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Title

Are Community Health Agents the link to integrating care? Lesson from Brazil

Abstract

Purpose: This viewpoint piece will highlight the contribution of trained lay community health workers to the integrated workforce in rural, remote and island settings, drawing on experience from a system strengthening project involving Community Health Agents (CHAs) in four municipalities in Litoral Norte, a remote coastal and island region in the state of São Paulo, Brazil.

Findings: CHAs took forward actions that touched the lives of thousands of vulnerable families with low income and complex needs in communities with high levels of social and health inequalities. They acted as a bridge between patients and families at home, primary healthcare professionals and wider community partners and services. Their valuable insight into the healthcare issues and social challenges experienced by the community informed and supported family centred practice and population health goals. The CHAs rapidly pivoted to became an essential public health workforce during the Covid-19 pandemic.

Practical implications: As we establish integrated care systems and embrace proactive care and population health the conditions are favourable for introducing a similar role in the UK. For psychological safety and avoidance of burnout people in such new roles will require training, supervision and full integration within community teams.

Originality: This viewpoint reflects experiential learning from a unique north-south collaboration that spanned the period of a global pandemic. It adds to the international literature on the value of community health workers in public health and chronic disease management and highlights their potential pivotal role as integrators at point of care.

Keywords

Community health worker; community health agent; workforce; population health; integrated care; intersectoral

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Background

Improving population health in remote, rural and island communities facing workforce recruitment and retention challenges requires creative and contextualised approaches. Workforce planning in these areas has focused on advanced practice skills to plug gaps in the medical workforce, remote consultations and decision support, and inward migration to increase capacity for social care. Although there is growing interest in new and additional roles such as community connectors and link workers for selected individuals and care groups, there has been limited progress in building scalable generalist capacity for integrated primary care.

Primary health care teams are integral assets to rural areas but may not always be the most influential agents of change when it comes to promoting positive health behaviours. Doctors, in particular, are the most likely members of the team to have migrated into the community having spent most of their training in urban centres with very different cultures and priorities to the remote areas they serve. GPs may also be relatively difficult to reach. For example, less than half of the remote population in Scotland are living within 15 minutes of a GP by public transport (Scottish Government National Statistics 2018).

Remote, rural and island communities should take inspiration from Brazil where the Family Healt[i]h Strategy (FHS), established in 1994, has led to substantial improvements in population health, particularly in underserved rural and remote areas (Castro *et al.,* 2019). Mackinko and Harris (2015) describe the FHS mode based on Family Health Units of interdisciplinary teams that include a doctor, a nurse, a nurse assistant and four to six community health agents (CHAs), sometimes with additional support from allied health professionals such as psychologist, dietitian and physiotherapist. Each team provides primary healthcare for up to 4,000 people in a defined geographical area (Wadge *et al.,* 2016).

CHAs are paid employees who work within their own communities, providing health education and managing many low-level health problems at home (Prasad and Muraleedharan 2008). They will have completed secondary education but there is no requirement to have undertaken more formal training in healthcare. The crucial recruitment criterion is being an established resident of a given neighbourhood, with the ability to communicate well with local residents.

Each CHA is trained over 8-12 weeks to proactively manage a caseload of around 150 households in a particular neighbourhood. During their monthly scheduled visits with each household, the CHAs identify health issues and risk factors affecting members of the household. They may provide screening, immunizations, advice in pregnancy, breastfeeding support, monitoring of chronic disease and support for self management. They gather individual and household-level health information and report data on social determinants, school enrolment and community participation. CHAs act as a bridge between the patients and family at home, the primary healthcare professionals and wider community partners and services. Their valuable insight into the healthcare issues and social challenges experienced by the community informs and supports family centred practice and population health activities of the Family Health Teams. The CHA model has been scaled up across Brazil with impressive results (Rocha and Soares, 2010; Giugliani *et al.,* 2011).

