Women and Noncommunicable Diseases in Africa:

Mapping the scale, actors, and extent of rights-based work to address the impact of NCDs on African women

AWDF

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List of Abbreviations and Acronyms

ANDLA	African Non-communicable Disease Longitudinal data Alliance
APHRC	African Population and Health Research Centre
AU	African Union
AWDF	African Women's Development Fund
BMI	Body mass index
CNCD-Africa	Consortium for NCDs Prevention & Control in sub-Saharan Africa
CRDs	Chronic Respiratory Diseases
CSOs	Civil Society Organisations
CSW	Commission on the Status of Women
CVDs	Cardiovascular diseases
DALYs	Disability-adjusted life years
EAC	East African Community
EANCDA	East Africa NCD Alliance
ECOWAS	Economic Community of West African States
EM-NCDA	Eastern Mediterranean NCD Alliance
ERA	Environmental Rights Action
EWEC	Every Woman Every Child
FCTC	Framework Convention on Tobacco Control
GBD	Global Burden of Disease Study
GCM/NCD	Global Coordination Mechanism on the Prevention and Control of NCDs
GSK	GlaxoSmithKline
IGT	Impaired Glucose Tolerance
IHD	Ischaemic heart disease
IHME	Institute for Health Metrics and Evaluation
iNGOs	International NGOs
MoH	Ministry of Health
MSA	Multisectoral Action
NCDs	Non-communicable diseases
NEPAD	New Partnership For Africa's Development
NGOs	Non-governmental organisations
NPHI	National Public Health Institutes
PASCAR	Pan African Society of Cardiology
PEPFAR	President's Emergency Plan for AIDS Relief
PIH	Partners in Health
PIH	Partners in Health
SADC	Southern African Development Community
SCI	Soul City Institute for Social Justice
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
STEPS	STEPwise approach to NCD risk factor surveillance
UN	United Nations
UN HLM	UN High-level Meeting
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNESCO	United Nations Education, Scientific and Cultural Organization
UNIATF	UN Interagency Task Force on the Prevention and Control of NCDs
WAHO	West African Health Organization
WHA	World Health Assembly
WHO AFRO	World Health Organization African Region

Introduction

1

The African Women's Development Fund (AWDF) is a pan-African, women-led, grant-making foundation supporting African women's organisations working at local, national, and regional level to promote, advance and realise African women's rights across the continent (AWDF 2017). Since its inception in 2001, AWDF has acquired resources from individuals, corporations, other foundations and governments to provide financial, capacity building, knowledge production and advocacy support to change-makers—African women's activist organisations and individuals—who advance women's rights and gender equality on the continent (AWDF 2017).

AWDF's current strategic plan *Shaping the Future (2017-2021)* focuses the organisation's work around investments to build the best possible future for women in Africa. As part of developing the strategic plan, AWDF commissioned a future trends analysis titled, *Futures Africa: Trends for Women by 2030* (AWDF 2017). This report indicated that non-communicable diseases (NCDs) are rapidly growing in terms of the burden of disease and soon becoming the leading causes of death in many countries across Africa (AWDF 2017). Focusing on this often neglected trend and the potential opportunities to support women-led initiatives in NCD response, AWDF wants to understand:

1. What is the scale and what are the key gendered concerns around NCDs and women in Africa?
2. Who are the key actors responding to the rise in NCDs in Africa?
3. How are these actors responding and are gender, equity and rights being considered in these responses?
4. What are the opportunities and challenges for African women's organisations around engagement with NCD prevention and control and what are the ways to support greater engagement on links between NCDs and women's rights?

AWDF's current strategic plan Shaping the Future (2017-2021) focuses the organisation's work around investments to build the best possible future for women in Africa.

This report sets about answering each of these four questions through a review of the literature as well as an online survey and interviews, ultimately helping to inform where to invest AWDF's resources and actions in this area, as well as highlight the importance of gendered responses to the rising tide of NCDs. The structure of the report follows the four broad questions. Information pertaining to questions two and three have been amalgamated into a single section (Section 3) to facilitate presentation and understanding of the links between specific actors and actions. In addition, there is a preliminary methodology section (Section 2), which provides an overview of the processes used for data collection and analysis as well as associated limitations and caveats to be considered when interpreting findings presented in the subsequent sections of the report.

Methodology

This section details the scope, methods and limitations related to the data and information collected and presented in the report.

2

2.1 Scope

This report focuses specifically on cardiovascular diseases (CVDs), diabetes, cancers, chronic respiratory diseases, and mental health. All future references to NCDs in this report therefore relate to these five broad disease groups unless explicitly stated otherwise.

The geographical scope of this report covers all 54 countries in Africa.

2.2 Data collection and analysis

The information and data collated in this report were obtained from a variety of sources including public data portals, a review of grey and published literature, an online survey, and in-depth interviews. Throughout the report all sources have been cited and referenced. Below is a summary of each of the methods used.

Estimates of the prevalence, incidence and mortality of each of the NCDs were obtained from the Global Burden of Disease Study (GBD) 2017, the most comprehensive effort to date to measure epidemiological levels and trends worldwide (IHME 2018). GBD is led by The Institute for Health Metrics and Evaluation (IHME) and provides global, regional, and national estimates of mortality and disability from major diseases, injuries, and risk factors (IHME 2018). All data presented in this report are available from the GBD IHME online portal: https://vizhub.healthdata.org/gbd-compare/.

It is important to consider that population growth and ageing play a significant role in the total increase in the number of deaths reported over time. Since this report aims to understand the current burden of disease at regional and national level, data presented here are mainly crude prevalence, incidence and mortality figures. In some instances age-adjusted estimates are presented to facilitate comparisons between countries. Estimates for mental health also include disability-adjusted life years (DALYs), which are a measure of the number of healthy-years lost. Data represent relates to all ages unless

reported otherwise. Regional analyses were based on the five United Nations (UN) sub-regions in Africa: Northern, Western, Central, Eastern and Southern Africa (UNSD 2019).

Data on the prevalence of NCD risk factors was obtained from the 2016 complication of national surveys in the WHO African Region (WHO AFRO) focusing on prevalence of NCD risk factors (WHO AFRO 2016). These surveys are called STEPwise approach to NCD risk factor surveillance (STEPS), and are standardized methods for collecting, analysing and disseminating data on NCD risk factors in WHO member countries.

Grey and published literature were reviewed to:

- Explore other estimates of the prevalence, incidence, and mortality associated with the NCDs of interest in Africa as well as information on relevant risk factors and access to services. A particular effort was made to search for research and data with a specific focus on women and gendered trends on the continent. Where appropriate, references of relevant publications were also reviewed to identify other pertinent sources;
- Identify key actors and funders supporting work on NCDs on the continent;
- Summarise key approaches to NCD prevention and response as well as links with other advocacy issues;
- Map rights-based work related to NCDs on the continent.

A short online survey was conducted in English to help understand which African women's organisations are already working on NCD prevention and response and explore opportunities to support greater engagement on links between NCDs and women's rights by African women's organisations. The survey was sent to organisations in the AWDF database with responses collated between 28th June 2019 and 23rd of July 2019. Responses were analysed in excel with key themes identified across all responses to a relevant question and where appropriate quantified. See Appendix 1 for the survey questions.

Nineteen in-depth interviews were conducted in English and French with key informants between 25th June 2019 and 17th July 2019. Appendix 2 includes the interview guide used and a detailed list of individuals interviewed. Interviews were conducted with individuals from:

- Civil Society Organisations (CSOs) working on NCDs who had responded to the AWDF online survey or had been referred to through other interviews or e-mail correspondence
- National and Regional NCD Alliances
- The NCD Alliance

There is an urgent need to expand research across the continent to develop more evidence-based and better-suited African solutions to the NCD crisis.

- Global Coordination Mechanism on NCDs, World Health Organization (WHO)
- Partners in Health (PIH)
- StrongMinds
- JHPIEGO

2.3 Limitations and caveats

There are a number of limitations and caveats related to the information presented in this report. First, there are major gaps across Africa with regards to health data generally and high-quality data more specifically. Data on NCDs are sparse; this includes cause-specific mortality data as well as NCD risk factor data which are rarely fully integrated into national health surveillance and reporting systems (Nyaaba 2017). For example a study which evaluated countries' progress towards WHO policy recommendations for reducing the NCD burden, found that more than two-thirds of African countries lack functional systems for generating reliable cause-specific mortality data which prevents accurate estimates of disease-specific burden needed for effective and appropriate health programming and delivery (Nyaaba 2017). Therefore it is important to note that the GBD 2017 estimates are based on sparsely available data and ultimately for most countries across the continent figures are derived from sophisticated modelling adjusting for biases where possible (IHME 2018). It is hard to say whether these estimates are likely to be under- or over-estimates of the true burden of disease however there is a clear need to improve data collection and reporting across the continent to better inform policy and planning.

Second, organisational differences in definitions and methodology mean comparisons across various data sources should be made with caution. The WHO African Region for example does not include Somalia, Djibouti, Sudan, Egypt, Morocco, and Tunisia; while the World Bank Africa Region consists of countries in sub-Saharan Africa (SSA) only. While doing research for this project a number of inconsistencies were noted across data sources even once identical geographical parameters and time scales were considered. To avoid these inconsistencies, a single data source, the GBD Study 2017, was used to estimate the NCD disease burden for all 54 countries on the continent.

Third, research on NCDs across Africa is lacking (Holmes 2010, Mafunda 2006). This spans the whole gamut, including disease burden and risk factor distribution among marginalised and hard-to-reach groups (e.g. LGBTQI, rural communities, those in informal settlements in urban settings); appropriateness of diagnostic tools and criteria in African populations; differences in pathophysiology; not to mention understanding co-morbidities and risk profiles with infectious diseases. This gap has meant that most of the programmatic and government-led responses to NCDs are based on findings from research done on predominantly male and Western populations (Holmes 2010). There is an urgent need to expand research across the continent to develop more evidence-based and better-suited African solutions to the NCD crisis.

NCDs and key gendered concerns in Africa

3

To begin to understand the scale of NCDs across the continent and the impact of these diseases on women, this section starts by outlining the burden of five main NCDs in Africa, namely CVDs, diabetes, cancer, chronic respiratory diseases (CRDs) and mental health and neurological conditions. It then summarises the prevalence of some of the major NCD behavioural and metabolic risk factors, such as nutrition, physical activity, tobacco, alcohol, and hypertension. Other determinants fuelling the rise of NCDs—urbanisation and socio-economic drivers—are also briefly discussed. The last part focuses on co-morbidities between NCDs and other disease groups.

Throughout this section in addition to presentation of overall figures and data, key statistics around the impact of NCDs on women in Africa, including any noticeable regional patterns or concerns for particular constituencies of women and girls are highlighted.

3.1 Burden of NCDs

Cardiovascular diseases
Cardiovascular diseases, which include a number of conditions affecting the heart or blood vessels, are the leading cause of death in Africa for both men and women, considering the continent in its entirety (Fig 1). However there is large geographical variation. Countries on the continent where CVDs are the leading cause of death include, Tunisia, Egypt, Morocco, Algeria, Cape Verde, Libya, Seychelles, Mauritius (WHO 2018). Some evidence suggests that compared to the rest of the world, CVD deaths in Africa occur at younger ages on average (Moran et al 2013).

In 2017, **more than 22 million women were estimated to be living with CVDs in Africa** (IHME 2018). There were almost 2.6 million new cases of CVDs occurring among women that year and over 675,000 deaths (IHME 2018).

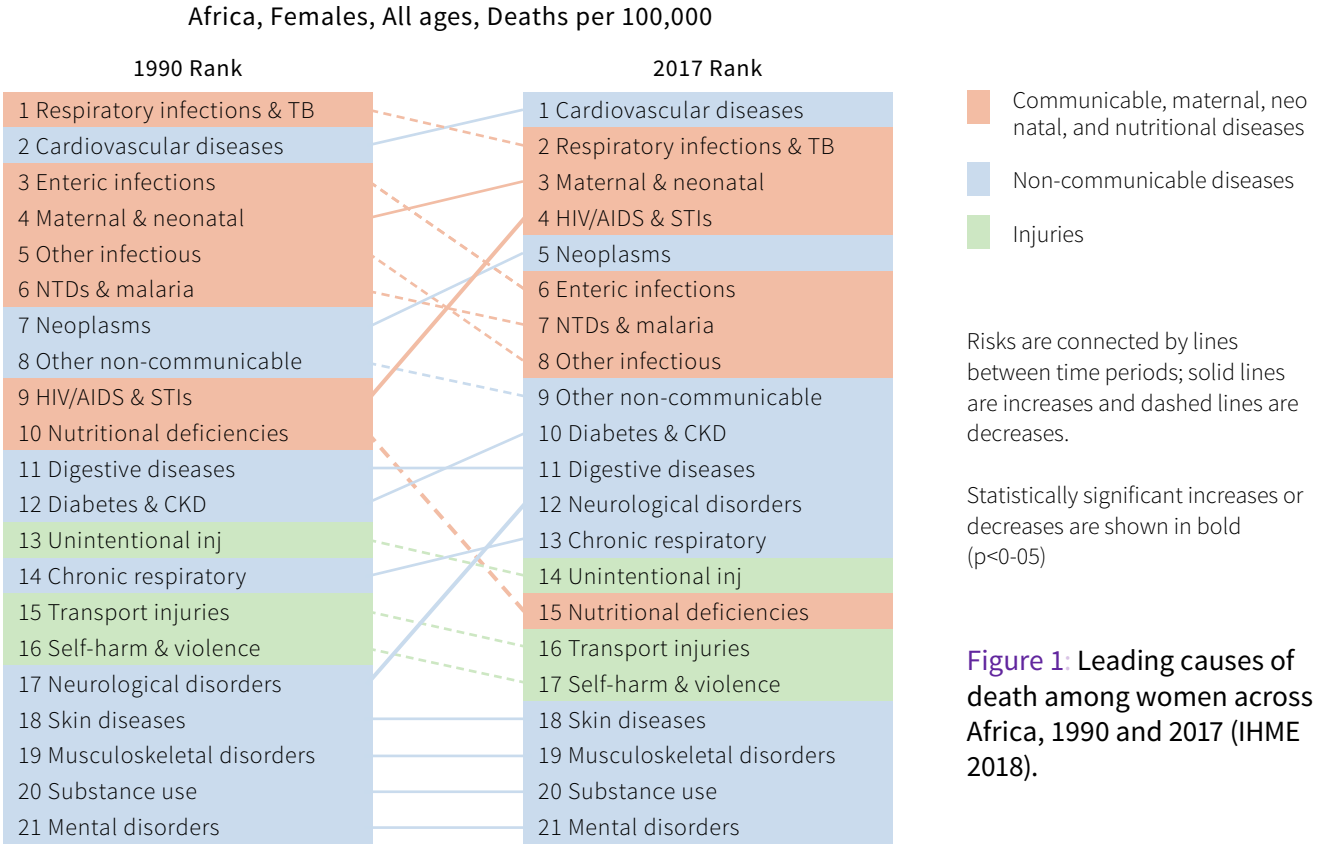


Figure 1: Leading causes of death among women across Africa, 1990 and 2017 (IHME 2018).

Regions with the highest prevalence of CVDs among women were: Western Africa (almost 6.5 million cases), Eastern Africa (over 6 million cases) and Northern Africa (over 5.8 million cases); and regions with the highest number of deaths were Northern Africa (over 230,000 deaths), Western Africa (over 179,000 deaths) and Eastern Africa (over 144,000 deaths) (IHME 2018). **In Western Africa, Central and Eastern Africa, the crude number of deaths from CVDs was higher among women compared to men** (IHME 2018). This difference remained in Western Africa even after adjusting for age. A recent global study of CVD burden found evidence that in countries which are earlier in the global socio-demographic transition, CVD mortality is higher among women (Roth 2017). Appendix 3 provides the crude and age-adjusted estimates of CVD prevalence and mortality for women by country. Countries with the highest age-standardized CVD mortality rates among women were Central African Republic, Morocco, Madagascar, Sudan, and Egypt (IHME 2018).

In addition to examining the burden of disease, it is also important to consider differences in the manifestation of CVD symptoms between men and women. Data suggest that men develop CVD at a younger age and have a higher risk of ischaemic heart disease (IHD) than women. Women on the other hand have a higher risk of stroke, including haemorrhagic stroke, which often occurs in older age (Leening et al 2014, George 2015, Maas 2010, Shaw 2009). Studies have also found that the presentation of clinical symptoms associated with various CVDs differ between men and women (Leening 2014, George 2015, Sheps 2001). Since clinical diagnostic definitions are based on symptoms reported from men, warning signs in women are often ignored, unrecognised or misdiagnosed, ultimately leading to under-treatment of CVDs in women (Peters et al 2016). Furthermore, for many women on the continent additional gender-specific barriers prevent them from accessing healthcare (Chiang 2013, Oosterhoff 2015).

Diabetes

Across Africa **more than 50.9 million people were estimated to be living with diabetes in 2017** (IHME 2018). This figure however is likely to be an underestimate as recent work suggests that Africa has the highest percentage of undiagnosed people living with diabetes, with almost 18.7 million people estimated to be undiagnosed in 2017 (IDF 2017). An additional 42.9 million adults (18-99) in Africa are thought to have Impaired Glucose Tolerance (IGT) which places them at high risk of developing Type 2 diabetes (IDF 2017). Forecasts suggest that by 2045 close to 108.6 million people will have IGT (IDF 2017). There is also some evidence suggesting that African women may be at greater risk of insulin resistance compared to women in other parts of the world, which would have major implications for risk assessment among women on the continent (Goedecke 2017). Similar to other regions in the world, the majority of diabetes cases in Africa are due to Type 2 diabetes. In Northern Africa, the epidemiological profile of Type 1 diabetes is similar to that observed in Europe and North America, while in SSA Type 1 is rarer and is associated with a later age of onset (Gill 2014). These differences may be due to an earlier mortality rate associated with lack of access to insulin, syringes and other long term monitoring equipment. It is also worth noting that there are two other distinct sub-groups of diabetes in Africa – malnutrition related diabetes mellitus and atypical ketosis-prone type 2 diabetes, although they both occur much less frequently (Gill 2014)[2].

Appendix 4 provides the crude and age-adjusted estimates of diabetes prevalence and mortality for women by country. Countries with the highest age-standardized diabetes mortality rates among women were Swaziland, Lesotho, Mauritius, Botswana, and Zimbabwe (IHME 2018).

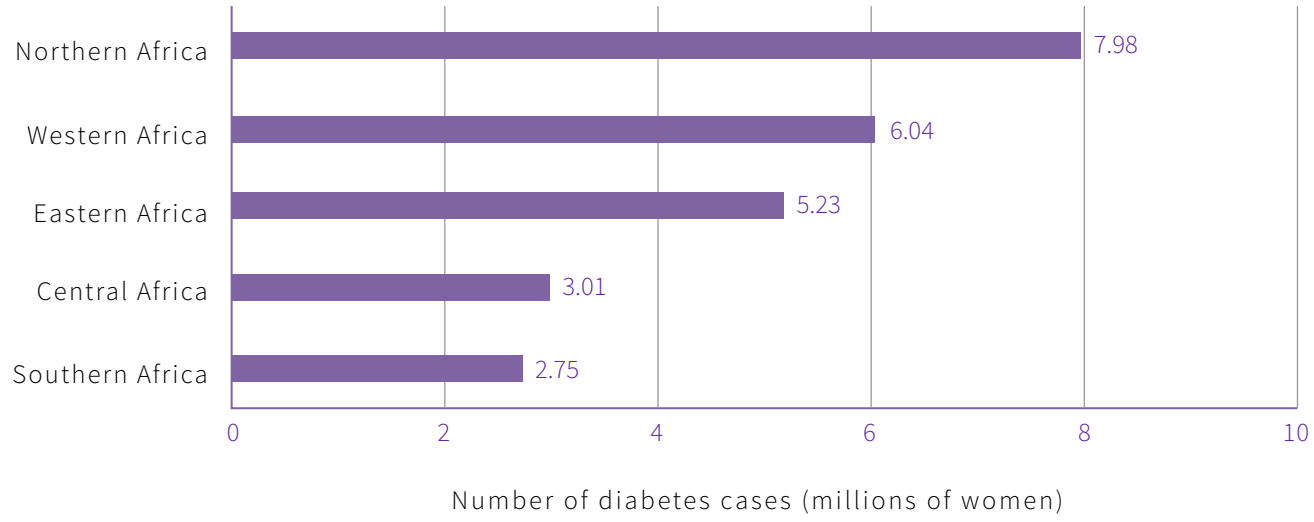


Figure 2: Crude prevalence of diabetes among women in Africa by region, 2017 (IHME 2018)

[1] IDF Africa Region includes 49 countries in SSA.

[2] The cause of MRDM is unknown however past or present malnutrition is always present; it also tends to occur in young adults and had been reported to be more common among men. Atypical ketosis-prone Type 2 diabetes is a form of diabetes characterized by the young age of onset with severe hyperglycemia and/or ketosis, followed by remission.

Considering all cancers, women are disproportionately affected, with more than 65% of all cancer cases on the continent in 2017 occurring in women and more new cases of cancer reported among women compared to men

Cancers

More than 3.7 million cases of cancer were estimated in Africa in 2017, with over 1 million new cases and over 650,000 deaths occurring that year (IHME 2018). **Considering all cancers, women are disproportionately affected, with more than 65% of all cancer cases on the continent in 2017 occurring in women and more new cases of cancer reported among women compared to men** (almost 560,000 cases among women and almost 500,000 cases among men) (IHME 2018). However, total number of deaths due to cancers were slightly higher among men compared to women (over 339,000 deaths among men and over 308,000 deaths among women) (IHME 2018). **The most common cancers across Africa among women were breast cancer, cervical cancer, ovarian cancer, colon and rectum cancer, and thyroid cancer** (Fig 3).

Regionally, Western Africa had the highest number of new cancer cases among women as well as the highest number of deaths among women due to cancer (IHME 2018). Cervical cancer was the most prevalent cancer among women in Eastern Africa unlike the other four regions, where breast cancer was the most prevalent (IHME 2018).

Appendix 5 provides the crude and where available age-adjusted estimates of cancer prevalence and mortality for women by country. Countries with the highest age-standardized mortality rates for cancer among women were Guinea, Congo, Somalia, Zimbabwe, and Eritrea (IHME 2018).

Finally, one of the epidemiological differences in the types of cancers found across many parts of Africa compared to many other regions of the world is the high incidence of infection-related cancers such as cervical, liver, and stomach cancer as well as Kaposi sarcoma, and non-Hodgkin lymphoma (Casper 2016).

