
Executive Summary

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List of Acronyms

AIDS  Acquired Immunodeficiency Syndrome
ARI  Acute Respiratory Infections
ART  Anti Retroviral Treatment
BLDS  British Library for Development Studies
BRAC  Bangladesh Rural Advancement Committee
CHW  Community Health Worker
CHW-PFA  Community Health Worker- Program Functionality Assessment
CM  Community Mobilizer
DOTS  Directly Observed Treatment Support
EmOC  Emergency Obstetric Care
GDP  Gross Domestic Product
GNI  Gross National Income
HAART  Highly Active Anti Retroviral Treatment
HIV  Human Immunodeficiency Virus
IMCI  Integrated Management of Childhood Illnesses
IPT  Intermittent Presumptive Treatment
KAP  Knowledge, Attitude, and Practices
KMC  Kangaroo Mother Care
LBW  Low Birth Weight
LHWP  Lady Health Workers Program
MDG  Millennium Development Goal
MoH  Ministry of Health
MNCH  Maternal, Newborn and Child Health
NCD  Non-Communicable Disease
NGO  Non-Government Organization
NS  Non Significant
ORS  Oral Rehydration Salts or Oral Rehydration Solution
ORT  Oral Rehydration Therapy
PACS  Programa de Agentes Comunitários de Saúde
PC  Peer Counselor
PMTCT  Prevention of Mother to Child Transfer
RCT  Randomized Controlled Trial
STI  Sexually Transmitted Infections
TBA  Traditional Birth Attendant
TB  Tuberculosis
TT  Tetanus Toxoid
UNFPA  United Nations Fund for Population Agency
WHC  World Health Assembly
Executive Summary

Human resources for health crisis is one of the factors underlying the poor performance of health systems to deliver effective, evidence-based interventions for priority health problems, and this crisis is more critical in developing countries. Participation of community health workers (CHWs) in the provision of primary health care has been experienced all over the world for several decades, and there is an amount of evidence showing that they can add significantly to the efforts of improving the health of the population, particularly in those settings with the highest shortage of motivated and capable health professionals.

With the overall aim of identifying CHWs programs with positive impact on Millennium Development Goals (MDGs) related to health or otherwise, a global systematic review was undertaken of such interventions, as well as eight in-depth country case studies in Sub-Saharan Africa (Ethiopia Mozambique and Uganda), South East Asia (Bangladesh, Pakistan and Thailand) and Latin America (Brazil and Haiti). The focus was on key aspects of these programs, encompassing typology of CHWs, selection, training, supervision, standards for evaluation and certification, deployment patterns, in-service training, performance, and impact assessment. For impact indicators, the focus was on those related to maternal and child health, HIV/AIDS, TB and malaria, as well as on those related to mental health and non-communicable diseases. In addition, building on the systematic review and the country case studies, draft recommendations was develop for recruitment, training and supervision criteria for CHWs programs to address the health MDGs, for further regional and global consultation among stakeholders, and for their eventual adaptation in varied contexts.

Methodology

For the systematic review, a comprehensive search of studies was performed in several data sources, without language restrictions, focusing on studies performed in developing countries. Eligible studies included randomized, quasi-randomized and before/after trials which had relied upon CHWs in community settings. In addition, other less rigorous study designs like observational (cohort and case-control) and descriptive studies were also reviewed to understand the context within which they were implemented, the typology of health care providers, the types of intervention delivered and reported results. Studies were included if (a) they detailed the role of CHWs and (b) if the outcomes considered are those related to reaching the health and nutrition MDGs like child mortality, maternal mortality, combating HIV/AIDS, TB, malaria, among other target health problems. The main comparison was between CHW
interventions compared to no intervention or routine care; or one form of CHW intervention compared with another form.

