# SELF-REPORTED NONCOMMUNICABLE DISEASE PREVALENCE AMONG OLDER PEOPLE LIVING WITH HIV IN SOUTHERN AFRICA West CA<sup>1</sup>, Ater A<sup>1</sup>, Hong SY<sup>2</sup>, Nkomo B<sup>3</sup>, Asiimwe F<sup>4</sup>, Tarumbiswa T<sup>5</sup>, Maida A<sup>6</sup>, Matola BW<sup>7</sup>, Mugurungi O<sup>8</sup>, Stafford KA<sup>9</sup>, Farley SM<sup>10</sup>, Agyemang E<sup>1</sup>, Laws RL<sup>1</sup>, Rolle IV<sup>1</sup>, Voetsch AC<sup>1</sup>

<sup>1</sup>CDC, Atlanta, USA; <sup>2</sup>CDC, Botswana; <sup>3</sup>Ministry of Health, Botswana; <sup>4</sup>CDC, Lesotho; <sup>5</sup>Ministry of Health, Lesotho; <sup>6</sup>CDC, Malawi; <sup>7</sup>Ministry of Health, Malawi; <sup>8</sup>Ministry of Health, Zimbabwe; <sup>9</sup>University of Maryland, Baltimore, USA; <sup>10</sup>ICAP at Columbia University, New York

#### Background

The burden of noncommunicable disease (NCD) among older people living with HIV (OPLWH) is increasing in low-and middle-income countries (LMIC).

OPLWH have a higher number of comorbidities, higher associated mortality, and higher disease burden compared to older persons without HIV.<sup>1</sup>

Limited population-level data in LMIC exist describing NCDs and management of comorbidities among people living with

#### **Methods**

We used data from the Population-based HIV Impact Assessments (PHIAs), nationally representative household surveys in Botswana, Lesotho, Malawi, and Zimbabwe conducted between 2019-2021.

Participants were tested for HIV using national rapid test algorithms and were asked if they ever were told by a doctor or health worker that they had or if currently taking medication for:

 diabetes mellitus, hypertension, heart disease, kidney disease, cancer, lung disease, or mental health condition

# HIV (PLWH).

# **Objective**

Describe the self-reported prevalence and current medication use for NCDs among OPLWH in four sub-Saharan African countries.

