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The role of social geography on Lady Health Workers' mobility and effectiveness in Pakistan

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ABSTRACT

The Pakistan Lady Health Worker (LHW) program provides door-step reproductive health services in a context where patriarchal norms of seclusion constrain women's access to health care facilities. The program has not achieved optimal functioning, particularly in relation to raising levels of contraceptive use. One reason may be that the LHWs face the same mobility constraints that necessitated their appointment. Past research has documented the influence of gendered norms and extended family (*biradari*) relationships on rural women's mobility patterns. This study explores whether and how these socio-cultural factors also impact LHWs' home-visit rates. A mixed-method study was conducted across 21 villages in one district of Punjab in 2009–2010. Social mapping exercises with 21 LHWs were used to identify and survey 803 women of reproductive age. The survey data and maps were linked to visually delineate the LHWs' visitation patterns. In-depth interviews were conducted with 21 LHWs and 27 community members. Members of a LHW's *biradari* had two times higher odds of reporting a visit by their LHW and were twice as likely to be satisfied with their supply of contraceptives. Qualitative data showed that LHWs mobility led to a loss of status of women performing this role. Movement into space occupied by unrelated males was particularly shameful. Caste-based village hierarchies further discouraged visits beyond biradari boundaries. In response to these normative proscriptions, LHWs adopted strategies to reduce the amount of home visiting undertaken and to avoid visits to non-biradari homes. The findings suggest that LHW performance is constrained by both gender and biradari/caste-based hierarchies. Further, since LHWs tended to be poor and low caste, and at the same time preferentially visited co-members of their extended family who are likely to share similar socioeconomic circumstances, the program may be differentially providing health care services to poorer households, albeit through an unintended route.

Introduction

Recent renewed interest in primary health care coupled with human resource shortages in the health sector in developing countries has rekindled interest in the concept of community health workers (Haines, Horton, & Bhutta, 2007). These workers are seen as an effective and efficient means of linking remote and marginalised populations to the health system (Daviauda & Chopra, 2008).

The Pakistan National Program for Family Planning and Primary Health Care in Pakistan, more commonly known as the Lady Health Worker (LHW) program, is amongst the more successful community health worker programs (Haines et al., 2007). It consists of over 110,000 female local-resident workers providing a range of door-step family planning, antenatal and child health services. Their family planning responsibilities include motivating couples to use modern contraceptives and providing pills and condoms. Women interested in injections, intra-uterine contraceptive devices or sterilisation are referred (Hafeez, Mohamud, Shiekh, Shah, & Jooma, 2011). The program operates in approximately 60–70% of rural areas and urban slum populations (OPMG, 2009).

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The latest evaluation suggests that there has been substantial improvement in the reach and quality of the LHW program over time (OPMG, 2009). Nevertheless, despite its relative success, it has not achieved optimal functioning as indicated by its failure to meet one of its key targets: increasing the contraceptive prevalence rate (CPR) from 22 to 42% in rural areas and from 40 to 58% in urban areas (OPMG, 2009). Pakistan is the sixth most populous country in the world, projected to become the fourth by the year 2040 (Population Action International, 2007). Although the program is attributed with increasing CPR by 8% nationally, use of modern contraceptive methods remains low at 22%, despite an apparent high latent demand for family planning services (National Institute of Population Studies, 2007). Given the LHW program is a key pillar of the family planning program, it is also notable that just 8% of current users report LHWs as their source of contraceptives (National Institute of Population Studies, 2007).

Most analyses of the program have focused on program inputs, processes, and management to explain this suboptimal functioning (OPMG, 2009). A range of factors have been identified that contribute to LHW under-performance related to both individual characteristics of the LHW (such as their experience and knowledge levels) and system level factors (such as the degree of supervision received and adequacy of medical supplies) (Khan, Chaudhry, & Muhammad, 2012; Mumtaz, Salway, Waseem, & Umer, 2003). While clearly important, there is also a need to recognise and address the wider social and cultural context within which the program operates; factors that have to-date received limited attention.

