Commentary

From Community Health Workers to Community Health Systems: Time to Widen the Horizon?

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ABSTRACT—Community health workers (CHWs) have reemerged as significant cadres in low- and middle-income countries and are now seen as an integral part of achieving the goal of universal health coverage (UHC). In international guidance and support, the emphasis is increasingly shifting from a focus on the outcomes of CHW-based interventions to the systems requirements for implementing and sustaining CHW programs at scale. A major challenge is that CHW programs interface with both the formal health system (requiring integration) and community systems (requiring embedding) in context-specific and complex ways. Collectively, these elements and relationships can be seen as constituting a unique sub-system of the overall health system, referred to by some as the community health system. The community health system is key to the performance of CHW programs, and we argue for a more holistic focus on this system in policy and practice. We further propose a definition and spell out the main actors and attributes of the community health system and conclude that in international debates on UHC, much can be gained from recognizing the community health system as a definable sphere in its own right.

BACKGROUND

Community-based health cadres, from lay health volunteers to trained and accredited community health workers, are increasingly included as an important component in national health systems striving to achieve universal health coverage (UHC). Global thinking and guidance on health systems, grappling with the ongoing health workforce crisis, have steadily begun to recognize the developing evidence base demonstrating the contributions of community health workers (CHWs) to improved health outcomes and driven a resurgence of interest in formally accounting for CHWs in health systems. \(^1\)\(^2\) Community-based strategies have become an integral part of maternal and child health, malaria, and HIV/AIDS programs in many low- and middle-income countries.
(LMICs). In addition, despite mixed outcomes historically\textsuperscript{3,4} and a variety of longstanding and emerging challenges,\textsuperscript{5} a growing list of countries—among them Brazil, Ethiopia, Iran, Rwanda and Malawi—have successfully implemented CHW programs at scale. These and other countries’ successes have helped tip the international consensus in favor of national CHW programs, as seen in the 2013 Third Global Forum on Human Resources for Health’s statement that CHWs and other frontline primary health care workers “play a unique role and can be essential to accelerating MDGs [Millennium Development Goals] and achieving UHC.”\textsuperscript{6}

Over the last five years, there have been a number of high-profile reports published by the Global Health Workforce Alliance, the Earth Institute, and others, collating and comparing experiences across countries.\textsuperscript{7-10} There is also a growing body of literature synthesizing current evidence and developing conceptual understandings on the design of national CHW programs and the processes of scaling up and integration into national health systems.\textsuperscript{11-17} International consensus meetings convened by both the Global Health Workforce Alliance and the U.S. Agency for International Development\textsuperscript{6,18} and the publication of a comprehensive guide\textsuperscript{19} by the U.S. Agency for International Development’s Maternal and Child Health Integrated Program have further enriched global conversations on the strengthening of CHW programs at scale.

**SYSTEMS PERSPECTIVE ON CHWS**

A notable feature of these documents and processes is the shift in emphasis from the more established focus on technical roles, performance, and the immediate human resource issues (training, supervision, remuneration) facing CHWs to embrace a broader systems perspective on programs. As stated in the introduction to the Maternal and Child Health Integrated Program guide, “Large-scale public sector CHW programs are complex entities that require adapting a systems perspective to the national and local contexts.”\textsuperscript{19} Drawing on health system frameworks such as the World Health Organization’s “building blocks” approach,\textsuperscript{20} CHW programs are being presented not just as human resources but as a full-fledged sub-system of the primary health care and district health system.

Important implications emerge from approaching CHW programming from a systems perspective. First, CHW programs require a comprehensive approach to planning and design and should be integrated with the formal health system’s approaches to service delivery roles and organization, financing, human resource, supply chain, information, and governance systems.\textsuperscript{12,13} Secondly, CHW programs not only interface with the formal health system but also with “community systems” involving actors such as local political structures, civic groups, and faith-based organizations.\textsuperscript{17} To realize their potential at scale, CHW programs need to be integrated into primary health care systems while being simultaneously embedded in and supported by communities.\textsuperscript{14,15,17} Thirdly, these elements interact in complex and context-specific ways, making universal guidelines and prescriptions difficult to apply locally.\textsuperscript{21}

Approaching CHW programs through a systems lens highlights that the attributes of the CHWs—their technical roles, skills, and motivation—only partly determine their performance. Further, though CHWs may be the most visible manifestation of health action within communities, health gains at this level involve a far greater array of community and health system factors than the CHW cadres themselves.

