to Explore Feasibility and Specific Needs

by

Karuna Sridharan Chibber

Doctor of Public Health

University of California, Berkeley

Professor Nancy Padian, Chair

The pervasiveness of gender-based violence (GBV) in India is well-known, as is the adverse impact of GBV on women's physical, mental, and reproductive health. Over the last decade, urban Indian women's healthcare utilization rates have increased substantially. These data have prompted researchers to emphasize the role of health care professionals in managing GBV and preventing the escalation of the problem. Yet, little is known about the health sector's response to GBV in India. Similarly, little research in India has examined the risk factors associated with forms of GBV other than physical violence.

This dissertation investigated several questions around the feasibility and development of health facility-based GBV interventions in India. Data were collected from two samples in urban Karnataka: Young married women of reproductive age utilizing urban health care services in Mysore, and primary care physicians serving women of similar ages and socioeconomic classes in Bangalore. Mixed methods were used to analyze these data. A grounded theory approach was used to analyze the data from in-depth interviews with physicians. Multivariable logistic regression was conducted on survey data collected from women.

The analyses with primary care physicians revealed that even without training and guidelines, many primary care physicians empathized with women who experience GBV and had developed culturally sensitive responses to GBV. Their practices, however, were selective and discretionary, and vulnerable to internalized norms and attitudes. Moreover, primary care physicians favored health facility-based GBV interventions, and provided concrete suggestions on what would be needed to implement such interventions in the Indian urban health-sector context.

The analysis with women found that factors relating to their husbands' characteristics—educational status, occupational status, alcohol consumption, and having multiple sex partners—were most significantly associated with women's risk of sexual violence. The risk factors for sexual and physical violence differed in many respects. More importantly, physical violence was found to be a strong predictor of sexual violence, and the determinants of sexual violence differed depending on the presence or absence of physical violence.

Study findings provide important information to guide the development of future health facility-based GBV interventions in urban India. A potential starting-point for such interventions is to build on existing positive physician practices, supporting physician efforts with training to

enhance their skills and confidence in assisting at-risk patients, and to address the norms and attitudes influencing their practice. More formative research is needed to address such issues as infrastructural needs and private sector respondents' motivations for responding to GBV. These findings could inform the development of large-scale intervention studies to measure the impact of enhancing health care professionals' skills with training and resources, on their actual GBV-related practices, and the long-term impact of these practices on women's health. Furthermore, research with women and men is needed to understand how their conceptualization and response to different types of GBV may vary. This understanding could be of substantial use to health care professionals, as they attempt to screen for various types of GBV, and connect women with the services best suited to meet their individual needs.

## **Dedication**

To the wonderful men in my life: my grandfather, father, uncle, brother,  
and dear husband, who have promoted gender equality through their every day actions,  
and who inspire me to keep fighting to improve women's lives

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## Acknowledgments

I would like to thank my committee members for their support and guidance. Above all, I thank Dr. Nancy Padian, my dissertation chair, for putting her trust in me and taking me on as a student even though she had known me only briefly. I am grateful for her guidance in identifying a suitable dissertation project, and for her invaluable insights throughout the process of data analysis and dissertation writing. I have tremendous admiration for Nancy's academic excellence and her dedication to improving women's reproductive health. Professor Meredith Minkler has consistently been there for me throughout the doctoral program, advising and encouraging me through the many challenging moments. I am so grateful for her detailed feedback on all sections of this dissertation, as well as for her mentorship and friendship over the past five years. Her example of bridging the gap between research and practice, and making real change in people's lives, will always guide my work. Professor Lorraine Midanik graciously served as my outside committee member. Her substantive comments on my dissertation chapters were invaluable and helped me articulate the importance of collaborative efforts across sectors to improve women's health. Professor Amani Nuru-Jeter's inputs were critical in the early conceptualization and design of this dissertation project. Her close attention to detail and academic rigor will continue to influence my approach to data analysis and academic writing in the years to come.

I owe special thanks to Drs. Maureen Lahiff, Suellen Miller, and Cheri Pies. Dr. Lahiff spent many hours helping me to navigate the roadblocks in quantitative data analysis and to refine my analytical strategy. Dr. Miller provided guidance in conducting qualitative data collection and analysis. Dr. Pies's encouragement and insights enabled me to identify the important questions that motivate my research, and to articulate my ideas into a comprehensive research proposal. I would also like to thank Ellie Schindelman for being a source of strength and positive energy in my life.

I am extremely grateful to Dr. Suneeta Krishnan for giving me the opportunity to work on her project in India. Suneeta has been tremendously supportive of my efforts, providing thoughtful input during the stages of research design, data collection, analysis, and writing. I have enjoyed our many conversations about resolving Indian women's myriad problems, and have learnt from her how to creatively establish the connections among various women's health and development issues, as well as how to employ evidence in the development of innovative solutions. I am grateful for her mentorship over the past four years, and for her support in spreading my work to the larger community of scholars and public health practitioners.

I thank Dr. Purnima Madhivanan for giving me the opportunity to work on her data. I am extremely appreciative of her support at a time when I was struggling to find a suitable dissertation project, and of the insightful feedback she has provided on the analysis and writing undertaken for my quantitative dissertation chapter.

Several members of the Samata Health Study research team in India were critical to the data collection and preliminary analyses in this dissertation. I thank Kalyani Subbiah for her outstanding leadership and management of the study and for her insightful comments during early analysis; Sajida Khanum for her warm presence and dedication to training field staff; and Dr. Anuradha Vastha and Surabhi Kukke, whose detailed planning and persistence in recruitment enabled me to identify and connect with my study sample, and to complete data collection in a timely manner. I also acknowledge Mridula Shankar and Suja for their support in transcription.

This dissertation would not have been possible without the support and encouragement of colleagues and friends. Thanks to Corinne Rocca for her partnership, encouragement to keep going, and constructive feedback on data analysis and a dissertation chapter. Thanks to Sujit

Rathod, Sandi McCoy, and Helen Chang for helping me resolve statistical problems. Thanks to Lynn Wenger for support with referencing. Thanks also to Megan Dunbar and Nuriye Nalan Sahin-Hodoglugil for their tips in navigating the ups and downs of dissertation analysis and writing, and also to Nuriye for her assistance with qualitative software. I would also like to thank my cohort in the Doctor of Public Health program (class of 2005) at the University of California, Berkeley, for their support and camaraderie through the past five years. I especially thank Marty Martinson, Sarah Roberts, Jennifer Lachance, Diego Castaneda, and Arnab Mukherjea for their constructive feedback at various stages in the design, implementation, and analysis of this dissertation research. A big thank you to my dear friend Deepta Chopra who, as always, provided loving friendship and intellectual stimulation, and was a continuous reminder that I had the determination and skill to finish what I had started. I also owe a special debt of gratitude to my friend Mahjabeen Wasim, who lovingly cared for my son so I could squeeze in a few extra hours of work every now and then.

I wish to thank my family for their encouragement and unending faith in me. In particular, I thank my parents for giving me the foundation to always seek the truth, to persevere, and to give back to the community. Their example of generosity and humility toward all inspired me to choose this road to travel. To my brother for his humor, large heartedness, and the many surprise visits over the last five years, providing a much needed break from doctoral work. Thank you to my sister-in-law for her genuine interest in my work and for feedback on a dissertation chapter. I am so grateful to my aunt and uncle in Bangalore, who provided a warm and welcoming home for me to conduct data collection while I was six months pregnant. I am also appreciative of my husband's family for their encouragement, countless hours of childcare, meals, and rides, especially during the final stages of dissertation writing, which ensured that I could stay energetic and focused till the end.

My deepest gratitude goes to my husband, who has been patient and supportive throughout this doctoral program, and has shown genuine interest in my work. His intellectual curiosity has been infectious, and has shaped my personality over the last 12 years of our relationship. Over numerous dinner table conversations he has helped me see the gaps in my arguments, and continues to teach me the value of good science and rigor in academic writing. Most importantly, his deep sense of equality between all women and men, and compassion for mankind, reminds me every single day that there are and can be *good* men in this world, and how extraordinarily lucky I am to have such a wonderful companion.

Finally, thank you to my darling two-year-old son, who certainly made dissertation writing a more challenging experience, but who allowed me to be silly, to giggle, and to sing and dance with all my heart and soul, reminding me of the joy of living in the moment, and putting away thoughts of what had past or what was yet to come.

Part of the data used in this dissertation and the support for mentorship of my work was funded by the National Institute of Child Health and Human Development (NICHD) (R01-HD041731) and a gift from the Levis Strauss Foundation (LSF), USA. I also acknowledge the support of the Department of Obstetrics, Gynecology and Reproductive Sciences at the University of California, San Francisco, and RTI International for managing the awards that funded this research, and the University of California, Berkeley for financial assistance during the early years of doctoral coursework.

## **Chapter 1: Introduction**

## Background

Gender-based violence (GBV) refers to a broad range of physically, sexually and psychologically coercive acts of violence, that arise from inequities in gender roles and relationships, that are directed against women by their male partners (Ellsberg, 2005; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005; Koenig, Stephenson, Ahmed, Jejeebhoy, & Campbell, 2006). Empirical evidence from over a decade indicates that GBV is widely prevalent worldwide (Ellsberg, 2005; Koenig et al., 2006; Panchanadeswaran & Koverola, 2005), and women are at greatest risk of violence from a current or former partner as compared to any other person (Ellsberg, 2005; Garcia-Moreno et al., 2005). According to a recent WHO multi-country study, 15% to 71% of ever-partnered women report experiencing physical violence, sexual violence, or both (Garcia-Moreno et al., 2005; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). GBV weakens women's overall physical and mental health status, increasing their risk of long-term health conditions such as physical disabilities, chronic pain, depression, unintended pregnancies, miscarriages, and sexually transmitted infections (Ellsberg, 2005). In the early 1990s, as evidence of the association between GBV and women's health outcomes intensified, GBV was recognized as an important public health priority by the United Nations General Assembly and the World Health Assembly (United Nations General Assembly, 1993; World Health Assembly, 1996)

In India, as in other countries, the pervasiveness of GBV and its unfavorable impact on women's health is well-known. According to the most recent national survey, 35% of Indian women of reproductive age reported experiencing physical violence from an intimate partner, 27.8% reported experiencing only physical violence without sexual violence, and 7.7% reported experiencing both (Silverman, Decker, Saggurti, Balaiah, & Raj, 2008). Data from both community and clinic-based studies, conducted across various regions of the country, reveal similarly broad ranging estimates: physical violence ranges from 19% to 65% (International Clinical Epidemiological Network, 2000; Kishor & Johnson, 2004; Krishnan, 2005; Silverman et al., 2008), psychological violence ranges from 15% to 72% , and sexual violence ranges from 10% to 50% (Batliwala, Anitha, Gurusurthy, & Wali, 1998; Duvvury, Nayak , & Allendorf, 2002; Koenig et al., 2006; Martin, Tsui, Maitra, & Marinshaw, 1999; Stephenson, Koenig, & Ahmed, 2006b; Varma, Chandra, Thomas, & Carey, 2007; Vizcarra, Hassan, Hunter, Munoz, Ramiro, & De Paula, 2004). Moreover, exposure to GBV has been found to adversely impact a broad array of reproductive, maternal, and mental health outcomes. For example, GBV increases women's risk of physical injuries and chronic pain (Jejeebhoy, 1998); unintended pregnancies, miscarriages, and sexually transmitted diseases, including HIV/AIDS (Jain, John, & Keusch, 1994; Newmann, Sarin, Kumarasamy, Amalraj, Rogers, Madhivanan et al., 2000; Stephenson, Koenig, & Ahmed, 2006a; Stephenson et al., 2006b); and mental health disorders, including attempts at suicide (Patel, Kirkwood, Pednekar, Pereira, Barros, Fernandes et al., 2006; Varma et al., 2007; Vizcarra et al., 2004).

Most research in India has focused exclusively on physical violence (Babu & Kar, 2009; Koenig et al., 2006). It is important, however, to now understand the risk factors for other types of violence, such as sexual and psychological violence, since as noted above, the pervasiveness of these other manifestations of GBV are also well established. More importantly, these other types of GBV, for example sexual violence, can be as harmful to women's health as physical violence, and can increase their risk of such often fatal conditions as HIV/AIDS (Ellsberg, 2005; Jain et al., 1994; Newmann et al., 2000; Stephenson et al., 2006b). Failing to research different types of GBV beyond physical violence could result in the assumption that risk factors for

different forms of GBV are similar, and that interventions needed to address them will also be similar. This may not necessarily be the most beneficial or effective approach for women who experience different types of GBV.

Another area which has not been adequately researched in India is health care professionals' (physicians and nurses) perspectives on responding to GBV. Over the last decade, several academicians and researchers, in response to the magnitude and adverse health implications of GBV, have highlighted the important role that health care professionals can play in preventing the escalation of GBV and managing its resulting adverse health outcomes (Jejeebhoy, 1998; Koenig et al., 2006; Muthal-Rathore, Tripathi, & Arora, 2002; Prasad, 1999). Evidence has also shown that, while women who experience GBV rarely seek help from the police or other support agencies—instead waiting to do so until their condition is near fatal (Panchanadeswaran & Koverola, 2005; Watts & Mayhew, 2004)—they will most likely seek health care at *some* point in their adult life (Watts & Mayhew, 2004). This presents an opportunity for early identification of GBV; limiting the health consequences resulting from GBV; and preventing the further escalation of the problem, including fatalities such as women's attempts at suicide (Colombini, Mayhew, & Watts, 2008). With the substantial increase in health care utilization by urban women across much of India (National Family Health Survey, 2005-06), the opportunity for health care professionals to assist women experiencing GBV is now greater than ever.

Despite this unique opportunity, limited published research has examined Indian health care professionals' current responses to GBV. We only know that at present, with rare exceptions, health care professionals do not receive training or gender sensitization during their education (Majumdar, 2004). There are no national or institutional policies requiring them to respond to GBV among their patients. Nor are there any guidelines on when they should intervene against GBV, or on what specific actions are appropriate and warranted in the Indian context (Deosthali & Malik, 2003). Only in cases of rape or sexual assault are physicians working at government hospitals required to collect forensic evidence, and provided guidelines on how to respond to these cases (Deosthali & Malik, 2003). Health care providers in private practice are not required to follow even these minimal procedures.

More promising responses to GBV have been undertaken and documented by other sectors. These range from legislation to protect and enforce women's rights, to support services—counseling, family mediation, psychological care, and training in income generation opportunities, amongst others—offered by non governmental organizations (NGOs) in response to specific instances of abuse (Poonacha & Pandey, 1999). Even though these services continue to be limited in number and reach, and their quality varies widely, they are increasingly available in urban cities. Most women, however, are unaware of these services, and resort to them only in extreme situations when their condition is near fatal (Panchanadeswaran & Koverola, 2005). This presents another area where health care professionals, as a consistent point of contact, can benefit women by increasing their awareness about the availability of support services, which in turn, may enable earlier and more efficient utilization of these services.

Evidence from some industrialized and developing countries supports this assertion that GBV interventions at health facilities can benefit women. In industrialized countries, health care professionals receive training and practice guidelines on how to respond to GBV, either during their education, or after, as continuing medical education (Rodriguez, Bauer, McLoughlin, & Grumbach, 1999; Thurston & Eisener, 2006). Studies have shown that the introduction of routine screening for GBV in medical visits significantly increases the likelihood of GBV disclosure by

women (Hathaway, Mucci, Silverman, Brooks, Mathews, & Pavlos, 2000; Krasnoff & Moscati, 2002). Moreover, when inquiry was followed by referral information and nurse-case management, women were more likely to practice safety behaviors such as keeping money aside, asking neighbors to call the police if violence occurs, and keeping ready all critical documents necessary in the event of an emergency exit (McFarlane, Groff, O'Brien, & Watson, 2006). Another study revealed that collaborative efforts between multiple services providers—physicians, nurses and social workers—resulted in women receiving ongoing community-based services for their experience of abuse, with close to half of the women reporting reduced risk of violence from their perpetrator (Krasnoff & Moscati, 2002). Research from women's perspective shows that in general women are highly appreciative of being asked about GBV, and view physicians as playing a critical role in raising awareness about the experience and risks of GBV, especially for women at earlier stages of abuse (Chang, Decker, Moracco, Martin, Petersen, & Frasier, 2003; Zink, Elder, Jacobson, & Klostermann, 2004). Women favor routine screening, counseling, and access to information and resources (Chang, Decker, Moracco, Martin, Petersen, & Frasier, 2005). They want healthcare providers to screen when cues or symptoms of abuse are present (Zink et al., 2004), provided the environment is supportive, non-judgmental, and patient confidentiality is maintained (Chang et al., 2003; Dienemann, Glass, & Hyman, 2005).

Similarly, health sectors in several developing countries have implemented GBV interventions, including screening, counseling, and referral at health facilities. Most of these interventions, however, appear to be in the early stages of conceptualization or implementation, and hence evaluations have not been made publicly available. Developing country efforts are different from those in industrialized countries, in that they tend to go beyond implementing basic training and guidelines for health care providers. They additionally emphasize integration and collaboration among all service providers at a health facility, and among the multiple sectors providing support services (Haque & Clarke, 2002; Jacobs & Jewkes, 2001; Schraiber & d'Oliveira, 2002; Velzeboer, 2003). Finally, some of these programs highlight the importance of legislation to improve women's access to justice; national policies that outline specific roles for service providers; and developing and strengthening linkages between the health sector and community organizations (Jacobs & Jewkes, 2001; Velzeboer, 2003).

In summary, the pervasiveness of GBV among married women in India, and its adverse impact on women's health, underscores the importance of developing and testing structural interventions to assist women who experience GBV. Evidence from other countries suggests that women could benefit from health-facility interventions that include routine screening, assessment, and referrals for GBV. There is also increasing evidence to show that GBV can manifest in ways other than physical violence (Babu & Kar, 2009; Koenig et al., 2006; Varma et al., 2007; Vizcarra et al., 2004) and these different types of GBV can be as harmful as physical violence (Chandra, Deepthivarma, Carey, Carey, & Shalinianant, 2003; Newmann et al., 2000; Varma et al., 2007). Understanding the risk factors for different types of GBV could be critical to the design of future GBV interventions. For example, in a health facility-based GBV intervention, educating health care professionals on the similarities and differences in the risk factors for different types of GBV may substantially improve their ability to screen for different types of GBV, and thereby better assist women who experience different manifestations of GBV.

### **Research aims**

The aim of this dissertation is to determine the feasibility and inform the development of health facility-based interventions to assist women who experience GBV in India. It offers a

much needed physicians' perspective on responding to GBV and on what is needed to improve physician GBV-related practices in the future. It also provides an in-depth study of another type of GBV, namely sexual violence that is increasingly important because of its association with women's risk of acquiring sexually transmitted diseases such as HIV/AIDS.

This dissertation addresses the following three specific research aims:

- 1. To examine primary care physicians' current practices in response to GBV, including their knowledge about GBV and their attitudes towards women who experience GBV**

The unique and important role for Indian health care professionals in managing health outcomes resulting from women's exposure to GBV, and in preventing the escalation of GBV, has been underscored by researchers and academicians for over a decade. Yet, no published research has examined the perspective of health care professionals on responding to GBV. In this analysis, I use a modified grounded theory research methodology (Strauss & Corbin, 1998a) to qualitatively examine physician knowledge, attitudes, and practices in response to GBV. Data are analyzed according to the conventions of qualitative research. This includes the use of open-coding (Strauss & Corbin, 1998b) to generate initial concepts, followed by selective coding to refine and integrate emerging analytical categories, and memoing and diagramming to establish the connections between the categories. The study findings provide a clear, qualitative description of the current practices employed by primary care physicians in response to GBV, emphasizing the unique and culturally-sensitive aspects of their practices. The findings also illustrate the influence of knowledge and attitudes toward GBV on physician practice. The results highlight the areas where primary care physicians are in need of support to improve their future GBV-related practices.

- 2. To explore primary care physicians' perspectives on the feasibility and needs for a future health facility-based GBV intervention**

Health facility-based interventions for GBV are being tried and tested in many developing countries. Prior to adapting such models to the Indian context, we need to understand Indian health care professionals' perspectives on the feasibility of, and specific needs for, developing such interventions in urban India. In this analysis, I employ the core principle of grounded theory, namely constant comparative analysis (Glaser & Strauss, 1967), to explore primary care physicians' perspectives on this issue. Analyzing data according to the conventions of qualitative research, I identify five main themes that emerge as the building blocks of a future health facility-based response to GBV. The study findings reveal that primary care physicians favor health facility-based GBV interventions, and can provide concrete suggestions on what will be needed to implement such interventions in the Indian urban health-sector context. The results have important implications for the design of future GBV interventions, particularly by highlighting the areas that primary care physicians would like to see prioritized, as well as the key barriers they perceived and which would need to be addressed for any such interventions to be sustainable.

- 3. To identify the determinants of sexual violence, compare them against the determinants of physical violence, and to study the association between sexual and physical violence.**

The prevalence of sexual violence has been recently established in India. Moreover, evidence from other countries reveals that sexual violence can increase women's risk of acquiring sexually

transmitted diseases such as HIV/AIDS (Maman, Campbell, Sweat, & Gielen, 2000). Yet, there has been little investigation of the risk factors associated with sexual violence in India. In this analysis, I use multivariable regression analysis to identify the determinants of sexual violence. I then study how these compare against the well-established determinants of physical violence. I use the available data on risk factors for physical violence as a starting point, and then develop multivariable logistic regression models to identify the determinants of sexual and physical violence independently. I then compare these two models and delineate the similarities and differences in risk factors for sexual violence versus physical violence. Finally, I study the association between sexual and physical violence, and how physical violence modifies the relationship between other covariates and sexual violence. Study findings make important contributions to our understanding of sexual violence, as well as the association between sexual and physical violence. The findings highlight the importance of examining different types of GBV independently, as each type of GBV (physical, sexual, economic, or psychological violence among others) is likely conceptualized and normalized by communities differently and thus associated with different risk factors.

### **Data sources**

Data for this dissertation come from two urban locations in the state of Karnataka, in southern India. Karnataka is an ideal location in which to explore my research questions for several reasons. First, observational studies conducted across urban and rural locations in Karnataka estimate the prevalence of GBV to be high and comparable to other parts of the country (Chandrasekaran, Krupp, George, & Madhivanan, 2007; Krishnan, 2005; Rocca, Rathod, Falle, Pande, & Krishnan, 2009). Second, according to the most recent national survey, urban women's utilization of antenatal care in Karnataka increased from 89% to 95% between 1991-92 and 2005-06, and the rate of institutional deliveries increased from 68% to 85% during the same time period (National Family Health Survey, 2005-06). Taken together, these two reasons suggest that the environment in Karnataka might be ripe for research and implementation of structural interventions to respond to GBV. Finally, Karnataka is one of 6 high HIV/AIDS prevalence states in India, and the prevalence of HIV among antenatal clinic attendants is relatively high at 2% in Bangalore city, the capital of Karnataka (Office of the Registrar General, 2001). This finding underscores the importance of investigating the risk factors for sexual violence, which can directly increase women's risk of acquiring HIV/AIDS.

Data for Research Aims 1 and 2 come from a study conducted with primary care physicians in Bangalore. This study was ancillary to the Samata Health Study (SHS), a longitudinal observational study conducted between 2005 and 2007 among 16-25 year old married women residing in urban poor communities in Bangalore (Rocca et al., 2009). The overall aim of SHS was to evaluate the relationship between various aspects of gender-based power, including women's employment and decision-making ability, and reproductive health outcomes, such as GBV, STI incidence and unintended pregnancy. In response to the high prevalence and incidence of GBV observed in SHS (Rocca et al., 2009), formative research was undertaken to examine primary care physicians' practices and attitudes towards GBV, and their perspectives on future health facility-based GBV interventions. Data from this ancillary study are used to address Research Aims 1 and 2. Purposive sampling was used to identify primary care physicians from the public and private sectors. A total of 30 in-depth interviews were conducted in English with primary care physicians practicing in Bangalore's east zone and serving low-to-



middle income female clients in the 18-30-year-old reproductive age group. This was also the same location for the parent SHS study.

Data for Research Aim 3 come from a study conducted in Mysore, another urban location in the state of Karnataka. A prospective cohort study investigating the relationship between vaginal flora and seroconversion to herpes simplex virus Type- 2 (HSV2) was conducted in Mysore. Baseline data from this study, collected between November 2005 and December 2006, and pertaining to violence against women were used to address Research Aim 3. The study used a two-stage recruitment process. A convenience sample of sexually-active women in the 15-30 year reproductive age group who were not pregnant, willing to undergo a pelvic examination and blood draw, and willing to remain in the area for 6 months, were recruited from the obstetrics and gynecology outpatient clinic of a large hospital. In addition, participants were recruited directly from the community through outreach programs and by connecting with community-based networks, primarily microeconomic self-help groups. A total of 1077 women were screened; 947 were eligible to participate in the study; and 918 (85%) were enrolled. Complete data on sexual and physical violence were available for 897 participants (83%).

In this dissertation, I use two distinct sources of data, collected from different types of participants: Women in the reproductive age group and primary care physicians serving such women. The joint inclusion of these two data sources is intentional, as it enhances our understanding of the needs for future health facility-based GBV interventions. The data collected from physicians provide a much needed physician perspective on current practices and future needs, while the data collected from women illuminate risk factors of a specific type of GBV, namely sexual violence, and explain how sexual violence compares to physical violence. The two locations from where these data were collected also have similarities, justifying their joint inclusion in this dissertation. Both Bangalore and Mysore are urban locations, and both parent studies recruited women from health care settings (outpatient clinics) who were similar in age and socioeconomic backgrounds. Data for Research Aims 1 and 2 were then collected from primary care physicians serving these women. Details of the sampling, data collection, measures, and analysis for each research aim are described in depth within the subsequent chapters.

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**Chapter 2: Indigenous physician practices to address gender-based violence: Findings from a study with primary care physicians in Bangalore, India**

## Background

Since the early 1990s, gender-based violence (GBV) has been recognized as a public health priority by the United Nations General Assembly and the World Health Assembly (United Nations General Assembly, 1993; World Health Assembly, 1996). It refers to a broad range of physically, sexually, and psychologically coercive acts of violence directed against women by their male partners, and arising from inequities in gender roles and relationships (Ellsberg, 2005c; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005; Koenig, Stephenson, Ahmed, Jejeebhoy, & Campbell, 2006). GBV is widely prevalent worldwide (Ellsberg, 2005c; Koenig et al., 2006; Panchanadeswaran & Koverola, 2005), ranging from 15% to 71% among ever-partnered women (Garcia-Moreno et al., 2005; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). In India, the estimates of lifetime prevalence of GBV are similarly high; physical violence ranges from 19% to 65% (Kishor & Johnson, 2004; Krishnan, 2005), while psychological and sexual violence are reported to a lesser extent at 25% and 18% respectively (Krishnan, 2005; Vizcarra, Hassan, Hunter, Munoz, Ramiro, & De Paula, 2004). In the southern state of Karnataka, where this study was conducted, the estimates of GBV prevalence were high and range from 27% to 50% (Chandrasekaran, Krupp, George, & Madhivanan, 2007; Krishnan, 2005; Rocca, Rathod, Falle, Pande, & Krishnan, 2009).

Exposure to GBV adversely impacts a broad array of reproductive, maternal, mental health, and child health outcomes. It increases women's risk for long-term health conditions such as physical disabilities, chronic pain, depression, unintended pregnancies, and miscarriages (Ellsberg, 2005c). Physical violence has been associated with a lowered likelihood that a couple would adopt modern contraception methods (Stephenson, Koenig, & Ahmed, 2006a) increased risk of pregnancy loss (Jejeebhoy, 1998) and gynecological morbidities (Stephenson, Koenig, & Ahmed, 2006b). Women who experience sexual violence by their husbands and who are concerned about their husbands' extra-marital affairs are also found to be at greater risk for common mental health disorders (Patel, Kirkwood, Pednekar, Pereira, Barros, Fernandes et al., 2006; Varma, Chandra, Thomas, & Carey, 2007). Further, exposure to physical and psychological GBV elevates women's attempts at suicide (Vizcarra et al., 2004), and experiencing GBV during pregnancy increases the risk of pregnancy loss and perinatal and neonatal mortality (Ahmed, Koenig, & Stephenson, 2006; Jejeebhoy, 1998). Finally, recent literature has begun to establish that exposure to GBV increases women's risk of acquiring HIV (Jain, John, & Keusch, 1994; Newmann, Sarin, Kumarasamy, Amalraj, Rogers, Madhivanan et al., 2000).

Recognition of the magnitude and adverse health implications of GBV have led to repeated recommendations in the literature to the unique role of, and need for, physicians to manage the health outcomes and prevent the escalation of GBV (Jejeebhoy, 1998; Koenig et al., 2006; Muthal-Rathore, Tripathi, & Arora, 2002; Prasad, 1999). With the substantial increase in health care utilization by urban women across many parts of India, an opportunity now exists to put into practice these recommendations. In the state of Karnataka, for example, urban women's utilization of antenatal care increased from 89% to 95% between 1991-92 and 2005-06, while the rate of institutional deliveries increased from 68% to 85% during the same time period (National Family Health Survey, 2005-06). Other studies indicate that as women use antenatal care and come into contact with health care professionals they become more aware of the available services, and may change their future health care seeking practices (Ram & Singh, 2006; Sugathan, Misra, & Retherford, 2001). The increased utilization of health care may thus provide an opportunity to reach and assist women who have experienced, or are at risk of, GBV.

