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Addressing domestic violence through antenatal care in Sri Lanka's plantation estates: Contributions of public health midwives

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ABSTRACT

Domestic violence in pregnancy is a significant health concern for women around the world. Globally, much has been written about how the health sector can respond effectively and comprehensively to domestic violence during pregnancy via antenatal services. The evidence from low-income settings is, however, limited. Sri Lanka is internationally acknowledged as a model amongst low-income countries for its maternal and child health statistics. Yet, very little research has considered the perspectives and experiences of the key front line health providers for pregnant women in Sri Lanka, public health midwives (PHMs). We address this gap by consulting PHMs about their experiences identifying and responding to pregnant women affected by domestic violence in an underserved area: the tea estate sector of Badulla district. Over two months in late 2014, our interdisciplinary team of social scientists and medical doctors met with 31 estate PHMs for group interviews and a participatory workshop at health clinics across Badulla district. In the paper, we propose a modified livelihoods model to conceptualise the physical, social and symbolic assets, strategies and constraints that simultaneously enable and limit the effectiveness of community-based health care responses to domestic violence. Our findings also highlight conceptual and practical strategies identified by PHMs to ensure improvements in this complex landscape of care. Such strategies include estate-based counselling services; basic training in family counselling and mediation for PHMs; greater surveillance of abusive men's behaviours by male community leaders; and performance evaluation and incentives for work undertaken to respond to domestic violence. The study contributes to international discussions on the meanings, frameworks, and identities constructed at the local levels of health care delivery in the global challenge to end domestic violence. In turn, such knowledge adds to international debates on the roles and responsibilities of health care professionals in responding to and preventing domestic violence.

1. Introduction

Sri Lanka's achievements in maternal and child health (MCH) are widely acclaimed in the South Asia region, and often put forward as an example for other low-income countries. The maternal mortality ratio (MMR) has declined steadily since the 1930s to 29 per 100,000 live births in 2013, a figure significantly lower than other South Asian countries, such as India and Nepal, which both had MMRs of 190 in the same year (World Bank, 2015). Nearly all (99%) pregnant women today have at least one antenatal care visit, and 98% of births occur in a hospital in the presence of a skilled attendant (Senanayake et al., 2011; United Nations Children's Fund, 2009). To a large extent, this situation is attributed to the expansion and decentralisation of infrastructure for pregnancy care and delivery, as well as investment in the increased presence of trained,

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community-based public health midwives (PHMs). Sri Lanka's PHMs are considered the 'backbone' of the public health care system (Senanayake et al., 2011). They provide the majority of MCH and family planning services at the community level, as well as public health and preventative health duties such as immunisations and nutritional assessments.

Amidst this success story however, maternal health in Sri Lanka is significantly compromised by pervasive violence in all spheres of women's lives (de Mel et al., 2013; Jayasuriya et al., 2011; Jegathesan, 2013; Moonesinghe et al., 2004). Sri Lanka's MCH achievements are also tempered by inequalities in indicators of maternal health across segments of society, with Tamil women in the tea estate sectors amongst the populations who fare the worst (Hollup, 1994; Hyndman, 2014).

The setting for this study is the tea estate sector of Badulla district. Poverty and gender-based violence (GBV) are widespread in Sri Lanka's estates, and the estate populations lag behind national figures on the majority of key health indicators (Centre for Poverty Analysis, 2005; Wijayathlake, 2003). GBV covers a range of events directed at women and girls because of their sex; for example, human trafficking, female infanticide, and intimate partner violence. Our focus is domestic violence, one of the most pervasive forms of GBV. Domestic violence is a significant health concern during pregnancy as the consequences can be severe, including depression and suicide, preterm births, low birth rates and fetal death, amongst many others (Shah and Shah, 2010). In Sri Lanka, prevalence surveys over the past three decades have produced estimates of domestic violence ranging from 18% to 72% (Jayasuriya et al., 2011; Moonesinghe, 2002; Samarasinghe, 1991; Subramaniam and Sivayogan, 2001), including 42% during pregnancy (Deraniyagala, 1992).

The importance of health sector responses to domestic violence is now well established given that the vast majority of women worldwide access health services at some point in their lives (Chibber and Krishnan, 2011). Antenatal care (ANC) services have been recognised as a particularly unique 'window of opportunity' to intervene to potentially safeguard the health of abused women and their unborn children (Yimer et al., 2014). Over the past decade, Sri Lanka's Ministry of Health has made some effort to improve the capacity of public health professionals to assist pregnant women experiencing domestic violence, notably through the development of a training module on all types of GBV for health care providers. However, there is still an acute lack of health care interventions that effectively increase the safety of pregnant women living with domestic violence in low-income settings in general (Jahanfar et al., 2013). In Sri Lanka, the key role of the front line health service providers for pregnant women, PHMs, is also strikingly absent in the public health and GBV research evidence. Without such knowledge, we are left with an inadequate understanding of the nature and underlying causes of domestic violence in Sri Lanka and how to improve health sector prevention and response work in the future.