For country case studies, a review of published and unpublished reports was conducted on specific country experiences with CHWs, and also a direct contact with key personnel overseeing the program was made through electronic correspondence and country visits. The primary level of evidence on impact derived from country specific assessment of CHW programs and from objective evaluation data (where available). The evidence was also triangulated from the global systematic review to the specific programs and types of CHWs in the selected countries. In addition to that, stakeholders familiar with program management and evolution were also contacted for specific inputs. In this process, information was assembled related to: program descriptions, job descriptions, or official descriptions of the role of the CHWs and the process followed to identify and recruit them; records identifying numbers of trained CHWs, dates of recent trainings, and documents describing training content and process as well as the supervision or monitoring process; and records of current numbers of CHWs. Following the assembly of information from multiple sources, a USAID supported CHW Program Functionality Assessment Tool (CHW-PFA) was utilized to assess the functionality of the CHW programs across these countries. The CHW-PFA proposes twelve programmatic components for a CHW program to be effective.

**Key Findings**

The review of CHWs across the globe provided us an interesting and diverse picture of the current scenario in outreach services of health care workers. There is a wide range of services offered by the CHWs to the community, ranging from provision of safe delivery, counseling on breast-feeding, management of uncomplicated childhood illnesses, from preventive health education on malaria, TB, HIV/AIDS, STDs and NCDs to their treatment and rehabilitation of people suffering from common mental health problems. The services offered by CHWs have helped in the decline of maternal and child mortality rates and have also assisted in decreasing the burden and costs of TB and malaria. However, the coverage by such programs and the overall progress towards achieving the MDG targets is very slow. The growing consensus regarding this current pace of progress, especially in the low-income countries, is that it relates to fragile health and economic systems.
Country case studies identified a wide range of CHW programs with different mix of CHW typology. For example, Uganda Village Health Teams program has short duration of training with preventive and basic curative tasks for CHWs, with a relatively strong supervision system, and within a weak health system, while, on the other hand, Pakistan’s Lady Health Workers (LHW) Program has long duration training programs, with promotional, preventive and basic curative tasks for CHWs, with a relatively strong supervision system, and within a relatively weak health system.

These country case studies demonstrate the participation of the respective governments and the NGOs in financing and implementation of their policies for the CHW programs. Results confirm that CHWs provide a critical link between their communities and the health and social services system. Communities across all the countries that we studied recognized the value of CHWs as a member of the health delivery team and therefore have supported the utilization and skill development of CHWs. These case studies further speak out the achievements of their CHW programs in relation to their modeling and level of commitment from their human resource. The region lagging far behind the MDG targets is Africa especially the sub-Saharan Africa. Various factors have been identified to be responsible. These include inadequate human resource especially work force who are dying with HIV/AIDS and poor remuneration for their work leading to high drop outs, lack of supervision, and equipment and drug supplies needed to provide essential maternal, child and reproductive health services and those required to control and treat potentially preventable infectious diseases.

Based on the review and the gaps identified in the existing CHW programs and the services rendered, various recommendations are made regarding their recruitment criteria, training content, certification process, ongoing and refresher training, supervision, incentives and professional advancement. Although it is recognized that varying contexts are important, attention to specific criteria and issues could potentially improve the working of CHWs and help scaling up key interventions in relation to MDG targets. These are detailed in the main Report and the summary messages below represent major points for consideration.

**Limitations of the study**

- The review identified a number of limitations. Firstly, most of the reviewed studies when implemented, neglected to document the complete description and characteristics of CHWs deployed, especially the level and amount of supervision provided to those workers, which could have helped us in identifying the importance
of this factor and its association with other outcomes. Additional information on the initial level of education of CHWs, provision of refresher training, mode of training: balance of practical/ theoretical sessions would have provided greater assistance in understanding the threshold effect, if any, of these factors on CHW performance in community settings. Importantly, community ownership and supervision of CHWs is a key characteristic which is insufficiently described and analyzed in available literature.