Despite this unique opportunity, no published research has examined Indian health care professionals' (physicians and nurses) practices and attitudes towards GBV. We only know that at present health care professionals do not receive training or gender sensitization during their education, nor any guidelines on how or when to intervene against GBV, and on what specific acts of violence in the Indian context warrant taking action (Deosthali & Malik, 2003). Only in the case of sexual assault are physicians working at government hospitals required to provide a forensic evidence report (required prior to filing a police report) and provided guidelines on how to respond to sexual assault cases. However, there are few mechanisms to ensure that they understand and implement these guidelines appropriately (Jaswal, 2000). Further, women complain of having to shuttle back and forth between the police station and hospital before the necessary procedures can be completed. The limited research with physicians reveals also that due to ambiguity about their role and perceived lack of skill and confidence, they hesitate to probe for GBV thereby avoiding legal involvement.

Other responses to GBV at the institutional-level include reactive and short-term responses as well as more long-term and preventive responses. Most common are laws to protect and enforce women's rights, encourage the prosecution of perpetrators, and establish standards on what is considered acceptable behavior towards women (Poonacha & Pandey, 1999). Mechanisms to enforce these laws have also been initiated such as the establishment of police stations staffed entirely by women police officers and designated specifically to handle crimes against women (Chikarmane, 1999). A more diverse set of responses focusing directly on the woman at risk of GBV are being offered by non-governmental organizations (NGOs) and/or collaborations between NGOs and state agencies (Poonacha & Pandey, 1999). Qualified social workers and medical counselors working at these organizations offer services such as family counseling and mediation, psychological care, emotional support, short and long-stay shelter, and vocational training and income-generation opportunities to economically empower women and build their confidence and autonomy in preventing further abuse. Such organizations continue to be limited in number and reach, and their quality varies widely depending on each organization's ideological perspectives on women's status in society, gender relations, and equality. Yet, they are increasingly being made available in urban cities across the country, including Karnataka, and are oriented towards women actively seeking help outside the home. Most women however are unaware of these sources of help, and resort to them only in extreme situations when their condition is near fatal (Panchanadeswaran & Koverola, 2005). This presents another area where health care professionals, as a consistent point of institutional contact, can create awareness among women about the availability of social services towards enabling earlier and more efficient utilization of these services over time.

In summary, the wide prevalence and adverse health outcomes associated with GBV underscore the urgency for a public health response. Prior to establishing such a response we need to understand physicians' perspectives towards responding to GBV, their current practices, and their perceptions on the practicality of a health facility-based response to GBV. In this paper, I report on results from a qualitative study undertaken with primary care physicians in Bangalore city in Karnataka, India to address the following research questions: (1) what are physicians' current practices in response to GBV? ; (2) what is their knowledge about its prevalence and impact on women's health, and their attitudes towards women who experience GBV? ; and (3) what are their perspectives on the feasibility and needs for a future health facility-based intervention for GBV? Data pertaining to research question 3 will be analyzed and described elsewhere (Chapter 3: Building a health sector response to gender-based violence in India:



Primary care physicians' perspectives). Here I present data pertaining to research questions 1 and 2, and describe the core practices that physicians employ in response to GBV that are comparable to the practice guidelines being recommended for physicians in Western countries including the United States of America, Canada, and parts of Europe since the 1980s. Each of these core practices will be discussed in detail describing their important elements and appropriateness for the local context.

### **Theoretical frameworks**

A broader human rights perspective and a more individual-focused, psychology-based theory of behavior helped frame and contextualize this research. One of the two human rights treaties articulates “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health” (Annas, 1998 p.1779). Jonathan Mann, a scientific leader in the early fight against HIV/AIDS, went on to say that public health and human rights are mutually dependent; defying human rights can have adverse physical and mental health implications while safeguarding and promoting basic human rights can enable health promotion (Mann, 1997). Reproductive rights, a focus area within health, are acknowledged as “complete physical, mental and social well-being in all matters relating to the reproductive system and to its functions and processes” (United Nations Population Fund, 1994 para.1). These rights adopt certain human rights including the right of all to be informed and “to make decisions concerning reproduction free of discrimination, coercion and violence” (United Nations Population Fund, 1994 para.2). Applying this rights perspective to GBV and the role of the health professionals in mitigating GBV helped me identify and articulate the key constructs that I was interested in examining in my research. These included physicians' perceptions of their professional role and attitudes towards GBV vs. other health conditions; whether they validated or invalidated the injustice that women experience; their notions around privacy, their thoughts on patient confidentiality and autonomy; and their perceptions and overall awareness of the social context and resources available for women. These ideas influenced the development of the research instruments, as well as my conduct of data collection. It also provided a lens with which to review the literature on GBV interventions that are being tried and tested in different countries.

The second guiding framework is the theory of planned behavior applied to the individual-level. This theory, developed by Ajzen and colleagues, has been shown to predict various health-related intentions and behaviors. It focuses on identifying the factors that motivate individuals' likelihood of performing a specific behavior (Montana & Kasprzyk, 2002). It emphasizes the connections between behavioral and normative beliefs, attitudes, perceived control, and behavioral intentions and behavior. Applying this theory to my research helped me identify certain constructs that would be important to examine in understanding what motivates physicians to respond to GBV. These include concepts such as physician's knowledge about GBV prevalence and impact; their attitudes towards GBV; their beliefs about provision of services; and perceived self-efficacy in responding to GBV (see Table 2.1 for examples of the application of key theoretical constructs in this study).

## **Methods**

### **Study setting and sample selection**

The formative research study described in this paper was situated within a larger women's health study titled ‘Gender, power, and susceptibility to STIs/HIV in India’, also known as the ‘Samata Health Study’ (SHS). This study was funded by the National Institute of

Child Health and Human Development (NICHD)<sup>1</sup> and conducted in low-income neighborhoods in the east zone of Bangalore city, the capital of Karnataka state in collaboration with the city municipal corporation (Bruhath Bengaluru City Corporation, BBMP). Among the 53 city neighborhoods served by urban health centers, two low-income neighborhoods were selected from the east zone of the city primarily due to logistical reasons. Only those neighborhoods that had a functional primary health center run by a physician who was interested in participating in this research were identified for the study. The selected neighborhoods were diverse in terms of caste, religion, and income, and included both residents of the city and others who had migrated from neighboring towns and states in search of work. The SHS aimed to prospectively characterize among married women and their husbands the nature of gender-based power—measured as access to resources and decision-making agency at multiple levels including individual, couple, and household among others—and study its association with women’s susceptibility to STIs and HIV. Responding to the finding of high prevalence of GBV in this study (Rocca et al., 2009), the SHS team<sup>2</sup> undertook several formative research studies to explore GBV interventions at the community-level.

One of these was a study to understand primary care physicians’ practices in response to GBV towards exploring the feasibility of future health facility-based interventions to address GBV. All the data and findings described in this paper are from this auxiliary study, where the target population were primary care physicians serving low to middle income clients in the east zone of Bangalore city. Study eligibility included practicing in the east zone to be consistent with the larger women’s health study; specializing in family medicine, internal medicine, obstetrics and gynecology or pediatrics; and having a client-load that was at least 50% comprised of women; with at least 50% of these women being in the 18-27 year age-group. Since this was a formative study aiming to explore physician’s perceptions about responding to GBV among women patients, I purposefully sampled physicians with a large female clientele in a similar age group as SHS, with the rationale that these physicians would be better equipped to provide rich illustrations of their experiences with women as compared to physicians who had few women patients. Given the formative nature of this study and the small sample size (n=30), comparisons between different types of physicians (by gender, sector, age etc.) was not feasible. Yet, with the private sector accounting for more than 80% of health-spending (Peters, Rao, & Fryatt, 2003) it was important to examine, at a minimum, the practices of both private and public sector primary care physicians even if comparisons between the two practice-settings would not be possible.

Samples from public and private sectors were identified independently. For the public sector sample, a list of registered primary care physicians working in the east zone of the BBMP was obtained. Consultations with senior BBMP physicians<sup>3</sup> followed to obtain details on each physician’s specialty, location (urban health center or maternity hospital), years in practice, and exposure to gender-sensitization training. 40 physicians from this list met the study eligibility criteria, and each potential respondent was assigned an ID number. A tracking sheet was developed for each ID and all communications with the potential respondent were recorded in this sheet.

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<sup>1</sup> This study was funded by NICHD and Suneeta Krishnan was the Principal Investigator on this study.

<sup>2</sup> The SHS is a collaborative project of the St. Johns Research Institute and RTI International. I am a public health analyst at RTI international and work closely with the SHS team.

<sup>3</sup> The SHS was conducted at BBMP clinics, and the SHS team has also collaborated with BBMP on other community projects such as the Bangalore Healthy Urbanization Project funded by the World Health. In the process they developed relationships with senior BBMP officials and physicians.

Similarly, to identify the private sector sample, a list of all primary care physicians registered with the Indian Medical Association (IMA) (including data on their specialty and complete address) was obtained. From this list, only those whose clinics were located in the east zone and in the same area as publicly operated urban health centers were selected. Staff from the SHS team then conducted community walks to verify the existence of the selected physicians and assess study eligibility. This exercise began with consultations with local stakeholders (pharmacists, residents visiting or gathered around the pharmacy and staff from the urban health centers) to get their perspectives on the primary care physicians in their neighborhoods to understand which physicians were considered popular and most frequented by women in the 18-27 year age group. SHS staff then visited each physician's clinic, both those from the IMA list and others identified by local stakeholders, and wrote extensive field notes with recommendations for which physicians appeared to be popular, met the study eligibility criteria, and were potentially strong candidates for the study. Through this process a total of 82 private sector primary care physicians were identified. All communications with these select physicians were documented using similar procedures as those employed with public sector physicians.

### **Research methodology**

This study was guided by a grounded theory research methodology. Grounded theory is a qualitative research methodology that “uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon” (Strauss & Corbin, 1990 p.24). The theory is “discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to” (Strauss & Corbin, 1990 p.23) an area of study, rather than beginning with a theory and trying to prove it. At its core are two concepts: (1) constant comparative analysis, the process of continuous interplay between data collection and analysis (Glaser & Strauss, 1967), and (2) theoretical sampling, the selection of participants based on the needs of the emerging analysis, as opposed to predetermined sampling before the research begins (Strauss & Corbin, 1998c). These two concepts are aimed at maximizing variation and enabling the researcher to compare and contrast the data and explore the varying properties and dimensions of a category under different circumstances towards generating theory that is based in reality (Glaser & Strauss, 1967; Strauss & Corbin, 1998a).

As with other research efforts, the actual use of this methodology in practice was modified (Strauss & Corbin, 1994) to incorporate key learnings from the literature and the previously described theoretical frameworks. Initially, purposive sampling, a non-probability sampling technique where sampling units are purposefully selected to facilitate comparisons (Ellsberg, 2005a) was employed wherein I actively identified physicians from the public and private sector who were articulate and most likely to provide a rich description of their current practices in response to GBV. The process of constant comparative analysis could only be approximated as best possible working within the constraints of data-collection for doctoral work, particularly shortages of funding and trained research assistants/translators.

### **Data collection**

Consistent with the principles of grounded theory, data collection was divided into two phases: July-August 2007 and October 2007-January 2008, enabling some back and forth between data collection and analysis. All interviews in the first round of data collection were conducted by me, while interviews in the second round were conducted by an external consultant

with training in anthropology and experience in health services research. The consultant received orientation to the study, and intensive training in administering the in-depth interviews.

As earlier noted, the total study population comprised of 122 primary care physicians (40 public sector and 82 private sector). However, consistent with qualitative research methods all potential participants were not contacted. Instead, data collection was initiated by first approaching those perceived to be capable of illuminating the questions under study by the SHS team during their extensive community visits, and those who were reported as being the most frequented by women in the 18-27 age group by local stakeholders. As per theorists' Strauss and Corbin's recommendations, data collection was stopped when theoretical saturation was attained, i.e., the point at which no new or relevant data on a category was emerging, or the category was well defined, or the relationships between the various categories were well established and validated.

A total of 52 physicians were contacted and 30 in-depth interviews were completed (14 public sector and 16 private sector). The process of data collection included the following steps. Working closely with the SHS clinical director, who is a physician by training, I contacted each potential respondent either by phone or in person and explained the purpose and objectives of the study. Those who met study eligibility, expressed interest in the study, and scheduled a time for the in-depth interview were then re-contacted. Given physicians' busy schedules, on average it took two to three visits or phone calls to finally get an interview. Interviews were conducted in English using a semi-structured guide. All interviews were conducted in a private location either at the urban health center or the physician's clinic. At the time of the interview, all participants received a detailed description of the study, its purpose, and objectives. Interviews were conducted only after reviewing the study objectives and the consent form, answering the respondent's queries, and obtaining written informed consent. All interviews were audio-taped. Reasons for not participating in the study (n=22) included failure to meet study eligibility criteria, disinterest, failure to respond to repeated interview scheduling attempts, and reaching theoretical saturation eliminating the need to re-contact some respondents. Only demographics were collected for those who contacted but who did not participate in the study. Protocols were approved by human subjects protections committees at the Indian Institute of Management, Bangalore (the local institutional review board) and the University of California, Berkeley, and RTI International (the US partner research agency).

Prior to the initiation of data collection, the guide was pilot tested. Two pilots were conducted. One with a public sector physician and one with a private sector physician, and the guides were modified accordingly. Further, throughout data collection, core grounded theory principles of constant comparative analysis and theoretical sampling were applied as best possible. This entailed modifying study guides and sampling strategy as needed to achieve better variation in the data and to thoroughly explore the properties and dimensions of the emerging concepts and categories, while ensuring that consistency and comparison across data points would still be possible. For example, after several interviews with public sector physicians I realized that some physicians were aware of specific procedures to be followed for sexual assault cases and claimed to refer patients to hospitals that had the facilities to document these cases. Considering it relevant to understand the perspectives of physicians who worked at these major hospitals, I modified the sampling strategy to recruit physicians from hospitals and modified the study guide by inserting questions to understand these physicians' unique perspective. Similarly, I made changes to the private sector sampling criteria looking for diversity by sampling more male doctors. Another example of the use of grounded theory principles involved the

introduction of detailed questions regarding the role of lower-level staff in assessing GBV. Several respondents emphasized training lower-level staff to identify GBV and assist with patient-care. To fully examine the properties of this emerging concept of training I introduced more detailed questions, and also added an interactive process called ranking to better explore respondents' perceptions on the specific needs for a future health facility-based intervention to be feasible at the operational-level. Briefly, ranking is a qualitative data collection tool that is particularly useful when there are many options, and helps participants prioritize among the many choices (Ellsberg, 2005b). Building on data from pilots and early interviews, I developed a list of needs for future health facility interventions. These included issues related to training, support activities, and referral centers. All of these issues were written up on small cards, and participants were asked to review the cards and prioritize among them. For example, participants were given a set of cards that included different types of health care professionals (physicians, nurses, outreach workers, senior health officers, counselors etc) and asked to prioritize who should get training to better assist patients who experience GBV.

### **Measurements**

A semi-structured in-depth interview guide was developed by referencing guides used in studies with health care professionals by the Pan American Health Organization (PAHO), the World Health Organization (WHO) and the Center for Enquiry into Health and Allied Themes (Cehat). Additionally, questions pertaining to key constructs from the human rights theoretical framework and the theory of planned behavior were also included (see Table 2.1 for application of key constructs in study). The guide had two main sections: The first section explored physician practices to assess and respond to GBV, knowledge about GBV and patients' social contexts, and attitudes towards violence against women and included a total of 17 open-ended questions. The second part explored physicians' perceptions on the feasibility of health facility-based interventions to reduce GBV and mitigate women's adverse health outcomes and included 10 open-ended questions, including a ranking exercise. Finally, as earlier noted, these guides were modified as needed throughout data collection to accommodate changing data needs.

### **Analysis**

As earlier noted, data collection was divided into two phases so that data collection and analysis could be as iterative as possible. After conducting and transcribing the first few interviews, I began open coding, a method of breaking down the data by naming and categorizing the phenomena by closely examining the data (Strauss & Corbin, 1998b). A preliminary code list was developed. Some of the codes were taken directly from the data (e.g., observing signs of GBV). However others came from study questions and hypotheses in that they were influenced by my knowledge of the literature (for example, class norms and gender norms) and interpretation of the applied theoretical frameworks. These codes became early sensitizing concepts for continuing data collection and analysis. Memos were written describing the codes and these were discussed with academic mentors and senior SHS staff towards making the necessary modifications to the sampling process and study guides to better explore all aspects of the emerging concepts.

The second round of data collection was then initiated and accompanied by continuous review of the data by listening to the audio tapes and writing descriptive memos. Data collection was concluded when theoretical saturation was reached, for example, when no new themes appeared in the data and a review of memos suggested that the properties and dimensions of key

concepts had been thoroughly examined. All interviews were then transcribed and open coding continued. As I moved from one data point to another, I identified, through comparative analysis, other areas in the data which had the same properties as previously coded data and applied codes accordingly.

Subsequently, measures were taken to ensure inter-rater reliability. Analytical meetings were held with the study principal investigator to develop and finalize a code list by which to categorize study findings. We (the PI and I) independently coded two interviews and came up with a code list. We reviewed each others' codes and then developed a focused code list. We each then independently applied this focused code list to new interviews and met several times to discuss our respective assignment of the codes and differences of opinion. These differences were reconciled by going back to the data and emerging themes and basing our final decisions for codes on participants' words and phrases. At this stage, we also began categorizing and reducing the data to more manageable portions by collapsing or merging some codes into broader and more meaningful categories. For example, the codes 'history taking', 'probing', and 'indirect questioning' were collapsed into the category titled 'screening practices'. A finalized code list was thus created, and I applied this code list to all the interviews. Coded data were organized using ATLAS.ti (version 5.6.2) a software program designed for qualitative data analysis (ATLAS.ti GmbH., 2009). Simultaneously, a cumulative series of memos and diagrams were developed recording descriptions of the emerging categories and their properties and dimensions as well the relationships between categories.

The final analysis entailed selective coding where I started to further refine and integrate categories and establish the connections between the categories to identify a core category. Detailed memoing and diagramming continued. Some examples of categories developed in this study include screening practices, referral practices, counseling practices, familiarity with the client, class norms, interplay between screening and patient disclosure, and screening and counseling as dynamic practices occurring along a continuum, among others. From the transcripts, detailed memos about concepts and categories, diagrams connecting these categories, and analytical meetings with the principal investigator, I identified a central theme suggesting that even in the absence of training and formal guidelines physicians have developed a process of identifying and responding to GBV among their patients.

## **Results**

### **Background characteristics**

All 30 physicians who participated in this study served low to middle income clients and reported identifying patients experiencing GBV but to varied extents. Most respondents were aware of social norms and customs in the communities they served including the fact that women have low social status relative to their husbands; GBV is tacitly ignored; there is stigma associated with disclosing personal issues such as the experience of GBV to persons outside the family; and it is dishonorable for women to leave marital relationships. Study respondents were also knowledgeable about the health conditions that women in the 18-30 year age group routinely experience, including those resulting from social conditions. Further, many respondents emphasized the different types of GBV, such as sexual violence and psychological violence, and how these were as harmful to women's health as physical violence and could result in a broad array of adverse health outcomes. Reflecting the common gender breakdown in physician employment in publicly-operated urban health centers and within the specialty of obstetrics and gynecology in India, 80% of the study sample was comprised of females. This can be also be

attributed in part to the fact that women prefer female physicians and thereby mainly female physicians satisfied one of the study eligibility criterions of having at least 50% of client load comprising of women in the 18-30 age group. Table 2.2 summarizes respondent characteristics.

### **Physician practices in response to GBV**

The central theme that emerged from this analysis was that even in the absence of training and formal guidelines, physicians have developed a sophisticated, albeit informal process for responding to GBV among their women patients. I characterized this process as ‘*Making Meaning*’. *Meaning* emphasizes that physicians are attempting to understand the patient’s reality, correctly diagnose the condition, and construct an appropriate response. While *Making* is used in its progressive tense to emphasize that this practice of trying to find *Meaning*, is not pre-determined but rather is iterative and continuous in response to the presence, or suspicion, of GBV.

*Making Meaning* comprises four core practices (Figure 2.1): (1) observing the patient and mentally noting the indications of GBV; (2) screening for GBV; (3) counseling; and (4) referring the patient to support services. Each of these practices will be described in detail.

#### **1. Observing indications of GBV**

Observing indications of GBV is the first step in the process of *Making Meaning*. It is a routine part of physicians’ clinical practice occurring throughout the patient visit and interspersed with other procedures such as taking patients’ clinical history. It happens subconsciously without any additional effort on the part of the physician. It appears to be practiced universally, and all physicians in the study confidently stated that they could “make out” if a patient was experiencing problems at home. Furthermore, since it only entails silently observing and perhaps making a mental note of what they see and no written documentation, no respondent perceived this practice as a hindrance to other clinical duties.

The most commonly observed indications of GBV are physical injuries ranging from minor cuts, bruises, and burn marks to more severe and chronic conditions such as broken limbs, fractures, swollen or black eyes. The perceived severity of these injuries varied. Injuries that occurred “repeatedly” or that debilitated the patient got the physician’s interest, for example, if a patient is unconscious with injuries or if she has injuries and her blood pressure rises dramatically. Many physicians also explained that upon noticing a physical injury they begin to reflect on what they see and try to *make meaning* of the injury. This includes contemplating issues such as the location of the injury, the manner in which it may have occurred, the patient’s behavior etc.

Another fairly commonly reported observation of GBV is “vague symptoms”. These include body ache, abdominal pain, headache, back ache, giddiness, and insomnia, loss of appetite, anxiety and general weakness. When presented with such symptoms, physicians try to *make meaning* of the patient’s condition. Some of them explained that they first check if the patient is clinically fit. If the patient’s vital signs and test results are normal and yet she complains of “vague symptoms”, they begin to suspect that she is experiencing other problems that are manifesting in this way or she is concealing personal issues. Additionally, some of the physicians also observe cases where the patient visits repeatedly but does not respond to treatment. For instance, one physician talked about noticing how one of her patients would visit every week complaining of excessive white discharge and was not responding to the prescribed treatment. This is when she suspected the problem to be chronic and indicative of social

problems. Others explained how the frequency of reporting vague problems also piques their interest:

If she is coming again and again with body pain, back ache, or what ever it is and same problems... Many people cannot express to anybody ...they will start with vague problems.

*(Public sector physician)*

A few respondents, who repeatedly expressed their commitment to women's rights, also reported noticing signs of psychological distress. For example, facial expressions indicative of sadness; being withdrawn, restless or uneasy; not engaging with the physician; and appearing fearful and unhappy amongst others. Some noticed even the slightest signs in body language indicating patient desires for more privacy:

And then sometimes [a patient] wants to tell me something, you know, and they're looking back because they feel somebody else can be listening.

*(Private sector physician)*

About a third of the sample reported identifying signs of sexual violence. They explained how they connected some behaviors and "vague" complaints to women's experiences of sexual violence. For instance, one respondent talked about a patient who repeatedly asked for medication that would make her husband sexually inactive. A discussion with the patient revealed that she was being severely harassed to have sex. Another respondent talked about patients who looked reluctant to be discharged from the hospital after their deliveries. Over her years of practice, she had discovered that this was a woman's way of asking for more time in the hospital to get some respite from the coercive sex that awaited her at home even though she had just given birth to a child and needed rest.

Finally, more than half the sample noted that women did not have reproductive choices in that they were not allowed to use birth control by their partners or other family members, or, at the other extreme, were forced to terminate their pregnancies so they could continue contributing to the household finances.

## **2. Screening for GBV**

Screening for GBV occurs selectively and is entirely based on the physician's discretion. The majority of the physicians interviewed in this study, however, appear to be screening for GBV. They follow a case-based approach, reviewing each case independently deciding whether or not to screen, and what screening method to use. The lack of time was explicitly stated as one of the reasons for selective screening.

There is no single approach to screening. The same physician may screen in instances that she perceives as warranting immediate inquiry but not screen at other times considering it better to wait for patient disclosure or a later visit when she has established familiarity with the patient. Broadly, physicians' orientations to screen can be classified into three categories: (1) trigger driven screening, (2) universal screening, and (3) choosing not to screen.

Most of the study respondents (n=27) followed the first approach of *trigger driven screening*. The triggers include observations of physical injuries; vague and repeated symptoms; mental unrest; and patient disclosure of GBV. Among these, observations of physical injuries were the most likely to prompt proactive screening (n=24). A smaller number of study



respondents (n=14) reported also screening in response to signs of mental unrest, anxiety, depression, or changes in patient's behavior. Still others talked about mentally noting all the signs of abuse but delaying screening until a later visit once they had established patterns in behaviors and/or symptoms. These physicians preferred to wait for "repeated symptoms" and until the patient-provider relationship had been strengthened. Patient disclosure, in contrast, almost always prompted screening (n=29). "Only when they start telling", was a common response to what prompts screening for GBV. Physicians also explained that patients are seldom direct about their experience of GBV. Instead they use indirect means to reveal that they are experiencing GBV, or disclose only a part of their problem:

They say injury and on examining them then they will say... or, vaguely she will tell you and when you talk to her she will express [reveal the real problem].  
(Public sector physician)

A second orientation is *universal screening*. Here the physician takes the initiative to ask the patient about her experiences at home and risk of GBV at every visit irrespective of their observations or of patient disclosure. Only two physicians reported asking all their patients, on a routine basis at each antenatal visit, if they were being physically or psychologically harassed at home. These physicians emphasized the importance of promoting women's health and rights, and physicians' responsibility to help women in distress. They felt that routine screening was the only way to ensure identification of all GBV cases. As one of them said, "when we make it [screening] selective maybe there are lot of cases we miss out". Further, routine screening would enable women to comprehend that physicians are concerned about their well-being, resources and support services exist, and that violence against women is an injustice that they do not have to accept.

The third orientation is *choosing not to screen*. Many study respondents pointed out specific instances where they chose not to screen. For example, almost half the physicians interviewed expressed subtly that conflict in the home is a "family problem" that takes place in all families and it exists "to some extent". As medical professionals, they felt they should not be intervening in all matters between husband and wife since they do not know the family history and should not judge who is right and who is wrong, and also do not have the time. Further, sometimes the problems are "small" and can be sorted out over time and with the support of other family members, and physicians' involvement in every such minor issue causes unnecessary "provocation". Only one physician stood out as different, reporting that she avoided screening for GBV, irrespective of what she observed or what her patients might disclose. Her approach was informed by the belief that every woman had the ability to make her own decisions and choose her own path in life, and those tolerating GBV were also to blame and physicians could have no impact:

No, no, I don't even break my head over them because I think they are beyond correction. No amount of counseling can help them. It's at the grass root level [where you need change]. Maybe her childhood, her upbringing, it is all so wrong that no one from the outside [such as a physician] can do anything for such a woman.  
(Private sector physician)

Another reason not to screen was in situations where respondents believed that GBV was higher among certain socio-economic classes due to characteristics unique to women and men from these classes and screening or counseling such women would be a “waste” of time. The majority of respondents believed that GBV was more common among women belonging to the lower socio-economic classes. Only one respondent however, who otherwise talked about her commitment to promoting women’s rights and health and described a nuanced and detailed screening practice, was candid enough to say that she avoided screening women belonging to the lowest socio-economic class, unable to empathize with them:

If she is a hard core slum woman even if she says severe symptoms, I still don't empathize much with them. Sometimes I do feel she deserves it for her way of behavior, her lifestyle... Whereas with a housewife and a lower middle-class [woman] I identify more with them and I feel that their problems are more genuine. ... They are [women from slums] also into habits like alcoholism, and they are all the time arguing with the husbands unreasonably. I have seen quite a few being harsh. Instead of trying to resolve problems, I feel they are adding fuel to fire.

*(Public sector physician)*

The next decision after choosing to screen is how to screen and study respondents reported two methods: (1) asking direct questions about the risk of GBV, or (2) asking indirect questions. In both methods, since screening is practiced in the absence of any training, physicians do not use any standard protocols but rather develop the questions extemporally deciding what and how much to ask. The actual content of the questions depends upon each physician’s comfort talking about GBV, her working style, and familiarity with the patient.

The second method of asking indirect questions is the preferred and more commonly practiced approach. Typically this entails asking the patient questions about other aspects of her life including married life, children, household structure, social support, and state of mind. From these “leading”, yet non-threatening questions physicians begin to ascertain the kinds of conflicts women might be dealing with at home. Talking about her screening methods, one physician said:

I just talk about their family. Usually they are quiet and they'll never even open their mouth. So start talking how many children, how are you, how is your diet, or I'll say oh you are that person’s relatives and something so it is like a close rapport and then slowly little she opens up. Maybe a few questions of her family or something when you talk and then [ask] what happened and I don’t think this is a hurt you got by falling.

*(Public sector physician)*

Direct questioning is practiced by about half the sample, and is most common in response to physical injuries. It includes asking the patient whether she has been hit, who hit her, why it happened, how the injury occurred etc. Further, as alluded to in the earlier quote many physicians explained that they start with indirect questioning but then quickly transition into direct questioning by openly disagreeing with the patient’s explanation of the injury, bluntly telling them that they do not believe them and urging them to tell the truth.