We begin to address these gaps with this study by exploring PHM's experiences identifying and responding to pregnant women affected by domestic violence in the estates of Badulla district. Our argument is developed in several stages. In the first section of the paper, we present the historical roots of and present day vulnerabilities to ill-health and domestic violence in our study setting. Next, we introduce our conceptual framework, a modified livelihoods model; then we describe our study methodology. Over the remainder of the paper, we develop our conceptual framework in relation to our major findings from fieldwork in Badulla's estates. We highlight the complex interplay of physical, social and symbolic assets, strategies and constraints of PHMs in these settings that estate PHMs navigate in their work. We conclude the paper by offering locally-relevant suggestions for future antenatal care policies and interventions.

1.1. Vulnerabilities

1.1.1. Historical roots of modern ills

The plantation estates of Badulla district are located in a mountainous region of central Sri Lanka. The majority of the district's population is engaged in agricultural work, many employed by the 161 tea plantation estates in the region (Badulla District Secretariat, 2012). Sri Lanka is one of the world's largest exporters of tea. The origins of the tea plantations date back to the mid-1800s when the country was under British rule. During this era, British planters brought low-caste, primarily Tamil-speaking labourers from villages in South India to work in Sri Lanka's plantations (Ilyas, 2014). For most of their history in Sri Lanka, the migrant plantation labourers lived and worked in deplorable conditions, responsible for much of the economic production of the nation yet largely excluded from the financial benefits of such productivity (Ilyas, 2014; Jegathesan, 2013). Plantation Tamils have also historically occupied a precarious social position in Sri Lanka, being denied citizen rights until 2003 (with the exception of a few years). As non-citizens, they had few basic entitlements: they could not vote; own land or property, access health services or education, or secure government employment outside the estates; procure identity cards or open bank accounts (Philips, 2003a).

The management of health services for estate Tamils has been similarly unstable, shifting between a private health system managed by the plantation companies and the public sector a few times since the 1800s. Most recently, in 2006, estate hospitals and other health services were taken over by the Ministry of Health. These shifts have resulted in suboptimal health facilities and staffing compared with national norms, which has in turn directly and negatively affected the health and wellbeing of estate residents (Jegathesan, 2013). Today, labour, land, and housing for plantation workers are controlled by the plantation estate owners and management, but health services are being continuously re-integrated into the national health framework. Plantation workers are therefore entitled to access free government health care, as well as private clinics off the estates. Such services, however, are not easily accessible for many estate residents given their long work hours in the plantations and lack of transportation or resources to travel from typically remote areas; hence, health inequalities persist.

1.1.2. Framing domestic violence in the estates

There are no published studies on the prevalence of domestic violence in Badulla's estate sector. We are currently conducting a questionnaire-based prevalence survey to fill this gap (results forthcoming). The limited information available from other estate populations tends to focus on the broader category of GBV rather than domestic violence specifically. Such studies suggest that GBV is a significant cause of vulnerability and ill-health for estate women in Sri Lanka. Wijayathlake's (2003) cross-sectional study in Nuwara Eliya, for example, identified 83% of female estate workers as victims of GBV occurring in their homes, workplaces and public places such as buses. Jegathesan's (2013) study, based on extended anthropological fieldwork in estates neighbouring to Badulla, powerfully accounts for the frequency and far-reaching impact of domestic violence in plantation womens' lives.

Domestic violence is understood and experienced differently according to cultural beliefs and socially sanctioned norms. We will account more for the nuances of domestic violence in the estates in a subsequent phase of this research. For now, briefly, cultural narratives of patriarchal privilege, the sanctity of family, and the inferior position of women in families influence the ways that

violence operates in the Tamil estate communities. These narratives are deeply rooted in Sri Lankan Tamil families and reflected in many daily routines and customs – for example, historical practices whereby women eat less than their husbands and brothers and suffer worse and more frequent nutritional deficiencies, or sacrifice their beds for the floor to their husbands and other male kin, including in old age (Philips, 2003b). There are also important structural dimensions to domestic violence in the plantation settings. Female estate workers are amongst the most oppressed, marginalised and exploited populations in Sri Lanka due to their work and class status, gender, ethnicity, and the nature of plantation economics. As we elucidate throughout this paper, such intersecting beliefs and dynamics have far-reaching psychological and material power in terms of a woman's sense of self, agency in her marriage and family life, and safety.

