Addressing Stillbirth in India Must Include Men

Lisa Roberts, Susanne Montgomery, Gayatri Ganesh, Harinder Pal Kaur & Ratan Singh

To cite this article: Lisa Roberts, Susanne Montgomery, Gayatri Ganesh, Harinder Pal Kaur & Ratan Singh (2017) Addressing Stillbirth in India Must Include Men, Issues in Mental Health Nursing, 38:7, 590-599, DOI: 10.1080/01612840.2017.1294220

To link to this article: http://dx.doi.org/10.1080/01612840.2017.1294220

Published online: 28 Mar 2017.

Submit your article to this journal

Article views: 42

View related articles

View Crossmark data
Addressing Stillbirth in India Must Include Men

Lisa Roberts, Dr, PH, MSN, RN, FNP-BC, CHES\textsuperscript{a}, Susanne Montgomery, PhD, MPH\textsuperscript{b}, Gayatri Ganesh, BA, MA\textsuperscript{c}, Harinder Pal Kaur, MBBS\textsuperscript{d}, and Ratan Singh, BAMS\textsuperscript{c}

\textsuperscript{a}School of Nursing, Loma Linda University, Loma Linda, California, USA; \textsuperscript{b}School of Behavioral Health, Behavioral Health Institute, Loma Linda University, Loma Linda, California, USA; \textsuperscript{c}Christian Hospital Mungeli, Mungeli, Chhattisgarh, India; \textsuperscript{d}Summer Institute Intern, School of Behavioral Health, Loma Linda University, Loma Linda, California, USA

ABSTRACT

Background: Millennium Development Goal 4, to reduce child mortality, can only be achieved by reducing stillbirths globally. A confluence of medical and sociocultural factors contribute to the high stillbirth rates in India. The psychosocial aftermath of stillbirth is a well-documented public health problem, though less is known of the experience for men, particularly outside of the Western context. Therefore, men’s perceptions and knowledge regarding reproductive health, as well as maternal-child health are important.

Methods: Key informant interviews (n = 5) were analyzed and 28 structured interviews were conducted using a survey based on qualitative themes. Results: Qualitative themes included men’s dual burden and right to medical and reproductive decision making power. Wives were discouraged from expressing grief and pushed to conceive again. If not successful, particularly if a son was not conceived, a second wife was considered a solution. Quantitative data revealed that men with a history of stillbirths had greater anxiety and depression, perceived less social support, but had more egalitarian views towards women than men without stillbirth experience. At the same time fathers of stillbirths were more likely to be emotionally or physically abusive. Predictors of mental health, attitudes towards women, and perceived support are discussed.

Conclusions: Patriarchal societal values, son preference, deficient women’s autonomy, and sex-selective abortion perpetuate the risk for future poor infant outcomes, including stillbirth, and compounds the already higher risk of stillbirth for males. Grief interventions should explore and take into account men’s perceptions, attitudes, and behaviors towards reproductive decision making.

Background

Millennium Development Goal 4, to reduce child mortality, cannot be achieved without reducing the world’s 3.3 million stillbirths (Cousens et al., 2011; Yoshida et al., 2016). Globally 98% of the stillbirths occur in low-/middle-income countries (Lawn et al., 2016) and 67% occur in rural areas (Oestergaard et al., 2011). Half of the world’s stillbirths occur during labor and delivery where skilled birth attendants and high-quality care are unavailable or unattainable (Lawn et al., 2016). India has the highest number of stillbirths in the world (Blencowe et al., 2016), and rates vary widely within the country. In Chhattisgarh, a predominantly rural central Indian state, the stillbirth rates are among the highest for India, ranging from 64 to 103/1000 live births (Bhati, 2014; International Institute of Population Studies, 2006; Roberts, Montgomery, Lee, & Anderson, 2012). A confluence of medical and sociocultural factors contribute to the high stillbirth rate among poor, rural women in central India, who lack decision-making power for reproductive choices and medical care.

Following stillbirth, women in low-/middle-income countries are often blamed for stillbirth, attributing assumptions of attempted abortion, mother’s sins, supernatural evil spirits, inadequately bearing the pains or doing the work of labour, or having an inadequate body, which leads to stigmatization, rejection and abuse from their partners, in-laws and society (Burden et al., 2016; Roberts, Anderson, Lee, & Montgomery, 2012; Sisay, Yirgu, Gobeayehu, & Sibley, 2014). Additionally, mourning a stillbirth may be taboo or suppressed to avoid stigmatization (Burden et al., 2016) due to society’s lack of acceptance and the stigma of stillbirth, which causes associated psychosocial trauma and underreporting (Brierley-Jones, Crawley, Lomax, & Ayers, 2014; Burden et al., 2016; Roberts & Montgomery, 2015, 2016b, in press; Roberts, Montgomery, et al., 2012).

