



ELSEVIER

Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

How do gender relations affect the working lives of close to community health service providers? Empirical research, a review and conceptual framework



Rosalind Steege^{a,*}, Miriam Taegtmeier^a, Rosalind McCollum^a, Kate Hawkins^b, Hermen Ormel^c, Maryse Kok^c, Sabina Rashid^d, Lilian Otiso^e, Mohsin Sidat^f, Kingsley Chikaphupha^g, Daniel Gemechu Datiko^h, Rukhsana Ahmed^{a,i}, Rachel Tolhurst^a, Woedem Gomez^a, Sally Theobald^a

^a Department of International Public Health, Liverpool School of Tropical Medicine, Pembroke Place, L3 5QA, UK

^b Pamoja Communications, UK Bishopstone, 36 Crescent Road, Worthing BN11 1RL, UK

^c Royal Tropical Institute, KIT Health, P.O. Box 95001, 1090 HA, Amsterdam, The Netherlands

^d James P. Grant School of Public Health, BRAC University, Mohakhali, Dhaka, Bangladesh

^e LVCT Health, Research and Strategic Information Department, P.O. Box 19835- 00202, Nairobi, Kenya

^f University Eduardo Mondlane, Department of Community Health, P.O. Box 257, Maputo, Mozambique

^g Research for Equity and Community Health (REACH) Trust, P.O. Box 1597, Lilongwe, Malawi

^h REACH Ethiopia, P.O. Box 303, Hawassa, Ethiopia

ⁱ Eijkman Institute for Molecular Biology, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia, Jalan Diponegoro 69, Jakarta, 10430, Indonesia

ARTICLE INFO

Keywords:

Gender
Community health workers
Close-to-community provider
Community health service delivery
Health system strengthening
Africa
Asia

ABSTRACT

Close-to-community (CTC) providers have been identified as a key cadre to progress universal health coverage and address inequities in health service provision due to their embedded position within communities. CTC providers both work within, and are subject to, the gender norms at community level but may also have the potential to alter them. This paper synthesises current evidence on gender and CTC providers and the services they deliver.

This study uses a two-stage exploratory approach drawing upon qualitative research from the six countries (Bangladesh, Indonesia, Ethiopia, Kenya, Malawi, Mozambique) that were part of the REACHOUT consortium. This research took place from 2013 to 2014. This was followed by systematic review that took place from January–September 2017, using critical interpretive synthesis methodology. This review included 58 papers from the literature. The resulting findings from both stages informed the development of a conceptual framework.

We present the holistic conceptual framework to show how gender roles and relations shape CTC provider experience at the individual, community, and health system levels. The evidence presented highlights the importance of safety and mobility at the community level. At the individual level, influence of family and intra-household dynamics are of importance. Important at the health systems level, are career progression and remuneration. We present suggestions for how the role of a CTC provider can, with the right support, be an empowering experience. Key priorities for policymakers to promote gender equity in this cadre include: safety and well-being, remuneration, and career progression opportunities.

Gender roles and relations shape CTC provider experiences across multiple levels of the health system. To strengthen the equity and efficiency of CTC programmes gender dynamics should be considered by policymakers and implementers during both the conceptualisation and implementation of CTC programmes.

1. Introduction

Close-to-community (CTC) providers' play an important role in

health service provision carrying out promotional, preventive, and/or curative health services and they are often the first point of contact to the health system for community members. They can be based in the

* Corresponding author.

E-mail address: Rosalind.steege@lstmed.ac.uk (R. Steege).

<https://doi.org/10.1016/j.socscimed.2018.05.002>

Received 29 November 2017; Received in revised form 26 April 2018; Accepted 2 May 2018

Available online 05 May 2018

0277-9536/ © 2018 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

Abbreviations

ASHA	Accredited Social Health Activist (India)
CHW	Community Health Worker
CTC	Close to Community
FGDs	Focus Group Discussions
LHW	Lady Health Worker (Pakistan)
MeSH	Medical Subject Headings
SDGs	Sustainable Development Goals
SSIs	Semi-structured interviews

community or in a basic primary health care facility (Lehmann and Sanders, 2007). By having direct contact with communities, they can expand access to services and contribute to improve health outcomes. CTC providers include a variety of different types, roles and designations of health workers, with Community Health Workers (CHWs) constituting the largest group (Theobald et al., 2015). Lewin et al., 2010 define a CHW as “any health worker carrying out functions related to health care delivery; trained in some way in the context of the intervention, and having no formal professional or paraprofessional certificate or degree in tertiary education” (Lewin et al., 2010, p7). In addition, it is advocated that CHWs should be members of, and selected by the communities they serve (Lehmann and Sanders, 2007).

The Sustainable Development Goals (SDGs) bring renewed emphasis on the importance of addressing the social determinants of health (UNDP, 2015). Understanding and harnessing CTC providers' intermediary or interface role between communities and the health sector will also be fundamental to achieving universal health coverage, as their unique position means they are strategically placed to understand (and potentially address) the social determinants of health. CTC providers are also not only a key cadre for service provision but, as described by Perez and Martinez, are also ‘natural researchers’ embedded in community realities, and able to relay these realities to outsiders, including policy makers (Perez and Martinez, 2008). CTC providers' experiences should be listened to, not only to understand these realities, but also to ensure that they are appropriately supported to realise their potential as agents of social change (Kane et al., 2016).

Richard Horton highlighted another key area of focus for achieving the SDGs when he wrote that SDG 5 (achieve gender equality and empower all women and girls) is the neglected SDG for health (Horton,

2015). There is growing literature around gender inequities within human resources for health (Dhatt et al., 2017; George, 2007; Standing, 2000). Still, there is limited country and project specific gender analysis of CTC service provision and the ways that gender dynamics shape CTC providers' experiences and their ability to deliver quality health services and address inequities. Research on how gender shapes CTC service provision has also not featured largely in health research or policy, and is an important gap to address (George, 2007; Östlin et al., 2011).

This paper aims to add to current literature, as well as provide a critical synthesis of the existing knowledge around gender and CTC health service provision. We present the challenges and opportunities across diverse geographical and programmatic contexts in order to provide key recommendations for policy makers to promote gender equitable CTC provider programmes. The conceptual framework presented in the results provides a visual representation of the factors affected by gender norms that impact the working lives of CTC providers that emerged from both the empirical research conducted as part of the REACHOUT consortium and the international literature. Although we acknowledge that gender as a concept is non-binary, our analysis focused on the distinctions between men and women, in line with the World Health Organisation's definition: “Gender refers to the socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of women and men” (WHO, 2011, p15).

There is also increasing acknowledgment of the need for an intersectional approach to gender analysis, which is critical to understanding the way different social stratifiers and power structures influence health inequities. CTC providers often have a lower socioeconomic status, educational level, and are predominantly women. They sit at the bottom of the health system hierarchy and are subject to the structural power relations which shape the health sector and their societies (Larson et al., 2016). These factors can influence their experience of gendered norms and relations. Where possible we have tried to bring an intersectional lens to the data presented, however, this data is largely missing from this emerging topic.

2. Methodology

This study uses a two-stage exploratory approach to synthesise learning on CTC providers' gendered experiences. The first stage was qualitative research across six country contexts (Bangladesh, Ethiopia,

Table 1

Interviews and focus group discussions conducted per country, by informant type (adapted from Kane et al., 2016).

Country	Bangladesh	Ethiopia	Indonesia	Kenya	Malawi	Mozambique
CTC provider	CTCP	HEWs	Kader (village midwife or nurse)	CHEWs	HSAs	APEs
FGDs	0	6	3	6	3	0
SSIs	Formal CTCPs-8 Informal CTCPs-16	12	44	0	8	18
CTC supervisor/manager/key informant						
SSIs	Paramedics-2, Clinic Managers-2, Counsellors-2, Nurse-1, Program officer-1	Kebele administrator-3, Health centre in charge-3, Delivery case team leaders-3, HEP coordinators-3, Regional HEP coordinator-1	Head of PHC or Puskesmas-4, Midwife coordinator-2, Head of district-2, MCH section-2	CHEWs-16, SCHMT members-3, Facility in-charges-4, National level policy makers-4	District level staff-13, Health centre in charges-2, NGO staff-9	Health facility supervisors-3, District supervisors-2
Community members						
FGDs	Married women-8 Married men-4	Women-6 Men-2	Men-2	4	Women-7 Volunteers-6	Mothers-8
SSIs	0	Mothers-12 TBAs-6	Mothers-39 TBAs-8 Head of village & head of PKK-17	10	Mothers-1 TBAs-6 Traditional leaders-3 Volunteers-2	Community leaders-6

APE = Agentes Polivalentes Elementares; CHEW = community health extension worker; CTCP = close-to-community providers, FGD = focus group discussion; HEP = health extension programme; HEW = health extension worker; HSA = health surveillance assistant; Kader = Village Health Volunteer in Indonesia; Kebele = smallest administrative district in Ethiopia or ‘neighbourhood’; MCH = Maternal and child health; NGO = non-governmental organisation; PHC = primary health centre; PKK = refers to the ‘family welfare movement’ – an Indonesian women's organisation; Puskesmas = sub-district community health centre; SCHMT = sub-county health management team; SSI = semi-structured interview; TBA = traditional birth attendant.

Indonesia, Malawi, Mozambique, Kenya) undertaken as part of the REACHOUT consortium between 2013 and 2014 (Koning et al., 2014). This revealed gender to be an important factor in shaping CTC provider experience, prompting the need for the second stage of this study, a focused review on gender and CTC providers, which took place from January–September 2017.

2.1. Stage 1, qualitative research across six countries

The REACHOUT consortium conducted primary research focused on factors influencing performance of CTC providers (Kok et al., 2015a). Qualitative research was most appropriate to obtain in-depth insight into supervision of CTC providers and barriers and facilitators into CTC provider motivation and performance (Pope et al., 2002). Participants (see Table 1) were purposively selected for diversity of age, gender, geographical location and experience. Common topic guides for focus group discussions (FGDs) and semi-structured interviews (SSIs) with CTC providers, policymakers, managers, and community members were developed. These were informed by a previous systematic review presenting an analytical framework on factors influencing the performance of CTC providers (Koning et al., 2014) and domains focused on tasks, roles and responsibilities, training and support, supervision, communication and relationships, motivation, referral, recruitment and incentives (Chikaphupha et al., 2016; Give et al., 2015; Kok et al., 2015b; Mahmud et al., 2015; McCollum et al., 2016; Nasir et al., 2016; Ndimba et al., 2015; Otiso et al., 2017).