1.2. Conceptual framework

With their protracted histories of ethnic and economic marginalisation and insecurity, the plantation estates are areas of 'concentrated [health] disadvantage' (Finch et al., 2010). In Fig. 1, we propose a model depicting the complexity of these landscapes for the PHMs who provide community-based health care services in these settings. The model is adapted from the livelihoods models of Ellis (1998, 2000) and the UK's Department for International Development (DFID) (1999). These original frameworks were developed to illustrate the vulnerabilities, assets, strategies and constraints that together determine the livelihoods of individuals and households in low-resource settings. Our model applies specifically to the work of estate PHMs. It illustrates the interplay of factors affecting the ability of PHMs to provide ANC services in the estate settings; draws attention to the broader contextual factors of the estates for maternal health; and points to the institutions and ideologies in which experiences of domestic violence take shape. We refer to our model to interpret and present our research findings on these themes over the course of the paper. The model is also instructive for highlighting the necessary factors required to create healthier landscapes of care, an idea we take up again at the conclusion of the paper.

2. Methodology

We conducted the fieldwork for this study in September and November 2014. Our team is an interdisciplinary collaboration of medical doctors and social scientists from Sri Lanka and Norway. We were supported by four Tamil- and Sinhala-speaking research assistants who acted as note-takers, transcribers and translators. Ethical clearance was granted from the Ethics Review Committee of the Faculty of Medical Sciences at the University of Sri Jayewardenepura in February 2014, and formal permissions were obtained from relevant health authorities in June and November 2014.

The fieldwork took place in six Medical Officer of Health (MOH) areas in Badulla district. MOH areas are responsible for all MCH services and typically cover a population of 60,000 (Ministry of Health (2012)). We invited PHMs employed in estates in the six MOH areas to attend group interviews at community health clinics. In total, we spoke to 31 midwives in six separate groups. Some of the midwives were recently appointed to the role, but many had nearly 30 years of experience in the profession. The interviews were conducted in Sinhala by the local principal investigator (PI). A topic guide was used, broadly covering the midwives' professional training and work experience; women's health in the estates; perceptions on domestic violence during pregnancy; and the availability of health and social services in the district. We incorporated visual methods into the conversations, such as the image of abuse in Fig. 2, to stimulate discussion on the dimensions of domestic violence –motivating factors, typical perpetrators, and formal and informal helpers.

Following each group interview, the Norwegian researchers interviewed the local PI using the participant topic guide to obtain an immediate written summary of the discussions in English, and maintained a record of reactions and reflections on the group dynamics and any striking details or significant differences from previous discussions. These summaries were supplemented by the written notes from the group interviews, taken in Sinhalese by the rapporteurs and translated to English and, later, by full transcripts

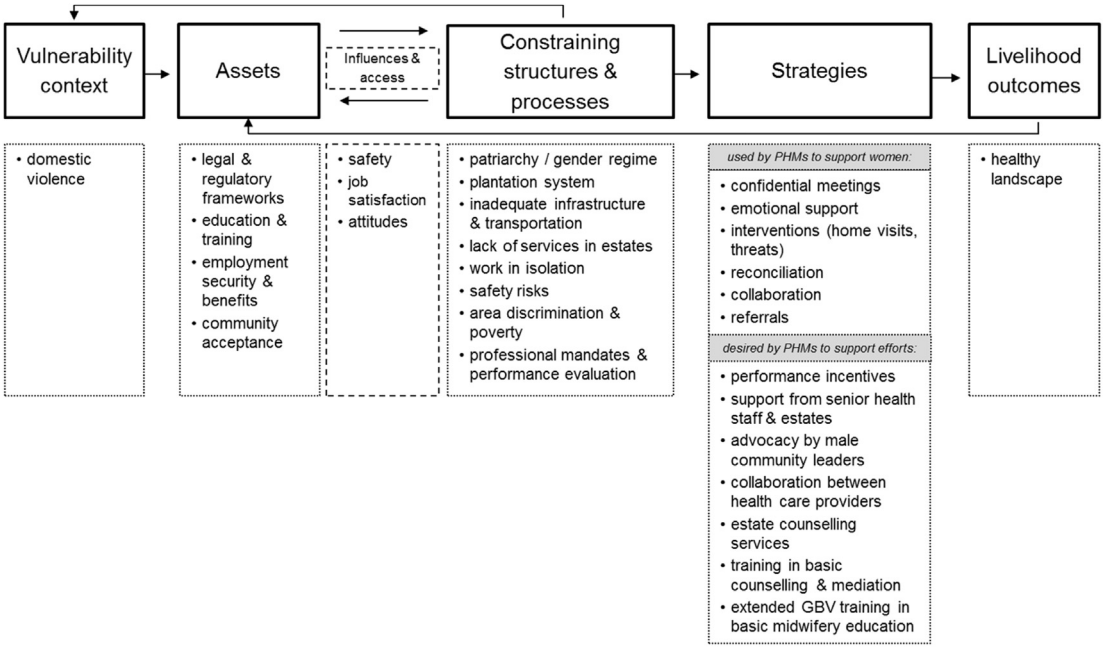

Fig. 1. Landscape of care for estate public health midwives – adapted from DFID (1999) by authors, Ragnhild Lund and Jennifer Infanti, in 2015.