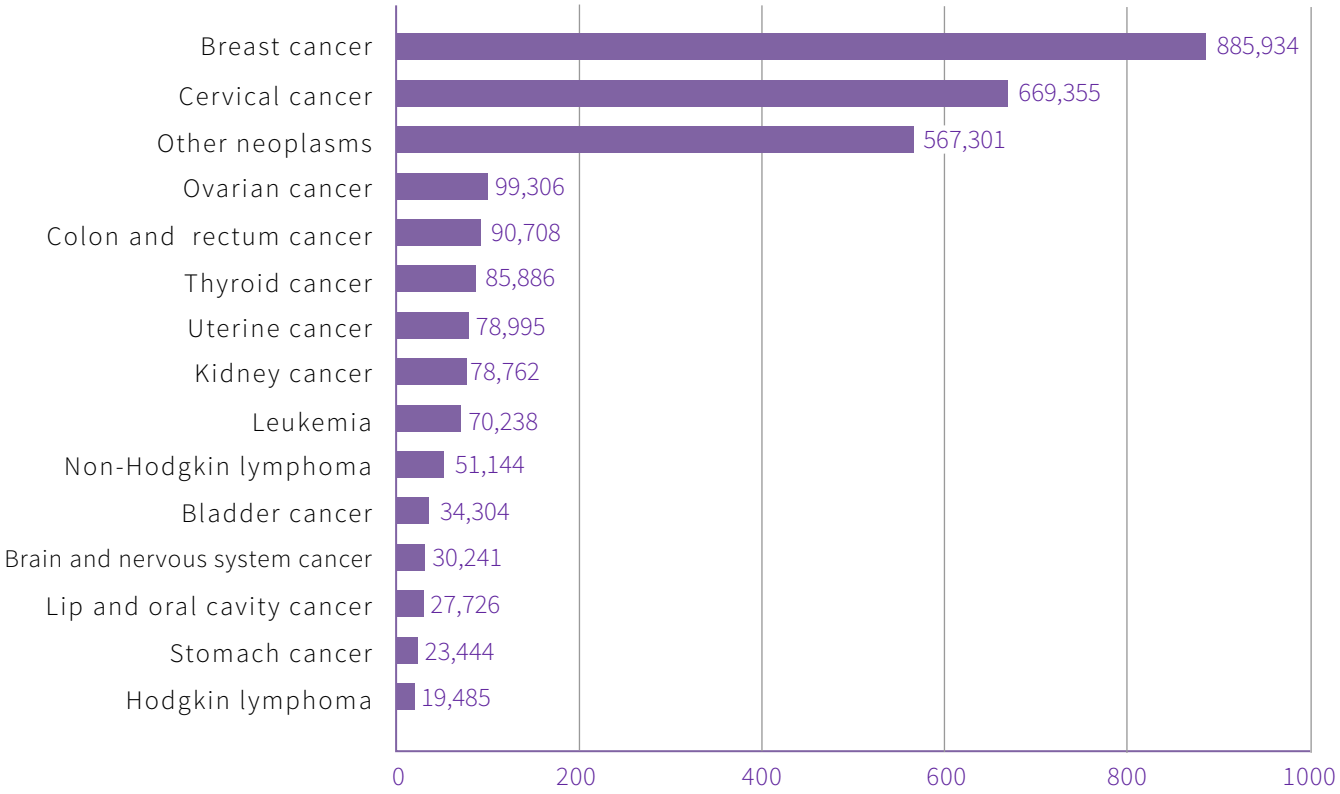


Figure 3: Most prevalent cancers among women in Africa, 2017 (IHME 2018)

Chronic respiratory diseases

Chronic respiratory diseases (CRDs) include a range of diseases of the airways and the other structures of the lung. The most common CRDs are chronic obstructive pulmonary disease (COPD), asthma, occupational lung diseases and pulmonary hypertension. CRDs are a substantial and growing group of diseases affecting the lives of women across Africa however they continue to receive little attention.

In 2017 there were more than 70 million cases of CRDs in Africa, more than half of these (37 million cases) occurred in women (IHME 2018). It is estimated that close to 90,000 women died in Africa due to CRDs in 2017 (IHME 2018). The region with the highest number of prevalent and incident cases of CRDs among women was Eastern Africa (over 10.9 million prevalent cases and over 2.1 million new cases in 2017), followed by Western Africa (over 10.2 million prevalent cases and over 1.7 million new cases in 2017) and then Northern Africa (over 9.6 million prevalent cases and over 1.2 million new cases in 2017). Western Africa had the highest of the number of deaths due to CRDs among women, with almost 27,000 women estimated to have died due to CRDs that year, followed by Eastern Africa (over 24,000 deaths), Northern (over 15,500 deaths), Central (close to 13,000 deaths) and Southern Africa (over 10,000 deaths) (IHME 2018).

Appendix 6 provides the crude and age-adjusted estimates of CRDs prevalence and mortality for women by country. Countries with the highest age-standardized CRD mortality rates among women were Sao Tome and Principe, Lesotho, Central African Republic, Congo, and Democratic Republic of the Congo (IHME 2018).

There is some evidence from studies in other populations to suggest differences in the epidemiology and clinical presentation of some CRDs among men and women (Jenkins 2017). A recent systematic review of COPD found that women with COPD were generally younger, smoked less, had a lower body mass index, and were more likely to be of lower socioeconomic status than men (Jenkins 2017). In addition, women were more likely to exhibit small airway disease (bronchiolitis), whereas men are prone to develop emphysematous (Jenkins 2017). These differences could potentially result in delays in diagnosis or misdiagnosis among women. However more research is needed in populations across Africa.

Mental and neurological conditions

Mental and neurological conditions capture a broad spectrum of conditions which affect thoughts, emotions, behaviour and relationships. Mental health conditions include depression, autism, and schizophrenia while neurological conditions include epilepsy, dementia, and multiple sclerosis. Many mental health conditions can be experienced in isolation or occur as co-morbidities with other NCDs.

Across Africa in 2017, it is estimated that close to 73 million women were affected by mental health conditions and more than 235 million women were affected by neurological conditions (IHME 2018). The **prevalence of neurological conditions was higher among women compared to men and the number of new cases of mental as well as neurological conditions was higher among women in Africa in 2017** (Fig 4) (IHME 2018). Furthermore, neurological conditions were estimated to cause more than 100,000 deaths among women on the continent in 2017, while mental health conditions contributed to more than 9.6 million healthy-life years (DALYs) lost among women in that year (IHME 2018). Regions with the highest prevalence and incidence of neurological and mental health conditions among women were: Western Africa (almost 90 million cases of neurological conditions, almost 22.5 million mental health conditions), Eastern Africa (almost 58 million cases of neurological conditions and over 22 million mental health conditions) and Northern Africa (almost 49 million cases of neurological conditions and almost 17 million mental health conditions) (IHME 2018). In addition, more than 80% of deaths due to neurological conditions among women occurred in these three regions (IHME 2018).

Appendix 7a and **7b** provides the crude and age-adjusted estimates of prevalence and mortality for neurological conditions and DALYs for mental health conditions among women by country. Countries with the highest age-adjusted mortality rates among women due to neurological conditions were Eritrea, Guinea-Bissau, Guinea, Libya, and Lesotho. The countries with the highest age-adjusted DALYs (disability-adjusted life years) due to mental health conditions among women were Morocco, Lesotho, Tunisia, Uganda and Sudan (IHME 2018).

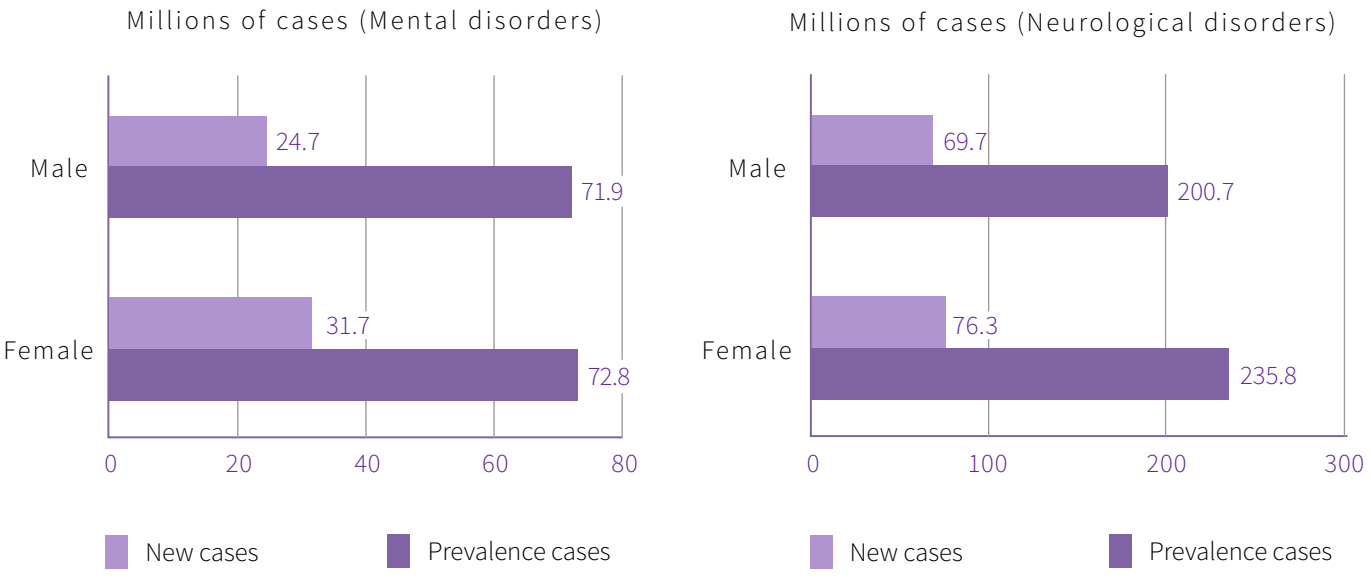
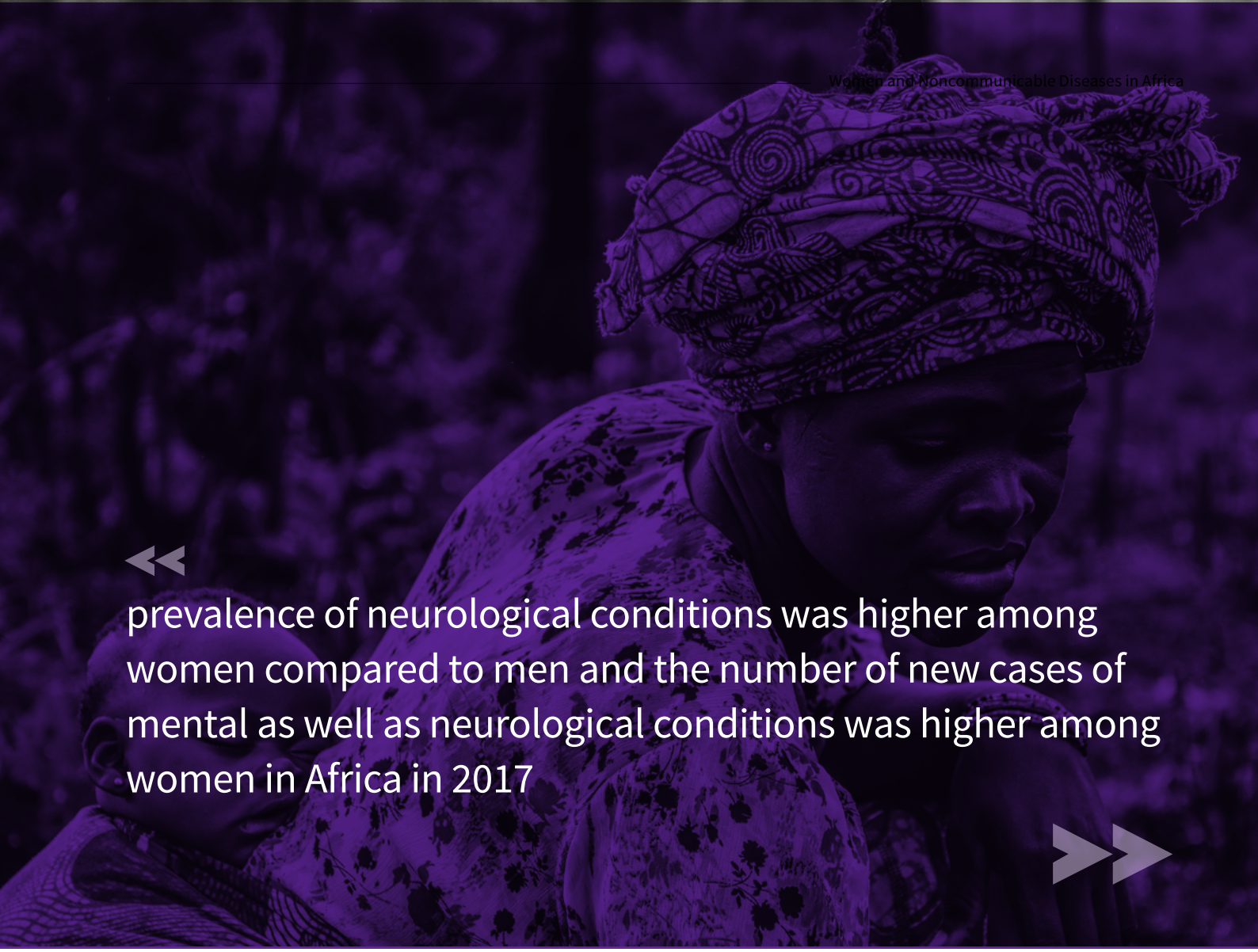


Figure 4: Prevalence and incidence of mental and neurological disorders in Africa by sex, 2017 (IHME 2018)



prevalence of neurological conditions was higher among women compared to men and the number of new cases of mental as well as neurological conditions was higher among women in Africa in 2017

3.2 Risk Factors

The observed changes in disease burden across Africa are largely due to changes in the magnitude and distribution of major risk factors for NCDs, alongside demographic change and economic development. Major behavioural risk factors for NCDs, in particular CVDs, diabetes and cancers are largely preventable. These include physical inactivity, tobacco use, alcohol consumption and unhealthy diets (often high in processed sugar, fats, salt) which in turn contribute to the development of metabolic risk factors such as hypertension, high body mass index (BMI), high fasting glucose, and raised cholesterol. Other determinants associated with the rise in NCDs include urbanisation, increasing life expectancy and poverty. Other key risk factors that disproportionately affect women include in-door air pollution and well as the negative psychological effects associated with the widespread oppression and violence against women. Further details of the distribution of some these risk factors and determinants in addition to gender-based differences are briefly discussed below.

Supporting women's struggles related to land rights, equality of women in agriculture, economic empowerment, education, food security, and access to resources are important contributions in the response to tackling NCDs on the continent.

Nutrition

Many countries across Africa, particularly those in Western, Eastern and Southern Africa, are undergoing a nutritional transition whereby undernutrition continues to contribute to high levels of stunting and underweight in populations, while at the same time among certain sub-groups of the population (e.g. those living in urban areas), overweight/obesity and diets low in nutritional value and high in processed sugar, fats and salt are increasing (Abrahams 2011).

These changes in diet are closely linked to economic policies in agriculture, trade, investment, and marketing which have altered the quantity, type, cost, distribution, and desirability of foods available (Abrahams 2011).

Fruit and vegetable consumption is one of the indicators of a healthy diet. Fruit and vegetable consumption varies across countries on the continent, with vegetables being consumed far more frequently than fruits (WHO AFRO 2016). Overall however individuals in most countries do not meet the recommended daily intake of fruit and vegetables. Among 32 countries which completed a survey (WHO STEPS) to assess the prevalence of NCD risk factors in the general population, **all countries reported that more than 60% of their adult populations do not consume the recommend five combined servings of fruits and vegetables** on an average day (WHO 2016). This ranged from 62% in Madagascar to as high as 99% in Ethiopia (WHO AFRO 2016). **In half of the countries, almost 9 in 10 adults were shown not to eat the recommended daily servings of fruits and vegetables** (WHO AFRO 2016). There were no significant differences between men and women in consumption patterns of fruits and vegetable servings (WHO AFRO 2016). Countries with the lowest proportion of adult women who ate less than five combined servings of fruits and vegetables were: Ethiopia (1.3%), Eritrea (1.5%), Niger (2.0%), Tanzania (2.4%), and Malawi (2.9%) (WHO AFRO 2016).

Additional points to consider related to nutrition and women's rights include:

- Women do not have equal access and control over productive resources and opportunities despite being the predominant labour force in the agro-industry and contributing extensively to food production, processing, marketing, household nutrition and natural resource management (FAO 2011, FAO 2018). Supporting women's struggles related to land rights, equality of women in agriculture, economic empowerment, education, food security, and access to resources are important contributions in the response to tackling NCDs on the continent.

- Governments' diversion of resources from food production to cash crop export contributes to food insecurity (Marquez 2013). Moreover, international investors are increasingly acquiring rights to use large tracts of land, mainly for non-food use, which is having a detrimental effect on local environments but also contributing to food insecurity in the region (Deininger 2011).

Physical Inactivity and Obesity

Physical activity levels in Africa are relatively high (WHO AFRO 2016). With the majority of the population residing in rural areas, most of the population are physically active due to their work or mode of transportation. **However across all five regions, physical activity levels are considerably lower among women compared to men** (WHO AFRO 2016). A comparison of more than 30 countries in Africa found that Ghana had the highest prevalence of physical inactivity for adult women with more than 80% being physically inactive, followed by Mali (66%), Mauritania (53%), Eritrea (53%), and Cameroon (50%) (WHO AFRO 2016). Worryingly, similar gender-differences in physical activity were also reported among school children (WHO AFRO 2016).

Closely linked to these gender differences in physical activity and changes in caloric intake, are stark differences in overweight and obesity levels between women and men across the continent. **In Africa, the prevalence of overweight among adult women is double that of men, and adult women are seven times more likely to be obese than adult men** (WHO AFRO 2016). Genetic and biological factors that predispose women to store fat for reproductive and lactating reasons may explain some of these differences. However, diet, physical activity, cultural beliefs, and urbanisation, also largely contribute to these gendered differences in obesity and NCD risk. In a 32-country comparison, the prevalence of overweight among women ranged from as low as 15% in Madagascar to as high as 68% in Seychelles and Ghana (WHO AFRO 2016). The other countries with the highest prevalence of overweight among adult women included Swaziland (65%), Mauritania (59%), Lesotho (58%), and Liberia (57%) (WHO AFRO 2016).

Additional points to consider related to tobacco include:

- Some national economies on the continent are heavily dependent on the tobacco production. This creates friction as tobacco companies provide a source of livelihood for those working on the tobacco farms but at the same time contribute to adverse health outcomes and food insecurity as land is not used for food production (Jakpor 2012, Marquez 2013).

- There is a strong association between socioeconomic status and smoking, with the poor being much more likely to smoke and thereby suffer the negative health consequences.

- **Convincing evidence suggests that the effects of smoking and diabetes on CVD risk are disproportionately stronger in women than in men** (Huxley 2011, Peters 2014 Diabetologia, Peters 2014 Lancet). This is not the case for other CVD risk factors, like excess weight, hypertension and elevated lipid levels which impact men and women similarly (Huxley 2011, Peters 2014 Diabetologia, Peters 2014 Lancet).

In Malawi, 2 million people rely on growing tobacco for their livelihood, and in Nigeria, British American Tobacco presents itself as a significant stakeholder in the rural economy." (Marquez 2013)

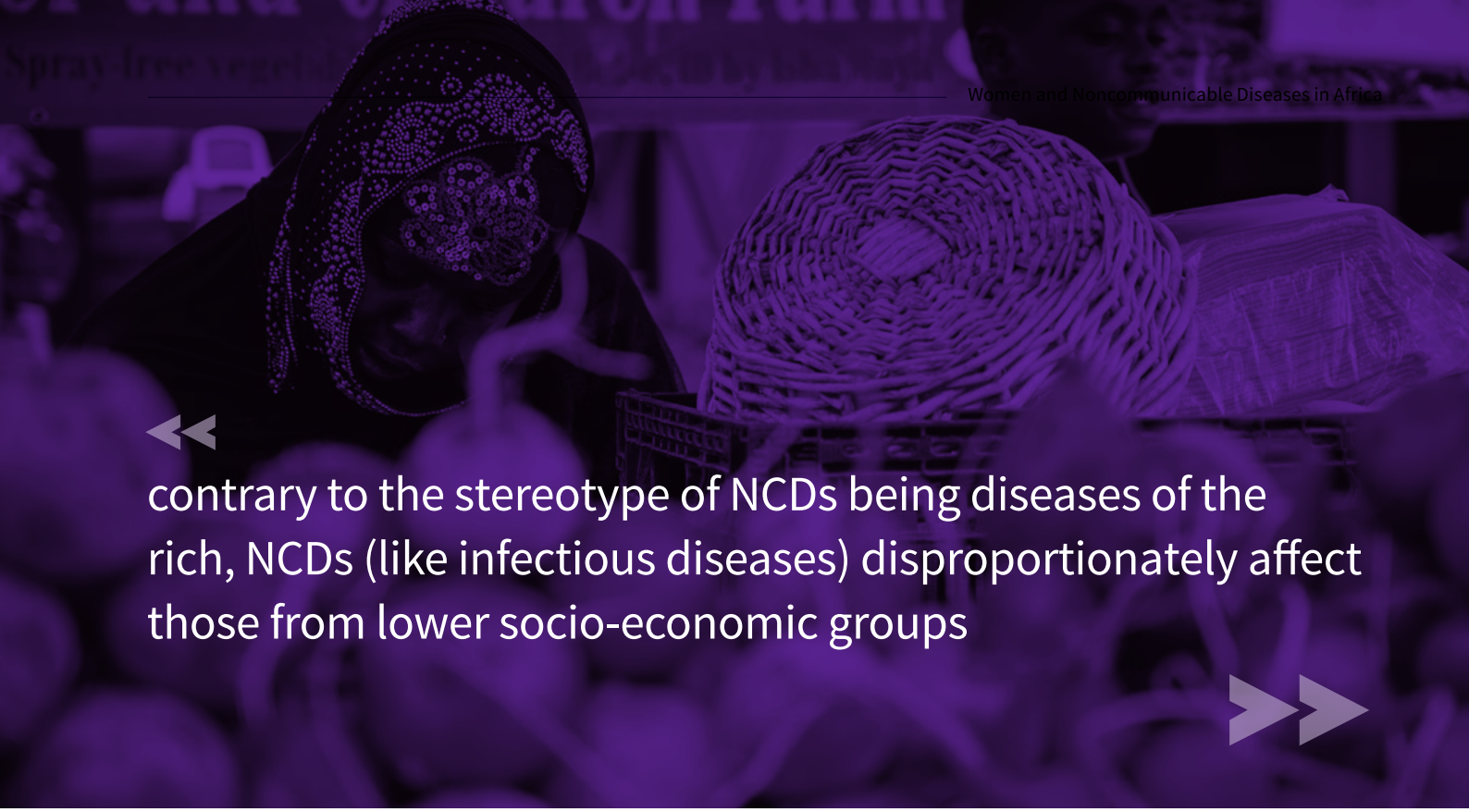
Alcohol

Alcohol consumption varies widely across Africa. For example, countries with predominantly Muslim populations report much lower levels of alcohol consumption. Home-brewed alcohol, particularly fermented maize or millet, represents a significant proportion of alcohol consumed in SSA, where it has been estimated that around one-third of the alcohol consumed is 'unrecorded' (Marquez 2013). However this feature is slowly changing. As economic conditions improve there is an accompanying increase in the consumption of commercially produced alcohol (Obot 2006, Marquez 2013).

