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ORIGINAL ARTICLE

Contextual factors affecting the integration of community health workers into the health system in Limpopo Province, South Africa

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Background: Community health workers (CHWs) are an essential cadre in the health systems of many low- and middle-income countries. These workers provide a wide variety of services and are key to ongoing processes of task shifting within human immunodeficiency virus programmes in particular. Ward-based outreach teams (WBOTs) are South Africa's latest iteration of the CHW programme and have been introduced as part of the National Department of Health's Primary Health Care Re-engineering programme.

Methods: In order to assess the perceived effectiveness of the WBOTs in supporting the ongoing rollout of antiretroviral therapy, tuberculosis care and patient support, we conducted a qualitative investigation focusing on the perceived successes and challenges of the programme among CHWs, community leaders, healthcare workers and community members in the Mopani district, Limpopo province, South Africa.

Results: The CHW programme operates across these contexts, each associated with its own set of challenges and opportunities.

Conclusions: While these challenges may be interrelated, a contextual analysis provides a useful means of understanding the programme's implementation as part of ongoing decision-making processes.

Keywords: community health workers, HIV, primary healthcare, South Africa

Introduction

The South African National Department of Health (NDoH) introduced a Primary HealthCare Re-engineering (PHCRE) strategy in 2012 that includes an increased focus on the role of community health workers (CHWs) as part of local ward-based outreach teams (WBOTs).[1] CHWs in South Africa form an important link between communities and the public health system, and CHW programmes across the country have previously been implemented by a diverse array of organisations, with varying degrees of success.[2]

CHWs provide a wide range of health promotion and disease prevention services within their communities and are a particularly valuable cadre of health workers, especially in rural health districts. One key aspect of the value of CHWs within health systems is related to their in-depth knowledge of their local communities.[3] This allows CHWs to adapt their activities to local knowledge and understanding of diseases.[3] Zulliger et al.[3] argue that in doing so, CHWs are 'able to bridge the lifeworlds of the community and … formal services to expedite access and adherence to local clinics and other services'.

Despite their importance to the health system, the effectiveness of CHW programmes in South Africa is limited by a range of challenges. These challenges include difficult working environments, poor integration into the formal health system, low and inconsistent payment, fear of human immunodeficiency virus (HIV)-related stigma, poor leadership and planning, inadequate resources and equipment, and a lack of opportunities for career advancement.[4–7]

The introduction of PHCRE requires the formalisation and integration of CHWs into the public health service. While mandated by the NDoH, South Africa's quasi-federal political system means that individual provinces are responsible for the bulk of the implementation process of the PHCRE strategy, including the WBOTs.[8] This flexibility of local implementation processes necessitates the negotiation and adaptation of national frameworks to local contexts and conditions, and the specific form that a WBOT programme takes is directly affected by the contexts into which it is introduced. Understanding the emergent nature of these programmes is therefore essential if they are to be effectively supported by the government and donors.[8]

Zizzamia et al.[9] found that approximately 60% of the population of Limpopo province are chronically poor. Social grants are an important source of income in the province, with 57.8% of households reporting receiving at least one monthly grant and only 51.7% of households receiving income from any form of employment.[10] In this article we explore the contextual factors that shape the implementation of the WBOT programme in the Mopani district of Limpopo province in order to contribute to a more in-depth understanding of the ways in which CHWs interact with and integrate into the formal health system.

Methods

Study context

The Mopani district consists of five subdistricts and is characterised by high levels of poverty and unemployment. We conducted our study in the Greater Letaba and Greater Giyani subdistricts, where the CHW programme in its current form has been in place since 2012; by 2016 it included 149 WBOTs covering 123 of the 125 wards in the subdistricts.[5] These teams support 222 261 of the 296 321 households in the subdistricts.[1] At the time that the research was conducted, CHWs were employed by the NDoH but were remunerated and managed through local non-profit organisations (NPOs).

Study design and participants

We used a qualitative methodology to conduct this research and recruited participants from 12 wards in Mopani district. Community members were invited to participate based on a random selection of households conducted using aerial photographs of the wards, with a maximum of three attempts made to visit each household selected. CHWs, CHW team leaders, primary healthcare (PHC) staff, social workers and community leaders were recruited based on their links to the PHC facilities serving each of the 12 wards.

In-depth interviews and focus group discussions (FGDs) were conducted with community members (n=38), CHWs (n=11), CHW team leaders (n=9), PHC staff (n=13), community leaders (n=20) and social workers (n=9) (Table 1). Interviews and FGDs, which were conducted in the participants' language of choice, were audio recorded, transcribed and translated into English where necessary. Findings were validated through reporting back to participants and NDoH staff after data analysis was completed. All participants provided signed informed consent prior to participating in research activities. Ethics approval was provided by the University of the Witwatersrand's Human Research Ethics Committee (protocol number M1611111).

