Factors influencing whether or not male partners from low and middle income countries attend childbirth: a mixed methods systematic review

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Abstract

Currently, there is a global drive to promote respectful maternity care including a woman’s right to have a companion of her choice during labour and birth. This may include but is not limited to doula, female relatives or friends, and male partners. Evidence suggests that male partners’ attendance at childbirth, when it is a woman’s choice, may be associated with a positive emotional experience for the woman. However, these potential benefits were reported from studies conducted in high income settings only. There is limited information about male partners’ attendance at labour and birth in low and middle income countries (LMICs). Although male partners’ attendance at childbirth is being implemented in a few health facilities in LMICs, there is a paucity of evidence on the acceptability and feasibility of this practice and the moderators of implementation in the context of LMICs.

Background

Currently, there is a global drive to promote respectful maternity care (1, 2). An important component of respectful maternity care is a woman’s right to have a birth companion of her choice, who may be a doula, female relative, friend, or spouse/partner (3). A Cochrane review of 26 trials from middle and high income countries found low quality evidence that, compared to women without continuous labour support, women who received continuous labour support had shorter labour duration, were more likely to give birth without any medical intervention and to report a satisfying childbirth experience (4). Key elements of labour support encompassed continuous presence, reassurance, praise, information about labour progress, advice about coping techniques, comfort measures, and advocacy (4). This Cochrane review combined studies in which labour support was provided by different people (e.g. hospital staff, doulas, female relatives, friends, and male partners), and therefore we do not know the relative effectiveness of support, for example by the woman’s male partner compared to support by female relatives. The Cochrane review also did not identify any trials from low income countries. In this paper the term ‘male partner’ is used to include any male companion chosen by the woman, such as spouse, male partner/friend or father of the baby.
A metasynthesis that included 12 studies, of which six were from low and middle income countries (LMICs), indicated that the presence of a birth companion reduced labouring women’s feelings of loneliness and provided reassurance (5). Furthermore, studies conducted in Lebanon, Syria, Egypt, Nepal, and Malawi included in the metasynthesis found that women who were supported by female companions felt their companions provided most of their emotional, physical, and informational needs (5). Some women said they preferred the presence of the male partner during childbirth, while others felt embarrassed by their presence (5). However, this metasynthesis only included studies of the views of women; the perspectives of partners and health personnel were not covered.

The World Health Organization (WHO) acknowledges that male partners can contribute to a woman’s positive experience of pregnancy, childbirth, and the postnatal period (6) While in high income settings male partners’ attendance may be embedded in cultural norms, in LMICs, the practice is uncommon due to a number of factors. Cultural norms in more traditional societies may discourage male partners from attending childbirth (7). Moreover, lack of privacy within maternity wards prevents facilities from permitting male partners’ attendance (8). However, hospitals’ encouragement and facilitation of male partners’ attendance at childbirth remains an understudied area in the context of LMICs. For example, it is unclear whether or not male partners’ attendance at labour and/or birth would be an acceptable and feasible practice to implement in LMICs health facilities if a woman prefers this. It is also not known which individual, clinical, contextual, and cultural factors are likely to influence male partners’ attendance at childbirth in LMICs. Further exploration is needed of the factors influencing whether male partners are able to attend childbirth in LMICs when they are the woman’s preferred birth companion. We conducted a systematic review to investigate the factors that influence male partners’ attendance at childbirth in LMICs.

Review question

Methods

Eligibility criteria
Published and unpublished primary studies using qualitative, quantitative or mixed methods were eligible to be included in the review if they: a) were conducted in a LMIC; b) reported data on factors influencing male partners’ attendance at labour and birth from
the perspectives of male partners, childbearing women or healthcare professionals; c) were published in English; and d) were published from 2002 onwards. For the purposes of the review, we defined male partners’ attendance at childbirth as follows: 1) male partners accompanying the woman to the health facility but not being physically present during childbirth; or 2) male partners accompanying the woman and being present at any stage of childbirth or throughout labour and birth.

Reviews were excluded but were used to identify relevant primary studies. In this review, the term LMICs encompassed low income, lower middle income, and upper middle income countries as defined by the World Bank’s country classification in 2017 by income levels (9).

Search strategy

The searches for Phases 1 and 2 were conducted separately using the same search terms in the following electronic databases: CINAHL, MEDLINE, ASSIA, PsychInfo ProQuest, Web of Science, SCOPUS, and Google Scholar. The search for Phase 1 was conducted in May 2016 and updated in November 2016 and December 2018. The search for Phase 2 was conducted September – November 2016 and updated in December 2018. The search strategy was saved on CINAHL, MEDLINE, and Google Scholar. Alerts for each database were created to update search outputs until December 2018. Whenever papers were released, they were screened to identify eligible studies that were added to the review.

Study selection

Search results were exported to Endnote reference management software version 7 (10). At each phase, after the de-duplication process, records were evaluated by title and abstract to identify potentially relevant papers. One reviewer (TCU) screened all the search output and a 10% sample was double-checked by second reviewers (AM or HW) to ensure the screening process was rigorous (11). Where there was not enough information, or the paper was potentially eligible, the full text article was assessed against the inclusion criteria. Articles about which there was uncertainty were discussed by the review team and consensus reached.

