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Empowering People to Reduce the NCD Risks that Threaten Tanzania's Communities and Health System

With the national increase in non-communicable diseases (NCDs), HPSS supports the use of strengthened community health promotion approaches, established in Phases I and II of the project, to address the rising threat to communities' health and household economies and the health system itself.

Rising trend in NCDs in Tanzania

Tanzania, in common with many resource-poor countries around the world, is undergoing an epidemiological transition, with a rise in illness and premature death caused by non-communicable diseases (NCDs) such as cardiovascular disease, stroke, diabetes, cancer and chronic respiratory disease. The 2015 Global Burden of Disease Study revealed that Tanzania faces a growing threat from the rising incidence of NCDs, which the World Health Organization (WHO) estimates to cause over a third of deaths nationally.

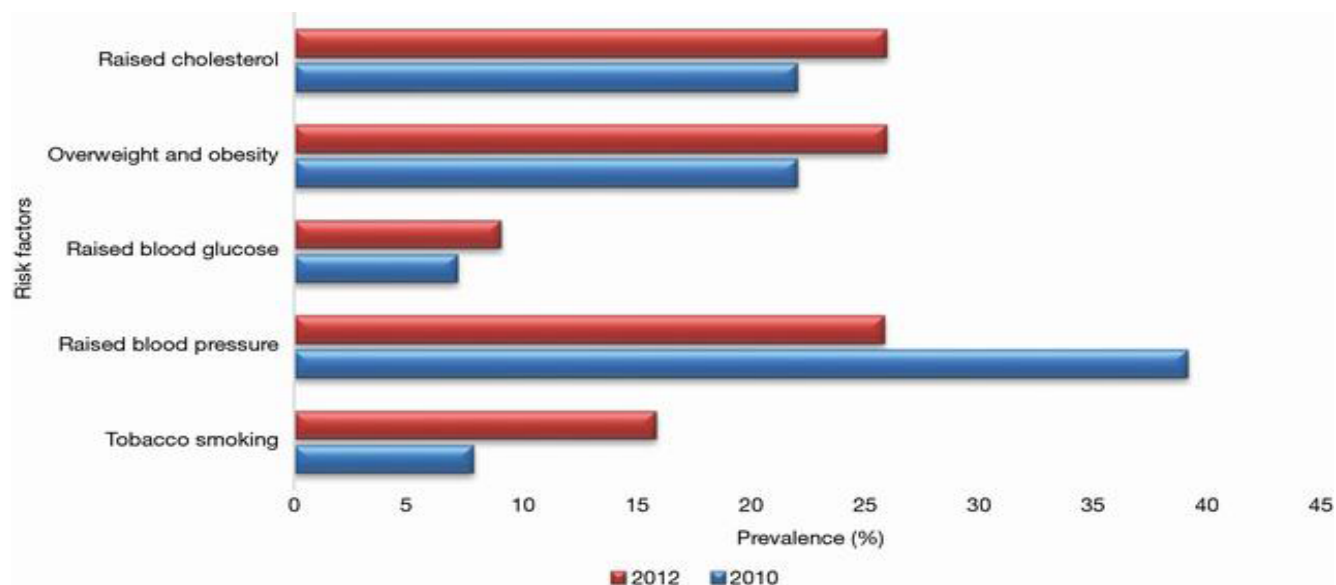


Figure 1. Rise in CVD risk factors over two years in Tanzania¹

¹ World Health Organization (WHO). (2014). Non-communicable diseases Country Profiles 2014. World Health Organisation. pp. 120.