Negative psychological outcomes associated with stillbirth include prolonged, complicated grief, guilt, shame, anxiety, depression, somatization, sleep disturbance, decreased function and post-traumatic stress disorder, which may continue despite subsequent pregnancy and the birth of a healthy child (Kelley & Trinidad, 2012; Lawn, Gravett, Nunes, Rubens, & Stanton, 2010; Roberts, Montgomery, et al., 2012; Robertson Blackmore et al., 2011; Turton et al., 2006). Also due to the same societal pressures, women may underreport adverse changes in their social circumstances, such as worsening relationships with husband, extended family and community, not being valued by family members, and increased vulnerability to their own safety after stillbirth (Gausia et al., 2011). Women’s reluctance to report social consequences may be due to social norms, which deter...
Asian women from complaining in general and make them particularly reluctant to complain about their husbands and in-laws (Chandran, Tharyan, Muliyil, & Abraham, 2002). Traditional social norms in India include male dominance and a cultural preference for sons, resulting in gender discrimination and limited autonomy for women (Bharadwaj & Lakdawala, 2013; Yesudian, 2009). Of 32 nations analysed using the Gender Inequality Index, the median was 0.36, Netherlands had the lowest inequality at 0.17 and India had the highest inequality at 0.75 (Straus & Mickey, 2012).

Despite underreporting in some areas, globally, many studies have documented the psychological impact of perinatal loss on mothers, but until recently, few studies anywhere have been conducted among fathers of stillborn babies, and the few studies available were conducted in high-income countries (Cacciatore, Erlandsson, & Rådestad, 2013; Peters, Lisy, Riitano, Jordan, & Aromataris, 2015; Turton et al., 2006). However, evidence suggests that both men and women are greatly affected psychologically and emotionally by the trauma of stillbirth and experience a broad range of symptoms with some gendered distinctions (Aho, Tarkka, Åstedt-Kurki, & Kaunonen, 2006; Avelin, Rådestad, Säflund, Wredling, & Erlandsson, 2013; Robertson Blackmore et al., 2011; Turton et al., 2006). While men and women experience similar feelings, they cope differently. Men generally express grief less intensively and for a shorter period of time, with less crying and less need to talk about the loss—choosing instead to distract themselves. Men are also more likely to internalize their grief or even deny it (Kersting & Wagner, 2012). Although men have been found to have less severe psychological symptoms than women, men were more prone to survivor guilt, anger, frustration and emotional withdrawal (Avelin et al., 2013; Barr, 2004, 2012; Burden et al., 2016), and sometimes take these irritable feelings out on their wives, or turn to alcohol consumption (Bhat & Byatt, 2016).

In addition to dealing with their own grief, men are also burdened by the sense of expectations that men should be strong to support their partners (Avelin et al., 2013; Cacciatore, 2013; Kelley & Trinidad, 2012). This expectation may explain the fact that women who perceive strong family support have less anxiety and depression than other women after stillbirth (Cacciatore, Schnebly, & Froen, 2009). Clearly this comes at a cost, however, as men tend to be even more treatment resistant than women, and yet they are feeling the pressure of expectations to power through challenges, supporting the women while dealing with their own grief.

While both men and women suffer significant mental health challenges, psychosocial difficulties and prolonged grief that may last many years after the stillbirth and increase the risk for physical morbidity and mortality (Aho et al., 2006; Burden et al., 2016; Cacciatore, 2013; Campbell-Jackson, Bezance, & Horsch, 2014; Hazell et al., 2016; Lawn et al., 2010; Turton et al., 2006), women typically grieve for longer periods of time than fathers (Cacciatore, 2013) and need more time to mourn and recover before conceiving again after the stillbirth. For men on other hand, the level of psychological symptoms increased as more time elapsed before another pregnancy (Turton et al., 2006).

