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Abuse from In-Laws during Pregnancy and Post-Partum: Qualitative and Quantitative Findings from Low-income Mothers of Infants in Mumbai, India

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Abstract

To examine experiences of perinatal (in pregnancy or post-partum) abuse from in-laws and to
assess associations between such experiences and perinatal intimate partner violence (IPV) from

husbands, as reported by Indian women residing in low-income communities in Mumbai. The present study includes both qualitative and quantitative research conducted across two phases of study. The qualitative phase involved face-to-face, semi-structured in-depth interviews ($n = 32$) with women seeking health care for their infants (6 months or younger) and self-reporting emotional or physical abuse from their husband. The quantitative arm involved survey data collection ($n = 1,038$) from mothers seeking immunization for their infants 6 months or younger at three large Urban Health Centers in Mumbai. Results of the qualitative study documented the occurrence of both non-physical and physical abuse from in-laws during pregnancy and post-partum. Non-physical forms of abuse included forced heavy domestic labor, food denial and efforts toward prevention of medical care acquisition. Quantitative results demonstrated that 26.3% of the sample reported perinatal abuse (non-physical and physical) from in-laws and that women experiencing perinatal sexual or physical IPV from husbands were significantly more likely to report perinatal abuse from in-laws (AOR = 5.33, 95% CI = 3.93–7.23). Perinatal abuse from in-laws is not uncommon among women in India and may be compromising maternal and child health in this context; such abuse is also linked to perinatal violence from husbands. Programs and interventions that screen and address IPV in pregnant and post-partum populations in India should be developed to include consideration of in-laws.

Keywords

Intimate partner violence; In-law abuse; India; Pregnancy and postpartum

Introduction

Male-perpetrated intimate partner violence (IPV; including sexual and physical violence) affects 10–61% of women across countries [1, 2]. Women in the developing world are at even greater risk for such abuse [1, 2]; one in four pregnant women in the developing world experiences physical or sexual assault from a partner during pregnancy [2, 3]. Over the past decade, growing research has documented that IPV, particularly IPV during pregnancy or postpartum (i.e., perinatal IPV), heightens women's risk for maternal health problems (e.g., pregnancy complications, labor and delivery complications, post-partum maternal health concerns) [2, 4–13] and infant and child mortality (including miscarriage and stillbirth) and morbidity (e.g., low infant birth weight, poor infant health and temperament) [7, 9, 11–24]. Consequently, major international health and human rights organizations like the World Health Organization (WHO) and the United Nations (UN) highlight the need to prioritize the elimination of IPV as a means of improving maternal and child health [2, 25]. In some cultural contexts, particularly those within Asia, this will likely require addressing conflict with and abuse (including violence and other forms of intentional maltreatment) from in-laws; cross-national studies with Asian populations document a strong and significant association between abuse from in-laws and IPV in marital relationships [26–34].

While abuse from in-laws (broadly defined and including physical violence as well as other forms of maltreatment) has been documented in diverse national settings and with racially/ethnically diverse populations [26–37], it appears to be particularly pervasive in South Asia and among South Asian women in other national settings [26–28, 31, 33, 34, 38, 39]. Within

the context of South Asia, research has demonstrated manifestation of abuse from in-laws in numerous ways, from emotional (e.g., forced domestic labor, verbal abuse), to economic (e.g., holding the family money) to physical (e.g., slapping, beating, or even life-threatening abuse such as burning) [27, 32–34]. Less research has been conducted specific to perinatal abuse of women by in-laws. The few studies from South Asia that have been conducted on this issue are limited to pregnant women and assessment solely of physical violence from in-laws, neglecting consideration of emotional or economic abuses that can also compromise maternal and child health [27, 40, 41]. Further and more detailed investigation of these issues is critical as these other forms of abuse from in-laws (e.g., heavy domestic labor) can have a severe impact on pregnant and postpartum women, as well as their infants.

This study seeks to build upon the small but growing research on abuse from in-laws by examining quantitatively and qualitatively women's experiences of abuse during the perinatal period (i.e., pregnancy and post-partum). The present study uses a mixed methods approach to examine experiences of abuse from in-laws, as reported by abused women who have recently delivered a child, and whether such experiences are associated with perinatal IPV. Such examination can inform on-going screening and intervention initiatives aimed at mitigating and preventing IPV by identifying the nature of in-law abuse faced by pregnant and postpartum women in India.

Method

The current study uses data from the “Mechanism for Relations of Domestic Violence to Poor Maternal and Infant Health” project, which involved cross-sectional in-depth interview (qualitative) and survey (quantitative) data collection with mothers of infants (< 6 months) presenting for infant care at urban health centers (UHCs) in Mumbai, India. The goal of this study was to assess associations between domestic violence and poor maternal and infant health concerns in urban India. The qualitative research preceded the quantitative study with the goal of informing survey development for this latter component. Current analyses are specific to examination of perinatal abuse from in-laws.

Qualitative Methods

In depth interview participants were recruited from the UHC within the Shivaji Nagar slum community of Mumbai, India. According to state and city government reports, Shivaji Nagar has a population of approximately 100,000; the majority (85%) of this community is Muslim and from Uttar Pradesh and Bihar, more northern states in India. The vast majority of women in this low income community (97%) do not work outside the home, and husbands most commonly work as tailors, domestic servants, and daily wage laborers. The majority of women (65%) are literate, a proportion larger than that seen for Indian women as a whole [39].