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Schweizerisches Tropen- und Public Health-Institut
Institut Tropical et de Santé Publique Suisse

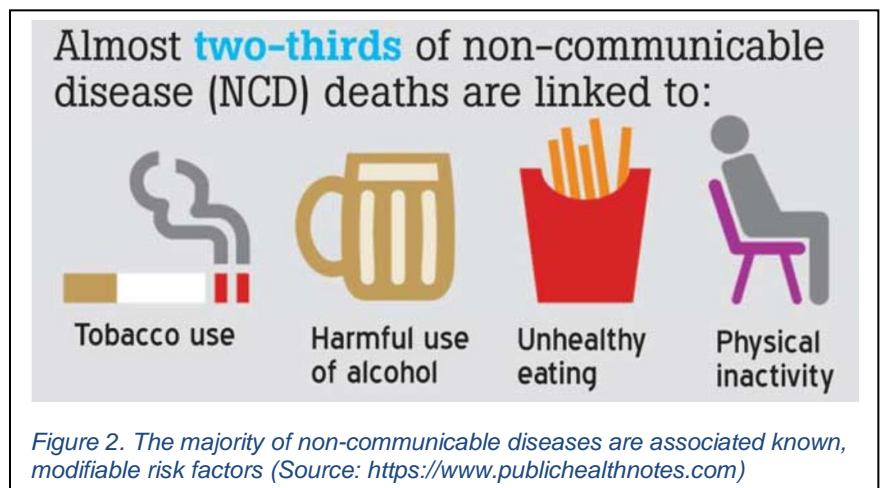
A 2019 study on cardiovascular disease (CVD)² in Tanzania showed rapid growth in risk factors that accelerate mortality and morbidity rates. In both rural and urban settings, cardiovascular lifestyle risk factors such as tobacco use, excessive alcohol consumption, unhealthy diet, inadequate physical activity, high blood pressure, diabetes, overweight, and obesity, are documented to be rising from previous WHO estimates made between 2010 and 2012 (shown in Figure 1, above).

The high and protracted costs of treating these diseases poses catastrophic health and economic consequences for individuals, households and communities, and has the potential to overwhelm the health system.

HPSS's health promotion response

As the majority of NCDs are associated with known, modifiable risk factors, the Health Promotion and System Strengthening (HPSS) *Tuimarisho Afya* Project funded by the Swiss Agency for Development and Cooperation (SDC) and implemented by the Swiss Tropical and Public Health Institute (Swiss TPH), has supported the Government of Tanzania to strengthen public understanding of risk factors through community health promotion to empower people to reduce their risks. This approach offers a cost-effective means of reducing NCD-related morbidity and mortality and the burden that such chronic illness places on poor families and communities.

Since 2012, HPSS has supported the Government of Tanzania to adopt cutting-edge, community participatory health promotion approaches. This included the development of health promotion policy, guidance documents, tools, training modules and establishing sustainable local government authority funding mechanisms for communities and schools' health promotion projects and activities. Community-actioned solutions were successfully piloted in Dodoma Region with water and sanitation solutions in response to malaria, eye and skin infections and diarrhoeal disease concerns. Since then, the project has been supporting the Government of Tanzania in using these approaches to address the country's growing threat from non-communicable diseases.



2 Roman, W. et al (29019). Cardiovascular diseases in Tanzania: The burden of modifiable and intermediate risk factors. Journal of Xiangya Medicine Vol 4 (August 2019).



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Policy support

HPSS provided support to the government drafting of the second *Tanzania NCD Strategic Plan 2016 – 2020*. This represented a shift in emphasis from curative services in the first plan, to prevention, both in terms of services, and individual and community empowerment to reduce risks. It also reflects the reorienting of services towards health promotion and prevention, an approach which HPSS promoted and piloted as the first community participatory health promotion strategy in Dodoma (*2012 Health Promotion Strategy for Dodoma Region*), as well as the *2015 National Policy Guidelines for Health Promotion*, for which the project provided technical assistance.