The psychological aftermath of stillbirth varies not only by the parent’s gender (Ellis et al., 2016), but also by country (Burden et al., 2016). India is a traditional society, with a well-documented social norm of male dominance (Straus & Mickey, 2012). Paradoxically, the male dominance and son preference of Indian society may actually be counterproductive to fertility expectations and particularly in the quest for sons as the pressure to ‘get’ a son often results in lack of sufficient spacing, which is related to poor birth outcomes (Kozuki & Walker, 2013). Therefore, additional studies are needed to understand fathers’ experiences related to stillbirth in low- to middle-income countries. The purpose of this study was three-fold: (a) to explore men’s perceptions, attitudes and behaviours related to reproductive choices linked to stillbirth; (b) to elicit father’s experiences related to stillbirth; and (c) to examine men’s opinions regarding a women’s mindfulness-based intervention for perinatal grief after stillbirth in their communities in rural, central India.

Methods
We conducted a mixed-methods study during which we asked men to be part of our formative work to develop a culturally adapted mindfulness-based intervention for perinatal grief for women after stillbirth. Key informant interviews (n = 5) were audio recorded, transcribed and analysed. Two major themes were identified, as well as several sub-themes.

Additionally, once the qualitative phase was completed, 28 men participated in a structured interview (survey) that was developed in alignment with the identified themes, choosing validated scales whenever possible. The survey included demographics and questions pertaining to general medical and mental health history, the care his wife/partner received pertaining to the pregnancy and delivery of a stillborn baby and their attitudes about the experience, as well as gendered social norms. Measures of psychosocial well-being, attitudes towards women, religious coping, perceived social provision of support, conflict management and satisfaction with life were also assessed. Additionally, men’s opinions regarding the women’s mindfulness-based intervention for perinatal grief after stillbirth were elicited.

Measures

**Descriptive variables**

Demographic variables included age, marital status, education and ethnicity. Additional descriptive variables included general health history and stillbirth history, ‘Has a child of yours ever been stillborn?’ as a yes/no dichotomous variable, with those answering positively answering additional questions pertaining to the stillborn, including time elapsed since stillborn, gender of the baby, setting (home or facility), type of birth attendant, whether or not the mother had received antenatal care and total number of stillbirths. Descriptive variables pertinent to socio-cultural factors influencing reproductive health were assessed among all participants and included the number of living sons and daughters, number of times the participant had been married, whether or not the participant allowed his wife to go to the market without asking for permission and whether or not the participant permitted his wife to visit natal kin.

The following validated scales were selected to align with our prior work in the same target community. This prior work
explored mental health issues in women who had suffered stillbirth. In addition, measures also reflect the very limited literature regarding fathers’ experiences related to stillbirth.

**Hopkins symptoms check list – 10 (HSCL-10)**
The HSCL-10 was translated into Urdu and performed well among a sample of poor, rural Pakistanis with low education levels (Syed, Zachrisson, Dalgard, Dalen, & Ahlberg, 2008); therefore, it was chosen for use among this population who share some similarities with the Syed et al. sample. We piloted this scale among a sample of poor, rural women after translating it to Hindi and found good reliability, with a Cronbach’s alpha of 0.84 (Roberts & Montgomery, 2015). The measure consists of 10 items which are rated on a Likert-type scale ranging from (1) not at all to (4) extremely, with higher scores representing more symptoms of anxiety and depression. Like Syed et al. (2008), we used a cut-off score, with a mean of 1.65 or greater indicating presence of notable mental health symptoms.

**Short Attitudes towards Women Scale (AWS)**
The 15-item version of the AWS was developed from the 25-item version (Spence, Helmreich, & Stapp, 1973), and further validated by Daugherty and Dambrot (1986). Response options are (a) agree strongly, (b) agree mildly, (c) disagree mildly and (d) disagree strongly. The scale was subsequently further shortened to 12 items and validated among Turkish students (Delevi & Bugay, 2013). Several items are reverse coded and then all items are summed, creating an index score with a range of 0–36. A high score indicates a pro-feminist, egalitarian attitude, whereas a low score indicates a traditional, conservative attitude. In a previous study with a sample of Asian-Indian immigrants in the USA (Cronbach’s alpha = .88), we used the 12-item version in Punjabi (Roberts, Mann, & Montgomery, 2015). For the current study, we used the 12-item version in Hindi (Cronbach’s alpha = .84).