Face-to-face, semi-structured in-depth interviews ($n = 32$) were conducted with women seeking health care for their infant 6 months and younger and self-reporting emotional or physical abuse by their husband. These women were recruited from patient lines into the study, with the assurance that their place in queue would not be lost due to their study involvement. These women were recruited based on a rotating schedule of times of days and

days of the week with sampling occurring for approximately 20 h per week over a 6 weeks period. Those agreeing to participation were invited into a private room within the health center; eligibility screening, informed consent, and the interviews were conducted in this room immediately subsequent to recruitment. Eligible study participants were defined as those who gave birth in the past 6 months, were attending the health center for child immunization or other infant care, and reported emotional or physical abuse from husbands either in the year prior to their most recent pregnancy (i.e., the pregnancy resulting in their current infant), during this index pregnancy, or since this index pregnancy. Eligibility was assessed via a brief (5–10 min) screening tool, and written informed consent was obtained from women eligible and willing to participate in the 90–120 min in-depth interview. Prior to participation, all eligible women provided confirmation they were comfortable discussing the conflicts in their marriage, to reduce risk for distress during the interview. In-depth interviews explored women's experiences of abuse by husbands and other family members and their perceived health consequences of these abuse experiences. During the interview, participants were monitored carefully by the interviewer to ensure the woman continued to feel comfortable participating, periodically checking women's level of distress by asking how they were feeling and providing ongoing validation for the woman's participation in the interview. Following the interview, research staff offered to each participant escort to domestic violence-related services in an attempt to promote service utilization by abused women. Participants were additionally to be provided with referrals for legal and mental health assistance for domestic violence and general trauma upon request or if need was indicated. No participant requested such services, and providers did not identify any women requiring legal or immediate mental health services based on interview responses.

All interviews were conducted in Hindi by Masters-level trained female research staff from the National Institute of Research on Reproductive Health (NIRRH). During the interviews, interviewers took brief notes in the language of the interview. Within 24 h of the interview, the interviewers detailed their notes fully, typing and translating them into English using Microsoft Word. Notes were then labeled with the date of the interview and the interviewer's initials. (Note: Audiotapes, while ideal, are not well received in the Indian context; hence, the proposed approach was used as it is the standard means of qualitative data collection in India). Translated and typed Word files were de-identified and sent to project investigators for feedback on data quality and data analysis considerations. This study was approved by the Institutional Review Boards of Harvard School of Public Health and the Indian Council on Medical Research.

Data Analysis—Using a Grounded Theory approach [42–44], the research team collaborated to identify mutually exclusive but possibly linked codes or themes across interviewees, as interviews were collected. Two graduate students of Public Health then worked independently on different text files to code all data. Additional codes and sub-codes were identified iteratively in this coding process, and reapplied to previous interviews as needed. Inter-coder reliability across coding was reached via a standard approach from [45]. Specifically, coders came to agreement on all codes; if agreement was unable to be reached, a decision was made by a doctoral-level study investigator who was overseeing the coding process. A manual coding process was used to sort coded data; i.e., coded and sub-coded

data were cut and paste into Word documents labeled by code, with coded data labeled by interview. During the coding process, tree diagrams were also constructed to depict study domains, codes specific to these domains, and sub-codes within each code [46]. These diagrams were developed using the same iterative process as that used for study coding as a whole. Final domains identified through this process included violence and maltreatment, norms and expected roles of family members, and effects of mal-treatment on pregnancy, postpartum health, and infant health. Within the violence and maltreatment domain, themes included violence/maltreatment from husbands, violence/maltreatment from in-laws, reasons for violence/maltreatment, and coping with violence/maltreatment. For the current paper, which focuses on perinatal abuse from in-laws (violence and maltreatment in pregnancy and post-partum), quotes were identified from the pregnancy and post-partum codes under the violence/mistreatment from in-laws. Data are presented based on the timing of the abuse—during pregnancy, at delivery or recovery from delivery, and post-partum; subcodes from each code and one to two quotes best illustrating each subcode are presented.

Quantitative Methods

Subsequent to the qualitative study described above, survey data collection was conducted with mothers (aged 15–35 years) seeking immunization for their infants aged 6 months or younger at three large UHCs located in major slum areas of Mumbai, India—Shivaji Nagar, Bail Bazaar and Mohili village. All recruitment sites were chosen based on their size (>100,000 residents), as well as the presence of a UHC in their community.

Participants were recruited and data were collected within the UHC immunization clinic settings. Recruitment occurred during all immunization clinic hours from August to December 2008. During this period of recruitment, community health volunteers and outreach workers within the clinic would approach mothers subsequent to their infant immunization and screen them for eligibility (having an infant age 6 months) and willingness to participate in the survey. After providing immunizations nursing staff asked women selected for recruitment if they would be interested in hearing about a study during which they would be asked question regarding conflicts in families and health issues for women and children. Those expressing an interest in participation were accompanied by the recruiter from the examination area to a private room within the clinic to speak with a trained research staff member.

