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Challenging gender inequity through male involvement in maternal and newborn health: critical assessment of an emerging evidence base

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Men's involvement in the health of women and children is considered an important avenue for addressing gender influences on maternal and newborn health. The impact of male involvement around the time of childbirth on maternal and newborn health outcomes was examined as one part of a systematic review of maternal health intervention studies published between 2000 and 2012. Of 33,888 articles screened, 13 eligible studies relating to male involvement were identified. The interventions documented in these studies comprise an emerging evidence base for male involvement in maternal and newborn health. We conducted a secondary qualitative analysis of the 13 studies, reviewing content that had been systematically extracted. A critical assessment of this extracted content finds important gaps in the evidence base, which are likely to limit how 'male involvement' is understood and implemented in maternal and newborn health policy, programmes and research. Collectively, the studies point to the need for an evidence base that includes studies that clearly articulate and document the gender-transformative potential of involving men. This broader evidence base could support the use of male involvement as a strategy to improve both health and gender equity outcomes.

Keywords: male involvement; male engagement; maternal health; newborn health

Background

Gender inequity impacts negatively on the health of women and children, including during pregnancy and the perinatal period (Caro 2009; Gill, Pande, and Malhotra 2007; UNFPA and Promundo 2010). There are multiple pathways linking gender inequity to poor health outcomes. A review of gender influences on child survival, for example, has documented the negative impacts of women's limited capacity to influence household decision making, women's lack of access to health-promoting resources, women's heavy work load, restrictive gender norms and gender discrimination (UNICEF and Liverpool School of Tropical Medicine 2011). Addressing gender inequity is thus an essential part of strategies to improve maternal and newborn health (Greene et al. 2004).

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Historically, strategies to address the health impacts of gender inequity were focused on empowering women. This emphasis on increasing women's autonomy has resulted in many documented gains for women. Yet adopting an exclusive focus on women to address gender inequity is increasingly recognised as limited (Eves 2005; Mumtaz and Salway 2009; Sternberg and Hubley 2004). While a separate focus on women and girls is important, an exclusive focus on women, rather than on gender as a social construct that affects both men and women, cannot fully address gender inequity (Barker, Ricardo, and Nascimento 2007; Barker et al. 2010). Therefore, working with men as well as women has been recognised as key to successfully challenging and transforming gender roles and norms (Barker 2014; Barker et al. 2010; Eves 2005).

Involving men in the health of women and newborns around the time of childbirth – including but not limited to support for women during and after pregnancy, seeking skilled care for birth and complications, newborn care, nutrition and breastfeeding, family planning after childbirth and maternal mental health – has the potential to directly address gender influences on maternal and newborn health outcomes.¹ Drawing on programme experience and theoretical work completed by Barker and colleagues (Barker 2014; Barker, Ricardo, and Nascimento 2007; Barker et al. 2010), this potential can be understood as threefold.

First, working with men as well as women makes it possible for a programme to engage with how men and women interact within relationships and thereby directly *target gender relations*, which are continually reconstructed through the ways that women and men relate to each other (Barker, Ricardo, and Nascimento 2007; Barker et al. 2010).

Second, involving men in programming that is intended to address gender inequity acknowledges men's capacity to act as agents of change and can support men to *challenge pre-existing roles and norms* surrounding masculinity, intimate partner relationships and parenting (Barker 2014).

Third, given the dominance of men within most social structures, such as political and religious institutions, involving men is a means for a programme to engage with maledominated social structures and potentially leverage that engagement to support men to ally with women in order to *challenge patriarchal structures* that reproduce gender inequities (Barker, Ricardo, and Nascimento 2007).

Gender-transformative interventions 'actively examine and promote the transformation of harmful gender norms and seek to reduce inequalities between men and women to achieve desired outcomes' (Kraft et al. 2014, 125). Because male involvement provides opportunities to support improved maternal and newborn health outcomes by changing gender relations, gender roles and norms, and the structures that reproduce them, it can be defined as potentially gender-transformative. In this paper, we have used these three opportunities as a framework to guide our assessment of the emerging evidence base for male involvement against the potential of male involvement interventions to address gender influences on maternal and newborn health outcomes.

The principle of involving men in maternal and newborn health (as well as sexual and reproductive health) as part of a wider strategy to address gender influences on health outcomes was endorsed two decades ago at the 1994 International Conference for Population and Development (Sternberg and Hubley 2004). Men were recognised to be not only clients with a right to healthcare and partners with a responsibility to support women's and children's health, but also agents of positive change with the ability to transform underlying gendered constraints on health (Greene et al. 2004). The recent upswell of interest in male involvement in maternal and newborn health can be traced to the 1994 Conference, with its explicit emphasis on gender.