**Short form of the brief cope**
Religious coping was measured using a 7-item version of the RCOPe scale with six items rated on a Likert-type scale ranging from (0) not at all to (3) a great deal. Positive and negative items are totalled separately, with each subscale totalling three items (Feder et al., 2013). A higher score on each subscale represents greater use of positive or negative religious coping (Cronbach’s alphas = 0.59 and 0.62, respectively). Additionally, one overall religious coping item to measure the extent that religion is used to understand or deal with stressful situations (John E. Fetzer Institute, 1999) is rated on a scale of (0) not involved at all to (3) very involved.

**Conflict tactics scale, shorter version (CTS25)**
The behaviours of participants when dealing with spousal conflict were measured using a 16-item scale. Items are rated from 0 to 3 as follows: 0) did not happen in the past three months, (1) occurred 1–10 times in the last three months, (2) occurred 10–20 times in the last three months, or (3) occurred more than 20 times in the last three months (Verduin, Engelhard, Rutayisire, Stronks, & Scholte, 2013). This version was found to produce sufficiently parallel results to the full-length revised Conflict Tactics Scale (CTS2), which has previously been used in India with a reported Cronbach’s alpha of .77 (Straus & Douglas, 2004; Straus & Mickey, 2012). Both frequency and severity of behaviours are noted by percentage. (Our Cronbach’s alpha was 0.68). An emotional index score was created by summing two items: verbal abuse and destruction of partner’s property or threatened to hit partner. A physical abuse index score was created by summing three items: pushed/shoved/slapped partner, minor-to-moderate injury inflicted (sprain, bruise, small cut and pain the next day) and severe physical abuse (punched, kicked or beat-up partner).

**Social Provisions Scale (SPS)**
We used the 12-item version of the scale, which assesses social support received from others as perceived by the respondent (Mosley-Williams, Lumley, Gillis, Leisen, & Guice, 2002). A Likert-type scale ranging from (1) strongly disagree to (4) strongly agree is summed after reversing reverse-coded items for a possible index score of 12–48 with higher scores reflecting more social support. (Cronbach’s alpha = 0.72).

**Satisfaction with Life Scale (SWLS)**
We chose the Satisfaction with Life Scale because it is easily understood by respondents and is applicable in divergent life situations and countries (Diener, Inglehart, & Tay, 2013). It is a five-item scale with items rated on a Likert-type scale ranging from (1) strongly disagree to (7) strongly agree (Diener, Emmons, Larsen, & Griffin, 1985). The resulting summed scores range from 5 to 35 with higher scores representing greater satisfaction with life (Cronbach’s alpha = 0.72). The scores can be further interpreted as follows: 30–35 = highly satisfied, 25–29 = slightly above average satisfaction, 20–24 = average satisfaction, 15–19 = slightly below average, 10–14 = dissatisfied with life and 5–9 = extremely dissatisfied (Diener, 2006).

**Programme questions**
Additional questions evaluated the acceptability of the programme. We asked six questions: an open-ended question about a programme to educate women about how to cope with stillbirth, questions ascertaining whether or not they had direct or indirect knowledge of the pilot programme we had implemented (had a family member participated), who they would recommend the programme to (friends, neighbours or family members) and any suggestions for programme improvement.

**Procedures**
Institutional Review Board approval was received from the researchers’ university, and informed consent was obtained from all participants prior to their participation. Key informants were purposively sampled, in that participants were randomly recruited in the village where the mindfulness-based intervention was piloted for women who had a history of stillbirth, and healthcare providers who interact with fathers after stillbirth.
The key informant (KI) interview guide was developed partially based on published literature pertaining to stillbirth, as well as work among women with a history of stillbirth in the local context (Roberts & Montgomery, 2016). The KI guide contained open-ended questions pertaining to community attitudes regarding stillbirth, personal experience of stillbirth and grief, reproductive health, attitudes towards women related to grieving after stillbirth, domestic violence and social support.

Interviews were conducted in English or Hindi, and the trained bilingual (English as well as Hindi and the local dialect) interviewers gave participants the option to be interviewed or participate in the survey. For all scales not previously available in Hindi, independent forward and backward translation of the instruments were completed to ensure cultural and functional equivalence rather than relying only on literal translation (Jones, Lee, Phillips, Zhang, & Jaceldo, 2001). The survey was conducted as a structured interview for those with low literacy.

Two participants were able to complete the survey themselves; both had completed class nine or higher education, one a business man and one a teacher. However, these two participants did not significantly differ from the rest of the sample.