Data extraction and quality appraisal

Relevant data including the objective of the study, setting, participants, sample size, recruitment and characteristics, and method of data collection and analysis were extracted by one reviewer. Quality appraisal of qualitative studies used the Critical Appraisal Skills Programme (CASP) checklist (12). For the quality assessment of both
quantitative and mixed methods cross-sectional studies, AXIS, an appraisal tool for surveys, was used (13). The quality of experimental and quasi-experimental studies was appraised using SURE checklist (14). Studies were critically assessed by TCU.

Findings

Search outcomes

The search for Phase 1 yielded 3,070 unique titles which were screened to identify 33 eligible papers as presented in Figure 1.

Study characteristics

This systematic review included 68 studies: 33 qualitative, 30 quantitative, and five mixed methods studies provided quantitative data (see table 1 and 2 on the attached document for details). Studies included in this review were published between January 2002 and December 2018. Studies were conducted in 27 LMICs, including seven low income countries (n=19 studies), 12 lower middle income countries (n=31 studies), and eight upper middle income countries (n=18 studies) The studies focused on a range of topics including barriers to male partners’ involvement in maternal health, male partners’ attendance and their experiences of childbirth, women’s perceptions of male partners’ presence, health providers’ attitudes to male partners’ attendance, women’s childbirth experiences, and the effects of male partners’ presence at childbirth. Included studies involved 18,045 participants; including 5,517 men, 10,471 women, 1,188 health providers, 851 female birth companions, 11 traditional birth attendants, six religious leaders, and seven village leaders.

Summary of the quality of studies

In Phase 1, all qualitative studies stated their aims clearly. All articles explicitly described the inclusion criteria. Methods used to generate data were extrapolated in every study. Two studies (19, 20) did not discuss consent, or other ethical requirements of the research conduct. Analytical approaches and evidence to support the findings were provided in all except in one study (21). Eleven papers did not discuss the credibility of their findings (19-29).

In Phase 2, 18 out of 32 surveys did not justify the sample size (30-46). Five studies (34, 40-43, 47) lacked details of the inclusion criteria. Ten studies reported measures undertaken to minimise non-response (36, 39, 47-54). All except one study (45) reported how outcome variables reflected their aims. However, in seven studies the outcome
variables were measured using non-validated instruments (30, 32, 33, 42, 47, 49, 50). Eight studies did not discuss ethics and consent (33, 40-42, 44, 50, 51, 55). Unlike some surveys, experimental studies provided sufficient information about the recruitment process.

Synthesis of the findings
After the analysis of the articles, themes from Phase 1 and Phase 2 were grouped into three broad categories: motivators, facilitators, and barriers that may determine male partners’ attendance at childbirth in LMICs (Table 3). Whilst the motivators to male partners’ attendance are the perspectives of only male partners, the facilitators and barriers were from the perspectives of male partners, pregnant women, health professionals, and community leaders.

**Table 3: Themes that emerged from synthesised studies**

| Broad category | Themes                                                                 | Obtained from Phase One | Obtained from Phase Two |
|----------------|------------------------------------------------------------------------|--------------------------|--------------------------|
| **Motivators** | To be there for their partners                                         | ü                        | ü                        |
| **Facilitators** | Women’s wish for male partners’ presence                               | ü                        |                         |
|                  | Support from healthcare professionals                                   | ü                        |                         |
|                  | Couples’ current relationship and closeness                              | ü                        |                         |
|                  | Educational attainment                                                   | ü                        |                         |
|                  | Positive attitudes towards male partners’ attendance                    |                         | ü                        |
|                  | Men accompanying their partners to antenatal care visits                |                         | ü                        |
| **Barriers**    | Restrictions imposed by health facilities                               | ü                        |                         |
|                  | Professionals’ negative perceptions                                      |                         | ü                        |
|                  | Sociocultural barriers                                                   | ü                        |                         |
|                  | Lack of information and preparation on childbirth                        | ü                        |                         |
|                  | Men’s negative experiences                                               |                         | ü                        |
|                  | Women’s opposition                                                       | ü                        | ü                        |
|                  | Lack of privacy                                                          | ü                        |                         |
|                  | Work-related constraints                                                 | ü                        | ü                        |
|                  | Family structure influence                                               | ü                        | ü                        |

1. **Motivators to male partners’ attendance**
Motivators of male partners’ attendance at childbirth were garnered from both male partners who attended childbirth and those who had not yet attended labour and/or birth. Male partners’ presence was viewed as an important practice to uphold.