Despite this, the potential for male involvement to address gender inequity seems to rarely be made explicit in the maternal and newborn health sector. Many health policymakers, researchers and programme planners have sought to encourage the positive involvement of men around the time of childbirth as a strategy to improve maternal and newborn health, without articulating whether or how men's involvement is expected to change gender influences on health outcomes. Indeed, a recurring critique has emerged that male involvement interventions commonly adopt a reductionist and instrumentalist approach that is focused on altering men's behaviours, without addressing the underlying gender influences that drive these behaviours. Such an approach can be the most feasible choice under certain programmatic conditions, including short-term interventions implemented in settings where gender-transformative approaches are unlikely to be readily accepted (Adeleye, Aldoory, and Parakoyi 2011; UNFPA and Promundo 2010), but it can also undermine male involvement as a strategy to effect gender-transformative change (Barker and Das 2004).

This paper has been developed following a recent systematic review of the evidence for male involvement in maternal and newborn health. The review sought to consolidate the evidence base for male involvement in maternal and newborn health. In an era of evidence-based policy and practice, this emerging evidence base will likely be used to inform global policy guidelines, to influence national and subnational policymaking and programming and to guide future research. Approaches that are not supported by the emerging evidence base are less likely to be promoted or adopted. Consequently, the studies that constitute the evidence base will influence how male involvement is understood and implemented in the maternal and newborn health sector.

This paper assesses the emerging evidence base against the potential of male involvement strategies to address gender influences on maternal and newborn health outcomes.

Methods

We conducted a secondary qualitative analysis of the evidence base for World Health Organization recommendations relating to male involvement interventions for maternal and newborn health (World Health Organization 2015).

The impact of male involvement interventions around the time of childbirth on maternal and newborn health outcomes was examined as one part of a systematic review of maternal health intervention studies commissioned by the World Health Organization. The review was conducted in two stages. The first stage identified, screened and mapped all maternal health intervention studies conducted in low- and middle-income countries between 2000 and 2012. A broad and inclusive search strategy, described further in the online protocol (MASCOT Study Group 2014), encompassed both published and unpublished literature, drawn from academic and other databases and expert recommendation. After duplicates were removed, 33,888 articles had been identified. All of these articles were screened on title and abstract, of which 4172 were screened on full text and 2340 were included in the mapping (MASCOT/WOTRO 2013). The second stage of the review sought to answer a series of specific review questions, one of which related to male involvement interventions for improved maternal and newborn health:

What interventions employed with women, men, communities and community leaders to increase male involvement have been effective in increasing care-seeking behaviour during pregnancy, for child birth and after birth for the woman and newborn and in improving key maternal and newborn health outcomes?

In this question, male involvement was defined broadly as strategies to increase the involvement of men. A total of 92 articles from the first stage of the review were eligible

for screening. An additional 68 articles were sourced from existing systematic reviews and the reference lists of included articles. After exclusion of the duplicates, 119 articles were screened on full text, and pre-defined inclusion and exclusion criteria were applied. Studies were only included where they reported on an intervention testing the impact of male involvement around the time of childbirth on pre-specified maternal and newborn health outcomes. Studies were required to report on the impact of the intervention on one or more of the following outcomes: birth with a skilled attendant or in a facility, use of antenatal or postnatal care for the mother and newborn, uptake of essential maternal and child health interventions, maternal nutrition, newborn nutrition, birth and complication preparedness, maternal mortality, maternal morbidity, neonatal mortality and perinatal mortality. Additionally, male involvement intervention studies were excluded where men's involvement was sought only for the promotion of family planning or the prevention or treatment of sexually transmitted infections, including HIV.

Thirteen studies were identified as eligible following a rigorous systematic process intended to collate the available evidence for the impact of male involvement on maternal and newborn health, and have informed World Health Organization recommendations on this topic (World Health Organization 2015). The 13 included studies therefore constitute an important evidence base for male involvement interventions in maternal and newborn health programmes.

We conducted a content analysis of the material extracted as part of the systematic review. This material included a description of the intervention, details about the people targeted by the intervention and people included in the study, and outcome measures relevant to maternal and newborn health or male involvement. The authors applied a critical gender lens to assess how the studies position men, and men's involvement in maternal and newborn health, against the framework describing the potential of male involvement strategies detailed above: to engage with relations between men and women; to support men to transform gender norms and roles; and to challenge social structures dominated by men that reproduce gender inequities.

Findings

The systematic review captured a small and diverse group of studies. Three of the included studies describe facility-based interventions in South Africa, India and Nepal that delivered education sessions to men, usually by reaching men together with their pregnant female partners through existing antenatal care services (Kunene et al. 2004; Mullany, Becker, and Hindin 2007; Varkey et al. 2004). Education sessions covered topics including care and nutrition during pregnancy, birth preparedness and complications readiness, and family planning. One study describes a workplace-based intervention in Turkey designed to deliver education sessions to groups of men but not women, with workplace physicians delivering information on topics including communication techniques, infant healthcare and fatherhood (Sahip and Turan 2007).