Finally, the study of these screening practices also highlights how physicians’ orientation to screen and screening method are heavily influenced by the patient’s disclosure and mannerisms. When physicians screen for GBV they look for verbal and non-verbal cues from the

patient to decide where to take the conversation. Physicians believe that patients are also watching them, their tone, language, body language etc. and determining how much and what to disclose. As physicians screen using either the indirect or direct method of inquiry, patients begin to disclose and a continuous interplay between inquiry and disclosure unfolds (as depicted in Figure 2.1 with the double-sided arrow). This aspect of screening seems to be common practice across both private and public sector physicians and across genders. The dialogue between physician and patient continues with the physician obtaining facts, reflecting on their credibility, and encouraging the patient to reveal the truth. As explained by a public sector physician, when she sees indications that a woman may have been hurt, she first asks the reason for her injury. If the woman says she fell down, the physician probes for more details about the fall. In this way the physician keeps refining her questions until she gets to the “truth”.

### **3. Counseling**

As depicted in Figure 2.1, for many physicians in the study the next practice after screening for GBV was to comfort the patient and offer guidance on addressing their problems. This was commonly referred to as “counseling” by study respondents and included the following activities: listening to the patient; providing her with the space to talk about her problem; validating the injustices she experiences; comforting her; encouraging her not to give up hope; preventing her from hurting herself; and providing some suggestions on how to improve her situation or prevent future abuse. Here again the issue of time influenced the extent to which these activities could be followed. Some physicians also reported offering medications to calm their patients, help assuage fears, and help them sleep better, and recommended interventions such as permanent contraception and infertility treatment to preemptively avoid health problems that may stem from GBV.

Some physicians have developed culturally-appropriate strategies to respond to an issue as sensitive and private as GBV in a local context where women are subordinate to their husbands and others in the household and have limited decision-making power. One of these was to interact with husbands. In response to physical injuries, repeated requests for medical terminations of pregnancies, non-adherence to medical treatment or direct disclosure of physical, psychological or sexual GBV, most physicians reported (n=24) inviting husbands to the clinic. Some of them (n=8) emphasized communicating with husbands in such a way so as to build allies to improve women’s health rather than enemies, and avoiding putting the women at increased risk of violence. For instance, one respondent explained how she keeps the conversation professional and tries to encourage the husband to support his wife’s treatment:

I do talk to the husband and I don’t tell them that I have been told these things at all.... I don’t want them to feel threatened in any way and think that the wife is sneaking or telling me things... I generally stress more on the fact that the wife is not doing so well in her pregnancy, that she definitely needs to get all the investigations done, and she needs to take a better diet because she is not putting on weight. The baby’s not being so well, things like that. I don’t tell them, you know, I heard that you’re beating your wife, nothing like that.

*(Private sector physician)*

The majority of the study respondents however (n=16) considered it “better [that] husbands are spoken to”, and “made to understand about what they are doing is wrong so that

they will not repeat the same thing again”. They felt that husbands need to be educated about the ill-effects of being violent towards their wives.

A second strategy was to invite members of the extended family (mothers, mothers’ in-laws, other influential relatives) to the clinic if physicians were unable to reach out to the husband first, or felt the situation warranted talking with other family members. Given their understanding of the social context, they recognize that the family is important, and consider it pertinent for all family members to agree with any changes that the husband and wife might be asked to make, and to understand why women should not be treated in this way. Explaining her rationale for meeting with family members, one physician said:

...This is also important because if she listens and the family members they don’t listen, there’ll be a tug of war again, they’ll try to pull her down, uh, conflicts will be there.  
(*Public sector physician*)

The content of the counseling message is another important aspect to consider while evaluating physicians’ current practices in response to GBV. Unlike screening practices which are case-dependent, the content of the counseling message is remarkably consistent for an individual physician but varies among physicians reflecting the strong influence of their own internalized social norms (see Figure 2.2).

On one end of the spectrum are messages that reflect *a belief in nascent normative values of gender equality and human rights* consistent with popular notions in Western countries. These include believing women, validating the injustices they experience, and saying that violence is inappropriate and women should “not be treated this way”. More than half of the physicians (n=10) who espoused such values had received training or gender sensitization. They felt that it was their role is to provide women with information about their rights, choices, and the kinds of support services that exist. These physicians understand the prevailing culture and are responsible with their advice. While encouraging women to defend themselves, seek help, hold their own, and stop accepting violence at the hands of their husbands, they also caution against taking any radical steps, insisting that the woman is the best judge of her situation and needs to think about her context and the choices available before taking any steps. They believe that women cannot be expected to spontaneously leave their homes in response to GBV or coerced into taking action, but as one physician said, they should be informed about sources of help:

I always advise, when it is repetitive violence I always ask them to take help. To go to the police, to go to a senior person in the family, somebody, some way to curb it.  
(*Private sector physician*)

A few physicians (n=4), though internalizing nascent norms around gender and equality, imparted advice that could be harmful to women. For example, their recommendations included leaving the marital home, being bold and “*beat[ing] back [the husband]*”—all of which could be extremely dangerous for women in social contexts where women are stigmatized for leaving marriages and occupy a subordinate position relative to their husbands including being financially dependent on them. Another respondent, who stood apart from the others in all aspects of her practice, went a step further blaming women who “tolerate” GBV. When she counseled women she did not merely validate the injustices they experienced and comforted

them, but also reported reprimanding them for tolerating the violence and firmly telling them to leave their husbands and earn for themselves.

On the other end of the spectrum as depicted in Figure 2.2 are counseling messages that reflect a *belief in traditional norms* that may be dominant in society. These include tacitly ignoring violence against women in certain situations, and accepting a subordinate position for women relative to men, and gender roles where women bear the primary responsibility for the household and childrearing. Half the study respondents (n=15) imparted this kind of advice, believing that it was important to counsel women on “how to adjust” and how to make the best of the situation, or on why they had to tolerate the violence “for the sake of their children” and keeping the family together. Some common examples of the kinds of counseling messages given to patients are:

We analyze the things and tell her, convince her that this is how it should be or this is how you should react and this is good for you.  
(Public sector physician)

Try to adjust to the family problems, because it is there in everybody’s house. Something we tell like that. And settle the matter there.  
(Public sector physician)

Finally, somewhere in the middle of this spectrum lie inconsistent counseling messages. Such messages reflect the ambiguity in physicians’ own minds on how women should respond to GBV. They are familiar with, and probably even believe to some extent, nascent normative changes in gender relations, but are also influenced by the dominant beliefs in the society that women are subordinate to men and should bear the responsibility of childrearing. These individuals (n= 5) seem to be pulled in both directions. The contradictions in their mind on how women should respond are reflected in their counseling advice. They advice their patients to “be bold” and leave their husbands, but then immediately follow up by saying that women have to put up with everything for the sake of their children and that “everyone in life has problems” and they should learn to manage these problems.

#### **4. Referral**

Referral is the last of the four core practices in the process of *Making Meaning*. The majority of study respondents (n=20) did not refer patients to any support agencies, but instead referred them to clinical specialists such as psychologists or gynecologists, believing that the patient needed specialized help in these areas. However, if a patient presented with severe physical injuries or sexual assault warranting legal intervention, most physicians were aware of the protocol to be followed and reported referring patients to government hospitals where they could obtain the necessary documentation to file a police report. Few women were known to follow through and actually file a police report.

Limited referral to support services can be attributed to the limited availability of support services, but more importantly to physicians’ lack of knowledge about, and interaction with, the existing organizations that provide such services in their local areas. Further, time, though discussed more in the context of future health interventions (discussed in more detail in chapter 3), was an implicit barrier to referral practices. Physicians perceived inquiring about services and supporting their patients to connect with these services to be difficult given other professional

responsibilities that needed to be completed in the same time period. They also felt ill-equipped to address anything beyond simple comforting and counseling and were inclined to refer patients to specialists:

...What which is beyond us, what we are not able to help, or what we are not able to give, we send them to the higher centers.

*(Public sector physician)*

A small subset of study respondents however (n=10) reported having taken the initiative to inquire about support services in their communities, or noting the contact information for organizations they had either met or heard about through the media, and actively referring their patients to these services. One public sector physician with administrative authority explained how she had taken action at the policy level by interacting with non-governmental organizations (NGOs) in the area surrounding the public health clinic where she worked. She had effectively formed a network of providers offering a range of support services to women in need. Given the differential expertise of service providers she felt that organizations needed to connect and learn about each other and their respective skill sets. As a physician she could provide medical services, but when approached by a patient who needed more than clinical help or basic comforting connecting with this network would enable her (as it would others in the group) to link the patient with the organization best suited to meet her individual needs.

### **Discussion**

To my knowledge, this is the first study from India to examine primary care physicians' practices in response to GBV. Study findings indicate that even in the absence of training and guidelines, many primary care physicians are sympathetic to women, engage with and understand the communities in which they work, and have developed indigenous and culturally-sensitive practices to respond to GBV. Several concepts identified through the application of theoretical frameworks described earlier were consistently found to influence physician practice and the strategies they employed to address GBV. These include physicians' perceptions towards their professional role, attitudes towards GBV and women's status in society, internalized social norms, and knowledge and awareness of social context and the availability of resources to help women. The study findings highlight the urgent need to support physicians' current efforts with training that enhances their skills and confidence in better assisting patients at risk of GBV; and that addresses the norms and attitudes that influence their practice. Existing training programs and guidelines being implemented world-over need to be adapted to the Indian context, introducing structure and consistency to physician practice, yet ensuring that the unique and creative aspects of physicians' current organically-developed practices are not entirely lost.

Here I will discuss some of the key findings that led to this conclusion. Consistent with other research (Rodriguez, Bauer, McLoughlin, & Grumbach, 1999; Roelens, Verstraelen, Van Egmond, & Temmerman, 2006), the study respondents could easily recognize physical signs of GBV and were knowledgeable about the adverse effects of GBV on women's health. Unlike other research, however, many of the study respondents also emphasized the linkages between women's psychosomatic and psychological complaints and their experience of GBV. The presence of vague symptoms: back ache, chronic body ache, headaches, repeated clinic-visits, unresponsiveness to treatment, and anxiety were all commonly reported indications of GBV. Some respondents also identified signs of sexual violence and were able to establish the linkages between women's experience of sexual violence and their mental state of mind. These detailed

observations suggest a thorough diagnostic practice, where study respondents are not merely treating the clinical conditions that patients present with, but pay close attention to details which on the surface may appear unrelated.

Current screening practices though selective, inconsistent, and likely resulting in many cases going unnoticed, have certain unique aspects that reflect sensitivity to the social context. In a society that implicitly ignores violence against women (Go, Sethulakshmi, Bentley, Sivaram, Srikrishnan, Solomon et al., 2003; Jejeebhoy, 1998), and where women themselves accept violence from their marital partners (Jejeebhoy, 1998) universal screening with direct questions about GBV asked out of context may be perceived as inappropriate by women and may not yield disclosure. It might have the reverse effect since “some [women] don’t like that [physicians] are asking” and may become silent. Or, as articulated by a private sector physician in this study and consistent with other research (Gerbert, Caspers, Bronstone, Moe, & Abercrombie, 1999; Rodriguez et al., 1999; Roelens et al., 2006; Velzeboer, 2003) routine screening for GBV when things are going “well and [the couple has] no problems and have a happy married life” may be perceived as offensive. Instead, study respondents’ practices of selectively screening only those perceived to be at risk, using a personalized approach, and delaying screening to later visits only after establishing familiarity with the patient may be more favorable to Indian women. The current practices emphasize gaining trust and building strong patient-provider relationships. Future studies are also needed to assess Indian women’s perspectives on what they desire and expect from health care providers before we can safely conclude which approaches to GBV-screening and intervention are most suitable for the Indian context.

Studies from Western countries reveal that physicians employ similar practices for responding to GBV. After over 20 years of recommendations for universal screening for GBV using standardized screening protocols, most physicians do not screen on a routine basis (Rodriguez et al., 1999; Waalen, Goodwin, Spitz, Petersen, & Saltzman, 2000). Instead, screening for GBV tends to be selective with specific patient attributes such as the presence of physical injuries and younger age of patient significantly increasing the likelihood of screening (Jonassen & Mazor, 2003; Rodriguez et al., 1999). The effectiveness of universal screening in improving women’s outcomes is still controversial (Gutmanis, Beynon, Tutty, Wathen, & MacMillan, 2007; Ramsay, Richardson, Carter, Davidson, & Feder, 2002; Rodriguez et al., 1999), and many recent studies reveal physician preference for “opportunistic” screening considering it inappropriate to question all patients about GBV (Gerbert et al., 1999; Roelens et al., 2006). Expert panels in primary care and prevention, such as the US Preventative Task Force now support this kind of screening (Gutmanis et al., 2007; Plichta, 2007). Research with physicians who have expertise in addressing GBV has also found that, similar to respondents in this study, physicians have developed a mixed approach to screening partly because of the difficulty in getting direct positive disclosures (Gerbert et al., 1999). They use direct questioning in the case of acute and visible injuries and indirect questioning for less visible and more difficult cases. They also advocate for a reorientation of the goals of universal screening. By screening for GBV, physicians should not be aiming to merely “fix” a problem, but rather to develop trusting relationships with their patients. Physicians’ goal should be to ask about GBV in a compassionate manner, to disseminate antiviolence messages, and to create the space for patients to talk about their experience of GBV whenever they felt ready.

The counseling practices described by study respondents reflect an awareness of, and respect for, local context. For instance, many respondents have employed creative approaches to counseling by inviting husbands to the clinic, and encouraging them to be supportive of their

wives' health and well-being and to refrain from abusive behavior. Other respondents explained that just counseling the woman and providing her with solutions was futile if she had to return to a hostile home environment, putting her at greater risk of violence if she chose to respond to the violence by seeking external help. Unlike some western countries including the United States where such practices would be illegal under privacy laws, in the Indian context these practices are illegal and might be an important strategy given the importance of extended family members in decision-making related to most household and personal matters. Several respondents also emphasized their roles in validating the injustice that women experience. This concept of validation was drawn from the application of the human rights framework to this research.

Though culturally-appropriate the adverse effect of norms and attitudes on the core practices of screening and counseling is evident, illustrating the urgency to support physicians' current efforts with training and guidelines. In physicians' screening practices, for instance, the decision to screen is often influenced by one of two attitudes. One is the notion that GBV is more common among lower socio-economic classes due to characteristics unique to men and women from these classes and it would be a waste of time for a physician to intervene. Two is the attitude that some problems are "small" and "private" and should be resolved by the couple on their own without requiring physician intervention. In physicians' counseling practices, the influence of norms and attitudes is seen in the content of the counseling messages. The fact that more than half the study respondents believed that it was important to counsel women on "how to adjust" and how to make the best of their situation for the sake of their children reflects an internalization of traditional norms that may suppress women. The advice to leave home or to "beat back" their husbands in response to GBV is another example. Here physicians are influenced by nascent norms about gender equality and have good intentions. Yet, without a comprehensive understanding of women's reality their counsel is potentially more harmful than beneficial. Similarly, with internalized norms that GBV is "to some extent" a part of married life and couples can and should sort out their own problems, physicians tend to hold back on referring patients to support services. Norms that organizations should take the initiative to approach the physician or that women should independently seek help further influenced referral practices unfavorably.

Other research confirms the undesirable influence of norms and attitudes on physician practices. A study from community-based practices in Oregon, Portland in the United States found that physicians' norms about socioeconomic class influences their practice, restricting their ability to empathize with women perceived to be able to leave abusive relationships—given their financial independence, education levels, and good health—and who choose to stay on (Nicolaidis, Curry, & Gerrity, 2005). Another study based in Virginia Beach, Virginia showed that negative feelings towards the work involved in intervening for GBV poses an impediment to routine practices (Garimella, Plichta, Houseman, & Garzon, 2002). In contrast, a study with a nationally-representative sample of US medical students found that just believing that it was extremely important for physicians to talk to patients about GBV favorably influenced the frequency of discussion about domestic violence with patients (Frank, Elon, Saltzman, Houry, McMahon, & Doyle, 2006).

Another challenge to physicians' practice is the limitation of time. Time (discussed in detail in Chapter 3: What is needed for a health sector response to GBV in India: primary care physicians' perspectives) was implicitly stated as a deterrent to three out of the four core practices (screening, counseling and referral). Feeling overwhelmed by multiple responsibilities and the limited time available physicians refrained from routine screening, in-depth counseling,



and detailed referral and case management. It was also stated as one of the reasons why physicians felt they could not independently educate themselves about the existing support services and connect their patients to these services and/or provide comprehensive follow-up care.

It can be argued that primary care physicians' current practices in light of these challenges—limited time, infrastructural shortages, limited support services, and the adverse influence of norms—are as ideal as they can be and interventions to enhance their practices are unnecessary. However, when contrasted against the practices of a small subset of physicians at the forefront of responding to GBV, the scope for improving physicians' practices in general through training is highlighted. While studying each of the core practices of *making meaning*, a small subset of physicians (n=10) stood out as unique in their characteristics, and the actions and strategies they are pursuing to address GBV among their patients. These physicians report screening most patients, and offering support and counsel that emphasizes the creation of rights consciousness and awareness of support services among women, while encouraging them to make their own decisions. These physicians are self-motivated and have taken the initiative to enhance their own skills and train their staff, and have identified and networked with organizations that provide specialized services to women in distress. More than half of them had received training on GBV management or gender sensitization, or, at a minimum, had influential role models in their professional and personal lives teaching them to make the connections between social problems and health and the importance of treating patients holistically.

The favorable impact of training on physicians' practices is consistent with research from multiple studies. Training has been found to influence physicians' confidence and sense of preparedness in their ability to screen clients for GBV and then assist them (Gerber, Leiter, Hermann, & Bor, 2005; Gutmanis et al., 2007; Jonassen & Mazor, 2003; Lapidus, Cooke, Gelven, Sherman, Duncan, & Banco, 2002). It helps to break down many of the perceived barriers to identification (Center for Enquiry into Health and Allied Themes, 2007; Jacobs & Jewkes, 2001), making them more aware of risk factors for, and indicators of, GBV, and the availability of community resources (Glowa, Frazier, Wang, Eaker, & Osterling, 2003; Gutmanis et al., 2007; Jonassen & Mazor, 2003; Lapidus et al., 2002; Stayton & Duncan, 2005). This awareness and confidence, in turn, significantly increases physician GBV-practices, especially screening and referral (Gutmanis et al., 2007; Lapidus et al., 2002; Rodriguez et al., 1999; Roelens et al., 2006; Stayton & Duncan, 2005). The reverse has also been empirically established. A study with obstetricians-gynecologists in Flanders, Belgium found that physicians were sympathetic to women and skilled in recognizing GBV but felt insufficiently skilled in intervening and responding to GBV (Roelens et al., 2006). Studies from the United States and one study from Pakistan and India respectively, have shown that physicians' reluctance to screen for GBV and to intervene arises from perceived lack of self-efficacy and comfort on how to intervene (Fikree, Jafarey, Korejo, Khan, & Durocher, 2004; Gutmanis et al., 2007; Jaswal, 2000; Rodriguez et al., 1999).

In summary, the study findings highlight the creative and culturally-appropriate GBV-practices developed organically by physicians. But the influence of internalized norms and attitudes is strong and can be unfavorable. Even though we cannot generalize the study findings given the small sample and the limitations of qualitative research as described in detail below, the findings do underscore that of a growing body of literature suggesting that the absence of formal training and guidelines for physicians is a deterrent to consistent and thorough inquiry and follow-up in response to GBV. Many physicians in this study may be observing and

screening for GBV, but they lack the skill and confidence to follow through and perform detailed assessments helping the patient to map out her risks and potential sources of support. The limitation of time underscores the need for simplifying physicians' practices by enhancing their skills and introducing standardized guidelines for screening, counseling, and referral, and making these part of standard physician practice with mechanisms for monitoring. This needs to be combined with training for support staff, including nurses, social workers, counselors, and outreach workers. Training may enable these individuals to better assist physicians in all of the core practices right from identifying women at risk of GBV to providing detailed case-management and this, in turn, may substantially improve physicians' practices over time facilitating earlier detection, assessment, and referral for GBV. It is equally important to enhance, in parallel, the quality and reach of preventive and reactive support services for women at risk of GBV so physicians have a trusted place to refer their patients for specialized assistance.

### **Limitations**

As with most qualitative research, these findings are limited by a lack of randomized sample selection and small sample size, and findings cannot be generalized to other primary care physician populations in other parts of India. Despite my efforts to sample widely and capture variation, there is bound to be self-selection with only those who were interested in/or at least curious about addressing GBV having participated in the study. Furthermore, since this was a formative research study where the aim was to understand the key issues from the perspective of primary care physicians we sampled purposively selecting physicians best suited to provide richness of information. The findings might also suggest more physician inquiry and empathy towards women since research shows that the proportion of physicians inquiring about GBV is directly associated with the proportion of women patients in their practices (Glowa et al., 2003) and this was one of the study eligibility criteria; respondents had to have a case load comprising of at least 50% of women in the reproductive age group. Hence, the number of physicians responding to GBV in this sample might be higher as compared to the response rates among physicians with more male clients in their practice. Finally, results from other studies with larger samples (Lapidus et al., 2002; Rodriguez et al., 1999; Waalen et al., 2000) tend to reveal more negative results as compared to this study i.e. they find a higher proportion of physicians do not screen, counsel, or refer for GBV, and do not follow practice guidelines. While future studies with larger samples across multiple sites in India are critical to further explore physicians' practices in response to, and perspectives towards, GBV, the central message from this small study is that some physicians have developed, in the absence of any training or guidelines, indigenous and culturally-sensitive practices to respond to GBV. It is perhaps more useful to build on these positive indigenous practices as the basis for a context-specific health facility response rather than focus on the negative and non-existent practices.

### **Conclusion and implications for future research and practice**

Given the paucity of research on Indian physicians' practices in response to GBV and perspectives on GBV, the study findings, despite their limitations, will be useful for future research and practice. While we cannot generate causal relationships, these findings offer insights into key issues such as physicians' general empathy towards women experiencing GBV; organically developed and culturally-sensitive practices that are being implemented; and the areas where physicians are in need of support. These findings may help to set future research priorities. Replicating this kind of qualitative research with a larger sample size in other parts of

the state of Karnataka, and subsequently throughout the country, would be the important next step to improve the generalizability of study results. Large national or multi-site surveys and/or randomized studies could follow to study the association between physician-training on how to respond to GBV and their actual practices; as well as the impact of physician interventions on women's disclosure about GBV and their practice of safety behaviors such as the use of support services. Such research will be critical to understanding whether a health facility response to GBV, tried and tested in other countries, can be successfully adapted to the Indian context.

These findings also help to generate hypotheses as to what types of programs might be needed at health facilities to mitigate the prevalence of GBV. For instance, physician training and sensitization that capitalizes on their basic awareness about GBV teaching them to not only mentally note the indications of GBV but to respond to it in a sensitive manner. Training efforts must also address physician stereotypes, perceived lack of professional responsibility to intervene for GBV, and negative feelings towards the work involved in GBV-intervention. They must aim at enhancing clinical knowledge about GBV and emphasize the adverse impact on women's health and create more positive feelings towards assisting women at risk of GBV. Most importantly however, while we adapt and learn from Western models of health facility-based interventions for GBV, it is important to not overlook the unique practices of some physicians, as revealed in this study, and incorporate the benefits of these organically developed practices. The counseling strategy, for example, of involving the husband and emphasizing the adverse health implications of the violence rather than the violence itself, or who caused it, but encouraging the husband to be an ally and support his wife's healthy pregnancy could have a favorable impact on women's future health and well-being. Other creative efforts such as using antenatal visit time to screen for GBV and/or to disseminate information on women's rights and laws protecting against violence could also be explored. Additionally, programs to enable the creation and strengthening of linkages between health institutions, healthcare providers, other institutional support services (for example, the police station and community-support services) are needed. Such linkages can help ensure that each group is aware of the other's presence and unique skills, enabling a collective and timely response to women at risk of GBV.

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## Tables and figures

**Table 2.1: Application of key constructs from theoretical frameworks in study**

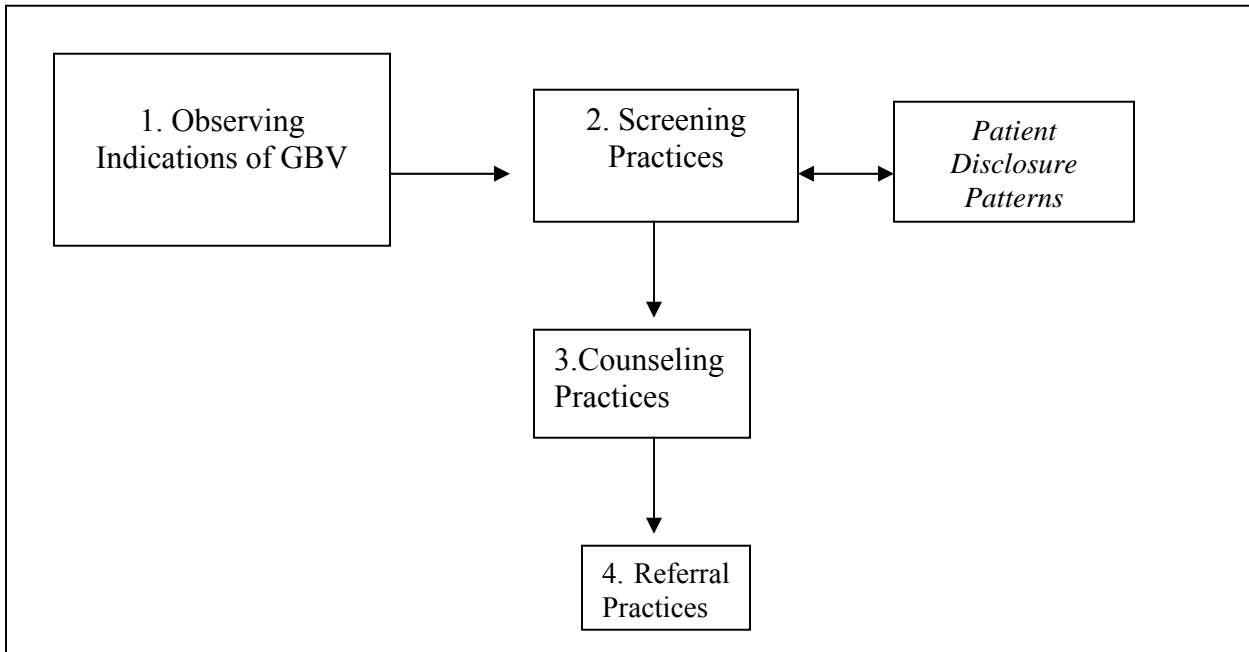
Construct	Application in formative research study with physicians
<b><i>Human Rights Framework</i></b>	
Right to the enjoyment of the highest attainable standard of physical and mental health	What are physicians' perceptions of their professional role -Should they respond to GBV -If so, how
Right to complete physical, mental and social well-being in all matters relating to the reproductive system and to its functions and processes	-What do they do now -Do they feel these procedures/steps that they follow are ideal -Do they validate/invalidate the injustice women experience
Right to safe and satisfying sex life	What is their awareness of the social context
Right to make [informed] decisions concerning reproduction free of discrimination, coercion and violence	Where is a woman's position in society/relative to her husband What constitutes as GBV -Does it include sexual, psychological, economical violence and other forms of harassment such restricting mobility, curtailing use of family planning etc
<b><i>Theory of Planned Behavior</i></b>	
Attitudes	What are physicians' attitudes towards GBV Do all women experience GBV, or is restricted to certain socioeconomic classes, religions, castes etc How do these attitudes influence practices—do they screen/counsel all patients
Behavioral Beliefs	What are physicians' beliefs about providing GBV-services (screening, counseling, and referral) Are there any positive/negative outcomes and attributes associated with the provision of services-will women benefit—is it worth getting involved
Normative Beliefs	What are physicians' beliefs about peers, organizations, others—do they support or discourage the provision of such services
Motivation To Comply	Do physicians demonstrate a motivation to comply with what peers, organization, others think is right
Perceived Control Beliefs	What is a physician's sense of self-efficacy in his/her ability to respond to and manage GBV among their patients Do they perceive external factors that that make it easier or harder to provide services
Perceived Power	Do they perceive to be able to control or manage these external factors What is the perceived effect of each of these factors and environmental conditions in enabling/disabling the provision of services



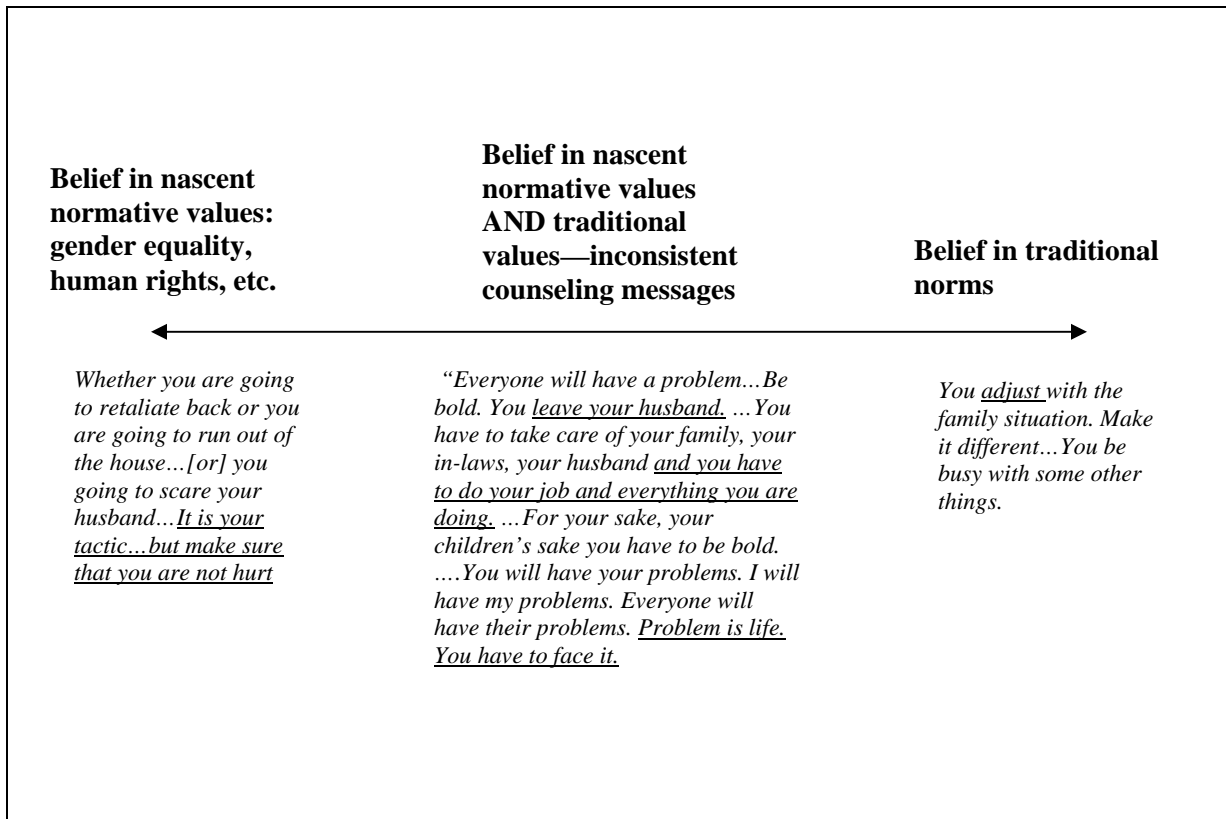
**Table 2.2: Socio-demographic characteristics of sample**

Variable Description	N (%)
Practice Setting	
Public clinic (urban health center or maternity hospital)	12 (40)
Private clinic	15 (50)
Hospital	3 (10)
Gender	
Female	24(80)
Male	6 (20)
Specialty	
General Physician	16 (54)
Gynecologists	11 (36)
Other	3 (10)
Additional Administrative Duties	
Yes	14 (47)
No	16 (53)
Years in practice	
5-10	11 (37)
> 10 years	19 (63)
Received Training on gender sensitization and GBV	
Yes	7 (23)
No	23 (77)

**Figure 2.1: Physicians' process of Making Meaning and its four core practices**



**Figure 2.2: The spectrum of counseling messages and the visible influence of norms and attitudes**



**Chapter 3: Building a health sector response to gender-based violence in India: Primary care physicians' perspectives**

## Background

Globally, the widespread prevalence of gender-based violence (GBV) and its adverse impact on women's physical, mental, and reproductive health has been well established (Ellsberg, 2005c; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006; Koenig, Stephenson, Ahmed, Jejeebhoy, & Campbell, 2006; Panchanadeswaran & Koverola, 2005). Since the 1990s, GBV has been recognized as a public health priority area by several international agencies (United Nations General Assembly, 1993; World Health Assembly, 1996). It has been defined as a broad range of physically, sexually, and psychologically coercive acts of violence directed against women by their male partners, arising from inequities in gender roles and relationships (Ellsberg, 2005c; Garcia-Moreno et al., 2005; Koenig et al., 2006).