A large body of literature describes the highly patriarchal nature of Pakistani society, highlighting clearly demarcated gender roles (Qadir, Khan, Medhin, & Prince, 2011; Winkvist & Akhtar, 2000) and the institution of *purdah* which prizes women's seclusion and limited mobility (Khan, 1999). Notwithstanding heterogeneity and fluidity in gender roles and relations across Pakistan's highly diverse population (Donna & Selier, 1997), women's inability to travel alone, and at will, is acknowledged to be an important barrier to their ability to access health and other services (Durrant & Sathar, 2000). Our earlier ethnographic investigation has illustrated ways in which women's mobility is shaped and constrained by other axes of social differentiation in addition to the gendered norms of behavior (Mumtaz & Salway, 2005). Specifically, we highlighted the significance of social, rather than purely physical geography in patterning women's routine movements in rural Punjab. Women in our field site were found to move quite long distances provided these movements took them into familiar spaces occupied by other members of their extended family group (*biradari*) while they avoided movement into spaces (such as households/courtyards/lanes) which were physically much closer but were occupied by people outside of their extended family. This is perhaps not surprising given the evidence from other rural studies that rigid hierarchical social relationships based on caste and extended family (*biradari*) position some groups as subordinate to others, dictate patterns of marriage and lead to economic exploitation and social exclusion of some groups (Kabeer, Mumtaz, & Sayeed, 2010; Mohmand & Gazdar, 2007).

To date, there has been limited investigation of how these socio-cultural influences on women's mobility might affect the work of LHWs, though clearly these female workers must operate within the same gender system that necessitated their appointment in the first place. Our own earlier work has found that disrespect from male colleagues and requirements to perform tasks bringing them into contact with men were commonly reported problems by LHWs (Mumtaz et al., 2003), but we did not examine the LHW patterns of movement in any detail.

The program is currently operationalised under a geographical catchment area model in which LHWs are assigned to households within an hour's walk of their residence; an apparently straightforward and comprehensible way to organise the LHW workload (Rifkin, Muller, & Bichmann, 1988). However, an unstated assumption is that individuals living in the same spatial area are relatively homogenous, sharing similar needs and values (Ramirez-Valles, 1998). Given the apparent social differentiation within Pakistani villages described above, this assumption seems questionable and deserves scrutiny.

The above review alerts us to the potential importance of social distance between LHWs and those they are intended to serve, and the interplay of socioeconomic and gender hierarchies, in shaping the performance of LHWs. Important questions remain regarding whether and how *biradari* (and caste), socioeconomic and gender hierarchies inter-relate to shape and constrain LHWs' work experiences and effectiveness. The present study seeks to further our understanding of some of these processes through a detailed exploration of the patterns of LHWs' home visitation and the influences upon LHWs' ability to travel within their assigned catchment area to provide doorstop services.

Methods

The study focused specifically on LHWs' patterns of home visitation and explored the question of whether an LHW's extended familial relationship with village women within her catchment area has any effect on her visitation patterns and the services that she delivers.

For this study, a key concept was the extended family; known locally as the '*biradari*'. A *biradari* is defined as a group of households related by blood. *Biradaris*' function as the key social, economic, and political unit of a village in Punjab. *Biradari* boundaries tend to be sharp, with members considered 'insiders' and non-members 'outsiders'. Often within a village most *biradari* houses will be located within close proximity, creating a *mohalla* (neighborhood) within which women can move freely as though an extension of their own home. However, some *biradari* members may also live much larger distances apart depending on the village layout. Generally there are three to five *biradaris* in any village. Collecting information on *biradari* relationships was straightforward as all village members are aware of each other's *biradari* membership.

We also employ the concept of 'social geography', which we developed in our earlier work (Mumtaz & Salway, 2005) to refer to the way in which physical spaces within the village are defined by the presence or absence of other significant individuals, identified particularly in terms of their *biradari* identity, but also by their gender and age. The social geography of the village will be different for different individuals because of their unique relationships with the people occupying particular spaces. Thus, some spaces will be legitimate and accessible to some women (often referred to as *ander* or inside) while being illegitimate and inaccessible to others (*baar*, or outside).

Data were collected using a mix of quantitative and qualitative methods in rural areas of district Attock, northern Punjab, Pakistan between December 2009 and November 2010. District Attock was chosen for both theoretical and practical reasons. Earlier work had indicated the relevance of social geography in patterning women's mobility in this area (Mumtaz & Salway, 2005) and it was therefore a suitable location in which to explore the hypothesis that LHW work patterns might also be affected by these factors. Furthermore, the research team had extensive prior experience of working in this area, strong local networks and good command of the local dialects, meaning that fieldwork was facilitated and data quality could be ensured.

The sample design and size were arrived at considering the requirements of both the qualitative and quantitative elements of