Some male partners expressed their intention to ‘be there for their partners’ as reported in 19 studies, including 13 qualitative studies and six quantitative studies (22, 24, 27, 39, 46, 52, 56-68). Reasons for attendance varied depending on the country’s societal and contextual understanding of male partners’ role during childbirth. In a study from Brazil, fathers said they attended childbirth because they thought it was their right to participate (56). In contrast, men from studies conducted in Uganda, Rwanda, and Tanzania held the view that male partners would not necessarily be physically present at childbirth, but should stay within the premises to receive updates on the woman’s labour progress (57, 69, 70). Some men whose partners birthed in private hospitals stated that they attended birth to provide emotional support to their partners (28, 58, 71). Other reasons that motivated male partners to attend included the fulfilment of their responsibility (24, 57, 59-61, 72), safety of the mother and baby during their stay at the health facility (22), and curiosity to witness what happens during childbirth (23, 68, 73). Some male partners said they would participate in childbirth to play a role in decision-making about the care given to their partners (22, 61, 68, 74).

Cross-sectional surveys provided estimates of some of the reasons that led to male partners’ attendance (36, 39, 46, 52, 65, 67). In a study conducted in Nigeria involving 149 male partners, 81.2% reported that they attended childbirth because they felt it was needed, and 53.7% desired to support their partners (46). A study from the Philippines reported that 80.4% of 50 first time fathers attended childbirth because of anxiety about the birth outcome (39). Two studies reported that 22.8% (n=34) of men from a study in China (46) and 6.5% (n=34) of men in a study from Nigeria (52) attended childbirth to welcome their baby. A study from Turkey reported that 73.9% (n=90) of male partners wished to attend childbirth to provide practical support to their partners like assisting them to do breathing exercises during labour (67).
2. Facilitators of male partners’ attendance

This broad theme covers individual and health system facilitators to male partners’ attendance.

Women’s wish for male partners’ presence

Five qualitative studies from Brazil, Nigeria, Rwanda, South Africa, and Uganda (20, 26, 29, 70, 75) reported that some women wished to have their husbands as birth companions. A study conducted in Nigeria, reported that women who were left unattended by midwives wished their spouses were present with them (26). Some women reported that they wanted emotional support from their husbands/partners (75). Other women whose husbands were present at childbirth reported that they felt protected and empowered to concentrate on the birthing task (70). Some women wanted their male partners to stay with them throughout childbirth to witness the endurance of labour (20).

Thirteen studies provided quantitative data on reasons why women wanted fathers to be present (30, 37, 40, 45, 47, 49, 51, 54, 67, 76-79). In one study from Nigeria that involved 506 women, 345 desired male partners’ presence at labour and birth and reasons included appreciation of the woman’s value (57.7%), witnessing childbirth ordeal (32.2%), interceding on their behalf for improved care (24%), receiving encouragement from their partner (21%), and 7.9% perceived that fathers would develop an early bond with the baby if they attended childbirth (49). In two studies, 86.6% (n=102) of 142 women from Nigeria and 86% (n=99) from Turkey whose male partners were present at labour reported that their partners’ presence was important for them because they benefitted from their emotional, psychological, physical, and financial support (67, 79).

Support from healthcare professionals

Studies conducted in Brazil and Gambia indicated that health professionals assisted fathers with information during childbirth such as measures to relieve labour pain and helping partners to support women into alternative positions (28, 29). In some instances, receiving information from healthcare practitioners during antenatal classes enabled male partners to attend childbirth (22, 24, 56, 59, 60). Men who received information, guidance, and encouragement from health professionals in private health facilities attended childbirth and felt engaged in the birth process (24, 60, 80).

Couples’ current relationship and closeness

Six qualitative studies suggested that among couples who reported having a good relationship, male partners were more likely to attend childbirth (27, 29, 57, 59, 70, 74).
Two quantitative studies complemented these findings (48, 81). For example, a survey from El Salvador reported that men who were married or in a stable relationship with their partners at the time of birth were more likely to attend than those in less stable relationships (81).

Educational attainment
Six quantitative studies (31, 40, 41, 44, 49, 51) found that a higher level of education was associated with male partners’ attendance. Four studies conducted in Nigeria, found that the higher the level of the woman’s schooling, the more likely male partners were to attend the birth (40, 41, 49, 51). In a study in India, among men who reported that they attended childbirth, 48.3% (n=472) were educated at secondary school level and 57.1% (n=389) had tertiary level education (44).

Positive attitudes towards male partners’ attendance
One qualitative study reported that some health providers thought male partners’ presence in the labour and/or delivery wards, would inspire them to use family planning (82). In addition, some midwives expressed that if male partners were allowed to attend childbirth, it would protect health providers from accusations of negligence (82).

In three quantitative studies, there was an association between positive attitude of women and male partners’ attendance. A survey from Ethiopia reported that 70.5% of women (n=277) viewed men’s involvement in childbirth as essential (48). An Iranian study reported that 88.4% (n=130) of women and 82.1% (n=119) of men had positive attitudes towards fathers’ presence during labour (55). A study from Egypt reported that 64% (n=124) of women had positive attitudes to their male partners’ stay in the delivery room (35).

Men accompanying their partners to antenatal care visits
This theme was from three quantitative studies (48-50). A study from Ethiopia reported that women who attended antenatal care sessions with their husbands were 3.8 times more likely to be accompanied at delivery than those who did not attend with their spouses (48). A study from El Salvador reported that men who attended prenatal care with their partners were likely to attend birth (50).
3. Barriers to male partners’ attendance

This theme encompasses individual, sociocultural, contextual, and health system related barriers that may limit male partners’ attendance.