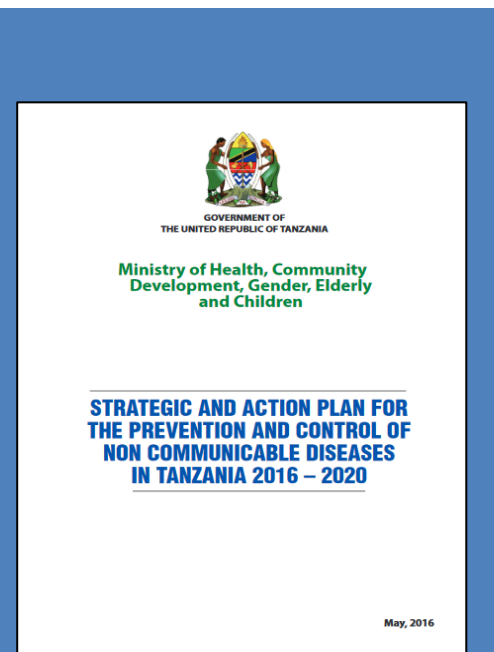
The *NCD Strategic Plan* listed the promotion of community-based approaches and sensitization for the prevention and control for NCDs as strategic priority actions. It also reflects health promotion approaches aligned with the WHO Ottawa Charter, rather than the reliance on top-down, health education that dominated in Tanzania, before HPSS supported the reorientation towards more effective community approaches and strengthening of health, school and community development capacities and structures.

Community NCD clinics

To specifically support the Government of Tanzania to effectively tackle the rise in NCD-related illness and premature deaths, in Dodoma Region HPSS piloted a multi-level approach engaging communities, health facilities, NCD Coordinators and Health and Community Development Officers who had previously been trained by the project in community participatory techniques. With their new community health promotion facilitation skills that had been put into practice during the pilot responses to water-related infection diseases, government officers facilitated communities to identify and prioritise their specific NCD concerns, to plan, budget and successfully access local authority funding to implement their solutions. This approach also served to create community awareness of NCD risk factors, as well as demand for NCD-oriented services.

From the health service supply side, HPSS supported the health system to offer NCD services by piloting screening clinics in selected health centres in Chamwino, Kongwa, Kondoa and Mpwapwa districts, as well as health centres and the district hospital in Dodoma City. In 2018, facilities were selected that had in-house expertise, facilities and medicines in line with standard treatment guidelines.

Fifty communities in the catchment areas surrounding these facilities also participated in the pilot and attended screening and follow-up treatment provided by medical doctors, including cardiologists, diabetes specialists, gynaecologists, ophthalmologists, dentists, surgeons, nurses and medical assistants. For patients whose screening indicated the need for medical intervention, treatment plans were implemented within the pilot facilities, including for example, hypertension and diabetes medication and management plans and



“Surveillance, primary prevention, multi-sectoral collaboration and strengthened health systems are key for the prevention and control of NCDs.”

Tanzania NCD Strategic Plan
2016 – 2020



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surgical interventions for breast and cervical cancers. HPSS provided start-up funds, to establish clinics by providing for consumables, including medication; staff allowances; patient files, prescription and appointment cards.

Results of the NCD screening pilot clinics

Extent of clinical NCD risks: During the NCD clinic pilot phase, over 1,000 individuals attended their local health facilities for the HPSS-supported NCD screening. Figure 3 shows that of these, a significant number of people presented clinical risk factors.

