# The burden of non-communicable diseases among people living with HIV is Sub Saharan Africa



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- We included 188 studies from 21 countries, representing 2,838,350 PLHIV.
- We found a high burden of NCDs among PLHIV .
- Depression: 30.4%; Hypertension: 20.1%; Diabetes: 5.4%
- More countries in SSA need to determine the burden of NCDs among PLHIV.
- Under represented NCDs were Cervical cancer and Chronic respiratory diseases.

### **BACKGROUND**

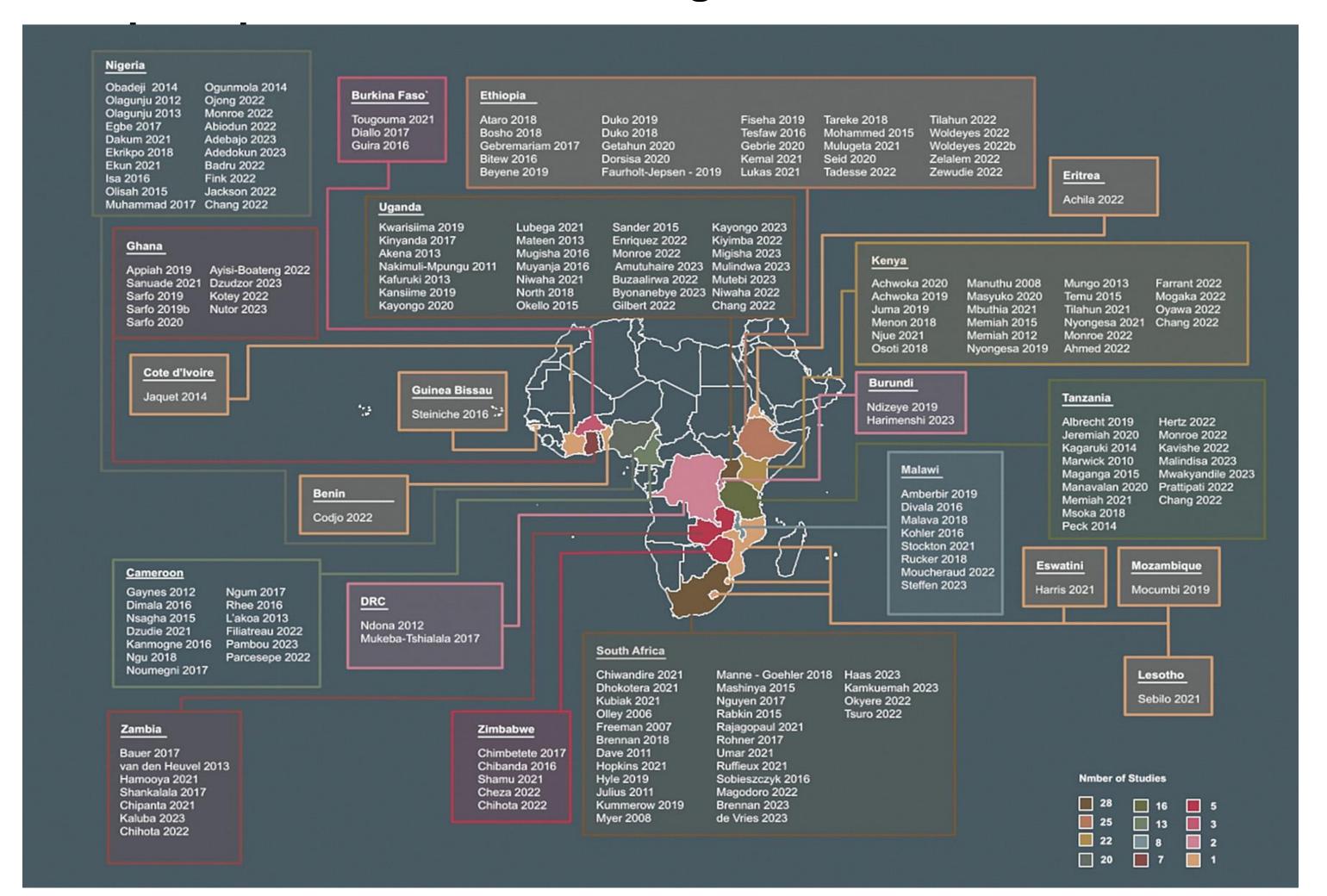
- Non-communicable diseases (NCDs) are increasing among people living with HIV (PLHIV),
- Globally, 39.9 million PLHIV (UNAIDS,2024)
- ❖ East and Southern Africa is home to 20.8 million PLHIV (>50%)
- ❖ Most premature deaths (85%) due to NCDs occur in LMICs.
- The wide availability of antiretroviral therapy has allowed PLHIV to have a longer life expectancy (an opportunity for developing NCDs)
- ❖ We determined the prevalence of NCDs and NCD risk factors among PLHIV in SSA to inform health policy makers and to promote integrated HIV/NCD care at primary health care facilities.

# **METHODS**

- ❖ A systematic review and meta-analysis
- ❖ We followed the PRISMA-20 guidelines for systematic reviews
- ❖ Comprehensively searched PubMed/MEDLINE, Scopus, and EBSCOhost (CINAHL) electronic databases for sources published from 2010 to July 2023.
- ❖ We applied the random effects meta-analysis model to pool the results using STATA.
- ❖ Chi-square & I² statistic: to measure Heterogeneity
- the Doi plots and LFK index: potential effect of publication bias on the meta-analysis
- ❖ PROSPERO (registration number: CRD42021258769).