The pervasiveness of GBV in India is also well established. According to community-based research and studies with nationally-representative samples, physical violence ranges from 19% to 65% (Kishor & Johnson, 2004; Krishnan, 2005; Silverman, Decker, Saggurthi, Balaiah, & Raj, 2008), psychological violence ranges from 18% to 72%, and sexual violence ranges from 10% to 50% (Batliwala, Anitha, Gurumurthy, & Wali, 1998; Duvvury, Nayak, & Allendorf, 2002; International Clinical Epidemiological Network, 2000; Koenig et al., 2006; Martin, Tsui, Maitra, & Marinshaw, 1999; Stephenson, Koenig, & Ahmed, 2006b; Varma, Chandra, Thomas, & Carey, 2007; Vizcarra, Hassan, Hunter, Munoz, Ramiro, & De Paula, 2004). Data are also available from the southern state of Karnataka, where this study was conducted. Estimates of physical violence range from 27% to 56% (Chandrasekaran, Krupp, George, & Madhivanan, 2007; Krishnan, 2005; Rocca, Rathod, Falle, Pande, & Krishnan, 2009), sexual violence was reported as 18% in one study among rural women in the 18-40-year-old group (Batliwala et al., 1998), and psychological abuse was reported at 69% among women seeking services at a voluntary counseling and testing center in an urban location (Chandrasekaran et al., 2007).

The linkages between GBV and women's health have also been examined in the Indian context. Exposure to GBV increases women's risk for physical injuries and chronic pain (Jejeebhoy, 1998), unintended pregnancies, miscarriages, and other gynecological morbidities (Stephenson, Koenig, & Ahmed, 2006a; Stephenson et al., 2006b), and mental health disorders, including suicide (Patel, Kirkwood, Pednekar, Pereira, Barros, Fernandes et al., 2006; Varma et al., 2007; Vizcarra et al., 2004). Recent evidence also shows that GBV exposure increases women's risk of acquiring HIV (Jain, John, & Keusch, 1994; Newmann, Sarin, Kumarasamy, Amalraj, Rogers, Madhivanan et al., 2000).

This evidence has led to repeated recommendations in the literature, both globally and in India, regarding the unique role of, and need for, physicians to prevent the escalation of GBV, and manage resulting health outcomes (Chandra, Deepthivarma, Carey, Carey, & Shalinianant, 2003; Jejeebhoy, 1998; Koenig et al., 2006; Muthal-Rathore, Tripathi, & Arora, 2002; Prasad, 1999). Researchers argue that physicians need to know about women's experiences of GBV in order to provide appropriate clinical treatment, especially for sexual and reproductive health conditions (Guedes, Bott, & Cuca, 2002). Evidence also shows that women who experience GBV rarely seek help from the police or other support agencies, until their conditions are near fatal (Colombini, Mayhew, & Watts, 2008; Panchanadeswaran & Koverola, 2005; Watts & Mayhew, 2004). Women will, however, seek health care at some point in their adult life (Colombini et al., 2008). This presents an opportunity for early identification of GBV; limiting the health consequences resulting from GBV; and preventing the further escalation of the problem, including fatalities such as women's attempts at suicide (Colombini et al., 2008).

In India, with the substantial increase in health care utilization by urban women across many parts of the country, opportunities for physicians to assist women experiencing GBV are now greater than ever. For example, in the state of Karnataka, where this study was conducted, urban women's utilization of antenatal care increased from 89% to 95% between 1991-92 and 2005-06, and the rate of institutional deliveries increased from 68% to 85% during the same time period (National Family Health Survey, 2005-06). Other studies indicate that as women use antenatal care and come into contact with health care professionals, they become more aware of the available services and may favorably change their future health care seeking practices (Ram & Singh, 2006; Sugathan, Misra, & Retherford, 2001).

Despite this unique opportunity, limited published research has examined Indian health care professionals' (physicians and nurses) current response to GBV and perspectives on the feasibility of a health facility-based response to GBV. We only know that at present with rare exceptions, health care professionals do not receive training or gender sensitization during their education (Majumdar, 2004). There are no national or institutional policies requiring them to respond to GBV among their patients. Nor are there any guidelines on when they should intervene against GBV, or on what specific actions in the Indian context are appropriate and warranted (Deosthali & Malik, 2003). Only in cases of rape or sexual assault, are physicians working at government hospitals required to collect forensic evidence, and provided guidelines on how to respond to these cases (Deosthali & Malik, 2003). However, there are few mechanisms to ensure that physicians understand and implement these guidelines appropriately (Jaswal, 2000). Women still complain of having to shuttle back and forth between the police station and hospital before the necessary procedures can be completed. The most recent legislation to protect women against domestic violence outlines, for the first time, a specific role for health care professionals in responding to violence against women ("Protection of Women from Domestic Violence Act," 2005). However, health care professionals' awareness about this law, their role in protecting women, and the resulting changes in their practices, are yet to be rigorously evaluated.

There have been two noteworthy efforts to develop a health sector response to GBV in India. The Achutha Menon Center for Health Science Studies in Trivandrum, in the state of Kerala, focuses on early gender sensitization for health care professionals (Achutha Menon Center for Health Science Studies, 2007). In July 2002, the Center started a project to incorporate gender and ethics training into medical school curricula across six Indian states, impacting 45% of all medical colleges in the country. The project includes: gender and ethics training for medical school faculty, interactive training sessions for students, opportunities for faculty and students to discuss issues at a national platform, and a review of medical school text books towards re-evaluating the way gender issues are discussed in medical education. The impact of this effort has not been evaluated. The second important initiative focuses on a tertiary-level response to GBV. The Center for Enquiry Into Health and Allied Themes (CEHAT) in Mumbai city, in the state of Maharashtra, collaborated with the Mumbai city municipal corporation to establish a crisis center for women experiencing GBV in a tertiary-care government hospital (Center for Enquiry into Health and Allied Themes, 2007). Prior to establishing the center, they conducted gender-sensitization and skill-building training for all health care professionals at the hospital (physicians, nurses, and other lower-level staff), teaching them how to identify and respond sensitively to GBV. CEHAT adopted a participatory training approach which enabled physicians to develop a list of indications of GBV that they should routinely watch for, and that should prompt them to screen for GBV. The crisis center offers counseling, legal aid, temporary

shelter, and referrals to other social support agencies. CEHAT is now expanding this program to other hospitals across Mumbai city. No published evaluations of this effort have been conducted thus far, but a review of internal process documents and personal communication suggests that training has enhanced health care professionals' ability to identify, assess, and refer GBV-patients to the crisis center, and thereby helped approximately 1500 women in accessing support services (Deosthali, 2009). The staff operating the crisis center believes that early detection and intervention for GBV has arrested the escalation of violence and other fatal outcomes; for example the number of attempted suicides by women has decreased.

In addition to the above described efforts, several international not-for-profit organizations (for example, PATH, CARE International, and the International Center for Research on Women) (Duvvury, Prasad, & Kishore, 2006; Program for Appropriate Technology in Health, 2003), have incorporated training on gender-sensitization and GBV management for health care professionals working on their India projects. However, unlike similar programs in industrialized countries, none of these programs in India have been rigorously evaluated, and the only available publications are brief descriptive analysis of these projects on the organizations' websites.

Although the health-sector response to GBV has been abysmal, there are other responses to GBV in India which are better documented. For example, the central government has enacted laws to enforce women's rights (Poonacha & Pandey, 1999). Moreover, several state governments are attempting to buttress the enforcement of these laws by establishing police stations staffed by female officers and designated specifically to handle crimes against women (Chikarmane, 1999). A more diverse and creative set of responses has been put forth by non governmental organizations (NGOs), both independently and in collaboration with state governments (Poonacha & Pandey, 1999). Social workers at these NGOs provide services such as family counseling and mediation, psychological support, short- and long-stay shelter, vocational training, and other income-generation opportunities aimed at empowering women economically and psychologically. Such services are limited in number and reach, and vary in quality, but are increasingly becoming available in urban areas across the country. Finally, the last type of response to GBV moves beyond the individual case to enable broader social change and transform the system and culture that permits such behavior against women (Poonacha & Pandey, 1999). These include efforts by NGOs and state-sponsored agencies to lead public-awareness campaigns about violence against women, gender equality, social ills such as dowry, and legal rights, among others. Many NGOs are also working directly with communities to form women's self-help collectives that may serve as both a preventive and reactive response to individual cases of GBV.

A review of the health sector response to GBV in other countries reveals that, as far back as the 1980s, several professional medical organizations in industrialized countries introduced guidelines for health care professionals on responding to GBV (Rodriguez, Bauer, McLoughlin, & Grumbach, 1999; Thurston & Eisener, 2006). Although the long-term effectiveness of such health sector responses, in improving women's health and preventing future abuse, are yet to be understood, evidence that women have benefited from health care professionals conducting routine screening, assessment and referral for GBV do exist. In general, women were appreciative of being asked about GBV, and viewed physicians as playing a critical role in raising awareness about the experience and risks of violence, especially if they were at earlier stages of abuse (Chang, Decker, Moracco, Martin, Petersen, & Frasier, 2003; Zink, Elder, Jacobson, & Klostermann, 2004). They wanted routine inquiry, counseling, and access to

information and resources (Chang, Decker, Moracco, Martin, Petersen, & Frasier, 2005). They wanted to develop trusting relationships with physicians, where choices and support would be available to them over the long term, even if they chose not to disclose their experience of GBV and/or refused services in the first few interactions with the physician (Chang et al., 2005; Dienemann, Glass, & Hyman, 2005; Feder, Hutson, Ramsay, & Taket, 2006). Routine inquiry about GBV by health care professionals led to increased likelihood of disclosure by women (Hathaway, Mucci, Silverman, Brooks, Mathews, & Pavlos, 2000; Krasnoff & Moscati, 2002). Further, when inquiry was followed by referral information and nurse-case management, women were more likely to practice safety behaviors such as keeping money aside, asking neighbors to call police if violence occurs, and keeping ready all critical documents necessary in the event of an emergency exit (McFarlane, Groff, O'Brien, & Watson, 2006).

In developing countries as well, there are several ongoing efforts to establish health-sector interventions to respond to GBV. Most of them, however, are in the early stages of conceptualization or implementation, with forthcoming plans for evaluation, and hence, available publications provide mostly descriptive analysis of these efforts. Another limitation is that the English translations of program evaluations are yet to be made available. A review of these program descriptions, however, demonstrates that health sector efforts in low and middle income countries are different from those in industrialized countries, in that they go beyond implementing basic training and guidelines for health care providers. What they emphasize is the integration and collaboration among all service providers at a health facility, and among multiple sectors providing varied services to women who experience GBV (Haque & Clarke, 2002; Jacobs & Jewkes, 2001; Schraiber & d'Oliveira, 2002; Velzeboer, 2003). Further, they highlight the importance of introducing legislation to improve women's access to justice; national policies that outline specific roles for service providers; and training for service providers at all levels and across all sectors, including the health sector and law enforcement agencies (Haque & Clarke, 2002; Jacobs & Jewkes, 2001; Schraiber & d'Oliveira, 2002; Velzeboer, 2003). Finally, they give importance to developing and strengthening linkages with community agencies, building on their strengths and networks, in order to create rights consciousness among women and the desire to hold service providers accountable.

There have been several approaches to implement GBV services at primary and secondary levels of health care, but evidence of their effectiveness remains forthcoming. One model has been to integrate selected services (screening, counseling, psychological therapy, health care treatment, and legal aid) at a single facility. For example, in Brazil, a dedicated counseling and support intervention for GBV survivors was established within a primary care center (Schraiber & d'Oliveira, 2002). Similarly, in Thailand, a one-stop crisis center to respond to women experiencing GBV was set up at a provincial hospital (Grisurapong, 2002). Another model has been to establish linkages across multiple service providers, wherein basic services (health care treatment and GBV screening) are available at one facility, with extensive referrals to other facilities for specialized services. For example, at three regional affiliates of the International Planned Parenthood Federation (IPPF), which offer primary-health care, screening and counseling for GBV were integrated into existing sexual and reproductive health services. Additionally, all health care professionals were trained to screen, treat, and refer survivors of GBV, and a standardized screening tool was developed (Guedes et al., 2002). Finally, each IPPF affiliate established partnerships with local non-governmental organizations (NGOs), referring women to these organizations for specialized services.



In summary, GBV is widely prevalent in India and there are several reasons that justify the need to examine the feasibility of a health facility-based intervention for GBV. First, the association between women's exposure to GBV and adverse health outcomes is well established. Second, data from industrialized countries demonstrates the potential benefits to women from a health-sector response to GBV. Third, there are data to show that Indian women's utilization of health care is increasing. Fourth, there is a paucity of data on Indian health care professionals' perspectives on responding to GBV. And finally, although lacking rigorous evaluations, there are data to show that health sectors in other low and middle income countries are responding to GBV, and undertaking multi-sectoral interventions. The potential benefits of such GBV interventions in the Indian health sector context need to be examined.

This paper presents data from a qualitative study undertaken with primary care physicians in Bangalore city, in the state of Karnataka, in southern India, to explore physicians' perspectives and current practices in response to GBV. The specific research questions of this study were: (1) what are physicians' current practices in response to GBV? ; (2) what is their knowledge about its prevalence and impact on women's health, and their attitudes towards women who experience GBV? ; and (3) what are their perspectives on the feasibility and needs for a future health facility-based intervention for GBV? Data pertaining to the specific research questions 1 and 2 were analyzed and described elsewhere (Paper 1: Indigenous Physician Practices to address GBV: Findings from a study with primary care physicians in Bangalore, India). In this paper, I present data on the third research question, describing the main themes that emerged as important elements to consider for a future health facility-based response to GBV in the urban Indian context.

### **Theoretical framework**

A broader human rights perspective and a more individual-focused, psychology-based theory of behavior, helped frame and contextualize the full study of primary care physicians, of which this paper is a part. The former human rights perspective, however, is of most relevance to this aspect of the research. One of the two human rights treaties articulates "the right of everyone to the enjoyment of the highest attainable standard of physical and mental health" (Annas, 1998 p.1779). Jonathan Mann, a scientific leader in the early fight against HIV/AIDS and a human rights advocate, said that public health and human rights are mutually dependent; defying human rights can have adverse physical and mental health implications, while safeguarding and promoting basic human rights can enable health promotion (Mann, 1997). Reproductive rights, a focus area within health, are acknowledged as "complete physical, mental and social well-being in all matters relating to the reproductive system and to its functions and processes" (United Nations Population Fund, 1994 para.1). Certain aspects of international human rights are incorporated into the larger framework of reproductive rights, including the right of all to be informed, and "to make decisions concerning reproduction free of discrimination, coercion and violence" (United Nations Population Fund, 1994 para.2).

Applying this human rights perspective to GBV and the role of health professionals in mitigating GBV, helped me identify and articulate key constructs that I was interested in examining in my research. These included physicians' perceptions of their professional role vs. other service providers in responding to GBV; their notions around ensuring privacy, patient confidentiality, and patient autonomy in decision-making; and their views towards their roles in promoting women's access to community services, amongst others. These ideas influenced the development of the research instruments, as well as my conduct of data collection. They also

provided a lens with which to review the literature on GBV interventions that are being tried and tested in different countries.

Additionally, the aspect of the research with primary care physicians described in this paper was guided principally by the philosophy and approach of grounded theory, a qualitative research methodology. Although described in more detail under the Methods section below, briefly, grounded theory is a conceptual approach to data collection and analysis that emphasizes discovering and developing a theory from within, that is, a theory that is grounded in the data, rather than “beginning with a theory and trying to prove it” (Strauss & Corbin, 1990 p.23).

## Methods

### Study setting and sample selection

This study built upon the Samata Health Study (SHS), a two-year, longitudinal observational study among married women between the ages of 16 and 25 residing in urban poor communities in Bangalore, the capital of Karnataka state. SHS was conducted in collaboration with the city municipal corporation (Bruhath Bengaluru Mahanagara Palike, BBMP) (Rocca et al., 2009). In response to the high prevalence of IPV observed in SHS (Rocca et al., 2009), qualitative research was undertaken to examine primary care physicians’ practices and attitudes towards IPV, and perspectives on future health facility-based GBV interventions. The analyses of these data are presented here. Study eligibility included practicing in Bangalore’s east zone, where SHS was conducted; serving low- to middle-income female clients; specializing in family medicine, internal medicine, obstetrics and gynecology, or pediatrics; and having a client load that was at least 50% female, with 18-30-year-olds comprising half this female clientele. Since this was a formative study aimed at exploring physicians’ perceptions about GBV, I purposefully sampled physicians with a large female clientele in a similar age groups as SHS, with the rationale that these physicians would be better equipped to provide rich illustrations of their experiences with women than physicians who had few women patients.

Purposive sampling, a non-probability sampling technique where sampling units are purposefully selected to facilitate comparisons, was used to select study participants (Ellsberg, 2005a). Comparison between different types of physicians (by sector, age, gender etc.) was beyond the scope of this formative study, but private-sector physicians were included in the sample because the private sector accounts for 80% of all health spending in India (Peters, Rao, & Fryatt, 2003), and I thus felt it important to capture the perspectives of these providers as well. To control for characteristics of location and clientele, private-sector sample participants were restricted to those working in the same geographic locations as their public-sector colleagues, with clients from similar income groups.

Samples from the public and private sectors were identified independently. For the public sector sample, a list of registered primary care physicians working in Bangalore’s east zone was obtained. This list consisted of approximately 100 physicians. Consultations with senior BBMP physicians<sup>4</sup> followed to obtain details on individual physicians on this list, including information on their specialty, location (urban health center or maternity hospital), years in practice, and exposure to gender-sensitization training. Through this process, 40 public sector primary care physicians were identified as meeting the study eligibility criteria. Each potential respondent was assigned an ID number and a tracking sheet, and all subsequent communications with the potential participant were recorded on this sheet.

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<sup>4</sup> The SHS was conducted at BBMP clinics, with which the SHS team had developed relationships through earlier collaborations on community projects such as the WHO-funded Bangalore Healthy Urbanization Project.

Similarly, to identify the private sector sample, a list of all primary care physicians registered with the Indian Medical Association (IMA) was obtained. This list included approximately 300 physicians. The first step was to prune the list down to physicians whose clinics were located in the east zone and in the same vicinity as public health centers. Trained staff from the SHS team then conducted community walks to verify the existence of all physicians on this shortened list and to assess study eligibility. They also consulted with local stakeholders—pharmacists, residents visiting or gathered around the pharmacy and staff from the urban health centers (UHCs)—to get their perspectives on which physicians were most frequented by women in the 18-30 year age group and the best candidates for this study. Through this process a total of 82 private sector primary care physicians were identified. All communications with these select physicians were documented using similar procedures as those employed with public sector physicians.

### **Research methodology**

This study was guided by a grounded theory research methodology. Grounded theory is a qualitative research methodology that “uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon” (Strauss & Corbin, 1990 p.24). The theory is “discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to” (Strauss & Corbin, 1990 p.23) an area of study, rather than beginning with a theory and trying to prove it. At its core are two concepts: (1) constant comparative analysis, the process of continuous interplay between data collection and analysis (Glaser & Strauss, 1967), and (2) theoretical sampling, the selection of participants based on the needs of the emerging analysis, as opposed to predetermined sampling before the research begins (Strauss & Corbin, 1998c). These two concepts are aimed at maximizing variation and enabling the researcher to compare and contrast the data and explore the varying properties and dimensions of a category under different circumstances towards the generation of theory that is based in reality (Glaser & Strauss, 1967; Strauss & Corbin, 1998a).

As with other research efforts (Strauss & Corbin, 1994), the actual use of this methodology in practice was modified to incorporate key learnings from the literature and the previously described theoretical frameworks. Instead of theoretical sampling, I initially used purposive sampling (Ellsberg, 2005a), and actively identified physicians from the public and private sector who were articulate and most likely to provide a rich description of their current practices in response to GBV. Theoretical sampling was employed later in the process. Due to the constraints of data-collection for doctoral work, particularly shortages of funding and of trained research assistants/translators, constant comparative analysis could only be approximated. For instance, in place of a continuous interplay between data collection and analysis which would have required my presence in the field for many more months than my study grant enabled, I divided data collection into two phases as described in more detail below.

### **Data collection and measures**

Data collection was divided into two phases: July-August 2007 and October 2007-January 2008, enabling interaction between data collection and analysis. All interviews in the first round of data collection were conducted by me, while interviews in the second round were conducted by a research consultant, a trained anthropologist. The consultant received an orientation to the study, and intensive training in administering the in-depth interviews.

Consistent with qualitative research methods, all potential participants from the study sample (n=122 with 40 public sector and 82 private sector primary care physicians) were not contacted. Instead, potential participants identified during the sampling process as having the highest proportion of women clients in the 18-30 year age group and best able to articulate responses to the questions under study were first approached. Upon reaching theoretical saturation (Strauss & Corbin, 1998c), when no new or relevant categories were emerging and the categories were well defined and validated, data collection was stopped. In total, 52 of the potential participants were contacted, and 30 in-depth interviews (14 public and 16 private) were completed.

The process of data collection included the following steps. Working closely with the SHS clinical director, who is a physician by training, I contacted each potential respondent either by phone or in person and explained the purpose and objectives of the study. Those who met study eligibility, expressed interest in the study, and scheduled a time for the in-depth interview were then re-contacted. Given physicians' busy schedules, on average it took two to three visits or phone calls to finally get an interview. All interviews were conducted in a private location either at the UHC or the physician's clinic. At the time of the interview, all participants received a detailed description of the study, its purpose, and objectives. Interviews were conducted only after reviewing the study objectives and the consent form, answering the respondent's queries, and obtaining written informed consent. Reasons for not participating in the study (n=22) included failure to meet study eligibility criteria, lack of interest, failure to respond to repeated interview scheduling attempts, and the investigator's having reached theoretical saturation, eliminating the need to re-contact some respondents. For potential respondents who were contacted but did not participate in the study, only demographics were collected. Protocols were approved by human subjects protection committees at the Indian Institute of Management, Bangalore (the local institutional review board), the University of California, Berkeley, and RTI International (the US partner research agency).

Interviews were conducted in English using a semi-structured in-depth interview guide. Each interview took an average of 90 minutes to complete. The interview guide was divided into two main sections. Questions in the first section and pertaining to physicians' practices in response to GBV are discussed elsewhere (Chapter 2: Indigenous physician practices to address gender-based violence: Findings from a study with primary care physicians in Bangalore, India). The second section explored physicians' perspectives on the feasibility of health facility-based interventions to address GBV, which is this focus of this paper. This section initially included about 10 open-ended questions which were developed in large part by referencing guides used in studies with health care professionals by the Pan American Health Organization (PAHO), the World Health Organization (WHO), and the Center for Enquiry into Health and Allied Themes (Cehat). However, this section was modified substantially through the course of data collection in response to emerging concepts from the data. First, I started with open-ended questions on issues of relevance that had emerged from my understanding of the literature. These questions were used to explore physicians' perspectives on the feasibility of a health facility-based response to GBV, and the specific needs and barriers to anticipate. Most respondents were confused by these questions and unable to hypothesize about future needs. A few respondents, however, who were at the forefront of responding to GBV and who had already given this topic much thought, were able to provide concrete ideas on what was needed in the future. Their ideas became initial sensitizing concepts and the study guide was modified accordingly.

I then introduced a qualitative data collection process called ranking which is particularly useful when there are many options, helping participants to prioritize among the many choices (Ellsberg, 2005b). All the core concepts that emerged from the early interviews pertaining to the feasibility of and future needs for a health facility-based response to GBV were listed in easy-to-comprehend language on small paper cards. Respondents were then asked to rank order these cards prioritizing the concepts that they perceived to be most relevant for a health facility-based intervention for GBV. I then reviewed each of the selected cards with the respondent, attempting to understand in-depth their rationale behind selecting (or not selecting) a certain card. Given the growing volume of these cards as data collection proceeded and new concepts emerged in the interviews, and my inability to quickly summarize what a respondent perceived as important, I then organized the cards into four categories. These were concepts pertaining respectively to: (1) training; (2) core activities that would be part of an intervention; (3) supplementary activities that needed to take place; and (4) infrastructure needs for referrals.

An example of how the interview process then unfolded is as follows. Respondents were given a set of cards pertaining to the first category (training). These cards included the names of different types of health care professionals (physicians, nurses, outreach workers, senior health officers, counselors etc). Thinking about each health care professional's role, responsibilities, and skills, respondents were asked to prioritize among these cards which health care professionals should receive training. They were asked to imagine that funds would be scarce and only a few key players could be trained; who in their minds should receive training as a priority? I then discussed their choice of cards in detail. This process was repeated with the next three categories.

Prior to the initiation of data collection, the interview guide was pilot tested. Two pilots were conducted, with a public sector and a private sector physician respectively, and the guides were modified accordingly. Consistent with grounded theory principles, such modifications continued throughout the data collection process to thoroughly explore the properties and dimensions of the emerging concepts and categories, while ensuring that consistency and comparison across data points would still be possible.

## **Analysis**

All interviews were audio-taped and transcribed. Guided by a grounded theory approach to data analysis, multiple rounds of coding and interpretation were employed. After conducting and transcribing the first few interviews, I began open coding, a method of breaking down the data by naming and categorizing the phenomena by closely examining the data (Strauss & Corbin, 1998b) This generated initial concepts which were tested and further explored in subsequent interviews towards the end of keeping data collection and analysis iterative. Some codes were grounded in the data while others (e.g., policy need, obstacles, need for guidelines, staff shortages) emerged from concepts in the literature and were identified a priori. Memos were written to describe these codes and shared with SHS field staff and academic mentors to ensure that individual assumptions and biases were not unduly influencing the analytical process.

The second round of data collection was then initiated and accompanied by continuous review of the data by listening to the audio tapes and writing descriptive memos. Data collection was concluded when theoretical saturation was reached, for example, when no new themes appeared in the data and a review of memos suggested that the properties and dimensions of key concepts had been thoroughly examined. All interviews were then transcribed and open coding continued. As I moved from one data point to another, I identified, through comparative analysis,

other areas in the data which had the same properties as previously coded data, and applied codes accordingly.

