Community Health Workers: An Underappreciated Asset to Tackle NCD

Jordan D. Jarvis*, Ishu Kataria*,†, Mellany Murgor*, Lilian Mbau‡

New Delhi, India; and Nairobi, Kenya

With continued undernutrition and escalating overnutrition, urbanization, and resource-strapped health systems, nations—particularly those in the low- and middle-income brackets—are facing the harsh reality of a growing double burden of communicable and noncommunicable diseases (NCD) [1,2]. The dearth of a skilled health workforce is a principal concern when it comes to tackling these challenges, as health care systems and health care training programs are set up to respond to acute care needs and struggle to deliver prevention and care for chronic conditions [3,4]. Although efforts to ramp up education and training on NCD among physicians, pharmacists, nurses, and other skilled health workers is urgently needed and must be prioritized, empowered Community Health Workers (CHW) present a secret weapon to combating NCD.

CHW are responsible for certain aspects of health care delivery within the community in which they live, and they apply their deep understanding of local population needs in their roles as service extension workers and agents of social change [5-9]. Although we use the term CHW in this paper, they receive many different titles across countries and programs [7,10-12]. CHW are not unskilled labor, although they generally have no formal professional or paraprofessional training and are thus not recognized as part of the formal health system in most countries [13]. Given the reach of CHW to otherwise underserved populations across rural and urban settings worldwide, we explore their potential to address NCD burdens across countries in this paper, and we suggest that their role in the formal health system warrants renewed consideration.

CHW TO FILL THE GAP IN HUMAN RESOURCES FOR HEALTH

The World Health Organization (WHO) estimates that countries with <23 health care workers per 10,000 population may not be able to achieve adequate primary health care outcomes. Yet, countries such as Kenya and India only have national averages of 1.8 and 6.5 physicians per 10,000 people, respectively [14]. Many countries' capacities to train nurses, physicians, and midwives are also insufficient to meet the population needs [15]. It is therefore imperative to bridge the human resource gap at the primary health care level by using a team that combines various skill levels—the use of trained CHW is one intervention to address this shortage.

The concept of using community members to render health services and their potential role to increase access to health services in remote areas and improve health outcomes has been recognized for over 50 years. Particularly with the Alma Ata Declaration, CHW became a hot topic for primary health care delivery in the 1980s [7], and although the emergence of vertical disease programs halted progress in this arena, CHW have proven to be crucial in settings with a weak primary health care system [6,16].

INTEGRATING COMMUNITY HEALTH WORKERS FOR IMPROVED AWARENESS, SCREENING, TREATMENT, AND DATA FOR NCD

Nearly 80% of all heart disease, stroke, and type 2 diabetes and >40% of cancers can be prevented by addressing the 4 shared risk factors for NCD described by WHO [17], emphasizing the critical need to empower communities to adopt healthy behavior [18]. CHW can facilitate early screening, referral, and improved treatment compliance by targeting individuals in schools, neighborhoods, and religious places in the community. In the United States, CHW have delivered nutritional education to Somali families in Minnesota, leading to increased fruit and vegetable intake [19], which led to significant improvement glycemic control in Michigan [20].

Low levels of population awareness on NCD, specifically low perceived susceptibility and perceived severity, also hinder access to NCD services [21,22]. This further results in late detection of NCD, with more frequent complications and increases in morbidity and mortality [23]. To address the 24% rate of high blood pressure in Kenya [24], nongovernmental organizations such as Amref Health Africa are currently using CHW to increase hypertension awareness, screening rates, and treatment literacy. Amref has reached over 100,000 individuals in Kibera, Nairobi, thus far by equipping CHW with blood pressure monitors to conduct household screenings and integrating them at the facility level to provide hypertension screening and expand treatment literacy among patients (unpublished, L. Mbau, June 2016). Through mobile phones and direct household visits, CHW were critical in ensuring that the majority of patients with NCD received the clinical follow-up they required. Furthermore, to ensure psychological and social factors were addressed in patients with chronic diseases, CHW linked individuals to patient support groups [25]. In India, CHW led a population-based NCD prevalence study among 113,462 individuals [26] in Kerala, illustrating the powerful role that they can potentially also play in collecting NCD prevalence or other relevant data.