**Analysis**

For the qualitative analyses, all KI interviews (n = 5) were audio recorded. Interviews were an average of 30 minutes long, conducted in the language of the interviewee’s choice and transcribed verbatim. Hindi transcripts were then translated into English, and all transcripts were analysed using content analysis. Themes were derived by summarizing frequently discussed concepts. Coding was systematically completed by two trained individuals. Coding discrepancies were discussed until consensus was reached, and the final codebook was developed. An additional coder then independently read and coded the qualitative data. Reliability was assessed by diving the number of agreed-upon codes by all possible codes and multiplying the result by 100 (Kelsey, 1996). The overall agreement was 86.4%.

Quantitative data analysis (n = 28) was conducted using SPSS version 23. Analysis included descriptive statistics, bivariate correlations between independent variables, stillbirth and mental health, and multiple regression analysis with mental health (HSCL) as the dependent variable.

**Results**

**Participants**

The five KIs were men ranging in age from 27 to 46, and included one doctor, one nurse and three community members. All the community KI participants had experienced stillbirth, and one had a history of three stillborn babies. Survey participants (N = 28) were self-identified adult males (18 years of age or older) of various ethnicities in two villages in Chhattisgarh, India. Table 1 describes our participants. Most were less than 45 years old, nearly all married, and while most respondents had more than nine years of education (57.1%), many had none (14.3) or little education (28.5%). Most reported no health problems. Our sample was ethnically diverse, but most were Other Backward Caste (OBC) (57.1%). Ethnicities were operationalized as Scheduled Caste defined as a class of Hindu people designated as such according to Article 341 of the Indian Constitution by the President of India. OBC is defined as a class of people born into the low castes of Hinduism, therefore at great social disadvantage, and Scheduled Tribe is defined as non-Hindu indigenous groups designated as such by the President of India under Article 342 of the Constitution of India (Mandal, Datta, Guha, Mukherjee, & Ghatak, 2005; Mandal, Mukherjee, & Datta, 2002; Narayan, 2006). There were no significant demographic differences between men with and without a history of stillbirth.
Two major qualitative themes

KIs explicitly stated that men are the decision makers in Indian society and within their own families. This was expressed unquestioningly – if there are decisions to be made, they decide. However, tacitly expressed was the notion that many things just are the way they are, a mixture of tradition and one’s fate rather than a matter of decision-making.

Reproductive rights

Overall, reproductive decisions were felt to be a matter best left between a husband and wife, with the husband having the final say regarding how many children to have, whether or not the wife should seek antenatal care and facility birth, and how soon to try to conceive again after experiencing stillbirth. Traditional norms, including the expectation to start a family immediately after marriage, were mentioned matter-of-factly. Delays were cause for concern. Concerns included the possibility of infertility or some other medical malady, and with time – gossip and prying by extended family members and neighbours. The possibility of infertility or medical malady interfering with conception was discussed with worry in terms of costs and the need to have at least one son. On the other hand, if a wife failed to produce offspring, particularly sons, the possibility of a second marriage was discussed as a reasonable option. Regarding the experience of stillbirth, up to two to three months was felt to be a normal amount of time to grieve, specifically, for women. Men did not acknowledge grieving themselves or even an expectation for men to grieve about a stillbirth. It was not something to be talked about within the home, but rather something to ‘get over’.

Our participants felt that the women just needed to get on with life.

‘She should forget about it (the stillbirth). I told her ‘we’ll have another baby.’ Still sometimes she weeps.’ – KI male community member.

‘In a few cases the husband will blame the wife for the (stillborn) baby.’ – KI male doctor.

‘It’s the husband’s decision to bring her or not for delivery. What can we do then … it’s too late. Then he may be angry with her also, thinking she is no good. Not a good wife … because his son is stillborn. Only he should have brought her sooner.’ – KI male nurse.

Family obligations

Men acknowledged their own family obligations as well as the need for sons to carry on with family obligations. Family obligations included caring for elderly parents, ensuring financial solvency, shelter, etc., but beyond physical obligations, family piety, respecting the wishes of elders, keeping one’s wife in line with family expectations and producing offspring were recurrent leitmotifs. Constant guidance was given regarding these matters, though not always regarded as supportive. Self-reliance was expected of male family members making decisions for the household or regarding personal reproductive choices, yet many times decisions were made without adequate information regarding possible options.

