

# Tackling the Rise in Non-Communicable Diseases and Conditions in Kenya

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## Introduction

Non-communicable diseases and conditions (NCDs) include cardiovascular diseases, cancers, diabetes and chronic respiratory diseases. The World Health Organization estimates that NCDs kill 38 million people each year with three quarters of these deaths (28 million) occurring in low- and middle-income countries. Globally, 16 million NCD deaths occur before the age of 70, with 82 percent of these “premature” deaths occurring in low- and middle-income countries. The WHO further estimates that NCDs were responsible for 64 percent of the total deaths in 23 low- and middle- income countries, 47 percent of these occurring in people who were younger than 70 years<sup>1</sup>.

Among NCDs, cardiovascular diseases account for most deaths (17.5 million annually), followed by cancers (8.2 million), respiratory diseases (4 million) and diabetes (1.5 million). The major risk factors for these conditions include tobacco use, physical inactivity, alcohol consumption, and unhealthy diets<sup>1</sup>.

These diseases are associated with multiple negative effects in low-income countries given that they decrease economic productivity and drain family resources, becoming a major threat to economic and social development. In Africa, deaths from these diseases are rising faster than anywhere else in the world. While in the developed world these diseases are responsible for deaths of only 13 percent of the young productive population, 30 percent of African youthful populations die from NCDs<sup>2</sup>. Poverty and inequality, which often occasion poor lifestyles characterised by poor diets, smoking and drinking, are some of the factors contributing to the high rates of NCDs in poor countries.

NCDs have been on a steady rise in Kenya with many patients visiting hospitals due to high blood pressure, cancers, diabetes, and respiratory diseases. The Kenya 2015 STEPwise Survey for Non-Communicable Diseases Risk Factors Report established that 27 percent of all deaths in the country result from NCDs while half of those admitted in hospitals are as a result of NCDs<sup>3</sup>. About a quarter (23 percent) and 3.1 percent of Kenyans had high blood pressure and impaired fasting glucose, respectively, while almost a third (27 percent) were obese or overweight<sup>3</sup>.

Routine data from the health system show that there has been a steady rise in the number of patients visiting facilities due to high blood pressure and diabetes, increasing from 494,312 to 751,341 and 166,203 to 218,992 in the years 2012/13 to 2014/15, respectively. Hypertension accounted for significantly more cases compared to diabetes and mental health as shown in Figure 1 overleaf<sup>4</sup>.

## Key Messages

- Non-Communicable Diseases (NCDs) have been increasing in Kenya. Recent evidence shows that 55% of hospital deaths in Kenya result from NCDs.
- Key risk factors for NCDs include tobacco use, alcoholism, unhealthy diet, and physical inactivity.
- Costs for treatment of NCDs are high; these drive and entrench families in poverty.
- Based on existing evidence, Kenya should develop and implement a health promotion programme to educate the public on NCD prevention, augment and implement fiscal and legislative measures such as taxation and restricted advertising for harmful foods/products, enforce laws to curb consumption of harmful products, and integrate NCDs into primary healthcare services.

This trend may be attributed to lifestyle changes exposing the population to more risk factors for NCDs, including poor nutritional habits such as increased consumption of processed foods, diets high in trans-fats and salt, smoking, low physical activity, and increased alcohol consumption. The STEPwise survey found that 19.3 percent of Kenyans drink alcohol regularly out of which 13 percent drink daily, while 12.7 percent engage in heavy episodic drinking. More men (23 percent) than women (4.1 percent) were smokers with a smoking prevalence of 13.1 percent.<sup>4</sup> In terms of diet, a vast majority of Kenyans (94 percent) eat less than five servings of fruit daily as recommended by WHO, 23.2 percent and 28 percent add salt and sugar to their food and drinks, respectively, while 38 percent cook with vegetable fat.<sup>4</sup> Health literacy is poor among Kenyans. The STEPwise Survey found that only 20 percent of Kenyans have ever received advice to eat fruits, eight percent to avoid tobacco, 10 percent to reduce or refrain from drinking alcohol and 11.4 percent to reduce salt intake.<sup>4</sup>

## Methodology

A desk review of the existing evidence on NCDs was conducted. Documents reviewed included policy and strategy documents from government and other actors locally and globally. Data collated within the DHIS2 over the previous three years (2013-2016) were analysed to show the trends in NCDs. Findings from the Kenya STEPwise survey 2015 were also used in quantifying the extent of the problem.