Despite this, the emphasis in accounts tends to remain narrowly focused on CHWs, often an officially designated cadre, such as health extension worker, health surveillance assistant, or lady health worker, with limited reference to the wider set of factors. Local health and community contexts of CHW programs are insufficiently characterized,\textsuperscript{22,23} and the many other players with whom CHWs work in communities often remain invisible, such as the family caregivers in the AIDS-affected households of rural Uganda,\textsuperscript{24} informal volunteers promoting child health in Mali,\textsuperscript{25} or the local Buddhist temples mobilizing communities in Thailand.\textsuperscript{26} Systemic approaches that would foreground the key relationships surrounding CHWs are inadequately developed.\textsuperscript{27} Of these relationships, the interface with communities and community embeddedness are the most poorly understood.\textsuperscript{15}

We believe that debates on community-based delivery to achieve universal health coverage could more properly reflect the emerging systems perspective, by widening the focus from a cadre to the community health system as a whole. Though formally designated CHWs may remain important elements of a community health system, widening the focus will encourage more systematic assessments of local contexts and designs that fit this context. It will also surface the “hidden” players\textsuperscript{25} promoting the health of communities alongside CHWs. It will open up the possibility of forms of community health action not necessarily centered on a nationally recognized and accredited CHW cadre, such as the community mobilizations for tuberculosis control through local organizations in Odisha State, India\textsuperscript{28} or the cardiovascular disease prevention programs through churches in urban Ghana.\textsuperscript{29}

The concept of a community health system is not new. At a meeting of the US-based network the CORE Group in 2011, it was presented diagrammatically as a comprehensive set of
community-based health providers, bounded by local contexts and existing in relationship with households, health system, governance, and other community structures (Figure 1).³⁰ It has since been developed into models of comprehensive community health system strengthening and applied in Ethiopia and Tanzania to mobilize community actors around diverse issues such as HIV testing and sanitation.³¹ The Community Systems Strengthening Framework of the Global Fund for HIV, Tuberculosis, and Malaria has a similar approach, focusing on “key populations” and the multiple mechanisms for engaging these.³² Though the idea of a community health system is held implicitly by many players in the field, and therefore is not necessarily new, we have not found any attempts to explicitly define or describe its elements in thinking on health systems.

FIGURE 1. Representation of a Community Health System Source.³⁰ © 2011 CORE Group. Reproduced by permission of CORE Group. Permission to reuse must be obtained from the rightsholder. Available at http://www.slideshare.net/COREGroup1/5102011-chws-on-the-move

WHAT IS A COMMUNITY HEALTH SYSTEM?
We thus put forward a preliminary definition and highlight key features of a community health system. We describe some often-overlooked community actors and conclude by spelling out the implications of a wider perspective for thinking about health system strengthening. In doing so, we have drawn on our knowledge and experience in South Africa, the African region, and beyond.

A community health system is the set of local actors, relationships, and processes engaged in producing, advocating for, and supporting health in communities and households outside of, but existing in relationship to, formal health structures.

The local actors in this system who engage in health action include some or all of the following:

- Household-level caregivers
- The array of formal, volunteer, and informal health providers working in communities
- Organizational intermediaries: nongovernmental organizations and other forms (religious, sport, youth, etc.) of associational life; workplaces
- Other government sectors: housing, education, social development, etc.
• Representative local health and political structures

These actors exist in relationship with each other, with households, and with the formal health system. Community health systems are not formal bureaucracies with vertical lines of command and control but social systems that contain both hierarchical and “horizontal” elements based on networking and reciprocity and relying on trust and acceptability. The relational ties forged in this system, referred to as social capital, are their most critical, if intangible, defining element. These ties are enabled or constrained by local social norms, power structures (political, religious, economic, etc.), and the “collective capacity” of communities. For example, local hierarchies of gender, caste, and generation significantly limited the ability of community-based distributors of family planning to provide accessible and equitable care in rural India.