Restrictions imposed by health facilities

Most public health facilities did not permit men’s presence at labour and/or birth and others put some restrictions on male partners’ attendance (19, 22, 26, 28, 29, 57, 60, 62, 72-75, 78, 83-88). For example, a study conducted in a public health facility in South Africa reported that male partners had to request permission to attend the first stage of labour in writing (60). In Syria, male partners’ presence was prohibited in the second stage of labour (72, 83). Lack of written protocols and some providers’ negative attitudes also limited male partners’ attendance (19, 26, 28, 29, 75, 83, 87, 88). Eight quantitative studies assessed the extent of this issue from the reports of men who wished to attend childbirth or of women who wanted their male partners to be present (35, 45, 49, 50, 52, 78, 89-91). Available estimates indicate that between 32.5% and 95% of male partners were restricted from accessing maternity wards.

Professionals’ negative perceptions

Three quantitative studies reported health providers’ perceptions that may limit male partners’ attendance (77, 91, 92). A study from Malawi reported that 5% of 60 midwives thought that permitting male partners’ attendance would increase litigation (77). Another survey from Nigeria indicated that 60.4% (n=136) of health providers perceived that male partners might disturb the caring team, 23.6% (n=53) feared that male partners would sue the hospital for negligence, and 3.6% (n=8) thought that male partners would collapse upon seeing blood (91).

Sociocultural barriers

Sociocultural barriers to male partners’ participation in the birth process was mentioned in 16 qualitative studies and one quantitative study (20, 22, 23, 25-28, 59, 60, 72, 74, 83, 87, 93, 94). Studies from Gambia, Syria, Botswana, Malawi, Kenya, South Africa, Nigeria, and Rwanda reported that men and women in rural and semi-urban areas did not favour male partners’ presence at labour and/or birth. This may have been influenced by cultural norms that regarded pregnancy and childbirth as a woman’s realm and patriarchal attitudes that childbirth is an intimate event which a man should not witness (20, 22, 26,
In one survey conducted in a rural Rwandan hospital, 51% of women (n=178) said that men’s presence at childbirth was not culturally appropriate (37).

**Lack of information and preparation on childbirth**

Fourteen qualitative studies contributed to this theme (19, 20, 22, 23, 56, 57, 59-61, 74, 85-87, 93). Male partners who attended childbirth reported that insufficient preparation restricted their participation during childbirth (19, 22, 23, 57, 61, 74, 85, 86, 93). Male partners who had not yet attended labour and birth voiced their concern over the kind of support they could provide to their partners (19, 22, 57, 74, 85, 86, 93).

**Men’s negative experiences**

In hospitals that allowed male partners to attend, some men reported that they were scared to attend because of the embarrassment of being seen in labour wards (19, 22, 23, 57, 67, 69, 74, 83). Another embarrassing event for some men was vaginal examinations, which some participants labelled as an invasion to the couple’s privacy (58). Some men from Tanzania stated that they could not attend labour for fear that their partners might make offensive statements that might embarrass them (69). Another negative experience was male partners’ fear of seeing their partners in pain during labour and seeing blood during birth (21-23, 29, 56, 58-60, 67, 93).

**Women’s opposition**

Some women were against male partners’ presence at childbirth because they presumed that a man does not know about labour (19, 22, 57, 70, 72-74, 83, 85, 93, 95).

Nine quantitative studies reported that women’s opposition may be a limiting factor to male partners’ attendance (30, 32, 35, 37, 41, 49, 51, 67, 69). Reasons underlying women’s opposition varied. For example, a study from Nigeria reported that 39.3% of 140 women perceived that male partners’ presence was not needed, 27.9% thought that male partners’ presence would disturb attending health professionals, and 18.6% perceived that their partners could not cope with delivery (49). In a study conducted in Turkey, 45.4% (n=25) of women who did not wish male partners’ presence reported that there was no need for them to stay with them during childbirth (67).

**Lack of privacy**

Studies conducted in Nepal, Malawi, Syria, and Nigeria reported that lack of privacy in the labour wards may limit male partners’ attendance (23, 74, 83, 96). Men who have ever accompanied their partners to deliver reported that the way labour wards are designed and the high number of parturient women pose privacy issues to male partners’ presence (23, 83, 96).
Work-related constraints

Five qualitative studies reported that unavailability due to work was a limiting factor to male partners’ attendance. Some women reported that they were supported by their mothers or mothers-in-law at the time of birth because their husbands migrated to cities for jobs (27). Some male partners reported that they did not attend childbirth because the labour occurred when they were at work (29, 87, 95). Similarly, quantitative studies from Nigeria and India echoed this finding (66, 97).

Family structure influence

Three quantitative studies from India, Nigeria, and El Salvador reported that family structure may limit male partners from attending childbirth (33, 44, 45). For instance, in India, one study reported that 85% of men reported that they did not attend because at the onset of labour, their partners were staying with their parents (44). In El Salvador, women from extended families were less likely to report on male partners’ attendance than women from nuclear families (33). In a qualitative study from Gambia, some men who had more than one wife reported that they did not attend childbirth for fear of instilling jealousy among their co-wives (94).