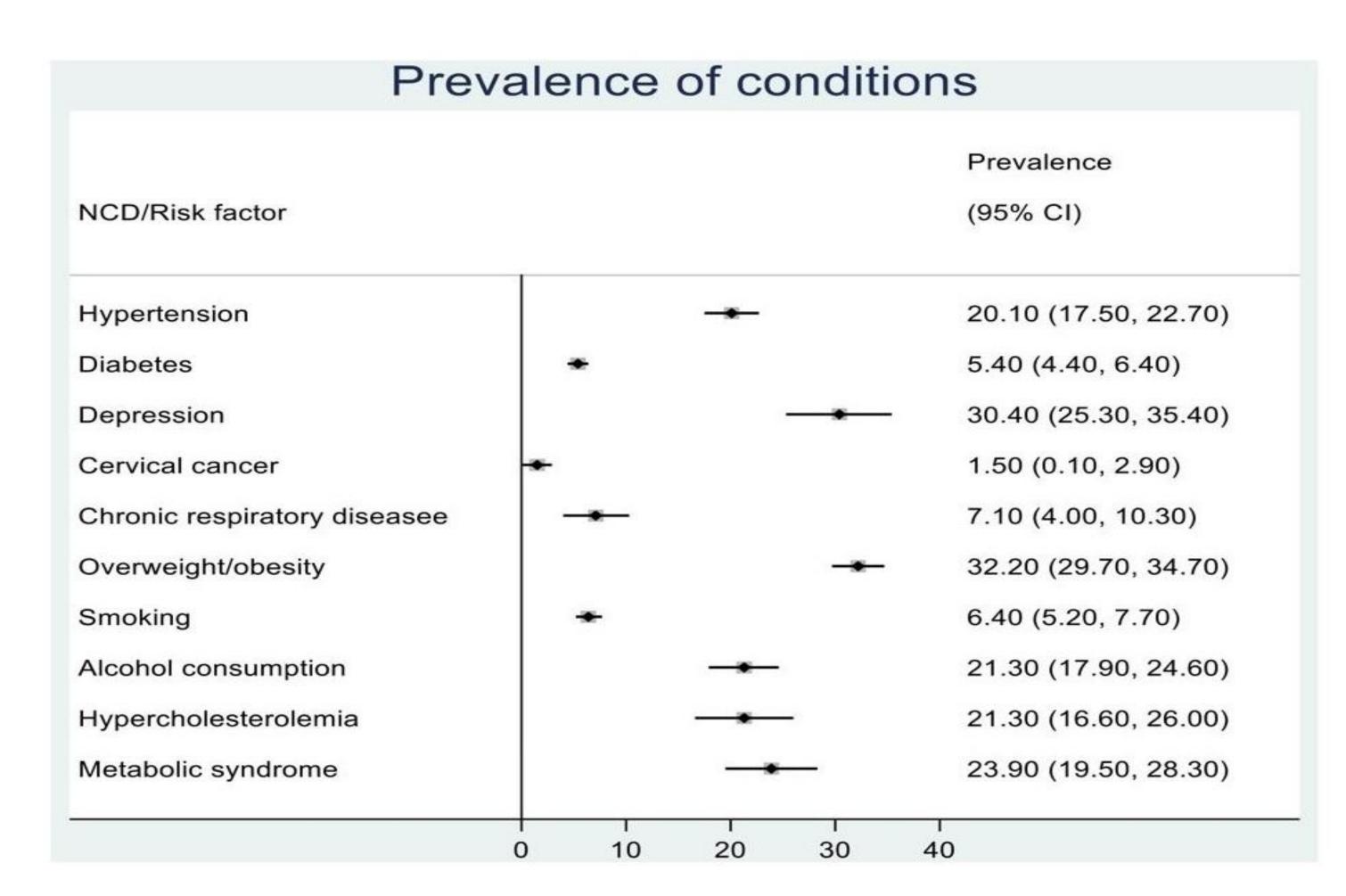
# **RESULTS**

Fig 1: Map showing countries where included studies on the burden of NCD/risk factors among PLHIV in SSA were



### RESULTS CONTINUED

Fig 2: Forest plot of pooled estimates generated by meta —analyses for prevalence of selected conditions among PLHIV in SSA



# **CONCLUSIONS**

- ❖ PLHIV have a high prevalence of NCDs and their risk factors.
- ❖ We recommend **strengthening of health systems** to allow for improved **integration of NCDs** and HIV services in public health facilities in SSA.
- ❖ NCD risk factors such as obesity, hypercholesterolemia, and alcohol consumption can be addressed through health promotion campaigns.
- ❖ There is a need for **further research** on the burden of NCDs among PLHIV.
- ❖ Reporting of negative findings should be encouraged to limit the effects of publication bias

# **ADDITIONAL KEY INFORMATION**

- The study was conducted as part of a larger PhD project.
- The manuscript was published in the Eclinical Medicine (Lancet) Journal: <a href="https://www.thelancet.com/action/showPdf?pii=S2589-5370%2823%2900432-7">https://www.thelancet.com/action/showPdf?pii=S2589-5370%2823%2900432-7</a>
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