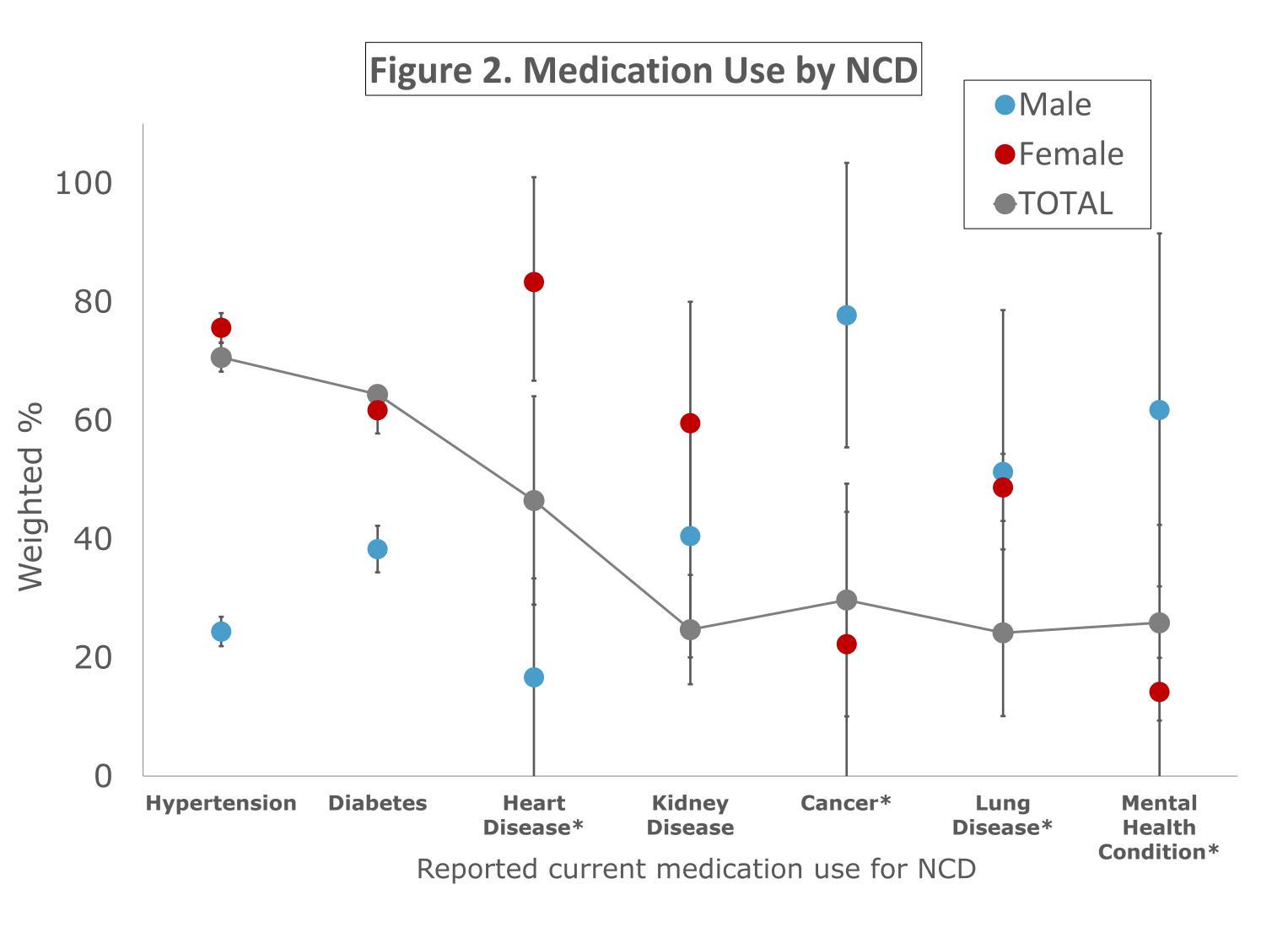
# **Results**

Twenty-two percent of OPLWH reported at least one NCD; 3.6% reported  $\geq 2$  NCDs.

The most common NCDs were hypertension (17.4%) and diabetes (3.8%); Botswana and Lesotho reported higher proportions of hypertension than Malawi and Zimbabwe (Figure 1).

More women than men reported hypertension [22.6%; 95% CI: 20.8-24.5 vs. 11.1%; 95% CI: 9.0-13.3] **and heart disease** [2.2%; 95% CI: 1.6-2.9 vs. 0.4%; 95% CI: 0.1-0.7], no differences by sex were found for other NCDs. Analyses were restricted to those 50 years and older with an HIV+ test result and sample sizes ranged from 2,464 to 3,691 by country.

Estimates were pooled and weighted using Taylor Series expansion to obtain robust variance estimators for complex survey data.



Of those reporting one or more NCDs, **<50% reported medication use for most NCDs** except for hypertension and diabetes; **more women than men reported current medication use for hypertension, diabetes** and heart disease\*; more men reported current medication use for cancer\* (Figure 2).