Discussion

This review sought to identify factors influencing whether or not male partners from LMICs attend childbirth. The findings reflect individual, community, and health system factors. Individual factors encompassed women’s, men’s and health providers’ attitudes and motivations. Community related factors derived from the structure, traditions, norms, taboos, gender roles, and other values of societies of LMICs where studies were conducted. Health system factors stemmed from facilities’ lack of policies about birth companionship and maternity ward related infrastructural constraints.

Although the current review included studies from different continents, and from low, lower middle, and upper middle income countries, there were strikingly similar themes in terms of individual, community and organisational acceptability of male partners’ attendance at labour and/or birth. This suggests that the relevant country’s income level was not a major factor. However, in terms of encouragement of male partners’ attendance, Brazil appeared to be the only country that had a national policy addressing birth companionship (98). A few studies attempted to examine the association between demographic characteristics and male partners’ attendance at childbirth among female and male participants but the evidence was weak. The findings from this review indicate that while some women from LMICs wish male partners to stay with them during labour
and/or birth, individual, organisational, attitudinal, clinical, structural, and contextual constraints limit women’s ability to make that choice. This finding is important because it complements other review work that examined only the barriers affecting male partners’ experiences of childbirth in low income countries (99, 100).

This review found that some women did not choose male partners’ attendance due to privacy related issues and cultural norms. Interestingly, the studies that found that men were embarrassed to attend childbirth were all from low income countries. However, there was limited information about predictive factors other than culture and gender norms. The effect of education, age, and income levels could be further investigated.

Some studies recruited participants solely either from rural or from urban areas. There might be differences in how people in these two settings view male partners’ attendance, though the current review could not draw conclusions on this aspect. Some studies were limited due to small unrepresentative samples from diverse populations. In addition, studies were carried out in countries with very different cultures. In some cases, only one study was found from a particular country. Therefore, caution should be taken when applying these findings to the wider context of LMICs.

Strength And Limitations

As far as we are aware, this is the first review that identified facilitators, motivators, and barriers to male partners’ attendance at childbirth in LMICs. Our systematic review synthesised both published peer-reviewed articles and unpublished resources such dissertations and theses. However, the review has some limitations. First, data extraction and quality appraisal was conducted by one reviewer. Secondly, there may be important studies that were not included because of the language limiter set. It was noted that some studies suffer from poor reporting of the methods. Most of the qualitative studies included in Phase 1 and all experimental studies in Phase 2 were more robust in their reporting than surveys.

Practice Implications

Incorporating male partners as integral participants in the birth process may be one way to promote family-centred services (108-110) and offer holistic childbirth care to women (4). Building on male partners’ motivation and some women’s wish to be supported by
their male partners, health facilities could develop birth companion policies incorporating male partners’ attendance at childbirth. If feasible facilities could consider removing any restrictions that may be imposed on couples who may wish to share the birth of their baby together. Irrespective of some contextual issues that may impede male partners’ access to the labour and/delivery wards, healthcare professionals should inform fathers who present at the health facilities why they are not allowed to enter the wards and further update them about childbirth progress. If the woman wishes the male partner to attend, health facilities could offer some preparatory information about what to expect and the roles he might perform during childbirth.

Conclusions

This review sheds light on the motivators, facilitators, and barriers of male partners’ presence at labour and/or birth in the context of LMICs. The review identifies sociocultural norms, health systems, structural, and individual factors that may limit the acceptance of men as companions during childbirth. Further work is needed to identify other factors that influence male partners’ presence at childbirth in in LMICs. There remain gaps in information about the feasibility of this practice from the perspectives of women, male partners, facility managers, and healthcare providers. Further research is needed to understand individual, sociocultural and health system contexts that limit women’s ability to choose their male partners as birth companions in LMICs.

Declarations

Ethics approval and consent to participate: Ethical approval was not required for this review
Consent for publication: Not applicable
Availability of data and materials: Details about the critical appraisal process and any further information about this review can be solicited through emailing the main author at :
TCUhawenimana@dundee.ac.uk
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Authors' contributions: Thierry Claudien Uhawenimana designed and executed the study, created the tables, and drafted the paper. Heather Whitford and Alison McFadden supervised Thierry in the design and writing of this study. They also participated in the screening of papers during the study selection process and contributed to the drafting and editing of this paper. Andrew Symon provided advice concerning the planning and conduct of the review, and contributed to the writing and editing of this study.
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Tables