Research staff members were female Masters-level employees of the National Institute of Research in Reproductive Health (NIRRH) trained in survey research, ethics, maternal and child health, and domestic violence. Once in a private setting with the eligible woman, the research staff would verify eligibility, confirm the woman's interest in participation, obtain written informed consent from the participant and implement the survey. Written informed consent involved the researcher reading the consent forms verbatim to all participants, due to concerns related to participant literacy. Following acquisition of written informed consent, researchers administered the 30–40-min confidential survey to the participant; all surveys were conducted in Hindi. At the conclusion of the survey, all participants were screened for emotional distress. Participants were also provided with referrals for legal and mental health assistance for domestic violence and general trauma. All procedures were approved by the

Institutional Review Boards of Harvard School of Public Health and NIRRH (via the Indian Council of Medical Research).

Over the recruitment period, 1,830 women were approached by a community health volunteer or outreach worker for participation; all women approached were known to be eligible (i.e., had an infant ≤ 6 months) based on their presentation for infant vaccinations. Sixty percent of these eligible women ($n/N = 1,108/1,830$) agreed to meet privately with the NIRRH research staff member to learn more about the study; 94.6% of these women ($n/n = 1,049/1,108$) agreed to study participation, were consented and completed the survey. From these $N = 1,049$ survey participants, $n = 11$ (0.01%) were dropped from further analysis due to their lack of responses on items related to violence or abuse from husbands or in-laws, resulting in a final sample size of $n = 1,038$.

Measures—Demographics assessed included single item measures of participant and husband's age, past year employment, and education (both any formal education and number of years of education). Single item measures were also used to assess women's age at marriage (categorized as <18 or $18+$), religion, native state, number of children, and whether she is living in a joint family system (i.e., with extended family, generally in-laws), as well as with which in-laws she is residing (i.e., mother-in-law, father-in-law, or brother-in-law, etc.).

Assessments of perinatal abuse from in-laws and perinatal violence from husbands were developed based on domestic abuse and violence items from the National Family Health Survey [39] and based on qualitative research findings, some of which are outlined in the current paper. For each item of abuse assessed in this survey, women were asked (yes or no) whether this occurred in the 12 months prior to their most recent pregnancy (pre-pregnancy), during their most recent pregnancy (pregnancy), or in the year following their most recent birth (postpartum). [Note: As all women in this study had infants aged 6 months or younger, post-partum would then be based on this 6 month timeframe.] For the current analysis, abuse and violence assessments were focused on the pregnancy and postpartum periods (perinatal). Four items were used to define perinatal IPV: (1) Did her husband hit, push, kick, beat, or slap her? (2) Did her husband burn her? (3) Did her husband insist on sex when she did not want to do it? (4) Did her husband force sex when she did not want to do it? If the participant indicated yes to any of these items occurring in pregnancy or postpartum, they were categorized as having experienced *Perinatal IPV*.

Ten items assessed abuse from in-laws in pregnancy. Women were asked about whether in laws had verbally humiliated them (2 items, insults against woman in front of others and insults against woman's natal family in front of others), forced them to bring money/goods from their natal home, impeded their access to health care, impeded their acquisition of food, impeded their ability to have rest, forced an abortion, interfered with their returning to their natal family for the baby's birth, or physically abused them (2 items, consistent with the physical IPV items noted above). Women reporting any abuse from in-laws in pregnancy were defined as having experienced *Abuse from In-Laws in Pregnancy*. Nine of these items (item on location of birth was excluded) and an item on impeding their acquisition of health services for a child were used to assess *Abuse from In-Laws at Postpartum*. A final abuse

from in-law variable was constructed from these two variables; if a participant indicated abuse from in-laws either during pregnancy or postpartum, they were categorized as having experienced *Perinatal Abuse from In-Laws*.

Data Analysis—Basic descriptive statistics were conducted on all variables. Chi-square analyses and *t*-tests were conducted to assess associations between demographic characteristics and perinatal abuse from in-laws. Chi-square analyses were also used to assess associations between perinatal physical or sexual IPV from husbands and perinatal abuse from in-laws, including any perinatal abuse from in-laws and abuse from in-laws in pregnancy and, separately, postpartum. Finally, adjusted regression analyses were conducted to assess associations between perinatal abuse from in-laws (in pregnancy or postpartum and separately for each of time frame) and IPV, after controlling for demographics (age, minor age at marriage, any formal education, employed in the past 12 months, and residing in a joint family).

Results

Qualitative Results

Sample Characteristics—Participants ($N = 32$) ranged in age from 16 to 35 years (mean age = 23.9 years); they were aged 13–24 years at marriage (mean age at marriage = 17.8 years). Most women ($n = 29$) were Muslim; the remaining participants ($n = 3$) were Hindu. Participants predominantly had 1 child ($n = 11$) or 2 children ($n = 11$); the remaining women had 3 children ($n = 9$) or 7 children ($n = 1$). Of women reporting an educational level ($n = 29$), 16 indicated primary education or less. Of the 24 women reporting employment status, 21 women stated that they were housewives.

Experiences of Perinatal Abuse from In-Laws—Qualitative study results document both physical and non-physical abuse of women by their in-laws during pregnancy, but profile more non-physical abuse during the periods around delivery and post-partum. Non-physical forms of abuse include concerns that can directly affect physical health, including forced heavy domestic labor, food denial, and efforts toward prevention of medical care acquisition. We outline these abuses by the timing in which they occur—during pregnancy, around delivery, or in the post-partum period.