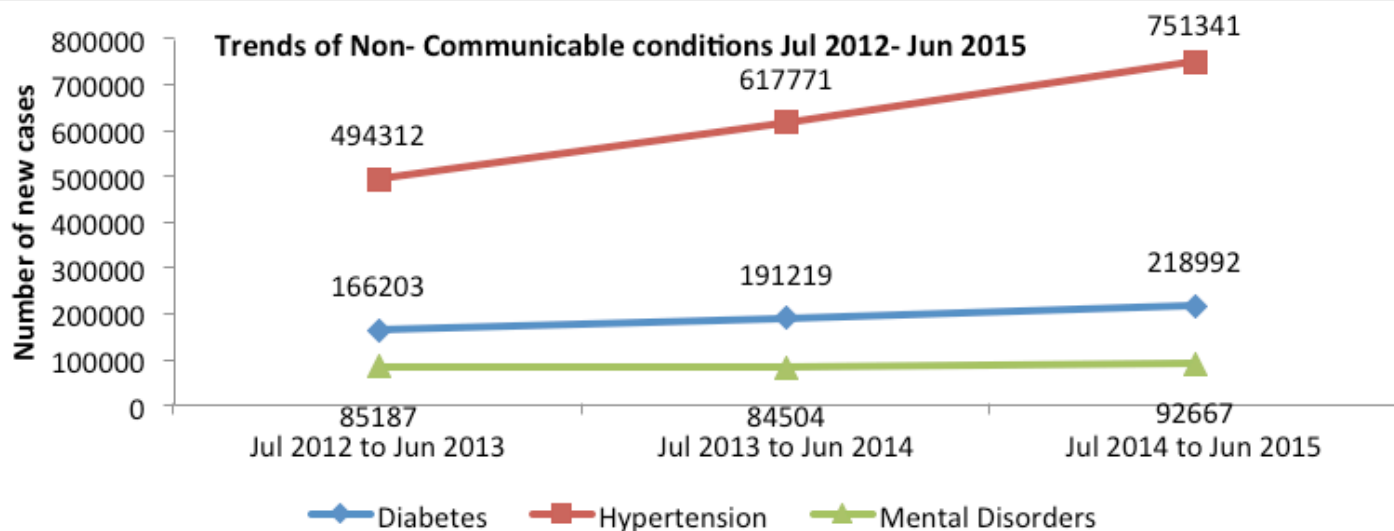


Figure 1: Trends of non-communicable diseases and conditions (Jul 2012-Jun 2015) Source: MoH (2015) Annual Health Sector Report 2014-2015.

## Discussion of Policy Options

Globally, a lot of concerted efforts have been put in place to tackle NCDs. A Global Action Plan for the Prevention and Control of NCDs 2013-2020 is in place with an intention to reduce the number of premature deaths from NCDs by 25 percent by 2025 through nine voluntary global targets.<sup>5</sup>

In the recent past, Kenya has made significant gains in putting in place measures to control and prevent NCDs. At the policy level, the Kenya Health Policy 2014-2030, which outlines the overall sector direction in health has prioritised NCDs, with one of the policy objectives being to curb the rising burden of NCDs<sup>6</sup>. In 2015, an NCD strategy was developed and launched with an aim to<sup>7</sup>:

- Establish mechanisms to raise the priority accorded to NCDs
- Foster the policy and legal environment to incorporate prevention and control of NCDs
- Promote healthy lifestyles and implement interventions to reduce the modifiable risk factors for NCDs
- Promote and conduct research and surveillance for the prevention and control of NCDs
- Promote sustainable local and international partnerships for the prevention and control of NCDs
- Establish and strengthen effective monitoring and evaluation (M&E) systems for NCDs and their determinants
- Strengthen health systems for NCD prevention and control across all levels of the health sector and promote and strengthen advocacy, communication and social mobilisation for NCD prevention and control

Some significant gains have been made in Kenya towards reducing some risk factors for NCDs. The most commendable gains have been made in control of alcohol and cigarette consumption through increase in taxes and enactment of legislation targeting to control use of these products. Restriction of times and places when and where alcohol is sold as well as strict implementation of the Traffic Act that controls drunken driving have in the past reduced alcohol consumption in Kenya. In terms of cigarette smoking, warnings of the harmful effects of the practice on cigarette packets, and banning both smoking in public places and tobacco advertisements have been implemented. These efforts, if sustained, could reduce the number of people exposed to cigarette smoke and alcohol, and consequently save many lives in the long-term. Some challenges, however, still exist in the implementation framework and they have somewhat eroded some of these gains. These, if not addressed systematically, could result in increase in use of cheaper and more harmful alternative products.

Regarding treatment of NCDs, investments in infrastructure such as modern equipment for screening and treating NCDs and training of healthcare workers to manage these conditions is ongoing. In a bid to improve data availability on NCDs, efforts are underway to define some key indicators to monitor progress on control of NCDs, and a number of regional cancer registries have been established.