Table 1: Characteristics of the included studies of Phase 1

| Author(s) | Country      | Study design and aim                                                                                                                                                                                                  | Setting                                                                 | Sampling               |
|-----------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------|
| **STUDIES FROM LOW INCOME COUNTRIES** |              |                                                                                                                                                                                                                       |                          |                        |
| Kaye et al. (2014) | Uganda     | Phenomenological approach To gain a deeper understanding of male involvement during pregnancy and childbirth by exploring men’s perceptions, experiences, and practices | The study was conducted in Mulago Referral Hospital,                  | Purposive              |
| Kululanga et al. (2012) | Malawi     | To investigate core causes of barriers to especially husbands’ involvement in maternal healthcare in rural Malawi setting Descriptive non-experimental design | Two health centres and their catchment areas in Mwanza District         | Purposive              |
| Kululanga et al. (2012) | Malawi     | Exploratory descriptive approach To explore the views and experiences of men who had attended the birth of their children | Blantyre Adventist Hospital and Mlambe Mission Hospitals; two private health facilities | Purposive and snow sampling |
| Secka (2010) | The Gambia  | No specific design was reported To explore socio-cultural factors affecting men’s involvement during pregnancy and child birth.                                                                                           | Banjul, Kanifing Municipality and the western division                  | Purposive              |
| Lowe (2017) | The Gambia  | Exploratory qualitative design To explore some of the underlying social and cultural factors affecting husbands’ involvement in maternal health issues pertaining to pregnancy and delivery in rural Gambia. | Five areas of rural Gambia (Makka Farafenni, Kerr Ardo, Kerr Gumbo, Mballow Omar and Bakindik) in the North Bank Region. | Purposive              |
| Mullany (2006) | Nepal      | No specific design/approach reported To explore men’s, women’s and providers’ attitudes towards the promotion of male involvement in maternal health; particularly during pregnancy and childbirth. | Prasuti Griha Maternity Hospital (PGMH).                               | Purposive              |
| Study                      | Country | Methodology/Design | Objective                                                                                                                                  | Sample Size/Settings                                                                 |
|----------------------------|---------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Sapkota et al. (2012)      | Nepal   | No specific design reported | To explore the immediate husbands’ experiences of supporting their wives during childbirth                                                  | Maternity and Neonatal Service Centre (MNSC), Paropakar Maternity and Women’s Hospital (PMWH) in Nepal |
| Lewis et al. (2015)        | Nepal   | In-depth interviews | To explore the nature of the husbands’ roles and involvement, the factors which influence or discourage their involvement, and their perceptions of the mother’s and the child’s needs. | Four villages in the Gorkha district                                                  |
| Mukamurigo et al. (2017)   | Rwanda  | Phenomenological approach | To explore the meaning of a poor childbirth experience as expressed by women who had given birth in Rwanda.                                      | Two health facilities in the Northern Province and Kigali city                         |
| Ndirima et al. (2018)      | Rwanda  | In-depth interviews | To understand the non-clinical aspects of care that rural women in Rwanda consider important during childbirth.                                | Mibilizi District Hospital, Southern Province                                          |
| Páfs et al. (2016)         | Rwanda  | Naturalistic inquiry approach | To explore recent fathers’ perspectives about their roles during childbearing and maternal care-seeking within the context of Rwanda’s political agenda for gender equality. | One health facility within Kigali City                                                |
| Bohren et al. (2017) F     | Uganda & Nigeria | Qualitative study guided by the World Health Organisation quality of care framework | To explore what “quality of care” means to childbearing women in Nigeria and Uganda, as a means of ensuring that women’s voices and opinions are prioritized when developing interventions to improve quality in maternity care provision. | Eight health facilities and facility catchment areas in Abuja and Akure, Nigeria, and Kampala, Uganda |
| Lwanga et al. (2017)       | Uganda  | Explorative qualitative design | To assess companionship during delivery; men’s perception and experiences during pregnancy and delivery.                                      | St Francis Hospital Nsambya, a private not for profit facility                         |
| Maluka and Peneza (2018)   | Tanzania| Cross-sectional qualitative design | To explore local perceptions about male involvement in pregnancy and childbirth in Tanzania.                                                 | Six health facilities in Masasi District Council in Mtwara Region                     |
| STUDIES FROM LOWER MIDDLE INCOME COUNTRIES | STUDIES FROM UPPER MIDDLE INCOME COUNTRIES |
|--------------------------------------------|--------------------------------------------|
| **Kwambai et al. (2013)**                   | **Kgokgothwane and**                       |
| Kenya                                      | Botswana                                  |
| No specified design                        | Explorative approach                      |
| To identify factors that facilitate or    | One private clinic with a                 |
| constrain men’s involvement in ANC and     | purposive                                 |
| delivery care in Western Kenya             |                                           |
| Asembo, a rural district in Nyanza Province | Purposive and group                       |
| Brong Ahafo Region                        | Purposive                                 |
| **Dumbaugh et al. (2014)**                 | **Abushaikha and Massah (2012)**           |
| Ghana                                      | Syria                                     |
| No specific design was reported            | Descriptive phenomenological approach     |
| To fill the gap in the existing literature | To explore the roles of a father during    |
| and inform future interventions by increasing | childbirth as perceived by Arab Syrian     |
| knowledge and understanding of the         | parents                                    |
| potential of male involvement in new-born  |                                           |
| care in a rural African setting.           |                                           |
| Brong Ahafo Region                        | Purposive                                 |
| **Ganle et al. (2016)**                    | **Abushaikha and Massah (2013)**           |
| Ghana                                      | Syria                                     |