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J.D. Jarvis and I. Kataria contributed equally to this paper.
From the *Young Professionals Chronic Disease Network, Global, Boston, MA, USA; †University of Delhi, New Delhi, India; and ‡Amref Health Africa in Kenya, Nairobi, Kenya. Correspondence: J. D. Jarvis (jordan@ncdaction.org).

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NEXT STEPS: FOSTERING A SUPPORTIVE POLICY ENVIRONMENT TO TAP CHW POTENTIAL

Task shifting, where the tasks performed by a physician are delegated to the "lowest" category that can perform them successfully [27], is the need of the hour to address NCD [28]. Successful deployment of community structures that support task shifting and incorporate CHW to address NCD require a conducive policy environment as well as training curricula that will equip CHW with appropriate knowledge and skills that lie within their capabilities and align with the resources they are given to do their job.

Setting supportive policies and plans

Several policies have been developed across countries that aim to employ CHW to address NCD. In India, the National Rural Health Mission (2005) recognizes that empowering CHW with knowledge and skills can be an effective way to combat NCD at the community level [29]. The Kenya National NCD Strategy (2015 to 2020) strives to integrate NCD control into communicable disease programs through the use of community health services [30]. Furthermore, the Ministry of Health in Kenya has developed a CHW NCD training module to facilitate the implementation of increased activities for NCD interventions in the community [31]. Other countries should similarly incorporate CHW into their national NCD action plans or strategies. However, the WHO NCD Progress Monitor in 2015 reported that only 33% of countries have set national NCD action plans or strategies [32], and those which are resourced in order to be successfully implemented are even fewer.

Resourcing and incentivizing CHW

In order to achieve results, national NCD policies and strategies must be resourced across the board and should include adequate resources to support effective deployment of CHW in the fight against NCD. Many countries face challenges in retaining CHW, and this retention can be influenced by both intrinsic and extrinsic factors [33]. Extrinsic factors include monetary and nonmonetary incentives, supportive supervision, community and policy support, recognition, and training opportunities. Intrinsic factors include individual motivation that is driven by personal goals, organizational commitment, and self-efficacy [34]. In Bangladesh and Nigeria, CHW left their posts due to low or irregular remuneration, family's disapproval, no space for growth, and poor supervision [35,36]. Experiences from community health interventions indicate that a well-defined incentive package is necessary for CHW to be retained [37,38].

In India, CHW are incentivized based on performance and service provided. For instance, through promotion of institutional delivery, they can earn US$3 and by detecting malaria cases they can earn US$12 per day [39]. Other nonmonetary incentives include training opportunities and certificates, provision of tools of trade such as bicycles, gumboots and medical supplies, uniforms, identity card, radio, equipment, and awards [40]. In Rwanda, assessment of performance-based payment of CHW for child and maternal care services demonstrated a 23% increase in the number of institutional deliveries and 56% increase in the number of child preventive care visits [41]. A recent study in Uganda revealed that CHW can be motivated and retained through nonmonetary incentives, such as relationship building, acquisition and sharing of knowledge, and witnessing positive changes related to their work [42].

The use of incentives for CHW to achieve their effective retention requires strong political will and commitment from governments to allocate adequate resources toward community health strategies. Targeted advocacy at all levels of government is required to ensure needed resources are allocated to support these community health structures.

CONCLUSIONS

There is a need to acknowledge the great responsibility played by CHW and more importantly their untapped potential to reduce the alarming rate of NCD increase in low- and middle-income countries. Task shifting is key to address the scope of the NCD problem in the context of a shortage of human resources for health. All countries using CHW should standardize incentive schemes and governments should allocate resources toward this. In addition, the CHW should receive recognition both at the community level and by the government, so as to increase their motivation to continue with the services. CHW can have more impact on improving equity in NCD prevention and care than potentially any other health care worker, because they are an integral part of the community that can reach underserved populations with complex social needs. NCD are an urgent social, economic, and health issue for communities, and therefore, the time to mobilize the ultimate community solution, CHW, is now.

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