Fig. 2. Interview aid – image created by Nepali artist, Rashmi Amatya, 2014.

based on audio-recordings of the conversations.

We also conducted short individual interviews with pregnant women at the health clinics, speaking to seven women in total. These women were randomly chosen by the midwives attending our group discussions; some were living with domestic violence, others not. The purpose of the interviews was to corroborate the information provided by the midwives, particularly on how abuse during pregnancy is disclosed to PHMs or other health professionals by women in the estates, if at all.

We conducted a preliminary thematic analysis of the available data to construct a list of key findings and then invited the midwives from the interviews to meet us collectively for a participatory workshop to discuss the findings. Twenty-two midwives participated in the day-long workshop. The workshop provided an opportunity for the PHMs to appraise and then verify or modify our interpretations, which has ultimately strengthened their validity. We also incorporated small group discussions on case scenarios of pregnant women into the workshop programme. This activity was particularly successful in terms of mutual benefit: as researchers, we were able to glimpse the ways in which PHMs perceive challenges in their work and attempt to solve them within the bounds of their available resources. For the midwives, the activity provided an opportunity to discuss and build upon the strategies, resources and referral options of PHMs working in different estates throughout the district. Overall, the workshop gave us new insights into the most practical strategies for combating domestic violence from the front lines of ANC service-delivery.

The processes of data coding and analysis were carried out collaboratively by the research team during fieldwork. We used our modified livelihoods model (Fig. 1) in the final analytical stages to identify and group the data into categories and themes. The analysis was also enriched by information gained from observations and visits to health clinics and hospitals during our stays in Badulla district, as well as informal discussions with other health professionals – most notably, MOHs, Judicial Medical Officers and Public Health Inspectors (PHIs).

3. Key findings

3.1. Assets of estate public health midwives

3.1.1. Training on gender-based violence

Sri Lanka's Ministry of Health recently strengthened the capacity of the public health sector to respond to domestic violence by developing a 4-day training module on GBV for primary health care professionals in 2009. The training addresses the types and health effects of GBV, including domestic violence; relevant laws and support services for victims; and ways for health care providers to identify and assist women affected by GBV. The module has been gradually rolled out across the country, including to PHMs working in plantation estates. Most of the estate midwives we met had attended the training and considered it a notable resource, especially in terms of their capacity to identify pregnant women experiencing domestic violence. The PHMs also mentioned the training had reassured them that domestic violence was a legitimate public health issue and thus partly their responsibility to address.

3.1.2. Employment security and benefits, and community acceptance

PHMs are recruited from the areas in which they will work based on their performance on the examinations held at the end of secondary school in Sri Lanka. They take up post in these communities following 18 months of training. The PHMs acknowledged one of their key assets as their secure (permanent) employment situations, with regular salaries paid by the government; entitlements to free housing, water and sanitation in the estates; and pensions. They considered their greatest resource, however, to be their acceptance or 'insider status' within the estate communities. As members of the same communities, the PHMs felt uniquely positioned to understand the health challenges faced by women in the estates. They were also clearly familiar with the cultural and ethnic norms, socio-economic realities and local languages. This knowledge helped them gain broad acceptance within the communities and build trustful relationships with pregnant women.

PHMs do not have an official mandate to identify or assist pregnant women experiencing domestic violence. Nevertheless, they find themselves regularly confronting the issue. In our interviews, the midwives explained that husbands, mothers-in-law and fathers-in-law are the main perpetrators of domestic violence in the estates; that shouting, slapping the face, hitting, and deprivation of food are the most common forms of domestic violence; and that such acts are considered justifiable or are accepted as the 'natural order'. PHMs regularly come to know about verbal and physical abuse affecting pregnant women from friends and particularly neighbours of the women, as well as through direct disclosures by the women themselves. In one of conversations, the PHMs built on each other's comments, summarising as follows: "When a mother is beaten, we get to know. Somebody nearby informs us. So, we visit them, we approach them directly" (PHM 1). "We do not tell them how we got the message" (PHM 2). "We closely interact, thus they do not hide their problems from us. We have the whole history of each woman. We don't only visit them during pregnancy – when one is sick, we visit them, we talk about all issues (PHM 3)."