Two studies describe interventions in Nepal and Indonesia that used social marketing or mass media campaigns to reach men and other key family and community members with safe motherhood and birth preparedness and complications readiness messages (Sood et al. 2004a, 2004b). Information was disseminated broadly but included messages targeted specifically to men.

The remaining seven studies – from India, Bangladesh, Nepal, Pakistan, Tanzania and Eritrea – describe community-based education and community outreach strategies to increase male involvement in pregnancy care, seeking skilled care for birth and

complications, postnatal care and reproductive health, as well as to increase men's awareness of maternal health issues more broadly (Fullerton, Killian, and Gass 2005; Hossain and Ross 2006; Midhet and Becker 2010; Mushi, Mpembeni, and Jahn 2010; Purdin, Khan, and Saucier 2009; Sinha 2008; Turan, Tesfagiorghis, and Polan 2011). Most of these interventions were focused primarily on male partners of pregnant women, and some additionally described a focus on male community members or community leaders.

The majority of studies were designed to increase the involvement of male partners of pregnant women. However, studies also sought to reach men who were expectant fathers (reached separately from their female partners), community health workers, religious or community leaders and general community members. Interventions variously aimed to reach men as individuals, within family or household structures or through social networks or leadership groups. The involvement that interventions aimed to elicit from men was not always clearly defined; across the studies, involvement included providing care and support to female partners during pregnancy, supporting uptake of health interventions and being present during antenatal care, postnatal care and childbirth, among other measures.

There is clearly a range of different strategies to increase the involvement of men in maternal and newborn health. Additionally, the studies were premised on a range of different explicit or implicit understandings of why male involvement in maternal and newborn health is desirable or appropriate. Most studies viewed men as the gatekeepers to women's health, as male partners or fathers who control the resources or make the decisions that allow women and newborns to access health care. For example:

Husbands are often the decision-makers when it comes to seeking medical care (Midhet and Becker 2010, n.p.)^2 $\,$

[W]omen depend heavily on men for access to healthcare (Varkey et al. 2004, 1)

[I]f women do not have support within the family, they often cannot use the knowledge and skills that they gain (Sahip and Turan 2007, 845)

[W]omen's ability to seek health care or implement lessons learned from health education interventions is often determined by the household head, usually the husband (Mullany, Becker, and Hindin 2007, 166)

Engaging with men was thus seen in most studies as a way of facilitating decision-making at the household level to support health-promoting behaviours and care seeking by men's female partners. Beyond a focus on men as decision-makers, however, studies provided a range of different justifications for male involvement.

Two studies rationalised the inclusion of men by describing their 'shared responsibility' for the health and wellbeing of their female partners (Sood et al. 2004a, 2004b). Two more studies conceptualised men as part of a larger community, to which they could make a positive contribution, rather than as an individual contributing to their immediate family (Hossain and Ross 2006; Sinha 2008).

Two studies described benefits to men's own health as a justification for increased male involvement in their family's health and engagement with the health system:

[M]en have relatively low use of reproductive health services and few contacts with reproductive health service providers (Sahip and Turan 2007, 844)

In addressing men's involvement \dots it is important to consider how to frame their contact with the health system so that it will encourage their future and continued involvement (Kunene et al. 2004, 2)

Only one study noted that male involvement interventions are warranted because men have a preference for greater involvement in maternal and newborn health:

[M]en themselves \dots would prefer that they play a more active role during pregnancy, delivery and infant care. (Kunene et al. 2004, 2)

The absence of a clear consensus among the 13 studies on what a male involvement strategy is, and why a strategy to increase male involvement is being adopted, is likely to, in part, reflect differences in the social and cultural contexts in which the studies were implemented. Yet it is also illustrative of an 'ambiguity of intention' in male involvement interventions that has been noted elsewhere (Montgomery, van der Straten, and Torjesen 2011). When assessed against the three-point framework detailed above, the 13 studies do not describe interventions in a way that clearly documents the gender-transformative potential of male involvement.

First, as described above, interventions focused on male involvement have the potential to work with men and women to directly address gender relations. The included studies were focused on men in relationships; most interventions invited male participants to be involved as part of a couple, household or family unit, and authors in all studies tended to describe men in terms of their relationships with women. Yet these relationships, while acknowledged, were not the focus of the studies. For example, despite the fact that most studies justified male involvement as a strategy to address household decisionmaking, only one study engaged directly with the dynamic of shared decision-making by measuring joint decision-making within couples (Varkey et al. 2004). Several interventions included components such as couple counselling that could plausibly influence how men and women relate to each other, yet, with the exception of Varkey and colleagues (2004), findings relating to men's relationships were not reported in the studies. Anticipated outcomes for the interventions were generally defined as specific instances of support provided by men to women, such as saving money for emergency transportation in case of birth complications, rather than more substantive changes in how men and women relate to each other, such as changed patterns of communication and decision-making about what support a woman may want or need from her male partner during pregnancy and how he can best provide this. The fact that changes in how men and women relate to each other were generally beyond the scope of the 13 studies is an important gap in the emerging evidence base. Where men's relationships with women are not reported or considered an outcome of interest, this leaves little opportunity for studies to document any changes in gender relations following male involvement interventions.