After completion of data collection, measures to ensure inter-coder reliability were taken. Analytical meetings were held with the study's principal investigator to develop and finalize a code list by which to categorize study findings. We (the PI and I) independently coded two interviews and came up with a code list. We reviewed each other's codes and then developed a focused code list. We each then independently applied this focused code list to new interviews. Our respective codebooks were merged to create a master codebook; redundant codes were removed; and code meanings were discussed and refined to ensure consistent and accurate interpretation. Differences of opinion were reconciled by going back to the data and basing our final decisions for codes on participants' words and phrases. A finalized code list was thus created, and I applied this code list to all the interviews. Coded data were organized using ATLAS.ti (version 5.6.2) a software program designed for qualitative data analysis (ATLAS.ti GmbH., 2009). Simultaneously, a cumulative series of memos and diagrams were developed recording descriptions of the emerging categories and their properties and dimensions as well the relationships between categories.

The final analysis entailed selective coding to further refine and integrate categories and establish the connections between the categories. Detailed memoing and diagramming continued. Some examples of categories developed in this study and relevant to this paper include: training priority, referral needs, trust among collaborators, NGOs as coordinators, and universal policy among others. From the transcripts, detailed memos about concepts and categories, diagrams connecting these categories, and analytical meetings with the principal investigator, several themes pertaining to physicians' perspectives on the needs for future health facility-based GBV interventions were identified.

## **Results**

### **Background characteristics**

Table 3.1 summarizes study respondents' background characteristics. Reflecting the common gender breakdown in physician employment in publicly-operated UHCs and within the specialty of obstetrics and gynecology in India, 80% of the study sample was comprised of females. This can also be attributed in part to the fact that women prefer female physicians and thereby mainly female physicians satisfied one of the study eligibility criteria of having at least 50% of client load comprising of women in the 18-30 age group.

All physicians who participated in this study understood the linkages between GBV and women's adverse physical, mental, and sexual health conditions. The majority believed that responding to GBV was part of a physician's professional responsibility. Further, they felt that a health facility-based response to GBV was both feasible and important in India, but were able to provide details on future needs and challenges to varying extents. Public sector respondents, by being part of a health system could better speak to the needs for a future health facility-based response to GBV. Many of them had a comprehensive understanding of how their health system functioned, the bureaucracy, and common systemic challenges to anticipate. Those who had received training on gender-sensitization or GBV management (n=7) were also able to provide detailed perspectives on what future training programs should include. Respondents with administrative duties (n=14) were best able to address policy and staff needs for a future health facility-based response to GBV.

## **Thematic findings**

Study respondents' perspectives on the feasibility and needs for a future health facility-based intervention for GBV, in the urban Indian context, reveal five major themes, which are discussed in detail below.

### **Compulsory policy with guidelines requiring a health sector response to GBV**

*Policy mandating health care response to GBV.* The need for a policy mandating a health care response to GBV was put forth primarily by public sector respondents. Their views are described here. Public sector respondents explained that a policy would legitimize their practices, and was critical to make all health care professionals both at the senior and lower level implement the practices without questioning them. Typically, all new health care practices were introduced into the public health system through formal policies. Respondents believed that for most of their peers, only when something was made “compulsory”, or “enforced on them”, would they perceive it to be “part of [their] work,” and thereby necessary to practice on a routine basis. Further, respondents explained that multiple responsibilities and limited time were deterrents to voluntarily taking on any additional responsibilities. Until there was a policy mandating a health care response to GBV, most health care professionals would treat GBV as a low priority issue. Explaining her reasons for advocating for a policy, one respondent said<sup>5</sup>:

See sometimes however much you try and explain the importance of something, not everyone is motivated to respond. For some doctors they have the drive, they have everything, [others] might not do it because it is not there in the routine. Most doctors say ‘why do I have to do something which I’m not told?’ So for those 50%, you have to bring in a policy. Then they will start doing it and it becomes routine practice.  
(Public sector physician)

Further, respondents explained that a policy enforced by the highest authority within each health system of practice would be sufficient to drive this change. It is important to note that many respondents who emphasized the need for a policy had been sensitized to GBV either through training or mentorship. Only one public sector respondent felt policies were unnecessary, arguing that they existed in theory but not in practice.

In contrast, private sector respondents had little to say about the need for policy. This is not surprising since private sector primary care physicians either work independently or are affiliated to private nursing homes and hospitals, and are not required to follow the policies put forth for public sector physicians. One private sector respondent had a different perspective on the need for policy as compared to her peers from the private sector who were unable to articulate the importance (or lack thereof) of a policy. This respondent felt that a policy was a way of increasing a physician's leverage in screening for GBV and asking women to follow-up with her suggested advice. Comparing the situation to HIV counseling and testing, she argued that when responding to GBV was made mandatory for physicians and the public was made aware of this policy, physicians would find it easier to screen for GBV and refer women to support services. Increased awareness among patients about the policy would lead to higher

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<sup>5</sup> Note: For purposes of clarification some words were added into the respondents' direct quotes. This has been depicted by the use of brackets [ ].

response rates to physician screening and willingness to comply. This same respondent, however, was ambivalent about how a policy would influence physicians' practices—the actual *implementation* of the policy, she felt, would depend on individual consciousnesses and sense of responsibility to patients.

***Need for practice guidelines.*** Respondents from both sectors emphasized the need for practice guidelines for implementation. The majority felt that guidelines would substantially simplify physician screening practices, save time, standardize practice, and increase the likelihood that responding to GBV would become part of physicians' routine practice. Some respondents emphasized the need for detailed instructions on responding to GBV. They wanted clarity in the following areas: what signs of GBV to be vigilant to; how to respond to GBV; what questions to ask patients; how to phrase the questions to increase GBV disclosure; when to ask the questions; how to educate women about their options; and where to refer them. Respondents also noted the need for standard definitions of different types of GBV, what qualifies as “severe” or “minor,” and when a response was necessary. One respondent articulated how current practices were entirely subjective:

Severe in the sense what? See for me severity could mean just a harsh word. For another physician it could mean that the woman gets a blow. So I need to know what severity of violence is. [I need] a standard set of tools to assess the severity of violence...there should be a particular system [that every physician has to follow].  
(Public sector physician)

Others expressed the need for a checklist of questions to pursue GBV identification. The emphasis was on keeping the checklist brief with “just 5 questions” and ensuring it took “just a minute or so” to implement. A simply worded and user-friendly checklist of questions that could be easily integrated into existing programs such as HIV counseling and testing was suggested to optimize patient and physician time. Respondents felt that this was also a way of ensuring that any staff member, if appropriately trained, could implement the checklist to identify women at risk of GBV. Differentiating between screening and assessment, some respondents further explained that the simple checklist of questions could be used just to identify if a patient was at risk of, or was experiencing, GBV. This was to be followed by in-depth assessment where each physician would have flexibility in deciding how they wanted to engage with the patient, and could adapt their inquiry process to the patient's individual needs. Explaining how this process would work, one respondent said:

Maybe [you can have] a set of 10 questions that will be the same for all patients. But when the diversion occurs and you think you need to change and go deeper into some specific aspect [i.e. something unique to that patient] then [the physician] needs to have the flexibility to deviate from the protocol.  
(Public sector physician)

### **Training for all health care professionals**

***Training Priorities.*** All study respondents identified training for health care professionals at all levels of the health system as a necessity for a future GBV intervention. Given the wide prevalence of GBV and its adverse impact on women's health, each health care professional was seen as playing a unique role in responding to GBV. The majority of the sample felt that priority



in training should be given to those who “interact with the community”—that is, to outreach workers in the public health system, who worked at “the grassroots levels,” and who were recruited from the community. Respondents explained how outreach workers were important because they conducted field visits, often going house to house to “build rapport” with the families and to create awareness about the services offered at UHCs. They were often the first (and in some cases only) point of institutional contact for women, even for those who chose to use private health care or chose not to utilize health care services at all. Respondents also felt that outreach workers better understood women’s realities, and hence their ability to communicate with women was superior to that of physicians, who typically belonged to a higher socio-economic class, and whose interactions with patients was limited to the UHC or hospital. Outreach workers also better understood the channels of communication, and culturally appropriate ways of approaching women and disseminating information. The majority of the sample believed that, if appropriately trained, outreach workers could be invaluable in the following areas: identifying women at risk of GBV in their homes; disseminating health messages; creating awareness among women about the ill-health effects of GBV; and successfully convincing woman to seek external help in response to GBV. Presenting their rationale for first training outreach workers, one respondent said:

...outreach workers are recruited from the community, [and] they would be messengers for us by telling women that this is the support you are going to get [at the clinic]. They can bring back the people [i.e. encourage women to visit the clinic].  
(*Public sector physician*)

Similarly, another physician remarked:

These people [outreach workers] are the ones who have direct contact with the society. They reach out to the society and reach out to the women. Not only women who come to them but the women with the hidden problems who don’t come out to them. These people can probe ... and make women come disclose their problems, so even hidden problems are revealed... These are the people who try to reach out to the community and try to get to the root of their problems.  
(*Private sector physician*)

In addition, several respondents considered it important to train and sensitize other lower-level health-care staff such as nurses and midwives since they worked longer hours at the UHC as compared to physicians, and thus had more opportunities to interact with patients. One respondent also highlighted that women might feel more comfortable disclosing GBV to these health care workers as compared to physicians.

Physicians from both sectors and across all specialties were the next priority group identified for training. Most respondents felt internists, family physicians, and gynecologists were the most likely to identify and respond to GBV among their patients. Yet, they felt that given the wide prevalence of and adverse health outcomes associated with GBV, all specialists should be sensitized to GBV, and understand the process of responding to GBV, if necessary. A few respondents felt that if trained and informed about GBV, and their role in helping women, even specialists might be inclined to respond to GBV cases. Senior officers in the public health

system were similarly important stakeholders. Even if they did not personally interact with patients they could influence policy makers.

A few respondents had different perspectives on training priorities which are noteworthy. Two respondents felt that training priorities should be determined on the basis of training opportunities; that is, those without any access to training and capacity-building should be given first priority. These respondents believed that private sector physicians and senior health officers had few opportunities to enhance their skills and learn about new technologies or approaches to providing care. However, they had a large clientele and could benefit women if they responded to women's experiences of GBV. Another three respondents felt that physicians were the first point of contact for women, and hence should be prioritized for training. One of these respondents also argued that the lower-level health-care staff, except those who worked in the community, should be the last to receive training as their skill and ability to comprehend training would be poor, given their low educational status. Another respondent, though generally in favor of extending training to lower-level health-care staff, cautioned against these health care workers' tendency to violate patient confidentiality. She felt that lower-level staff commonly "talked amongst themselves," and because they belonged to the same community as the patients, if they violated patient confidentiality, women's risk for GBV might be exacerbated.

**Results of training—a role for all health care professionals.** Most respondents felt that if trained, selective screening and simple counseling could be undertaken by providers at a UHC or private clinic on a routine basis, where each health care professional would have a specific role. Public sector respondents wanted to introduce medical counselors at the UHC to be responsible for initial screening and counseling. Private sector respondents felt support staff such as nurses could assist in these procedures. Respondents explained that these support staff (counselors or nurses) could conduct routine GBV screening and counseling, and provide documentation and follow-up at regular visits. They could consult with the physician only when the patient needed special assistance. The physician-counselor/physician-nurse team would then work together to assess the severity of the situation and construct an appropriate response, including referring the patient to specialized services. There was little disagreement among study respondents on the importance of involving lower-level health-care staff in a GBV response. However, the emphasis was on giving these health care staff the appropriate training, which emphasized screening for GBV in a sensitive and compassionate manner, and respecting patient privacy and confidentiality. Study respondents also explained how outreach workers, if trained, would have an important role in a health sector response to GBV. They would be responsible for creating awareness about the services at the clinic; following-up and checking on patients' progress at home; determining whether patients had followed-up on physicians' advice; whether there had been any impact; and, most importantly, knowing what additional help patients needed. Outlining the idea that every health care professional would have a specific role, one respondent said:

Each one has a role...like the outreach workers can act as counselors in the community. They know the basic roots of the problem so they can bring the patients to the health center [identify patients at risk in the community itself]. In the hospital [health center/clinic], the counselor can act as a professional counselor and can help in solving the problems, and the doctor would be the even more skilled counselor who would assist in problem solving. So each one has a role.

*(Public sector physician)*

***Details of training curricula.*** About a third of the respondents who were spearheading efforts to respond to GBV among health care professionals, and were privileged to have received training, provided specific details on what they perceived as critical for future training programs. They felt that trainers should be highly motivated and passionate about the issue. Multiple sessions were needed to reinforce the key messages, so that, over time, health care professionals would consider it routine practice to respond to GBV. Respondents also felt that the training programs should be interactive and emphasize participation, enabling health care professionals to reflect on their current practices, and where they needed to make changes. Articulating this idea one respondent said:

So the trainers should make us [the physicians] talk about what we think. ... They should do that first and only then give their [the trainer's] input. .... If the trainer goes on giving information... we [the physicians] get super saturated, but instead you should let physicians bring out their ideas and internally start differentiating between what is wrong and what is right in their current practices.

*(Public sector physician)*

Respondents also wanted training programs to enhance their skills in responding to GBV. Specifically, they wanted to learn how to speak to patients; what questions to ask; when to ask them; how to phrase the questions to encourage disclosure; what indications of abuse to look for; how to support patients in making the right decisions, etc. The need for simple tools to help health care professionals make quick assessments and identify the risk factors for GBV and the associations between GBV and health conditions also were stressed.

### **Centralized and well-coordinated referral system**

***Perceived need for referral centers.*** A centralized referral center with a well-coordinated network linking health care professionals and organizations providing specialized support services to GBV survivors was a strongly emphasized need for the future. At present, study respondents were not referring patients to support services because these professionals had limited knowledge about the availability of such services. Lack of trust in these services was another deterrent to making referrals. Explaining why they needed a referral center, most respondents said that as physicians their expertise was in treating clinical conditions; providing intensive counseling and additional support to patients was “beyond their scope”. Other providers were the experts in offering detailed case management services such as psychological care and emotional support, family counseling and mediation services, and facilitating women’s access to other specialized services such as legal aid, short-term shelter, and longer-term opportunities to become economically independent. It was thus considered imperative to have a referral center with trained providers, commonly referred to as counselors, who could offer these specialized services. It is important to note that although respondents referred to these providers as counselors, they were talking about individuals with advanced training in social work<sup>6</sup>. Explaining their perspective, study respondents further explained that these counselors tended to

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<sup>6</sup> Students who pursue social work at the masters level in India have broadly two opportunities after graduation: (1) to work with NGOs in development projects focusing on community development, poverty eradication, improving public health etc., or (2) to focus on clinical issues and become affiliated with a hospital or clinic. Those who chose the latter route, due to their affiliation with a medical institution, are often referred to as counselors.

be more familiar with patients because of their field experience, better positioning them to work with patients and their families to identify long-term solutions to GBV. This experience also enabled them to skillfully disseminate advice in a manner that was both acceptable to women and easy to understand. Explaining the favorable impact of establishing a referral center with trained counselors, one respondent said:

If I feel that there is a person who needs more support than I can provide, because, you know, sometimes it's not only counseling that is sufficient. Women may need more help. Like trying to get the husband involved, or [women becoming] financially independent... So when I know that this woman needs more support than I can give... it would be very nice if I could refer her somewhere.  
(*Private sector physician*)

**Location of referral centers.** The majority of the sample generally stated a preference for establishing a GBV-focused referral center in a government-operated health facility in order to maximize such a center's reach among lower income clientele. Most public sector respondents further specified that referral centers should be set up at multiple UHCs, thereby making the centers easily accessible to women from different parts of the city. Publicly operated UHCs were preferable for several reasons: They are smaller in size and provide specific out-patient services at fixed hours as compared to tertiary-care hospitals which are larger and always busy. In addition, they are already well-established and women are actively utilizing these health centers. Finally, having more time and space will ensure greater commitment amongst health-center staff to providing in-depth GBV- services and responding in a rapid manner.

One respondent, who had given this issue detailed thought and proactively formed an active network with the NGOs in her community, disagreed. She felt that even a few referral centers across the city were insufficient. The distances and requirement to travel from one center to another would discourage women from seeking help. Her suggestion was to instead recruit a counselor (i.e. a person with advanced training in medical social work) for every UHC. This individual could be trained in detecting and managing GBV cases, and consulting with the physician whenever necessary to refer patients to the centralized referral center where they would receive more information and follow-up care connecting them with the other specialized services—legal aid, temporary shelter, or longer-term support—that they may require. Her emphasis was to “not miss” any GBV cases and to ensure that there were no “breakages in the link” –that is, upon identifying a patient experiencing GBV, making sure that she receives the services she needs in a timely manner.

A few respondents were unable to commit to a single location and described advantages and disadvantages of all settings. They felt that each patient was unique and required different services and adjustments to be made, thereby justifying the establishment of multiple referral locations catering to patients' varied needs. As one respondent explained:

Each case is different. Each person might be different. There might be a woman from the higher socioeconomics classes who comes to the center. There might be a woman who needs some discretion for her to come in. Some others might have financial problems, and may not want to go to a certain place. [Still others] may not want to go to place where they will be branded [as being GBV survivors] So keeping all these in mind, you know, according to what her need is, we should have different referral units, and as per her need we'll need to refer. (*Public sector physician*)

Finally, given the stigma associated with GBV disclosure, two respondents felt that instead of a stand-alone GBV-focused referral center, UHCs should collaborate with existing NGOs for referrals. They felt that women would be reluctant to discuss GBV in UHCs for fear of being discovered by other community women.

***Other important characteristics of referral centers.*** Several other aspects of referral centers important to consider for the future were highlighted. First, the location should be central to the community and easily accessible. Second, the environment should be a non-judgmental one where women would feel comfortable sharing their experiences. Third, client privacy and confidentiality should be fully respected. Fourth, the center should be positioned as a place that manages routine women's health conditions, thereby reducing the stigma attached to seeking help for GBV. Fifth, the referral center should have trained counselors, physicians, and lower-level health-care staff working together to address women's special needs. Finally, the referral center should provide multiple services, or, at a minimum, be well-connected with NGOs/other organizations that provide specialized services. Study respondents envisaged the referral center as a safe space for women to disclose their problems and know that "they [are] free to walk in and measures [would be] taken to do something" [about their problems].

***Importance of NGOs.*** In addition to articulating the need for establishing referral centers, all respondents noted non-governmental organizations' (NGOs) important role in preventing and responding to women's experiences of GBV. No one disputed the need for the health sector and the NGO sector to collaborate closely in responding to GBV. The prevailing attitude towards NGOs and their quality of work was favorable. NGOs were perceived as having a competitive advantage because of their sole focus on GBV, as opposed to the health sector's focus on health alone. Further, respondents felt that NGOs were committed to the issue of GBV prevention and were well-connected with other service providers. "Nothing can be done without the NGOs help" was a common sentiment. Many respondents felt that NGOs worked in an organized manner and had the skills and experience to work in this area. As a result, they had the ability to provide specialized care at all times and to connect women with other services depending on their individual needs. Further, study respondents felt that NGOs typically engaged with the community, involving community members in their work, and were thus closer to women's realities, as compared to health care professionals. Some respondents expressed the need for more information about NGOs and their expertise, and mechanisms for routine interactions and open channels of communication between health care professionals and NGOs. This would enable health care professionals and NGOs to learn about each other's skills and expertise. With awareness about NGOs and the specific services they offered, respondents explained that they would feel more confident referring their patients to these NGOs, and have the comfort of knowing that their patients would be well-treated.

Two study respondents who had proactively initiated discussions with NGOs in their community explained their vision of working with NGOs in the future. Speaking from their context as physicians in the public health sector, they envisaged a future where the city municipal government would operate referral centers, but the NGOs would coordinate the entire effort. This would include recruitment, training, and placement of counselors at the government-operated referral centers. The NGOs would provide these counselors and other health-care staff at the UHCs with on-going technical assistance to better assist women who experienced GBV. The NGOs would also be responsible for ensuring that all processes were taking place smoothly,

and patients were receiving the care they needed. Over time, such a collaborative effort would enhance health sector capacity and ensure sustainability, even if the NGO later withdrew.

### **Environment of collaboration, mutual respect, and trust**

*A collaborative environment.* Another important need for a health facility-based GBV intervention was an environment of collaboration, mutual trust, and respect. Respondents believed that this had to be the foundation on which the three needs described above—compulsory policies with accompanying guidelines; training for all health care professionals; and a centralized referral system—would coexist. By collaboration, respondents meant that different service providers and health care professionals needed to work collectively towards the same goals. It entailed communicating frequently, sharing ideas and visions, and taking the initiative to ask for, and to give, feedback. Two commonly perceived benefits of collaboration were: the simplification and reduction of work load for each individual provider, and opportunities to enhance skills by learning from one another. As one respondent explained:

And even the NGOs, and other service providers, everyone will have less of a burden and they will have only certain cases [if physicians do their bit by addressing the smaller problems].

*(Private sector physician)*

Another respondent remarked:

Only thing is we are amateur in the project, we have not done anything. Whereas on the other hand you [the NGO] have done a program and we definitely need your guidance. ... even if we become sustained, we still need your guidance because you will continuously do the research on this subject and stay up to date. The NGO will be a guide for us to stay committed [to responding to GBV].

*(Public sector physician)*

Respondents also tended to feel that within a single facility, all health care staff had to work collectively. For example, if a counselor identified a person at risk of GBV by using a screening checklist, it was her/his responsibility to consult with the physician. The counselor and the physician then had to collectively decide upon an appropriate response for the patient. In addition, study respondents felt that other specialists should be aware of the GBV response mechanisms in their health facility, and know what to do and where to refer their patient if necessary. Among multiple service providers, respondents emphasized the need for routine interactions to facilitate collaboration. This included opportunities for service providers to meet, to share ideas, to de-brief about patients, and to learn about each other's expertise. Such activities would create awareness among service providers about others working towards the same goals and facilitate future interactions. As two physicians explained:

If an organization is set up and we have a rapport with that organization...I might also feel comfortable calling them up and asking what treatment [was given], whether my patient came.

*(Public sector physician)*

If I refer them to a particular center, and I know I can follow-up there, even if the patient doesn't get back to me, I can always contact the center and find out about my patient.  
(*Private sector physician*)

**Building trust.** Respondents also believed that over time, such interactions would foster trust and respect—both of which were critical enabling factors for physician GBV-practices, especially referral. By trust, respondents meant having faith and confidence in another service provider or organization's abilities. Trust was necessary both among health care professionals working at different levels within a single health facility, as well as between health care professionals and other service providers.

**Creating respect.** Respect towards one another was identified as the second important factor influencing physician practice and a critical element of the overall environment. By respect, respondents were referring to the ability to value and recognize another provider or organization's skills and processes. In a collaboration between an NGO and health facility, for instance, it is important for both groups to respect each other's processes and ways of working; to have the humility to try to understand the differences in each other's processes and to reflect on why these existed rather than blindly criticizing each other. Respondents felt that only when a physician trusts and respects an NGO would she/he willingly refer her/his patients there. Physicians and NGOs working together should therefore aspire to reach an understanding where:

Just seeing your [the physician's] referral card or the moment they come to know that this person has come from this health center, irrespective of anything else, and without asking any questions, they should admit the patient and start giving them the legal support or whatever it is they need.  
(*Public sector physician*)

### **Limited time and other-related barriers to physician practice**

**Lack of time.** The majority of the sample perceived lack of time as an important barrier to their ability to respond to GBV. Even while offering concrete suggestions to develop a health facility-based response to GBV in the future, study respondents recognized that these practices were time-intensive. During clinic hours, their time was already fully committed to standard clinical practices, and taking on the additional tasks of conducting routine screening for GBV and in-depth counseling was not practical.

**Staff shortages.** One of the reasons physicians' time was perceived as limited was the shortages of trained support staff who could assist in routine procedures. Public sector respondents complained that they were always understaffed, while private sector respondents operated solo and had no staff or infrastructural support. The latter explained how they were responsible for everything from scheduling appointments, providing clinical treatment, follow-up to maintenance of their clinics.

**Client Volumes.** Additionally, respondents from the public sector also felt that limited time was a practical concern because they were already overwhelmed with large client volumes. With the typical case load of 100 patients in a week, they "were not spending much time or talking to [patients]". As one public sector respondent explained, when faced with such client volumes, her only aim was to finish seeing all the patients.

I was the only doctor ... What happens is ANC [Ante-natal care] patients are about 100, and when 100 patients come I used to be like let me just finish seeing all the patients and

send them off fast ... This was my [attitude] because of the long time period that patients had to wait.

*(Public sector physician)*

**Multiple responsibilities.** These large client volumes, combined with multiple commitments, further reduced the perceived time available to respond to GBV in an appropriate manner. Many public sector respondents explained that as government employees they were required to participate in trainings and health camps, and offer their services on a wide range of public health issues. This made it challenging for them to complete their routine responsibilities leave alone take on any new responsibilities by conducting routine screening and counseling for GBV.

It is important to note that the logistical barriers discussed here were revealed in a discussion of future needs for health facility-based responses to GBV. Most respondents felt sympathetic to women and had a desire to respond to GBV, giving positive suggestions on their perceptions of what was necessary for the future. The barrier of limited time combined with other issues of staff shortages, large client volumes, and multiple responsibilities were just practical challenges that had to be addressed for any future GBV intervention to be sustainable. In the words of one physician:

... The problem is time, we can do all four (screening, counseling, assessing and referral), but the time factor is there. So we can only do each to a certain extent [limits to GBV practices].

*(Private sector physician)*

Further, while discussing suggestions for the future, many respondents had ideas on overcoming some of these logistical barriers. For instance, most public sector respondents advocated for establishing referral centers at UHCs that were small and not as busy implying that health care staff working at these select locations would have more time. This, in turn, would influence staff commitment to respond to GBV appropriately. All respondents also emphasized the need to recruit and train support staff, and to capitalize on their unique strengths, enabling them to better assist physicians in routine responses to GBV. Finally, in addition to the barriers discussed above, internalized norms, beliefs, and attitudes could adversely influence physician practices in the future. Since studying physician attitudes towards GBV was not the focus of this paper, these attitudinal barriers have not been addressed here.

## **Discussion**

This study—as one of the first to explore Indian physicians’ viewpoints on this topic—offers new understanding about primary care physicians’ perspectives on the feasibility and needs for future health facility-based GBV interventions in India. What emerges as the central finding of this analysis is that primary care physicians favor health facility-based GBV interventions, and in their recommendations are alluding to what Lori Heise et al. call a “systems approach” (Heise, Ellsberg, & Gottemoeller, 1999). This includes training and gender-sensitization for all health care professionals; developing solutions to address infrastructural barriers (for example, large client volumes) that limit the physician’s ability to respond to patients; establishing policy and standardized practice guidelines; and, developing and strengthening referral systems. In addition, health care professionals work collaboratively with



service providers from other sectors, including law enforcement agencies and those providing support services to women who experience GBV. Several of these issues are consistent with the concepts identified for study through the application of the human rights theoretical perspective, which guided this research. These include physicians' perceptions towards their professional role in responding to GBV; their responsibility in enabling women to connect with support services; and their overall awareness of women's realities.

A diagrammatic rendering of the thematic findings described in the results section, enabled me to arrive at the central finding of this analysis and resulting conclusions. Figure 3.1 is a model of the relationships between the five themes and other core categories from the data. It represents physicians' perspectives on the fundamentals of a health facility-based GBV intervention. The three core pillars—policy, people, and infrastructure—are supported in an environment of collaboration, mutual trust, and respect. This diagram was adapted from the Johns Hopkins Leadership and Management Paradigm developed by Professors Peters and Ward (Peters & Ward, 2003).

The central idea—that an effective GBV response requires a system-wide and multi-sectoral effort—is contained within many of the thematic findings. Describing their perceived needs for future training, for example, the majority of the study respondents strongly emphasized the need to train all health care professionals to respond to GBV, and especially those who interact with the community. With this recommendation, respondents acknowledged that physicians alone cannot respond to GBV, but that each and every health care professional has an important and unique role to play. Another example of the central idea is evident in the thematic findings on training and referrals. Both descriptions reveal study respondents' views towards the divisions of roles, responsibilities, and expertise among different service providers. Physicians were skilled in treating clinical conditions, while other service providers such as social workers were expert in case management, including emotional and psychological care and connecting patients to other short and longer-term support services. Thus, all providers had to work collectively to respond to GBV. Finally, a third example of the central idea is in the importance given to NGOs. Study respondents unanimously stated that NGOs had to play a central role in the institutional response to GBV. They articulated NGOs' strengths, as well as the importance of working with them collectively.

Another interesting finding is how study respondents' perspectives on health facility-based GBV interventions compare with the efforts being undertaken in other developing countries. Even without exposure to the evidence on other country health sector efforts to GBV, study respondents arrived at similar conclusions. Study respondents articulated the need for a compulsory policy requiring health care professionals to respond to GBV. This is consistent with the approach in some countries in South America and in South Africa, among others. The Pan American Health Organization's (PAHO) effort to develop an integrated health-sector response to GBV, across 10 Latin American countries, worked with each country team to develop national policies outlining the role of providers in addressing GBV (Velzeboer, 2003). PAHO took several measures to ensure that these policies were widely disseminated across the health sector and community members towards securing political and administrative commitment for implementation. In South Africa, the response to GBV was initiated by the national department of health (Jacobs & Jewkes, 2001). A core objective of their GBV response was to develop and institutionalize national policies on how health care providers should respond to GBV.