Each country context used local health systems researchers, experienced and trained in qualitative data collection. Semi-structured topic guides were developed in English and translated into local language and back-translated for consistency. The topic guides were piloted and adapted. All participants provided informed consent; SSIs and FGDs were digitally recorded, transcribed and translated into English. A sample of transcripts was randomly checked against the recordings by one researcher per country. Daily debriefing sessions were held with all data collectors in each context to discuss key findings, encourage reflexivity, summarise notes and observations, identify saturation of themes and refine lines of inquiry. The transcripts were independently read in pairs by four researchers per country to identify key themes and develop a coding framework. This process used open-coding (Charmaz, 2014), combined with a pre-defined common framework of factors that could influence CHW performance common across all six countries (Koning et al., 2014). Transcripts were coded using NVivo (v.10) software, emerging themes were discussed, and the coding refined. The coded transcripts were further analysed and summarised in narratives by theme. Each country validated findings via meetings with district health offices. Although gender issues were not the focus of the studies, they emerged inductively in our data analysis. Queries were run on this data to explore findings related to gender norms and discussed within country teams (national analysis) and across the whole REACHOUT consortium team (inter-country analysis).

Ethical approval was granted by KIT Royal Tropical Institute, Amsterdam for the generic protocol. Each of the six countries obtained ethical clearance from their respective national ethics committee.

2.2. Stage 2: A systematic review to explore the impact of CTC providers' gender on their role and service provision in low and middle income countries

Methods for systematic reviews employing qualitative data are still developing, with many approaches emerging in this area (Barnett-Page and Thomas, 2009; Seers, 2015). One method is critical interpretive synthesis, which takes a grounded theory approach and uses techniques from qualitative research to guide an iterative process to the review process (Barnett-Page and Thomas, 2009; J. Corbin and Strauss, 1990; Dixon-Woods et al., 2006a). We deemed the critical interpretive synthesis approach most appropriate for the following reasons:

- 1) It is well suited to the emergent and exploratory nature of our review question: 'How do gender relations impact the working lives of CTC service providers?' This called for an organic approach to development of the search title and the search strategy (Dixon-Woods et al., 2006b)
- 2) Critical interpretive synthesis is a systematic approach facilitating the analysis of complex and diverse bodies of literature. This may include qualitative and quantitative data and includes forms of evidence that are traditionally excluded in conventional systematic reviews but that may be pertinent to an emerging research topic (Ako-Arrey et al., 2016; Dixon-Woods et al., 2005, 2006b)
- 3) Data is used to generate key themes and the relationships between them and presented in a conceptual framework. Demonstrating the complex interplay of these linkages is critical to better understanding the CTC providers' interface role and how this is shaped by gender in different contexts (Dixon-Woods et al., 2006b)

To help define a search strategy, eight papers were purposively selected for relevance (these were identified through searching the literature, discussions with stakeholders, including authors of relevant work at conferences) (Dixon-Woods et al., 2006b). The papers were mapped for relevant MeSH (Medical Subject Headings) terms and keywords using a MeSH analyser tool (Yale, 2015). These were used to define a search strategy for MeSH terms and related keywords pertaining to CTC providers, gender and low and middle income countries (see annex 1) to identify further relevant literature. Four databases were searched including SCOPUS, Medline, Cinahl and Global Health. Relevant papers were identified. Citation searches as well as searches of the reference lists of relevant papers were then performed, alongside ongoing consultations with experts to identify other papers of interest. A total of 58 papers met the study inclusion criteria (Fig. 1), these were then assessed for quality. Papers were then critically reviewed to assess impact of gender in CTC experiences and programmes and the authors' positionalities were analysed where explicit. Data were then independently extracted into a common data extraction table. This allowed for the development of themes, reflection and critique of papers with a particular focus on how gender norms and power relations shape CTC experiences and programmes. Themes, and the relationships between them, were then synthesised into a theoretical framework (Dixon-Woods et al., 2006b).

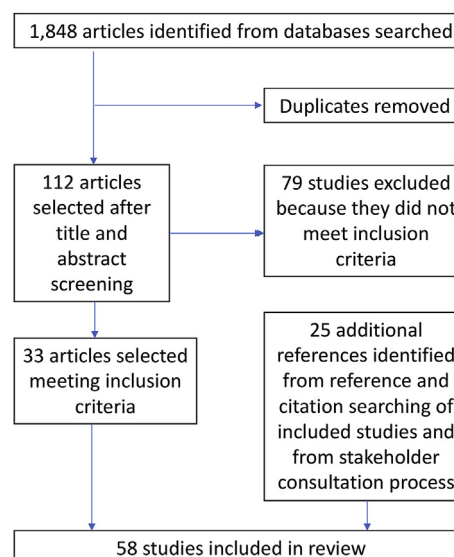


Fig. 1. Flow chart of the systematic review selection process.

2.3. Quality assurance

Stage 1: We reviewed and ran queries on the primary data (in the NVivo files) and presented the findings back to the wider diverse group of researchers from the six countries via the conceptual framework over the course of the REACHOUT consortium meetings. This was done to trigger and capture in depth discussions, reflect on our own experiences and positionalities and to discuss the extent to which it reflected the different contexts.

Stage 2: Aligned with the iterative approach to searching the literature adopted in critical interpretive synthesis and to enhance the trustworthiness of our analysis and identify further relevant literature, we conducted ongoing stakeholder consultation and critical reflections as a knowledge translation component (Arksey and O'Malley, 2005; Dixon-Woods et al., 2005; Dixon-Woods et al., 2006b). This involved presentations and discussions at conferences, in webinars and within the *Thematic Working Group on Strengthening and Supporting the Role of Community Health Workers in Health Systems Development*, of the Health Systems Global network (see annex 1). The large multi-disciplinary team were in continual dialogue, both within the team and with external stakeholders, to ensure the analysis and conceptual framework presented represents many perspectives across contexts.

Identified papers were double read to decide suitability for inclusion. When the two readers (RS, RM) disagreed a third adjudicator was sought (MT). Two authors (RS, RM) independently reviewed each paper for quality using the recognised Critical Appraisal Skills Programme assessment tool for qualitative research studies (CASP, 2013), and came together to agree on a final score. The critical interpretive synthesis approach was followed: studies which indicated most relevance and quality, were given greater weighting in the synthesis (Dixon-Woods et al., 2006a, 2006b) however, studies of all quality levels were included to give an overview of context globally, with an assumption that some methodologically weaker papers are theoretically and conceptually important (Ako-Arrey et al., 2016; Entwistle et al., 2012; Flemming, 2010).

3. Results

The results from the critical interpretive synthesis and the primary data collection are presented together according to the themes that emerged, and in relation to the individual CTC provider level, the community level, and health systems level. We present the gendered assets and challenges to health service provision and then describe opportunities for change and empowerment.

The interface of the CTC provider between the community and the health system (which the community is a part of) and how gender norms cut across the different levels and influence the factors is shown in Fig. 2. This in turn is mediated by other axes of inequity (shown on the left), and the political economy and health systems context (shown to the right).

Table 2 displays the studies included in the review by theme, and countries of mention by theme.

3.1. Individual CTC provider level

3.1.1. Influence of family and household dynamics

Power relations can influence people's decision whether to become CTC provider. Lack of family support is a common challenge to taking up this work, as signalled across the international literature (Ahmed et al., 2017; Alam and Oliveras, 2014; Alam et al., 2012b; P. C. Campbell and Ebuehi, 2011; Condo et al., 2014; Daniels et al., 2005; Fotso, 2015; Greenspan et al., 2013; Hoodfar, 2010; Jackson and Kilsby, 2015; Khan et al., 2012; Miller et al., 2014; Mumtaz et al., 2003; Najafizada et al., 2014; Nandi and Schneider, 2014; Newman et al., 2011; Nyanzi et al., 2007; Olang'o et al., 2010; Rahman et al., 2010; Razeq et al., 2012; Saprii et al., 2015; Sharma et al., 2014; Tripathy et al., 2016). In Kenya, a study found that husbands and children of female volunteer CTC providers, perceive the work as of low economic value to the family, which negatively affects participation (Olang'o et al., 2010). Family disapproval was also cited as a reason for attrition among female CHWs in Bangladesh (Alam and Oliveras, 2014) and in Pakistan, a lack of family support is felt by Lady Health Workers (LHWs), as cultural norms dictate that it is 'disrespectful' for females to

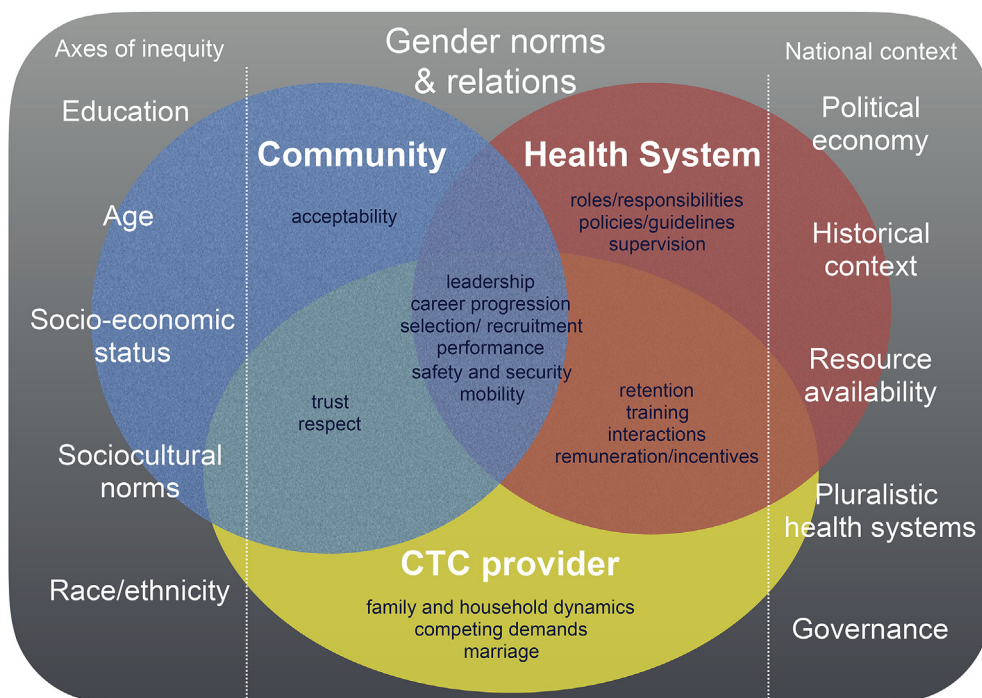


Fig. 2. Conceptual framework showing the areas affected by gender across the levels of individual, community and health system, the relationship between them, and the complex interplay within the broader health and political environment.

Table 2
Summary of papers reviewed by theme and country.