Among 28 countries that have data, the prevalence of current alcohol consumption among adults ranged from just 0.3% in Niger to 87% in Seychelles (WHO AFRO 2016). At least one in five adults was estimated to be a current alcohol drinker in half of the countries that took part in the survey. **In SSA the prevalence of heavy episodic drinking (binge drinking) is the highest globally**, with around 1 in 4 of those who drink reporting heavy drinking (Marquez 2013). Countries with the highest prevalence of binge drinking among women included: Botswana (52%), Gabon (40%), Mozambique (35%), Togo (22%), and Sao Tome and Principe (21%) (WHO AFRO 2016). Across all countries however prevalence of alcohol consumption was lower among women compared to men (WHO AFRO 2016). Similar to smoking, there was a high prevalence of alcohol use among youth. A survey in 13 countries among students aged 13-15 years found over 10% of students reported using alcohol in the last 30 days in most countries that participated (WHO AFRO 2016). Disturbingly, local alcohol corporations are increasingly targeting adolescents and young adults, for example through sponsorship of cultural or sporting events (WHO AFRO 2011, WHO AFRO 2016).

Hypertension

Hypertension, also known as raised or high blood pressure, is the leading risk factor for CVDs. It is also associated with renal disease and eclampsia in pregnancy. Estimates suggest that the number of people affected by hypertension is highest in Africa, with more than 50% individuals aged 50 years and older being hypertensive (Bosu 2019, van de Vijver 2013). Most people across the continent who are hypertensive are unaware of their status, as early hypertension is often asymptomatic. Therefore most people are untreated or poorly controlled, leaving them at high risk of stroke, and heart and renal disease (van de Vijver 2013). Among the 36 STEPWise surveys conducted in the region, the five countries with the highest prevalence of hypertension were Seychelles (40%), Cape Verde (39%), Sao Tome and Principe (39%), Ghana (37%) and Niger (36%) (WHO AFRO 2016). **Overall, among adults the prevalence of hypertension was higher among men compared to women, with the exception of Algeria, Botswana, Lesotho, and Mali, where women had a significantly higher prevalence of hypertension** (WHO AFRO 2016). Countries with the highest prevalence of hypertension among women were: Ghana (38%), Botswana (37%), Sao Tome and Principe (36%), Seychelles (36%), and Lesotho (36%) (WHO AFRO 2016).



contrary to the stereotype of NCDs being diseases of the rich, NCDs (like infectious diseases) disproportionately affect those from lower socio-economic groups

Other determinants driving the rise in NCDs

In addition to the behavioural risk factors mentioned above, the upsurge in NCDs across the continent is closely linked to two other phenomena: first an increase in life expectancy as control of infectious diseases improves; and second urbanisation, which is occurring at an alarming pace. Urbanisation is frequently associated with an increase in outdoor air pollution, a major risk factor for CRDs. In addition, it is coupled with adoption of unhealthy diets and lifestyles often leading to a rise in hypertension and other NCD risk factors, such as stress. Worryingly the effects of urbanisation are not solely limited to urban centres. Evidence suggests that even in very rural areas on the continent, the negative lifestyle changes associated with urbanisation are increasingly visible in rural communities (Riha 2014).

It is also important to note that contrary to the stereotype of NCDs being diseases of the rich, NCDs (like infectious diseases) disproportionately affect those from lower socio-economic groups (Marquez 2013, Schneider 2009). This generates a vicious cycle of poverty as diseases cause both loss of income as well as out-of-pocket payment for treatment. Below are other NCD risk factors that disproportionately affect women and girls:

- **In-door air pollution is the leading risk factor for CRDs in women**. In-door air pollution due to biomass fuels such as wood, animal dung, grass, crop residues or charcoal, for cooking and/or heating disproportionately affects women and children who are often the ones cooking food, heating the home, etc. This is particularly the case in rural areas and among women and girls from lower socio-economic groups.

- **In terms of mental health, many risk factors and triggers are closely linked to negative life experiences and events, which for many women directly relate to misogyny (WHO 2000, WHO 2019)**. These gender-specific risk factors include “gender-based violence, socioeconomic disadvantage [and discrimination], low income and income inequality, low or subordinate social status and rank and unremitting responsibility for the care of others” (WHO 2019).

effective interventions to address NCDs require a life-course approach where people's health is considered from preconception through adolescence and adulthood. In order to achieve this, women's holistic health must be prioritised

3.3 Commonalities and co-morbidities between NCDs and infectious diseases

The double burden of infectious diseases and NCDs in most countries on the continent creates a unique epidemiological profile which must be taken into account while developing and implementing effective and holistic NCD response plans. These commonalities include: (i) different disease groups sometimes sharing determinants or risk factors; (ii) multiple diseases occurring in the same individual (co-morbidity); (iii) the presence of one condition increasing the likelihood of developing the other or worsening the outcome of another condition; (iv) treatment for one disease increasing the likelihood of developing another condition (Marques 2013, Young 2009). Below are a few examples:

- **Diabetes is associated with almost a tripling of risk for tuberculosis** and it is hypothesised that tuberculosis may also increase the risk of an individual developing diabetes. When a person has both tuberculosis and diabetes their prognosis worsens compared to those who have only either diabetes or tuberculosis (Young 2009).

- **Antiretroviral therapy used to manage HIV is strongly linked to developing metabolic syndrome.** Furthermore HIV infection itself can increase the risk of developing both diabetes and CVDs (Young 2009).

Another commonality that is important to consider when responding to the rise of NCDs especially from a gendered point of view, is **the effect of maternal health and in-utero conditions on the risk of NCDs in the child later in its life.** For example gestational diabetes is a strong predictor of future health, both of the mother, who may develop diabetes and CVDs later in life, but also for the child who is likewise at increased risk (Herath 2017, Marco 2012). Other risk factors include poor maternal nutrition before and during pregnancy, as well as tobacco use during pregnancy (Amuna 2008, Steyn 2006). These risk factors contribute to poor intrauterine growth, often resulting in low birth weight of the child, which predisposes it to metabolic disorders and NCD risk in later life (Amuna 2008, Steyn 2006). Evidence also shows that breastfeeding not only decreases the mother's risk of ovarian cancer, premenopausal breast cancer and diabetes, but also protects the child from diarrheal disease, respiratory infections as well as obesity later in life (Lutter 2012). Consequently, **effective interventions to address NCDs require a life-course approach where people's health is considered from preconception through adolescence and adulthood.** In order to achieve this, women's holistic health must be prioritised.

Key actors, responses and gendered approaches tackling NCDs in Africa

4

Given the immense and rapidly increasing health, social, and economic burden of NCDs, there has not been a commensurate response from global and national actors, including governments, funding institutions and others.

This section aims to provide an overview of actors responding to the NCD crisis across the continent, giving some examples of how they are responding, and in particular highlight actions that have centred on gender, equity and women's rights. Where possible attention is also drawn to factors facilitating or hampering prioritization and action on NCDs.

4.1 Overview

Key actors involved in NCD prevention and control in Africa can be grouped into two main categories, those in the state sector and non-state sector. The state sector comprises all organisations of national governments, including regional and local government structures. The non-state sector includes: (i) large global transnational actors like the United Nations (UN), related entities like the WHO, as well as intergovernmental organisations like the African Union (AU), Economic Community of West African States (ECOWAS), East African Community (EAC), Southern African Development Community (SADC), West African Health Organization (WAHO), (ii) civil society and non-governmental organisations, (iii) professional associations, (iv) academic institutions and research bodies, (v) commercial companies (private industry), (vi) public-private partnerships, and (vii) philanthropic organisations. Appendix 8 provides a list of the actors compiled as part of the research undertaken for this report.

4.2 National governments

Despite earlier evidence of the rise of NCDs, global prioritization of NCDs by governments really began in 2011 with the first UN High-level Meeting (UN HLM) on NCDs (UN 2011). The meeting prioritised four NCDs and four risk factors and was the second time in history that the UN General Assembly had met on a health issue (the first time was on AIDS a decade earlier). Following that meeting, in 2012 the World Health Assembly (WHA) adopted a global target of 25% reduction in NCDs associated premature mortality by 2025 (25-by-25) (WHO 2012). Shortly thereafter, the WHO developed the Global Action Plan for the Prevention and Control of NCDs 2013-2020, which set out a series of voluntary targets and indicators to support countries in their national efforts towards achieving the 25-by-25 goal (WHO 2013). This included a set of "Best Buys" and other recommended interventions, which are cost-effective prevention and control measures governments and other actors could adapt and adopt to tackle NCDs. Since then there have been two other UN HLMs focusing on NCDs—one in 2014 and more recently in 2018—where crucially, mental health and air pollution were added to the list of priority areas (UN 2014, UN 2018). **Then in 2015 as part of the 2030 Agenda for Sustainable Development, Heads of State and Government committed to reduce premature NCD deaths by 30% by 2030 and promote mental health and wellbeing (SDG target 3.4) (UN 2015)**. Country profiles published by the WHO in various years have been the main mechanism for monitoring progress towards achieving both the 25-by-25 target and the more recent Sustainable Development Goal (SDG) target related to NCDs (WHO 2011, WHO 2014, WHO 2015, WHO 2017, WHO 2018).

A synthesis of African governments' progress towards these targets found worryingly slow progress in implementing recommended NCD prevention approaches such as tobacco taxes, strengthening health systems, and restrictions on marketing of unhealthy food and drink (Nyaaba 2017). More specifically the report found that:

- Even though more than 90% of African countries had established an NCD unit, branch or department within the Ministry of Health (MoH) or its equivalent in 2011, only **18.5% of African countries in 2015 had fully set national NCD indicators which were time-bound**. Eastern Africa had the highest proportion of countries that had set time-bound NCD indicators (22% of countries in the region) (Nyaaba 2017).

- Similarly while almost 70% of African countries had partially operational multi-sectoral national policies, strategies or action plans that integrated several NCDs and shared risk factors in 2014, only **22.2% of them had fully operational national integrated NCD policies, strategies or action plans in 2015**. Twenty-five percent of countries in Western Africa and 17.6% of countries in Eastern Africa had operational multi-sectoral national policies, strategies or action plans for NCDs (Nyaaba 2017).

- **Just under 4% of African countries had fully functional systems for generating reliable cause-specific mortality data on a routine basis in 2015** despite more than 65% of countries having included cause–specific NCD mortality in the national health reporting system in 2011 (Nyaaba 2017).

- **Only Tunisia had fully reduced the affordability of tobacco products by increasing tobacco excise taxes in 2015** (Nyaaba 2017).

- **25% of countries in Western Africa reported having operationally integrated alcohol-specific policies/programs/action plans in 2014** (Nyaaba 2017).

- **In 2015, almost 40% of the Eastern African region had fully implemented at least one recent national public awareness program on diet and/or physical activity** with the Southern African region recording only one country fully achieving this indicator (Nyaaba 2017).

- In 2015 **34% of countries in Northern African had NCD evidence-based national guidelines/ protocols/standards for the management of major NCDs through a primary care approach.** The Western and Central African regions recorded only one country each as having fully achieved this indicator (Nyaaba 2017).

Other government bodies or strategies which are closely linked to the NCD agenda include:

- National Public Health Institutes (NPHI)

  Twenty-eight countries on the continent have NPHIs, which generally have the mandate of providing leadership and coordination for public health while strengthening public health functions at national level, including surveillance, research, and coordination for emergencies and preparedness (IAPHI 2019). With regards to NCDs efforts of NPHIs have generally focused on surveillance (IAPHI 2019).

- National Gender Policies and Strategies

  Most countries have introduced National Gender Policies to address gender inequalities and empower women (MEWC 2018). However, where women's health is mentioned, it is usually focuses on sexual and reproductive health (MEWC 2018). Here, the holistic view of women's health is lacking despite it being central to gender equality.

The proposed strategies for addressing the current and anticipated burden of NCDs can broadly be divided into two groups, namely **strategies that focus on prevention and those that focus on provision of services and care to people diagnosed with NCDs**. A few strategies straddle both groups (e.g. data). Furthermore the overarching principles listed in the Global Action Plan generally span both strategies aimed at prevention and those aimed at management of NCDs (WHO 2013, WHO 2018).

Given the staggering forecasts of the future burden of NCDs across Africa, government efforts rightly focus on prevention. However **the range of risk factors for NCDs and mental health conditions means multi-sectoral action (MSA) is crucial, involving both health and non-health sectors**. This includes government departments of education, trade, agriculture, urban planning, legislature, justice, finance and transport to name a few. A recent study across five African countries (Kenya, South Africa, Cameroon, Nigeria and Malawi) assessed the extent of MSA in national NCD prevention policy development (Juma 2018). Although countries did demonstrate some MSA, the level of sector engagement varied across different NCD policies, with higher engagement of sectors in developing tobacco policies across countries, followed by alcohol policies, diet and nutrition policies, physical activity policies, and finally national NCD action plans (Juma 2018). The active engagement of non-health sectors in establishing tobacco policies was enabled through established structures at national levels including inter-ministerial and parliamentary committees (Juma 2018). Expert or technical working groups, largely led by Ministries of Health, also facilitated

Overarching principles of the Global Action Plan (WHO 2013)

- Life-course approach
- Empowerment of people and communities
- Evidence-based strategies
- Universal health coverage
- Management of real, perceived or potential conflicts of interest
- Human rights approach
- Equity-based approach
- National action and international cooperation and solidarity
- Multisectoral action

coordination across government departments. Overall, **MSA happened more at policy formulation stage and less during implementation**. Barriers to MSA included lack of awareness among non-health sectors of their contribution and impact on population health and wellbeing; lack of political will; complexity around coordinating groups from multiple sectors (e.g. differences in interests, competitiveness, etc.); industry interference; lack of locally generated evidence; and finally inadequate resources and finances (Juma 2018).

In terms of provision of services for NCD detection and management, integration of health services is central to providing more holistic care throughout people's lives and at the same time reducing economic costs (Marquez 2013). Most health service delivery systems across the continent have been developed to provide episodic care for acute conditions (NCD Alliance 2018). **Integration of care across all levels, particularly at primary care level ensures people receive more personal, continuous and complete treatment** (NCD Alliance 2018). Importantly, an integrated approach recognises the interactions between different diseases and leverages the overlapping nature of some treatments and strategies (NCD Alliance 2018). Much of the published work of health service integration involves collaborations between government, international NGOs (iNGOs) as well as the private sector (NCD Alliance 2018). It is critical that governments plan and more actively drive the integration of health services which span health promotion, disease prevention, diagnosis, treatment, disease management, as well as rehabilitation and palliative care services.

Government financing for NCDs

In 2001, African Union (AU) governments pledged through the Abuja Declaration to commit 15% of their annual budgets to public health spending (AU 2001). Although overall health spending by African governments increased between 2001 and 2011, the share of public-private spending has remained largely the same (UNAIDS 2013). **Largely, progress towards the 15% goal has been disappointing with nearly one-third of AU governments having reduced health expenditure since 2001** (UNAIDS 2013). Mozambique, which had the second-highest health spending among AU governments in 2001, cut health spending from 14.8% of its annual budget to just 7.8% in 2011 (UNAIDS 2013). Countries that did meet the target included: Rwanda, Liberia, Malawi, Zambia, Togo, and Madagascar while Swaziland, Ethiopia and Lesotho were just shy of the target (UNAIDS 2013). Another positive example was the Democratic Republic of the Congo, which impressively increased health spending from just 2.8% in 2001 to 10.8% in 2011 (UNAIDS 2013).

African governments are already underspending on health and funding for NCDs is even of lower priority. In an effort to encourage governments to invest in and prioritise NCDs, the WHO produced the report Saving lives, spending less: a strategic response to noncommunicable diseases (WHO 2018). It outlines the financing needs for tackling NCDs and translates what investment in the WHO cost-effective "Best Buys" would look like in term of economic and health gains (WHO 2018). For example it shows that "for every US$ 1 invested in scaling up interventions to address NCDs in low- and lower-middle-income countries, there will be a return to society of at least US$ 7 in increased employment, productivity and longer life" (WHO 2018).

Considering donor funding has often driven health priorities in many African countries, inadequate donor interest and funding for NCDs could be a contributing factor to this lag in prioritization and response to NCDs (Nugent 2010). This however is no excuse for governments as cost effective solutions exist. People will continue to suffer and health systems further crippled unless governments' take action immediately.

4.3 Transnational and intergovernmental organisations

The UN and its member organisations, in particular the WHO, have been central in galvanising political leadership to begin to prioritise and respond to the NCD crisis. As outlined above, a number of UN HLMs and most recently the SDGs have put NCDs and mental health on the global agenda. The UN Interagency Task Force on the Prevention and Control of NCDs (UNIATF) was established as a result of the first HLM in 2011. UNIATF is overseen by the WHO and supports the *Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013–2020*, as well as the NCD-related targets within the SDGs (WHO 2015). UNIATF has 41 members including the African Development Bank, Food and Agricultural Association, The Global Fund to Fight AIDS, TB and Malaria, International Agency for Research on Cancer, Organization of Islamic Cooperation, United Nations Education, Scientific and Cultural Organization (UNESCO), United Nations Office on Drug and Crime (UNODC), UN Women, UNAIDS, United Nations Development Programme (UNDP), United Nations Environmental Programme (UNEP), World Bank, WHO, and World Trade Organization (WHO 2019).

In 2014 the WHO established the Global Coordination Mechanism on the Prevention and Control of NCDs (GCM/NCD), which is the first and only WHO instrument aimed at facilitating multi-stakeholder engagement and cross-sectoral collaboration to prevent and control NCDs (WHO 2018). It convenes and connects diverse stakeholders comprising all WHO Member States, UN Organisations, and non-State actors, including relevant private sector entities, to address five objectives: advocating and raising awareness; disseminating knowledge and information, encouraging innovations and identifying barriers, advancing MSA and advocating for mobilization of resources (WHO 2018).

Other NCD specific actions and strategies led by the WHO include:

- The WHO Framework Convention on Tobacco Control (FCTC), the first treaty negotiated under the auspices of the WHO, which focuses on both reduction of demand and supply of tobacco products. The FCTC came into force in 2005 when it was ratified, accepted, or approved by 40 States (WHO 2005);

- The *Global Strategy for Women's, Children's and Adolescents' Health 2016-2030*, which presents a roadmap on ending all preventable deaths of women, children and adolescents within a generation (WHO 2015);

- The *Global Strategy on Human Resources for Health: Workforce 2030*, which addresses, in an integrated way, all aspects ranging from planning, education, management, retention, incentives, linkages with the social service workforce, to inform more incisive, multi-sectoral action on the health workforce, based on new evidence and best practices (WHO 2016).

The WHO Regional Office for Africa has an NCD team which appears to be very understaffed and although information on NCDs is provided on the website based on the interviews conducted WHO AFRO have not been responsive to collaborating or discussing regional coordination.

The principal global intergovernmental body exclusively dedicated to the promotion of gender equality and the empowerment of women is the Commission on the Status of Women (CSW) (CSW 2019). The 63rd CSW took place in early 2019 and focused on social protection systems, access to public services and sustainable infrastructure for gender equality and the empowerment of women and girls (UNESC 2019). There was a relatively little focus on women's health in terms of NCDs, universal health coverage or health inequality monitoring, although

some events touched on the difficulties faced by adolescent and young girls (UNESC 2019). More needs to be done to ensure health becomes a more central theme at CSW, with the WHO being one of the primary candidates to advance this agenda.

The AU response to NCDs has been weak, with the sub-regional bodies (ECOWAS, EAC, SADC, WAHO, NEPAD) and other country offices playing much weaker roles than they should (Nyaaba 2017). For example in 2015 African leaders adopted Agenda 2063, "the continents new long term vision for the next 50 years" (AU 2015), however health and nutrition are only mentioned broadly. Furthermore, the AU New Partnership for Africa's Development (NEPAD) Agency mandated to support a number of initiatives that directly affect population health and NCDs has not explicitly committed or outlined actions to contribute to the reduction in NCDs risk factors across the continent (NEPAD 2017).

SDGs and NCDs

The breadth of SDGs presents an important framing to support the multisectoral action required for tackling NCDs but also an opportunity to demonstrate that by tackling NCDs, governments will be working towards achieving other SDGs. A recent publication as part of the Lancet Taskforce on NCDs and Economics reported "[the] SDG targets and indicators form a web of mutually reinforcing actions for sustainability. Identifying and measuring interactions between SDGs and their targets is an essential precursor to building alliances and political will for action across sector" (Nugent 2018). For example the NCD target 3.4 directly links to nine other targets (see Fig 5), namely SDG 1 (reducing poverty), SDG 2 (zero hunger), SDG 3 (health and wellbeing), SDG 4 (education), SDG 5 (gender equality), SDG 8 (decent work and economic growth), SDG 10 (reduced inequalities), SDG 11 (sustainable cities and communities), and SDG 12 (sustainable production and consumption) (Nugent 2018).