Study respondents also emphasized that policy should be accompanied by practice guidelines. The two interventions described above (Jacobs & Jewkes, 2001; Velzeboer, 2003), as

well as others (Guedes et al., 2002; Schraiber & d'Oliveira, 2002), have similarly developed practice guidelines for health care professionals in their respective countries. A more distinct finding from this study is how respondents distinguished between guidelines for screening and for assessment, without explicitly saying so. Screening was perceived as a way of identifying a person at risk of GBV and could be implemented with a standard checklist. The process of assessment, however, could have rough guidelines, but physicians needed flexibility to probe and assess as they considered appropriate for each case, enabling them to best respond to the patient's individual needs. In effect, what respondents are advocating is the adaptation of existing protocols and practice guidelines to the Indian context, but they acknowledge that the intervention will vary among different contexts. Further, they suggest that even within a single context or health facility, every patient is likely to be different. Study respondents thus felt that even if protocols and policies were institutionalized in the Indian health sector context, there needed to be ample flexibility to address individual needs. Experts in GBV research and interventions have similarly advocated for context-specific interventions, and recognizing that there could be tremendous variation in the application of an intervention from one context to another (Garcia-Moreno, 2002).

It is also important to note that the level of detail described in this paper is grounded in the data, and thereby reflects study respondents' sincere desire to improve their own responses to GBV. As the researcher, I asked broad and open-ended questions about concepts previously established as important for GBV interventions. Study respondents built on these concepts, refining the details, and articulating their own ideas for the future. For example, I asked study participants if they needed training. They responded in the affirmative and additionally discussed which health care professionals needed training and in what priority order. The fact that the majority emphasized training outreach workers also reflects their understanding of women's realities; the challenges women face in help-seeking and GBV-disclosure; and, the recognition that physicians need support to enhance their GBV practices. There is substantial evidence from industrialized countries that training can influence physicians' confidence and sense of preparedness in their ability to screen clients for GBV and then assist them (Gerber, Leiter, Hermann, & Bor, 2005; Gutmanis, Beynon, Tutty, Wathen, & MacMillan, 2007; Jonassen & Mazor, 2003; Lapidus, Cooke, Gelven, Sherman, Duncan, & Banco, 2002). Training also makes physicians more aware of risk factors for GBV, and the availability of community-resources (Gerbert, Caspers, Milliken, Berlin, Bronstone, & Moe, 2000; Glowa, Frazier, Wang, Eaker, & Osterling, 2003; Gutmanis et al., 2007; Jonassen & Mazor, 2003; Lapidus et al., 2002; Stayton & Duncan, 2005). Training is thus an integral component of most developing country health-sector responses to GBV (Grisurapong, 2002; Guedes et al., 2002; Jacobs & Jewkes, 2001; Schraiber & d'Oliveira, 2002; Velzeboer, 2003).

Another example of the detail provided by study respondents on this topic comes from the discussion on referral systems. I asked study respondents about the kinds of systems and infrastructure needed for a health facility-based GBV intervention in the future. Respondents introduced the idea of establishing a referral center that they could trust, and subsequently provided tremendous detail about future referral systems. The ability to think through this issue with such detail suggests that some respondents may have already begun to consider how they, as health care professionals, could make a concerted effort to assist women who were experiencing GBV. Also, as earlier indicated, study respondents wanted opportunities to learn about support services, and to interact and communicate with other service providers on a regular basis. A collaborative and trusting environment, they believed, was imperative for different

service providers to work together in response to GBV. Evidence from other health sector efforts has similarly shown that providers are reluctant to refer their patients to services/organizations they know little about (Fikree, Jafarey, Korejo, Khan, & Durocher, 2004; Rodriguez et al., 1999). Today, many developing country health sector responses to GBV emphasize inter-sectoral collaboration, and promote the cross-cutting values of partnership and equal participation (Grisurapong, 2002; Jacobs & Jewkes, 2001; Velzeboer, 2003).

### **Limitations**

As with most qualitative research, this study has several limitations relating primarily to recruitment and sampling. The lack of randomized sample selection limits our ability to generalize study findings to other physician populations. Purposive sampling, though useful in uncovering in-depth information, is not free of selection bias. The small sample size limits comparisons by physician characteristics. Future studies with larger sample sizes conducted across multiple sites in India may corroborate and expand on our findings; for example, differences in physician perceptions for GBV interventions by gender, age, and practice setting may be explored. The hypothetical nature of this discussion challenged some respondents' ability to offer concrete suggestions on the needs for a future GBV intervention. Despite taking corrective measures and modifying the study guide and process of questioning, by introducing an interactive data collection method, only about 2/3<sup>rd</sup> of the sample could clearly articulate their perspectives on the feasibility and needs for a future health facility-based GBV intervention. Finally, the difference between intention to practice and actual practice can be questioned. This difference has been well established in women's health; for example, the discrepancy between adolescent women's pregnancy intentions and actual contraceptive use and sexual health behaviors has been established (Bartz, Shew, Ofner, & Fortenberry, 2007; Petersen, Gazmararian, Anderson Clark, & Green, 2001; Rosengard, Phipps, Adler, & Ellen, 2004; Sable, 1999; Sable, Libbus, & Chiu, 2000). Similarly, although study respondents suggest that if their needs are met in the future, they will actively screen, assess, and refer for GBV, their actual practices remain to be seen. Any future intervention that includes training and provision of support services for health care professionals must therefore monitor and evaluate actual practice.

### **Conclusion and implications for future research and practice**

Even though we cannot generalize from the study findings, they do suggest that primary care physicians are likely to be aware of the pervasiveness of GBV, and the resulting adverse women's health outcomes. More importantly, many may favor a health facility-based response to GBV, and seek to play a more active role in assisting women who experience GBV. Study respondents are advocating a system-wide and multi-sectoral response to GBV, as recently implemented in many developing countries (Guedes et al., 2002; Jacobs & Jewkes, 2001; Velzeboer, 2003). Study findings underscore those of a growing body of literature and program descriptions, suggesting that physicians alone cannot reduce women's burden of GBV and mitigate their suffering. This requires a collaborative effort between health care professionals at all levels of the health system and service providers from other sectors (Colombini et al., 2008; Heise et al., 1999)

The study findings also leave several questions unanswered, and these help delineate areas for future research. Private sector respondents had little to say about the needs for a policy requiring health care professionals to respond to GBV. This is not surprising since public policy

is not enforced for practitioners in the private sector. Yet, since we know that the private sector accounts for over 80% of all health spending in India (Peters, Rao, & Fryatt, 2003), involving these providers in a GBV response will be imperative. Prior to institutionalizing any policy that mandates a health sector response to GBV, we need to understand what the implications of such a policy will be on practitioners in the private sector. Further, we need to ascertain what incentives may be necessary to encourage such individuals who work independently, and without any institutional affiliations, to respond to GBV on a routine basis.

Another area lacking research is the documentation of women's experience of GBV. Surprisingly, study respondents did not identify this as an important future need. For women who decide to press charges against their perpetrators, medical documentation of their experience of GBV might be particularly important (Watts & Mayhew, 2004), and often their only source of evidence against their perpetrator. Documentation of the details of the experience and actions taken, while ensuring patient confidentiality, will also be necessary to facilitate communication among providers across various sectors who are working together to assist women who experience GBV. We need to understand health care professionals' current barriers to documentation and develop strategies to address these challenges.

A related area requiring future research is health care professionals' ability to ensure patient privacy and confidentiality under their current circumstances (Watts & Mayhew, 2004). Though many study respondents emphasized the importance of training health care professionals to maximize privacy and patient confidentiality, an observational assessment may be first necessary to understand if it is even practical to create a safe physical space that is private and confidential for women to disclose sensitive issues such as GBV. If this is not the case, we need to first assess what changes are necessary to the infrastructure. Some physicians also noted the likelihood of lower-level health care workers gossiping amongst themselves and violating patient confidentiality. This should also be examined in the context of the physical space of a clinic. For example, what are the implications of training all staff to respond to GBV when they work in a small one-room clinic? What are the implications for patient confidentiality of all staff being aware of the patient's experience of GBV, as opposed to just the physician? Other related infrastructural and logistical challenges noted by study respondents—multiple responsibilities and limited time to devote to GBV-related practices—also need further research, in an effort to identify creative and low-cost solutions to address these challenges.

Finally, though all study respondents repeatedly emphasized the importance of training, we need to understand the efficacy of training programs. Evidence from industrialized countries has shown that the benefits of training health care professionals to respond to GBV declines over time (Rodriguez et al., 1999). Building on the findings from other country efforts, we need to ascertain what other incentives and support systems are needed for sustainable change.

Study respondents appear enthusiastic to collaborate with other health care professionals and service providers from multiple sectors to respond to GBV. Despite their enthusiasm, interagency efforts on the issue of violence against women have had few concrete outcomes (Espinoza, 2005). Multi-sector collaborations require a well-deliberated plan, wherein stakeholders collectively decide upon common goals, specific prevention activities, and a process of measuring outcomes (Espinoza, 2005; Watts & Mayhew, 2004). This is time-intensive and requires political will and long-term commitment from all sectors involved (Espinoza, 2005). A rushed effort to collaborate that does not draw on the expertise of all stakeholders could result in a well-intentioned but poorly executed intervention that may further jeopardize women's safety (Watts & Mayhew, 2004).

Perhaps the first step, prior to establishing any collaborative efforts, is to work exclusively with the health sector ensuring that health care professionals receive basic gender sensitization, either during their education, or after, when they join a health system. This training should emphasize the unacceptability of violence against women, and health care professionals' responsibility to ensure that women receive the appropriate health services. Early training may also ensure that health care professionals address their own biases, misconceptions, and fears about responding to GBV (Watts & Mayhew, 2004). Second, since an important role for health care professionals is to facilitate women's access to non-health services (Colombini et al., 2008; Watts & Mayhew, 2004), it will be important to connect health care professionals with organizations that currently provide such services. A quick evaluation of these services in each community to know what exists, followed by low-cost initiatives to facilitate interaction between health care professionals and these agencies could be beneficial. Third, since health care professionals face many challenges to practice, particularly the shortage of time, efforts to integrate routine GBV practices (screening, assessment and referral) within existing women's health services (e.g., counseling on family planning or HIV/AIDS prevention programs) could be explored (Watts & Mayhew, 2004).

The impact of all of the above described programs—training, networking with other service providers, integration of GBV with other health care programs—could be tested through intervention research. Large-scale quasi-experimental or randomized intervention studies would be an important research priority to test the impact of enhancing health care professionals' skills with training and resources— practice guidelines, on-site support of social workers and counselors, a well-coordinated referral network, and opportunities for routine interaction with other services providers —on their actual GBV-related practice and the long term impact on women's health and well-being. Several remaining issues, for example physician challenges to practice, could be addressed in the context of such an intervention study. Once we understand how to successfully work with the health sector to respond to GBV, collaborative intervention studies among different sectors can be initiated.

Finally, a health-sector response to GBV should not be seen as an end in itself. A combination of other immediate or short term efforts and proactive or longer-term efforts are necessary to respond adequately to GBV (Poonacha & Pandey, 1999). For example, efforts to enhance the quality and reach of support services for women at-risk are important. After being identified as at-risk for GBV at a health system, women will need detailed case management. Trained social workers can assist women in this area offering support services—psychological and emotional care, family counseling and mediation—and ensuring that women receive the follow-up care necessary to improve their condition. Additionally, proactive efforts—raising public awareness about GBV, empowering women economically, psychologically, and politically—that facilitate broader social change, and transform the very system that perpetuates this kind of behavior against women are needed. The latter may, over time, help the vast majority of Indian women who do not seek external help in response to GBV, due to help-seeking challenges and cultural norms surrounding GBV disclosure (Poonacha & Pandey, 1999).

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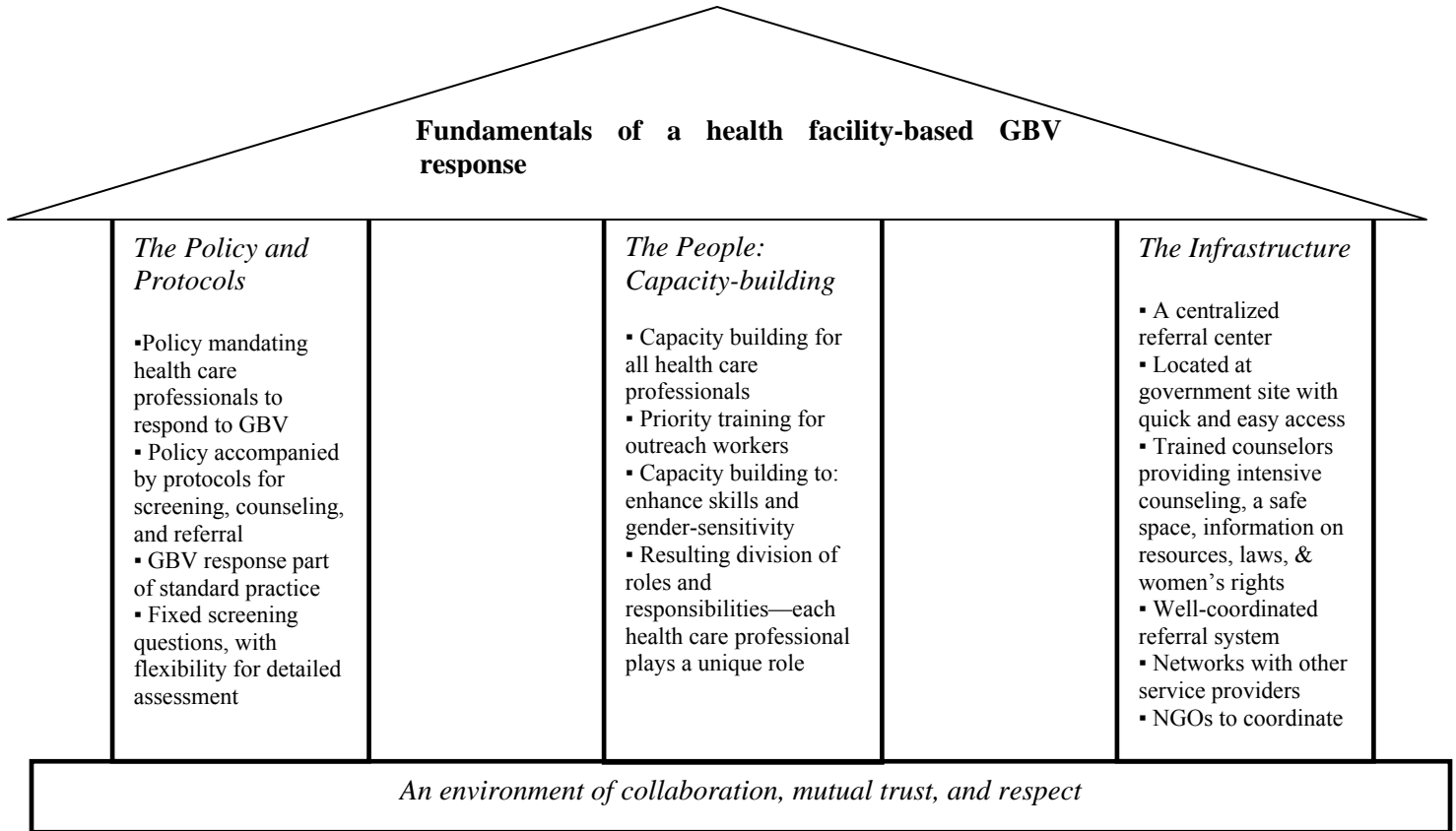
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## Tables and figures

**Table 3.1: Socio-demographic characteristics of sample**

Variable Description	N (%)
Gender	
Female	24(80)
Male	6 (20)
Practice Setting	
Public clinic (urban health center or maternity hospital)	12 (40)
Private clinic	15 (50)
Hospital	3 (10)
Specialty	
General Physician	16 (54)
Gynecologists	11 (36)
Other	3 (10)
Additional Administrative Duties	
Yes	14 (47)
No	16 (53)
Years in practice	
5-10	11 (37)
> 10 years	19 (63)
Received Training on gender sensitization and GBV	
Yes	7 (23)
No	23 (77)

**Figure 3.1: A model of the relationships between themes and categories from the data**



**Chapter 4: Determinants of sexual and physical violence: Exploring the similarities and differences**

## Background

Since the early 1990s, the United Nations General Assembly and the World Health Assembly have recognized Violence Against Women (VAW) as a public health priority associated with adverse women's health outcomes (United Nations General Assembly, 1993; World Health Assembly, 1996). Among the many forms of VAW, women in developing countries are particularly vulnerable to gender-based violence (GBV) (Ellsberg, 2005; Krishnan, 2005). GBV includes a broad range of physical, sexual and psychological coercive acts arising from inequities in gender roles and relationships directed against women by their male partners (Ellsberg, 2005; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005; Koenig, Stephenson, Ahmed, Jejeebhoy, & Campbell, 2006). There has been extensive research documenting the widespread prevalence of GBV (Ellsberg, 2005; Koenig et al., 2006; Panchanadeswaran & Koverola, 2005). According to a recent WHO multi-country study the lifetime prevalence of GBV ranges from 15% to 71% among ever-partnered women (Garcia-Moreno et al., 2005; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). Exposure to GBV weakens women's overall physical and mental health status, increasing their risk of long-term adverse health conditions such as physical disabilities, chronic pain, depression, unintended pregnancies, miscarriages, and sexually transmitted diseases including HIV/AIDS (Ahuja, Bangdiwala, S.S, Jain, Jeyaseelan, Kumar et al., 2000; Ellsberg, 2005; Jain, John, & Keusch, 1994; Jejeebhoy, 1998; Newmann, Sarin, Kumarasamy, Amalraj, Rogers, Madhivanan et al., 2000; Patel, Weiss, Mabey, West, D'Souza, Patil et al., 2006; Stephenson, Koenig, & Ahmed, 2006a, b).

In India, as in other part of the world, the prevalence of GBV has been well established, but studies have focused mainly on physical violence. The lifetime prevalence of physical violence, as estimated from clinic and community-based studies, ranged from 22% to 65% (Chandra, Deepthivarma, Carey, Carey, & Shalinianant, 2003; Chandrasekaran, Krupp, George, & Madhivanan, 2007; Kishor & Johnson, 2004; Krishnan, 2005; Martin, Tsui, Maitra, & Marinshaw, 1999b). The variation in estimates across studies has been attributed to differences in the questions used to assess GBV, sampling procedures, and sample characteristics, as well as heterogeneity in the populations studied (Chandrasekaran et al., 2007; Krishnan, 2005). Prevalence estimates from nationally-representative studies also tend to vary. The most recent findings from a nationally-representative population sample (NFHS-3 2005-06) estimated that about a third of the sample experienced physical violence (35.5%) from an intimate partner, with over a quarter (27.8%) experiencing physical violence in the absence of sexual violence, and less than 10% (7.7%) reporting both physical and sexual violence (Silverman, Decker, Saggurti, Balaiah, & Raj, 2008). In a multi-country study, where data from India was collected across seven sites in urban, rural, and urban-slum areas, the prevalence of physical violence was estimated to be 19% (Kishor & Johnson, 2004). In another study that focused exclusively on India, and collected data from six states, the prevalence of physical violence was much higher at 40% (Ahuja et al., 2000). Both population and clinic-based studies have also shown that women experience physical violence during pregnancy, with the prevalence ranging from 12.9% to 47.6% (Chhabra, 2007; Khosla, Dua, Devi, & Sud, 2005; Peedicayil, Sadowski, Jeyaseelan, Shankar, Jain, Suresh et al., 2004; Purwar, Jeyaseelan, Varhadpande, Motghare, & Pimplakute, 1999). In one of these studies, conducted among women attending antenatal care, 8.3% of the sample reported an increase in physical violence during pregnancy (Purwar et al., 1999).

In the state of Karnataka, where this study was conducted, the estimates of physical violence were similarly high. Over a quarter (27%) of women surveyed in a study reported having been beaten by their husbands, while 34% of male heads of household or women's

husbands concurred (Krishnan, 2005). In more recent literature, the estimates were higher at 29% and 50%, respectively (Chandrasekaran et al., 2007; Rocca, Rathod, Falle, Pande, & Krishnan, 2009). This could be attributed to the fact that both studies report taking measures to build rapport with the community, and trained their researchers to conduct data collection in a sensitive manner and to ensure respondent confidentiality.

The prevalence of sexual<sup>7</sup> and psychological violence<sup>8</sup> in India has been measured to a lesser extent. Data from a multi-site study revealed that 15% of the sampled women had experienced one or more incidents of forced sex (International Clinical Epidemiological Network, 2000), while a study in Karnataka found that 18% of women in the 18-40 year age-group reported being forced into sex by their husbands (Batliwala, Anitha, Gurumurthy, & Wali, 1998), and less than 10% of respondents from a clinic-based study in Bangalore city, the capital of Karnataka, reported sexual coercion during pregnancy (Varma, Chandra, Thomas, & Carey, 2007). Studies conducted with married men, in efforts to understand male perspectives on violence against women, revealed a higher prevalence of sexual violence ranging from a low of 9% to a high of 50% (Duvvury, Nayak, & Allendorf, 2002; Koenig et al., 2006; Martin et al., 1999b). Data on the prevalence of psychological violence are similarly limited. In Kerala, 25% of women participating in a multi-country study reported experiencing psychological violence, and 7.5% of them reported attempting suicide as a result of psychological violence (Vizcarra, Hassan, Hunter, Munoz, Ramiro, & De Paula, 2004). In Karnataka, a quarter of the sample (15%) surveyed in a cross-sectional study in an antenatal clinic reported psychological violence (Varma et al., 2007).

Studies conducted in India have also identified a number of individual, relationship, household, and community-level determinants of GBV. Here again the focus has been physical violence. In both community-based and population-based studies conducted across the country, partner's alcohol consumption consistently appears to increase the likelihood of physical violence (Go, Sethulakshmi, Bentley, Sivaram, Srikrishnan, Solomon et al., 2003; Jeyaseelan, Kumar, Neelakantan, Peedicayil, Pillai, & Duvvury, 2007; Jeyaseelan, Sadowski, Kumar, Hassan, Ramiro, & Vizcarra, 2004; Krishnan, 2005; Ramiro, Hassan, & Peedicayil, 2004; Varma et al., 2007). Partner's consumption of alcohol remains a significant determinant of physical violence even after controlling for independent covariates such as age, household income, family structure, and place of residence (Jeyaseelan et al., 2007; Jeyaseelan et al., 2004; Krishnan, 2005; Ramiro et al., 2004; Varma et al., 2007). Most of these studies measured partner's alcohol consumption as a dichotomous variable (i.e. men consume or don't consume alcohol). Only one study classified the frequency of alcohol consumption into four categories: teetotaler (as the reference category), not excessive consumption, occasional consumption, and regular consumption (Jeyaseelan et al., 2004). Unfortunately, the authors do not explain how they arrived at these categories. They reported that most husbands in the sample consumed alcohol, and regular consumption of alcohol as compared to no consumption increased the likelihood of women experiencing physical violence by 5.6 times. Another study found that if men consumed alcohol just before having sex, the likelihood of women experiencing GBV was increased two-fold (Krishnan, 2005).

Education is another important determinant of physical violence. Across several studies, women with higher education had a significantly lower likelihood of experiencing physical

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<sup>7</sup> Sexual violence is defined as "penetrative sex, deception, verbal threats and psychological intimidation to obtain sex, and rape" (population council report, 2004).

<sup>8</sup> Psychological violence is defined as "being insulted or belittled, threatened or abandoned" (Ramiro, 2004)



violence compared to uneducated women (Ackerson, Kawachi, Barbeau, & Subramanian, 2008; Bangdiwala, Ramiro, Sadowski, Bordin, Hunter, & Shankar, 2004; Jejeebhoy, 1998; Jeyaseelan et al., 2004; Koenig et al., 2006). Higher education among husbands was also negatively associated with physical violence (Ackerson et al., 2008; Jeyaseelan et al., 2004; Koenig et al., 2006). One study by Ackerson et al. that focused exclusively on the effects of education and used a nationally-representative sample also found that women who were more educated than their husbands reported an increased likelihood of lifetime and current physical violence as compared to women whose educational attainment was on par with, or below, that of their husbands' educational attainment (Ackerson et al., 2008). Further, using multilevel multivariable logistic regression modeling the authors found that the neighborhood educational context—defined as neighborhood male and female literacy rates—modified the relationship between women's education and their likelihood of experiencing physical violence. The protective effect of neighborhood educational context on women's risk of physical violence was stronger for women with middle to high level of education as compared to women who had low education.

Other individual-level determinants of physical violence include younger age, parity, childlessness, witnessing abuse in childhood, women's lack of autonomy, control over economic resources, and low social support (Jeyaseelan et al., 2007). Household and community-level factors include living in extended families, dowry-related harassment, and intergenerational violence (Bangdiwala et al., 2004; Jeyaseelan et al., 2007; Khosla et al., 2005; Koenig et al., 2006; Krishnan, 2005; Martin, Kilgallen, Tsui, Maitra, Singh, & Kupper, 1999a; Martin et al., 1999b). Community norms that condone VAW also tend to increase women's likelihood of experiencing physical violence and sexual violence (Koenig et al., 2006), while having social support was found to have the opposite effect on experiencing physical violence (Jeyaseelan et al., 2007). Marriage, a social necessity that takes place at a young age for women, combined with centuries-old traditions and customs that perpetuate unequal relations between men and women is directly associated with the likelihood of GBV (Go et al., 2003; Jejeebhoy, 1998; Jejeebhoy & Cook, 1997; Rastogi & Therly, 2006). In addition, belonging to a lower socioeconomic class and being burdened with financial problems as compared to belonging to a middle or higher socioeconomic class was also found to be positively associated with physical violence (Chandrasekaran et al., 2007; Jeyaseelan et al., 2007; Khosla et al., 2005; Koenig et al., 2006; Krishnan, 2005; Singh, Rohtagi, Soren, Shukla, & Lindow, 2008). One study among antenatal clinic-attendees established the reverse; the odds of abuse were greater for women in households with an income higher than Rupees. 3000 as compared to those whose household income was less than Rupees.1000 (Rupees or Rs. or INR is the term used for Indian currency. At the current exchange rate Rupee 1 equals \$.02 US dollars, so Rupees 3000 equals \$62.67 and Rupees 1000 equals \$20.89) (Varma et al., 2007). The authors admit this finding was unexpected and call for further research to explore the reasons for this finding. One possibility could be the substantially smaller sample size as compared to other studies and the co-existence of physical and psychological violence in this sample.

The relationship between women's empowerment, defined as increased access to economic and social resources, and their risk of physical violence has also been explored. Some studies have found that improving women's status with employment and membership in group-based savings is associated with lower physical violence (Jejeebhoy & Cook, 1997; Schuler, Hashemi, Riley, & Akhter, 1996). Other studies have shown the reverse; for example, in one study women who worked, earned income, and controlled their income were more than twice as likely to report physical violence as compared to those who were not earning (Krishnan, 2005).

In another study, women who participated in social groups—self-help groups, savings funds, or women’s groups—after marriage were more likely to report physical violence (Rocca et al., 2009). The authors of these last two studies attribute the inverse relationship between women’s empowerment and social group participation and physical violence to the fact that these women might be defying norms. Krishnan (2005) suggests that women who earn and manage their income might be more outspoken and challenge their husbands’ authority resulting in increased conflict. Rocca et al. (2009) argue that there might be tacit norms in the community regarding women’s mobility. To participate in social groups women have to leave their homes and are thereby possibly defying the norms that expect women to stay home which may result in increased conflict.

As is evident from this review, most of the research on the prevalence and determinants of GBV in India has focused exclusively on physical violence. There has been little investigation of the risk factors associated with other types of GBV. It is important, however, to study in more depth the risk factors for other types of GBV since we know that GBV can take forms other than physical violence and that these other forms of GBV can adversely impact women’s health, including fatalities such as HIV/AIDS (Ellsberg, 2005; Jain et al., 1994; Newmann et al., 2000; Stephenson et al., 2006b). Failing to research other types of GBV could result in the assumption that risk factors for different types of GBV are similar, and the interventions designed to address different types of GBV will also be similar which may not necessarily be most effective.

To my knowledge, only two published papers have examined the determinants of different types of GBV in India (Babu & Kar, 2009; Koenig et al., 2006). Babu and Kar (2009) used population-based data to study the lifetime prevalence and risk factors for physical, psychological, and sexual violence. They found women’s older age, lower education, lower household income, and urban residence to be common risk factors for both sexual and physical violence. Physical violence was also associated with other socio-economic and demographic variables including religion, woman’s occupation, and caste. In contrast, Koenig, Stephenson, and Ahmed et al. (2006) found differences between the risk factors for different types of GBV. Analyzing data from a nationally-representative sample of married men from Northern India, they found higher education among husbands to be negatively associated with recent physical violence but positively associated with experiencing sexual violence (Koenig et al., 2006).

Both studies, however, have limitations. Babu and Kar (2009), state that they include individual and community-level variables in their analysis. However, their choice of community-level variables (state of residence, religion, and caste) do not reveal much about community norms towards women and masculinity, perceptions about traditional gender roles, or cultural practices such as dowry –all of which have been identified as measures of community-level effects on women’s risk of GBV (Heise, 1998). Although Koenig et al. (2006) did include individual and more appropriate community-level variables such as community norms regarding wife beating and a measure of community environment of crime, and conducted a multilevel rigorous analysis, their data come from married men and do not capture women’s perspectives. On an issue as private and sensitive as GBV, with prevailing norms that afford men superior status in marital relationships and rights over their wives, perceptions of what constitutes violence, especially forced sex, are bound to vary between men and women.

