

TRAINING COMMUNITY HEALTH WORKERS FOR CVD RISK SCREENING: A CALL TO ACTION



INCREASING BURDEN OF NCDs

- NCDs are among the top causes of death in South Africa, with more than one third (36%) occurring before the age of 60 years and accounting for nearly 40% of deaths in 2010
- Cardiovascular diseases (CVDs) are the leading cause of NCD death and driven by lifestyle risk factors associated with Type-2 diabetes and hypertension, which are often called the 'silent killers' and which severely impact health systems both in terms of burden and cost
- There is considerable evidence of unmet need for diabetes and hypertension care with poor levels of screening, treatment and treatment control

NEED FOR COMMUNITY-BASED PREVENTION

NCDs contribute to premature mortality in South Africa and threaten its socio-economic development. To address the increasing impact on services and its associated cost it is necessary to strengthen NCD prevention and management, if the target of reducing NCD deaths by 2% per annum is to be achieved. Early detection and screening of CVDs is crucial to increasing life expectancy and to reducing health care costs associated with complications from these diseases.

Shifting the focus from curatively orientated health care services to community-based approaches for NCD prevention and promotion is urgently needed. Community-clinic linkage models using community health workers (CHWs) are an effective and affordable strategy for addressing NCDs in resource limited settings. Expanding the role of CHWs needs to be considered, as this could free up time from trained health professionals to do other tasks that need high levels of formal, professional training.

Training CHWs in screening and monitoring of CVDs is a potentially cost-effective strategy that can help address the growing burden of NCDs in line with national and global health policies.

PRIORITY ACTIONS

- Train CHWs on how to use the paper-based or mobile app version of a new and simple tool for community-based and opportunistic CVD risk screening
- Support acceptance of CHW-based screening and well-structured referral pathways for treatment initiation by improving the community-clinic linkage
- Assess effectiveness, cost and sustainability of scaling community-based CVD risk screening by trained CHWs in South Africa



IMPLICATIONS OF PROGRAM ROLL-OUT

Practical implications

Training CHWs in CVD risk screening can be done over 1–2 weeks, including both practical and didactic components. Training teams should consist of health professionals (e.g. nurses, physicians, and nutritionists) who are fluent in both the official and predominantly spoken languages at each site.

Human resource implications

To scale the intervention nationally, approximately 450 CHWs (90 full-time equivalents) per million people are needed to screen the entire adult population. In South Africa, this would amount up to 20,000 CHWs, which is a small proportion of the 700,000 positions for such workers proposed by the South Africa National Planning Commission.

Financial implications

Screening by CHWs is cost-effective or even cost-saving, compared to usual clinic-based screening. The cost per screened adult using the mobile application is \$1 and at these rates, depending on which version of the intervention is used, the overall annual cost would be \$4–\$8 million. Using the mobile app is the most cost-effective strategy because it could save more lives.

KEY FINDINGS

- Health workers without formal professional training can be adequately trained to screen for, and identify, people at high risk of CVDs

- Training CHWs to screen for CVDs using a simple non-invasive risk screening tool can be a highly cost-effective intervention

- The mobile application version of the tool is simple to learn and can be used with as little as four hours of training

Cardiovascular disease risk scoring chart



Refs: Gaziano, T.A., et al., *An assessment of community health workers' ability to screen for cardiovascular disease risk with a simple, non-invasive risk assessment instrument in Bangladesh, Guatemala, Mexico, and South Africa: an observational study.* The Lancet Global Health, 2015. 3(9): p. e556-e563.
 Gaziano, T., et al., *Cardiovascular Disease Screening By Community Health Workers Can Be Cost-Effective In Low-Resource Countries.* Health Aff (Millwood), 2015. 34(9): p. 1538-45



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