The integration of midwives in the estate communities was also mentioned as important for building relationships with other health and social service providers in the estates who have insight into pregnant women's home circumstances – for example, the welfare officers appointed by the plantation management and crèche attendants. These service providers regularly inform the PHMs when they have concerns about a woman's health or safety.

In spite of these assets and resources however, the vast majority of estate PHMs maintained that they "operate with a safety net of care … [characterized by] more holes than thread" (Wies and Haldane, 2011, p. ix). In the section that follows, we delineate a number of intersecting factors identified by our participants as considerable constraints on their abilities to provide optimal ANC services to pregnant women living with domestic violence.

3.2. Constraints on care

The most challenging of the constraints for the PHMs are structural and relate to the effects of gender inequality and patriarchy on their work; the plantation economic system; and the quality and availability of health services in the estates. We address these factors in sequence below, before turning to constraints related to the profession of public health midwifery.

3.2.1. Women's subordinate status

The dominant position and authority of husbands in marital relationships, and of men in extended families and society at large, complicates the problem of domestic violence for PHMs in many ways. Practically, the midwives felt that men in positions of authority, status or influence in the estates, such as the police, plantation managers and other health providers like PHIs, could do much more to support their efforts to assist abused women. This is especially true beyond pregnancy when the midwife's role is limited. According to the PHMs, such men are instead often complicit in the violation of women's rights. Amongst other examples shared, these men often don't take complaints about domestic violence seriously at all, and some accept bribes to dismiss the complaints. One of our research participants told us:

> [An abused woman] may go to the police when she has no other options. It would be her final way to seek refuge. She would go to police when she finds it [the violence] too difficult to bear any longer. But, policemen are not considerate about [abused] mothers, like we are. They only record complaints. They don't threaten men. They even warn the woman not to come to them again.

Indeed, a few PHMs had reported complaints to the police – about particular cases of domestic violence, or about the widespread prevalence of domestic violence and alcohol abuse in the estates – but none could share an example of the police effectively addressing such a complaint nor enforcing any laws to protect women's safety in their homes.

The fact that midwives are also women cannot be underestimated. Midwives are recognised by the public as caring and skilled professionals who provide an important service to their communities. They have gained the respect of villagers and other health authorities in the communities. However, their gender undermines their professional authority to significantly shift social norms, practices and beliefs about men's behaviours. One PHM clearly explained the difficulty of talking to men about their (violent) behaviour: “Women are men's rights; that means they [men] will say to us: we have the right to beat our women. What they say is, the marriage certificate gives them license to beat their wives.” Such attitudes also make it nearly impossible for women to challenge their husbands publicly. This creates situations which the PHMs described as both frustrating and disheartening. For example, women often told their husbands that PHMs were to blame for a woman's independent decision to report abuse to the police. Or, a woman who had confessed to being terrified of her husband or other abusive family member would suddenly claim to be “happy at home” upon the midwife's intervention in the family situation. In addition, some PHMs felt their personal safety was genuinely at risk when a woman reported abuse to the police or when intervening in situations where the abuser was a particularly influential person in the community or under the influence of alcohol.

Furthermore, it became evident in our fieldwork that many PHMs hold personal beliefs that lead them to accept violent behaviour as normal and justifiable. Some maintained that abuse is a private matter or felt that some amount of physical violence, such as slapping to the face, is expected in domestic relationships. Several PHMs justified violence under conditions, such as where a woman neglected her physical appearance, or didn't ‘properly’ care for her home, husband or children. As women living in patriarchal communities, we can expect that some PHMs may lack empowerment in their private lives or tolerate violence in their homes. Such factors influence their ability to provide the most appropriate care to women experiencing domestic violence.

3.2.2. Plantation economics

Many participants spoke of unique challenges to their work presented by the nature of plantation agriculture. They all felt that women's long work hours (sometimes from 6:00 am–6:00 pm) made it difficult to schedule home visits, as well as for pregnant women to attend antenatal clinics. The nature of plantation work was also mentioned as a risk factor for poor maternal health in general during pregnancy. Many estate women work in the mountainous terrain of the plantations, carrying heavy loads until late into their pregnancies, and then return home to immediately cook dinner and food for the next day for the entire extended family. “We pity them,” one midwife told us during the interviews:

> They work hard. They have to climb hills and their work is very risky. They have to carry the loads [of tea leaves] on their backs. If there is even a little problem with the leaves they have plucked, they are paid less. They have to walk miles and miles every day.

Women who moved into the estates following ‘love marriages’ (in contrast to marriages arranged by their families) were identified as especially vulnerable to poor health outcomes during pregnancy and increased risk of domestic violence. These women are not typically entitled to work in the plantations, and are thus often destitute and isolated. The registration of these women as pregnant can be missed because they are not in the plantation employment registers.