This study uses baseline data from a prospective cohort study of young reproductive age women conducted in Mysore, Karnataka to inform the gap in the literature on the determinants of sexual violence. More specifically, my research aims were to study: (1) the relationship between socio-economic factors, individual and family-level variables pertaining to relationships, and

women's autonomy and women's risk of sexual violence; and (2) the association between sexual and physical violence. This study had two main hypotheses. The first hypothesis was that there would be both similarities and differences in the risk factors for the two types of violence, in that the strength of the relationship and the directions of the associations between different covariates and each type of violence could vary. The two types of violence are founded upon similar gender inequities, and could have similar risk factors. Yet, the two types of violence have also been previously related to different risk factors, and this needs further exploration. The second hypothesis was that physical violence would be an important determinant of sexual violence. Given the abundance of literature on the risk factors for physical violence, I used this as a starting point to develop multivariable logistic regression models to study the determinants of physical and sexual violence independently. I compared the two models to ascertain whether risk factors for a more commonly-reported type of GBV such as physical violence may be used as proxies for sexual violence, often perceived to be a more private and sensitive issue. I also studied the how physical violence modifies the relationship between other covariates and sexual violence.

## **Methods**

### **Study setting and data source**

A prospective cohort study investigating the relationship between vaginal flora and seroconversion to herpes simplex virus Type- 2 (HSV2) was conducted in Mysore in the south Indian state of Karnataka. The data for this analysis come from baseline data for this study collected between November 2005 and December 2006 and pertaining to violence against women. A two-stage recruitment process was employed for this study. Detailed recruitment methods are described elsewhere (Krupp, Madhivanan, Karat, Chandrasekaran, Sarvode, Klausner et al., 2007). In brief, participants were recruited from the obstetrics and gynecology outpatient clinic of a large hospital. Additionally, study staff collaborated with employees of government development programs and tapped into existing community-based networks, primarily microeconomic self-help groups, to recruit participants directly from the community. Outreach programs were conducted to create a rapport with the community. These included basic reproductive health information as well as details about the HSV2 study, eligibility criteria and invitation to enroll. Free transportation was provided to women who travelled to the hospital in groups of six or more to participate in the study. Study eligibility included: being between 15-30 years of age, sexually-active, not pregnant, willing to undergo a pelvic examination and blood draw, and willing to remain in the area for 6 months. A total of 1077 women were screened; 947 were eligible to participate in the study; and 918 (85%) were enrolled. Complete data on sexual and physical violence were available for 897 participants (83%). The study protocol was approved by the Center for the Protection of Human Subjects at the University of California, Berkeley in April, 2005 and the Asha Kirana Hospital Institutional Review Board in Karnataka, India (the local institutional review board), in compliance with all federal regulations governing the protection of human subjects. Subsequently in August 2008, the Center for the Protection of Human Subjects at the University of California, Berkeley determined that this study was exempt from full committee review under a provision that allows secondary analysis of data that has no attached identifiers.

## **Data collection**

Trained researchers approached potential participants in clinic-waiting rooms and explained the purpose of the study. Those interested were assessed for eligibility, explained the purposes of the study, and written informed consent was obtained. Data were collected from all eligible participants who gave written informed consent to participate in the study. Enrolled women participated in face-to-face interviews conducted in private rooms in the clinic by trained researchers. The survey was conducted in Kannada and Urdu, the two most commonly spoken languages among this population. The survey collected information on socio-demographics, household and personal economic activity and assets owned, reproductive health status and healthcare seeking behavior, sexual history, individual and husband's substance abuse, history of sexually transmitted infections, experience of physical and sexual violence by an intimate partner, and a series of questions on the husband's socio-demographics, economic activity, and sexual relationship.

## **Measures**

The measures pertaining to the experience of physical and sexual violence by an intimate partner, those most relevant for this analysis, were developed by referencing validated instruments from other studies including WHO's multi-country study on domestic violence and women's health, and the National Family Health Survey-2—the Indian equivalent of the Demographic Health Survey.

## **Outcome measures**

Two outcome variables, namely experiencing sexual violence in the past year and experiencing physical violence in the past year, were considered for this analysis. A dichotomous variable for the experience of sexual violence in the past year was created by combining responses to 12 items from the survey that pertained to various acts of sexual violence as defined by the WHO. Each of these items was categorical: (0) the act never occurred, (1) the act occurred rarely or once/twice a year, (2) the act occurred sometimes or less than once a month, and (3) the act occurred frequently or at least once a month. The frequency distributions of responses, however, were uneven in that very few women responded with a 2 or 3 i.e. acknowledged experiencing the specific act of sexual violence sometimes or less than once a month and frequently or at least once a month. Since research on sexual violence in India is still very limited, the principal investigator and I felt it was at least important to study the experience of sexual violence even if frequency data were unreliable. Dichotomous variables for each of the 12 items were thus created by coding responses 1, 2 and 3 i.e. experiencing the act rarely or once/twice a year, sometimes or less than once a month, and frequently or at least once a month as having experienced sexual violence in the past year. A summary measure was then created by adding up the responses to these 12 new dichotomous items. Similarly, 12 items from the survey pertaining to the experience of physical violence were first modified into dichotomous variables, and then a summary measure of the experience of physical violence in the past year was created by summing responses across the 12 items. (The complete list of items used to create the two outcomes variables are described in Table 4.1).

## **Independent measures**

The selection of independent measures was influenced by recent literature and Heise's conceptual framework for VAW (Heise, 1998). Figure 4.1 outlines my adaptation of this

framework. GBV is recognized to be a function of the complex interplay of proximate and distal factors continuously interacting both across and within the multiple levels of influence in the environment (Kaplan, 1999; McMichael, 1999; Stokols, 1996), represented by concentric circles in Figure 4.1. Specific factors operate at each level and are hypothesized to be risk factors for GBV. Based on the availability of data, I focused my analysis on factors operating at three levels: individual, relationship, and household.

The individual-level variables used in this analysis included the following: age in years, age at first sex, having children, women's contribution to household income, and women's educational status. After checking the form of the first two variables, they were retained as continuous. Since having children gives women higher status in marital relationships (Jejeebhoy & Cook, 1997), a dichotomous variable for whether or not women have children was included in the model as a measure of women's status. Additionally, women's contribution to household income was included as a categorical variable with three categories: making no contribution to the household income (the reference group), contributing less than half to half of the total household income, and contributing more than half to all of the household income. These categories were decided upon based on the functional form of the data and the aim of exploring how different levels of contribution to the household income might influence women's risk of violence. In addition, I studied how previous literature had treated women's earning, employment, and contribution to household income. Finally, women's educational status was also included as a categorical variable using the conventional categories: no education (reference group), primary education (1-7 years of schooling), and more than primary education (more than 7 years of schooling).

Several independent variables pertaining to the husband's characteristics were also included in the analysis as factors operating at the relationship level. These included: husband's educational attainment, occupation, and two measures of the husband's propensity for risky behavior—consumption of alcohol and having multiple sex partners; both of which have been empirically associated with women's risk of GBV (Go et al., 2003; Jeyaseelan et al., 2007; Krishnan, 2005; Ntaganira, Muula, Masaisa, Dusabeyezu, Siziya, & Rudatsikira, 2008). Husband's educational status was classified into the three categories similar to women's educational status. Occupational categories, on the other hand, were developed based on consultations with the principal investigator of the study and her understanding of the local context and the way the data were distributed. Three categories combining occupations of similar skill and income level were created: (1) all unskilled occupations (reference group); (2) occupations that required some skill and yielded higher incomes such as being a clerk, a hotel owner, a supervisor, and a professional; and (3) the occupation of service drivers (i.e. those who operated motor vehicles). This last occupational category could have been included under category 2 'skilled and higher income'. However, this was retained as a separate category for several reasons. First, 'driver' was the single largest frequency among all possible occupations for husbands (11.1%) in the raw data. Second, evidence shows that occupations involving mobility such as being a taxi, lorry, truck, or other automobile driver are associated with increased risky behaviors for men including excessive alcohol consumption and substance abuse, and having multiple sex partners (Saggurti, Schensul, & Verma, 2009; Sopheab, Fylkesnes, Vun, & O'Farrell, 2006). These risky behaviors, in turn, are associated with women's risk of violence (Go et al., 2003; Jeyaseelan et al., 2007; Jeyaseelan et al., 2004; Krishnan, 2005; Martin et al., 1999a; Ramiro et al., 2004). It was thus considered to important to study the independent effects of this particular occupational category among husbands and women's risk of violence instead of

combining the ‘driver’ occupation with other skilled and higher income jobs. Husband’s consumption of alcohol and having multiple sex partners were included as dichotomous variables. The reference categories for each variable were husbands not consuming alcohol and husbands not having multiple sex partners, respectively.

Finally, two measures operating at the household-level were included: monthly household income and number of people in the household. After exploratory analysis the former was dichotomized at the median Rs. 4000 (INR), while the latter was treated as continuous and retained in the model as an indicator of household economic pressure as well as social context given our understanding of how certain family members can be influential both in the perpetuation and prevention of GBV (Clark, Silverman, Shahrouri, Everson-Rose, & Groce, 2009; Hyder, Noor, & Tsui, 2007; Naved & Persson, 2008; Raj, Livramento, Santana, Gupta, & Silverman, 2006).

### **Statistical analysis**

This was an exploratory study to identify the determinants of sexual violence, to study how these compare against the well-established determinants of physical violence, and to study the association between sexual and physical violence. I hypothesized that there would be both similarities and differences between the risk factors for sexual and physical violence, and that physical violence would be an important determinant of sexual violence even after adjusting for other covariates. By similarities and differences I mean that certain covariates were hypothesized to be associated with both types of violence, but the strength of the relationship and the direction of the associations were not clear. These include the following variables: women’s educational status, women’s contribution to the household, husbands’ educational status, number of people living in the household and household income. In the case of husbands’ alcohol consumption and having multiple sex partners, the association was hypothesized to be in the same direction for both physical and sexual violence.

The analysis began with exploratory data analysis. This included checking for missing data and imputing mean values for missing data<sup>9</sup>; recoding categorical variables of interest to reduce the number of categories; and checking the functional form of continuous variables to ensure that there was a linear relationship between the independent variable under consideration and the outcome variable. The relationships among potentially related independent variables were also assessed using tests for correlation, chi-square, and student *t-tests*, to ensure that two highly correlated variables were not included in the multivariable analyses. Bivariate logistic regression analyses were then conducted to assess the strength of the association of each covariate with the two outcome variables using odds ratios and 95% confidence intervals. Multivariable logistic regression modeling followed and this had four steps. First, informed by previous literature on the risk factors for physical violence, a multivariable logistic regression model was constructed to identify the significant determinants of experiencing physical violence in the past year, adjusting for other covariates. Second, this model was repeated replacing the outcome variable with the log odds of experiencing sexual violence in the past year. An iterative process then followed where covariates hypothesized to influence the likelihood of women experiencing sexual violence such as reproductive and sexual health and health practices were tested one by one until a final parsimonious model emerged. However, based on statistical results, the inability to establish temporality, and my understanding of the literature, these

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<sup>9</sup> Note: for a few variables such as income, partner’s consumption of alcohol, age at first sex data was missing for approximately 1% of the cases. These were replaced with the means.

additional covariates were not included in the final model for sexual violence. Third, the two models (physical violence and sexual violence) were compared to explore how the determinants of experiencing sexual violence and physical violence in the past year compare. Fourth, the sample was stratified by the experience of physical violence in the past year, and the multivariable regression model for experiencing sexual violence in the past year was repeated to explore the possibility of effect modification of the relationships between other covariates and sexual violence by the experience of physical violence. A test of statistical interaction between each covariate and physical violence was also conducted to ensure that stratifications results were significant. The measure of association calculated in all these steps was odds ratios with corresponding 95% confidence intervals to assess the certainty around these estimations. All analyses were conducted using Stata 10 computer software (StataCorp, 2009).

Since this was an exploratory analysis of secondary data without a main effect that had been collected for other research purposes, the power analysis was conducted post-hoc and with modifications. As earlier described, the analysis had several covariates of potential interest resulting in having several hypotheses under consideration and the power associated with different hypotheses is likely to differ. Given this constraint, I calculated the power for several combinations of covariates using two different power calculators and comparing the results (Demidenko, 2007; Rothman, 2002). First, I calculated power using a covariate that was least hypothesized to be associated with the outcome. This covariate was whether or not women had children. To obtain a medium to high effect size (OR: 1.5-1.75) the power of the study was 78%. Second, using a covariate well established to be associated with violence (partner's consumption of alcohol) as the main effect, the power to obtain a medium effect size (OR: 1.5) was calculated as 80.6%. Next, with one variable as the main effect (partner's consumption of alcohol) and one as a confounder (partner has multiple partners), the power to obtain a medium effect (OR: 1.5) was calculated at 80%. It is, however, likely that with the addition of more covariates the power could be reduced.

## Results

The sample characteristics are summarized in Table 4.2. The majority of the participants were married (97%), and their average age at baseline was 25 years (range 16-30). A little over a quarter (27%) of all women had received no formal education, while 30% reported receiving at least primary education, and 43% had more than primary education. Only about a quarter were employed outside of the home in either the unskilled service sector or in skilled professions. The majority had children (84%) and about half were living in nuclear families (43%). Husbands tended to be older than their wives, but their educational attainment was similar: 32% had no formal education, 25% had received at least primary education, and 43% had more than primary education. In contrast to women, all husbands were employed with about half (45%) working in the unskilled sector and the other half in skilled services. About half the study participants reported having experienced physical violence in the past year (49%), and over a third (36%) reported experiencing sexual violence in the past year.

Tables 4.3 to 4.6 summarize the results of the logistic regression analyses. Table 4.3 presents results from unadjusted and adjusted analyses with sexual violence as the outcome variable. In the unadjusted model, women who had children as compared to those without children (OR=1.55, 95% CI: 1.0-2.3), and women who were contributing to the household income by less than half to half as compared to those who made no contribution were at increased odds (OR=1.78, 95% CI: 1.2-2.7) of experiencing sexual violence. Those whose

husbands had at least primary education as compared to those whose husband were not educated (OR=1.19, 95% CI: 1.3-2.7) and those whose husbands were employed as drivers as compared to the reference category of unskilled occupations were also at increased odds (OR=1.87, 95% CI: 1.2-2.9) of experiencing sexual violence. Husband's consumption of alcohol (OR=2.13, 95% CI: 1.6-2.8) as compared to no consumption of alcohol and having multiple sex partners (OR=2.20, 95% CI: 1.4-3.5) as compared to not having multiple sex partners doubled the odds of sexual violence among women. All of these associations except having children remained statistically significant even after adjusting for other covariates.

Table 4.4 presents results from the unadjusted and adjusted analyses with physical violence as the outcome variable. In the unadjusted model, several covariates were inversely associated with the odds of experiencing physical violence. These include woman's age at first sex (OR=.92, 95% CI: .88-.97), having acquired more than primary education as compared to women who had no education (OR=0.65, 95% CI: .47-.89), number of people living in the household (OR=.92, 95% CI: .86-.98), and having an income of Rs. 4000 (INR) or more as compared to having an income less than Rs. 4000 (INR) (OR=.59, 95% CI: .42-.84). In contrast, women who were contributing less than half to half of the household income as compared to those who made no contribution were at increased odds of experiencing physical violence (OR=2.40, 95% CI: 1.6-3.7). Husband's consumption of alcohol (OR=2.48, 95% CI: 1.9-3.3) and having multiple sex partners (OR=2.06, 95% CI: 1.3-3.3) also doubled the odds of physical violence among women. After adjusting for other covariates women's educational status, the number of people living in the household, age at first sex, and household income were no longer statistically significant, while women's contribution to household income and husband's consumption of alcohol and having multiple sex partners remained significant.

Comparing the two adjusted models for experiencing sexual and physical violence respectively in Table 4.5, husband's consumption of alcohol and having multiple sex partners, and women's contribution to the household income were significantly associated with the likelihood of experiencing both types of violence and the associations were directionally similar. However, factors relating to the husband's characteristics—education and occupational status—were associated with the odds of experiencing sexual violence but not physical violence. Having children increased the odds of sexual violence but had no effect on physical violence.

Finally, Table 4.6 demonstrates how physical violence modifies the relationship between the other covariates and sexual violence. When women experienced physical violence most of the covariates previously found to be significant (Table 4.3) were no longer significant. Even husband's consumption of alcohol was no longer significant (OR=1.48, 95% CI: 1.0-2.2), and only husbands' having multiple sex partners remained marginally significant (OR=1.93, 95% CI: 1.03-3.63). Comparing these data to Table 4.3 which included all respondents (those with and without physical violence), the striking difference in the strength of the association between these covariates and sexual violence and the change in significance of relationships can be seen (husband's consumption of alcohol for the entire sample OR=2.13, 95% CI: 1.6-2.8 and husband's having multiple partners for entire sample OR=2.20, 95% CI: 1.4-3.5). When women did not experience physical violence, the significant correlates were very different. Having a husband with primary education as compared to no education increased the odds of sexual violence three-fold (OR=3.27, 95% CI: 1.4-7.5). Women who reported their husbands' occupation as being skilled and higher income (OR=1.97, 95% CI: 1.0-3.9) or as being a driver (OR=3.26, 95% CI: 1.4-7.9) were also at increased odds of experiencing sexual violence. Husband's consumption of alcohol was a significant risk factor but with a weaker association



(OR=1.93, 95% CI: 1.1-3.4) as compared to the adjusted model in Table 4.3 (OR=2.13, 95% CI: 1.6-2.8), while husbands' having multiple sex partners was no longer significant. Women's contribution to the household income of more than half to all of the household income as compared to those who made no contribution, was seen to have an inverse relationship with sexual violence (OR=0.21, 95% CI: 0.1-0.6), while a contribution that is less than half to half (found to increase the odds of sexual violence in the adjusted model in Table 4.3) was no longer associated with sexual violence. A test of statistical interaction between each covariate and physical violence with sexual violence as the outcome variable was also conducted. The results were identical with both models.

### **Discussion**

Building on previous research, this study makes important contributions to our understanding of both sexual and physical violence and the association between the two. Consistent with my hypothesis, several differences and similarities were noted between the determinants for sexual and physical violence. Physical violence was also found to be a strong predictor of sexual violence, and the determinants of sexual violence differed depending on the presence or absence of physical violence. These findings highlight the importance of examining different types of GBV independently, as each type of GBV (physical, sexual, economic or psychological violence amongst others) is likely conceptualized and normalized by communities differently and thus associated with different risk factors. Future research is also warranted to understand in more detail and at multiple dimensions the differences between male perpetrators who both physically and sexually abuse their wives as compared to those who only sexually abuse their wives.

One of the most striking differences between the determinants of physical and sexual violence was husband's educational status which was associated with sexual violence but not with physical violence. Women whose husbands were educated up to primary school (7 years of schooling) were at increased odds of experiencing sexual violence as compared to women whose husbands were uneducated, while husbands' educational status was not significantly associated with physical violence. Women whose husbands had higher education (more than 7 years of schooling) were also at increased odds of experiencing sexual violence, but the relationship was not significant. Other studies have established an inverse relationship between husbands' and wives' educational status and the likelihood of physical violence (Ackerson et al., 2008; Jeyaseelan et al., 2004; Koenig et al., 2006). Koenig M et al. (2006) examined both types of GBV and found similar differences in the determinants for physical and sexual violence. Higher education among husbands was associated with a significantly lower likelihood of recent physical violence, while it was positively associated with the likelihood of recent sexual coercion. But unlike this study having primary schooling had no significant relationship with recent physical or sexual violence, but having higher education was significant. Research from other parts of the country including Karnataka help explain some of these differences. Sexual coercion by men is often considered an unavoidable part of a marriage (Go et al., 2003). In contrast, physical violence occurs when women violate socially-acceptable gender roles (Jejeebhoy & Cook, 1997) or when men are frustrated by their poor socioeconomic conditions (Jeyaseelan et al., 2004) and may engage in excessive alcohol consumption, which, in turn, exacerbates violence (Go et al., 2003; Jeyaseelan et al., 2007; Krishnan, 2005; Ntaganira et al., 2008). Although widely accepted by women (Jejeebhoy, 1998; Jeyaseelan et al., 2004) and the broader community, there are situations when physical violence is condemned and other family

members may intervene to mitigate the violence (Clark et al., 2009; Naved & Persson, 2008). Educated men might be afforded a higher status in society that comes with different expectations of how they should treat their wives. These men may be conditioned against physically abusing their wives as a way of maintaining their public image, while the sexual domain may be the only private area where they can continue to exercise control over their wives. The relationships between education and sexual violence may also be confounded by other factors which we are unable to ascertain through cross-sectional analysis.

Husband's occupation was similarly significantly associated with sexual violence but not physical violence. Women whose husbands were employed as drivers were at increased odds of experiencing sexual violence as compared to those whose husbands worked in unskilled and low paying jobs. Evidence from India and other countries has demonstrated that male occupations with mobility (such as taxi/truck/other automobile drivers) are associated with risky behaviors such as having multiple sex partners and consumption of alcohol and other substance abuse (Gorbach, Sopheab, Phalla, Leng, Mills, Bennett et al., 2000; Rao, Pilli, Rao, & Chalam, 1999; Saggurti et al., 2009; Sopheab et al., 2006). These behaviors, in turn, are well established determinants of both physical and sexual violence (Go et al., 2003; Jeyaseelan et al., 2007; Jeyaseelan et al., 2004; Krishnan, 2005; Martin et al., 1999a; Ramiro et al., 2004); also consistent with the findings from this study. More recent data from the study of HIV however provide a possible explanation for the differing relationship between husband's occupation and sexual violence vs. husband's occupation and physical violence. The occupational profiles of HIV-positive men demonstrate a propensity for high-mobility occupations such as taxi/truck drivers, hotel staff, agriculture/factory workers (Bhattacharya, Joshi, & Kapilashrami, 2004) while research with HIV-infected women in India show that the majority of infections are attributed to heterosexual transmission, largely within the institution of marriage (Jain et al., 1994; Newmann et al., 2000). HIV-infected women are also more likely to report a history of forced sex (Gupta, Wyatt, Swaminathan, Rewari, Locke, Ranganath et al., 2008); and physical violence alone does not increase women's risk of HIV infection (Silverman et al., 2008). These data when examined together and when combined with our understanding of traditional norms of male entitlement over women's bodies (Go et al., 2003; Jejeebhoy & Cook, 1997) suggest that certain occupations among men that involve mobility (being a taxi/truck driver, hotel staff, agriculture/factory worker) might lead to increased sexual violence but not necessarily physical violence, and subsequently increase women's risk of acquiring sexually transmitted infections. Further, similar to educated men, those in certain occupations—perceived to be high-paying and skilled—might have a higher status in society and be expected to behave in a more outwardly controlled manner, causing them to engage in less physically abusive behavior but resorting to sexual coercion as a way of exercising power and control over their wives. Given their long periods of stay away from home they may consider it within their rights to satisfy their frustrations by demanding sex, whether by force or threat of force, irrespective of their wives' desires.

There are also a few noteworthy similarities between the determinants of physical and sexual violence. First, husband's consumption of alcohol and practice of having multiple sex partners were positively associated with sexual and physical violence. Although these associations have been previously established (Go et al., 2003; Jeyaseelan et al., 2007; Jeyaseelan et al., 2004; Krishnan, 2005; Martin et al., 1999a; Ramiro et al., 2004) it is important to highlight that these associations persist even after controlling for other factors indicating that husbands' risky behaviors increase women's vulnerability to GBV irrespective of other socio-economic improvements.

Another similarity between the determinants of the two types of GBV is that of women's contribution to the household income. For both physical and sexual violence, as women began to contribute to the household income, bringing in less than half to half of the income, their likelihood of experiencing sexual and physical violence increased. However, when they contributed more than half to all of the household income, although not significant, the direction of the association with sexual and physical violence was reversed suggesting a possible protective effect. Evidence of the relationship between physical violence and women's earning has been previously established and tends to be mixed. Some studies have found a positive relationship similar to findings from this study (Krishnan, 2005; Rocca et al., 2009), while others have found that with earnings and membership in group-based savings women have a lower likelihood of experiencing physical violence (Jejeebhoy & Cook, 1997; Schuler et al., 1996) and sexual violence (Hadi, 2005). Two studies have also demonstrated how this relationship is confounded by the local context (Koenig, Ahmed, Hossain, & Khorshed Alam Mozumder, 2003; Schuler, Hashemi, & Badal, 1998). Koenig et al. found that in "culturally conservative" areas or areas where gender roles were changing with more women being employed, women's earning and membership in groups had a positive association with physical violence while in less conservative areas they are unrelated (Koenig et al., 2003). A few explanations can be put forth to elucidate this association. As women begin to earn and contribute to the household income, they may have a greater sense of independence, an awareness of their rights, and begin to challenge traditional gender norms (Ahmed, 2005). Men as the traditional providers for the family may feel their authority is being undermined and fearing a change in the status-quo be more likely to exert power and superiority over their wives (Jeyaseelan et al., 2007; Schuler et al., 1998). As Schuler et al (1998) have demonstrated qualitatively, when women's contributions become substantial, which possibly happens over time, men might begin to accept the new gender roles and recognize the value of their wife's contribution resulting in the inverse association (Schuler et al., 1998). Future studies using longitudinal data are warranted to understand this relationship between women's earning and GBV, and to study the potential confounding effects of time, the amount that women contribute to the household income, and their respective impact on gender roles.

Finally, another important finding from this study is the effect of physical violence on sexual violence. Physical violence was a strong predictor of sexual violence and the determinants of sexual violence differed depending on whether physical violence was present or not. Among women who did not experience physical violence, having a husband with at least primary education increased the likelihood of experiencing sexual violence as much as three times. Women whose husbands were employed in any kind of higher paying occupation as compared to those in unskilled jobs were also more likely to experience sexual violence. These relationships were not significant among the women who did experience physical violence. The significant and substantially higher odds ratios among those who do not experience physical violence suggest that there are differences between men who physically abuse their wives and those who don't, and the dynamics of the marital relations between both types of couples are probably also very different. This is further highlighted by the finding that for women who do not experience physical violence, contributing more than half to all of the household income is inversely related with sexual violence which is not true for women who also experience physical violence where the association remains positive although not statistically significant. The study findings, in the context of other literature, point to the need for detailed exploration of several areas that will be discussed in detail below.

## Limitations

Several limitations of this study should be noted. First, the use of cross-sectional data limits the ability to establish any causal relationships between experiencing sexual violence and the independent covariates. The outcome variable was therefore restricted to the experience of sexual and physical violence in the past year preceding the survey; previous literature was referenced extensively for the choice of correlates to be investigated; and we can only assess associations between the independent covariates and the experience of sexual violence. Second, since these data were restricted to individual behavior and practices I was unable to study the effects of risk factors operating at other levels of the environment, such as community norms around women's status and violence against women, cultural practices like dowry etc., and thus unable to fully operationalize the theoretical principles of the ecological model. With GBV now recognized to be a function of the complex interplay of multiple factors continuously interacting both across and within the many levels of influence in the environment (Heise, 1998), ecological studies that examine the risk factors operating at all levels of an individual's environment are imperative. Despite limitations of the available data, I did attempt to approximate the broader contextual factors influencing women's risk for GBV by including in the model variables such as household income, number of people living in the household, and women's contribution to the household income. Third, variables pertaining to reproductive and sexual practices, communication between couples on sexual health matters, women's sexual health outcomes and health-care seeking—all potential determinants of sexual violence—were not included in the final analysis even though data were available due to small sample size and the inability to establish temporality. For example, did exposure to sexual violence result in sexually transmitted infections (STIs) or does the presence of STIs increase/decrease risk of sexual violence; do women seek healthcare in response to sexual violence or does seeking healthcare influence their risk of sexual violence. Fourth, the possibility of misclassification bias for several potential determinants resulted in their exclusion from the final analysis. For example, 'age at marriage' the conventional variable used in studies of GBV determinants was considered but 'age at first sex' was used instead because the question about 'age at marriage' may have been misunderstood by several respondents with ages as low as 7 and 11 being reported. It is possible that many respondents reported the age at which their marriages were arranged rather than the age at which they started living with their husbands in response to this question. This variable also had missing data. The data on 'age at first sex' was more complete, and age at sexual debut has been empirically associated with GBV (Fonck, Leye, Kidula, Ndinya-Achola, & Temmerman, 2005). Further, in this sample age at first sex and age at marriage were fairly similar and easily inter-changeable. Similarly it would have been ideal to include data on women's occupational status and decision making in household matters, data on individual-level measures of autonomy, and data on which extended family members lived in the household to study the impact of social context on the likelihood of violence. Data on all these variables however suffered from misclassification bias and women's financial contribution to the household had to be used as a measure of individual-level autonomy, and a continuous variable for the total number of people in the household. A final limitation of this study is that all of the data are self-reported and are subject to recall and social desirability biases. The potential for underreporting is also likely to be high for data of such a private nature. The study investigators took several steps to counter these limitations and to improve validity: female interviewers were recruited from the local communities and received extensive training on research methods and ethics; and they collaborated with government development groups and community agencies to

develop a rapport with the community prior to study initiation. The team also developed relations with community-based organizations that support women who experience violence and need help. For example, they developed a relationship with all women's police station and if women in the study wanted to report their experience of violence the team members would accompany them to police stations to file reports.

### **Conclusion and implications for future research and practice**

Study results have potentially important implications for future research and programs aimed at reducing GBV in India. The substantial differences between determinants of sexual and physical violence suggest the need for more in-depth research to examine how communities conceptualize and respond to different types of GBV. Further, given the adverse women's health conditions associated with sexual violence such as miscarriages, unintended pregnancies, and sexually transmitted diseases including HIV/AIDS, more attention to women who experience sexual violence exclusively is needed. Interventions designed in the absence of such understanding which adopt a common approach to address all types of GBV may not be sufficient to make a significant impact on the different types of GBV.