The second area of potential for male involvement interventions identified above is the opportunity provided by these interventions to support men's ability to challenge gender roles and norms alongside women, premised on the recognition of men's capacity to act as agents of change. Yet men's capacity to internalise and act on a desire for gendertransformative change was not well recognised in the 13 studies. The studies describe men's external behaviours rather than their internalised identities, attitudes and subjective experiences. Many of the studies did not survey or interview men during data collection, although the interventions clearly targeted men as participants. No study included outcomes designed to directly capture attitudes held by men. This was the case despite the fact that several studies acknowledged the importance of men's attitudes on key study outcomes. Additionally, numerous studies collected and reported sociodemographic information about female participants as a means to unpack the experiences of different groups of women, but this level of detail on male participants was not presented in any study. There was no qualitative reporting of men's experiences with the male involvement programmes described, whereas in several studies limited qualitative information was reported for women. Few studies explored men's attitudes related to becoming involved in

maternal and newborn health within their families. As noted above, only two studies made reference to men's own preferences and identities as partners or fathers. Overall, men were generally defined in terms of their utility for women and children, with men's own subjective wishes and needs usually going unrecognised. The 13 studies did not capture changes in men's internal identities, attitudes or motivations that may be associated with male involvement interventions. This means that men's capacity to actively pursue gender-transformative change is not well documented within the emerging evidence base.

The third area in which male involvement interventions are considered to have gendertransformative potential, as detailed above, is through supporting men's ability to ally with women and challenge patriarchal social structures that reproduce gender inequity. Several studies demonstrated an awareness of the role of existing social structures, such as religious groups and leadership committees, in reproducing gender roles and norms. While in some studies this awareness was confined to the background description of the study setting, others attempted to engage with these structures as part of the intervention (Hossain and Ross 2006; Purdin, Khan, and Saucier 2009; Sood et al. 2004a, 2004b). By working with religious leaders, male elders or other influential figures, these interventions aimed to shift gender roles and norms to become more supportive of anticipated changes in behaviour among male partners targeted by the intervention. It was notable, however, that the studies did not aim to support men to challenge these structures, for example by advocating an increased role for women. Rather, with two exceptions, interventions that engaged with social structures worked within or through existing structures, and no study reported that the intervention had included women as well as men in work done within these existing structures. The two exceptions to this were studies reporting that new social structures had been developed through the interventions maternal health volunteer discussion groups in Eritrea (Turan, Tesfagiorghis, and Polan 2011) and community support systems for obstetric emergencies in Bangladesh (Hossain and Ross 2006) - but it was unclear whether these new structures were intended to provide space for gender equitable discussion and decision-making. Based on what was documented, studies that engaged with social structures did not aim to encourage men to ally with women to challenge the patriarchal nature of these structures. This indicates that the emerging evidence base is comprised of studies that did not capture the potential of male involvement strategies to engage with and transform social structures.

In summary, the current evidence base does not describe interventions that directly address gender relations between men and women; that support men to change their values, attitudes and identities, rather than simply their behaviours; or that support men to ally with women to challenge patriarchal social structures.

Discussion

Generally, although there was some variation between studies, the focus of the studies that constitute the emerging evidence base was to employ male involvement as a strategy to prevent men from taking actions that can harm women and newborns and support men to take actions that can improve maternal and newborn health. This strategic approach, which focuses almost exclusively on men's actions and decisions, rather than their relationships or subjective experiences, has been critiqued in the literature on male involvement as reductionist and instrumentalist (Barker and Das 2004). Two major critiques of this conceptual approach are relevant here. First, an approach that focuses primarily on men's actions rather than their subjective experiences is unlikely to create opportunities to engage with men's agency and their capacity to reconstruct gender relations (Barker,

Ricardo, and Nascimento 2007). Second, problematising individual men's actions without recognising and challenging their broader context does not offer a way to address the patriarchal social structures through which individual men's specific actions come to occur. An instrumentalist approach to male involvement neither constructs men as potential agents of positive change, nor supports transformative social change to challenge gender inequity (Barker and Das 2004; Greene et al. 2004).

It is imperative to recognise, however, that an instrumentalist approach to male involvement can be the most feasible strategy to increase men's engagement in maternal and newborn health in certain programmatic contexts. An exclusive focus on changing men's behaviours may be particularly suited to short-term interventions implemented in settings where gender norms and roles are strongly enforced and transformative approaches are unlikely to be readily accepted by men, women and the broader community (Adeleye, Aldoory, and Parakoyi 2011; UNFPA and Promundo 2010). Additionally, in some cases pregnancy may not be a suitable time to encourage gender-transformative change, as both men and women can be vulnerable during this time and may not be open to change. In such scenarios, approaches that incorporate an understanding of the gender order in their particular setting, without seeking to transform it, may be the only viable short-term option for redressing some of the harms resulting from men's gendered behaviours (Caro 2009). Such approaches have been termed 'gender-accommodating' rather than gender-transformative (Kraft et al. 2014, 125).