Data analysis

We conducted a grounded theory-style analysis, using a three-stage coding process.[11] Grounded theory is based on the idea that meaning is negotiated and understood through interactions with others in social processes.[11] A grounded theory approach to data analysis aims to develop an explanatory theory of these social processes in the environments in which they take place.[11]

Two researchers independently read through the interview transcripts and identified basic themes. These themes were then combined into a working codebook using NVivo 11 qualitative data analysis software (QSR International, Melbourne, VC, Australia). A second stage of coding involved grouping basic themes into analytical categories. This was done through constant comparison and discussion between the two researchers. A final stage of coding resulted in our identification of the importance of understanding the various contexts in which the CHW programme operates.

Findings

Six critical contexts affecting the implementation of the WBOT programme were identified in our data analysis. These contexts provide the background to the programme and vary in the extent to which they can be influenced by management and policy makers. Contexts include geographic, social and economic, community, local governance and authority, and organisational.

Geographic contexts

The main geographic factor affecting the programme was the long distances between PHCs facility and households in the communities these clinics served, as well as the distance between individual households that CHWs were expected to assist. The design of the CHW programme did not appear to take this challenge into account. For example, in addition to visiting a set number of households each day, CHWs were expected to report to both their PHCs facility and their managing NPOs each day.

Team leaders, social workers and community members also discussed the difficulty of accessing and providing care resulting from the long distances they needed to travel and the lack of affordable and accessible transportation, regardless of the distances travelled. Kok et al.[12] note that topographical challenges are a frequently reported barrier to the implementation of CHW programmes in low- and middle-income countries (LMICs) and have the potential to severely limit the accessibility of health services to communities.

In response to the challenge of having to travel long distances between households, CHWs reported using their own funds to pay for transport:

> *Some of the houses that we visit are far, we need to use transport. If we were to get transport we were going to cover houses that we are expected to. We spend a lot of money travelling. (CHW FGD 2)*

Table 1. Study participants

Participant identity	Inclusion criteria	Method
Community members	Household members >18 y of age	In-depth interviews
CHWs	CHWs working in the 12 sampled wards	FGDs
Facility nurses	Nurses employed at PHCs serving each ward	FGDs
CHW team leaders	Professional nurses tasked with managing CHWs in each ward	In-depth interviews
Social workers	Social workers responsible for supporting communities in each ward	In-depth interviews
Community leaders	Local community leaders identified by PHC staff or community members	In-depth interviews

More broadly, the lack of transport for CHWs underlines the need for adequate support structures and reimbursement to prevent these programmes from becoming exploitative and relying on CHWs' goodwill and commitment to their communities for their success. Kane et al.,[13] in their multicountry study of CHW empowerment, found that many CHWs reported feeling empowered by being a part of the formal health system and being able to do meaningful work, but that they were constantly frustrated by feelings of being 'unsupported, unappreciated and undervalued'.

The apparent lack of consideration of the challenges associated with the geographical context in which the CHW programme is implemented reflects the province-specific nature of the PHCRE programme and a potential downside of relying on provincial health departments to facilitate the necessary processes of negotiation and adaptation that characterise the emergent nature of the WBOT approach. Schneider and Nxumalo[8] note that for this approach to work requires 'strong subnational governance, able to adapt national frameworks to local conditions, set priorities, and coordinate and mobilise local actors'.

Social and economic contexts

The Mopani district is marked by high levels of poverty and unemployment, which in turn have direct effects on the CHW programme. First, CHWs and their families are generally very poor themselves, and the low levels of pay limit their own ability to access basic necessities. Even though they are poor, CHWs reported sometimes having to pay from their own pockets to help their patients to buy food and transport to clinics, placing further strain on their own households. Mottiar and Lodge[14] report the same finding in their research on CHWs across three South African provinces (Gauteng, KwaZulu-Natal and Limpopo) and note that this exemplifies the commitment of CHWs to their roles and their communities.

Relying on the good will of an underpaid cadre of auxiliary health workers to support the NDoH's rollout and scale-up of primary healthcare is problematic and unsustainable, and the lack of adequate remuneration for CHWs was raised in interviews by community leaders, nurses, team leaders and CHWs themselves.

It is equally important to note that the socio-economic context itself is, in part, a driver of the need for CHW programmes in the first place, due to the high rates of poverty-related ill health in rural South Africa.[15] Furthermore, the availability of pools of people willing to work in underpaid roles is a result of a system of economic governance that is unable to create sufficient employment opportunities.[16] These issues highlight some of the core tensions within South African society more broadly and should be explicitly addressed in the healthcare policy development process. At the time of this research, WBOTs in the Mopani district appeared to be functioning as stop-gaps rather than integral parts of the health system.