‘I alone had to decide. Everybody was telling (me to) make a decision. Last time we went to the private doctor and even after so much money we spent, the baby was born dead. This time we went to the government hospital … it was also stillborn. I think my wife is not alright yet but everyone is telling to have another baby.’ – KI male community member with history of several stillbirths.

‘He brought his wife after three days of labor because he was away in the fields. It’s harvest time. She came with uterine rupture …’ – KI nurse.

Descriptive analysis

With respect to autonomy, most of the men (71.4%) indicated that they allowed their wives to go to the market without first seeking permission, but very few (7.1%) allowed their wives to visit natal kin without permission. The number of living children by our male participants ranged from zero to seven, with an average number of 2.8, (SD 1.36) per participant. The number of living sons ranged from zero to five, while the number of living daughters ranged from zero to three. More than half (64.35%) of men had a history of at least one stillborn child with their wives; three had experienced stillbirth twice (10.7%). The average length of time since the stillbirth had occurred was six years, with a range of two months to 20 years. Stillborn babies were more often male (61%), born at home (83%), with deliveries attended by a traditional birth attendant or relative (72%), with half of the mothers having had no antenatal care.

When we compared men with a history of stillbirth to those who did not (Table 1), those with a history of stillbirth reported a higher number of days as a ‘normal’ period for women to grieve after stillbirth, higher use of positive religious coping, less use of negative religious coping and lower perceived social provision of support. They were also more likely to report higher (but not statistically) satisfaction with life. Among men with stillbirth history, we found statically significant higher levels of depression and anxiety (HSCL) and statistically significant differences on attitudes towards women, with men having a history of stillbirth more likely to be egalitarian in their views.

Table 2 describes domestic violence perpetration behaviours by respondents. Items on the CTS2S were endorsed by the men to indicate that they had been perpetrators against their partners in the following ways within the past three months: 50.0% had been verbally abusive, 42.9% had destroyed something belonging to their partner or threatened to hit their partner, 32.2% had pushed/shoved/slapped their partner, 17.9% had inflicted minor-to-moderate injury and 10.7% had inflicted more severe physical abuse. None of the participants indicated that their partners had needed to see or were seen by a doctor due to a fight with them or that they themselves had been victims. The emotional abuse (EA) index score and the physical abuse (PA) index score averages were higher among men with a history of stillbirth (EA M = 0.78, SD 0.10 and PA M = 0.56, SD 0.12) than those without (EA M = 0.60, SD 0.16 and PA M = 0.40, SD 0.16), though these differences were not statistically significant.

Bivariate correlations

In preparation for outcome variable analysis we explored demographics (including those concerning history of stillbirth) with mental health outcomes, and satisfaction with life using bivariate correlation analysis, and ultimately controlled for those that were significant or trending (p < .1) when exploring correlates of
stillbirth history. Additionally, we explored bivariate correlation of demographics and attitudes towards women, social provision of support, religious coping, EA and PA. A broad range of demographic variables were significantly associated with the mental health outcome variable, but none were significantly associated with the satisfaction with life outcome variable. Several of the demographic variables that were significantly associated with the mental health outcome variable were also significantly associated with attitudes towards women (see Table 3 for details). Single demographic variables either trended ($p < .10$) or showed significant correlations ($p < .05$) with social provision of support, PA, and EA. There were no significant correlations between the demographic variables and positive or negative religious coping, or overall use of religion to handle stressful situations.

### Table 2. Items of perpetration endorsed by participants ($N = 26$).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Men with a history of stillborn ($n = 18$)</th>
<th>Men without a history of stillborn ($n = 10$)</th>
<th>Men with a history of stillborn ($n = 18$)</th>
<th>Men without a history of stillborn ($n = 10$)</th>
<th>Men with a history of stillborn ($n = 18$)</th>
<th>Men without a history of stillborn ($n = 10$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1–10 times in the last three months</td>
<td>10–20 times in the last three months</td>
<td>More than 20 times in the last three months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal abuse</td>
<td>3 (16.6)</td>
<td>3 (30)</td>
<td>7 (38.8)</td>
<td>1 (10)</td>
<td>1 (3.6)</td>
<td></td>
</tr>
<tr>
<td>Destruction of partner’s property or threatened to hit partner</td>
<td>4 (22.2)</td>
<td>2 (20)</td>
<td>5 (27.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pushed/shoved/slapped partner</td>
<td>4 (22.2)</td>
<td>1 (10)</td>
<td>4 (22.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minor to moderate injury inflicted (sprain, bruise, small cut, pain the next day)</td>
<td>2 (11.1)</td>
<td>2 (20)</td>
<td>1 (3.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe physical abuse (punched, kicked, or beat-up partner)</td>
<td>3 (16.6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Multiple regression