Themes (factors affected by gender)	Relevant studies	Countries of mention
Influence of family and household dynamics	Ahmed et al., 2017; Alam and Oliveras, 2014; Alam et al., 2012b; Campbell and Ebuehi, 2011; Condo et al., 2014; Daniels et al., 2005; Fotso, 2015; Greenspan et al., 2013; Hoodfar, 2010; Jackson and Kilsby, 2015; Khan et al., 2012; Miller et al., 2014; Mumtaz et al., 2003; Najafizada et al., 2014; Newman et al., 2011; Nandi and Schneider, 2014; Nyanzi et al., 2007; Olang'o et al., 2010; Razee et al., 2012; Rahman et al., 2010; Saprii et al., 2015; Sharma et al., 2014; Tripathy et al., 2016	Afghanistan, Bangladesh, Ethiopia, The Gambia, India, Iran, Kenya, Lesotho, Pakistan, Papua New Guinea, Rwanda, South Africa, Tanzania, Uganda
Safety and security	Ahmed et al., 2017; Fotso, 2015; Hoodfar, 2010; Jackson and Kilsby, 2015; Khan et al., 2012; Miller et al., 2014; Nyanzi et al., 2007; Razee et al., 2012	Ethiopia, The Gambia, India, Iran, Pakistan, Papua New Guinea, Uganda
Acceptability	Abbott and Luke, 2011; Ahmed et al., 2017; Alam et al., 2012a; Alamo et al., 2012; Elazan et al., 2016; Feldhaus et al., 2015; Fotso, 2015; Gittings, 2016; Geldsetzer et al., 2017; Hill et al., 2008; Javanparast et al., 2011; Jenkins, 2011; Jenson et al., 2014; Kipp and Flaherty, 2003; Kambarami et al., 2016; Katabarwa et al., 2001; Miller et al., 2014; Mohan et al., 2003; Müller et al., 2010; Mumtaz et al., 2015; Najafizada et al., 2014; Newman et al., 2011; Olang'o et al., 2010; Uzonde et al., 2015	Afghanistan, Bangladesh, Ghana, India, Iran, Kenya, Lesotho, Nigeria, Pakistan, Peru, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zimbabwe
Mobility	Ahmed et al., 2017; Ahmed et al., 2017; Ahmed et al., 2017; Ahmed et al., 2017; Elazan et al., 2016; Feldhaus et al., 2015; Fotso, 2015; Hoodfar, 2010; Jackson and Kilsby, 2015; Miller et al., 2014; Mohan et al., 2003; Müller et al., 2010; Mumtaz et al., 2003; Newman et al., 2011; (Rahman et al., 2010; Saprii et al., 2015; Sharma et al., 2014; Uzonde et al., 2015	Bangladesh, Ethiopia, India, Iran, Lesotho, Nigeria, Pakistan, Rwanda, Tanzania, Uganda
Working conditions, career opportunities and performance	Alamo et al., 2012; Bagonza et al., 2014; Clemmons et al., 2002; Crispin et al., 2012; Daniels et al., 2005; Daniels et al., 2012; Devkota and van Teijlingen, 2010; Eskandari et al., 2016; Jackson and Kilsby, 2015; Javanparast et al., 2011; Jenson et al., 2014; Katabarwa et al., 2001; Kipp and Flaherty, 2003; Miller et al., 2014; Mohan et al., 2003; Mumtaz et al., 2003; Nyanzi et al., 2007; Sharma et al., 2014; Topp et al., 2015; Tripathy et al., 2016	Cameroon, Ethiopia, The Gambia, India, Iran, Kenya, Nepal, Nigeria, Pakistan, South Africa, Tanzania, Uganda, Zambia
Remuneration and incentives	Dorwie and Pacquiao, 2014; Greenspan et al., 2013; Jackson and Kilsby, 2015; Jenkins, 2009; Miller et al., 2014; Mumtaz et al., 2015; Nandi and Schneider, 2014; Newman et al., 2011; Olang'o et al., 2010; Rahman et al., 2010; Swartz and Colvin, 2015; Topp et al., 2015; Utomo et al., 2006	Bangladesh, Ethiopia, India, Indonesia, Kenya, Lesotho, Pakistan, Peru, Sierra Leone, South Africa, Tanzania Zambia
Selection & recruitment	Nandi and Schneider, 2014	India
Empowerment and Leadership	Alam et al., 2012b; Campbell and Ebuehi, 2011; Condo et al., 2014; Corbin et al., 2016; Dorwie and Pacquiao, 2014; Hoodfar, 2010; Jackson and Kilsby, 2015; Jenkins, 2009; Miller et al., 2014; Mumtaz et al., 2003; Mumtaz et al., 2013; Mumtaz et al., 2015; Nyanzi et al., 2007; Najafizada et al., 2014; Saprii et al., 2015; Sarin and Lunsford, 2017; Tripathy et al., 2016; Utomo et al., 2006	Afghanistan, Bangladesh, Ethiopia, The Gambia, India, Indonesia, Iran, Pakistan, Peru, Rwanda, Sierra Leone, South Africa, Tanzania, Uganda

interact with members of the other sex (Mumtaz et al., 2003).

In Afghanistan, family support is often a necessity to the role as the male head of the family needs to give permission for women to become CHWs (Najafizada et al., 2014). Likewise in Iran, obtaining a husband's permission is required to for women to leave the marital home and hold a job (Hoodfar, 2010). Where husbands refused permission for their wives to become a CTC provider this was linked to an unwillingness to give up control over the time and mobility of their wives, concerns that women's volunteer work might lead to neglect of family responsibilities, and fears about the safety of women going door to door (Hoodfar, 2010). Women used their initiative to devise strategies that would appease their families' concerns, e.g. by travelling in teams of two, indicating women's agency in strategies to expand their roles beyond the conventional restrictions of home and family (Hoodfar, 2010).

In CTC programmes where female CTC providers are required to live in the same community that they work in, marriage to someone from a different community can be another cause of attrition. Our

primary data revealed that in rural areas of Ethiopia, Kenya, and Malawi attrition or transfer among female CHWs was attributed to marriage that caused women to move out of their (home) village.

“One of the [Health Surveillance Assistants] has been transferred ... the other one was at Phare where there was a female [Health Surveillance Assistant] who has followed her husband to Dowa.”

Health Surveillance Assistant, Malawi

In Ethiopia, strict policies that prevent female Health Extension Workers transferring to another health post, is a frustration for many women wanting to move to their husband's village. The policy has since been revoked but is rarely enforced, and forces partners to either live apart, or women to leave their position as a Health Extension Worker.

“Agriculture development agents are getting transfer, education ... We also have the right to get married. We have to be with our husband as like other sectors doing. There is a provision of government which says “the wife and the husband should not separate

due to work place”

Health Extension Worker, Ethiopia

From the literature, marriage, and its implications for relocation, was a factor that influenced attrition rates among female CTC providers. In Afghanistan, it is common for female CHWs to stop working when they get married and they are no longer willing to relocate for work (Najafizada et al., 2014). These dynamics are also particularly acute in Pakistan where it is perceived to be shameful for a husband to relocate because of his wife's work (Mumtaz et al., 2003).

Emerging from our empirical research and the international literature was also the expectation that female CTC providers are expected to fulfil household chores and care for the children and elderly family members in addition to their work. For example, Accredited Social Health Activists (ASHAs) in India were reprimanded by their husbands or elders if they did not fulfil their traditional role as good ‘daughters-in-law’ by completing domestic duties and social obligations (Saprii et al., 2015). In South Africa, female respondents reported being pulled between domestic duties and their role as a CTC provider in the community (Daniels et al., 2005) and in Rwanda the varying and unpredictable intensity of the work was perceived to be detracting from time necessary for families (Condo et al., 2014). Attrition due to conflict with family commitments also came out strongly in Bangladesh (Alam et al., 2012a; Alam and Oliveras, 2014). These examples serve to highlight the multiple roles female CTC providers are asked to fulfil; often the main caregivers, it can be difficult for them, and their families, to justify volunteering their time, yet this remains largely expected of them.

3.1.2. Safety and security

Insecurity can affect performance among CTC providers. The REACHOUT consortium data indicated that safety was a challenge to service provision at night, and during the day in urban informal settlements in Kenya and Bangladesh, and to some degree in rural contexts in Kenya. In Kenya, there were reports of threats of violence by husbands in the community to CHWs wanting to conduct HIV testing, and reports of rape of CHWs. Participants suggested that female CHWs needed to be accompanied by security officers and called for attention to their safety.

“... Security for the CHWs is wanting; so many CHWs have been raped in the course of their work by the clients. CHWs need total security as they are also human beings, so we pray that if possible security should be provided. I know that at times it is not possible, for we pray if it is possible that this issue be looked upon.”

CHW, Kenya

Insecurity for female CTC providers was also an emerging theme in the literature (Ahmed et al., 2017; Dasgupta et al., 2017; Fotso, 2015; Hoodfar, 2010; HSG, 2016; Jackson and Kilsby, 2015; Khan et al., 2012; Miller et al., 2014; Mumtaz et al., 2003; Nyanzi et al., 2007; Razee et al., 2012). In Odisha, India, ASHAs reported that safety was a concern and that they could not attend to expectant mothers at night as they were afraid to walk alone (Fotso, 2015). Similar concerns were felt in Papua New Guinea, where female CHWs would ask male colleagues or their husbands to escort them during night visits demonstrating a pragmatic, problem solving approach taken to circumvent safety concerns (Razee et al., 2012). Evidently, further action over the safety concerns facing this cadre needs to be taken, both in the context of Papua New Guinea - which has one of the highest rates of gender-based violence in the world (HRW, 2016) - and globally; tragic events in India in 2016 also saw the rape and consequent suicide of an ASHA, Somwati Tyagi, during the course of her work (Dasgupta et al., 2017). Moreover, insecurity for CHWs can be particularly acute in conflict-affected settings. In times of conflict in the Democratic Republic of the Congo it is not uncommon for nurses to leave their posts for more secure locations leaving CHWs to take responsibility for clients. CHWs in the Democratic Republic of the Congo are commonly older women and they run a high

risk of rape at the community level in times of conflict (HSG, 2016; Raven et al., 2015).

Of particular note, the threat of violence and sexual harassment for female CTC providers is not only experienced within the community; the threat is also felt within the health system and demands attention. In Pakistan, LHWs were subject to sexual harassment from both upper management and lower level male staff within the health system (Mumtaz et al., 2003). This was particularly demotivating for the LHWs, and some reported harassment during training by their male co-workers as a cause of attrition (Mumtaz et al., 2003).

3.2. Community level

3.2.1. Acceptability

The sex of the CTC provider affected the acceptability and uptake of services in the community, shaped by gender norms, relationships and types of services offered. In all REACHOUT countries, female CTC providers were perceived to be more able than male CTC providers to encourage pregnant women to access facilities and in Mozambique and Malawi cultural norms formed a barrier to male CTC providers visiting women in their homes. This dynamic was corroborated in the literature (Abbott and Luke, 2011; Ahmed et al., 2017; Alam et al., 2012a; Alamo et al., 2012; Elazan et al., 2016; Feldhaus et al., 2015; Fotso, 2015; Geldsetzer et al., 2017; Gittings, 2016; Hill et al., 2008; Javanparast et al., 2011; Jenkins, 2009; Jenson et al., 2014; Kambarami et al., 2016; Katarbarwa et al., 2001; Kipp and Flaherty, 2003; Miller et al., 2014; Mohan et al., 2003; Müller et al., 2010; Mumtaz et al., 2015; Najafizada et al., 2014; Newman et al., 2011; Olang'o et al., 2010; Uzundu et al., 2015). Interestingly, a study in Uganda also found that female CTC providers had statistically significantly more female clients who kept family planning a secret from their spouses than male CTC providers (Kipp and Flaherty, 2003). This suggests a notion of greater trust between women in the community and female CTC providers; trusting relationships have also been shown to impact on performance and is crucial to CTC providers intermediary position (Kok et al., 2017).