Community Change Agents

Zanchetta *et al* (2014) concluded that the ability to create sustained and meaningful change in local communities depends on the local meaning of health, active engagement of the community and perceived feasibility of the intended changes. CHAs had a pivotal role in engaging the community in a system strengthening project in four municipalities in a remote coastal region of São Paulo. The Transforming Together project was a collaboration between state and municipal services in Brazil and a consultancy team from Scotland (International Centre for Integrated Care, 2020). The innovative north – south collaboration aimed to establish a more integrated system across different levels of healthcare and with partners from social care, social development, education, housing, sport, culture and local communities. The CHAs in the four municipalities were already trained to identify the needs of families in their neighbourhoods. During the project they were supported to engage with a wider range of partners beyond their usual healthcare team and to function as local change agents, co-designing solutions to local health and social care issues. The quotes in this viewpoint piece were collected from conversations with the Community Health Agents (CHAs) throughout the project, demonstrating the voice of their lived experience.

The project delivered rapid change during 2019 despite a challenging and changing political landscape. Actions by CHAs touched the lives of many thousands of vulnerable families with

low income and complex needs in communities with high levels of social and health inequalities. They developed as a network of change agents who adopted and spread new ways of integrated working across the region: health, education and social development professionals working together to identify those with social vulnerability and provide joint outreach from primary care centres; working with NGOs and community partners and schools to support self-management and wellbeing for those who rarely engage; undertaking joint needs assessment and population health initiatives in low income housing contributing to a significant reduction in rates of dengue and gestational syphilis; health promotion, and mental health and suicide prevention initiatives in schools. All achieved by the existing workforce with some upgraded community facilities and additional IT equipment. The state and visiting team provided facilitation and support to build relationships and trust between professionals from different sectors and to understand how to draw on the assets and kindness of local communities. In particular, the CHAs were empowered to use their role as natural integrators at point of care and to strengthen relationships beyond their usual network. Their role was central to creating a place based, family and community centred model of integrated care that builds on the strengths of individuals and of all partners in the local communities. The CHAs were already valued as the beating heart of the community and were highly visible system navigators, sharing public health messages on their teeshirts, supporting families across the life stages, mobilising people and community resources, and communicating with a wide range of professionals from different sectors. They would often state that 'we are the eyes and ears for everyone'. As one CHA highlighted *'we must look at people as human beings that have feelings and a back story and not just numbers. People are usually treated like numbers'.*

The CHAs reach into underserved communities stating that they go in there with 'a good heart and not just good intentions.' During the Transforming Together project one of the CHAs highlighted that *'it is the community health agents who go to the home and bond and trust. They disseminate information, encourage, persuade and motivate'.*

Nowhere was considered too high risk for the CHAs to reach - they were trusted and accepted by their own community and well placed to listen and understand what matters to people. They created small community spaces near their local family health units to engage families and worked with local schools to encourage people of all ages to be active and manage their

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health and wellbeing. This was emphasised by one of the CHAs who stated that '*we need to understand that health is not a unique thing that happens in a hospital or when I visit someone at home as a CHA. Health is a responsibility for all that needs to be taught in schools, from childhood.*'

They recognised the value of working collaboratively and used a total football analogy to describe a team where all players use their skills, are open and transparent, flexible and ready to break down barriers and adopt new ways of working to improve lives and opportunities for all. One of the CHAs highlighted that from their perspective '*this is not a competition - we are all here to do our best and support our neighbours*'; a poignant thought for us all.

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Box 1 contains some examples of the transformative work that CHAs led in the four municipalities. More information is available in the project handbook (São Paulo Estado Secretaria da Saúde, 2022).

CHAs transformed the external area of a primary care clinic as a community space for physical activity, intergenerational play and created a community garden where they taught families about healthy nutrition. CHAs undertook a survey to identify the community needs, informing and working alongside health, social care, education, housing and social development professionals. They delivered tailored activities to families in the most deprived communities to tackle high rates of pregnancy related complications, reduced rates of syphilis and dengue, increased uptake of vaccination, and supported healthy lifestyle education and paths to employment. CHAs worked closely with teachers and mental health professionals to support children and adolescents avoid high risk behaviours, drug and alcohol misuse. They worked to prevent pregnancy, sexually related diseases, bullying and strengthened the connections and contribution of young people in the local community.