The study findings also suggest the need for in-depth research on the characteristics and perspectives of male perpetrators. It will be important to understand how men and women may be conceptualizing GBV differently, which may explain why men's self reports of perpetrating sexual violence are higher than women's self reports of experiencing sexual violence. This kind of information is important to understand, for example, what makes some men exercise control over their wives in the sexual space alone, while others are violent towards their wives both physically and sexually, and still other are violent only physically.

Since some determinants for the two types of violence are common, they may be used as proxies for women's risk of sexual violence—a potentially underreported type of GBV. Health care providers can be trained to understand the similarities in the determinants of physical and sexual violence and to be prompted by these signs to delve deeper into women's experience of abuse. For example, asking a woman who discloses the reason for a physical injury to be an alcoholic husband about her sexual relations with her husband. New and innovative approaches to improve women's reporting of sexual violence are also critical to better address the adverse health outcomes associated specifically with sexual violence.

Finally, the consistent association between male consumption of alcohol and risky practices in explaining the differential frequency and severity with which women experience sexual and physical violence emphasize that interventions aimed only at women may not be sufficient. Interventions that focus directly on these problems such as the SBIRT (Screening, Brief-Intervention and Referral to Treatment) public health approach used in industrialized countries like the United States and Canada to address excessive alcohol-use could be adapted to the Indian context (Canadian Center on Substance Abuse, 2009; United States Department of Health & Human Services, 2009). Low male health-care utilization rates in India may require the inclusion of an incentive or economic livelihood enhancement component to encourage men to visit primary healthcare centers. Additionally, interventions that address other problems that men face in day-to-day survival, as well as programs that work closely with men in group-settings and challenge the deeply rooted social norms that condone GBV are necessary.

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## Tables and figures

**Table 4.1**

**List of indicator variables used to create binary outcome variables for the experience of sexual and physical violence**

**Sexual Violence**

- Had sex when she did not want to but complied because of fear
- Her husband did not use condom despite her requests
- Her husband touched her body against her will
- Had sex when not willing but without force
- Her husband used physical force to make her do something degrading/humiliating
- Her husband used threats to have sex
- Her husband used force (hitting, holding down, using a weapon) to have sex
- Her husband forced her to have sex when her judgment was impaired (asleep, drugged, medicated)
- Her husband forced her to have sex when others could see/hear
- Her husband forced her to touch his genitals
- Her husband criticized/humiliated her about sex
- Her husband used foreign objects against her will for sex

**Physical Violence**

- Her husband hit her
- Her husband slapped her
- Her husband kicked her
- Her husband beat her
- Her husband pushed/shoved her
- Her husband pulled hair or dragged her by her hair
- Her husband pushed her against a table/wall
- Her husband threw something at her that could hurt her
- Her husband burned her with a hot object
- Her husband used weapon
- Her husband choked-attempted to strangle-strangled her
- Her husband used some substance that could hurt her e.g. kerosene

**Table 4.2****Percentage distribution of sample on dependent and select independent variables**

<b>Variable Name</b>	<b>Percentage</b>
<b>Dependent Variables</b>	
Sexual violence	36
Physical violence	49
<b>Independent Variables</b>	
Mean age	26
Mean age at first sex	17
Mean number of people in the household	5
Women's education	
None	26.8
Primary	30.2
More than primary	43
Husband's education	
None	32.2
Primary	24.9
More than primary	42.9
Religion	
Hindu	69.1
Muslim	28.8
Christian	2.1
Family Structure	
Nuclear	43
Joint	57
Women's employment	
Unskilled	19.5
Skilled	5.5
Husband's employment	
Unskilled and lower incomes	43.6
Skilled and higher incomes	45.3
Driver	11.1
Husband's Alcohol Consumption	
Yes	43.5
No	56.5
Have Children	
Yes	84
No	16
Household Income (INR)	
Less than Rs. 4000	82.2
Rs.4000 or more	17.8
Women's Contribution to household income	
None	71.6
Less than half to half	12.3
More than half to all	16.2
Husband has multiple sex partners	
Yes	9.2
No	90.9

**Table 4.3****Multivariable logistic regression analysis of sexual violence: unadjusted and adjusted Models**

Variable	Unadjusted Model Sexual violence		Adjusted Model Sexual violence	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age	1.04	(0.99-1.08)	1.02	(0.97-1.07)
Age at first sex	0.99	(0.94-1.04)	1.00	(0.94-1.06)
Have children				
No	Ref		Ref	
Yes	1.55	(1.04-2.31)	1.52	(0.96-2.40)
Education				
no education	Ref		Ref	
primary	1.10	(0.77-1.58)	1.16	(0.78-1.71)
more than primary	1.01	(0.72-1.42)	1.04	(0.70-1.55)
Contribution to household				
no contribution	Ref		Ref	
less than half to half	1.78	(1.18-2.74)	1.74	(1.14-2.67)
more than half to all	0.83	(0.56-1.22)	0.71	(0.47-1.08)
Number of people living in the household	0.99	(0.93-1.06)	1.00	(0.93-1.07)
Husband's Education				
no education	Ref		Ref	
primary	1.19	(1.32-2.71)	1.80	(1.21-2.67)
more than primary	1.07	(0.77-1.48)	1.04	(0.70-1.54)
Husband's Occupation				
unskilled	Ref		Ref	
skilled & higher income	1.21	(0.90-1.62)	1.24	(0.89-1.74)
driver	1.87	(1.20-2.90)	1.59	(1.00-2.55)
Husband ever consumed alcohol				
No	Ref		Ref	
Yes	2.13	(1.61-2.81)	2.13	(1.59-2.85)
Income				
< 4000	Ref		Ref	
4000 or more	1.04	(0.73-1.48)	1.24	(0.82-1.89)
Husband has multiple partners				
No	Ref		Ref	
Yes	2.20	(1.39-3.48)	2.18	(1.34-3.54)

**Table 4.4****Multivariable logistic regression analysis of physical violence: unadjusted and adjusted Models**

Variable	Unadjusted Model Physical Violence		Adjusted Model Physical Violence	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age	1.04	(1.00-1.08)	1.01	(0.96-1.06)
Age at first sex	0.92	(0.88-0.97)	0.95	(0.90-1.00)
Have children				
No	Ref		Ref	
Yes	1.43	(0.99-2.06)	1.22	(0.80-1.87)
Education				
no education	Ref		Ref	
primary	0.90	(0.63-1.27)	1.08	(0.74-1.57)
more than primary	0.65	(0.47-0.89)	0.81	(0.55-1.20)
Contribution to household				
no contribution	Ref		Ref	
less than half to half	2.40	(1.56-3.69)	2.33	(1.48-3.64)
more than half to all	1.04	(0.73-1.50)	0.82	(0.56-1.21)
Number of people living in the household	0.92	(0.86-0.98)	0.94	(0.88-1.01)
Husband's Education				
no education	Ref		Ref	
primary	1.14	(0.80-1.62)	1.17	(0.80-1.73)
more than primary	0.77	(0.57-1.05)	1.03	(0.70-1.51)
Husband's Occupation				
unskilled	Ref		Ref	
skilled & higher income	0.94	(0.71-1.25)	1.20	(0.86-1.67)
driver	1.47	(0.94-2.29)	1.43	(0.89-2.29)
Husband ever consumed alcohol				
No	Ref		Ref	
Yes	2.48	(1.89-3.26)	2.36	(1.78-3.14)
Income				
< 4000	Ref		Ref	
4000 or more	0.59	(0.42-0.84)	0.82	(0.54-1.23)
Husband has multiple partners				
No	Ref		Ref	
Yes	2.06	(1.28-3.32)	1.80	(1.08-3.00)

**Table 4.5**

**Multivariable logistic regression analysis of sexual and physical violence: comparing the correlates**

Variable	Adjusted Model Sexual Violence		Adjusted Model Physical Violence	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age	1.04	(0.99-1.08)	1.01	(0.96-1.06)
Age at first sex	0.99	(0.94-1.04)	0.95	(0.90-1.00)
Have children				
No	Ref		Ref	
Yes	1.55	(1.04-2.31)	1.22	(0.80-1.87)
Education				
no education	Ref		Ref	
primary	1.10	(0.77-1.58)	1.08	(0.74-1.57)
more than primary	1.01	(0.72-1.42)	0.81	(0.55-1.20)
Contribution to household				
no contribution	Ref		Ref	
less than half to half	1.78	(1.18-2.74)	2.33	(1.48-3.64)
more than half to all	0.83	(0.56-1.22)	0.82	(0.56-1.21)
Number of people living in the household	0.99	(0.93-1.06)	0.94	(0.88-1.01)
Husband's Education				
no education	Ref		Ref	
primary	1.19	(1.32-2.71)	1.17	(0.80-1.73)
more than primary	1.07	(0.77-1.48)	1.03	(0.70-1.51)
Husband's Occupation				
unskilled	Ref		Ref	
skilled & higher income	1.21	(0.90-1.62)	1.20	(0.86-1.67)
driver	1.87	(1.20-2.90)	1.43	(0.89-2.29)
Husband ever consumed alcohol				
No	Ref		Ref	
Yes	2.13	(1.61-2.81)	2.36	(1.78-3.14)
Income				
< 4000	Ref		Ref	
4000 or more	1.04	(0.73-1.48)	0.82	(0.54-1.23)
Husband has multiple partners				
No	Ref		Ref	
Yes	2.20	(1.39-3.48)	1.80	(1.08-3.00)

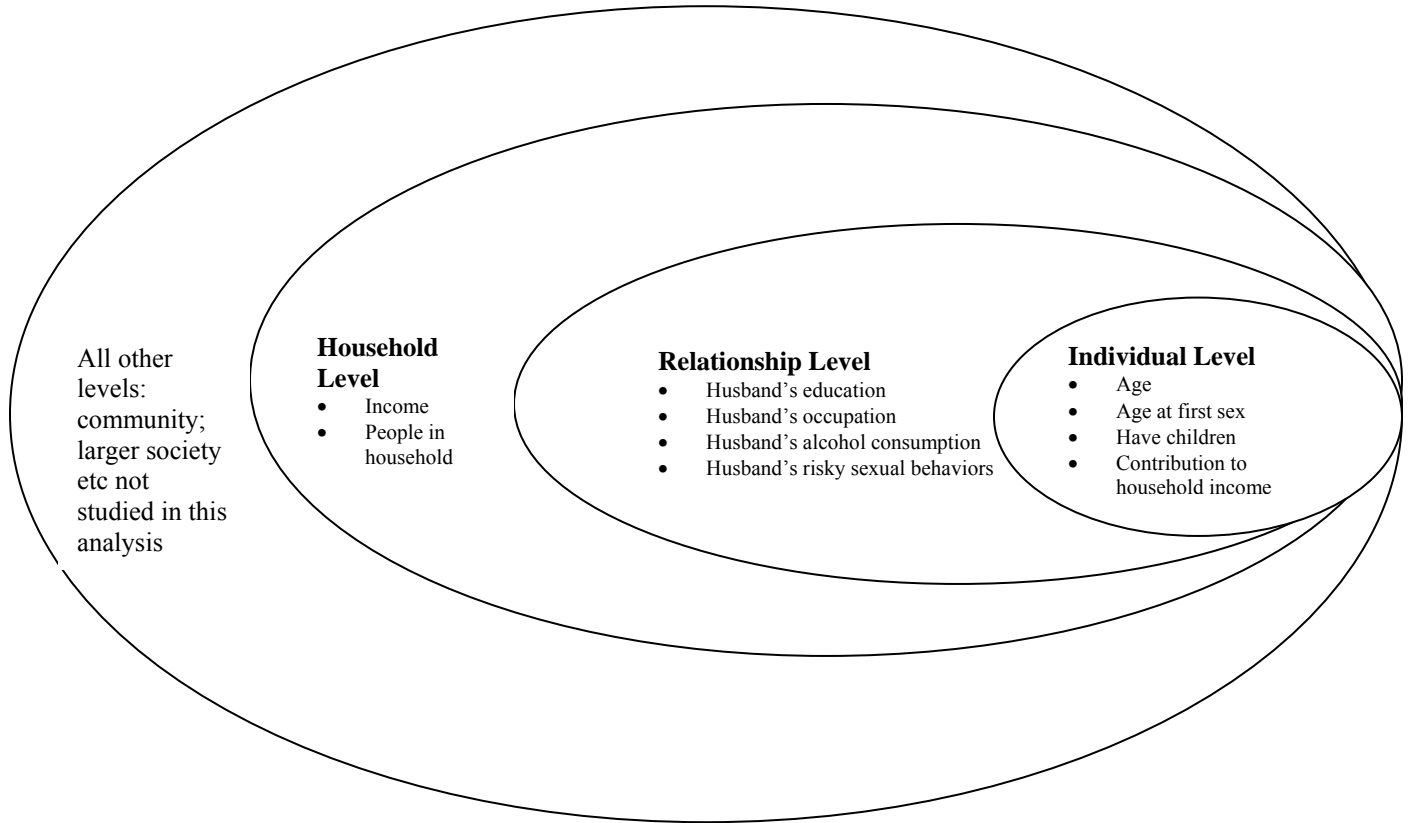
**Table 4.6**

**Multivariable logistic regression of sexual violence stratified by physical violence**

Variable	Adjusted Model Sexual Violence			
	Among women reporting YES physical violence		Among women reporting NO physical violence	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age	1.05	(0.98-1.13)	0.99	(0.91-1.09)
Age at first sex	1.01	(0.93-1.10)	1.05	(0.95-1.16)
Have children				
No	Ref		Ref	
Yes	1.39	(0.74-2.63)	1.55	(0.71-3.40)
Education				
no education	Ref		Ref	
primary	0.96	(0.58-1.58)	1.21	(0.52-2.80)
more than primary	1.25	(0.75-2.08)	0.83	(0.35-1.94)
Contribution to household				
no contribution	Ref		Ref	
less than half to half	1.35	(0.79-2.28)	1.54	(0.65-3.63)
more than half to all	1.19	(0.69-2.07)	0.21	(0.07-0.65)
Number of people living in the household	0.98	(0.88-1.10)	1.06	(0.95-1.18)
Husband's Education				
no education	Ref		Ref	
primary	1.39	(0.83-2.33)	3.27	(1.42-7.54)
more than primary	0.9	(0.54-1.48)	1.5	(0.63-3.60)
Husband's Occupation				
unskilled	Ref		Ref	
skilled & higher income	0.97	(0.63-1.51)	1.97	(1.00-3.87)
driver	0.99	(0.54-1.81)	3.26	(1.35-7.90)
Husband ever consumed alcohol				
no	Ref		Ref	
Yes	1.48	(1.00-2.19)	1.93	(1.12-3.35)
Income				
< 4000	Ref		Ref	
4000 or more	1.26	(0.66-2.38)	1.6	(0.84-3.07)
Husband has multiple partners				
No	Ref		Ref	
Yes	1.93	(1.03-3.63)	1.95	(0.71-5.39)



**Figure 4.1: Ecological model adapted from Heise, 1998**



## Chapter 5: Conclusion

## **Summary**

The pervasiveness of GBV in India is well-known, as is the adverse impact of GBV on women's physical, mental, and reproductive health. The interventions in response to GBV in India range from legislation to enforce women's rights, to support services that are put forth by NGOs and state agencies in response to specific instances of abuse (Poonacha & Pandey, 1999). Over the last decade, as the adverse health impact of GBV has been established, researchers have repeatedly highlighted the need for health care professionals to prevent the escalation of GBV, and to manage the resulting health outcomes (Chandra, Deepthivarma, Carey, Carey, & Shalinianant, 2003; Jejeebhoy, 1998; Koenig, Stephenson, Ahmed, Jejeebhoy, & Campbell, 2006; Muthal-Rathore, Tripathi, & Arora, 2002; Prasad, 1999). Yet, to my surprise, there had been limited research from the perspective of health care professionals on responding to GBV. A literature review of the interventions to address GBV in India revealed little information on some fundamental questions that needed to be addressed, prior to establishing a health sector response to GBV in India. What were health care professionals' attitudes towards GBV? Did they consider it part of their professional duty to respond to GBV? Were they currently doing anything in response to GBV among their patients? And, finally, did they believe that a health sector response to GBV was even feasible in India, and if yes, what did they consider the most critical building blocks of such an intervention?

In Chapters 2, 3, and 4, I investigated different facets of these outstanding questions surrounding the feasibility and development of health facility-based GBV interventions in India. Specifically, I sought to address the following research objectives: (1) to examine primary care physicians' current practices in response to GBV, including their knowledge about GBV and their attitudes towards women who experience GBV; (2) to explore primary care physicians' perspectives on the feasibility of and needs for a future health facility-based intervention for GBV; and (3) to identify the determinants of sexual violence, compare them against the well-established determinants of physical violence, and to study the association between sexual and physical violence.

## **Key findings**

Taken together, the three chapters in this dissertation offer new understanding regarding the feasibility of and needs for health facility-based interventions to assist women who experience GBV in India. Chapters 2 and 3 presented data from a qualitative study among primary care physicians in Bangalore, to understand their attitudes and practices in response to GBV, and to explore their perspectives on the feasibility of and needs for a future health facility-based GBV intervention. The study findings described in chapter 2, indicated that even without training and guidelines, many primary care physicians had developed indigenous and culturally-sensitive practices in response to GBV. These practices, however, were selective, discretionary, and vulnerable to internalized norms and attitudes. More importantly, the majority of physicians interviewed were sympathetic to women who experienced GBV; believed they had a professional duty to assist such women; and were able to identify signs of GBV. Many respondents further emphasized that in their experience, GBV takes forms other than physical violence, the most widely reported and studied form of GBV in India, and that these other forms of GBV—sexual, psychological, and emotional violence, among others—were equally harmful to women, and manifested in a broad array of health outcomes.

Chapter 3 focused on primary care physicians' perspectives on the feasibility of and needs for future health facility-based interventions. Study findings indicated that primary care

physicians favored health facility-based interventions for GBV, and articulated specific elements that they considered critical for the development and sustainability of such interventions. These included training and gender-sensitization for all health care professionals; establishing policy and standardized practice guidelines; developing and strengthening referral systems; and collaborating closely with other services providers toward making a collective response against GBV. In effect, what they were advocating for was a system-wide and multi-sector response to GBV, consistent with the approach being undertaken by other low- and middle-income countries.

Chapter 4 presented data from a quantitative analysis conducted among reproductive age women in Mysore to identify the determinants of sexual violence, and to study the association between sexual and physical violence. Study findings indicated that factors relating to women's husbands' characteristics—educational status, occupational status, alcohol consumption, and having multiple sex partners—were most significantly associated with women's risk of sexual violence. Consistent with my hypothesis, the risk factors for sexual and physical violence were not identical. The determinants associated with increased risk of physical violence, after adjusting for other covariates were: women's lower age at first sex; women's increasing contribution to the household income as compared to making no contribution; husband's consumption of alcohol and having multiple sex partners as compared to no alcohol consumption and not having multiple sex partners. The latter three covariates were also significantly associated with women's risk for sexual violence in the same direction. But additionally, husband's higher educational status and employment in higher paying occupations increased women's risk for sexual violence but had no association with women's risk for physical violence. Moreover, physical violence was found to be a strong predictor of sexual violence, and the determinants of sexual violence differed depending on the presence or absence of physical violence.

Findings from chapters 2 and 4, using data collected from two different samples—primary care physicians and reproductive age women—underscore the fact that physical and sexual violence are distinct forms of GBV. Each has its own set of health implications and its own set of risk factors. These findings highlight the importance of studying different types of GBV independently, as each type of GBV (physical, sexual, economic or psychological violence amongst others) is likely conceptualized and normalized by communities differently and thus associated with different risk factors.

### **Strengths**

The three chapters in this volume had several strengths. The study with primary care physicians (Chapters 2 and 3) was, to my knowledge, among the first in India to capture physicians' perspectives on their GBV-related practices. The study sample, though small, included physicians from the private sector. This is important because the private sector now accounts for 80% of all health care spending in India (Peters, Rao, & Fryatt, 2003), thereby making it critical to capture the perspectives of these physicians as well. An added strength of this study was the use of qualitative research methods. This research methodology is best suited to understanding an area where prior knowledge is inadequate, and the aim is to learn about participants' and *not* researchers' experiences, beliefs, and understanding (Morse & Richards, 2002; Ulin, Robinson, & Tolley, 2005). Formative research also provides a richness of data, allowing for a deeper and more meaningful understanding than quantitative results (Miller, 2007), particularly of an issue as complex as health care professionals' response to GBV. Finally, by focusing on a group of providers who are at the forefront of health care provision,

this study could provide important information to guide the development of future health sector-based responses to GBV in India.

The study with reproductive age women (Chapter 4) was among the first observational studies in the country to collect data from women regarding their experience of both sexual and physical violence. This provided an opportunity to model the risk factors for both types of GBV (sexual and physical violence) independently, and to examine the relationships between them, among the same subset of women. In addition, validated tools were used to measure women's experiences of sexual and physical violence. Finally, data were collected on potential risk factors for GBV that operate at multiple levels in a woman's environment, such as individual, relationship, and household-level factors.

### **Limitations**

The three chapters in this volume had notable limitations. As with most qualitative research, the study with primary care physicians (Chapters 2 and 3) had limitations relating primarily to recruitment and sampling. The lack of randomized sample selection limits our ability to generalize findings to other physician populations. Purposive sampling, though useful in uncovering in-depth information, entails selection bias. In addition, the small sample size limits comparisons by physician characteristics.

The study among reproductive age women (Chapter 4) used cross-sectional data, thereby limiting the ability to establish any causal relationships between the independent covariates and experiencing sexual violence. The study focused primarily on individual level variables, rendering it impossible to examine the association between factors operating at the broader community and societal-level; for example, community norms around GBV and women's risk of sexual violence. A final limitation of this study is that the data were self-reported and thus subject to recall and social desirability biases. The potential for underreporting is also likely to be high for data of such a private nature, and given women's own acceptance of GBV, and the stigma associated with GBV disclosure.

### **Implications for future research and practice**

This dissertation presented formative data regarding the feasibility of and needs for future health facility-based GBV interventions in India. Study findings provide important information to guide future research and practice in this area. In the work with health care professionals, the next step would be to replicate the qualitative research with larger samples in other parts of the Karnataka, and subsequently throughout the country, to improve the generalizability of study results. Such research may corroborate and expand on our findings, and may also reveal important differences. For example, physician responses to GBV may vary by gender, age, and practice setting. Subsequently, questions that remain unanswered regarding the development of GBV interventions need to be explored. These include the following: (1) understanding what motivates private sector physicians to change or take on additional practices, such as screening, counseling, and referral for GBV; (2) a needs assessment to ascertain physicians' ability to ensure patient privacy and confidentiality in their current physical space; and (3) identifying creative and low-cost solutions to address physician barriers of time, multiple commitments, other infrastructural problems. Finally, participatory research could be undertaken with health care professionals, incorporating their expertise in the development of future health-sector GBV interventions. Physicians' first-hand knowledge might help inform the design of practice guidelines and monitoring and evaluation mechanisms, to ensure a relatively seamless

integration of GBV-related practices into the existing health care program being offered to women patients.

Findings from all of the above described formative research should feed into the development of large-scale quasi-experimental or randomized intervention studies. These studies will measure the impact of enhancing health care professionals' skills with training and resources—practice guidelines, on-site support of social workers and counselors, a well-coordinated referral network, and opportunities for routine interaction with other service providers—on their actual GBV-related practice and the long term impact on women's health and well-being. Several remaining issues, for example physician challenges to practice, could be addressed in the context of such an intervention study. Although physicians in this sample advocated a multi-sector response to GBV, I believe, the first step is for such intervention studies, focused exclusively on the health sector, to measure the impact of training and supporting physicians on their GBV-related practices. Once we understand how to successfully work with the health sector to respond to GBV, collaborative intervention studies among different sectors can be initiated.

The study findings also generate hypotheses regarding the specific types of programs needed to improve health care professionals' GBV-related practices. Physicians' current efforts need to be supported with training that enhances their skills in screening for GBV and then following-up with detailed assessments and counseling. The latter in turn could help patients map out their risks and identify potential sources of support. To that end, existing training programs that are being implemented globally should be adapted to the Indian context, but care should be taken to ensure that the culturally sensitive and creative aspects of physicians' current, organically developed practices are retained. Training programs should also address commonly held stereotypes, perceived lack of professional responsibility to intervene against GBV, and negative feelings towards involvement with GBV cases. One strategy could be to emphasize the linkages between GBV and women's health outcomes—reiterating the unique and important role for health care professionals in assisting women. Another important need is training for all support staff—such as nurses, social workers, counselors, and outreach workers—so they can assist physicians in implementing the core practices, from identifying women at risk of GBV to providing detailed case management support. Given the large client volumes, multiple responsibilities, and time shortages that primary care physicians in India face, a concerted effort by *teams* of health care professionals may over time facilitate earlier detection, assessment, and referral for GBV. Finally, programs are needed to establish and strengthen relationships among health care professionals and organizations that provide support services to women who experience GBV.

In Chapter 4, the study with reproductive age women highlighted how sexual and physical violence are likely distinct forms of GBV, but how physical violence is an important predictor of sexual violence. These findings add to the emerging global data regarding the overlap between women's experience of physical and sexual violence, and the finding that women in some countries appear to experience sexual violence exclusively (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). Building on this collective evidence, the next step would be to conduct formative research followed by quantitative surveys to: (1) examine how women, men, and members of their broader communities conceptualize and respond to different types of GBV; and (2) to understand what makes women who experience only sexual violence different from women who experience physical violence alone, or both physical and sexual violence. For example, what is different about these women's relationships and the

characteristics of their male perpetrators? The importance of understanding sexual violence in more depth, and studying how it compares with physical violence, is now greater than ever, with evidence that exposure to sexual violence increases women's risk of fatalities such as HIV/AIDS (Maman, Campbell, Sweat, & Gielen, 2000; Newmann, Sarin, Kumarasamy, Amalraj, Rogers, Madhivanan et al., 2000).

The findings from this research should continuously feed into program development. For example, health care professionals should be educated about how the risk factors for sexual and physical compare, and how women's response to different types of GBV varies. This information may enhance health care professionals' ability to screen for different types of GBV, and to identify situations where risk factors for physical violence—more commonly reported by women—might be used as a proxy to delve deeper into women's experience of other less-commonly disclosed types of GBV, such as sexual violence.

### Conclusion

Enormous amounts of time and resources are expended every year on research pertaining to the prevalence of and risk factors for GBV in India, particularly physical violence, and GBV's impact on women's health outcomes. I was intrigued by how *much* of this research underscored the important role for health care professionals in managing GBV-related health outcomes and preventing the escalation of the problem, yet how *little* described the current practices and perspectives of these very health care professionals toward GBV. There are likely several small programs across the country where a health care response to GBV has been initiated. But to my knowledge, most of these data remain undocumented and publicly unavailable, limiting the ability to scale up these evidence-based practices.

This dissertation was undertaken as an attempt to inform this gap in the literature regarding the feasibility of and needs for future health facility-based GBV interventions. To my mind, the most encouraging finding is that health care professionals, with few exceptions, empathize with women who experience GBV, and can identify the various manifestations of GBV and their health implications. In addition, those at the forefront of health care provision have developed their own practices in response to GBV, and could comprehensively identify the areas where they were in need for future support. Finally, the favorable impact of training and exposure to gender sensitive practices on physicians' approaches to GBV were also revealed in this dissertation, as in other research. In my study sample, a small subset of physicians stood out as unique. They described their interactions with advocates of women's rights both within and outside of their medical professions, and exposure to a single training on gender sensitization and GBV-management. These experiences changed their perspective on responding to GBV dramatically, and enabled them to internalize how important physicians could be in protecting and promoting women's rights. Their words demonstrate how deeply they are now invested in promoting women's health and rights:

*.. I'm a human being first, second a woman, third a gynecologist. Not the other way around. ... I'm just doing it what I feel is right (Private sector physician)*

*"...I reflected that when the man is drunk, when he is going on the road he does not hit the policeman, he doesn't hit anybody that he comes across. Only after coming home, he hits his wife or the daughter. Why not any other person? So over time I understood that it was not the question of who was right or wrong, it was the most vulnerable person [who*

*always got hurt]. So instead of addressing what the woman did, how she provoked the man, what made her do it, whether she was right, whether she was wrong, we have to only address the issue that she is suffering. As a human being where is her right? Why she cannot get those rights that the man is enjoying?” (Public sector physician)*

The pervasiveness of GBV among married women in India and its adverse effects on women’s health emphasize the importance of developing and testing various structural interventions to support women at risk of GBV. Even though physicians’ current practices are selective, discretionary, and vulnerable to internalized norms and attitudes, the critical next step in advancing the response to GBV is to build on the positive aspects of physician practices, as revealed in this dissertation. These positive practices in turn can serve as the basis for a context-specific health care response to GBV in India, and are much more helpful than is a focus on negative and non-existent practices. As public health practitioners and researchers seeking to design, implement, and evaluate interventions to respond to GBV in India, it is imperative that we start from the ground up—by *first* understanding the perspectives and practices of those called upon to respond to GBV, and *next* working with them collectively to design context-specific GBV interventions. Efforts that incorporate the expertise of those involved in its actual implementation are likely to be far more effective and sustainable than those which merely import interventions or practice guidelines put forth by other countries.



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