A second important effect of the high level of poverty and unemployment in the study area was the frequency of circular migration between the Mopani district and larger cities, such as Polokwane, Pretoria and Johannesburg. The frequent migration of their patients meant that CHWs often spent time trying to trace individuals who had missed appointments at PHCs but who were in fact no longer living in the area:

> *The defaulters that we find they are those who are seasonal workers at farms. They come back after 6 months. When we visit those people they tell us that they were not around that's why they did to come and collect their treatment. (CHW FGD 1)*

This wasted time undermined the CHWs' abilities to meet their targets and complete their other tasks.

Community contexts

The contexts of the CHWs' local communities affected their work in a variety of ways. The most frequently discussed aspects of CHWs' experiences in their local communities were the ongoing impact of HIV-related stigma, cultural beliefs about illness and community experiences of HIV.

Stigma, and more specifically, the fear of being stigmatised, was frequently mentioned by CHWs as an important barrier to being able to undertake their HIV-related work. They discussed how patients were wary of having CHWs at their houses because they were afraid that their neighbours would assume that they were HIV positive if they saw them being visited. Participants also noted that HIV-positive community members would hide their HIV status from CHWs out of fear that the CHWs would disclose their status to other people in the community. Stigma also reportedly prevented people from accessing care at health facilities, and in some instances nurses noted that patients travelled long distances to collect medication from facilities outside their immediate communities. Busza et al.[17] report that fear of stigmatisation remains an important barrier to the timely uptake of antiretroviral therapy (ART) in spite of the increasingly

widespread availability of HIV treatment. Given that supporting the ART rollout is a core function of WBOTs, negotiating HIV-related stigma should form an essential part of their training. In the study by Busza et al.,[17] for example, CHWs worked around stigma-related barriers by meeting patients outside their homes, pretending to be friends or relatives, and proactively countering stigmatising beliefs.

The cultural context of the Mopani district also presented challenges to the CHW programme's effectiveness. This was particularly evident in reports from CHWs and clinic staff that community members would initially try to get help from traditional healers and churches rather than access care from clinics. Delays in seeking care led to situations in which patients became bedbound due to their illnesses before agreeing to seek medical care. These situations were particularly stressful for CHWs, as patients required increased levels of care, including having food cooked for them and household cleaning.

In some cases, people reportedly viewed their symptoms as being due to bewitchment rather than a physical illness, and tended to be reluctant to access care from clinics, preferring the advice of traditional healers. The CHWs attempted to counteract this tendency by educating traditional healers about HIV in the hope that they would refer people to them or to clinics. In several cases this appeared to be happening.

> *When we do door-to-door, the traditional healers end up understanding that there are some things that they cannot heal after we have explained to them. We do not undermine what they can heal. We do not stop them, we tell them that if there is something that you cannot do refer them to the clinic, so that the clinic can continue with them. (CHW FGD 3)*

> *There are some traditional healers that I trust, before they help someone they take their patients to the clinic and ask them test for HIV. Some of them you find that they are HIV positive. Traditional healers help us a lot, now we feel free to work with them than before. The trainings help us a lot; we take what we have learnt to the community before people used to die because of lack of information. (CHW FGD 4)*

This proactive approach to working in the specific cultural contexts affecting their patients highlights the value of CHWs and their local knowledge of their communities.[3] The CHWs' ability to negotiate the specific local needs of their patients is critical and should be actively supported in the ongoing implementation of the PHCRE programme.

Contexts of local governance and authority

Local systems of governance and the enactment of authority in particular locales can have both positive and negative effects on the implementation of health-related interventions. CHWs reported that where community leaders were supportive and engaged with them, this support facilitated easier access to households in their communities. The importance of support from community leaders in implementing CHW programmes is emphasised by le Roux et al.,[18] who note that this support helps CHWs to feel respected and appreciated, which can ease the burden of their difficult jobs.

> *They are useful because if we can look back people used to die a lot because no one knew that they were sick, and death would occur at any time. Since they [CHWs] have been working in the community we are experiencing less death. Death does not occur like it used to in the beginning. (Community leader 3)*

Although there were no reports of community leaders obstructing the work of CHWs, there were instances where community leaders stated that they had not been consulted or told about the CHW programme.

> *We don't have enough information about CHWs. What they do when they get to households I don't have enough information. There is no single day that they have visited me, so I cannot speak for them. (Community leader 1)*

This was not a common finding, but these leaders felt that they should have been included in the rollout of the programme, though they did not express any further negativity about CHWs.