Given that gender-accommodating approaches can be appropriate in certain contexts, the absence of a gender-transformative approach to male involvement should not be considered a gap in any individual study. In aggregate, however, the emerging evidence base is limited by the lack of evidence to support male involvement as a strategy for gender-transformative change. This shows a need for a body of work that approaches and documents male involvement differently, in order to broaden the current evidence base with studies illustrating the potential of male involvement to effect gender-transformative change.

The development of such a body of work is a large and complex project. Two key areas stand out for urgent attention. First, it is important to be able to describe models of male involvement in a way that clearly differentiates between instrumentalist and gender-transformative approaches. This requires a clear conceptual approach. Recognising that male involvement interventions will necessarily address gender relations, it is imperative that they be well theorised with respect to gender and gender-transformative change at interpersonal and social levels.

Maternal and newborn health could benefit from ample research and conceptual work in other areas of health that describes the impacts of male involvement in lower- and middle-income countries. Male involvement has been explored more extensively in the gender-based violence, sexual and reproductive health and HIV/AIDS literature. For example, Lundgren and colleagues (2005) and Shattuck and colleagues (2011) provide good examples of gender-transformative family planning interventions in Malawi and El Salvador, respectively. Both use clear theoretical models for proposing how and why the interventions would change attitudes as well as behaviours.

There is also considerable research on male involvement in high-income countries, particularly in relation to fatherhood, and some of the findings and lessons from these experiences are likely to be applicable to other contexts. For example, Alio and colleagues (2013) proposed a framework for male involvement consisting of four components (accessibility, engagement, responsibility and couple's relationship), which could be tested in other contexts. Similarly, Burgess' (2004, 2007) work on active fatherhood in the

UK offers an example of a robust conceptualisation of male involvement in maternal and newborn health that could potentially be translated to other settings. Makusha and Richter's study on maternal gatekeeping in KwaZulu-Natal in this special issue offers valuable insights into local conceptualisations of fatherhood in a low-income context (Makusha and Richter, 2015).

In addition to the need for a clear theoretical approach, it is important to be able to measure male involvement interventions in a nuanced way that captures the difference between transformative and instrumentalist approaches. Defining and measuring male involvement is a methodological challenge, as demonstrated by the diverse range of indicators adopted by the studies in this review and elsewhere in the literature. There is a tendency to use specific indicators of involvement, such as male attendance at the birth or assistance with transportation during pregnancy, without clear justification for how male involvement is defined or whether chosen indicators are representative of this definition. Yet there are many ways in which men can be involved and many different motivations drive their involvement. A single, specific action is unlikely to be a meaningful measure for a man's level of involvement. For example, the commonly used indicator of a man accompanying his female partner to antenatal care may be indicative of a man who is actively engaging in his partner's pregnancy because he believes that he is a co-parent with his female partner; the same indicator, however, could equally reflect a man's view that independent mobility of his female partner is inappropriate, which does not necessarily correspond to his level of engagement with his partner's pregnancy.

Some studies have attempted to measure the degree of engagement using cumulative measures of behaviours, such as a man accompanying his female partner to antenatal care, waiting in the waiting room, joining the appointment, talking to the health worker and discussing the appointment with his female partner afterwards (Byamugisha et al. 2010; Iliyasu et al. 2010). However, this does not disentangle the motivations for these behaviours (Montgomery, van der Straten, and Torjesen 2011). As has been discussed extensively elsewhere, some indicators of male involvement are more effective than others in capturing changes in gender relations, and more research needs to be done to identify and verify these indicators (Barker, Ricardo, and Nascimento 2007).

Developing a strong conceptual base for male involvement interventions and integrating effective measures for documenting male involvement can be expected to support further development of male involvement as a promising area for addressing gender influences on maternal and newborn health.

Limitations

The 13 studies included in our secondary analysis were mostly identified as part of a rigorous systematic mapping designed to consolidate the evidence base for male involvement in maternal and newborn health, among other topics. This evidence base has informed global recommendations and will likely influence national and subnational policymaking and programming. The assessment of the evidence presented here must, however, be understood as limited by the particular framework through which the studies were identified. Evaluation of conceptual approaches to male involvement was not the primary purpose of the original systematic review and did not specifically guide the inclusion or exclusion criteria of the review. The systematic review included studies that were intervention studies, rather than observational studies, commentaries or discussions of male involvement. Additionally, studies were only included where they reported on prespecified maternal and newborn health outcomes, which did not include certain key male

involvement outcomes such as men's support during pregnancy or joint decision-making about childbirth. For the above reasons, there may be other literature on the topic that is not included in the review, particularly qualitative studies or descriptive pieces that examine implementation processes and the theoretical basis of male involvement interventions in more detail. Irrespective of the process used to identify these studies, however, they constitute an emerging evidence base, and the review demonstrates important gaps in this evidence base.