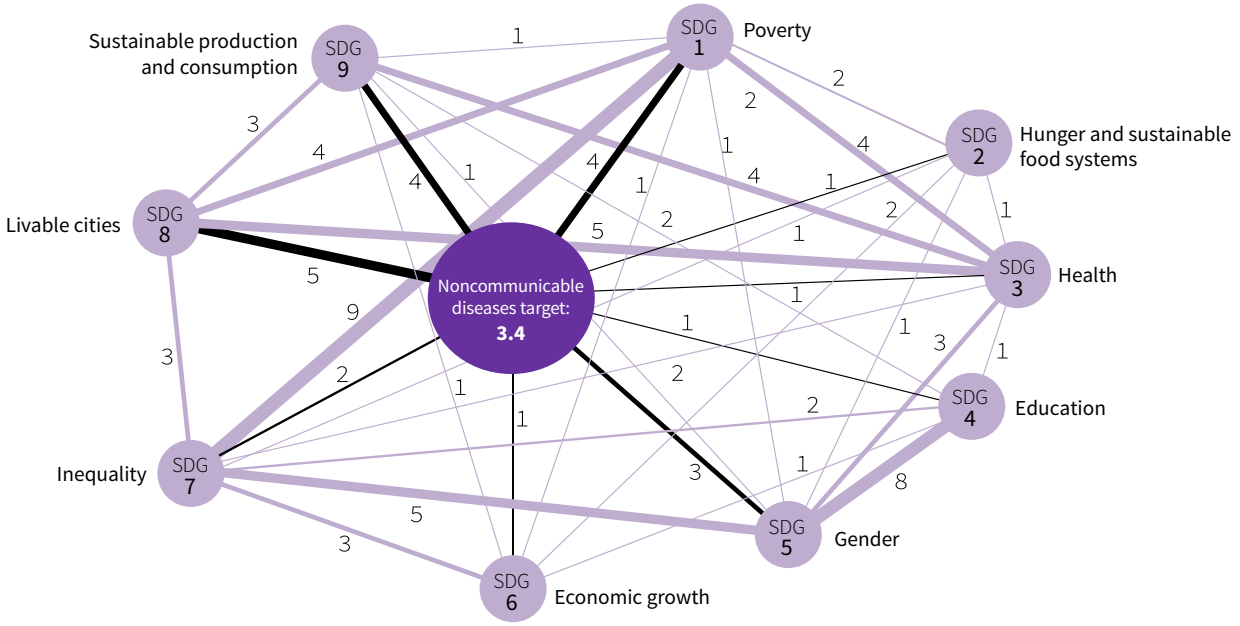


Figure 5: Links between nine SDGs and NCD target 3.4 (Nugent 2018 adapted from LeBlanc 2015)

4.4 Civil society organisations and non-governmental organisations

A relatively small group of civil society organisations (CSOs) and NGOs have been involved in considerable advocacy both globally and nationally. This small group has led to many of the current gains in political commitments to NCDs, relevant policy development and in some cases, direct action to tackle NCDs on the continent (Heller 2019 and Juma 2018). Despite these gains, civil society response is relatively recent and remains largely fragmented and weak, with groups often focusing on specific diseases or risk factors, and rarely extending beyond the health sector (Heller 2019).

International NGOs tackling NCDs in Africa include the NCD Alliance, AMREF Health Africa, JPIEGO, Partners In Health (PIH), PATH, Hospice Africa, African Mental Health Foundation, StrongMinds, Age Action Alliance, International Union for Health Promotion and Education, and Young Professionals Chronic Disease Network.

NCD Alliance has been by far the most active in driving the NCD agenda forward globally. Founded in 2009, the NCD Alliance consists of a global network of more than 2,000 organisations in 170 countries, including global and national NGOs, scientific and professional associations, academic and research institutions, private sector entities as well as dedicated individuals (NCD Alliance 2016). The NCD Alliance has four strategic pillars it is currently focusing on namely, advocacy, accountability, knowledge exchange, and capacity building (NCD Alliance 2016). The NCD Alliance is also a member of the Taskforce on Women and NCDs and has an ongoing commitment to support the goals of Every Woman Every Child (EWEC), a global movement mobilising and intensifying international and national action towards the Global Strategy for Women's, Children's and Adolescents' Health (NCD Alliance 2016, EWEC 2015). EWEC targets governments, the UN, multilaterals, the private sector and civil society to address the major health challenges facing women,

Taskforce on Women and NCDs

The Taskforce on Women and NCDs, launched in 2011, brings together fourteen global health organisations from the women's health and NCD communities to respond to the unique and growing burden of non-communicable diseases on women in low- and middle-income countries by mobilizing leadership, expanding technical expertise and disseminating evidence to inform policymaking, planning and services (Taskforce on Women and NCDs 2019). Since 2011 the Taskforce has organized and supported a range events and panels to raise awareness and increase the capacity of the global health community to tackle the growing burden of NCDs on women (Taskforce on Women and NCDs 2019). The most recent event the Taskforce co-sponsored was a side event at the 63rd session of the Commission on the Status of Women. This event highlighted how access to a broad range of public services, sustainable infrastructure, and social protection schemes can help achieve gender equality and empower women and girls (Taskforce on Women and NCDs 2019). The Taskforce also supports the NCD+ campaign, which encourages people across ages, nations, and professional training to use social networking creatively to build awareness and inspire action around NCDs globally (Taskforce on Women and NCDs 2019). The Taskforce is currently co-chaired by PIH.

children and adolescents (EWEC 2015). NCD Alliance also engages with Women Deliver, a leading, global advocate for girls' and women's health, rights, and wellbeing, bringing together diverse voices and interests to drive progress in maternal, sexual, and reproductive health and rights (Women Deliver 2019). Most recently the NCD Alliance published a report titled *"Delivering healthy lives and well-being for women and girls"* which outlines some of the gender-specific dimensions of NCDs and presents a number of recommendations to improve the health and wellbeing of girls and women (NCD Alliance 2019).

There are a wide range of national civil society organisations and NGOs tackling NCDs locally and regionally, including national and regional NCD Alliances, which consist of alliances of local NCD actors. Across Africa, there are at least 14 national NCDs Alliances and three regional Alliances—Consortium for NCDs Prevention & Control in sub-Saharan Africa (CNCD-Africa), the East Africa NCD Alliance (EANCDA), and the Eastern Mediterranean NCD Alliance (EM-NCDA), which includes eight countries in North Africa (Algeria, Djibouti, Egypt, Morocco, Tunisia, Sudan, South Sudan, and Somalia). How these alliances are formed, their areas of focus, target groups, activities and funding models are all determined locally and are highly varied.

Two mapping exercises were undertaken by the global NCD Alliance to understand the current status of NCD response among CSOs in SSA and to identify opportunities and challenges to supporting CSO work on NCD prevention and control (NCD Alliance 2017, NCD Alliance 2019). One mapping exercise focused on the WHO AFRO Region and the second was a proactive effort to gather information from Francophone countries in SSA (NCD Alliance 2017, NCD Alliance 2019). Responses were received from over 80 different CSOs working in 30 different countries, with most responses received from organisations in Kenya, Nigeria, Rwanda, South Africa, Tanzania, Cameroon, Togo and Mali (NCD Alliance 2017, NCD Alliance 2019). Most organisations had been active between 1-5 years and worked at national level principally targeting the general public, followed by NCD affected groups (NCD Alliance 2017, NCD Alliance 2019). Less than 10 organisations worked specifically on women and NCDs (NCD Alliance 2017, NCD Alliance 2019). The Francophone organisations principally focused on diabetes followed by CVDs, unhealthy diet, and cancers (NCD Alliance 2019). While CSOs in the WHO AFRO survey focused on cancers, tobacco, diabetes, unhealthy diets, and CVD (NCD Alliance 2017). The main priority areas for CSOs were raising awareness/education, reducing exposure to risk factors, and improving early diagnosis/detection (NCD Alliance 2017, NCD Alliance 2019). Section 6 explores these responses in more detail along with the responses to the interviews and online survey of African women-led organisations conducted for this report.

Examples of CSOs' response to NCDs on the continent

Examples of CSOs' response to NCDs on the continent

- Soul City Institute for Social Justice (SCI), an intersectional feminist organisation in South Africa, advocated for the regulation of alcohol exposure and support for a bill banning alcohol advertising (SCI 2019). SCI's mission is to ensure that young womxn and girls enjoy substantive equality, with access to resources and opportunities that enable this (SCI 2019). SCI has developed a social change model that combines prime time popular mass media and social media with social mobilization and policy advocacy to create an enabling environment for individual and collective approaches to realizing constitutionally guaranteed rights (SCI 2019).

- The National Council Against Smoking in South Africa, founded in 1976, has been instrumental in lobbying government for legislation to control tobacco use (NCASSA 2019). It has played an active role in tobacco control advocacy and policy development in the SADC region, African region and globally (NCASSA 2019). The organisation also counsels smokers who would like to quit through managing a toll-free quit line where smokers can call anytime and receive tobacco cessation support (NCASSA 2019).

- Environmental Rights Action (ERA) founded in 1993, advocates on the most urgent environmental, human rights and social issues in Nigeria (ERA 2019). ERA in partnership with Nigerian Tobacco Control Research Group and the Campaign for Tobacco-Free Kids set up Tobacco Control Nigeria. Together they advocated for the passage of the Tobacco Control Act 2015 which is a comprehensive, FCTC-complaint legal instrument addressing all the Tobacco "best buy" interventions as well as other measures relating to the reduction of the demand and supply for tobacco, including prohibition of smoking in public places in Nigeria (Oladepo 2018). An analysis of the passage of the Act reported that "the critical factors which aided the passage of the Act were the pressure from the civil society and other stakeholders, and the president's decision of leaving a mark of achievement at the end his term as president." (Oladepo 2018)

- Women Coalition Against Cancer (WOCACA) in Malawi is a women-led organization established to contribute towards cancer prevention and control by empowering women, men and children through education, training, research, advocacy, lobbying, mobilization, networking in semi-urban and rural areas. WOCACA also focuses on NCDs more broadly and prioritises treating women holistically. They currently work in 8 districts in Malawi and have championed early screening and detection of cervical cancer.

4.5 Professional associations and trade unions

Most professional associations involved in NCD response exist at national level and are formed by individuals of a particular medical profession, for example nurses, psychiatrists, radiologists, or cardiologists. The number of organisations and their roles differ depending on the country and healthcare system. They can be involved in regulation, licensing, ethical issues, establishing standards including clinical guidelines, and representing the profession's interests. Considering these responsibilities, medical professional associations are critical actors to reforming healthcare.

As mentioned above addressing the burden of NCDs requires a multi-sectoral response. **Therefore it is imperative that professional bodies beyond the health sector are involved, for example national teachers associations, small farmers associations**, and women's associations. Research for this report did not find any examples of multi-sector collaborations among professional to tackle NCDs.

Pan African Society of Cardiology

The Pan African Society of Cardiology (PASCAR) is an organisation of physicians from across Africa involved in prevention and treatment of CVDs and has been active since 2004 (although established in the 1980s) (Dzudie 2019, PASCAR 2019). PASCAR forms working relationships with other organisations and departments in Africa with similar mandates and focuses. A core group of committed individuals with extraordinary knowledge of the African cardiovascular environment has been assembled in regional structures (North, East, South and West Africa) within a Governing Council (PASCAR 2019). The Governing Council focuses on identifying key issues, brainstorming novel solutions and designing appropriate programs to combat cardiovascular disease on the continent. In addition, PASCAR has established Task Forces with representation from key role players in cardiovascular subspecialties such as interventional cardiology, life style risk modification, and allied catheterisation laboratory professionals (PASCAR 2019). The PASCAR Task Force for Prevention, is still relatively young compared to some of the others, and realises that effective prevention of CVD overlaps with prevention of the bulk of NCDs. So far activities have been prioritised according to levels of prevention and levels of care at which prevention is targeted. In addition to this, aside from the adult prevention, the taskforce is looking into youth-based prevention. So far only one project which is currently being in the planning stages focuses specifically on women. This is an aspect the taskforce is keen to expand in and wants to interact with international forums and collaborative research studies dedicated to CVD in women.

“NCDs in women remains an area that deserves much more attention”

Dr Kemi Tibazarwa (PASCAR Taskforce for Prevention)

4.6 Academic institutions and research bodies

Academic institutions have multiple roles to play in responding to the NCD crisis; first, is a responsibility to train high quality health care workers given the alarming shortage across the continent; second, involves collaborating to create expertise and a robust local, regional, and national evidence-base related to NCD risk, burden of disease, as well as strategies for NCD prevention and control.

Managing the current and future burden of NCDs is not going to be possible without an ample health workforce that is well-trained, well-paid, well-resourced, supported and respected. The Global Health Workforce Alliance estimates that more than 1.5 million health workers are needed across Africa, including nurses, midwives and doctors (WHO 2016). Nurses in particular form the backbone of the health workforce and are the largest group of the health workforce, undertaking different roles in different circumstances ranging from personal care through to managerial responsibilities (APPG 2016). Furthermore nurses are predominantly women. Investing in nursing will therefore have the triple impact of improving population health, promoting gender equality and supporting economic growth (APPG 2016).

Faculties of public health, health science or medicine in some public and private universities across the continent teach and conduct research on NCDs (Mullan 2011; McKee 2012). However doctoral-level research is often limited to a few countries and usually involves a combination of degree training in African and global universities (Mullan 2011; McKee 2012). A clear disparity in scientific funding, research capacity and resources exist between institutes in high-income countries and most in middle or low income countries on the continent (McKee 2012). Despite having 25% of the global burden of disease, in 2016 Africa accounted for just 1.1% of global investments in research and development and only 2% of world research output (Simpkin 2019; UNESCO 2015). Although countries in the AU pledged to invest at least 1% of GDP in research in 2007, this commitment remains largely unrealised with most countries spending only 0.4% on research in 2015 (Simpkin 2019). Even across Africa there are disparities in research capacities. For example, concentrated hubs undertaking academic research on NCDs include academic institutions in a handful of countries including Cameroon, Egypt, Gambia, Ghana, Kenya, Morocco, Nigeria, South Africa, Tanzania, Tunisia, and Uganda (Mullan 2011; McKee 2012; Simpkin 2019; UNESCO 2015).

One of the leading pan-African research institutions is the African Population and Health Research Centre (APHRC), headquartered in Nairobi, Kenya, with an office in Dakar Senegal. It conducts high quality policy-relevant research on population, health, education, urbanization and related development issues across Africa (APHRC 2019). APHRC has led work on the co-occurrence of NCD risk factors in urban slum populations and is currently working with partners on the African Non-communicable

Disease Longitudinal data Alliance (ANDLA) Project to generate Big Data to help understand NCDs and the role of infection in Africa (APHRC 2019).

Other global research-related groups that have been active in NCD response include the *Lancet* family of journals, which have led several major initiatives focusing on obtaining the best evidence to inform health policies and other actors to reduce the global burden of NCDs. This includes the *Lancet* Taskforce on NCDs and economics, which aims to generate evidence around the economic case for NCDs to support ministries of health, ministries of finance, and others (Lancet 2018).

First Africa NCD Research Conference

In 2017 the East Africa NCD Alliance in partnership with the African Population and Health Research Center organized a successful three-day conference in Nairobi, Kenya titled *"First Africa Non-Communicable Disease Research Conference 2017: Sharing Evidence and Identifying Research Priorities"* (Juma 2019). It was attended by more than 150 participants and researchers from various sectors including academia, civil society, government (ministers of health), international NGOs, the WHO, health care providers and practitioners of both allopathic and alternative medicine, the private sector and patient support groups (Juma 2019). Institutions in Kenya, South Africa, Nigeria, Cameroon, Uganda, Tanzania, Rwanda, Burundi, Malawi, Belgium, USA and Canada were represented (Juma 2019). The conference covered topics like: multi-sectoral action in NCD prevention in Africa, NCD prevention and control initiatives in SSA, and NCD research priorities and collaborative networks for Africa, however gender did not feature prominently (Juma 2019).

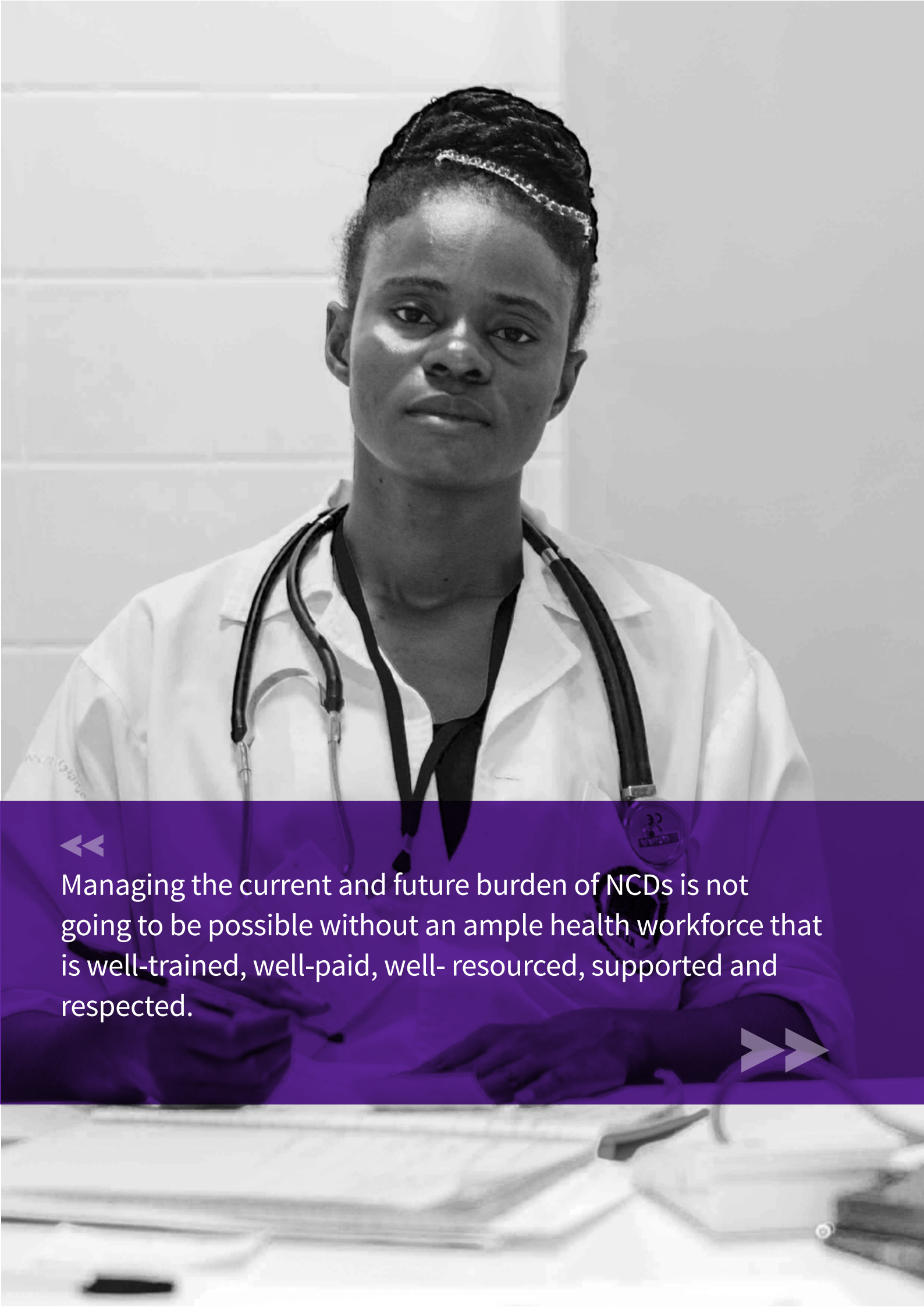
4.7 Commercial companies

Most of the commercial companies that have been involved in NCD response are from the pharmaceutical industry. These include GlaxoSmithKline (GSK), Novartis, Pfizer, Roche, and AstraZeneca. Below are a few examples of initiatives led by pharmaceutical actors responding to the NCD crisis:

- In 2014 GSK set up the Africa NCD Open Lab Programme which is part of a series of strategic investments in sub-Saharan Africa (GSK 2014). The Africa NCD Open Lab aims to create an innovative research network that will see GSK scientists collaborate with researchers across Africa on high quality epidemiological, genetic and interventional research, from its hub at GSK's Stevenage R&D facility in the UK (GSK 2014). The aim is to help build local expertise, creating a new generation of African NCD experts, while instilling a deep vein of "African thinking" within GSK's own R&D organisation (GSK 2014). GSK committed $4 million towards this initiative which focuses on cancers, CVDs, diabetes, and respiratory diseases in Cameroon, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Malawi, Nigeria, Senegal, South Africa, Tanzania, The Gambia, and Uganda (GSK 2014). It also announced an additional £5m collaboration with the UK and South African Medical Research Councils as part of this programme (GSK 2014).

- In 2016 AstraZeneca in collaboration with the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) embarked on the Healthy Heart Africa Programme, an ambitious global public-private partnership to tackle the burden of HIV and hypertension in Africa (AstraZeneca 2019). The partnership will jointly invest up to $10 million over five years to integrate hypertension services into existing HIV platforms across Africa to improve access to HIV and hypertension care (AstraZeneca 2019).

- In 2016, Pfizer had more than 30 programs in development to address NCDs. Some of these



Managing the current and future burden of NCDs is not going to be possible without an ample health workforce that is well-trained, well-paid, well- resourced, supported and respected.

programmes focused on specific diseases like cancer and CVDs, while others addressed gaps in health care systems that affected populations heavily impacted by NCDs (Pfizer 2016).

Access Accelerated

Access Accelerated is a unique cross-industry collaboration that seeks to reduce barriers to prevention, treatment, and care for NCDs in low- and middle-income countries through health systems strengthening and alignment with universal health coverage objectives and priorities (AA 2019). Through Access Accelerated, 24 global biopharmaceutical companies came together in partnership with countries, civil society, multilateral institutions, and NGOs to support cross-sectoral dialogue and drive on-the-ground implementation and action to address NCDs (AA 2019). These include the World Bank, the NCD Alliance, PATH, the International Federation of Pharmaceutical Manufacturers & Associations, and the Union for International Cancer Control (AA 2019). Access Accelerated has programmes active in over 35 countries across Africa (AA 2019). Few of the programmes specifically target women. One initiative in Kenya, the Roche Breast Cancer National Access Program, involved Roche and the Kenyan Ministry of Health who co-funded breast cancer treatment for a group of affected women (AA 2019). Additionally, Roche funded the training of five oncology nurses, provided over 80 surgeons with surgical preceptorships to improve biopsy techniques in addition to providing two diagnostic machines to allow improved adherence to screening and diagnostic protocols and standardization of testing (AA 2019).

4.8 Philanthropic organisations and other initiatives

Philanthropic organisations supporting projects working towards the prevention and control of NCDs in Africa include Novartis Foundation, Medtronic Philanthropy, Bloomberg Philanthropies, Bill & Melinda Gates Foundation, Helmsley Charitable Trust, and Medical Research Council Global Challenges Fund. Philanthropic funding tends to focus on specific disease groups and less on health systems strengthening.

Other initiatives include the recent, Defeat NCD Partnership which was established in 2018 and is a ‘public–private–people’ partnership anchored in the UN primarily focusing on tackling NCDs in low and middle income countries, starting with a focus on hypertension and diabetes (DNCDP 2019). The Partnership is also supposed to offer a new NCD funding mechanism.