These same gender norms can also impact upon the ability of CTC providers to perform their roles. Uptake of health services is often influenced by decision-making and norms at the community level. This in turn reinforces these norms within households (as household ideologies often reflect that of the community) and may constrain autonomy in decision making within households. The REACHOUT consortium qualitative research documented the influence of socio-cultural norms, gender expectations, and relationships regarding household decision making, where often husbands or mothers-in-law are the primary decision-makers.

“My challenge is the communities couldn't accept what I told about health facility delivery. The pregnant woman wanted to deliver at home because her husband didn't permit her to deliver in the health facility.”

CHW, Indonesia

This presents challenges for both female and male CTC providers in patriarchal societies, who negotiate situations where women may not be allowed to make decisions due to the influence of gender and generation. This was also demonstrated in the empirical research from Kenya, where patriarchal norms mean women who challenge their husbands' decisions are at risk of gender-based violence.

Male CTC providers may be well placed to gain male acceptance in receiving health messages in the community and help to transform gender norms. REACHOUT findings from Kenya found that the lack of male CHWs was perceived by the community to be a barrier to effective family planning and voluntary counselling and testing services for HIV.

The critical interpretive synthesis also demonstrated the complementary role of male CTC providers in increasing uptake of family planning services in India (Fotso, 2015). ASHAs perceived the introduction of male CTC providers as an opportunity to counsel men in

the community, who were responsible for decision making around their wives' health, that the ASHAs were previously unable to reach (Fotso, 2015). Nevertheless, male CTC providers may be a barrier to the uptake of services among women – in Lesotho men were less accepted as they were perceived to have ulterior motives in the care setting and female clients reported vulnerability to sexual exploitation as men were seen to be untrustworthy when it comes to sex (Newman et al., 2011). Men who did take on a caregiving role were stigmatised by community members, as caregiving was associated with a feminine social identity (Newman et al., 2011). In Tanzania, both male and female CTC providers were accused of conducting house visits due to adulterous motives; CHWs were encouraged to conduct house visits in male and female pairs to mitigate this (Feldhaus et al., 2015).

Issues of mistrust of provider by sex emerged from our qualitative research, causing a barrier to service provision; husbands in Kenya were suspicious of young male CHWs visiting their wives at home, demonstrating how gender discrimination intersects with other axes of inequity such as age, and marital status to shape interactions between CTC providers and different household members.

“There are gender and age barriers in the community ... For example, the CHEW [Community Health Extension Worker] is a young man and they know that you are not married so when you visit the home the people will be wondering whether you are going after their daughters or their young wives ... And when you are young lady and you are coming to talk about family planning, they will feel that you don't know what you are talking about since you are not married and you have never given birth to a baby”

CHW, Kenya

3.2.2. Mobility

Although communities may prefer female CTC providers for certain tasks (e.g. maternal health services), women may also face challenges at the community level. The challenges of restricted mobility can hinder female CTC providers' ability to do their job (Ahmed et al., 2017; Elazan et al., 2016; Feldhaus et al., 2015; Fotso, 2015; Hoodfar, 2010; Jackson and Kilsby, 2015; Miller et al., 2014; Mohan et al., 2003; Müller et al., 2010; Mumtaz et al., 2003; Newman et al., 2011; Rahman et al., 2010; Saprii et al., 2015; Sharma et al., 2014; Uzundu et al., 2015). Cultural restrictions around women's movement obstruct both women's access to healthcare, and CTC providers access to client's homes (Alam et al., 2012a; Mumtaz, 2012; Najafizada et al., 2014; Rahman et al., 2010). To circumvent women's consequent poor access to healthcare in Pakistan, the government introduced Lady Health Workers (LHWs) (Mumtaz, 2012; Mumtaz et al., 2003). However, these discriminatory social norms also meant that LHWs' movement was attributed to a loss in social status among the women performing this role, and lead to marginalisation of LHWs by their families and community members (Mumtaz, 2012; Mumtaz et al., 2003). LHWs reported having to ask a brother, mother, or husband to accompany them on their duty rounds, limiting their ability to do their job (Mumtaz et al., 2003), the reasons why this was limiting were not explicit from the paper however this would likely lead to a dependence on another family member's availability and potentially infringe on CTC provider-client confidentiality. A study by Saprii et al. in India found issues of topography can also make female mobility difficult and these were exacerbated when combined with ethnic conflicts. These two things led to frequent road closures, insecurity, and were detrimental to health services (Saprii et al., 2015).

Gender norms and their influence on mobility can have implications for the implementation of CTC programmes. This was demonstrated in Northern Nigeria where male CHWs were provided motorcycles by the local government (Uzundu et al., 2015). Female CHWs however, were prevented from exposing their legs due to conservative Islamic beliefs and were not allowed to use motorcycles until programme developers held an advocacy meeting with traditional leaders in which they

consented to women riding 'gender-sensitive' motorcycles (that did not expose their legs) (Uzundu et al., 2015). Similar dynamics were shown in the Afar region of Ethiopia where the few male CHWs were provided with bicycles (Jackson and Kilsby, 2015). The men expressed discomfort with the situation and would have liked to see their female colleagues be given the same benefit (Jackson and Kilsby, 2015).

Gendered religious customs were also found in Afghanistan where it is preferable to have both a male and female CHW at health posts yet Islamic law dictates men and women cannot interact unless they are 'Mahram' – relatives of the other sex (Najafizada et al., 2014). Such belief systems may have repercussions for the health system in recruitment and employment of CTC providers and serve to highlight the complexity of gender relations and their connection with faith. In India ASHAs are also limited by religious boundaries, where Hindu ASHAs were not able to enter Muslim homes (Sarin and Lunsford, 2017). There are also instances where faith enables CTC providers to transcend cultural norms. For example, in South Africa a male pastor interpreted his ability to provide intimate care, traditionally deemed female labour, not because of his commitment to challenge gender norms, but because of his Christian ethic of care (Swartz and Colvin, 2015). In Bangladesh, unmarried CHWs were referred to as 'girls' (as opposed to women) and felt uncomfortable moving around the community, this was overcome once they started to wear a Muslim headdress 'niqab', increasing their confidence when travelling (Rahman et al., 2010). This demonstrates the power of observing religious customs over adhering to gender and socio-cultural norms, in building trust and respect within the community.

3.3. Health system level

3.3.1. Working conditions, career progression and performance

The REACHOUT consortium data from Malawi revealed that although Health Surveillance Assistants in Malawi are both male and female, men are more likely to be in supervisory roles. Low female education and literacy were cited as reasons for women's lower position in the health system hierarchy, emphasising the intersect between gender and education. In Ethiopia, a lack of career advancement opportunities were a cause of demotivation and attrition among Health Extension Workers.

The lower position of women within the health system may also not solely rely on education and other opportunities for skill development. In Afghanistan, restricted mobility was cited as a barrier to women taking on supervisory roles (Najafizada et al., 2014). Challenges of the competing demands that women face with regards to their domicile status may also make upward mobility for women more difficult. A lack of opportunities for women to advance also means that women have less opportunity to improve their socio-economic status. In Pakistan, LHWs have had minimal increase in salary, including those with 30–40 years of service (Mumtaz et al., 2003). This, coupled with a lack of clear job descriptions for LHWs, and an expectation they will perform whatever task is required, leads to demotivation and poor performance (Mumtaz et al., 2003). In India, lack of clear job descriptions and lack of promotion for good performance alongside an absence of 'employee status' for female ASHAs also led to frustration (Sharma et al., 2014). Of note, these issues were raised in female only CTC provider programme contexts and begs the question: would this be acceptable for men? Jackson and Kilsby argue this question should be the litmus test for decisions around working conditions for female health extension workers in Ethiopia (Jackson and Kilsby, 2015), but we would argue this should be extended to all female CTC provider programmes.

A study on community antiretroviral therapy and tuberculosis treatment supporters in Uganda, found that males lost more patients for follow up than females (Alamo et al., 2012). A study in Kenya demonstrated that while male CHWs were 60% more likely to keep better records than female CHWs, women were 58% more likely to counsel and 71% more likely to be able to convince their clients to adopt

evidence-based maternal care practices than men (Crispin et al., 2012). Similarly, in Lesotho women saw themselves as having a greater ability to talk clients into adherence (Newman et al., 2011). In Kenya, it was not only ability that was affected by gender but roles and responsibilities. Male CTC providers were suggested to be fearful of performing certain tasks e.g. changing soiled bedsheets and washing patients – it was suggested that only women possessed the tolerance to be able to perform these duties and many women saw it as their ‘natural duty’ (Olang’o et al., 2010).

When appropriate and supportive policies are not in place, reproductive roles can also impact upon performance due to frequent absenteeism due to pregnancies and other maternal health issues. Sharma et al. reported that as many ASHAs belong to the reproductive age group (25–40 years), frequent periods of maternal leave affected service delivery; though noted this was in part due to the absence of any government policy to make interim arrangements during an ASHA’s maternity leave (Sharma et al., 2014). In Ethiopia, working through pregnancies and menstruation periods was mentioned as a hardship for female Health Extension Workers, who would continue to walk long distances during these periods (Jackson and Kilsby, 2015).

3.3.2. Remuneration and incentives

Lack of proper remuneration can be a cause of high attrition rates among CTC providers, which can have negative effects on the cost-effectiveness and sustainability of programmes. The REACHOUT consortium qualitative research found that attrition rates of male volunteers in both rural and urban areas in Kenya and Malawi was high due to the gendered role of men as breadwinners, making commitment to a voluntary role challenging.

“... [in] slum sectors where the guys are working in a casual business, you will find out that you have recruited so many guys, that is the men, but by the end of it all you will find that men do go for some job outside the area in the day time and come back at night. Women are the ones who most of the times stay around, so we have to consider that one.”

CHW, Kenya

Remuneration also came out as a theme in the literature (Dorwie and Pacquiao, 2014; Greenspan et al., 2013; Jackson and Kilsby, 2015; Jenkins, 2009; Miller et al., 2014; Nandi and Schneider, 2014; Newman et al., 2011; Olang’o et al., 2010; Rahman et al., 2010; Swartz and Colvin, 2015; Topp et al., 2015; Utomo et al., 2006). One study from Zambia found that women were significantly more likely than men, to agree that they joined an HIV volunteer programme because they wanted “to receive things and allowances”, “get a paying job” or because they “have no job” (Topp et al., 2015), highlighting the disparity between paid career opportunities for men and women. In Lesotho, lack of payment for HIV-related caregiving reinforced the gendered segregation of the caring role, where women and girls make up the most of the informal and largely unpaid care workforce (Newman et al., 2011). The community perceived men’s free labour as a farce, whereas women were expected to work for nothing (Newman et al., 2011). Typically, women are ‘vertically segregated’ to lower, less well-paid jobs and it has been argued that gender segregation in the labour market is also of the most profound and enduring dimensions compared with segregation by race or class (Newman et al., 2011). An intersectional lens is also particularly important in understanding remuneration in low and middle-income countries where women are often at the lower end of the gender-class-socioeconomic hierarchy (Mumtaz et al., 2003).