An additional limitation is that articles did not necessarily document the complete male involvement strategy adopted. Limited information was available on interventions, and it is not possible to know what aspects were unreported. In the absence of detailed information, there is a risk of reading the standard critique of instrumentalism into these studies, and we acknowledge that this may not accurately reflect how interventions were actually designed or implemented. Nevertheless, given that these 13 studies comprise a body of evidence for male involvement in maternal and newborn health, the way that male involvement is documented and represented in this important sub-set of the literature matters separately from how the interventions were done: a critique of these studies' reported approaches is a critique of how male involvement is currently understood in the emerging evidence base.

Conclusion

An assessment of the male involvement intervention studies identified through a comprehensive systematic review of maternal health interventions reveals important gaps in how male involvement is conceptualised in the emerging evidence base for male involvement in maternal and newborn health. Emerging research, comprising the studies included in a systematic review commissioned to inform global recommendations relating to male involvement for maternal and newborn health, does not examine the gender-transformative potential of male involvement interventions. This points to the need for an approach to male involvement that is conceptualised and documented with closer reference to gender, in order to understand and document the potential of male involvement as a way of supporting health and gender equity. Specifically, the included studies demonstrate the need for greater incorporation of gender-transformative conceptual approaches into future interventions, with effective measures built in to such interventions in order to develop the evidence base for their impact on a broad range of health and gender equity outcomes. We expect that the innovative approaches to male involvement included in this special issue will respond to some of these critical needs.

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findings and drafted the manuscript; AP, MC, RK and SL reviewed the validity of the secondary analysis and the appropriateness of conclusions. AP is a staff member of the World Health Organization and alone is responsible for the views expressed in this paper, which do not necessarily represent the decisions, policy or views of the World Health Organization itself.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes

- 1. It is also important to consider the wishes of men and women. Many men and women express a preference for men to be more involved in providing care and support to their female partners and children. At the same time, this is not always the case, and it is important that interventions do not impose new forms of behaviour where these are unwanted or may cause harm, such as the loss of women's autonomy or privacy due to men's increased attendance at antenatal clinics (Davis, Luchters, and Holmes 2012).
- 2. The terms 'husband' and 'wife' are used only where men and women were explicitly defined as such in a study. This terminology is not intended to normalise marriage or to single out married couples as distinct from other couples in longer-term relationships.

References

- Adeleye, O. A., L. Aldoory, and D. B. Parakoyi. 2011. "Using Local Culture and Gender Roles to Improve Male Involvement in Maternal Health in Southern Nigeria." *Journal of Health Communication* 16 (10): 1122–1135.
- Alio, A. P., C. A. Lewis, K. Scarborough, K. Harris, and K. Fiscella. 2013. "A Community Perspective on the Role of Fathers During Pregnancy: A Qualitative Study." *BMC Pregnancy* and Childbirth 13 (1): 60.
- Barker, G. 2014. "A Radical Agenda for Men's Caregiving." IDS Bulletin 45 (1): 85-90.
- Barker, G., and A. Das. 2004. "Men and Sexual and Reproductive Health: The Social Revolution." International Journal of Men's Health 3 (3): 147–153.
- Barker, G., C. Ricardo, and M. Nascimento. 2007. Engaging Men and Boys in Changing Gender-Based Inequity in Health: Evidence from Programme Interventions. Geneva: World Health Organization.
- Barker, G., C. Ricardo, M. Nascimento, A. Olukoya, and C. Santos. 2010. "Questioning Gender Norms with Men to Improve Health Outcomes: Evidence of Impact." *Global Public Health* 5 (5): 539–553.
- Burgess, A. 2004. "Making the Most of Fathers." Local Economy 19 (3): 282-287.
- Burgess, A. 2007. The Costs and Benefits of Active Fatherhood: Evidence and Insights to Inform the Development of Policy and Practice. Abergavenny, United Kingdom: Fathers Direct.
- Byamugisha, R., J. K. Tumwine, N. Semiyaga, and T. Tylleskar. 2010. "Determinants of Male Involvement in the Prevention of Mother-to-Child Transmission of HIV Programme in Eastern Uganda: A Cross-Sectional Survey." *Reproductive Health* 7: 12.
- Caro, D. 2009. A Manual for Integrating Gender Into Reproductive Health and HIV Programs: From Commitment to Action. 2nd ed. Interagency Gender Working Group, Population Reference Bureau.
- Davis, J., S. Luchters, and W. Holmes. 2012. Men and Maternal and Newborn Health: Benefits, Harms, Challenges and Potential Strategies for Engaging Men. Melbourne, Australia: Compass: Women's and Children's Health Knowledge Hub.
- Eves, R. 2005. "Masculinity Matters: Men, Gender- Based Violence and the AIDS Epidemic in Papua New Guinea." In *Civic Insecurity: Law, Order and HIV in Papua New Guinea*, edited by V. Luker and S. Dinnen, 47–79. Canberra, Australia: Australian National University.
- Fullerton, J. T., R. Killian, and P. M. Gass. 2005. "Outcomes of a Community- and Home-Based Intervention for Safe Motherhood and Newborn Care." *Health Care for Women International* 26 (7): 561–576.