Additionally, we learned of changes to the plantation system due to recent privatisation and a corresponding implementation of semi-permanent work contracts and deregulation. New recruitments to estate work seem to be increasingly in the form of casual or seasonal labour, with lower salaries and fewer employment benefits. The midwives felt such job insecurity contributed to increased alcohol abuse and violence due to financial stress and men having more idle time. It also led to family separations, with many estate men and women seeking casual work in Colombo or other cities, or taking positions overseas. Many women are away from the estates for most of a pregnancy now, returning home only for the birth. Such factors combined increase the complexity of the midwives' work with pregnant women.

3.2.3. Quality and availability of essential health services

PHMs expend significant time and energy maintaining contact with pregnant women in the estates due to poor roads, limited transportation options, and long travel distances. They typically work in isolation because many estates are remotely located. Furthermore, according to the midwives we consulted, the health service facilities that are available in the estates do not afford sufficient privacy or confidentiality to address sensitive topics such as domestic violence. These health service limitations were considered major constraints to the provision of adequate care and support.

In addition to the poor quality of health service infrastructure, the PHMs had concerns about the lack of accessible and appropriate services for women experiencing domestic violence. Despite recent

legislative recognition of domestic violence following the passing of The Prevention of Domestic Violence Act of 2005, the government's response to the problem has been far from comprehensive (Moonesinghe and Barraclough, 2007). No separate funds have been allocated in the government's health budget for the provision of sustainable support services for victims (United Nations Population Fund, 2010). As a consequence, the vast majority of health and other support services for victims of domestic violence are offered on an ad-hoc basis by non-governmental organisations (Japan International Cooperation Agency, 2010). Typically, these services are located in Colombo or other urban settings.

In our study setting, a few support services were available in Badulla city, but these too are largely inaccessible for women living in the estates who cannot afford to be away from their work or families for the time required to travel to the city and back, often two hours in each direction. When we asked PHMs about gaps in the care they provided, they consistently told us that women experiencing violence had no viable places to go for support. They were frustrated that they were encouraged in the government training course on GBV to make referrals to organisations in locations that were simply impractical for their patients. They also mentioned that in the limited cases where a woman does access a referral service, there is rarely communication from the service provider to the midwife, and no systems in place for follow-up care. This exemplifies a lack of coordination within the larger health care system.

3.2.4. The limits of professional responsibilities

In the past, PHMs were responsible for delivering babies, a duty they described as a source of pride and satisfaction. Today, with the vast majority of deliveries taking place in hospitals, PHMs have been asked to take on new public health responsibilities which have increased the complexity of their workload, such as addressing sanitation and domestic violence. Responding effectively to domestic violence requires regular and sustained intervention and counselling beyond what the PHMs feel they can reasonably provide. Several midwives mentioned they are not properly supported in this work; at minimum, they feel they need to be trained in basic counselling or family mediation. Additionally, the PHMs felt overwhelmed by the clerical and administrative burdens of their work. They are required to complete many lists of performance targets on daily or monthly bases. The work they do to address domestic violence is not assessed, rewarded or otherwise incentivised in these documents nor in their formal performance evaluations, and this was perceived as particularly demotivating.

3.3. Strategies to maximise resources in a constrained environment

Brown and Duguid (1991) write that "conventional descriptions of jobs mask not only the ways people work, but also significant learning and innovation generated in the informal communities-of-practice in which they work" (p. 40). This statement has much relevance to estate PHMs who engage in a variety of informal and unrecognised activities to manipulate and maximise their limited resources in order to care for women living with domestic violence.

3.3.1. Measures to ensure privacy and confidentiality

A key strategy identified by the PHMs is to locate safe, private places to talk to women whom they suspect are affected by domestic violence. One of a PHM's regular duties is to hold antenatal check-ups for pregnant women at field medical clinics, usually twice per month. If a midwife identifies any signs of abuse during these check-ups, such as bruises, malnutrition or anxiety, she will invite these women to stay for private consultations at the end of the clinic. If necessary, she will provide a socially acceptable excuse for the extra consultation to allay any potential suspicions from others about the nature of the extended stay – for example, to discuss a concern related to the position of the foetus. The midwife will also make a concerted effort to talk to these women in the streets of the estates but makes these meetings look coincidental to ensure a woman's safety. The PHMs also capitalise on other opportunities for visits to these women's homes in order to broach discussions about domestic violence, such as to monitor infant health, the hygienic state of the home, or provide education on family planning options following the pregnancy.