Abuse from In-Laws During Pregnancy

Most descriptions of abuse during the prenatal period focused on abuse during pregnancy; this was also when more varied forms of abuse were cited, including domestic servitude, food denial, and physical abuse.

Verbal Abuse and Harassment During Pregnancy—Women described verbal abuse and harassment most commonly from mothers-in-law and primarily in the form of criticisms of character or domestic skills; husbands and other in-laws would sometimes reinforce this abuse.

Whenever I felt like taking rest (during my pregnancy) my in-laws taunt me. They treated me like servant. It felt very humiliating. I always thought, “Why do they

mistreat me, abuse me. I used to complain to my husband but he never listened to me.

- Participant 16 years old, age at marriage 15 years,
religion: Muslim

(In my pregnancy) My mother in-law always taunted me. I felt very bad at that time... Actually she (mother-in-law) just hates me. She kept harassing me on small things... Like I do not wash clothes properly; I don't know how to cook food. For so many things she always criticizes me, and my sister in-laws always take her side.

- Participant 28 years old, age at marriage 24 years,
religion: Hindu

Forced Heavy Domestic Labor in Pregnancy—Coinciding with criticism of domestic skills were participants' reports that they were being forced to take an inordinate amount of domestic responsibility for the household in ways that made them feel like household labor. Most commonly, the work was dictated by the mother-in-law.

I used to get up at 3 or 4 o'clock in the morning to get the water. After that, I made breakfast and prepared a lunch box for my father-in-law and my sister-in-law; I make a separate lunch for my mother-in-law, wash clothes and clean the house. I had to do my work whether I was pregnant or not. No one was helping me.

- Participant 16 years old, age at marriage 16 years,
religion: Muslim

I did all the household work... My mother-in-law is not fit to do any kind of work... I do all the work, like washing clothes and cleaning the house; sometimes I do farming also. For the whole day I did household work only... There was no different in situation during pregnancy. My whole body was swollen (with discomfort from heavy domestic labor in pregnancy).

- Participant 17 years old, age at marriage 15 years,
religion: Muslim

Impeded Access to Medical Care in Pregnancy—Women described low acquisition of prenatal care due to in-laws' lack of support for such care seeking; often, this was supported by in-laws refusal to allow that funds be provided for women's medicine or medical care.

Only once (did I obtain any health care in pregnancy); when my hand was (severely) burned (by my father-in-law), I went to the doctor. As I told you, my in-laws and husband never gave me money for medicine... During my (8th month of) pregnancy my mother-in-law, sister in-law and my father in-law chased me away from my house.

- Participant 19 years old, age at marriage 17 years,
religion: Muslim

Eviction in Pregnancy—Some women who were residing with the in-law family also reported eviction at the time of pregnancy; in such circumstances, women often turned to natal parents for support.

I just told my mother to bring (things for me or the baby) whenever she visited my place. Only my mother provided (financial support). All the expenses were paid by me, including my ceremony on the 7th month of my pregnancy. They (my in-laws) didn't give 1 rupee for it... Then, I left my in-law's house at the 8th month of my pregnancy. My mother-in-law had thrown me out of the house, so my mother came and brought me here.

- Participant 20 years old, age at marriage 18 years,
religion: Muslim

Denial of Food in Pregnancy—Several women reported mothers-in-law limiting their food intake during pregnancy; those reporting this form of abuse often linked it directly to infant health concerns, including miscarriage and low infant birth weight.

My mother-in-law never allows me to eat anything in the house. When I was pregnant I used to eat every alternate day... I only had food when my husband gave me money and that only occurred once in 2 or 3 days. I never ate anything at my house... He (my infant son) is about 2 kg in weight (approximately 4 lb). That's the reason the doctor referred me to Sion hospital.

- Participant 16 years old, age at marriage 16 years,
religion: Muslim

Yes, that time (just prior to miscarriage) my mother in law did not give me food to eat. (I was without food for) two and half days; then I ran from my in-laws' place. I just went to my sister place. After a week I felt feverish and at that time my bleeding (miscarriage) started.

- Participant 20 years old, age at marriage 17 years,
religion: Muslim

A few additional women also reported denial of craved foods in pregnancy; this was sometimes linked to overall food denial by in-laws.

They never stopped me (from eating) in that matter but never gave me the food what I wanted to eat at that time... I mean to say, as you know, at the time of pregnancy, we usually have a temptation of having different types of food. I didn't get that type of food during my pregnancy.

- Participant 24 years old, age at marriage 22 years,
religion: Muslim

When I used to have cravings for different types of things, my mother in law did not allow me to eat those things. I used to feel very hungry also, but my elder sister in-law and mother in-law never gave me enough food to eat. I felt very embarrassed to ask for food.

- Participant 16 years old, age at marriage 15 years,
religion: Muslim

Physical Abuse in Pregnancy—Physical abuse in pregnancy was not commonly reported, but when it was reported, it appeared to be a carryover from physical abuse prior to pregnancy. Notably, women reported physical abuse from more than just the mother-in-law.