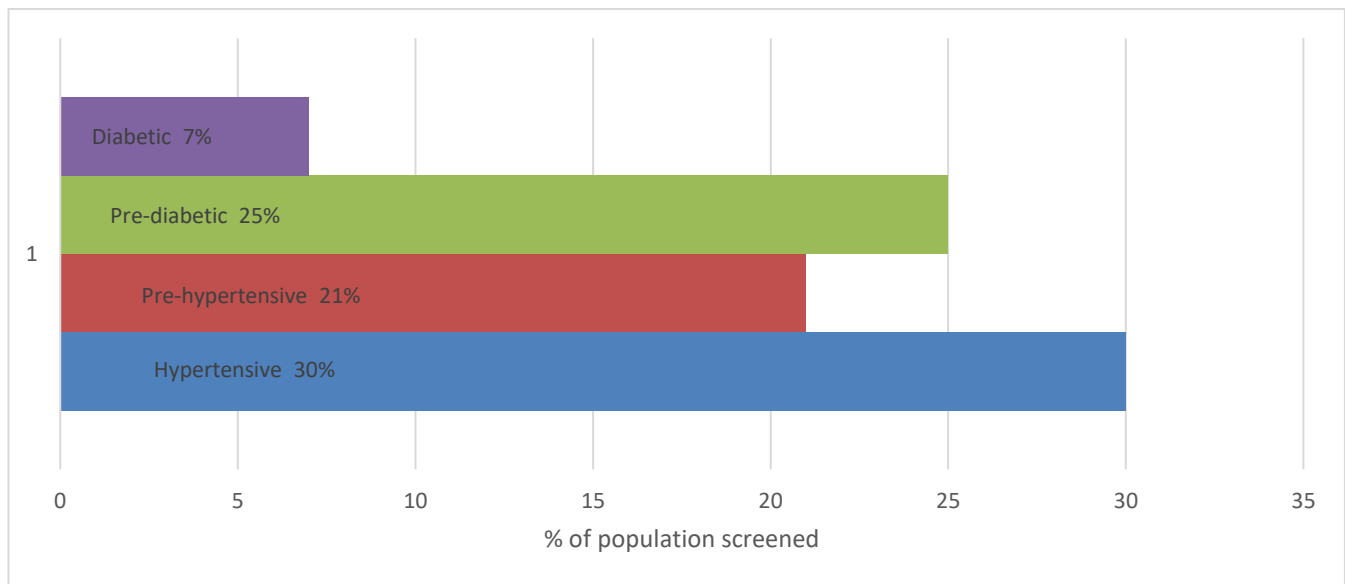


Figure 3. Proportion of patients presenting clinical risks and conditions at the pilot NCD screening clinics

A third of all people attending the screening clinics presented hypertension, with their resting blood pressure at or above 140/90 mmHg. Although high blood pressure does not typically cause symptoms that the patient is aware of, it is a major risk factor for stroke, coronary artery disease, heart failure, atrial fibrillation, peripheral arterial disease, vision loss, chronic kidney disease, and dementia. Given that a further 21% of our pilot sample was diagnosed to be pre-hypertensive, with blood pressure above 120/80 mm Hg, this indicates that half the population participating in our pilot were at risk.



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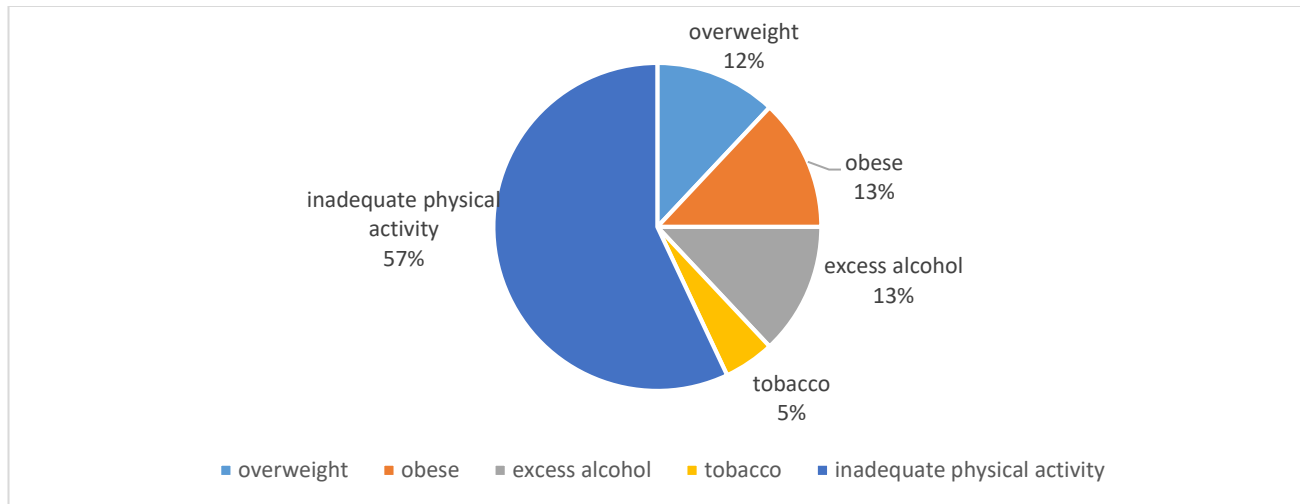


Figure 4: Proportion of patients attending the pilot clinics in Dodoma region presenting NCD risk factors.