While underpowered, we conducted exploratory multivariate analyses with HSCL as our dependent variable. We entered all variables that were significantly associated with mental health symptoms (HSCL) on bivariate analysis (time since stillbirth, gender of stillborn, where stillbirth occurred, wife having had antenatal care, birth attendant, number of stillbirths experienced and ethnicity) to explore HSCL in a multivariate fashion for the men with a history of stillbirth. In this model, the adjusted $R^2$ was 97.2%. Gender of stillborn (male), birth attendant (not skilled), number of stillbirths (more) experienced, ethnicity, PA perpetration and satisfaction (less) with life were significant predictors of poorer HSCL. Two variables also trended towards significance ($p < .10$): antenatal care and negative religious coping. There were no significant interactions.

### Programme evaluation

Survey participants were asked open-ended questions to elicit their opinions regarding the women’s mindfulness-based intervention for education regarding stillbirth risk and coping, which had been conducted in their communities. While more than half of the participants (56.5%) did not know that such a programme had been piloted in their village, most of the men (91.1%, $n = 21$) indicated that they believed it was a good programme or good social service that should be undertaken. None of the participants reported a family member having participated in the women’s mindfulness-based programme. Based on their review of programme purpose and components, 100% of the men indicated they would recommend the programme to a friend, family member or neighbour in need.

### Discussion

To our best knowledge, this is the first paper exploring Indian males’ thoughts about stillbirths and how it affects their family
dynamics. Men acknowledged their general, medical and reproductive decision-making power, reflecting the findings of the National Family Health Survey, which asks men and women about their decision-making capacity in regard to health, visiting relatives and the market (International Institute of Population Studies, 2006). Yet while simultaneously expressing decision-making as a right, it was also expressed as an expectation put upon them – a burden, especially as they felt they lacked knowledge and readiness for well-informed decisions. Wives were not allowed/encouraged to discuss their stillbirth, and since society expects the couple to conceive, they were pushed to conceive again soon. If not successful, a second wife was seen as a possible solution, especially if no son was conceived.

Higher levels of mental health symptoms and the perception of receiving less social support among men who had experienced stillbirth may explain the greater likelihood that they are emotionally and/or physically abusive towards their wives. Abuse was more likely despite increased use of positive religious coping, which is likely an attempt to deal with a pressured situation (Kragt Bakker & Paris, 2013). These findings are consistent with a systematic review indicating that fathers report symptoms of anxiety and depression following stillbirth, though lower levels than mothers do (Badenhorst, Riches, Turton, & Hughes, 2006; Turton et al., 2006). Furthermore, depression has been linked to both emotional and PA perpetration in both Western and non-Western cultures and a previous study in India indicated that perceived lack of social support may lead to marital violence (Bhat & Ullman, 2014). It is therefore not surprising that in India, for men with stillbirth related stress, domestic violence would be even more pronounced.

At the same time, men in this sample who had experienced stillbirth had more egalitarian views towards women than men who had not experienced stillbirth. Inequitable gender norms can be influenced by experiences (Verma et al., 2006), and it is possible that experiencing the grief of stillbirth with their wives provides an opportunity for men to gain new insight, personal growth and development of empathy (Avelin et al., 2013; Miyoko, 2012). These positive outcomes represent opportunities to consider while providing the best possible care for parents according to current evidence. Most studies indicate that mementos of the baby or other supports for memory making, compassionate communication and validation of emotions from healthcare providers, information regarding cause of loss and postnatal care, support groups, and cognitive behavioural interventions may be helpful (Crispus Jones, McKenzie-McHarg, & Horsch, 2015; Ellis et al., 2016; Lisy, Peters, Riitano, Jordan, & Aromataris, 2016; Peters et al., 2015). There are inconsistent findings in the literature regarding photos and time spent viewing/holding the stillborn baby (Crispus Jones et al., 2015; Edmundson, Givens, O’Donnell, & Turner, 2015) and may be considered taboo in some cultures. An important caveat to consider is that the evidence is not only derived primarily from Western studies, it is not strong enough to reliably inform practice guidelines (Koopmans, Wilson, Cacciarelli, & Flendy, 2013). It is important to carefully consider practice or intervention approaches according to the sociocultural context (Chichester, 2005; Peters et al., 2015), especially when outside the Western world where studies pertaining to stillbirth, particularly concerning fathers, are lacking.