My in-laws treated me very badly during my pregnancy. They always (physically) hurt me, and when I became pregnant, they treated me more inhumanely. They thought, “Now there is an increase of one more person in the family and automatically expenses will increase, as well.” They could not afford it.

- Participant 35 years old, age at marriage 12 years,
religion: Muslim

I was serving lunch to my father-in-law... I forgot to put salt in the mutton, so he (my father-in-law) become so angry he just threw the dish towards me. It was so hot; my hand became burned because of that. You can see this burn mark. And as if that was not enough for them, my mother in-law started physically abusing me... I was 6 months pregnant at that time.

- Participant 19 years old, age at marriage 17 years,
religion: Muslim

Abuse from In-Laws Around Delivery

Abuse around delivery primarily focused on in-laws’ prevention of women delivering where they wanted, but some women also described neglect at delivery.

Prevented from being at Natal Home for Delivery and Recovery—Cultural tradition within some parts of South Asia includes women going to their natal parents’ home for delivery and/or post-partum. Some women described how in-laws sought to prevent them from engaging in this practice or cut short their time with their natal parents after delivery.

I came to my parents place for delivery (in my) eighth month of my pregnancy. My mother in-law was not at all ready to send me to my parents’ house. I had to be stubborn about going; only then did my mother in-law send me here.

- Participant 17 years old, age at marriage 15 years,
religion: Muslim

After delivery, I went to my parent’s house. Within 15 days of my arrival, my husband took me back to my in laws’ house... They (my in-laws and husband) are not allowing me to return to my parent’s house. This is not fair thing. Is it?

- Participant 24 years old, age at marriage 22 years,
religion: Muslim

Impeded Access to Hospital Delivery—Women also described in-laws preventing them from seeking hospital delivery for birth, even though that was the daughter-in-law’s preference.

Thank God that I was here (at the health center with natal mother) at the time of delivery; otherwise they (my in-laws) would have not allowed me to deliver my baby at hospital. They delivered all the children of my elder bhabhi (sister-in-law) at home only, and they didn't go to the hospital for delivery.

- Participant 20 years old, age at marriage 18 years,
religion: Muslim

Neglected or Ignored at Delivery—Some participants also described being left alone or ignored by in-laws at the time of delivery; this was particularly noted in situations where a girl child was born.

No one (neither husband nor in-laws) was there at that time (delivery). They (the in-law family) are very bad people. They were not there when I needed them most.

- Participant 24 years old, age at marriage 22 years,
religion: Muslim

My parents live in a village which is nearby my in-laws' village. So at the 2nd month of my pregnancy, I went to my parents' house for the delivery. But as I delivered a girl child, no one from my in-law's house came to see me or to take me home.

- Participant 22 years old, age at marriage 16 years,
religion: Muslim

Abuse from In-Laws During the Post-Partum Period

Post-partum experiences of abuse focused on control issues that affect women's ability to care for their children

Impeded Access to Medical Care, Post-Partum—As with such abuse during pregnancy, women described in-laws' economic control of their access to medical care; however, in this period, focus was more on impeded access to care for the infant rather than themselves.

See today only we (she and her sister-in-law) wanted to come here for vaccination of our babies, so we asked our mother-in-law for money. She just gave us ten rupees only... So we asked for more money. However, as soon as asked for more money, she started shouting at us. Then we took the ten rupees and walked the whole way here with three children.

- Participant 19 years old, age at marriage 15 years,
religion: Muslim

Eviction in the Post-Partum Period—Some women residing with in-laws were evicted from the house subsequent to delivery. In some cases just the woman was evicted, while her husband was allowed to remain in the household; other cases involved eviction of the couple.

They were only not allowing me to stay in the house now... At the time of my first delivery, when I delivered a girl child, they wouldn't allow me to enter the house.

- Participant 22 years old, age at marriage 16 years,
religion: Muslim

After my delivery, my mother-in-law asked us to leave the house (where my husband and I were living)... (We moved to) such a bad place... it was only a plastic shed (hut). But we lived there for one month... That time was a very bad time for us, because of my health issues and my husband being unable to go to work... We didn't have money to buy food.

- Participant 20 years old, age at marriage 15 years,
religion: Muslim

Post-Partum Control over Fertility and Childrearing—Women also report in-laws pressuring fertility, making decisions regarding timing of conception and abortion, and sometimes even who will care for the child once born. Often women feel that in-laws make these decisions without their consideration.

Actually they (my in-laws) want a boy child, and as you know I delivered girl child. (Note: The participant already had a boy child.) My sister in-law has some uterus problem, so she is unable to conceive a child. Now my in-laws want me to deliver another child (i.e., become pregnant again for another boy) and give the girl (my new infant) to my sister-in-law... Nobody is even asking me; they decided on their own. I felt very bad about it. These are my own kids, and I don't have any right to make the decision.