Organisational contexts

The management and organisational contexts of CHW programmes in South Africa have frequently been found to be problematic by researchers focusing on community health.[2,8,14] In the Mopani district, we identified several critical factors related to the organisational context of the CHW programme. These included tensions between the NDoH and non-governmental organisations (NGOs) responsible for paying CHWs, staff shortages within the NDoH and the lack of formally designated WBOT leader posts, the overburdening of CHWs in terms of their reporting requirements and the lack of effective integration of social workers into the WBOTs' operational strategies.

Although policies have changed since this study was conducted, during the research process a common complaint among CHWs was that they were effectively being managed by separate organisations, with varying operational requirements and plans. They noted that they were required to compile reports for both the NDoH and the NGO that employed them, as well as having to juggle the sometimes conflicting instructions they received from their NDoH team leader and the NGO staff.

The lack of formalisation of the WBOT programme within the NDoH also meant that team leaders were expected to manage CHWs on top of their duties as nurses and health workers at clinics. This led to excessively high workloads among team leaders, and several reported being unable to support CHWs adequately as a result. In some areas there were either insufficient staff at clinics to allocate a separate team leader to each team of CHWs', or no staff were willing to take on the extra workload. In these cases, multiple teams ended up being managed by one centralised team leader, which also limited the team leader's ability to support them. These difficulties point to broader problems in the governance of the PHCRE programme. As Schneider and Nxumalo[8] note, governance of CHW programmes is a complex and multilevel process that involves individuals and organisations spanning the continuum from the local to the national and international. The WBOT strategy was detailed in an NDoH white paper but was not allocated ring-fenced funding and, as noted previously, implementation of the strategy was left up to individual provinces.[8] In Limpopo province, the lack of a clear strategic vision for the implementation of WBOTs appears to have led to districts and subdistricts adopting a make-do approach

to implementation, resulting in widely varying impacts between local areas. In our study, it was clear that due to the lack of formalisation of the WBOTs, the relative impact of the programme depended to a large extent on the commitment and capacity of individual team leaders. For example, the team leaders quoted below report different levels of commitment to their teams:

> *I feel their pain and sometimes I feel that I want to quit because of the way they are suffering. I don't want to quit, but imagine that you are working but you are not getting anything in return while they are serving a big community which goes all the way to H–. When I go with them I have to use my transport and then get them food because they don't have money these people, I buy food for them. I give money to the one who stays in G– to buy chicken and I will cook pap for them and then we will eat. (Team leader 1)*

> *So you can see that even if they have challenges I can't assist them. Sometimes they phone me and you will find that I can't go assist them at households. We have patients in M–, it's another village, it's far and I am unable to go that side. (Team leader 3)*

Without a formalised system of governance and leadership for WBOTs, their effectiveness relies on the good will and commitment of individual CHWs and team leaders, and as Mottiar and Lodge[14] note, after years of functioning this way 'the system may be exhausting its stocks of altruism'.

Limitations to our research include the fact that we conducted our assessment in only two subdistricts and it is possible that our findings will have limited applicability in other contexts. In addition, we were unable to interview the NGO managers of the CHW programme, as they were unavailable at the times the interviews were being conducted.

Conclusions

The CHW programme operates across a range of contexts, each with its own set of challenges and opportunities. These challenges may be interrelated, as is the case with the lack of resources in the organisational context and the challenge of transport associated with the geographical context, and it is therefore useful to understand the contexts of the programme's implementation as part of ongoing decision-making processes. Kok et al.[12] undertook a literature review of the contextual determinants of CHW effectiveness in LMICs and report results similar to ours. They found that community, economic, environmental and health system policy contexts had important effects on CHW performance, with community contexts playing the most important role.[12] While our analysis also identified community factors, and particularly the fear of stigma, as important determinants of the success of the WBOT programme, the organisational context was the most noteworthy impediment to the potential effectiveness of the CHWs. This suggests the need for policymakers to address the programmatic and structural level challenges that have led to the widely varying effectiveness of WBOTs across provinces and districts. Without a coherent and adequately resourced organisational context, the implementation of CHW programmes relies heavily on individuals' commitment to their communities and their own altruism, and risks becoming undervalued and exploitative.

Author's contributions: GJ was responsible for data coding and analysis and drafting the manuscript. NN was responsible for planning the study, participated in its design and coordination, performed data coding and analysis and helped draft the manuscript. NM coordinated and carried out the exploratory study. GM helped draft the manuscript. JR participated in the design of the study and helped draft the manuscript. JAM helped draft the manuscript. HES helped draft the manuscript. RPHP was responsible for planning the study, participated in its design and coordination, and helped draft the manuscript. All authors read and approved the final manuscript.

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