Payment needs vary across contexts. In rural and urban Sierra Leone female traditional birth attendants are often the breadwinners of the family (Dorwie and Pacquiao, 2014) and rely on income generated from the role. Lack of or irregular payments can also impact on performance and relationships with the community as demonstrated in the ASHA programme in India (Saprii et al., 2015). ASHAs felt unable to manage the basic needs of their families and children’s education which resulted

in pressure from husbands and family members to discontinue their role (Saprii et al., 2015). Highlighting the complexities of how social norms and beliefs play out across contexts, in some settings volunteer status is a necessity for social acceptance. In Iran, alongside the salaried CHW programme that recruits both men and women, a female only Volunteer Health Worker cadre has been in existence since 1992. The volunteer status of this all-female cadre aligns with social norms that dictate women should not earn money (Hoodfar, 2010). This is in part due to men feeling their position of authority over their wives is derived primarily from their economic power; a voluntary status meant husbands were more accepting of their role, and were proud of the knowledge and respect that their wives have earned (Hoodfar, 2010). Nevertheless, programmes need to be able to evolve. While voluntary roles may have been historically necessary to gain acceptance, once the role is established, the issue of remuneration should be re-evaluated to ensure women are not being exploited and can gain economic independence.

3.3.3. Selection and recruitment policies

The REACHOUT consortium qualitative data demonstrated the role village heads and village health committees play in influencing the selection and recruitment of CTC providers. However, there are also gendered factors that may influence recruitment of CTC providers. In Mozambique, the stipulation that Agentes Polivalentes Elementares attend a four-month residential training programme may make it difficult for women to take up the role due to gendered household responsibilities. In addition, women’s poorer educational status means men are more able to fill the roles.

“In the community, a majority of us women didn’t get the opportunity to go to school; our fathers didn’t allow us to go to school. And in the APE [CHW] activities you must know how to read and write in order to not give the wrong medicine to the community. ... Some women know how to write and read; however, some husbands refuse to allow their wife to become an APE, arguing that she will have a relationship with other men during the training and that she will not have time to take care of the household and the children.”

Mother, Mozambique

In India, when selecting CTC providers for the Mitani programme, the community and village council members considered factors such as mobility, ability to speak, leadership qualities, availability of time and family obligations, along with her being from the same village and of the same socioeconomic profile (Nandi and Schneider, 2014). For programmes that select both male and female CTC providers these types of considerations may inadvertently preference men.

3.4. Overcoming gendered challenges to CTC programming through trust, empowerment and leadership

Despite the above limitations for females, being a CTC provider can be an empowering experience. While this is true for both men and women, the effects can be more pronounced for women. The REACHOUT consortium data from Bangladesh found that trust and respect for CTC providers from community members enabled women to gain confidence in negotiating challenges, and largely work freely and without difficulty outside the home.

“No, I don’t face any problems. I go at 2.00am too. No one says anything. Even the Mafias [referring to the leaders of local thugs] don’t say anything to me. Their children’s delivery also happens by my hand. They know that they need me. If I go somewhere late at night, they understand that I have a delivery to attend. That day I went to Kolapara at 2.00am. On the way I met a Mastan [referring to a greatly feared local leader]. He asked me, ‘Aunty, where are you going?’. I told him, ‘Kolapara, a patient’s house.’ He told me, ‘You can go, Aunty. There’s no problem. If there’s any problem, just tell them my name.’ Then I said, ‘You guys are the Mastans. If you don’t

do any harm to me, who else would do it?' I talked like this. They respect me. That's why he didn't say anything."

Dai, Bangladesh

Gender roles and relations are in flux; and empowerment of female CTC providers has been seen across many contexts (Alam et al., 2012b; P. C. Campbell and Ebuehi, 2011; Condo et al., 2014; J. H. Corbin et al., 2016; Daniels et al., 2005; Dorwie and Pacquiao, 2014; Hoodfar, 2010; HSG, 2016; Jackson and Kilsby, 2015; Jenkins, 2009; Miller et al., 2014; Mumtaz et al., 2015; Mumtaz et al., 2003; Mumtaz et al., 2013; Najafizada et al., 2014; Nandi and Schneider, 2014; Newman et al., 2011; Nyanzi et al., 2007; Saprii et al., 2015; Sarin and Lunsford, 2017; Tripathy et al., 2016; Utomo et al., 2006). In Afghanistan, being a CHW enables women to move more freely in the community in order to visit other women in their homes. This was reported to be an empowering experience for female CHWs (Najafizada et al., 2014). In Palestine, building trusting relationships with village steering committees, village councils, and the wider community helped overcome issues female CTC providers faced around lack of mobility and acceptance (HSG, 2016). Community acceptance of female CTC providers also contributed to acceptance of other working women in the community. Palestinian female CHWs have become highly respected members of the community, serving as role models for other women (HSG, 2016).

CTC providers have also emerged as local leaders in a space where women may contribute in a limited way to local politics. In Pakistan, Mumtaz et al. found that changing aspirations, coupled with economic benefits, are some of the reasons women seek work as a LHW (Mumtaz et al., 2003). Women's potential to contribute to the economy of the family is being recognised by women and their families – representing a fundamental change in the cultural norms that govern this society (Mumtaz et al., 2003). In Iran, the opportunity for women to adopt a public role in the health worker programme has led to more democratised households (Hoodfar, 2010). Like Pakistan, Iran has also seen the emergence of women as local leaders and political activists. Volunteers have become skillful in gaining support from the Ministry of Health and became involved in advocacy via petitions and local media campaigns to lobby for broader health and well-being services for the community (Hoodfar, 2010). In India, where women are usually excluded from becoming members of the village council, ASHAs proactively negotiated with the community and helped to set maternal health as a priority in the village development agenda (Saprii et al., 2015) suggesting gender transformation is occurring at the community level.

In South Africa, the role of a Lay Health Workers has allowed women to feel empowered to seek further skills, opening up opportunities for development (Daniels et al., 2005) and in Lesotho, the caregiving role was seen as a source of power for women in the community (Newman et al., 2011). Research from India also found that the position of ASHA allowed women to take on a separate identity from their husband or father and they were seen as more than just 'somebody's wife', or 'somebody's daughter' (Sarin and Lunsford, 2017). Critically, another study on the ASHA programme found the position transformed harmful gender norms and meant some women were no longer at risk of gender based violence in their own homes, as they worked to address this issue within the community (Nandi and Schneider, 2014).

4. Discussion

This paper synthesises empirical research and literature from multiple sources and country contexts to demonstrate the ways in which gender norms and power relations shape CTC providers' experiences and interactions at individual, community, and health systems levels. While there is growing interest in gender and human resources for health, the focus on CTC providers brings additional insights into an often-overlooked cadre of health workers and gives direction to generalisable priorities and lessons for policy and practice.

4.1. Gender interactions are complex and in flux

Health professionals' experiences at all levels of the health system are shaped by gender norms and power relations (Dhatt et al., 2017; Standing, 2000). Most navigate gender norms from an institutional space in which they interact with communities but leave at the end of the day. By contrast, CTC providers predominantly operate within their own community and household spaces and continuously navigate relationships from the bottom up and within the existing hierarchies on a constant basis.

Our conceptual framework demonstrates some of the ways gendered relations act on CTC providers at different levels in ways which inter-link, are complex and vary by context. For example, safety and security cuts across all three levels of our conceptual framework: it impacts on individual CTC providers' own experiences of safety, both within the community and the health system, and how safe they feel in their daily role. It also influences individuals within the community in the form of neighbours and family members who may be recruited to help ensure CTC provider safety. Similarly, recruitment is shaped by both community norms and the health system, including the policies that dictate choice and procedures.

Current policies and ways of working are implicitly set to male norms; greater female representation in policy making positions is crucial to bringing about change in this area (Standing, 2000). For example, in Mozambique, policy dictates all new Agentes Polivalentes Elementares must undergo four months of training, which brings challenges for some women due to domestic and childcare obligations. Bringing a stronger gender analysis to CTC programme policies is vital to ensuring gender equity and sustainability within CTC programmes.

Women working as CTC providers in a patriarchal society are presented with many challenges. Nevertheless, the notion of empowerment came out strongly from several contexts as something that sets apart female CTC providers from other women in the community. In some settings women were attracted to the role because of the gender inequality in their community and they saw the position as a way to improve social status, upgrade their education and as a potential conduit into higher-level jobs within, and outside, the health system.

4.2. Policy implications for CTC programmes

Context matters in health systems; focussing on CTC providers highlights this as gender, poverty, power and other axes of inequality play out in different ways at the community level (Theobald et al., 2016). Whilst there is no blueprint for how gender impacts CTC providers, our results have shown that there are similarities across contexts allowing comparisons and recommendations for policy to be drawn. Based on this we present key areas for policy consideration:

- 1. Safety** - Laws and policies that protect women who are working as CTC providers are of paramount importance. Everyone deserves the right to feel safe and protected by their employer and CTC providers are no different; ensuring safety of this cadre is important for realising universal health coverage and supporting female empowerment. Our findings have highlighted that patriarchal relations can manifest in particularly violent ways within many different settings which should prompt the health sector to introduce health and safety measures to protect those they have a duty of care to.
- 2. Remuneration** - Literature demonstrates that women are paid far less than their male counterparts and undertake a significant portion of unpaid work (Sen and Ostlin, 2008). Remuneration in CTC provider programmes varies greatly, some are volunteers without any incentives or financial compensation whereas others are formally employed and paid salaries by the health sector. Unpaid or poorly paid positions tend to attract women who may have more limited prospects to secure other paid work (Newman, 2014). Yet, by paying female CHWs a rate that is not deemed 'acceptable' for men CTC

provider programmes are further perpetuating the inequalities that exist and placing women at further risk of male power. Women's unpaid caring work needs to be formally recognised and valued to break the harmful gender norms that assume women are easier and cheaper to hire and that the women's labour is more pliant. Labelling the work as 'voluntary' also reinforces the perception that women have domestic duties they need to work around. This should be accompanied by strict recruitment criteria as programmes that promote payment of CHWs may also have unintended consequences. For example, in Mozambique, the revitalized CHW policy had an explicit preference for selecting women (MoH, 2010), however in practice communities selected men to play this role. The reasons for this are unclear but one theory is that men as 'breadwinners' are perceived as more deserving of paid work. Again, this is an area where policies accompanied by an enabling environment towards selecting women could empower female CHWs and enable men to pursue more traditionally female roles.