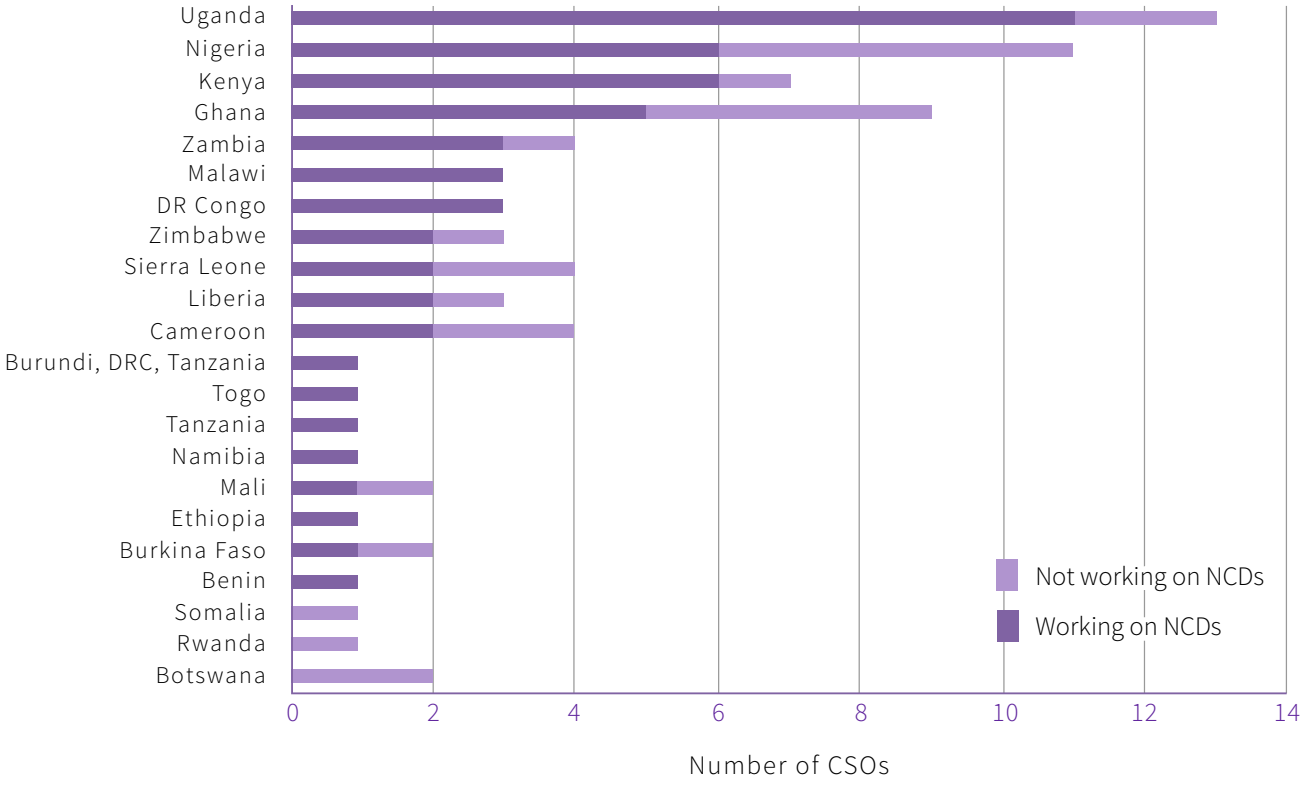
Opportunities and challenges for African women's organisations

5

Recently there has been a push to more actively engage and coordinate local CSOs' response to NCD prevention and control. As mentioned in the previous section there have been several pieces of work focusing on mapping CSOs in Africa responding to the NCD crisis—exploring the scope of their work, areas for action, opportunities and barriers they face working on NCDs, and recommendations of ways to better support them. Most of this research however has not focused on women-led organisations on the continent and little is known about the work they are leading to tackle NCDs. This section describes findings from an online survey conducted for this report of African women's organisations. In addition it describes responses and information gathered from in-depth interviews. This section ends by exploring the challenges and opportunities for African women's organisations in responding to the NCD crisis.

5.1 Online Survey Responses

We received 77 responses to the online survey, with responses from twenty-two different countries (Fig 6). Most organisations reported working in one country, with only one CSO reporting working across multiple countries (Burundi, DRC, and Tanzania). No responses were received from countries in North Africa or from Lusophone countries on the continent. **Sixty-eight percent of organisations who responded reported working on NCDs**. Among the 25 organisations that do not currently work on NCDs, the majority (72%) reported that they would consider integrating an NCD component into your work and 24% said they might consider it; only one organisation reported that they would not consider integrating NCDs into their work.



Focus of NCD-related work

Among the 53 organisations already working on NCDs, most mentioned working on NCDs broadly. Among those that specifically mentioned a disease group, cancer was the most frequently reported area, followed by diabetes, mental health and CVDs (Fig 7).
The vast majority of CSOs (more than 80%) reported sensitisation or awareness-raising among women, young girls, and communities as the main type of intervention used to tackle NCDs (Fig 8). Organisations reported disseminating information on prevention, detection, as well as management of NCDs.

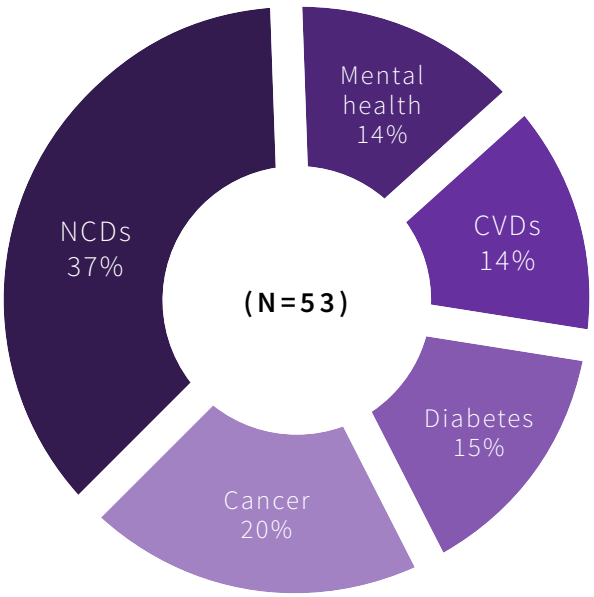


Figure 7: Specific area of focus mentioned by African women's organisations working on NCDs, 2019

"We provide education and training on prevention of cancers of the breast, cervix and other cancers by encouraging healthy eating habits, exercise, responsible sexual behavior as well as management, should one be diagnosed." Regional Deaf Women Initiatives Network (Kenya)

"We do community mobilizations, education, sensitization, outreaches and referrals for cancers and suspected mental health disorders." Community Health Support and Empowerment initiative (Nigeria)

"Nous sensibilisons les populations rurales sur les comportements à adopter pour prévenir les maladies cadio vasculaires, le diabète, le cancer…etc" CJ2D AYESSI (Benin)

Other NCD-related work included referring people to the appropriate services (23%), providing screening/testing/ counselling (21%), advocacy (13%), capacity building (4%), building partnerships (4%) as well as research (2%). Twelve organisations also reported integrating NCD programmes into their work on infectious diseases such as raising awareness about NCD risk among HIV+ women.

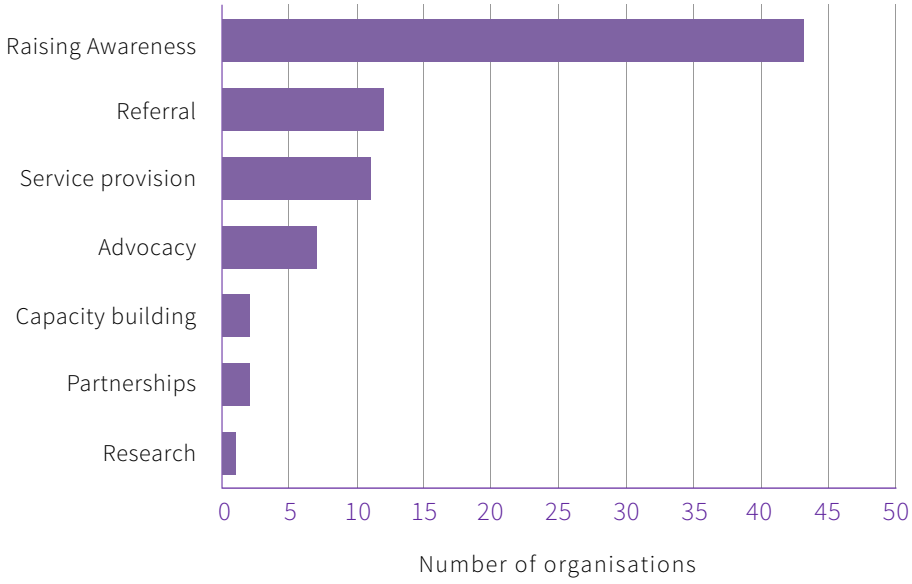


Figure 8: Type of NCD-related work African women's organisations reported, 2019

"The organisation work with HIV-positive people who prone to getting NCDs such as cancers and they have to made aware of the symptoms and ways of preventing NCDs, especially through balanced diets and exercises as well as accessing medical care as soon as possible whenever necessary." Solidarity Community Care Organisation (Namibia)

"We integrate testing for diabetes and [high] blood pressure during our HIV testing campaigns."
Cameroon Medical Women Association (Cameroon)

NCDs. This is a largely neglected area in NCD response in Africa despite a call to improve quality of life and relief of suffering for those with incurable disease. **Palliative care and survivorship were themes that also emerged in several interviews with individuals working in Kenya, Burkina Faso, Uganda, and Cameroon, reporting a focus on this area.**

Priorities for women-led CSOs

In terms of priorities for women-led organisations working on NCDs, more than 30 CSOs said raising awareness about NCDs among women and girls was a priority. This included sensitisation by providing information about how to prevent NCDs and known risk factors, raising awareness about healthy lifestyles including good nutrition, changing attitudes and behaviour through campaigns, as well as providing information about disease detection and where to access screening and medical support (Fig 9).

Improving access to services was the second most reported priority, which included providing women and girls with access to screening, testing and treatment for NCDs. Other frequently reported priorities were advocacy, women's economic empowerment, and providing women with psycho-social support.

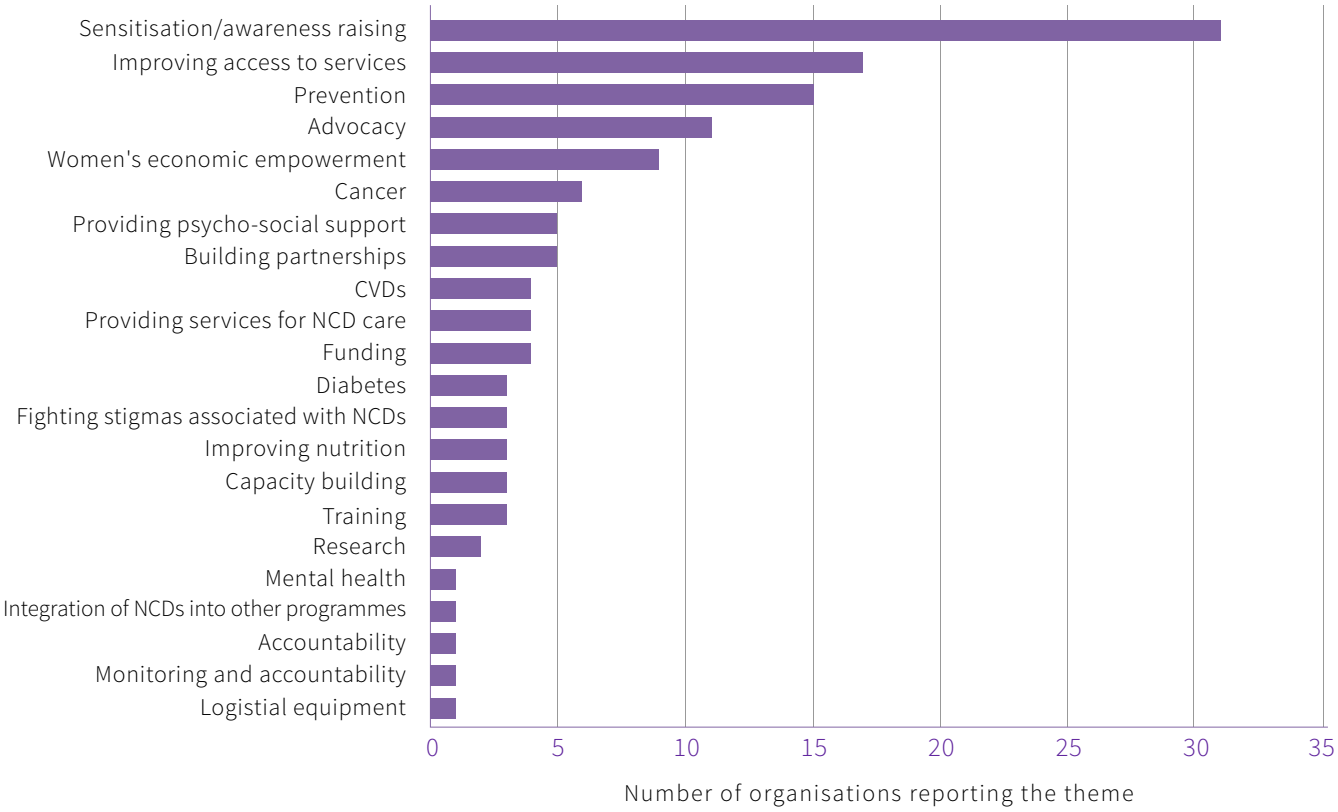


Figure 9: Priority areas for African women's organisations working on NCDs, 2019

"The top three priority areas for action among African women's organization are: 1. community outreach sensitization for the women to be able to identify the disease, how to prevent, etc; 2. provision of curative/medication support. 3. Financial support to build on their nutritional value." Women's Action for Human Dignity (Sierra Leone)

"1. Raise priority accorded to NCDs through advocacy; 2. Strengthen national capacity, governance, multi-sectoral action, and partnerships; 3. Reduce the major modifiable risk factors, such as tobacco use, harmful use of alcohol, unhealthy diets, and physical inactivity in Liberia." United Youth for Peace, Education, Transparency and Development in Liberia (Liberia)

"1. Sensitizing the communities on NCDs (e.g. cardiovascular diseases, diabetes, cancer, chronic respiratory conditions, mental health); 2. Advocacy for policies to address NCDs; 3. Financial support to women organisation on addressing and improving access to NCDs." Maboshe Memorial Centre (Zambia)

Other priorities mentioned included: research; forming partnerships and networks; integrating NCDs into other programmes; and monitoring to hold stakeholders and other groups accountable.

"Accountability: - The cyclical process of monitoring, review, and remedial action. A crucial force for political and programmatic change and a key to tracking progress on NCDs. Examples include tracking national action and the progress of governments and the private sector against commitments." STEMA Women's Development Group (Kenya)

5.2 Opportunities and challenges

Below we explore the opportunities and challenges for African women's organisations around engagement with NCD prevention and control based on responses to the online survey as well as the in-depth interviews.

Challenges

The main challenge faced by women-led organisations on engaging with NCDs was funding. Close to 50 organisations mentioned lack of funding and financing of NCD-specific work was a major challenge (Fig 10). Lack of expertise/knowledge related to NCD prevention and control within organisations was the second most reported challenge followed by lack of staff to coordinate

A common understanding of why we should be working together is still a big problem.

Dr Ibtihal Fadhil (Founder and Chairperson of the Eastern Mediterranean NCD Alliance)

NCD-related work. Both of these themes were major challenges also identified by groups not currently working on NCDs. Lack of awareness among communities of NCD risk factors, symptoms and management was also reported as a challenge. Linked to this were reports of socio-cultural barriers associated with local belief systems. Other challenges reported were: lack of healthcare provision; lack of political prioritization of NCDs; lack of coordination; socio-cultural barriers including the stigma associated with some NCDs; and lack of locally relevant research and evidence on NCDs.

In many of the interviews conducted, individuals mentioned that although grassroots organisations were offering screening and referral for some NCDs, **a major barrier was the lack of available, accessible, affordable, and good quality services and treatment provided by the public sector**. A considerable lack of investment in primary health care was

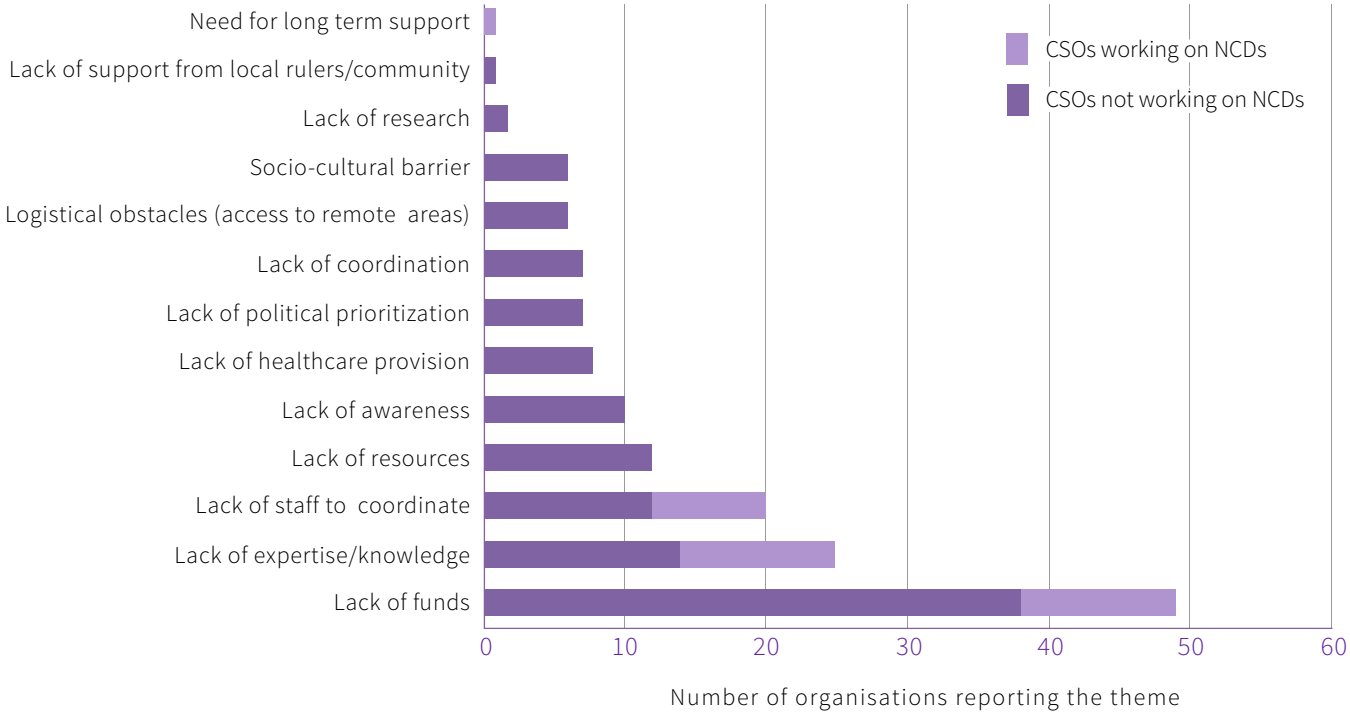


Figure 10: Challenges of working on NCDs reported by African women's organisations working on NCDs, 2019

reported as a critical obstacle. There is a clear need for communities and women in particular to be supported in order hold governments to account for their right to good quality healthcare.

Creating a wide-reaching network and better coordination among women-led organisations was also reported as a challenge. For example, although organisations in Sudan did not respond to the online survey, in an interview with Dr Fadhil, she mentioned a strong presence of women-led organisations in the country. Both among responses to the online survey and in the interviews conducted, people reiterated that fragmentation, and sometimes even resistance to working together, remained a challenge faced by groups working on NCDs.

Other challenges raised in the interviews included:

- The **neglect of women outside of reproductive years**, particularly the elderly who have a much higher incidence of NCDs;
- The **low prioritisation of mental health; mental health is rarely considered as a first response** despite evidence showing women with good mental health are better equipped to look after themselves and their communities;
- Obstacles related to **the operationalisation of research findings**;
- The **framing of NCDs as a technical issue**;
- **Industry fight-back**, particularly from tobacco and alcohol corporations.

"Women outside of childbearing ages aren't getting the care they need, despite the high incidence of NCDs. How do we link this demographic to services and women's groups?" Dr Vicki Pinkney-Atkinson (Director, South African NCD Alliance)

"Policy without resource is poetry." Mr Wondu Bekele

"Health is seen as a doctor's issue. We need to change the narrative to 'It is my health and I need to be responsible'" Dr Catherine Karekezi (Kenya NCD Alliance)

"There is no single convening body for mental health. For example a Global Mental Health Conference." Kari Frame (StrongMinds)

Opportunities

A variety of opportunities were identified for African women led-organisations to respond to the growing burden of NCDs; these are briefly outlined below.

Ability to reach and build capacities of local communities: Many women-led organisations have direct links with both individuals and communities. This places them in a unique position not only to raise awareness about NCD risk, prevention and management, but also situates them in a position where they can work with communities to tailor responses to the local context. Many respondents reported that women were "hungry" for health education and to improve their lives. Women-led organisations also play important roles in building community capacity to monitor and hold governments to account.

Provide a direct link between communities and policy makers: Linked to the point above, many CSOs work directly with local communities and healthcare providers as well as government agencies through their advocacy work. This places CSOs in a valuable position of being able to speak directly to the issues effecting women and girls, championing the causes that affect them most. Government should use this unique feature of CSOs, by working closer with them at all stages, from NCD policy development through to implementation.

Build multisectoral action and solidarity: The sheer breadth of risk factors and determinants associated with NCDs makes for a ripe opportunity to build solidarity between CSOs in different sectors. Furthermore, the current evidence of health, social, and economic problems being interwoven is a strong catalyst for collective action. This unification is needed even beyond NCDs as collective cross-cutting support and solidarity strengthens efforts and improves the chances of success.

Holistic care and support for women and girls: The range of risk factors for NCDs and care required to manage these illnesses allows for organisations to work towards holistic care and empowerment of women. Although also a challenge, this feature provides a strong opportunity for society and service providers to consider and treat women's health and wellbeing in a more complete, personal, and uninterrupted way.

Engaging the youth: In many countries across the continent youth make up the majority of the population. Moreover, it is often during these formative years that lifestyle habits for formed. As this cohort ages they will in turn become the strata of the population with the largest NCD burden and affect the next generation as they become parents. The youth therefore presents an important group to actively work on with regards to NCD response.

Prominent African women champions for NCDs: Raising the profile of NCDs is a critical part to sustaining existing support but also galvanising new support, specifically on NCDs and women's empowerment. Having a network of prominent pan-African women champions speaking on NCDs will help raise awareness among women and girls across the continent but also leverage political, economic, and social networks nationally and internationally to drive forward the gender-equitable NCD agenda. Other opportunities reported include:

- High energy and commitment of women-led organisations;
- Requiring minimum resources to make big impact;
- Working with mass media.

Recommendations

6

Based on the research undertaken for this report below are a set of recommendations of ways to support greater engagement on links between NCDs and women's rights by African women's organisations.

1. **Mobilise and grow financial support for on-going and planned work led by African women's organisations focusing on NCD prevention and control.**

   - Increase budgetary allocations for NCD prevention and control, particularly funds for women-led organisations on the continent.

   - Advocate for increased donor support for NCDs through existing donor networks and platforms.

   - Encourage applications from countries where women-led organisations are less active in NCD response.

2. **Strengthen capacity of African women-led organisations currently working on or planning to work on NCDs.**

    - Effectively leverage existing work on NCDs by women-led organisations on the continent.