3.3.2. Connecting to meet emotional needs

The PHMs had different strategies for inquiring about a woman's possible exposure to violence during pregnancy. Often, their focus is on offering a confidential and listening ear to provide emotional support or counsel. Many midwives mentioned encouraging the women to put their hopes and efforts into their children, ensuring the children finished schooling and thus have opportunities for work outside the estates (and thereby also to avoid their mothers' kinds of suffering). Similarly, they encouraged the women to use contraception following the pregnancy in order to be better able to provide for their children's welfare and education. Some PHMs suggest temporary relocation to a woman's maternal home to escape violence during pregnancy. In such situations, the midwife might again provide the woman with a justifiable excuse to give to her husband and in-laws for the relocation, such as to receive care for "persistent troubles with vomiting".

3.3.3. Intervening

The midwives have also developed intervention strategies based on their past experience working with women in violent relationships and individual philosophies of care. With the consent of their patients, some PHMs attempt to threaten abusive husbands with police action. A number of midwives explained a system in which they requested an abusive husband to sign a written contract stating he would not endanger the safety of his pregnant wife nor unborn child through violent behaviour for the rest of the pregnancy. If these contracts were violated, the agreement was that the midwife was then under obligation to report the abuse to the police. Another frequently used fear-based tactic is to visit the perpetrators and scare them into being "especially caring and gentle" with the woman during the pregnancy by describing and sometimes showing images of babies born with severe disabilities, allegedly due to violence during pregnancy.

3.3.4. Reconciliation

Sri Lanka has one of the lowest divorce rates in the world (Kodikara, 2012). Marriage is considered a sacrament and the social stigma and legal technicalities of formal separation and divorce make the process nearly prohibitive for most women (Wijeyesekera, 2009). Reconciliation is therefore a socially desirable solution in situations of family strife. Many PHMs believe in the possibility and desirability of reconciliation, particularly if certain domestic conditions are changed – for example, if an abuser's excessive drinking is controlled or if a couple can move out of an extended family situation into their own home to have more autonomy and opportunity for sexual intimacy. "We have to find solutions for reconciling the couple," one PHM explained, "what I tell to couples is not to hurry for divorce as they have got children who need a father." Other PHMs are less hopeful about the possibility of restoring domestic harmony, but pragmatic about efforts to reconcile: "We are conscious of the reality. It is the only option. If we refer them [to an external support service], when they return they have to be with their husbands anyway."

Encouraging women to reconcile with their abusers has been

shown to be problematic in many ways: it trivialises the violence; it reinforces acceptance of gender roles which justify the right of husbands to use violence in household controversies, and widely-held beliefs amongst women that violence may be deserved as a result of personal failures; and it may dissuade women from taking action in response to domestic violence in the future (Cantalupo et al., 2006). Practically, for estate PHMs, it is also logistically challenging and time consuming. However, bringing families together with the goal of restoring good relationships, or counselling couples individually or together, remains a key feature of PHMs' strategic efforts to assist pregnant women affected by domestic violence.

3.3.5. Collaboration and referral practices

Finally, it can be strategic for PHMs to consult external support and make referrals for women under their care. Our participants often consulted other public health providers with higher status in the health care hierarchy for assistance with their interventions, namely MOHs or PHIs, especially where the provider was male and the abusive person notably violent or aggressive. When possible, the PHMs brought community health volunteers with them on home visits where they feared their safety could be endangered. The PHMs also made occasional referrals to the Women In Need counselling desk at Badulla Hospital, a voluntary support service. In severe cases of abuse, they consulted the village headman, government-appointed civil servant for the district, or police at the district station. If a woman caused injury to herself in an effort to escape a violent situation, her midwife could make a referral for a stay in the local hospital and/or a consultation with the hospital psychiatrist. When talking to one such psychiatrist, we learnt that the overwhelming number of patients under her care were women living in situations of domestic violence who had tried to kill themselves with poison.

4. Towards a healthier landscape of care – a call to action

Local social, cultural, and economic conditions have a fundamental influence on whether an environment is healthy or not (Williams, 2007). It is clear that the conditions in Sri Lanka's estates are not conducive for good health for many female residents and an agenda for change based on local realities and proposed solutions is required. Returning to our model in Fig. 1, the imperative to build on midwives' assets, reduce their constraints, and support the implementation of new strategies is evident in order to ultimately create healthier landscapes of care.

In terms of strengthening assets, many estate PHMs have taken the initiative to ask women about their domestic circumstances when they suspect violence. This is an essential step in addressing domestic violence as it takes the onus of disclosing off victims. It also recognises that domestic violence is not only a private family affair but must be addressed at multiple levels. These efforts could be bolstered now by the implementation of awareness-raising programmes in the plantations about the health consequences of domestic violence for pregnant women, as well as the physical and psychological health implications of all violence. The Ministry of Health's existing channels for health education and promotion could provide a 'suitable vehicle' for such programmes (Moonesinghe and Barraclough, 2007).