| No specific design reported                | Descriptive phenomenological approach     |
| To examine women's perspectives on men's   | To explore Syrian parents’ perceptions    |
| involvement in maternal and child         | of barriers to paternal presence and      |
| healthcare in Ghana, focusing on the      | contribution during childbirth.            |
| Upper West Region as a case example.      |                                           |
| Seven communities across two districts -   |                                           |
| Wa West and Lambussie-Karni districts -    |                                           |
| in the Upper West Region (UWR)             |                                           |
| **Emelonye et al. (2016)**                 |                                           |
| Nigeria                                    |                                           |
| Qualitative cross-sectional design         | Four general hospitals in Abuja           |
| To investigate the barriers inhibiting the |                                           |
| use of spousal presence for childbirth     |                                           |
| pain relief in Nigeria.                    |                                           |
| **Abushaikha and Massah (2012)**           |                                           |
| Syria                                      |                                           |
| Descriptive phenomenological approach      | One major governmental obstetrical        |
| To explore the roles of a father during    | hospital in the city of Tartous            |
| childbirth as perceived by Arab Syrian     |                                           |
| parents                                    |                                           |
| One major governmental obstetrical        | Purposive                                 |
| hospital in the city of Tartous            |                                           |
| **Carter (2002)**                          |                                           |
| Guatemala                                  |                                           |
| No specific design reported                | Five communities in two departments of    |
| To help clarify husbands’ roles in         | Guatemala: Chimaltenango and Quetzaltenango. |
| maternal health and men’s and women’s      |                                           |
| perspectives on these roles.               |                                           |
| **Arunmozhi et al. (2015)**                |                                           |
| India                                      |                                           |
| No specific design reported                | Pulianthope Health Post from North,       |
| To identify some of the factors            | Vadapalani Health Post from the            |
| contributing to poor male                  | south and Shenoy Nagar Health Post from    |
| participation in maternal and neonatal      | the central division, Urban Tamil Nadu,    |
| care in Urban Tamil Nadu, India.            |                                           |
| **Kaveri and Aik (2016)**                  |                                           |
| India                                      |                                           |
| In-depth interviews                        | Two hospitals in Kolkata (one private and  |
| To explore the perceptions of pregnant     | public facility),                           |
| woman, husband and service providers about |                                           |
| the presence of husband as a birth         |                                           |
| companion during childbirth.               |                                           |
| Two hospitals in Kolkata (one private and  |                                           |
| public facility),                           |                                           |
| **Kgokgothwane and**                       |                                           |
| Botswana                                   |                                           |
| Explorative approach                      |                                           |
| One private clinic with a                  |                                           |
| Purposive                                 |                                           |
| Author(s) (Year) | Country | Study Design | Methodology | Setting | Sample Description |
|-----------------|---------|--------------|-------------|---------|--------------------|
| Nolte (2002)    |        | To explore and describe the views of Botswana adults of childbearing age towards support during labour and childbirth |          | maternity wing in the urban area in Botswana and a Primary Hospital in a rural area | to recruit participants given bir previous Convenien used to recruit female participants who have given birth in the previous two years. Convenience sample used to recruit any male participants. |
| Moreira Silva et al. (2015) | Brazil | Descriptive explorative design | To analyse the opinion of men who accompanied the partner during labour/birth and witnessed the birth of his son. | Municipal Maternity of Juazeiro-BA | |
| de Souza Francisco et al. (2015) | Brazil | Descriptive exploratory design | To explore the expectations and meanings that individual fathers ascribe to their presence at birth. | One maternity unit of a public hospital in Santa Catarina | |
| de Melo and de Brito (2013) | Brazil | Descriptive exploratory study | To analyse the perceptions of the fathers about their presence in the labour room during their child’s birth. | Not reported | |
| Alves et al. (2013) | Brazil | Descriptive exploratory design | To understand the inclusion of the companion support in the obstetric ward and to identify the actions developed to support the pregnant mother during labour, delivery, and immediate postpartum. | Obstetric Care Unit of the University Hospital from the Federal University of Santa Catarina | The number of participants was determined by saturation. |
| Souza and Gualda (2016) | Brazil | Thematic oral history approach | To identify the experiences of women and their coaches during the childbirth process in a public maternity hospital from Parana State, Brazil. | Maternity department of a university public hospital linked to the nursing and medical programs at the Universidade Federal do Paraná (UFPR), in the city of Curitiba | |
| Mullick et al. (2005) | South Africa | Qualitative component of the baseline intervention study on men’s involvement in maternity health | To obtain input which would help in the design of the intervention of men in maternity care. | Eight urban and four rural clinics that fell in the administrative area of the Prince Mshiyeni Memorial Hospital (PMMH) | |
| Nesane et al. (2016) | South Africa | To determine male partners’ views on their involvement in maternal healthcare services. Exploratory descriptive qualitative study | | Kutama, Madombidzha and Vleifontein clinics of Makhado Municipality in Limpopo Province | Purposive sampling |
| Sengane et al. (2012) | South Africa | Exploratory descriptive design | To explore and describe the expectations concerning care provided by midwives to mothers | One third-level academic public hospital labour ward situated in a semi-rural area of the Gauteng | Purposive sampling |
| Study | Country | Design | Setting | Purposive Sampling |
|-------|---------|--------|---------|-------------------|
| Sengane (2009) | South Africa | Descriptive phenomenological design | Two health facilities in the Gauteng province, including one private and one public hospitals | |