    - Develop context-specific tools and training to support women-led organisations in addressing gaps in multisectoral response to NCDs including, strategy and campaign planning, advocacy, research skills, and legal capacity.

    - Share lessons learnt from advocacy on other issues that have proved successful.

3. **Facilitate access to and creation of information related to NCD prevention and control for African women-led organisations currently working on NCDs as well as those not yet directly working on NCDs.**

    - Collate and publicize existing resources and tools, particularly focusing on material relevant to a women-led multisectoral response to NCDs in Africa.

    - Support the development of locally relevant technical information, guidance on relevant policies, advocacy materials, and communication materials, especially those linking women's rights and empowerment to NCD response.

    - Contribute to changing the narrative around NCDs and African women's rights through blogs and analyses by African women.

4. **Support the formation of multisectoral coalitions/partnerships with other health and non-health women-led organisations at national, regional and local levels.**

    - Identify areas of convergence with NCDs and explore ways to integrate NCD action into other issues of focus.

    - Fund women-led multisectoral partnerships or progammes bridging the gap between NCDs and other issues.

5. **Build African feminist leadership to holistically tackle NCDs and empower women on the continent.**

    - Integrate analysis of NCDs as a women's rights concern into existing movement building spaces.

    • Produce feminist analyses related to NCDs in Africa and share with broader networks.

References

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Abrahams, Z., McHiza, Z., and Steyn, N.P. (2011) Diet and mortality rates in Sub-Saharan Africa: Stages in the nutrition transition. BMC Public Health, 11.
Access Accelerated (AA). (2019). Retrieved from: https://accessaccelerated.org

Africa Union (AU). (2001). Abuja Declaration on HIV/AIDS, tuberculosis, and other related infectious diseases. OAU/SPS/ABUJA/3. African Union, Abuja.

African Union (AU). (2015). Agenda 2063: The Africa We Want. Retrieved from: https://au.int/sites/default/files/documents/36204-doc-agenda2063_popular_version_en.pdf

African Women's Development Fund (AWDF). (2017). Shaping Africa's Future: AWDF's Strategic Direction 2017- 2021. AWDF, Accra.

All-Party Parliamentary Group on Global Health (APPG). (2016). Triple Impact: How developing nursing will improve health, promote gender equality and support economic growth. APPG on Global Health, London.

Amuna, P. and Zotor, F.B. (2008). Epidemiological and nutrition transition in developing countries: impact on human health and development. Proceedings of the Nutrition Society, 67, 82-90.

The African Population and Health Research Centre (APHRC). (2019). Retrieved from: https://aphrc.org/

AstraZeneca. (2019). Healthy Heart Africa: Investing for the Future. Retrieved from: https://www.astrazeneca.com/sustainability/access-to-healthcare/healthy-heart-africa.html

Blecher, E. and Ross, H. (2013). Tobacco use in Africa: Tobacco control through prevention. American Cancer Society. Retrieved from: https://www.cancer.org/content/dam/cancer-org/cancer-control/en/reports/tobacco-use-in-africa-tobacco-control-through=prevention.pdf

Bosu, W.K., Reilly, S.T., Aheto, J.M.K., Zucchelli, E. (2019) Hypertension in older adults in Africa: A systematic review and meta-analysis. PLoS ONE, 14 (4), e0214934.

Casper, C. and Fitzmaurice, C. (2016). Infection-related cancers: prioritising an important and eliminable contributor to the global cancer burden. Lancet Global Heath, 4(9), PE580-E581.

Chiang, C., et al. (2013). Barriers to the use of basic health services among women in rural southern Egypt (Upper Egypt). Nagoya Journal of Medical Science, 75(3-4), 225–231.

Commission on the Status of Women (CSW). (2019) Commission on the Status of Women. CSW. Retrieved from: http://www.unwomen.org/en/csw

Defeat NCD Partnership (DNCDP). (2019). Retrieved from: https://defeat-ncd.org/

Deininger, K., et al. (2011). Rising global interest in farmland: can it yield sustainable and equitable benefits? Agriculture and Rural Development. Washington, DC.

Dzudie, D., et al (2018). Roadmap to achieve 25% hypertension control in Africa by 2025. Global Heart, 13, 1, 45-59.

Environmental Rights Action (ERA). (2019). Retrieved from: http://erafoen.org

Every Woman Every Child (EWEC). (2015) Executive Office of the United Nations Secretary-General. UN, Geneva. Retrieved from: http://www.everywomaneverychild.org

Food and Agriculture Organisation of the United Nations (FAO). (2011). The state of food and agriculture, 2010-2011: Women in agriculture closing the gender gap. Retrieved from http://www.fao.org/docrep/013/i2050e/i2050e.pdf

Food and Agriculture Organisation of the United Nations (FAO). (2018). Leaving no one behind: Empowering Africa's Rural Women for Zero Hunger and Shared Prosperity. Retrieved from http://www.fao.org/3/CA1506EN/ca1506en.pdf

George, J., et al. (2015). How does cardiovascular disease first present in women and men? Incidence of 12 cardiovascular diseases in a contemporary cohort of 1,937,360 People. Circulation, 132: 1320–8.

Gill, G. (2014). Diabetes in Africa - Puzzles and challenges. Indian Journal of Endocrinology and Metabolism, 18(3): 249–251.

GlaxoSmithKline (GSK). (2014) Press release: GSK joins with research councils in UK and South Africa to tackle non-communicable diseases in Africa. Retrieved from: https://www.gsk.com/en-gb/media/press-releases/gsk-joins-with-research-councils-in-uk-and-south-africa-to-tackle-non-communicable-diseases-in-africa/

Goedecke, J. H. et al. (2017). Type 2 diabetes mellitus in African women. Diabetes Research and Clinical Practice, 123: 87-96.

Heller, O., et al. (2019). The process of prioritization of non-communicable diseases in the global health policy arena. Health Policy and Planning, czz043.

Herath, H., et al. (2017). Gestational diabetes mellitus and risk of type 2 diabetes 10 years after the index pregnancy in Sri Lankan women-A community based retrospective cohort study. PloS One, 12(6): e0179647.

Holmes, M. D., et al. (2010). Non-Communicable Diseases in Sub-Saharan Africa: The Case for Cohort Studies. PLoS Med, 7(5): e1000244.

Huxley, R. R., and Woodward, M. (2011). Cigarette smoking as a risk factor for coronary heart disease in women compared with men: a systematic review and meta-analysis of prospective cohort studies. Lancet, 378: 1297–305.

Ijsselmuiden, C.B., et al. (2007) Mapping Africa's advanced public health education capacity: the AfriHealth project. WHO Bulletin, 85 (12): 914-22.

Institute for Health Metrics and Evaluation (IHME). (2018). Findings from the Global Burden of Disease Study 2017. Seattle, WA. Retrieved from: http://www.healthdata.org/gbd/data-visualizations

International Association of Public Health Institutes (IAPHI). (2019). Our Members. IAPHI. Retrieved from: http://www.ianphi.org/membercountries/index.html

International Diabetes Federation (IDF). (2017). IDF Diabetes Atlas 8th Edition. Country Summary Table. Retrieved from: https://www.diabetesatlas.org/resources/2017-atlas.html

Jakpor, P. (2012). Nigeria: how British American Tobacco undermines the WHO FCTC through agricultural initiatives: invited commentary. Tobacco Control, 21(2): 220.

Jenkins, C. R., et al (2017). Improving the Management of COPD in Women. Chest, 151, 3, 686-696.

Juma, K., et al. (2019). First Africa non-communicable disease research conference 2017: sharing evidence and identifying research priorities. J Glob Health, 8(2): 020301.

Juma, P. A., et al. (2018). Multi-sectoral action in non-communicable disease prevention policy development in five African countries. BMC Public Health, 18: 953.

The Lancet Taskforce on NCDs and economics (Lancet). (2018). Retrieved from: https://www.thelancet.com/series/Taskforce-NCDs-and-economics

Le Blanc, D. (2015). Towards integration at last? The Sustainable Development Goals as a network of targets. Sustain Dev, 23: 176-187

Leening, M. J., et al. (2014). Sex differences in lifetime risk and first manifestation of cardiovascular disease: prospective population based cohort study. BMJ, 349, g5992, 19.

Lutter, C. K. and Lutter, R. (2012). Fetal and Early Childhood Undernutrition, Mortality, and Lifelong Health. Science, 337(6101) 1495-1499.

Maas, A. H. and Appelman, Y. E. (2010). Gender differences in coronary heart disease. Netherlands Heart Journal, 18 (12): 598–602.

Mafunda, J., et al. (2006) Emerging non-communicable disease epidemic in Africa: preventive measures from the WHO Regional Office for Africa. Ethn Dis, 16 (2): 521-6.

Make Every Woman Count (MEWC). (2018). African Women's Decade 2010-2020: Women's Participation in Decision-Making & Leadership. MEWC. Retrieved from: http://iknowpolitics.org/sites/default/files/awd_womensparticipationindecision-makingleadership_2018.pdf

Marco, L. J., et al. (2012). Cardiovascular Disease Risk in the Offspring of Diabetic Women: The Impact of the Intrauterine Environment. Experimental Diabetes Research, 565160.

Marquez, P. V., Farrington, J. L. (2013). The Challenge of Non-Communicable Diseases and Road Traffic Injuries in Sub-Saharan Africa. An Overview. The World Bank, Washington, DC.

McKee, M. et al. (2012). Where There Is No Health Research: What Can Be Done to Fill the Global Gaps in Health Research? PLoS Medicine, 9, 4.

Moran, A., et al. (2013). The epidemiology of cardiovascular diseases in sub-Saharan Africa: the Global Burden of Diseases, Injuries and Risk Factors 2010 Study. Prog Cardiovasc Dis, 56 (3): 234-9.

Mullan, F., et al. (2011). Medical schools in sub-Saharan Africa. The Lancet, 377: 1113-1121.
National Council Against Smoking in South Africa (NCASSA). (2019). Retrieved from: https://www.againstsmoking.co.za/

NCD Alliance (2018). Shaping the Health Systems of the Future: Case Studies and Recommendations for Integrated NCD Care. NCD Alliance. Retrieved from: https://ncdalliance.org/sites/default/files/resource_files/ShapingTheHealthSystemsOfTheFuture_FINAL_WEB_0.pdf

NCD Alliance. (2016). NCD Alliance Strategic Plan 2016-2020: From global commitments to national and regional action on NCD prevention and control. NCD Alliance. Geneva.

NCD Alliance. (2017). Mapping of NCD Civil Society Organisations in the WHO African Region. NCD Alliance, Geneva.

NCD Alliance. (2019). Delivering healthy lives and well-being for women and girls. NCD Alliance, Geneva. Retrieved from: https://ncdalliance.org/sites/default/files/resource_files/Women%26NCDsBrief_WEB_0.pdf

NCD Alliance. (2019). Mapping of NCD Civil Society Organisations in Francophone sub-Saharan Africa. NCD Alliance, Geneva.

New Partnership for Africa's Development (NEPAD). (2017). Annual Results Based Report: Fast-Tracking the Implementation of Africa's Development Agenda. NEPAD. Retrieved from: https://www.nepad.org/publication/annual-report-2017

Nugent, R., et al. (2018). Investing in non-communicable disease prevention and management to advance the Sustainable Development Goals. Lancet, 391: P2029-2035.

Nugent, R., and Feigl, A. (2010) Where have all the donors gone? Scarce donor funding for non-communicable diseases. Center for Global Development Working Paper, 228.

Nyaaba, G. N., et al. (2017). Tracing Africa's progress towards implementing the Non-Communicable Diseases Global action plan 2013–2020: a synthesis of WHO country profile reports. BMC Public Health, 17: 297.

Obot, I.S. (2006) Alcohol use and related problems in sub -Saharan Africa. African Journal of Drug and Alcohol Studies, 5(1): 17-28.

Oladepo, O., et al. (2018). Analysis of tobacco control policies in Nigeria: historical development and application of multi-sectoral action. BMC Public Health, 18: 959.

Oosterhoff, P. and Igonya, E. K. (2015). Constitutions reforms and access to HIV services for women in low-resource settings in Nairobi, Kenya. Institute of Development Studies, Evidence Report Number 137.
Pan African Society of Cardiology (PASCAR). (2019). Retrieved from: http://www.pascar.org/

Peters, S. A., Huxley, R. R., Woodward, M. (2014). Diabetes as a risk factor for stroke in women compared with men: a systematic review and meta-analysis of 64 cohorts, including 775,385 individuals and 12,539 strokes. Lancet, 383: 1973–80.

Peters, S. A., Huxley, R. R., Woodward, M. (2014). Diabetes as risk factor for incident coronary heart disease in women compared with men: a systematic review and meta-analysis of 64 cohorts including 858,507 individuals and 28,203 coronary events. Diabetologia, 57: 1542–51.

Peters, S. A. E., et al. (2016). Women's health: a new global agenda. BMJ Global Health.

Pfizer. (2016). Pfizer 2016 Annual review: Partnering to Tackle Non-Communicable Diseases. Retrieved from: https://www.pfizer.com/files/investors/financial_reports/annual_reports/2016/partnering-to-tackle-non-communicable-diseases-ncds/index.html

Riha, J., et al. (2014). Urbanicity and lifestyle risk factors for cardiometabolic diseases in rural Uganda: a cross-sectional study. PLoS Medicine, 29 (11): 7.

Roth, R.A., et al. (2017). Global, Regional, and National Burden of Cardiovascular Diseases for 10 Causes, 1990 to 2015. Journal of the American College of Cardiology, 70 (1): 1-25.

Schneider, M., et al. (2009). Poverty and non-communicable diseases in South Africa. Scandinavian Journal of Public Health, 37: 176-186.

Shaw, l. J., et al. (2009). Women and ischemic heart disease: evolving knowledge. Journal of the American College of Cardiology, 54 (17): 1561-75.

Sheps, D. S., et al. (2001). Sex differences in chest pain in patients with documented coronary artery disease and exercise-induced ischemia: results from the PiMi study. American Heart Journal, 142(5): 864-71.

Simpkin, V., Namubiru-Mwaura, E., Clarke, L., et al. (2019). Investing in health R&D: where we are, what limits us, and how to make progress in Afric. BMJ Global Health, 4: e001047.

Soul City Institute for Social Justice (SCI). (2019) Retrieved from: https://www.soulcity.org.za/

Steyn, K. and Damasceno, A. (2006). Lifestyle and related risk factors for chronic diseases., in Disease and mortality in sub-Saharan Africa, 2nd edition. World Bank: Washington, D.C., 247-65.

Taskforce on Women and NCDs. (2019). Retrieved from: https://www.womenandncds.org

UN Economic and Social Council (UNESC). (2019). Commission on the Status of Women Sixty-third session. E/CN.6/2019/L.3. UN, New York.

UNESCO Institute for Statistics. (2015). Global investments in R&D. UIS Fact Sheet No. 36. Retrieved from: http://uis.unesco.org/sites/default/files/documents/fs36-global-investments-in-rd-2015-en.pdf

UNAIDS. (2013). Abuja +12 Shaping the future of health in Africa. Retrieved from: http://files.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2013/JC2524_Abuja_report_en.pdf

United Nations (UN). (2011). Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. A/66/L.1. United Nations, New York.

United Nations (UN). (2014). Outcome Document of the High-Level Meeting of the General Assembly on the Comprehensive Review and Assessment of the Progress Achieved in the Prevention and Control of Non-Communicable Diseases. A/68/L.53. United Nations, New York.

United Nations (UN). (2015). Resolution adopted by the General Assembly on 25 September 2015. A/70/L.1. United Nations, New York.

United Nations (UN). (2018). Political declaration of the third high-level meeting of the General Assembly on the prevention and control of non-communicable diseases. A/73/L.2. United Nations, New York.

United Nations Statistics Division (UNSD). (2019) Standard Country or Area Codes for Statistical Use. Geographic Regions. Retrieved from: https://unstats.un.org/unsd/methodology/m49/

Van de Vijver, S., et al. (2013). Status report on hypertension in Africa--consultative review for the 6th Session of the African Union Conference of Ministers of Health on NCD's. The Pan African Medical Journal, 16: 38.

WHO Regional Office for Africa (WHO AFRO). (2011). Monitoring alcohol marketing in Africa: Findings from Gambia, Ghana, Nigeria and Uganda. WHO Regional Office for Africa: Brazzaville.

World Health Organization African Region (WHO AFRO). (2016). Report on the status of major health risk factors for noncommunicable diseases. WHO African Region, 2015. Retrieved from: https://www.afro.who.int/sites/default/files/2017-06/15264_who_afr-situation-ncds-15-12-2016-for-web_0.pdf

Women Deliver. (2019) About Us. Women Deliver. Retrieved from: https://womendeliver.org/our-work/
World Health Organization (WHO). (2000). Women's Mental Health: An Evidence Based Review. WHO, Geneva.

World Health Organization (WHO). (2011). Noncommunicable diseases country profiles 2011. WHO, Geneva.

World Health Organization (WHO). (2012). 65th World Health Assembly, Resolutions and Decisions. WHA65/2012/REC/1. WHO, Geneva.

World Health Organization (WHO). (2013) Global Action Plan for the Prevention and Control of NCDs 2013-2020. WHO, Geneva. Retrieved from: https://apps.who.int/iris/bitstream/handle/10665/94384/9789241506236_eng.pdf?sequence=1

World Health Organization (WHO). (2014). Noncommunicable diseases country profiles, 2014. WHO, Geneva.

World Health Organization (WHO). (2015). Noncommunicable diseases progress monitor 2015. WHO, Geneva.

World Health Organization (WHO). (2015). Terms of Reference for the UN Interagency Task Force on the Prevention and Control of NCDs. WHO, Geneva.

World Health Organization (WHO). (2016). Health workforce requirements for universal health coverage and the Sustainable Development Goals. WHO, Geneva.

World Health Organization (WHO). (2017) Noncommunicable diseases progress monitor, 2017. WHO, Geneva.

World Health Organization (WHO). (2018). Noncommunicable diseases country profiles 2018. WHO, Geneva.

World Health Organization (WHO). (2018). Saving lives, spending less: a strategic response to noncommunicable diseases. WHO, Geneva. Retrieved from: https://apps.who.int/iris/bitstream/handle/10665/272534/WHO-NMH-NVI-18.8-eng.pdf?ua=1

World Health Organization (WHO). (2019). UN Interagency Task Force on NCDs. WHO, Geneva. Retrieved from: https://www.who.int/ncds/un-task-force/en/

World Health Organization (WHO). (2019). Gender and women's mental health. WHO, Geneva. Retrieved from: https://www.who.int/mental_health/prevention/genderwomen/en/
World Health Organization. (2005). WHO Framework Convention on Tobacco Control. WHO, Geneva.

World Health Organization. (2015). Global Strategy for Women's, Children's and Adolescents' Health 2016-2030. WHO, Geneva.

World Health Organization. (2016). Global Health Estimates 2015: Deaths by Cause, Age, Sex, by Country and by Region, 2000-2015. Retrieved from https://www.who.int/healthinfo/global_burden_disease/estimates/en/

World Health Organization. (2016). Global Strategy on Human Resources for Health: Workforce 2030. WHO, Geneva.

World Health Organization. (2018). WHO global coordination mechanism on the prevention and control of noncommunicable diseases: final report: WHO GCM/NCD working group on the alignment of international cooperation with national NCD plans (‵ Working group 3.2, 2016–2017)‵ . World Health Organization. Retrieved from: https://apps.who.int/iris/handle/10665/312273

Young, F., et al. (2009). A review of co-morbidity between infectious and chronic disease in Sub Saharan Africa: TB and Diabetes Mellitus, HIV and Metabolic Syndrome, and the impact of globalization. Global Health, 5: 9.

Appendices

8

Appendix 1: Online survey questionnaire

African Women's Development Fund (AWDF), as part of its strategic plan, commissioned a futures trends analysis Futures Africa: Trends for Women by 2030 which indicated that Non-Communicable Diseases (NCDs) are rapidly growing in terms of the burden of disease and becoming the leading causes of death in Africa. Given the gendered dimensions to risk factor exposure and access to services, AWDF is now commissioning a mapping to assess the status of rights-based and community organizing responses to NCDs and their impact on African women. This survey is part of the mapping and aims to help understand which African women's organisations are already working on NCD prevention and response, and explore opportunities to support greater engagement on links between NCDs and women's rights by African women's organisations. If you have any questions please contact Johanna Riha, the consultant leading this piece of work (johanna.riha@gmail.com).

1. What is the full name of your organisation?

2. Which country/countries does your organization work in?

3. Does your work involve a gender-based approach to prevention or control of non-communicable diseases (e.g cardiovascular diseases, diabetes, cancer, chronic respiratory conditions, mental health)?

Working on NCDs

This section is to be completed by organizations already working on areas related to gender equity and the prevention or control of NCDs (e.g cardiovascular diseases, diabetes, cancer, chronic respiratory conditions, mental health).

4. Briefly explain what work your organization does in relation to NCD

prevention or management.5a. What do you think are the top three priority areas for action among African women's organizations on NCD prevention and response?

6a. What are the top three challenges your organization faces to NCD work?

7a. What are the top three opportunities for African women's organizations working on NCD prevention and response?

8a. What do you think are the top three ways to support greater engagement on links between NCDs and women's rights by African women's organisations?

9a. Please list any donors you know who are already funding or would be willing to fund work on NCDs and women's rights in Africa.

10a. Are you willing to be contacted for follow-up discussion? If so please enter your name, email address and contact phone number.

Not currently working on NCDs

This section is to be completed by organizations NOT working on areas related to gender equity and the prevention or control of NCDs (e.g cardiovascular diseases, diabetes, cancer, chronic respiratory conditions, mental health).

5b. Are there potential links between your existing advocacy issues for gender equity and NCD prevention and response? If so please explain.

6b. Would you consider integrating an NCD component into your work?

7b. What are the challenges to integrating NCD prevention or management into your organizations portfolio?

8b. What do you think are the top three ways to support greater engagement on links between NCDs and women's rights by African women's organisations?

9b. Please list any donors you know who are already funding or would be willing to fund work on NCDs and women's rights in Africa.

10b. Are you willing to be contacted for follow-up discussion? If so please enter your name, email address and contact phone number.

Appendix 2: Interview guide and list of individuals interviewed

Interview guide

Introduction

African Women's Development Fund (AWDF), as part of its strategic plan, commissioned a futures trends analysis Futures Africa: Trends for Women by 2030 which indicated that Non-Communicable Diseases (NCDs) are rapidly growing in terms of the burden of disease and becoming the leading causes of death in Africa. Given the gendered dimensions to risk factor exposure and access to services, AWDF is now commissioning a mapping to assess the status of rights-based and community organizing responses to NCDs and their impact on African women. This interview is part of the mapping and aims to help understand which African women's organisations are already working on NCD prevention and response, and explore opportunities to support greater engagement on links between NCDs and women's rights by African women's organisations. If you have any questions please contact Johanna Riha, the consultant leading this piece of work (johanna.riha@gmail.com).