- Participant 17 years old, age at marriage 15 years,
religion: Muslim

Quantitative Results

Sample Characteristics—Participants ranged in age from 17 to 45 years (mean age = 24.6 years, SD = 4.4 years) (See Table 1). The majority of women had a history of education (84.4%); mean level of education was 8.2 years (SD = 3.1 years). One in ten women (10.8%) was employed in the past year. The majority of women had migrated to Mumbai; 43.7% were from Uttar Pradesh. Majority of participants were Muslims (58.9%) followed by Hindus (37.7%). Participants' husbands ranged in age from 18 to 55 years (mean age = 29.1 years, SD = 5.1 years). The vast majority of husbands (87.8%) had received some education; mean level of education was 9.1 years. Almost all men (99.1%) were employed. A large proportion of participants (40.0%) were married for less than 3 years. Slightly % reported marriage as a minor; mean age at marriage was 18.6 years (SD = 3.0 less than one third of women (31.5years). Mean number of children for the sample was 2.0 children (SD = 1.2 children); 40.1% ($n = 414$) had only one child. The majority of women (61.6%) were living in joint families. Among those living in joint families, 76.2% ($n/n = 487/639$) were living with a mother-in-law and 59.7% ($n = 375/639$) were living with a father-in-law (primarily in addition to the mother-in-law). Women reporting no formal education and those living in joint families were significantly more likely to report perinatal abuse from in-laws ($P < .05$).

Experiences of Perinatal Abuse from In-Laws, by Timing (Pregnancy or Post-Partum), and Their Association with IPV—

More than one-fourth of the sample reported perinatal abuse from in-laws (26.3%, $n = 273$), with reported experiences being more common in pregnancy than during postpartum (25.4 vs. 15.3%) (See Table 2). The most common form of abuse reported was insults (20.1% in pregnancy and 13.7% postpartum); this was the only form of reported perinatal abuse from in-laws that exceeded 10%. Physical violence from in-laws was not very common either in pregnancy (2.4%) or postpartum (1.3%).

Bivariate analyses document that all forms of abuse from in-laws assessed were associated with husband perinatal violence (physical or sexual violence during pregnancy or postpartum), which was reported by 36.0% ($n = 374$) of the sample. (See Tables 1, 2) Adjusted logistic regression analyses demonstrated significant associations of husband violence with in-law abuse experiences overall after controlling for demographics (see “Data Analysis” section for details). Women experiencing perinatal physical or sexual IPV from husbands were significantly more likely to report abuse from in-laws during the perinatal period (AOR = 5.33, 95% CI = 3.93–7.23); This association held true for both in-law abuse in pregnancy (AOR = 5.11, 95% CI = 3.76–6.94) and postpartum (AOR = 4.44, 95% CI = 3.08–6.40). Logistic regression analyses were not pursued for associations of husband IPV with each specific form of in-law abuse due to relatively small cell sizes for many of the forms assessed.

Discussion

Findings from this study document that perinatal abuse from in-laws (i.e., violence and maltreatment from in-laws in pregnancy or postpartum) is both common and varied in nature among women seeking infant health care in Mumbai slum communities. More than 1 in 4 women in the current study report such experiences, and although physical violence from in-laws was not commonly reported among survey participants, many reported forms of abuse from in-laws are health compromising for mothers and infants (e.g., impeding access to food or health care). Notably, and consistent with previous research not specific to the perinatal period [26–28, 31–34, 38], such abuse from in-laws is significantly more likely among women experiencing violence from husbands; it also is most commonly described as being perpetrated by mothers-in-law [32, 38, 47, 48]. These findings demonstrate that, at least within this South Asian perinatal population, IPV is often occurring in the context of broader family violence against wives and, in such situations, requires family interventions, particularly inclusion of mothers-in-law, to address the abuse.

In addition to documenting an overall notable prevalence of perinatal abuse from in-laws in this postpartum sample recruited from Mumbai, this study also highlights qualitatively and quantitatively greater reports of abuse in pregnancy rather than during the postpartum period, across all forms of abuse from in-laws. Among survey participants, 1 in 4 reported abuse from in-laws during pregnancy, where slightly more than 1 in 7 reported such abuse in postpartum. These findings are consistent with that seen in the United States [49, 50]. In part this may be attributable to the differing time available for the abuse to occur in the assessed periods of pregnancy and postpartum; across the current study as well as these US studies,

postpartum abuse was assessed within a period of 6 months or less where abuse in pregnancy encompassed the full 9 months of gestation. Further research is needed to clarify if abuse from in-laws is greater in pregnancy than postpartum for this sample and others, and, if this is the case, why there is greater vulnerability in pregnancy.

While abuse from in-laws was reported across sociodemographic groups within our sample, it was more common among less educated women and those working outside the home. These findings are consistent with previous research from India documenting heightened risk for IPV among women with less education [39, 51] and those working [39, 52] or vocationally trained [53]. These apparently contradictory findings are similar to those seen in other parts of the world and seem to be rooted in the realities of heightened vulnerability to family violence (IPV and abuse from in-laws) among those most socially vulnerable and simultaneously among women threatening the patriarchal power structure via employment [52, 54]. Further these findings are particularly notable because of their juxtaposition with findings regarding women's required domestic servitude. Overall, these results reinforce previous research documenting the similarities between IPV and abuse of women from in-laws in terms of their being rooted in ideologies of women's (wives') inferior status relative to men (husbands and thus parents or family of husbands) and entitlement to control women based on this inferior status [32].