Career progression opportunities and participation in leadership - There is a growing body of analysis concerning gender inequities in leadership within the health sector at international, national and institutional levels showing how women are under-represented in leadership roles (Dhatt et al., 2017). Arguably, male and female CTC providers are leaders within their own community. However, evidence shows that female CHWs are less likely to advance into decision-making positions as leadership roles are often reserved for men (C. Campbell et al., 2009; Newman, 2014; Sen and Ostlin, 2008). These opportunities for professional development and promotion within CTC programmes are often lacking. This needs to be built into the system of CTC programming to encourage women to progress into higher levels of the health system and leadership positions if they so desire and provide the opportunity for women to input into health systems policy development (C. Campbell et al., 2009; P. C. Campbell and Ebuehi, 2011; Daniels et al., 2012; Jackson and Kilsby, 2015; Mumtaz et al., 2015; Najafizada et al., 2014).

CHWs are often unable to influence strategic level outcomes at work, such as priority setting, or resource allocation and planning (Kane et al., 2016). By giving CTC providers a platform to input into policy development we would not only contribute to their empowerment, but also promote their role as agents of social change. In turn, this may challenge some harmful gender norms and build opportunities for them to realise their potential to build more responsive and inclusive health systems. Finally, workplace policies need to be put in place that support women in balancing paid employment and the domestic roles that disproportionately fall upon their shoulders. In addition, measures like maternity leave and sickness pay can assist female CTC providers in remaining in employment.

Health systems are microcosms of the societies they serve, mirroring and reinforcing norms and practices that are often gender inequitable and harmful. CTC providers have been shown to internalise and reflect the gender and socio-cultural biases of their environment (Sarin and Lunsford, 2017). The health sector has a duty to reduce harm and foster well-being. Action to redress gender inequity and tackle other violent structures is arguably part of their core remit. The health system can be a mechanism for societal transformation, but first it must be aware of its own failings and weaknesses. While the health system does not enact policy and programmatic change to address the harmful impacts of gender inequity, we miss opportunities to work towards the fifth SDG. (UNDP, 2015).

4.3. Strengths and limitations of our approach

This paper draws on two different strands of evidence and approaches which is not standardised and there was not a single coding

system across the two strands of evidence. However, given the emergent nature of this topic we felt it was important to synthesise evidence from different sources to present a global overview of current state of knowledge. The critical interpretive synthesis methodology undertaken corroborated our findings and the synthesis adds range of contexts covered and helps to provide a global overview. A limitation of the critical interpretive synthesis process was that due to the large body of papers identified for inclusion and the lack of detail on author positionality, we were not able to critically discuss how the underlying studies were constructed in detail. We are also unable present the nuances of the socio-cultural norms and changing gender norms within each context. For example, there are changes in how the CTC provider role is perceived and in many communities there is less aspiration for young women to enter this role, particularly while it remains unremunerated (Raven et al., 2015). Female CTC providers also want more for their young daughters (Jackson and Kilsby, 2015); the position is changing with time and context yet we treat them as a homogenised group. This highlights the need for more country-specific focussed research exploring gender norms framed within a historical context for CTC providers.

Gender influence was not explicitly built into our qualitative research design but emerged inductively. As we did not set out to investigate this, we missed opportunities to probe more deeply across the different levels and we were unable to link these findings to program impacts. Our research was also limited to current CTC providers' experiences. Hearing from ex-CTC providers may have produced interesting findings around attrition due to gendered experiences. The critical interpretive synthesis was limited to only English language only, however ongoing stakeholder discussions ensured that research from many different global contexts was included. Finally, whilst the themes have been conceptualised from an intersectional standpoint, the data does not allow us to fully disaggregate in this way.

5. Conclusion and way forward

Gender norms are context specific and thus there is no blueprint for gender responsive CHW programming. Furthermore, CTC providers are not homogenous groups - gender intersects with other axes of equity, which all play a role in shaping gendered experience. Principles of gender equity however, can be applied in all settings and will require a cultural shift to address broader power relations. Creating gender transformative policies would be a suitable starting point to ensure CTC providers are appropriately supported to overcome the inequalities that they face and so that they can take full advantage of their unique position as agents of societal and social change.

Declarations

We declare we have no competing interests.

Data statement

We have not provided the data sets as qualitative transcripts collected are with country PIs and have not been appropriately anonymised to enable sharing. Sharing these raw transcripts could potentially breach the informed consent agreement that was negotiated in the collection of the qualitative data. In the illustrative quotations we have ensured anonymity but this cannot be guaranteed within the primary transcripts. Country PIs may be contacted via rosalind.steege@lstmed.ac.uk.

Acknowledgements

We would like to thank the European Union for its funding and support for the context analysis. REACHOUT has received funding from the European Union Seventh Framework Programme ([FP7/

2007–2013] [FP7/2007–2011]) under grant agreement no. 306090. This document reflects only the authors' views, and the European Union is not liable for any use that may be made of the information contained herein. We would like to thank all the participants that shared their experiences in the REACHOUT qualitative data collection and those who gave ideas and inputs through their contributions to a webinar on

this topic on 10th February 2016 hosted by Health Systems Global (special thanks to: Asha George, Hana Rabadi, Amuda Baba, Polly Walker). Many thanks to Ireen Namakhoma and Korrie de Koning for their contributions to the context analyses and to Malabika Sarker and Hilary Standing commenting on the draft manuscript.

Annex 1. Systematic review process

Phase 1 of the REACHOUT project involved 1) a review of the international literature on factors influencing the performance of CTC providers (150 studies and 46 reviews), 2) six reviews of country level literature on the subject in the REACHOUT countries, and 3) six country level qualitative context analyses that explored a range of CTC provider related issues at multiple levels of the health system. These literature reviews and qualitative studies were conducted during 2013–2014 and included searches in English, Bangla and Portuguese and informed the focused systematic review on gender that was conducted as part of this study in 2017.

The critical interpretive synthesis systematic review conducted for this paper, focused on gender and CTC providers. Four databases were searched: Medline (5th May 2017), Scopus (8th May 2017), CINAHL plus (8th May 2017) and Global Health (8th May 2017). In addition, reference lists of identified papers were combed for other suitable studies alongside citation searching and stakeholder consultation through the *Thematic Working Group on Strengthening and Supporting the Role of Community Health Workers in Health Systems Development* (see <http://www.healthsystemsglobal.org/>) identified further references. This search took place from January–September 2017. Conceptual saturation was reached and the quality of the studies was appraised. Studies of highest quality were given the most weighting in the analysis.

Search terms:

	Keywords
#1	(lay OR volunt* OR untrained OR unlicensed OR non + professional* OR non + professional OR nonprofessionals OR nonprofessional OR 'non professional' OR 'non professionals' OR informal OR 'non formal' OR non + formal OR link OR outreach OR auxiliary OR traditional) n5 (worker OR workers OR visitor OR visitors OR attendant OR attendants OR aide OR aides OR support OR support* OR person* OR person OR helper OR helpers OR carer OR carers OR caregiver OR caregivers OR consultant OR consultants OR assistant OR assistants OR staff OR visit* OR visit OR midwife OR midwives OR provider OR providers OR 'care giver*' OR practitioner OR practitioners)
#2	(community OR communities OR 'community based' OR village OR villages OR frontline) n3 ('health worker' OR 'health workers' OR 'health care worker' OR 'health care workers' OR 'healthcare worker' OR 'healthcare workers' OR distributor OR distributors OR worker OR workers OR provider OR providers)
#3	paraprofessional OR paraprofessionals OR 'paramedical personnel' OR "health promoter" OR "barefoot doctor"
#4	Gender or "gender factors" OR "sociocultural factors" OR "social determinants" OR "gender role" OR "gender influence" OR "gender relations" OR "interpersonal relations" OR "social norms" OR "social values" OR "intersectionality" OR "women's mobility"
#5	LMIC OR "low n2 income countr*" OR "middle income countr*" OR "developing countr*" OR "global south" OR Africa OR Asia OR "low resource setting"
#6	(Community AND Health AND Worker)
	MeSH terms
#7	(MH"Community Health Workers")
#8	(MH"gender Identity + ") OR (MH "sex factors") OR (MH "social norms") OR (MH"interpersonal relations + ") OR (MH"social class + ") OR (MH"social capital") OR (MH"social marginalization") OR (MH"hierarchy, social") OR (MH"family relations")
#9	(MH"social attitudes") OR (MH"gender bias") OR (MH"attitude of health personel + ") OR (MH"cultural values") OR (MH"social norms") OR (MH"social values + ") OR (MH"sex factors")
#10	(MH"Developing Countries")
#11	(MH"Developing Countries") OR (MH"Asia + ") OR (MH"Africa + ") OR (MH"Pacific Islands + ") OR (MH"Low and Middle Income Countries")
#12	(DE "community health services" OR DE "maternity services" OR DE "public health services" OR DE "traditional health services" OR DE "barefoot doctors" OR DE "medical auxiliaries")
#13	((DE "gender relations" OR DE "women's status") AND (DE "family life OR DE "social status")) OR (DE "social mobility" OR DE "vertical mobility") OR (DE "social stigma")
#14	DE "least developed countries" (explode)
Medline	(#1 OR #2 OR #3 OR #7) AND (#4 OR #8) AND (#5 OR #10) = 301 hits
Cinahl	(#1 OR #7) AND (#4 OR #9) AND (#5 OR #11) = 614 hits
Global Health	(#1 OR #12) AND (#4 OR #13) AND (#5 OR #14) = 799 hits
Scopus	(#6) AND (#4) AND (#5) = 134 hits

Delimiters:

- Literature from 2000 onwards (identified as a suitable cut-off from an earlier search on the topic)
- English studies

Inclusion criteria

- Original research
- Study types include qualitative, quantitative and mixed methods
- Studies relating to CTC providers which provide an analysis of how gender of the CTC provider can impact on their role
- Studies where the CTC provider fits the definition used for this project: “any health worker carrying out functions related to health care delivery; trained in some way in the context of the intervention, and having no formal professional or paraprofessional certificate or degree in tertiary education.”
- Studies pertaining to low and middle income countries

Exclusion criteria

- Commentaries, narratives and opinion pieces
- Systematic or literature reviews
- Studies involving CTC providers with professional certifications and tertiary education
- Studies pertaining to high income countries