Background

1. What is the full name of your organisation?
2. Which country/countries does your organization work in?
3. Briefly explain what work your organization does in relation to NCD prevention or management.
4. How many years has your organisation worked in the area of NCDs or their risk factors?
5. Who are the target audiences of your work?
6. Which diseases/risk factors does your organization primarily focus on?
7. What are one or two examples of your organisation's strategies that have led to specific outcomes for the targets groups of your work?

NCDs as a Women's Rights Issue

8. What NCD issues in your country have seen a civil society response to date?
9. What are some neglected, but important areas for early action in tackling NCDs in your country?
10. Who is active in work on NCDs (cardiovascular diseases, diabetes, cancer, chronic respiratory conditions, and mental health) in your context?
11. Do you think the gendered questions and issues around NCD prevention and control are being addressed in your context?
12. What do you see are the major gaps in the African women's organizations response to NCDs in your country?
13. What are the top three challenges African women's organizations face in working on NCDs?
14. What are the potential solutions to address the gaps in African women's organization's response to NCDs in your country?
15. What are the top three opportunities for African women's organizations working on NCD prevention and response?
16. What do you think are the top three priority areas for action among African women's organizations on NCD prevention and response?
17. What do you think are the top three ways to support greater engagement on links between NCDs and women's rights by African women's organisations?
18. Please list any donors you know who are already funding or would be willing to fund work on NCDs and women's rights in Africa.

List of individuals interviewed

Name	Area of focus	Country	Organization
Ginette Bonou	NCDs	Benin	CJ2D AYESSI
Roland Tossou	NCDs	Benin	Directeur Exécutif ONG La Fraîche Rosée; Président de l'Académie de la Jeune Élite du Bénin
Sylvie Paley	Cancer	Burkina Faso	Action Contre le Cancer Infantile Bobo Dioulasso
Kenfack Fulbert	Palliative Care	Cameroon	Président du Association Santo Domingo-SEG Cameroun
Philomène Mukendi	Cancer	DRC	Les Anges du Ciel
Wagida Anwar	Anti-smoking campaign in pregnancy	Egypt	Professor at Department of Community Medicine, Ain Shams University, Egypt
Wondu Bekele	Cancer	Ethiopia	Founder and General Manager, Consortium of Ethiopian NCD Association and Mathiwos Wondu Ethiopia Cancer Society
Catherine Karekezi	NCDs; diabetes	Kenya	Medical Director, Kenya Diabetes Management and Information Centre; NCD Alliance Kenya
Maud Mwakasungula	Cancer and NCDs	Malawi	Executive Director, Women's Coalition Against Cancer (WOCACA), Malawi
Ricky Lu	Maternal health service & NCD integration	Many	Director of Family Planning & Reproductive Health, and the Cervical Cancer Prevention Programs at Jhpiego Member of The George Institute/WHO Women & NCDs steering group
Jack Fischer	NCDs and Mental Health	Many	Technical Officer, Global Coordination Mechanism on NCDs (GCM/NCD), World Health Organization
Maia Olsen	NCDs	Many	Program Manager, NCD Synergies, Partners In Health
Cristina Parsons Perez; Priya Kanayson; Lucy Westerman	NCDs and Mental Health	Many	Capacity Development Director; Policy and Advocacy Manager; Policy & Campaigns Manager, The NCD Alliance
Ibtihal Fadhil	NCDs	Many	Chair, NCD Alliance, Eastern Mediterranean Region
Diana Agabi		Nigeria	ABANTU for Development
Vicki Pinkney-Atkinson	NCDs	South Africa	Director, South African NCD Alliance
Kemi Tibazarwa	CVDs	Tanzania	Chair, Task Force on Cardiovascular Disease Prevention, Pan-African Society of Cardiology (PASCAR)
Eva Magambo	Cancer	Uganda	Nakawa Division Women's Council
Kari Frame	Mental Health	Uganda and Zambia	International Program Director, StrongMinds

Appendix 3: Crude and age-adjusted estimates of prevalence and mortality for cardiovascular diseases among women by country, Africa, 2017 (IHME 2018)

Country	Year	Sex	Disease	Crude prevalence (number of prevalent cases)	Age standardised prevalence (cases per 100,000)	Crude number of deaths	Age standardised death rate (deaths per 100,000)
Algeria	2017	Female	CVDs	1,178,654	6,959	38,339	276
Angola	2017	Female	CVDs	389,226	5,420	10,586	258
Benin	2017	Female	CVDs	166,002	5,280	5,049	243
Botswana	2017	Female	CVDs	50,662	5,998	1,583	248
Burkina Faso	2017	Female	CVDs	312,908	5,326	9,381	247
Burundi	2017	Female	CVDs	153,782	5,636	4,497	301
Cameroon	2017	Female	CVDs	394,955	5,312	11,424	245
Cape Verde	2017	Female	CVDs	15,718	6,272	440	159
Central African Republic	2017	Female	CVDs	68,562	5,201	3,539	425
Chad	2017	Female	CVDs	190,046	5,574	6,220	297
Comoros	2017	Female	CVDs	15,134	5,587	517	255
Congo	2017	Female	CVDs	84,115	5,616	3,770	381
Cote d'Ivoire	2017	Female	CVDs	359,232	5,777	11,512	302
Democratic Republic of the Congo	2017	Female	CVDs	1,173,187	5,279	45,133	319
Djibouti	2017	Female	CVDs	18,092	5,631	417	229
Egypt	2017	Female	CVDs	2,309,925	7,496	82,007	395
Equatorial Guinea	2017	Female	CVDs	17,523	5,328	382	195
Eritrea	2017	Female	CVDs	87,746	5,122	2,843	300
Ethiopia	2017	Female	CVDs	1,334,069	5,054	26,520	177
Gabon	2017	Female	CVDs	34,296	5,616	1,036	221
Ghana	2017	Female	CVDs	610,525	6,100	22,137	326
Guinea	2017	Female	CVDs	184,785	5,474	8,227	351
Guinea-Bissau	2017	Female	CVDs	26,798	5,554	1,154	381
Kenya	2017	Female	CVDs	793,541	5,586	16,858	191
Lesotho	2017	Female	CVDs	44,368	5,825	2,336	387
Liberia	2017	Female	CVDs	70,834	5,693	2,272	293
Libya	2017	Female	CVDs	184,335	7,350	6,007	315
Madagascar	2017	Female	CVDs	422,104	5,984	16,785	407
Malawi	2017	Female	CVDs	301,068	5,802	7,265	192
Mali	2017	Female	CVDs	273,453	5,276	9,935	302
Mauritania	2017	Female	CVDs	67,125	5,624	2,177	259

Mauritius	2017	Female	CVDs	53,402	6,200	1,498	177
Morocco	2017	Female	CVDs	1,202,914	7,331	58,291	416
Mozambique	2017	Female	CVDs	484,874	5,950	13,562	284
Namibia	2017	Female	CVDs	50,575	5,662	1,438	192
Niger	2017	Female	CVDs	261,556	5,232	7,700	265
Nigeria	2017	Female	CVDs	3,007,684	5,425	62,804	185
Rwanda	2017	Female	CVDs	204,196	5,114	4,699	188
Sao Tome and Principe	2017	Female	CVDs	4,083	6,322	133	277
Senegal	2017	Female	CVDs	249,441	5,679	7,998	252
Seychelles	2017	Female	CVDs	3,265	5,922	112	197
Sierra Leone	2017	Female	CVDs	131,258	6,066	5,170	355
Somalia	2017	Female	CVDs	240,930	5,599	9,131	371
South Africa	2017	Female	CVDs	1,562,333	6,019	41,348	175
South Sudan	2017	Female	CVDs	131,385	5,455	3,588	278
Sudan	2017	Female	CVDs	731,876	7,118	29,417	397
Swaziland	2017	Female	CVDs	22,208	5,986	759	298
Tanzania	2017	Female	CVDs	863,046	5,440	20,993	197
The Gambia	2017	Female	CVDs	34,944	5,753	1,368	322
Togo	2017	Female	CVDs	131,220	5,612	3,871	258
Tunisia	2017	Female	CVDs	399,222	6,404	14,732	263
Uganda	2017	Female	CVDs	552,854	5,434	10,986	189
Zambia	2017	Female	CVDs	245,311	5,531	5,542	209
Zimbabwe	2017	Female	CVDs	270,951	5,774	9,893	319

Note: CVDs = Cardiovascular diseases. Top 10 countries with the highest figures are highlighted in red.

Source: Global Burden of Disease Study 2017. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://vizhub.healthdata.org/gbd-compare/. For terms and conditions of use, please visit http://www.healthdata.org/about/terms-and-conditions

Appendix 4: Crude and age-adjusted estimates of prevalence and mortality for diabetes among women by country, Africa, 2017 (IHME 2018)

Country	Year	Sex	Disease	Crude prevalence (number of prevalent cases)	Age stand-ardised prevalence (cases per 100,000)	Crude number of deaths	Age stand-ardised death rate (deaths per 100,000)
Algeria	2017	Female	DM	1,591,082	8,676	3,147	21
Angola	2017	Female	DM	663,873	8,383	1,435	30
Benin	2017	Female	DM	203,902	6,091	617	28
Botswana	2017	Female	DM	83,578	9,168	427	63
Burkina Faso	2017	Female	DM	306,336	4,887	1,238	30
Burundi	2017	Female	DM	146,055	5,331	591	36
Cameroon	2017	Female	DM	420,778	5,274	1,825	36
Cape Verde	2017	Female	DM	13,725	5,419	54	20
Central African Republic	2017	Female	DM	122,202	8,566	380	40
Chad	2017	Female	DM	198,781	5,519	685	31
Comoros	2017	Female	DM	16,942	6,149	78	36
Congo	2017	Female	DM	156,617	9,441	555	50
Cote d'Ivoire	2017	Female	DM	397,703	5,746	1,446	35
Democratic Republic of the Congo	2017	Female	DM	1,968,851	8,291	4,392	29
Djibouti	2017	Female	DM	20,193	5,796	83	40
Egypt	2017	Female	DM	3,112,657	8,790	6,287	23
Equatorial Guinea	2017	Female	DM	36,102	9,876	76	34
Eritrea	2017	Female	DM	95,751	5,559	462	43
Ethiopia	2017	Female	DM	1,080,969	4,059	4,778	29
Gabon	2017	Female	DM	57,767	8,879	175	35
Ghana	2017	Female	DM	626,452	5,802	2,277	31
Guinea	2017	Female	DM	176,021	5,054	938	38
Guinea-Bissau	2017	Female	DM	33,439	6,257	139	43
Kenya	2017	Female	DM	740,779	5,119	2,405	25
Lesotho	2017	Female	DM	76,290	9,667	644	97
Liberia	2017	Female	DM	85,877	6,342	300	36
Libya	2017	Female	DM	311,221	10,920	850	42
Madagascar	2017	Female	DM	371,756	5,207	1,457	33
Malawi	2017	Female	DM	301,780	5,828	1,086	28
Mali	2017	Female	DM	301,936	5,620	1,155	33
Mauritania	2017	Female	DM	80,905	6,465	325	37

Mauritius	2017	Female	DM	115,894	13,325	827	93
Morocco	2017	Female	DM	1,613,174	9,317	5,527	37
Mozambique	2017	Female	DM	440,183	5,407	1,750	33
Namibia	2017	Female	DM	72,359	7,842	272	35
Niger	2017	Female	DM	262,525	5,089	881	28
Nigeria	2017	Female	DM	2,337,408	3,899	6,664	18
Rwanda	2017	Female	DM	181,308	4,460	766	28
Sao Tome and Principe	2017	Female	DM	3,316	4,845	6	12
Senegal	2017	Female	DM	310,014	6,607	1,253	37
Seychelles	2017	Female	DM	5,053	9,015	10	18
Sierra Leone	2017	Female	DM	129,002	5,607	573	37
Somalia	2017	Female	DM	245,641	5,778	1,285	47
South Africa	2017	Female	DM	2,037,215	7,597	12,764	52
South Sudan	2017	Female	DM	139,239	5,720	550	39
Sudan	2017	Female	DM	800,022	7,065	1,806	23
Swaziland	2017	Female	DM	49,153	12,312	308	105
Tanzania	2017	Female	DM	705,482	4,481	3,373	30
The Gambia	2017	Female	DM	35,364	5,623	163	36
Togo	2017	Female	DM	120,618	4,793	423	26
Tunisia	2017	Female	DM	435,226	6,762	1,054	18
Uganda	2017	Female	DM	493,209	4,939	1,638	26
Zambia	2017	Female	DM	244,510	5,423	1,013	36
Zimbabwe	2017	Female	DM	434,391	9,022	1,822	53

Note: DM = Diabetes Mellitus. Top 10 countries with the highest figures are highlighted in red.

Source: Global Burden of Disease Study 2017. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://vizhub.healthdata.org/gbd-compare/. For terms and conditions of use, please visit http://www.healthdata.org/about/terms-and-conditions

Appendix 5: Crude and age-adjusted estimates of prevalence and mortality for cancer among women by country, Africa, 2017 (IHME 2018)

Country	Year	Sex	Disease	Crude prevalence (number of prevalent cases)	Age stand-ardised prevalence (cases per 100,000)	Crude number of deaths	Age stand-ardised death rate (deaths per 100,000)
Algeria	2017	Female	Neoplasms	128,391	668	9,935	60
Angola	2017	Female	Neoplasms	45,778	535	6,010	96
Benin	2017	Female	Neoplasms	16,081	476	2,553	98
Botswana	2017	Female	Neoplasms	5,723	614	765	100
Burkina Faso	2017	Female	Neoplasms	38,185	573	5,692	113
Burundi	2017	Female	Neoplasms	15,368	514	2,343	104
Cameroon	2017	Female	Neoplasms	41,028	511	6,390	104
Cape Verde	2017	Female	Neoplasms	1,356	545	236	92
Central African Republic	2017	Female	Neoplasms	8,932	589	1,455	122
Chad	2017	Female	Neoplasms	18,169	480	2,924	108
Comoros	2017	Female	Neoplasms	1,939	673	308	121
Congo	2017	Female	Neoplasms	13,235	745	1,817	134
Cote d'Ivoire	2017	Female	Neoplasms	27,577	402	4,162	79
Democratic Republic of the Congo	2017	Female	Neoplasms	126,541	506	18,757	97
Djibouti	2017	Female	Neoplasms	2,526	661	349	123
Egypt	2017	Female	Neoplasms	217,276	565	17,678	58
Equatorial Guinea	2017	Female	Neoplasms	2,246	604	262	95
Eritrea	2017	Female	Neoplasms	13,847	746	2,161	150
Ethiopia	2017	Female	Neoplasms	146,618	517	21,247	98
Gabon	2017	Female	Neoplasms	3,746	573	538	97
Ghana	2017	Female	Neoplasms	62,940	568	8,923	101
Guinea	2017	Female	Neoplasms	22,427	619	3,645	127
Guinea-Bissau	2017	Female	Neoplasms	3,117	571	497	124
Kenya	2017	Female	Neoplasms	66,057	442	10,056	85
Lesotho	2017	Female	Neoplasms	4,741	607	880	126
Liberia	2017	Female	Neoplasms	6,523	475	989	99
Libya	2017	Female	Neoplasms	32,296	1,068	2,334	98
Madagascar	2017	Female	Neoplasms	44,549	559	6,394	105
Malawi	2017	Female	Neoplasms	30,179	542	4,841	104
Mali	2017	Female	Neoplasms	27,484	471	4,312	97
Mauritania	2017	Female	Neoplasms	7,033	565	1,081	106

Mauritius	2017	Female	Neoplasms	8,068	946	690	78
Morocco	2017	Female	Neoplasms	141,573	791	11,204	68
Mozambique	2017	Female	Neoplasms	52,714	600	7,751	120
Namibia	2017	Female	Neoplasms	5,560	608	758	90
Niger	2017	Female	Neoplasms	23,649	435	3,733	94
Nigeria	2017	Female	Neoplasms	417,875	668	49,380	102
Rwanda	2017	Female	Neoplasms	22,792	523	3,360	95
Sao Tome and Principe	2017	Female	Neoplasms	470	665	64	110
Senegal	2017	Female	Neoplasms	23,285	495	3,915	101
Seychelles	2017	Female	Neoplasms	694	1,212	65	115
Sierra Leone	2017	Female	Neoplasms	12,416	531	1,953	109
Somalia	2017	Female	Neoplasms	29,215	622	4,873	134
South Africa	2017	Female	Neoplasms	167,139	612	22,928	90
South Sudan	2017	Female	Neoplasms	16,436	581	2,355	116
Sudan	2017	Female	Neoplasms	59,384	458	6,258	66
Swaziland	2017	Female	Neoplasms	2,380	608	364	113
Tanzania	2017	Female	Neoplasms	95,783	544	13,934	99
The Gambia	2017	Female	Neoplasms	2,627	420	465	91
Togo	2017	Female	Neoplasms	12,136	466	1,833	91
Tunisia	2017	Female	Neoplasms	49,573	771	3,598	59
Uganda	2017	Female	Neoplasms	59,639	549	9,366	108
Zambia	2017	Female	Neoplasms	29,364	600	4,366	117
Zimbabwe	2017	Female	Neoplasms	29,996	621	5,574	139

Note: Top 10 countries with the highest figures are highlighted in red.

Source: Global Burden of Disease Study 2017. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://vizhub.healthdata.org/gbd-compare/. For terms and conditions of use, please visit http://www.healthdata.org/about/terms-and-conditions

Appendix 6: Crude and age-adjusted estimates of prevalence and mortality for chronic respiratory diseases among women by country, Africa, 2017 (IHME 2018)

Country	Year	Sex	Disease	Crude prevalence (number of prevalent cases)	Age stand-ardised prevalence (cases per 100,000)	Crude number of deaths	Age stand-ardised death rate (deaths per 100,000)
Algeria	2017	Female	CRDs	1,703,493	8,934	2,148	15
Angola	2017	Female	CRDs	1,035,093	8,341	2,055	43
Benin	2017	Female	CRDs	286,904	6,400	1,009	45
Botswana	2017	Female	CRDs	82,072	8,443	230	34
Burkina Faso	2017	Female	CRDs	585,521	6,733	1,261	28
Burundi	2017	Female	CRDs	293,154	6,303	758	43
Cameroon	2017	Female	CRDs	658,132	6,326	2,473	49
Cape Verde	2017	Female	CRDs	12,579	4,806	47	17
Central African Republic	2017	Female	CRDs	157,581	8,289	635	72
Chad	2017	Female	CRDs	323,338	6,198	1,059	46
Comoros	2017	Female	CRDs	21,928	6,510	63	28
Congo	2017	Female	CRDs	181,939	8,632	671	65
Cote d'Ivoire	2017	Female	CRDs	650,163	6,843	1,510	35
Democratic Republic of the Congo	2017	Female	CRDs	2,455,805	7,456	9,364	62
Djibouti	2017	Female	CRDs	26,687	5,923	53	24
Egypt	2017	Female	CRDs	4,386,792	10,508	6,892	29
Equatorial Guinea	2017	Female	CRDs	42,876	8,211	89	42
Eritrea	2017	Female	CRDs	149,138	5,911	470	41
Ethiopia	2017	Female	CRDs	2,481,315	5,628	4,511	26
Gabon	2017	Female	CRDs	65,590	8,259	131	27
Ghana	2017	Female	CRDs	719,828	5,874	1,866	25
Guinea	2017	Female	CRDs	337,906	7,053	1,282	51
Guinea-Bissau	2017	Female	CRDs	44,632	6,346	176	53
Kenya	2017	Female	CRDs	1,109,477	5,485	3,220	33
Lesotho	2017	Female	CRDs	75,726	9,209	458	72
Liberia	2017	Female	CRDs	108,915	5,961	300	35
Libya	2017	Female	CRDs	264,194	8,579	437	22
Madagascar	2017	Female	CRDs	824,925	7,482	3,008	62
Malawi	2017	Female	CRDs	551,373	7,048	1,091	26
Mali	2017	Female	CRDs	493,070	6,849	2,134	58
Mauritania	2017	Female	CRDs	116,021	6,872	299	33

Mauritius	2017	Female	CRDs	53,832	7,769	203	24
Morocco	2017	Female	CRDs	1,411,224	8,141	2,828	20
Mozambique	2017	Female	CRDs	871,308	6,472	1,590	29
Namibia	2017	Female	CRDs	80,952	8,118	230	30
Niger	2017	Female	CRDs	494,713	6,279	1,416	43
Nigeria	2017	Female	CRDs	4,638,006	5,799	9,394	24
Rwanda	2017	Female	CRDs	467,858	7,928	1,053	36
Sao Tome and Principe	2017	Female	CRDs	5,496	6,748	38	76
Senegal	2017	Female	CRDs	338,088	5,767	1,198	35
Seychelles	2017	Female	CRDs	3,539	7,042	10	18
Sierra Leone	2017	Female	CRDs	193,859	6,473	700	45
Somalia	2017	Female	CRDs	418,678	6,001	1,333	45
South Africa	2017	Female	CRDs	1,891,190	7,068	7,673	32
South Sudan	2017	Female	CRDs	286,723	6,966	665	41
Sudan	2017	Female	CRDs	1,438,840	8,733	2,222	30
Swaziland	2017	Female	CRDs	37,679	8,359	121	44
Tanzania	2017	Female	CRDs	1,934,463	7,605	3,144	25
The Gambia	2017	Female	CRDs	51,292	6,169	197	44
Togo	2017	Female	CRDs	203,608	6,431	631	38
Tunisia	2017	Female	CRDs	416,116	7,001	825	15
Uganda	2017	Female	CRDs	1,078,559	6,320	2,052	30
Zambia	2017	Female	CRDs	438,612	6,096	1,000	32
Zimbabwe	2017	Female	CRDs	444,914	8,161	1,588	48

Note: CRDs = Chronic Respiratory Diseases. Top 10 countries with the highest figures are highlighted in red.