Behavioural and lifestyle risks: As figure 4 shows, the majority of people attending the screening clinics, **57%, engaged in less physical activity** than the World Health Organization's recommendation of a minimum of 150 minutes of moderate-intensity aerobic activity a week. According to WHO³ insufficient physical activity is one of the ten leading risk factors for death worldwide, causing an estimated 3.2 million deaths globally. It is a key risk factor for NCDs such as **cardiovascular diseases, cancer (particularly colon and breast) and diabetes**, indicating that a substantial proportion people of Dodoma are at risk of developing chronic, if not fatal disease in the future.

This is reflected in the proportion of the screened population that carried excess fat: 15% of the pilot sample was **overweight** and a further 13% were **clinically obese** and **at risk of associated NCDs including cardiovascular diseases, cancer and diabetes**.

Implications for the health of the nation, the health system and household economies

The result of our data our concerning, given the prevalence of, often multiple, risk behaviour, clinical and pre-clinical risk factors. Given the chronic and disabling progression of many NCDs, the inability to work, need for care from family members and health care providers, places substantial long-term burdens at the household, family and health service levels, threatening their development, prosperity and functioning. World Economic Forum, among other economic think tanks, has stated that: "The anticipated economic toll of NCDs is staggering".⁴

"The anticipated economic toll of NCDs is staggering"

World Economic Forum and the Harvard School of Public Health (2011).

3 WHO Physical Activity Fact Sheet. Accessed 2.1.17 <http://www.who.int/mediacentre/factsheets/fs385/en/>

4 World Economic Forum and the Harvard School of Public Health (2011). The Global Economic Burden of Non-communicable Diseases <http://www.weforum.org/EconomicsOfNCD>



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Health promotion: the cost-effective and empowering solution to the rise in NCDs

However, the majority of NCDs are avoidable and health promotion has the potential to empower people to reduce their risks, both through communicating the risks and consequences of negative consumption, lifestyle choices, and behaviours, and by supporting action for change at the community, family, school, health facility and individual levels.

While HPSS provided the funds to kick-start community NCD clinics to illustrate a cost-effective means of addressing the NCD burden, the clinics themselves have shown that all associated costs can be met. All consumables and expenditures covered by the project during the pilot phase have since been integrated within daily clinical services and costs have been absorbed by annual facility budgets. As well as continuing to screen and treat the communities they serve, these facilities are also leading local preventive activities.

Health promotion is much more than a mode of awareness-raising that it has mistakenly been regarded to be. By holistically strengthening health promotion within the Tanzanian, health, community development and education system, HPSS has supported reorientation of Tanzania's health promotion and NCD policy, trained government, health, education and community development officers and piloted affordable community-level prevention approaches. These, together with our training of lecturers and courses developed on community participatory health promotion, provide a sustainable basis upon which the Government of Tanzania can cost-effectively address the rise in chronic illness, disability and early death due to NCDs and reduce the burden on the health system as well as families and communities.

The Health Promotion and System Strengthening (HPSS) "Tuimarisho Afya" Project is part of the development cooperation between Tanzania and Switzerland, funded by the Swiss Agency for Development and Cooperation (SDC). The HPSS project was launched in 2011 to pilot strengthening of health insurance, community participatory health promotion, pharmaceutical management and management of health technology in Dodoma Region. The project is currently in its third and final phase, during which the project is supporting the Government of Tanzania to scale-up approaches to all 26 regions, nationwide.

Dr Kate Molesworth

Senior Public Health Specialist & Social
Development Adviser

Swiss Centre for International Health

Swiss Tropical and Public Health Institute

Socinstr. 57, P.O. Box,

4002 Basel, Switzerland

kate.molesworth@swisstph.ch
www.swisstph.ch

Mr Ally-Kebby Abdallah

Project Manager

Health Promotion and System Strengthening
Project (HPSS)

P.O.Box 29

ACT Building, 7th Avenue

Dodoma, Tanzania

ally.kebby@hpss.or.tz
<https://www.hpss.or.tz/>