Health providers in community health systems, especially at the less formalized end of the spectrum, do not have the ready-made status of professionals. Those seeking a recognized role within it have to navigate the “gray zones” between a range of public, nongovernmental, and private actors. Providers face different kinds of expectations, and meeting these depends not only on formal support from the health system (often considered as weak) but also on the ability to draw on social networks and other resources within communities. Intervening on health thus involves relational “work” and balancing a mix of role identities as belonging both to the community and the health system—as community insider, outsider, and broker.

Further, though there are universally recognized organizational forms in health systems (hospital, primary health care system, professions etc.), community health systems are context specific. Regions and countries differ, as do individual communities, depending on their histories, economic and political systems, and prevailing cultural and social norms. These features (summarized in Table 1) make the governance of interventions to strengthen community health systems “complex and relational.”

| TABLE 1. Summary of the Key Features of the Community Health System |
|---------------------------------------------------------------|
| **LESS RECOGNIZED ACTORS IN COMMUNITY HEALTH SYSTEMS** |
| Certain actors in community health systems are insufficiently recognized for their contributions. We have alluded to these and highlight them further below, while acknowledging that this is not a comprehensive inventory. |
| In the course of their evaluation of integrated community case management interventions in six African countries, Leon and colleagues identified the significant role of community health volunteers. In Mali, Niger, and Ethiopia, the formally designated CHWs (agents de santé communautaire and health extension workers, respectively), trained in integrated community case management interventions, were in effect a second tier of delivery, with a dense and semiformal system of volunteers (relais or health development army) providing a first tier of more regular interaction with households. These volunteers worked closely with the official CHWs but were seldom acknowledged or recognized as players. The authors refer to them as “hidden” actors and suggest that this volunteer mobilization may have been important to the child survival gains in these countries. Similar large-scale recruitment of health volunteers (more than 800,000 for a population of 66 million in 2008) has been described in Thailand’s primary health care system and considered a significant factor in health gains over the last decades. |
| Extending into households, family caregivers, generally female, play a predominant role in contexts of high HIV burdens, mental illness, and disability, also bringing into focus families and households and their functioning as a key dimension of community health systems. |
| In the AIDS-affected countries of southern Africa, investments in community systems strengthening have created an “associational revolution”—the growth of a civil society organization sector, taking a wide variety of forms and acting as carers, advocates, and health promoters. In South Africa this has been encouraged by a regulatory system registering nonprofit organizations and the contracting of home and community-based services through both health and social development sectors. The connectedness, ability to leverage |
resources, and orientations (rights-based, religious, entrepreneurial, etc.) of organizations vary. However, on the whole, they represent significant local social safety nets, mobilizing volunteer participation and acting as intermediaries. At the more formalized end of the spectrum, they have been contracted by government to employ and manage community health workers and thus form the main interface between the community health system and primary health care and district systems. Finally, local political structures were important enablers and gatekeepers in community-based initiatives in South Africa and Uganda. In Chhattisgarh State, India, engaging the village councils or panchayats was a key strategy in addressing social determinants of health such as food security and gender-based violence.

IMPLICATIONS OF A WIDENED FOCUS FOR HEALTH SYSTEM STRENGTHENING

The design of community-based interventions by policy makers, whether through the mechanism of CHWs or not, needs to be located within community health systems. It is important to map the full array of health actors in the community health system and the relationships between them. Some of these may fall under the “control” or influence of health system strengthening initiatives, whereas others do not. However, they will shape what can be achieved in communities and will therefore need to be understood and engaged. This, in turn, has implications for the mindsets and styles adopted by formal system players seeking to intervene in the community health system, who often start from the premise of command and control and are poorly prepared to work in a collaborative, networking mode of relationship.

Secondly, holistic designs that aim to mobilize both community and health system support need to grapple with the intangibles of the local social and cultural context, including community capacity to act on health issues. Methodologies from the field of development such as asset mapping, social network analysis, and capacity assessment provide techniques for understanding the context of community health systems. The success or failure of individual programs or cadres may have less to do with their skills, scope of practice, and training than on these contextual factors. Case studies and evaluations need to assess and report more fully on the contexts in which programs are implemented. The corollary of this is that community health systems are context specific, and though broad approaches and lesson learning across contexts is possible, overprescription is counterproductive.

Finally, in global debates and initiatives on universal health coverage and the sustainable development goals, much can be gained from recognizing the community health system as a unique and definable sphere in its own right. We have put forward a definition of this system that is open to refinement and further elaboration.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

No potential conflicts of interest were disclosed.

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