An intervention for fathers of stillbirths in India, for instance, must take into account social norms. In India’s patriarchal society with its strong son preference and distant women’s autonomy, sex-selective abortion occurs despite laws against prenatal sex determination (Ahankari, Myles, Tata, & Fogarty, 2015; Roberts & Montgomery, 2016a), putting women at risk for future preterm birth and foetal growth restriction (Lemmers et al., 2015; Saccone, Perriera, & Berghella, 2015) – increasing the risk of poor infant outcomes, including stillbirth (Gardosi, Madurasinghe, Williams, Malik, & Francis, 2013; Surkan, Stephansson, Dickman, & Cnattingius, 2004). Inadvertently, the quest for sons driving sex-selective abortion increases the risk of stillbirth, compounding the already higher risk of stillbirth for male foetuses (Mondal, Galloway, Bailey, & Mathews, 2014). The social norms perpetuating stillbirths are at the same time causing poor social outcomes, a conundrum with serious public health implications. Education regarding the risks and possible prevention could potentially have an important impact on fathers of stillbirths. This knowledge in turn could begin to influence men’s acceptance of the status quo. We found this validated with the strong support expressed by the men for our intervention for women affected by stillbirth. Indeed, their openness suggests that aligned outreach to men with stillbirth experiences might provide a critical opening to the development of an intervention for men as well.

Limitations of the current study include the small sample size and purposive sampling, which limit generalizability. However, this study offers unique insights into rural men’s thinking about stillbirth in India, adding to the limited literature regarding fathers’ experiences of stillbirths. Additionally, adding to the literature regarding their perceptions, attitudes and behaviours related to reproductive choices, which are linked to stillbirth will inform future interventions. The men in this sample were supportive regarding the women’s mindfulness-based intervention for perinatal grief after stillbirth that was piloted in their communities; however, men’s unique needs will also need to be addressed in future interventional studies.

Burden et al.’s systematic review and meta-analysis (2016) indicate that stigmatization and societal pressure to quickly pursue or delay conception is especially strong in low-/middle-income countries and will need to be addressed in future intervention studies. An earlier systematic review by Badenhorst et al. (2006) called for recognition of fathers caring for their partners’ needs when planning or providing care and should also be included in interventions. Given the differences in stillbirth experience for men and women (Peter Barr, 2012; Cacciarelli et al., 2013; Turton et al., 2006), tailoring interventions not only to mothers’ needs but fathers’ needs as well has been recognized as an important component of support to be included (Campbell-Jackson et al., 2014).

Additionally, interventions aimed at changing community norms within the sociocultural context would be beneficial to both men and women who experience stillbirth. For example, the BOMA model among the Masai in Africa uses collective counselling for antenatal care. This effectively strengthens existing cultural concepts and social structures to train those...
responsible in how to be stewards of women’s health (The African Medical and Research Foundation, 2013). For men in India, perhaps a similar model would alleviate their feeling of a lack of social support while fulfilling their duties. Most stillbirths are preventable with antenatal care and having skilled birth attendants for the delivery (Lawn et al., 2016; Oestergaard et al., 2011), and previous studies involving husbands in maternity care in India showed that the husband’s presence during antenatal care resulted in more family planning and enhanced the odds of an institutional delivery by 2.37 times (Chattopadhyay, 2012; Varkey et al., 2004).

Conclusions

In a patriarchal society like India, sociobehavioural interventions should explore and take into account men’s reproductive-related perceptions, attitudes, behaviours and support needs after experiencing stillbirth. Further studies are needed to develop and evaluate a culturally tailored intervention where men and their community are included.

Funding

Primary funding for this study was provided by a Loma Linda University School of Nursing seed fund grant. Additionally, research reported in this publication was in part supported by the National Institute of Health Disparities and Minority Health of the National Institutes of Health under award number P20MD006988. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Conflict of interest

The authors declare that they have no conflict of interest.

References


The African Medical and Research Foundation. (2013). The 'BOMA' health delivery model: An innovative approach to delivering maternal, newborn and child health services to semi-nomadic communities in hard-to-reach regions (p. 33).