A flexible and trusted workforce

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Concluding just before the onset of the Covid-19 pandemic, the project built readiness for the challenging work required of CHAs at this difficult time, as described in the reflection by Maciel *et al.,* (2020). CHAs described how the sudden disruption to primary care services and the introduction of Covid-19 restrictions had a profound effect on the mental health of local people:

> *'The social isolation suspended some of the fundamental activities that we were used to, like routine appointments, groups for patients with diabetes, hypertension, pregnant women and domiciliary visits for chronic patients. Initially we weren't allowed to visit families so we couldn't give them advice regarding the pandemic and the care they needed for their health conditions. We noticed that social isolation made people more depressed, and we saw more people with diabetes and blood pressure decompensations. In my micro area we had some cases of stroke, panic attack and anxiety episodes in adults, adolescents, and children'.*

The CHAs rapidly pivoted to became an essential public health workforce, providing accurate information, supporting case tracing and quarantine, and encouraging uptake of the Covid -19 vaccine.

> *'I was able to continue visiting my community families by taking safety measures and talking to them through the gate in the open air. The monitoring of Covid-19 patients and contact tracing went well. The Hospital (Santa Casa), Emergency Room and Primary Care services would inform CHAs of a positive case in their micro area, so we called all the people who had previous contact'.*

CHAs worked hard to maintain public trust in the face of conflicting messages from social media and a lack of national guidelines and leadership (Lotta et al., 2020).

> *'It was very difficult to deal with fake news regarding Covid-19, because while we were giving information regarding vaccines and safety health measures, they came with 10 different fake news that we had to deconstruct. We were also in a very delicate political situation because our federal government wasn't supporting Covid-19 combat measures, making this moment more difficult. We were becoming a sick population,*

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> *also suffering from anxiety and depression, and becoming a confused society that wasn't trusting the health care system'.*

The CHAs were a constant in the community during the pandemic at a time when many healthcare services were deconstructed. They were a conduit to connect people with the support and services they needed. Many worked well beyond their usual role providing much needed compassion and welfare support.

> *'Despite these difficulties I kept giving them information and care, learning to talk through my eyes over my mask in a different relationship with them, showing them tenderness, respect, supporting them psychologically and socially. Because many lost their jobs and income we also provided for their basic needs with food and medicine.'*

Discussion and implications for practice

Attempts to review the impact of the CHW role are fraught by the heterogeneous nature of the activities delivered, tailored to the local context and the varying levels of training and employment arrangements (Lewin *et al.,* 2010; Giugliani *et al.,* 2011). The potential scope of the role is reflected in the very broad definition - 'any health worker carrying out functions related to healthcare delivery, trained in some way in the context of the intervention, and having no formal professional or paraprofessional certificate or tertiary education degree' (Lewin *et al,.* 2010).

For personal and psychological safety and avoidance of burnout, people working in these roles require support, supervision and full integration within a community team (Lima et al., 2022; Silva et al., 2022) as well as ongoing training and development (Grossman-Kahn et al., 2018). In their evaluation of CHWs in the US, Mirambeau *et al.,* 2013 note the value of CHWs who share the same language, ethnicity, and life experiences as the communities they serve but found they were rarely well integrated into care teams. As we establish integrated care systems and embrace proactive care and population health in the UK, the conditions are now favourable for introducing a similar community role. The call to do so by Harris and Haines, 2012 was followed by a pilot of the role in Wales (Johnson *et al.,* 2013)

but there has been a long gap in the UK literature on this subject until Haines *et al.,* (2020) repeated the call for a national roll out in response to Covid -19**.**

The pandemic increased awareness and interest in community action, social leadership and a need for intersectional approaches. But even pre-pandemic, each rural community has forged a network of local relationships to find solutions for the challenges and adversities they face on a daily basis related to their remoteness. Their mutual reliance builds trust and dependence. In order to improve the health of our rural areas it is necessary to make use of the most valuable assets we have which are the human relationships within these communities. Rural communities are skilled in finding bespoke solutions for their needs and Community Health Agents can provide the invaluable link between local culture and the professional health workforce. Living longer and healthier lives need not be the struggle of an individual, but can become the shared endeavour of a community.

Rural, remote and island communities are great places to test radical workforce innovation. Let's learn from Brazil and think who can be our 'eyes and ears' and integrators in these places. This could accelerate a shift to a family centred and place-based approach to improve health for all.,

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