- Gill, K., R. Pande, and A. Malhotra. 2007. "Women Deliver for Development." *The Lancet* 370 (9595): 1347–1357.
- Greene, M. E., M. Mehta, J. Pulerwitz, D. Wulf, A. Bankole, and S. Singh. 2004. Involving Men in Reproductive Health: Contributions to Development, UN Millennium Project.
- Hossain, J., and S. R. Ross. 2006. "The Effect of Addressing Demand for as Well as Supply of Emergency Obstetric Care in Dinajpur, Bangladesh." *International Journal of Gynecology & Obstetrics* 92 (3): 320–328.
- Iliyasu, Z., I. S. Abubakar, H. S. Galadanci, and M. H. Aliyu. 2010. "Birth Preparedness, Complication Readiness and Fathers' Participation in Maternity Care in a Northern Nigerian Community." *African Journal of Reproductive Health* 14 (1): 21–32.
- Kraft, J. M., K. G. Wilkins, G. J. Morales, M. Widyono, and S. E. Middlestadt. 2014. "An Evidence Review of Gender-Integrated Interventions in Reproductive and Maternal-Child Health." *Journal of Health Communication* 19 (sup 1): 122–141.
- Kunene, B., M. Beksinska, S. Zondi, N. Mthembu, S. Mullick, E. Ottolenghi, I. Kleinschmidt, S. Adamchak, B. Janowitz, and C. Cuthbertson. 2004. *Involving Men in Maternity Care*. Durban: Reproductive Health Unit (Durban) and Department of Obstetrics and Gynaecology, University of Witswatersrand.
- Lundgren, R. I., J. N. Gribble, M. E. Greene, G. E. Emrick, and M. de Monroy. 2005. "Cultivating Men's Interest in Family Planning in Rural El Salvador." *Studies in Family Planning* 36 (3): 173–188.
- Makusha, T., and L. Richter. 2015. Personal communication.
- MASCOT Study Group. 2014. "Systematic Review Draft Protocol, Version 6.2 Feburary 2014. Review Title: Health System and Community-Based Interventions for Improving Maternal Health and for Reducing Maternal Health Inequalities in Low- and Middle-Income Countries: A Two-Stage Mixed-Methods Research Synthesis." http://www.mascotfp7.eu/wp-content/ uploads/2012/03/Mascot_systematic_review_protocol_Final_20130912.pdf
- MASCOT/WOTRO. 2013. MASCOT/Wotro Map of Maternal Health Research. London: EPPI-Centre, Social Science Research Unit, Institute of Education.
- Midhet, F., and S. Becker. 2010. "Impact of Community-Based Interventions on Maternal and Neonatal Health Indicators: Results from a Community Randomized Trial in Rural Balochistan, Pakistan." *Reproductive Health* 7 (1): 30.
- Montgomery, E., A. van der Straten, and K. Torjesen. 2011. "Male Involvement' in Women and Children's HIV Prevention: Challenges in Definition and Interpretation." JAIDS Journal of Acquired Immune Deficiency Syndromes 57 (5): e114–e116.
- Mullany, B. C., S. Becker, and M. J. Hindin. 2007. "The Impact of Including Husbands in Antenatal Health Education Services on Maternal Health Practices in Urban Nepal: Results from a Randomized Controlled Trial." *Health Education Research* 22 (2): 166–176.
- Mumtaz, Z., and S. Salway. 2009. "Understanding Gendered Influences on Women's Reproductive Health in Pakistan: Moving Beyond the Autonomy Paradigm." Social Science & Medicine 68 (7): 1349–1356.
- Mushi, D., R. Mpembeni, and A. Jahn. 2010. "Effectiveness of Community Based Safe Motherhood Promoters in Improving the Utilization of Obstetric Care. The Case of Mtwara Rural District in Tanzania." *BMC Pregnancy and Childbirth* 10: 14.
- Purdin, S., T. Khan, and R. Saucier. 2009. "Reducing Maternal Mortality among Afghan Refugees in Pakistan." *International Journal of Gynecology & Obstetrics* 105 (1): 82–85.
- Sahip, Y., and J. M. Turan. 2007. "Education for Expectant Fathers in Workplaces in Turkey." Journal of Biosocial Science 39 (6): 843–860.
- Shattuck, D., B. Kerner, K. Gilles, M. Hartmann, T. Ng'ombe, and G. Guest. 2011. "Encouraging Contraceptive Uptake by Motivating Men to Communicate About Family Planning: The Malawi Male Motivator Project." *American Journal of Public Health* 101 (6): 1089–1095.
- Sinha, D. 2008. Empowering Communities to Make Pregnancy Safer: An Intervention in Rural Andhra Pradesh. New Delhi: Population Council.
- Sood, S., U. Chandra, P. Mishra, and N. Shailes. 2004a. Measuring the Effects of Behavior Change Interventions in Nepal with Population Based Survey Results. Baltimore, Maryland: JHPIEGO.
- Sood, S., U. Chandra, A. Palmer, and I. Molyneux. 2004b. Measuring the Effects of the SIAGA Behaviour Change Campaign in Indonesia with Population Based Survey Results. Baltimore, Maryland: JHPIEGO.