Consistent with this framework for abuse of women, current findings indicate that abuse from in-laws is reinforced by social structures and cultural expectations of women that can be used against them to justify or facilitate abuse. For example, abuse from in-laws is more common in the context of joint family systems (i.e., contexts of extended and multigenerational family residing together, most commonly via a patriarchal line). In such contexts, increased contact with in-laws and cultural expectations of daughter-in-law subservience, particularly related to domestic labor, creates conflict in which in-laws' abuse of women can arise [38], particularly from mothers-in-law [47, 48]. Joint family systems continue to exist, particularly for lower income groups, and can be beneficial to support families with domestic labor and child care. However, within abusive households, this traditional norm becomes another facilitator for abuse of women. Qualitative findings clearly document criticism and verbal abuse of women particularly around domestic issues, and forced domestic labor tied with prevention of resting were noted frequently as forms of abuse women experienced at the hands of their in-laws, particularly during pregnancy.

In-law expectations of funds from women's natal families also appear to be linked with in-law's perinatal abuse of wives, as described by qualitative research participants. Although dowry is currently outlawed, it continues to be a common practice across much of India. Dowry demands by in-laws appear to increase the likelihood of violence and other forms of abuse from both husbands and extended family [33, 55–60] and also increase risk for women's poor mental health [61]. Consistent with this previous research, qualitative findings from the current study also document in-laws' ongoing harassment of women to seek monies or goods from their natal families, with women feeling frustrated by these requests as they often came from poor families unable to provide more to the in-laws. Quantitative findings document these types of demands as the most pervasive form of abuse they experienced from in-laws.

Similarly, son preference as indicated by disappointment with the birth of girl children was noted in the qualitative findings; this was identified as a key reason why in-laws were abusive or neglectful during pregnancy or postpartum. Previous research from India documents that son preference is reported by 20% of men and 25% of women [39] and is associated with negative attitudes toward women and IPV perpetration [62–65]; hence, it is not surprising to see the issue linked with abuse from in-laws. Such attitudes carry from abusive men's parents and previous research documents their use in justifying abuse of daughters-in-law [32, 38, 64]. Lack of quantitative data on this issue prohibits clear demonstration of abuse from in-laws being more common among those families with son preference ideologies; more research is needed to examine this issue.

While the current study contributes to the growing literatures on abuse from in-laws and on perinatal abuse in South Asia, the present findings should be considered in light of several limitations. The study has limited generalizability, only including those women who have given birth to a still living child. As described previously, infant mortality, stillbirth and miscarriage are more likely among victims of IPV, relative to those who have not experienced IPV [9, 11, 13, 17, 21, 24]; hence, women most vulnerable to perinatal IPV and likely to experience perinatal abuse from in-laws are less likely to be reflected in the current study. Notably, our samples are also disproportionately Muslim, relative to that seen for India as a whole, and although differences in IPV exist by religion, there may be sociocultural differences that have not been captured in this study. Finally, the study is based on use of samples obtained from a small number of urban clinics within Mumbai slum communities; while the findings may not reflect broader populations of women who have recently given birth, they may be applicable to other urban settings within India.

In addition to these generalizability concerns, the study additionally has potential biases attached to reliance on self-report; however, this likely results in more conservative estimates of abuse experiences and would unlikely have substantial impact on observed quantitative associations. However, in terms of postpartum abuse, recruitment of women with 5–6 months old infants provided inadequate time for full assessment for abuse during the post-partum period. As noted above, this likely affected reported prevalence of post-partum abuse. The study was also limited to cross-sectional findings; hence, no assumptions can be made regarding the causal association between IPV and abuse from in-laws. Study findings also do not directly assess perinatal health impacts of abuse from in-laws, nor do they consider other aspects of family violence including spousal violence against the mother-in-law or child abuse in women's natal family. Although these were not the primary research questions, longitudinal and lifespan research is needed to document how abuse from in-laws affects maternal and child health. Although mixed methods used in this study provide greater insight into the issue, separate qualitative and quantitative samples prohibits linkage of findings across these two distinct efforts; hence such future longitudinal work may benefit from qualitative assessment with a subsample of survey participants.

Conclusion and Implications

Findings from this study clearly document the high prevalence of in-law abuse both in pregnancy and postpartum and more importantly, the striking relationship between perinatal

in-law abuse and IPV. These findings have critical implications for perinatal IPV prevention and intervention efforts with South Asian women and in cultural contexts where extended families form an important social unit. Evidence from this and other studies [30, 32] demonstrates the need to screen and address abuse from in-laws among pregnant and postpartum populations, and indicate that screening for in-law abuse also will likely improve the detection of IPV. Additionally, intervention efforts should broaden their definition of abuse to include and identify different types of maltreatment practices, as assessments limited to physical violence would inadequately capture all women experiencing abuse from in-laws; this is consistent with approaches being recommended by WHO internationally [66]. Finally, in the absence of larger social change efforts to counter socially and culturally sanctioned beliefs (e.g., women's inferiority to men, son preference) and practices (dowry), any efforts to intervene around issues of abuse from in-laws or husbands will simply be the equivalent of a band aid on a broken arm. Social change interventions that seek to promote gender equitable attitudes and norms and focus on families—husbands, mothers-in-law and fathers-in-law—are critical, and simultaneously, structural approaches to improve and support the status and development of women are needed. Moving forward with these interventions will require safe but rigorous evaluation of how women can cope with and mitigate the impact of family violence in their lives generally, but particularly in the vulnerable perinatal periods.