Source: Global Burden of Disease Study 2017. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://vizhub.healthdata.org/gbd-compare/. For terms and conditions of use, please visit http://www.healthdata.org/about/terms-and-conditions

Appendix 7: Crude and age-adjusted estimates of prevalence and mortality for neurological conditions among women by country, Africa, 2017 (IHME 2018)

Country	Year	Sex	Condition	Crude prevalence (number of prevalent cases)	Age standardised prevalence (cases per 100,000)	Crude number of deaths	Age standardised death rate (deaths per 100,000)
Algeria	2017	Female	NC	8,922,080	43,927	5,306	42
Angola	2017	Female	NC	5,053,751	40,509	1,355	45
Benin	2017	Female	NC	2,358,534	45,053	941	55
Botswana	2017	Female	NC	472,814	40,356	265	47
Burkina Faso	2017	Female	NC	4,330,291	45,470	1,563	54
Burundi	2017	Female	NC	1,606,784	33,987	534	49
Cameroon	2017	Female	NC	5,756,593	45,495	2,034	58
Cape Verde	2017	Female	NC	125,680	45,507	127	41
Central African Republic	2017	Female	NC	872,562	40,457	264	48
Chad	2017	Female	NC	2,862,499	45,460	916	56
Comoros	2017	Female	NC	117,931	33,997	86	53
Congo	2017	Female	NC	951,736	40,536	398	59
Cote d'Ivoire	2017	Female	NC	4,968,577	45,479	1,506	56
Democratic Republic of the Congo	2017	Female	NC	14,418,489	40,451	5,050	48
Djibouti	2017	Female	NC	172,574	34,037	71	54
Egypt	2017	Female	NC	20,243,483	45,246	6,446	46
Equatorial Guinea	2017	Female	NC	230,912	40,538	72	47
Eritrea	2017	Female	NC	921,555	33,967	432	68
Ethiopia	2017	Female	NC	13,839,906	30,662	5,495	44
Gabon	2017	Female	NC	348,056	40,544	192	46
Ghana	2017	Female	NC	6,771,701	45,481	2,316	46
Guinea	2017	Female	NC	2,469,690	45,458	1,255	64
Guinea-Bissau	2017	Female	NC	389,313	45,478	128	64
Kenya	2017	Female	NC	7,919,176	35,185	3,401	48
Lesotho	2017	Female	NC	394,143	40,342	288	61
Liberia	2017	Female	NC	978,904	45,544	313	53
Libya	2017	Female	NC	1,505,289	43,891	1,008	63
Madagascar	2017	Female	NC	3,910,491	34,023	1,312	44
Malawi	2017	Female	NC	2,678,364	33,981	1,525	44
Mali	2017	Female	NC	3,938,030	45,413	1,320	56
Mauritania	2017	Female	NC	826,559	45,525	400	58

Mauritius	2017	Female	NC	277,924	39,269	361	44
Morocco	2017	Female	NC	8,016,179	43,913	6,148	51
Mozambique	2017	Female	NC	4,727,403	34,089	1,990	55
Namibia	2017	Female	NC	472,299	40,345	331	47
Niger	2017	Female	NC	3,970,145	45,422	1,034	53
Nigeria	2017	Female	NC	43,442,947	46,158	17,887	59
Rwanda	2017	Female	NC	2,001,881	34,002	950	47
Sao Tome and Principe	2017	Female	NC	43,085	45,482	21	50
Senegal	2017	Female	NC	3,026,162	45,474	1,426	56
Seychelles	2017	Female	NC	19,816	39,246	27	47
Sierra Leone	2017	Female	NC	1,639,676	45,513	618	56
Somalia	2017	Female	NC	2,379,175	33,947	967	59
South Africa	2017	Female	NC	11,933,860	41,575	9,292	42
South Sudan	2017	Female	NC	1,417,742	33,983	537	51
Sudan	2017	Female	NC	7,804,468	43,907	2,639	42
Swaziland	2017	Female	NC	223,296	40,304	98	54
Tanzania	2017	Female	NC	7,703,921	31,403	4,566	48
The Gambia	2017	Female	NC	448,758	45,437	217	60
Togo	2017	Female	NC	1,628,161	45,461	519	50
Tunisia	2017	Female	NC	2,686,686	43,935	2,538	47
Uganda	2017	Female	NC	5,796,815	34,057	2,009	42
Zambia	2017	Female	NC	2,973,453	38,590	1,190	55
Zimbabwe	2017	Female	NC	2,824,921	40,308	1,090	54

Note: NC = Neurological Conditions. Top 10 countries with the highest figures are highlighted in red.

Source: Global Burden of Disease Study 2017. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://vizhub.healthdata.org/gbd-compare/. For terms and conditions of use, please visit http://www.healthdata.org/about/terms-and-conditions

Appendix 7b: Crude and age-adjusted estimates of prevalence and DALYs for mental health conditions among women by country, Africa, 2017 (IHME 2018)

Country	Year	Sex	Condition	Crude prevalence (number of prevalent cases)	Age standardised prevalence (cases per 100,000)	Crude number of DALYs	Age standardised DALYs rate (DALYs per 100,000)
Algeria	2017	Female	MH	2,905,389	14,282	385,162	1,878
Angola	2017	Female	MH	1,507,674	12,166	202,569	1,686
Benin	2017	Female	MH	593,420	11,544	76,488	1,561
Botswana	2017	Female	MH	134,671	11,754	18,378	1,608
Burkina Faso	2017	Female	MH	1,094,262	11,611	140,411	1,563
Burundi	2017	Female	MH	619,944	13,095	76,774	1,709
Cameroon	2017	Female	MH	1,423,760	11,560	186,875	1,586
Cape Verde	2017	Female	MH	31,389	11,522	4,395	1,623
Central African Republic	2017	Female	MH	268,597	12,436	35,018	1,662
Chad	2017	Female	MH	745,969	12,002	95,251	1,640
Comoros	2017	Female	MH	42,656	12,389	5,491	1,621
Congo	2017	Female	MH	279,789	12,090	37,934	1,662
Cote d'Ivoire	2017	Female	MH	1,195,035	11,196	153,526	1,494
Democratic Republic of the Congo	2017	Female	MH	4,387,477	12,237	564,418	1,625
Djibouti	2017	Female	MH	61,666	12,586	8,158	1,687
Egypt	2017	Female	MH	6,565,102	14,425	805,146	1,787
Equatorial Guinea	2017	Female	MH	68,394	12,174	9,500	1,721
Eritrea	2017	Female	MH	345,464	12,905	43,970	1,695
Ethiopia	2017	Female	MH	5,756,114	12,920	724,687	1,701
Gabon	2017	Female	MH	101,145	11,917	13,872	1,648
Ghana	2017	Female	MH	1,613,056	11,029	212,561	1,482
Guinea	2017	Female	MH	615,882	11,542	79,668	1,564
Guinea-Bissau	2017	Female	MH	96,771	11,596	12,589	1,575
Kenya	2017	Female	MH	2,747,535	12,395	353,198	1,642
Lesotho	2017	Female	MH	130,618	13,599	18,703	1,968
Liberia	2017	Female	MH	262,078	12,582	34,799	1,742
Libya	2017	Female	MH	497,158	14,436	65,728	1,891
Madagascar	2017	Female	MH	1,457,204	12,800	185,064	1,690
Malawi	2017	Female	MH	974,862	12,414	121,059	1,601
Mali	2017	Female	MH	955,609	11,011	117,641	1,432
Mauritania	2017	Female	MH	194,396	10,800	24,670	1,421
Mauritius	2017	Female	MH	82,537	11,360	11,046	1,517

Morocco	2017	Female	MH	2,969,478	16,293	419,413	2,287
Mozambique	2017	Female	MH	1,761,329	12,834	221,094	1,684
Namibia	2017	Female	MH	129,699	11,179	16,900	1,474
Niger	2017	Female	MH	1,052,473	11,856	128,837	1,566
Nigeria	2017	Female	MH	10,898,355	11,859	1,463,099	1,665
Rwanda	2017	Female	MH	750,725	12,894	98,627	1,741
Sao Tome and Principe	2017	Female	MH	10,340	11,052	1,353	1,487
Senegal	2017	Female	MH	728,418	11,094	93,739	1,480
Seychelles	2017	Female	MH	5,422	10,585	703	1,368
Sierra Leone	2017	Female	MH	412,163	11,695	53,465	1,584
Somalia	2017	Female	MH	932,759	13,243	115,091	1,725
South Africa	2017	Female	MH	3,504,970	12,329	472,122	1,655
South Sudan	2017	Female	MH	521,308	12,698	66,484	1,683
Sudan	2017	Female	MH	2,938,400	15,845	343,891	1,914
Swaziland	2017	Female	MH	64,044	11,743	8,519	1,584
Tanzania	2017	Female	MH	3,055,039	12,652	395,062	1,696
The Gambia	2017	Female	MH	120,935	12,684	16,603	1,821
Togo	2017	Female	MH	403,828	11,524	52,853	1,556
Tunisia	2017	Female	MH	898,600	14,784	119,788	1,943
Uganda	2017	Female	MH	2,266,949	13,614	305,196	1,922
Zambia	2017	Female	MH	936,261	12,341	118,441	1,624
Zimbabwe	2017	Female	MH	730,684	10,494	90,437	1,339

Note: DALYs = Disability Adjusted Life Years (the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability); MH = Mental Health conditions. Top 10 countries with the highest figures are highlighted in red.

Source: Global Burden of Disease Study 2017. Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018. Available from http://vizhub.healthdata.org/gbd-compare/. For terms and conditions of use, please visit http://www.healthdata.org/about/terms-and-conditions

Appendix 8: List of actors responding to NCDs in Africa

Organisation	Type	Headquarter	Website
National Institute of Public Health (Algeria)	1	Algeria	http://www.insp.dz
National Institute of Public Health (Angola)	1	Angola	http://www.ianphi.org/membercountries/memberinformation/angola.html
National Institute of Public Health (Burundi)	1	Burundi	http://www.insp.bi/
Department of Disease Control	1	Cameroon	http://www.minsante.gov.cm/site/minsante.php?lang=e
International Development Research Centre	1	Canada	https://www.idrc.ca/
National Institute of Public Health (Cape Verde)	1	Cape Verde	www.insp.gov.cv
National Institute of Public Health (Cote d'Ivoire)	1	Cote d'Ivoire	http://www.ianphi.org/membercountries/memberinformation/cotedivoire.html
Ethiopian Public Health Institute	1	Ethiopia	http://ephi.gov.et
Ghana Health Service	1	Ghana	http://www.ghanahealthservice.org
National Institute of Public Health (Guinea)	1	Guinea	http://www.ianphi.org/membercountries/memberinformation/guinea.html
National Institute of Public Health (Guinea Bissau)	1	Guinea Bissau	http://www.ianphi.org/membercountries/memberinformation/guineabissau.html
Kenya Medical Research Institute	1	Kenya	www.kemri.org
Kenya National Public Health Institute	1	Kenya	http://www.ianphi.org/membercountries/memberinformation/kenya.html
National Public Health Institute of Liberia	1	Liberia	www.nationalphil.org
National Centre for Disease Control	1	Libya	http://www.nidcc.org.ly/tem2.htm
Institute of Health Monitoring and Disease Surveillance	1	Madagascar	http://www.ianphi.org/membercountries/memberinformation/madagascar.html
Public Health Institute Malawi	1	Malawi	http://malawipublichealth.org/
Direction of Epidemiology and Control Diseases (MoH)	1	Morocco	http://www.ianphi.org/membercountries/memberinformation/morocco.html
National Institute of Hygiene (Morocco)	1	Morocco	http://inh.ma/
National Institute of Health of Mozambique	1	Mozambique	http://www.misau.gov.mz/
National Primary Health Care Development Agency	1	Nigeria	http://www.nphcda.gov.ng/
Nigerian Centre for Disease Control	1	Nigeria	https://ncdc.gov.ng/
Nigerian Institute of Medical Research	1	Nigeria	www.nimr.gov.ng
Biomedical Center, Institute of HIV/AIDS, Disease Prevention of Control	1	Rwanda	www.rbc.gov.rw
Sierra Leone National Public Health Agency	1	Sierra Leone	http://health.org.sl

National Institute of Health National Public Health Laboratory	1	Somalia	www.nih.gov.so
National Institute for Communicable Diseases	1	South Africa	www.nicd.ac.za
Public Health Institute of Sudan	1	Sudan	www.phi.edu.sd
National Institute for Medical Research	1	Tanzania	www.nimr.or.tz
National Institute of Hygiene (Togo)	1	Togo	http://www.inhtogo.tg/
National Institute for Health	1	Tunisia	www.insp.rns.tn/
Uganda National Institute of Public Health	1	Uganda	http://www.ianphi.org/membercountries/memberinformation/uganda.html
U.S. President's Emergency Plan for AIDS Relief (PEPFAR)	1	USA	https://www.pepfar.gov/
US Centers for Disease Control and Prevention	1	USA	https://www.cdc.gov/
National Public Health Institute (Zambia)	1	Zambia	www.znphi.co.zm
Africa CDC	2	Ethiopia	www.africacdc.org
World Bank	2	USA	https://www.worldbank.org
Commission on the Status of Women	2		http://www.unwomen.org/en/csw
Global Coordination Mechanism on Prevention and Control of NCDs	2		https://www.who.int/ncds/gcm/en/
The United Nations Interagency Task Force on the Prevention and Control of NCDs	2		https://www.who.int/ncds/un-task-force/en/
UN Women	2		www.unwomen.org/
WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases	2		https://www.who.int/activities/gcm
Noguchi Memorial Institute for Medical Research	3	Ghana	www.noguchimedres.org
African Population and Health Research Centre	3	Kenya	https://aphrc.org/
Alliance for Accelerating Excellence in Science in Africa	3	Kenya	www.aesa.ac.ke
Pasteur Institute of Morocco	3	Morocco	www.pasteur.ma
African Society of Human Genetics	3	South Africa	https://www.afshg.org/
Human Heredity and Health in Africa (H3Africa) consortium	3	South Africa	https://h3africa.org/
INDEPTH Network	3	South Africa	http://www.indepth-network.org/
Ifakara Health Institute	3	Tanzania	http://ihi.or.tz/
Uganda Virus Research Institute	3	Uganda	http://www.uvri.go.ug/
African Cancer Registry Network	3	UK	https://afcrn.org
Harvard Global Equity Initiative (HGEI)	3		https://hgei.harvard.edu/
Network of African Science Academies	3		www.nasaconline.org
Population Council	3		https://www.popcouncil.org/about
The George Institute for Global Health	3		https://www.georgeinstitute.org.uk/
African Medical Credit Fund	4		https://thegiin.org/medical-credit-fund

Defeat NCD Partnership	4		https://defeat-ncd.org/
Novartis Foundation	5	Switzerland	https://www.novartisfoundation.org
Bill & Melinda Gates Foundation	5	USA	gatesfoundation.org
Bloomberg Philanthropies	5	USA	https://www.bloomberg.org
Doris Duke Charitable Foundation	5	USA	https://www.ddcf.org/
Medtronic Philanthropy	5	USA	https://www.medtronic.com/uk-en/about/foundation.html
The Bush Institute	5	USA	https://www.bushcenter.org/explore-our-work/taking-action/partnership-to-end-aids-and-cervical-cancer.html
Helmsley Charitable Trust	5		https://helmsleytrust.org/
International Diabetes Federation	6	Belgium	https://www.idf.org
International Network for Cancer Treatment and Research	6	Belgium	http://www.inctr.org/
Burundi NCD Alliance	6	Burundi	https://ncdalliance.org/burundi-ncd-alliance-bncda
HealthBridge	6	Canada	www.healthbridge.ca
Heart and Stroke Foundation	6	Canada	https://www.heartandstroke.ca/
Egypt Health	6	Egypt	http://www.egypthealth.net
Ethiopia NCD Alliance	6	Ethiopia	http://mathiwos.org/
Breast Care International	6	Ghana	https://www.breastcareinternational.org/
African Academy of Sciences	6	Kenya	https://aasciences.ac.ke
African Institute for Health and Development	6	Kenya	https://aihdint.org/
African Mental Health Foundation	6	Kenya	https://www.africamentalhealthfoundation.org/; https://africamentalhealthresearchandtrainingfoundation.org/
Kenya NCD Alliance	6	Kenya	https://ncdak.org/
Malawi NCD Alliance	6	Malawi	https://ncdalliance.org/what-we-do/capacity-development/list-of-national-regional-ncd-alliances
Women Coalition Against Cancer	6	Malawi	https://www.uicc.org/membership/women-coalition-against-cancer-malawi-wocaca
Mozambique NCD Alliance	6	Mozambique	https://ncdalliance.org/news-events/news/mozambique%E2%80%99s-ncd-alliance-launched
Environmental Rights Action	6	Nigeria	http://erafoen.org/; http://tobaccocontrol.ng/
Nigeria NCD Alliance	6	Nigeria	https://ncdalliance.org/news-events/news/creating-an-ncd-civil-society-action-plan-for-nigeria
Rwanda NCD Alliance	6	Rwanda	https://ncdalliance.org/news-events/news/launch-of-the-rwanda-non-communicable-disease-alliance
Rwanda Palliative Care and Hospice Organisation	6	Rwanda	http://www.rpcho14.org/
Cancer Alliance (South Africa)	6	South Africa	https://www.canceralliance.co.za
Cancer Association of South Africa	6	South Africa	https://www.cansa.org.za/
Global Mental Health Peer Network	6	South Africa	https://www.gmhpn.org/
Soul City Institute for Social Justice	6	South Africa	www.soulcity.org.za

South Africa NCD Alliance	6	South Africa	https://www.sancda.org.za/
Southern Africa Alcohol Policy Alliance	6	South Africa	http://saapa.net/
The National Council Against Smoking (South Africa)	6	South Africa	www.againstsmoking.co.za
Framework Convention Alliance/ Framework Convention Alliance for Tobacco Control	6	Switzerland	https://www.fctc.org/
NCD Alliance	6	Switzerland	https://ncdalliance.org
Union for International Cancer Control	6	Switzerland	https://www.uicc.org
World Heart Federation	6	Switzerland	https://www.world-heart-federation.org; https://www.world-heart-federation.org/whf-african-summit/
Tanzania NCD Alliance (TANCDA)	6	Tanzania	http://www.tancda.or.tz/
Uganda Non Communicable Disease Alliance (UNCDA)	6	Uganda	https://ncdalliance.org/uganda-ncd-alliance
Age Action Alliance	6	UK	www.ageactionalliance.org
Health Action Partnership International	6	UK	www.hapi.org.uk
Hospice Africa	6	UK	www.hospice-africa.org.uk
Arogya World	6	USA	http://arogyaworld.org/
FHI 360	6	USA	https://www.fhi360.org/
Jhpiego	6	USA	https://www.jhpiego.org/
Management Sciences for Health	6	USA	https://www.msh.org/
Partners in Health	6	USA	https://www.pih.org/
PATH	6	USA	https://www.path.org/; https://www.path.org/programs/noncommunicable-diseases/
PSI	6	USA	https://www.pih.org/
StrongMinds	6	USA	https://strongminds.org
Zambia NCD Alliance	6	Zambia	https://ncdalliance.org/what-we-do/capacity-development/list-of-national-regional-ncd-alliances
Zanzibar NCD Alliance (Z-NCDA)	6	Zanzibar	https://zncda.wordpress.com/
AMREF Health Africa	6		https://amref.org
Consortium for NCDs Prevention & Control in sub-Saharan Africa	6		https://www.iuhpe.org/index.php/en/non-communicable-diseases-ncds/building-the-case-for-ncds-in-africa
Diabetes Association - Ghana	6		https://www.idf.org/our-network/regions-members/africa/members/11-ghana.html?layout=details&mid=126
East African NCD Alliance	6		https://ncdalliance.org/resources/the-east-africa-ncd-charter; https://ncdalliance.org/news-events/news/east-african-ncd-alliance-convenes-to-set-workplan-priorities-in-uganda
Eastern Mediterranean NCD Alliance	6		https://www.emrncda.org/
Global Alliance Against Chronic Respiratory Diseases	6		https://gard-breathefreely.org/
Global Cancer Observatory	6		https://gco.iarc.fr/
Global Health Advocacy Incubator	6		https://advocacyincubator.org/
Global Initiative for Asthma	6		https://ginasthma.org

Global Initiative for Chronic Obstructive Pulmonary Disease	6		https://goldcopd.org/
International Alliance of Women	6		https://womenalliance.org/
Movement for Global Mental Health	6		http://www.globalmentalhealth.org/
Taskforce on Women and NCDs	6		https://www.womenandncds.org/
Women Deliver	6		https://womendeliver.org/
Young Professionals Chronic Disease Network	6		http://www.ncdaction.org/
Access Accelerated	7	Switzerland	www.accessaccelerated.org
Roche	7	Switzerland	https://www.roche.com; https://www.roche.com/sustainability/access-to-healthcare/cancer-care-partnerships-kenya.htm
GSK	7	UK	https://www.gsk.com
Pfizer	7	USA	https://www.pfizer.com; https://www.pfizer.com/files/investors/financial_reports/annual_reports/2016/partnering-to-tackle-non-communicable-diseases-ncds/index.html
AstraZeneca	7		https://www.astrazeneca.com/sustainability/access-to-healthcare/young-health-programme.html
Eli Lilly and Company	7		https://www.lilly.com
Novo Nordisk	7		https://www.novonordisk.com
International Society of Nurses in Cancer Care	8	Canada	www.isncc.org
Pan African Thoracic Organisation	8	South Africa	panafricanthoracic.org/
Pan-African Society of Cardiology	8	South Africa	www.pascar.org
American Academy of Paediatrics	8		https://www.aap.org/en-us/Pages/Default.aspx
International Association of National Public Health Institutes	8		www.ianphi.org/
The Forum of International Respiratory Societies	8		https://www.firsnet.org/
Danish Civil Society Fund	9	Denmark	https://www.cisu.dk/the-civil-society-fund/overview
Danish International Development Agency	9	Denmark	http://um.dk/en/danida-en/
Medical Research Council	9	UK	https://mrc.ukri.org/
Wellcome Trust	9	UK	https://wellcome.ac.uk/
International Union for Health Promotion and Education	6 and 8	France and Canada	https://www.iuhpe.org/index.php/en/non-communicable-diseases-ncds/building-the-case-for-ncds-in-africa
World Obesity Federation	6 and 8	UK	https://www.worldobesity.org/
American Heart Association	6 and 8	USA	https://www.heart.org/
American Cancer Society	6 and 8		https://www.cancer.org/

Note: Type of organisation

1. National governments
2. United Nations entities and intergovernmental organizations
3. Academic institutions
4. Public-private partnerships
5. Philanthropic organizations
6. Global civil society and non-governmental organizations
7. Private industry
8. Professional associations
9. Donor

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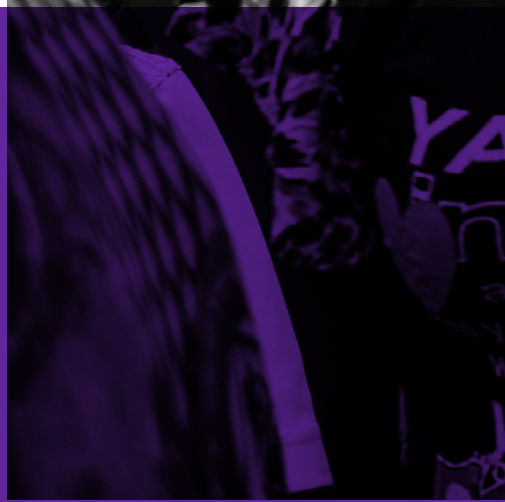

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