- Secondly, studies related to the role of CHWs in HIV/AIDS prevention and care, mental health and food security and nutrition were scarce.
- Thirdly, few evaluation studies/reports were at scale and none had followed an a-priori experimental design or impact assessment process

**Strategic Messages**

- The programs should be coherently inserted in the wider health system, and CHWs should be explicitly included within the HRH strategic planning at country and local level.
- Community preparedness and engagement is a vital element that is relatively rarely practiced. From the outset, program should develop village health committees in the community that can also contribute in participatory selection processes of CHWs.
- CHW programs should be based in and respond to community needs. In practical terms, such programs should continually assess community health needs and demographics, hire staff from the community who reflects the linguistic and cultural diversity of the population served, and promote shared decision making among the program's governing body, staff, and community health workers.
- Given the broad role that many CHWs play in primary care, a program must assure that a core set of skills and information related to MDGs be provided to most CHWs. Therefore, the curriculum should incorporate scientific knowledge about preventive and basic medical care, yet relate these ideas to local issues and cultural traditions. They should be trained, as required, on the promotive, preventive, curative and rehabilitative aspects of care related to maternal, newborn and child health, malaria, tuberculosis, HIV/AIDs as well as other communicable and non-communicable diseases. Other training content and training duration may be added pertinent to the specific intervention that the CHW is expected to work on as detailed in main report.
- The CHW programs should regulate a clear selection/ deployment procedure that reassure appointing those who certify the course completion and pass the writing or verbal exam at the end of training.
• The CHW programs should support provision of requisite and appropriate core supplies and equipment to enable appropriate functionality of such workers.
• The programs should have established referral protocols with community-based health and social service agencies.
• The programs should have regular and continuous supervision and monitoring systems in place and supervision should be taught to be undertaken in a participatory manner that ensure two-way flow of information. Moreover, both external and internal evaluations need to be carried out on regular basis to improve the services and analyze the need of various logistics, supplies and training according to the requirements. Ideally, programs should evaluate their own performance on annual basis, while a third party evaluation could be recommended in every 4-5 years, which would generate a neutral and free from bias findings.
• CHW programs should also provide opportunities for career mobility and professional development. These should include opportunities for continuing education, professional recognition, and career advancement. This can be through specific programmatic opportunities or access to educational and training scholarships.
• The outline of the country plan of action to develop and improve CHW program(s) should be finalized by a working group of relevant multiple stakeholders, including identification of resources needed, indicators and targets, and monitoring tools, and formally authorized by the Ministry of Health
• Finally, sustained resources should be available to support the program and workers therein.

**Knowledge gaps requiring further study**

• There is a remarkable dearth of information on the cost-effectiveness of CHW programs.
• Studies are needed to assess whether the CHW programs promote equity and access.
• Studies are required to assess the effectiveness of paid workers versus voluntary workers.
• Studies are needed to evaluate quality of care and effectiveness of health care provided by CHWs as compared to professional health care providers in the fields of health education, promotion and management of specific health problems.
• Given the global burden, specific studies on the potential role of CHWs in HIV/AIDS prevention and care, as there is very limited empirical information on this.
• Further systematic reviews are also required on factors affecting the sustainability of CHW interventions when scaled up; the effectiveness of different approaches to ensure program sustainability; and the cost-effectiveness of CHW interventions for different health issues.

• Additional analysis is required on the volume of work and type of activities and hence the number of CHWs required for such tasks. An example of this type of analysis is provided by a study in Bangladesh which assessed how many additional health workers would be needed to implement IMCI protocols. However, further studies are needed to determine the CHW workforce needed and their functional needs for MDG specific interventions.

Recommendations on how GHWA can utilize the Report/Findings

• The findings from this report should be disseminated to policymakers at country level, to health care delivery organizations, and to organizations in charge of developing HRH programs. As an initial step, an international consultation on CHW study and a global review would facilitate this exchange.

• That consultation should involve interactive debates that draw attention to key aspects of the community component and planning process, help clarify issues and address practical questions related to operationalization of these findings.

• GHWA should organize theme-focused workshops with existing CHW programs, to facilitate more interaction and generate quality output and in the long run, facilitate follow-up visits in these countries to provide technical support and guidance for CHW programs, including operational research.

• GHWA should also facilitate in undertaking studies related to cost-effectiveness of CHW interventions, potential role of CHWs in HIV/AIDS prevention and care, functional needs of CHWS for MDG specific interventions etc.

• GHWA should also take responsibility for publishing country specific CHW program evaluations and reports, and as much as possible, utilizing innovative, quasi-experimental designs to assess impact of such programs.
## Action Plan

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<td><strong>Performed situation analysis</strong></td>
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<td><strong>Review Results (Global Consultation)</strong></td>
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