References

- Abbott, L., Luke, N., 2011. Local hierarchies and distributor (non) compliance: a case study of community-based distribution in rural North India. *Health Care Women Int.* 32, 225–242.
- Ahmed, J., Rehman, S.U., Shahab, M., 2017. Community midwives' acceptability in their communities: a qualitative study from two provinces of Pakistan. *Midwifery* 47, 53–59.
- Ako-Arrey, D.E., Brouwers, M.C., Lavis, J.N., Giacomini, M.K., 2016. Health systems guidance appraisal—a critical interpretive synthesis. *Implement. Sci.* 11, 9.
- Alam, K., Khan, J.A., Walker, D.G., 2012a. Impact of dropout of female volunteer community health workers: an exploration in Dhaka urban slums. *BMC Health Serv. Res.* 12, 260–260.
- Alam, K., Oliveras, E., 2014. Retention of female volunteer community health workers in Dhaka urban slums: a prospective cohort study. *Hum. Resour. Health* 12, 29.
- Alam, K., Tasneem, S., Oliveras, E., 2012b. Performance of female volunteer community health workers in Dhaka urban slums. *Soc. Sci. Med.* 75.
- Alamo, S., Wabwire-Mangen, F., Kenneth, E., Sunday, P., Laga, M., Colebunders, R.L., 2012. Task-shifting to community health workers: evaluation of the performance of a peer-led model in an antiretroviral program in Uganda. *AIDS Patient Care STDS* 26, 101–107.
- Arksey, H., O'Malley, L., 2005. Scoping studies: towards a methodological framework. *Int. J. Soc. Res. Meth.* 8, 19–32.
- Bagonza, J., Kibira, S.P.S., Rutebemberwa, E., 2014. Performance of community health workers managing malaria, pneumonia and diarrhoea under the community case management programme in central Uganda: a cross sectional study. *Malar. J.* 13, 367.
- Barnett-Page, E., Thomas, J., 2009. In: Paper, N.W. (Ed.), *Methods for the Synthesis of Qualitative Research: a Critical Review*.
- Campbell, C., Gibbs, A., Nair, Y., Maimane, S., Kumar, M., Burman, E., 2009. Frustrated potential, false promise or complicated Possibilities? Empowerment and participation amongst female health volunteers in South Africa. *J. Health Manag.* 11, 315–336.
- Campbell, P.C., Ebuehi, O.M., 2011. Job satisfaction: rural versus urban primary health care workers' perception in Ogun State of Nigeria. *W. Afr. J. Med.* 30, 408–412.
- CASP, 2013. 10 questions to Help You Make Sense of Qualitative Research (Critical Appraisal Skills Programme).
- Charmaz, K., 2014. *Constructing Grounded Theory - 2nd Edition*. Sage Publications Ltd, London, UK.
- Chikaphupha, K.R., Kok, M.C., Nyirenda, L., Namakhoma, I., Theobald, S., 2016. Motivation of health surveillance assistants in Malawi: a qualitative study. *Malawi Med. J.* 28, 37–42.
- Clemmons, L., Amazigo, U.V., Bissek, A.C., Noma, M., Oyene, U., Ekpo, U., et al., 2002. Gender issues in the community-directed treatment with ivermectin (CDTI) of the african programme for onchocerciasis control (APOC). *Ann. Trop. Med. Parasitol.* 96 (Suppl. 1), S59–S74.
- Condo, J., Mugeni, C., Naughton, B., Hall, K., Tuazon, M.A., Omwega, A., et al., 2014. Rwanda's evolving community health worker system: a qualitative assessment of client and provider perspectives. *Hum. Resour. Health* 12, 71.
- Corbin, J., Strauss, A., 1990. *Grounded Theory Research: Procedures, Canons, and Evaluative Criteria* Qualitative Sociology, vol. 13. pp. 3–21.
- Corbin, J.H., Mittelmark, M.B., Lie, G.T., 2016. Grassroots volunteers in context: rewarding and adverse experiences of local women working on HIV and AIDS in Kilimanjaro, Tanzania. *Global Health Promot.* 23, 72–81.
- Crispin, N., Wamae, A., Ndirangu, M., Wamalwa, D., Wangalwa, G., Watako, P., et al., 2012. Effects of selected socio-demographic characteristics of community health workers on performance of home visits during pregnancy: a cross-sectional study in Busia District, Kenya. *Global J. Health Sci.* 4, 78–90.
- Daniels, K., Clarke, M., Ringsberg, K.C., 2012. Developing lay health worker policy in South Africa: a qualitative study. *Health Res. Pol. Syst.* 10, 8–8.
- Daniels, K., Van Zyl, H.H., Clarke, M., Dick, J., Johansson, E., 2005. Ear to the ground: listening to farm dwellers talk about the experience of becoming lay health workers. *Health Pol.* 73, 92–103.
- Dasgupta, J., Velankar, J., Borah, P., Nath, G.H., 2017 Jul-Sep. The safety of women health workers at the frontlines. *Ind. J. Med. Ethics* 2 (3), 209–213.
- Devkota, B., van Teijlingen, E., 2010. Demystifying the Maoist barefoot doctors of Nepal. *Med. Conflict Surviv.* 26, 108–123.
- Dhatt, R., Theobald, S., Buzuzi, S., Ros, B., Vong, S., Muraya, K., et al., 2017. The role of women's leadership and gender equity in leadership and health system strengthening. *Global Health, Epidemiology and Genomics* 2.
- Dixon-Woods, M., Agarwal, S., Jones, D., Young, B., Sutton, A., 2005. Synthesising qualitative and quantitative evidence: a review of possible methods. *J. Health Serv. Res. Pol.* 10.
- Dixon-Woods, M., Bonas, S., Booth, A., Jones, D.R., Miller, T., Sutton, A.J., et al., 2006a. How can systematic reviews incorporate qualitative research? A critical perspective. *Qual. Res.* 6.
- Dixon-Woods, M., Cavers, D., Agarwal, S., Annandale, E., Arthur, A., Harvey, J., et al., 2006b. Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Med. Res. Meth.* 6, 35.
- Dorwie, F.M., Pacquia, D.F., 2014. Practices of traditional birth attendants in Sierra Leone and perceptions by mothers and health professionals familiar with their care. *J. Transcult. Nurs.* 25, 33–41.
- Elazan, S.J., Higgins-Steele, A.E., Fotso, J.C., Rosenthal, M.H., Dharitri, R., 2016. Reproductive, maternal, newborn, and child health in the community: task-sharing between male and female health workers in an Indian rural context. *Indian J. Community Med.* 41, 34–38.
- Entwistle, V., Firnigl, D., Ryan, M., Francis, J., Kinghorn, P., 2012. Which experiences of health care delivery matter to service users and why? A critical interpretive synthesis and conceptual map. *J. Health Serv. Res. Pol.* 17, 70–78.
- Eskandari, A., Abolfazi, N., Lafzi, A., Golmohammadi, S., 2016. Oral health knowledge and attitudes of community health workers in east Azerbaijan, Iran. *J. Dent.* 17, 297–300.
- Feldhaus, I., Silverman, M., LeFevre, A.E., Mpembeni, R., Mosha, I., Chitama, D., et al., 2015. Equally able, but unequally accepted: gender differentials and experiences of community health volunteers promoting maternal, newborn, and child health in Morogoro Region, Tanzania (25 August 2015)–(2025 August 2015). *Int. J. Equity Health* 14.
- Flemming, K., 2010. Synthesis of quantitative and qualitative research: an example using Critical Interpretive Synthesis. *J. Adv. Nurs.* 66, 201–217.
- Fotso, J.C., 2015. Special Issue: improved access to maternal, newborn and child health services: strengthening human resources for health. In: Fotso, J.C. (Ed.), *BMC Health Services Research*. BioMed Central Ltd, London; UK, pp. S1–S6.
- Geldsetzer, P., Vaikath, M., De Neve, J.-W., Bossert, T.J., Sibandze, S., Mkhwanazi, M., et al., 2017 Jul 1. Distrusting community health workers with confidential health information: a convergent mixed-methods study in Swaziland. *Health Pol. Plann.* 32 (6), 882–889.
- George, A., 2007. Human resources for health: a gender analysis. In: Paper Prepared for the Women and Gender Equity Knowledge Network of the World Health Organization's Commission on Social Determinants of Health, pp. 58.
- Gittings, L., 2016. 'When you visit a man you should prepare yourself': male community care worker approaches to working with men living with HIV in Cape Town, South Africa. *Cult. Health Sex.* 18, 936–950.
- Give, C.S., Sidat, M., Ormel, H., Ndima, S., McCollum, R., Taetmeyer, M., 2015. Exploring competing experiences and expectations of the revitalized community health worker programme in Mozambique: an equity analysis. *Hum. Resour. Health* 13, 54.
- Greenspan, J.A., McMahon, S.A., Chebet, J.J., Mpunga, M., Urassa, D.P., Winch, P.J., 2013. Sources of community health worker motivation: a qualitative study in Morogoro Region, Tanzania. *Hum. Resour. Health* 11, 52–52.
- Hill, Z., Manu, A., Tawiah-Agyemang, C., Gyan, T., Turner, K., Weobong, B., et al., 2008. How did formative research inform the development of a home-based neonatal care intervention in rural Ghana? *J. Perinatol.* 28 (Suppl. 2), S38–S45.
- Hoodfar, H., 2010. Health as a context for social and gender activism: female volunteer health workers in Iran. *Popul. Dev. Rev.* 36, 487–510.
- Horton, R., 2015. Offline: gender equality—the neglected SDG for health. *Lancet* 386,