- Sternberg, P., and J. Hubley. 2004. "Evaluating Men's Involvement as a Strategy in Sexual and Reproductive Health Promotion." *Health Promotion International* 19 (3): 389–396.
- Turan, J. M., M. Tesfagiorghis, and M. L. Polan. 2011. "Evaluation of a Community Intervention for Promotion of Safe Motherhood in Eritrea." *Journal of Midwifery & Women's Health* 56 (1): 8–17.
- UNFPA and Promundo. 2010. Engaging Men and Boys in Gender Equality and Health: A Global Toolkit for Action. Rio de Janiero: UNFPA and Promundo.
- UNICEF and Liverpool School of Tropical Medicine. 2011. Gender Influences on Child Survival, Health and Nutrition: A Narrative Review. New York, NY: UNICEF.
- Varkey, L. C., A. Mishra, A. Das, E. Ottolenghi, D. Huntington, S. Adamchak, M. E. Khan, and F. Homan. 2004. *Involving Men in Maternity Care in India*. New Delhi: Frontiers in Reproductive Health Program, Population Council.
- World Health Organization. 2015. WHO Recommendations on Health Promotion Interventions for Maternal and Newborn Health 2015. Geneva: World Health Organization.

Résumé

L'implication des hommes dans la santé des femmes et des enfants est considérée comme un moyen important de traiter des influences des genres sur la santé maternelle et néonatale. L'impact de l'implication des hommes aux alentours de la naissance sur la santé maternelle et néonatale a été examiné dans le cadre d'une revue systématique des études sur les interventions de santé maternelle publiées entre 2000 et 2012. Sur les 33.888 études qui ont été passées en revue, treize études admissibles abordant l'implication des hommes ont pu être identifiées. Les interventions mises en évidence dans ces études constituent une assise factuelle émergente sur l'implication des hommes dans la santé maternelle et néonatale. Nous avons conduit une analyse qualitative secondaire de ces treize études, passant en revue le contenu qui avait été systématiquement extrait. Une évaluation critique de ce contenu révèle d'importantes lacunes dans la base de données factuelles qui pourraient avoir un impact réducteur sur la compréhension de « l'implication des hommes » et sur sa mise en œuvre dans les politiques, les programmes et les recherches ayant rapport à la santé maternelle et néonatale. De facon collective, les treize études soulignent la nécessité d'une base de données englobant celles d'études qui précisent clairement en quoi l'implication des hommes est un instrument potentiel d'une évolution favorable des inégalités entre les genres. Cette base de données élargie pourrait en effet appuyer la notion selon laquelle l'implication des hommes serait une stratégie à utiliser pour améliorer à la fois la santé maternelle et néonatale et les inégalités entre les genres.

Resumen

Se considera que la participación de los hombres en la salud de las mujeres y los niños constituye un método importante para abordar la influencia de género en la salud maternoinfantil. Teniendo como marco una revisión sistemática de numerosos estudios de intervención maternoinfantil publicados entre 2000 y 2012, se examinó el impacto que tiene en la salud maternoinfantil la implicación de los hombres a la hora del parto. Entre los 33,888 artículos revisados se identificaron trece estudios aptos que abordan la participación de los hombres en esta experiencia. Las intervenciones documentadas en dichos estudios forman parte de la evidencia emergente a favor de la implicación de los hombres en la salud maternoinfantil. En este sentido, a partir de estos trece estudios los autores realizaron un análisis cualitativo secundario, revisando el contenido que había sido extraído sistemáticamente. Una valoración crítica de dicho contenido encontró lagunas importantes en la evidencia, las cuales probablemente delimiten la forma en que la "implicación de los hombres" es comprendida e implementada en la política, en los programas y en las investigaciones en torno a la salud maternoinfantil. En conjunto, los estudios señalan que es necesario obtener evidencia derivada de estudios que articulen y documenten claramente la capacidad de transformar nociones basadas en el género a partir de la participación de los hombres en estas cuestiones. Una base de evidencia más amplia podría sustentar una estrategia destinada a fomentar la participación de los hombres en estos asuntos, a fin de mejorar los resultados relativos a la salud y a la equidad de género.