Table 2. Characteristics of the included studies of Phase 2

| Study | Setting | Purposive Sampling |
|-------|---------|-------------------|
| To study the acceptability and experience of supportive companionship during childbirth by mothers, health professionals and supportive companions. | Blantyre City, in the Southern region; Respondents recruited from randomly selected one tertiary hospital and one health centre in Blantyre Southern Region | 309 first time mothers whose husband or a female friend was available to stay in the hospital throughout the birth process. |
| | Paropakar Maternity and Women’s Hospital (PMWH), a public referral hospital, Kathmandu, | 350 pregnant women who presented as referrals at the maternity ward. |
| | Ruhengeri Hospital in Musanze District | 506 consenting mothers. |
| Location | Sample Size | Objective |
|----------|-------------|-----------|
| Ungogo town | 52 women who attended antenatal and postnatal check-ups | To document the attitude and preferences of pregnant women about social/emotional support while in labour and also to seek factors that may influence such attitudes. |
| University College Hospital, Ibadan | 564 health providers |  |
| Three public hospitals | 462 pregnant | To identify the factors associated with husbands' involvement in maternal health in Myanmar. |
| Atelewo community in Osogbo, the capital of Osun State | 362 adult men |  |
| 4 public hospitals in Ogun state |  |  |
| AshwiKhurd and Talegaon primary health centres in Ahmadnagar |  |  |
| 426 men who had at least one child within two years at the time of interview |  |  |
| Study | Objective | Methodology | Sample Size |
|-------|-----------|-------------|-------------|
| Study 1 | To assess sociodemographic, knowledge and attitude correlates of male involvement in maternal and neonatal health. | Ten residential wards and one industrial ward in South Dagon Township. | 203 married men one year of age |
| Study 2 | To assess and determine the feelings and experiences of first-time fathers during labour and delivery of their partner/wife. | One government hospital in Samar. | 51 first-time fathers |
| Study 3 | To provide a baseline perspective on the prevalence of Salvadoran men’s attendance at prenatal care, delivery, and postpartum well-baby care and on sociodemographic factors associated with their attendance, with the goal of informing efforts to help men play more positive roles in maternal-child health. | El Salvador National Male Health Survey carried out in 2003 by the Salvadoran Demographic Association. | 418 men aged 59 who reported having fathered at least one live-born child in the five years preceding the survey; 1786 women who reported that their male partners attended their latest birth; |
| Study 4 | To explore pregnant women’s attitudes towards the inclusion of a lay companion as a source of social support during labour and delivery in rural central Ghana. | Apam Catholic Private Hospital. | 50 pregnant women present at antenatal care |

**STUDIES FROM UPPER MIDDLE INCOME COUNTRIES**

| Study | Objective | Methodology | Sample Size |
|-------|-----------|-------------|-------------|
| Study 5 | | Large Maternal and | 210 expectant |
| To examine Chinese fathers’ feelings related to their partners’ labour and birth as well as views on their presence during the labour and birth. | Postnatal ward of a tertiary hospital in Fujian Province | 403 fathers w/ partners who gave birth in the study hospital |
|---|---|---|
| To determine the effects of fathers’ attendance to labour and delivery on the experience of childbirth in a university hospital in Istanbul, Turkey. | Maternity unit of Istanbul University Istanbul Faculty of Medicine Gynaecology and Obstetrics Department | 50 primigravid women |
| To determine Turkish women’s and their spouses’ views on spousal support during delivery | Elazığ Training and Research Hospital | 170 couples w/ postpartum unit |
Figure 1: PRISMA Summary of the screening process for Phase 1

Records identified (n = 4,608)

Screened after duplicates were removed (n = 3,070)

2,950 titles excluded after title and abstract screening because they did not meet the inclusion criteria

Full texts assessed for eligibility (n = 120)

Studies excluded (n = 87). 56 had no substantial data about fathers' attendance, 16 were qualitative studies conducted in high income countries, 10 articles were opinion-based papers and editorials, 5 papers were quantitative studies conducted in LMICs.

Qualitative studies (n = 33)
Total number of records identified through database searching MEDLINE, CINAHL, SCOPUS, ASSIA, web of science, PsychInfo, ProQuest, and google scholar (n = 6,513) citations

Screened after duplicates were removed (n =5,139)

5,035 records were excluded after title screening and abstracts where available because they did not meet the inclusion criteria

Full texts that were further assessed for eligibility (n=104)

Studies excluded (n= 69); 17 qualitative studies, 7 from high income settings, 4 full texts were not accessible, 12 focused on fathers’ influence on delivery care utilisation, 10 focused on birth preparedness and complication readiness, 4 opinion based papers, 3 focused on fatherhood, 6 on post-birth stress disorders among fathers, 4 on ANC, 2 reviews on fathers’ presence during childbirth

Quantitative studies (n =30)
Mixed methods studies (n=5)

Figure 2

PRISMA Summary of the screening outcomes for Phase 2