- 1928.
- HRW, 2016. World Report 2016-Papua New Guinea. Human Rights Watch, New York.
- HSG, 2016. Webinar: Community Health Workers: the Gender Agenda. Health Systems Global.
- Jackson, R., Kilsby, D., 2015. "We Are Dying while Giving Life": Gender and the Role of Health Extension Workers in Rural Ethiopia. pp. 83.
- Javanparast, S., Baum, F., Labonte, R., Sanders, D., 2011. Community health workers' perspectives on their contribution to rural health and well-being in Iran. *Am. J. Publ. Health* 101, 2287–2292.
- Jenkins, K., 2009. "We have a lot of goodwill, but we still need to eat...": valuing Women's Long Term Voluntarism in Community Development in Lima. *Voluntas Int. J. Voluntary Nonprofit Organ.* 20, 15–34.
- Jenkins, K., 2011. Peruvian community health promoters: expanding the spaces of health voluntarism. *Health Place* 17, 17–23.
- Jenson, A., Gracewello, C., Mkocha, H., Roter, D., Munoz, B., West, S., 2014. Gender and performance of community treatment assistants in Tanzania. *Int. J. Qual. Health Care* 26, 524–529.
- Kambarami, R.A., Mbuya, M.N.N., Pelletier, D., Fundira, D., Tavengwa, N.V., Stoltzfus, R.J., 2016. Factors associated with community health worker performance differ by task in a multi-tasked setting in rural Zimbabwe. *Glob. Health: Science and Practice* 4, 238–250.
- Kane, S., Kok, M., Ormel, H., Otiso, L., Sidat, M., Namakhoma, I., et al., 2016. Limits and opportunities to community health worker empowerment: a multi-country comparative study. *Soc. Sci. Med.* 164, 27–34.
- Katabarwa, M.N., Habomugisha, P., Ndyomugenyi, R., Agunyo, S., 2001. Involvement of women in community-directed treatment with ivermectin for the control of onchocerciasis in Rukungiri district, Uganda: a knowledge, attitude and practice study. *Ann. Trop. Med. Parasitol.* 95, 485–494.
- Khan, A.W., Amjad, C.M., Hafeez, A., Shareef, R., 2012. Perceived individual and community barriers in the provision of family planning services by lady health workers in Tehsil Gujjar Khan. *J. Pakistan Med. Assoc.* 62, 1318–1322.
- Kipp, W., Flaherty, A., 2003. Potential role of male community-based distributors in a family-planning programme in Western Uganda: results of a pilot study. *J. Health Popul. Nutr.* 21, 103–111.
- Kok, M.C., Dieleman, M., Taegtmeier, M., Broerse, J.E., Kane, S.S., Ormel, H., et al., 2015a. Which intervention design factors influence performance of community health workers in low- and middle-income countries? A systematic review. *Health Pol. Plann.* 30, 1207–1227.
- Kok, M.C., Kea, A.Z., Datiko, D.G., Broerse, J.E.W., Dieleman, M., Taegtmeier, M., et al., 2015b. A qualitative assessment of health extension workers' relationships with the community and health sector in Ethiopia: opportunities for enhancing maternal health performance. *Hum. Resour. Health* 13, 80.
- Kok, M.C., Ormel, H., Broerse, J.E.W., Kane, S., Namakhoma, I., Otiso, L., et al., 2017. Optimising the benefits of community health workers' unique position between communities and the health sector: a comparative analysis of factors shaping relationships in four countries. *Global Publ. Health* 12, 1404–1432.
- Koning, K.D., Kok, M., Ormel, H., Kane, S., Rashid, S., Sarker, M., et al., 2014. A Common Analytical Framework on Factors Influencing Performance of Close-to-Community Providers. KIT Royal Tropical Institute, pp. 78.
- Larson, E., George, A., Morgan, R., Poteat, T., 2016. 10 Best resources on... intersectionality with an emphasis on low- and middle-income countries. *Health Pol. Plann.* 31, 964–969.
- Lehmann, U., Sanders, D., 2007. Community Health Workers: what Do We Know about Them? The State of the Evidence on Programmes, Activities, Costs and Impact on Health Outcomes of Using Community Health Workers. World Health Organisation, Geneva, pp. 42.
- Lewin, S., Munabi-Babigumira, S., Glenton, C., Daniels, K., Bosch-Capblanch, X., van Wyk, B.E., et al., 2010. Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst. Rev.* 25 (1), Cd004015.
- Mahmud, I., Chowdhury, S., Siddiqi, B.A., Theobald, S., Ormel, H., Biswas, S., et al., 2015. Exploring the context in which different close-to-community sexual and reproductive health service providers operate in Bangladesh: a qualitative study. *Hum. Resour. Health* 13, 51.
- McCollum, R., Otiso, L., Mireku, M., Theobald, S., de Koning, K., Hussein, S., et al., 2016. Exploring perceptions of community health policy in Kenya and identifying implications for policy change. *Health Pol. Plann.* 31, 10–20.
- Miller, J.S., Musominali, S., Baganizi, M., Paccione, G.A., 2014. A process evaluation of performance-based incentives for village health workers in Kisoro district, Uganda. *Hum. Resour. Health* 12, 19–19.
- MoH, 2010. Programa de Revitalização dos Agentes Polivalentes Elementares. In: MINISTÉRIO DA SAÚDE DIREÇÃO NACIONAL DE SAÚDE PÚBLICA. REPÚBLICA DE MOÇAMBIQUE, pp. 37.
- Mohan, P., Iyengar, S.D., Brahmawar, S., Sen, K., 2003. Auxiliary Nurse Midwife: what Determines Her Place of Residence? *World Health & Population*.
- Müller, A., Murenzi, J., Mathenge, W., Munana, J., Courtright, P., 2010. Primary eye care in Rwanda: gender of service providers and other factors associated with effective service delivery. *Trop. Med. Int. Health* 15, 529–533.
- Mumtaz, Z., 2012. Gender and social geography: impact on Lady Health Workers mobility in Pakistan. *BMC Health Serv. Res.* 12, 360–360.
- Mumtaz, Z., Levay, A., Bhatti, A., Salway, S., 2015. Good on paper: the gap between programme theory and real-world context in Pakistan's Community Midwife programme. *BJOG An Int. J. Obstet. Gynaecol.* 122, 249–258.
- Mumtaz, Z., Salway, S., Muneeba, W., Nighat, U., 2003. Gender-based barriers to primary health care provision in Pakistan: the experience of female providers. *Health Pol. Plann.* 18, 261–269.
- Mumtaz, Z., Salway, S., Nykiforuk, C., Bhatti, A., Atallahjan, A., Ayyalasoamayajula, B., 2013. The role of social geography on lady health workers' mobility and effectiveness in Pakistan. *Soc. Sci. Med.* 91.
- Najafizada, S.A.M., Labonté, R., Bourgeault, I.L., 2014. Community health workers of Afghanistan: a qualitative study of a national program. *Conflict Health* 8, 26–26.
- Nandi, S., Schneider, H., 2014. Addressing the social determinants of health: a case study from the Mitani (community health worker) programme in India. *Health Pol. Plann.* 29 (Suppl. 2) ii71–ii81.
- Nasir, S., Ahmed, R., Kurniasari, M., Limato, R., Tulloch, O., Syafruddin, D., et al., 2016. Challenges that Hinder Parturients to Deliver in Health Facilities: A Qualitative Analysis in Two Districts of Indonesia. *Makara Journal of Health Research* 20 (3), 80–88.
- Ndima, S.D., Sidat, M., Give, C., Ormel, H., Kok, M.C., Taegtmeier, M., 2015. Supervision of community health workers in Mozambique: a qualitative study of factors influencing motivation and programme implementation. *Hum. Resour. Health* 13, 63.
- Newman, C.J., 2014. Time to address gender discrimination and inequality in the health workforce. *Hum. Resour. Health* 12, 25.
- Newman, C.J., Fogarty, L., Makoae, L.N., Reavely, E., 2011. Occupational segregation, gender essentialism and male primacy as major barriers to equity in HIV/AIDS caregiving: Findings from Lesotho. *Int. J. Equity Health* 10, 24–24.
- Nyanzi, S., Manneh, H., Walraven, G., 2007. Traditional birth attendants in rural Gambia: beyond health to social cohesion. *Afr. J. Reprod. Health* 11, 43–56.
- Olang'o, C.O., Nyamongo, I.K., Aagaard-Hansen, J., 2010. Staff attrition among community health workers in home-based care programmes for people living with HIV and AIDS in western Kenya. *Health Pol. Plann.* 25, 232–237.
- Östlin, P., Schreckler, T., Sadana, R., Bonnefoy, J., Gilson, L., Hertzman, C., et al., 2011. Priorities for Research on Equity and Health: Towards an Equity-Focused Health Research Agenda. *PLoS Med.* 8, e1001115.
- Otiso, L., McCollum, R., Mireku, M., Karuga, R., de Koning, K., Taegtmeier, M., 2017. Decentralising and integrating HIV services in community-based health systems: a qualitative study of perceptions at macro, meso and micro levels of the health system. *BMJ Global Health* 2.
- Perez, L.M., Martinez, J., 2008. Community health workers: social justice and policy advocates for community health and well-being. *Am. J. Publ. Health* 98, 11–14.
- Pope, C., van Royen, P., Baker, R., 2002. Qualitative methods in research on healthcare quality. *Qual. Saf. Health Care* 11, 148.
- Rahman, S.M., Ali, N.A., Jennings, L., Seraji, M.H., Mannan, I., Shah, R., et al., 2010. Factors affecting recruitment and retention of community health workers in a newborn care intervention in Bangladesh. *Hum. Resour. Health* 8, 12.
- Raven, J., Akweongo, P., Baba, A., Baine, S.O., Sall, M.G., Buzuzi, S., et al., 2015. Using a human resource management approach to support community health workers: experiences from five African countries. *Hum. Resour. Health* 13, 45.
- Razee, H., Whittaker, M., Jayasuriya, R., Yap, L., Brentnall, L., 2012. Listening to the rural health workers in Papua New Guinea - the social factors that influence their motivation to work. *Soc. Sci. Med.* 75, 828–835.
- Saprii, L., Richards, E., Kokho, P., Theobald, S., 2015. Community health workers in rural India: analysing the opportunities and challenges Accredited Social Health Activists (ASHAs) face in realising their multiple roles. *Hum. Resour. Health* 13, 1–13.
- Sarin, E., Lunsford, S.S., 2017. How female community health workers navigate work challenges and why there are still gaps in their performance: a look at female community health workers in maternal and child health in two Indian districts through a reciprocal determinism framework. *Hum. Resour. Health* 15, 44.
- Seers, K., 2015. Qualitative systematic reviews: their importance for our understanding of research relevant to pain. *British Journal of Pain* 9, 36–40.
- Sen, G., Ostlin, P., 2008. Gender inequity in health: why it exists and how we can change it. *Global Publ. Health* 3 (Suppl. 1), 1–12.
- Sharma, R., Webster, P., Bhattacharyya, S., 2014. Factors affecting the performance of community health workers in India: a multi-stakeholder perspective. *Glob. Health Action* 7, 25352.
- Standing, H., 2000. Gender – a Missing Dimension in Human Resource Policy And Planning for Health Reforms. *Human Resources Development Journal* 4, 16.
- Swartz, A., Colvin, C.J., 2015. 'It's in our veins': caring natures and material motivations of community health workers in contexts of economic marginalisation. *Crit. Publ. Health* 25, 139–152.
- Theobald, S., Hawkins, K., Kok, M., Rashid, S., Datiko, D.G., Taegtmeier, M., 2016. Close-to-community providers of health care: increasing evidence of how to bridge community and health systems. *Hum. Resour. Health* 14, 32.
- Theobald, S., MacPherson, E., McCollum, R., Tolhurst, R., 2015. Close to community health providers post 2015: Realising their role in responsive health systems and addressing gendered social determinants of health. *BMC Proc.* 9, S8–S8.
- Topp, S.M., Price, J.E., Nanyangwe-Moyo, T., Mulenga, D.M., Dennis, M.L., Ngunga, M.M., 2015. Motivations for entering and remaining in volunteer service: findings from a mixed-method survey among HIV caregivers in Zambia. *Hum. Resour. Health* 13.
- Tripathy, J.P., Goel, S., Kumar, A.M.V., 2016. Measuring and understanding motivation among community health workers in rural health facilities in India—a mixed method study. *BMC Health Serv. Res.* 16, 366–366.
- UNDP, 2015. Sustainable Development Goals (United Nations Development Programme).
- Utomo, I.D., Arsyad, S.S., Hasmi, E.N., 2006. Village family planning volunteers in Indonesia: their role in the family planning programme. *Reprod. Health Matters* 14, 73–82.
- Uzondu, C.A., Doctor, H.V., Findley, S.E., Afenyadu, G.Y., Ager, A., 2015. Female health workers at the doorstep: a pilot of community-based maternal, newborn, and child health service delivery in northern Nigeria. *Glob Health Sci Pract* 3, 97–108.
- WHO, 2011. In: Organisation, W.H. (Ed.), *Gender Mainstreaming for Health Managers: a Practical Approach*, pp. 87 (Geneva).
- Yale, 2015. Yale MeSH Analyzer. Cushing/Whitney Medical Library. Yale University.