Major gaps remain in control of unhealthy diets, environmental and household pollution and physical inactivity. In the Kenyan health sector, as in other low and middle income countries, the approach to prevention and treatment of these chronic diseases is largely unstructured. A 'global framework for action to improve the primary care response to chronic non-communicable diseases' has been proposed with highlights on key areas to structure such



Image: Jay Grandin/Flickr

a programme. These include identification and addressing modifiable risk factors, screening for common NCDs and diagnosing, treating and following-up patients with common NCDs using standard protocols.<sup>5</sup> This proposed framework borrows heavily from one developed for tuberculosis control that was highly effective. It advocates for a package of interventions for quality care including contextual components such as political commitment. Some of the specific approaches recommended include case-finding in primary healthcare services attendees, standard diagnostic and treatment protocols, reliable drug supply, and a strong reliable monitoring and evaluation system. This would include indicators to measure progress towards increasing the impact of primary care interventions on chronic NCDs.<sup>5</sup>

The WHO has also developed and recommended a set of interventions for NCD risk factors based on impact, cost effectiveness, feasibility of implementation, and affordability.<sup>8</sup> These interventions, packaged as the 'best buys', include measures to reduce tobacco use, harmful use of alcohol, unhealthy diets and physical inactivity, cancer, cardiovascular disease and diabetes. This is through regulation and fiscal measures, public health education and preventive health interventions such as administration of aspirin to people at high risk of heart attacks and strokes as well as immunisation and screening to prevent cancer.

A number of these cost effective population-based prevention interventions have been implemented in Brazil, China, India, Mexico, Russia, South Africa and England. These include provision of public health education through mass campaigns and school-based interventions, fiscal measures to control sale of unhealthy foods while reducing the cost of healthier foods, regulatory measures that restrict marketing of unhealthy foods especially to children, physician counselling, food labelling, and worksite interventions.

Interventions to reduce obesity by improving diets and increasing physical activity were found to be a useful addition to the management of chronic diseases. Regulation and price interventions on food were found to produce results in the shortest time in most countries while strategies that combined several interventions produced the highest health gains. Regulations targeting control of food advertising were the most effective in most countries especially in China and India with regulation of advertising food to children saving most lives overall. This intervention was more effective and efficient than school-based health promotion programmes. Fiscal measures were effective in obesity control in Brazil and China, whereas physician counselling worked best in Russia and China.<sup>9</sup>

Health literacy has been identified as a major determinant of health outcomes since it is associated with better health outcomes. Systematic reviews have shown that promotion of health education and interventions at primary healthcare points and community level is one of the most effective ways of improving health literacy for NCD risk factors. Interventions on smoking have been shown to be most effective at the primary level while those targeting nutrition and physical activity were more effective when done at the community level<sup>10</sup>.

Other instances where interventions have been used include control of advertising and labelling of unhealthy foods in South Korea and South Africa, and legislations and regulations to limit the salt content of food produced in industries in South Africa.<sup>11</sup> Regulation of food labelling, unhealthy food pricing, marketing and health claims have also been done in Mexico, for example, to control the amount of sugar in drinks. South Africa additionally introduced lifestyles interventions such as an open-gym system in Johannesburg.<sup>11</sup>

It is clear that all the risk factors for NCDs including tobacco use, harmful use of alcohol, lack of physical activity, excess energy intake and unhealthy diet are all modifiable by law, fiscal measures, and health education.

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## Recommendations

### Fiscal and legislative measures

- Introduce higher taxes on unhealthy foods and reduce taxes and cost of producing healthy foods. Such foods include those rich in fiber including fruits and vegetables.
- Restrict advertising of unhealthy foods especially those targeting young children
- Introduce legislation to regulate the salt and sugar content of foods produced in industries
- Enforce laws on control of sale of alcohol and cigarette strictly especially the hours and places of availability

### Health Promotion

Implement health promotion programmes to educate the public on prevention, screening and treatment of NCDs, including benefits of healthy eating, physical activity and harmful effects of alcohol and smoking. This can be done through mass media and in a variety of other appropriate channels such as health facilities, schools, workplaces, households and local communities.

## Integration of NCD management in primary health care

Integrate NCD management in the primary health care services through development of clear structures to prevent and manage NCDs. These should include methods of identification and addressing modifiable risk factors, screening for common NCDs and diagnosing, treating and following-up patients with common NCDs using standard protocols.

## Monitoring and Evaluation systems

Establish clear monitoring and evaluation (M&E) systems to monitor NCDs and their determinants and evaluate progress at the national, regional and global levels. Develop and incorporate indicators that properly capture NCD data, provide harmonised tools, streamline the reporting systems and train relevant staff to properly code and capture NCD data. These measures are urgently needed to improve the quality of NCD data required for decision-making.



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