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Table 1

Demographic characteristics mothers of infants recruited from a Mumbai Slum Community Health Center, for total sample and by perinatal abuse from in-laws during most recent pregnancy ($N = 1,038$)

	TOTAL ($N = 1,038$)	Perinatal abuse from in-laws ($n = 273$)	No perinatal abuse from in-laws ($n = 765$)	Chi-square or t -test and P value
Age (mean and SD)	24.6 years (4.4)	24.1 years (4.3)	24.7 years (4.4)	$t = 2.2, P = .03$
Minor age at marriage (n and %)	31.5% (327)	35.5% (97)	30.1% (230)	$\chi^2 = 2.8, P = .1$
Any formal education (% and n)	84.4% (876)	88.6% (242)	82.9% (634)	$\chi^2 = 5.1, P = .02$
Employed in the past year (% and n)	10.8% (112)	13.9% (38)	9.7% (74)	$\chi^2 = 3.8, P = .07$
Religion				$\chi^2 = 8.5, P = .08$
Hindu	37.7% (391)	31.5% (86)	39.9% (305)	
Muslim	58.9% (611)	65.9% (180)	56.3% (431)	
Other	3.5% (36)	2.5% (7)	3.8% (29)	
Native state				$\chi^2 = 8.5, P = .08$
Maharashtra	36.7% (381)	39.9% (109)	39.9% (305)	
Uttar Pradesh	43.7% (454)	43.2% (118)	56.3% (431)	
Other	19.6% (203)	16.9% (46)	3.8% (29)	
Husband's age (mean and SD)	29.1 years (5.1)	28.5 (4.7)	29.3 (5.2)	$t = 2.2, P = .03$
Husband currently employed (% and n)	99.1% (1,029)	98.2% (268)	99.5% (761)	^a
Husband has any formal education (% and n)	87.8% (911)	88.3% (241)	87.6% (670)	NS
Length of marriage				NS
<3 years	40.0% (415)	39.6% (108)	40.1% (307)	
3–5 years	19.3% (200)	21.6% (59)	18.4% (141)	
6–10 years	24.8% (257)	22.7% (62)	25.5% (195)	
>10 years	16.0% (257)	16.1% (257)	15.9% (257)	
Live in joint family	61.6% (639)	72.2% (197)	57.8% (442)	$\chi^2 = 17.6, P < .001$

^aCell sizes too small for association analyses to be meaningful

Table 2

Prevalence and types of perinatal abuse from in-laws and its association with perinatal IPV from Husbands, as reported by mothers of infants recruited from a Mumbai Slum Community Health Center ($N=1,038$)

	Total ($N = 1,038$)	IPV ($n = 374$)	No IPV ($n = 664$)	Chi-square, P value
Any abuse from in-laws				
During either pregnancy or postpartum	36.0 (374)	63.4 (173)	26.3 (201)	120.1, $P<.001$
During pregnancy	25.4 (264)	44.7 (167)	14.6 (97)	113.9, $P<.001$
During postpartum	15.3 (159)	27.5 (103)	8.4 (56)	67.3, $P<.001$
Insult woman or her natal family in front of others				
During pregnancy	20.1 (209)	35.6 (133)	23.8 (89)	86.5, $P<.001$
During postpartum	13.7 (142)	11.4 (76)	8.0 (53)	50.7, $P<.001$
Force woman to bring money/goods from natal home				
During pregnancy	4.6 (48)	11.0 (41)	1.1 (7)	53.3, $P<.001$
During postpartum	2.7 (28)	6.1 (23)	.8 (5)	26.6, $P<.001$
Impede access to health care [*]				
During pregnancy ^a	2.5 (26)	5.9 (22)	.6 (4)	27.3, $P<.001$
During postpartum ^b	2.0 (21)	4.0 (15)	.2 (1)	32.6, $P<.001$
Impede acquisition of food [*]				
During pregnancy	2.9 (30)	6.4 (24)	.9 (6)	25.9, $P<.001$
During postpartum	1.5 (16)	4.0 (15)	.2 (1)	23.5, $P<.001$
Impede rest				
During pregnancy	5.1 (53)	11.8 (44)	1.4 (9)	53.5, $P<.001$
During postpartum	3.3 (34)	7.2 (27)	1.1 (7)	28.7, $P<.001$
Force abortion				
During pregnancy	1.0 (10)	1.6 (6)	6 (4)	**
During postpartum	.1 (1)	.3 (1)	0 (0)	**
Interfere with woman going to natal home for birth				
During pregnancy	8.3 (86)	16.3 (61)	3.8 (25)	49.6, $P<.001$
During postpartum	—	—	—	—
Physically abuse the woman ^{**}				

	Total (N = 1,038)	IPV (n = 374)	No IPV (n = 664)	Chi-square, P value
During pregnancy	2.4 (25)	5.3 (20)	.8 (5)	21.5, P<.001
During postpartum	1.3 (14)	3.5 (13)	.2 (1)	19.9, P<.001

* Fisher Exact Test used due to small cell sizes

** Cell sizes too small for association analyses to be meaningful

a Impeded access to woman's health care

b Impeded access to either the woman's health care or her child's health care