The midwives in our study also told us frequently that they feel burdened by the responsibility of responding to domestic violence and need the help of the community in this work. They suggested that religious and estate leaders, and organisations of elderly men, lead initiatives to educate young people and men in the estates about the consequences of domestic violence. They would also like the support of estate management to bring men together for meetings to mobilise opposition to domestic violence by encouraging men to stop being bystanders to other men's violent behaviour and to instead hold each other accountable. They recommended working within cultural expectations of masculinity to create such change and reduce violence.

Similarly, the PHMs expressed clearly that they cannot do the work of addressing domestic violence effectively in isolation. They need to be accompanied by other health care providers on home visits where abusive individuals may be present. The police need to receive training on GBV, and their performance assessments should include targets to investigate and follow-up on reported cases of domestic violence so they have a vested interest in holding perpetrators accountable. Ideally, the PHMs would like to see a government-appointed health authority established with the task to investigate incidents of domestic violence, and estate-level officers delegated to fulfil this work at the community level. The plantation welfare officers could be trained to respond to domestic violence and mandated to work collaboratively with the PHMs.

The PHMs also emphasised the potential value of having government appointed, trained, Tamil-speaking counsellors to work with them in the plantations. This service would ideally offer free-of-charge counselling for a host of mental health issues, including relationship counselling for couples and families, and to support men in changing violent behaviours. The PHMs emphasised that counselling services should not be designated strictly as support for women experiencing violence as the cultural stigma about speaking out against one's husband is so considerable it will limit uptake of the service.

Finally, the PHMs suggested a host of possible improvements on a smaller scale. They would like to have a small budget to offer transportation subsidies to support estate women to attend health and domestic violence support services outside the clinics. They suggested that men's organisations or the plantation management be encouraged (or incentivised by the government) to organise more recreational activities, in an effort to reduce men's alcoholism by filling idle time. They recommended that the existing GBV training be expanded and incorporated into basic midwifery training.

Changes are also required on a conceptual level to ensure improvements to the current situation. We only consulted a small number of patients in this study, making it difficult to evaluate whether the PHMs overestimated their efforts to address domestic violence. However, it was apparent that the traditional job description of an estate PHM fails to capture the many laborious and innovative strategies these women engage in to provide health services to pregnant women living with domestic violence – tasks for which they receive no performance-related rewards or recognition. The decline in traditional midwifery duties, such as birth attendance, and increased responsibility for social problems as complex as domestic violence, has contributed to diminished job satisfaction. It is our impression that this is affecting recruitment into the profession too, as that the majority of PHMs we met were middle-aged or older, most with more than 20 years of work experience.

In addition, it is important to recognise and address the challenges that community-based ANC presents. PHMs deliver many care services in communities and homes rather than institutions, such as medical clinics or hospitals. Home environments are associated with a multitude of symbolic meanings – privacy, security, nourishment, intimacy, terror and personal identity, to name only a few (Das, 2008; Williams, 2007). The ability and persistence of PHMs to address the health problems linked to domestic violence in such environments requires a tremendous expenditure of energy, time and resources.

5. Final conclusions

Domestic violence in pregnancy is a widespread issue affecting millions of women around the world every year. On a global scale, much has been written, and debated, about how the health sector can effectively and comprehensively respond to domestic violence (e.g., see García-Moreno et al., 2014). Moonesinghe and Barraclough (2007) propose various ways to integrate health care, human rights and legal responses in the Sri Lankan context specifically. Yet, the vast majority of scholarship on the topic has thus far underestimated the contributions of some of the key front line ANC service providers, such as PHMs.

Our study has revealed that estate PHMs in Sri Lanka have significant awareness of the nature, scope and magnitude of domestic violence in the communities within their professional jurisdictions. Due to their intimate knowledge of the estates and insider status within the communities, they are also uniquely situated in the health care system to assist women experiencing violence during their pregnancies. PHMs have also fashioned a set of creative strategies to address domestic violence through ANC, although this 'toolkit' is insufficient to deal with the enormous challenge of domestic violence and the multidimensional constraints on their daily work.

The effectiveness of the global movement to end domestic violence, and all forms of GBV, rests in part on its ability to acknowledge and incorporate the diverse local concerns that affect women's access to health and social justice around the world. Our study demonstrates the significance of local economic, structural, cultural and social ideologies and constraints for front line health service providers, and the abused women they work with. The model we have developed makes the conditions for implementing healthier landscapes of care more visible, contributing to increasing awareness and discussions on the roles and responsibilities of health care professionals in responding to and preventing domestic violence.

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