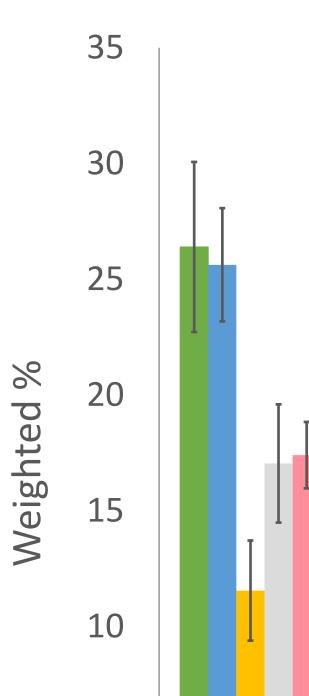
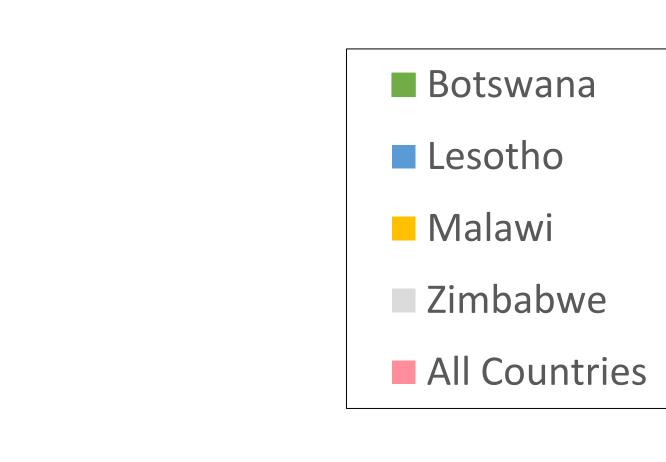


Figure 1: Prevalence of NCD by Country



\*Estimates by sex are based on a denominator <25 and should be interpreted with caution

### Limitations

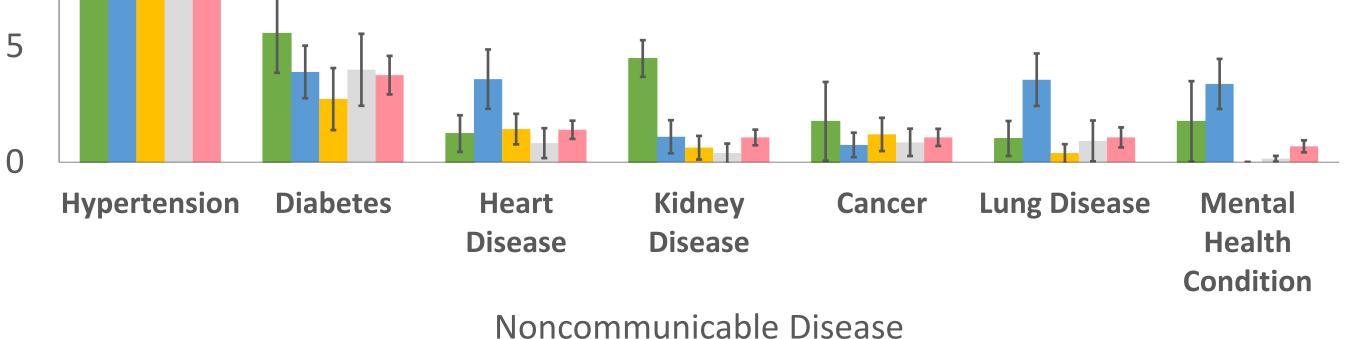
Surveys did not include objective screening of NCDs such as blood pressure measurement or blood testing for diabetes.

NCD estimates are based on self-report of diagnosis and may not represent the true prevalence of NCDs among OPLWH in these countries; evidence indicates significant % of these conditions are undetected or untreated in LMIC.<sup>2,3</sup>

Small numbers limited comparisons by NCD, country, and sex.

## Conclusions

The self-reported prevalence of hypertension and diabetes among OPLWH was higher than other NCDs, with lower treatment reported



**Disclaimer:** This project is supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through CDC under the terms of cooperative agreements #U2GGH002173 and U2GGH002172. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the funding agencies.

among men.

Strengthening NCD surveillance as well as improving access and uptake of NCD-related clinical and prevention services in communities is needed for OPLWH.

#### References

1.Verheij E, et al. 2023. Long-term evolution of comorbidities and their disease burden in individuals with and without HIV as they age: analysis of the prospective AGEhIV cohort study. Lancet HIV. 10(3): 164-174.

2.NCD Risk Factor Collaboration (NCD-RisC). 2021. Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: Lancet. Sep 11;398(10304):957-980.

3. Achwoka et al. 2019. Noncommunicable disease burden among HIV patients in care: a national retrospective longitudinal analysis of HIV-treatment outcomes in Kenya, 2003-2013. BMC Public Health. 219): 372.

