

# The prevalence Of multimorbidity in people living with HIV and on ART attending Gugulethu community health clinic

## BACKGROUND

Multimorbidity is defined as the presence of two or more chronic conditions. Its occurrence in low-to-middle income countries (LMIC) is rising to the levels reported in high-income countries (HIC). However, the patterns of multimorbidity are not well understood in LMIC. South Africa is challenged by a growing burden of non-communicable diseases (NCDs) against the existing background of communicable diseases such as HIV and TB, which often lead to coexistence of NCDs and infectious diseases in the same person.

According to a recent overview of reviews on the range of prevalence's of NCDs in people living with HIV (PLWH) globally:

- Type 2 Diabetes mellitus occurred in 7% to 48.6%,
- Dyslipidemia was present in 6.3% to 100%,
- Depression occurred in 25.8% to 64%,
- hypertension was found in 4.0% to 67.0%.

We investigated the prevalence of multimorbidity in PLWH on ART attending the Gugulethu community health clinic to contribute to the knowledge gap in South Africa

## METHODS

Cross-sectional study at Gugulethu HIV clinic and ART adherence clubs.

Sample: HIV infected individuals  $\geq 30$  years old on ART for  $2 \geq$  years (N = 464).

- Comprehensive questionnaire: sociodemographic factors including employment, socioeconomic status, general health, medical and family history, education, smoking and alcohol intake.
- Validated questionnaires: depression and anxiety
- Anthropometry: weight, height, BMI and blood pressure.
- Bloods/urine: viral load, lipids, Hb1ac, creatinine and urinary albumin/creatinine ratio

## KEY FINDINGS IN PLWH

- Prevalence of multimorbidity is high in younger age groups
- Prevalence of multimorbidity increases with age
- HIV is controlled, however NCDs such as hypertension and diabetes are uncontrolled.
- 42 % cases of hypertension and 33 % cases of diabetes were undiagnosed.

## IMPLICATIONS FOR PRACTICE

Further attention and efforts should be dedicated to integration of infectious and NCD health services.

Strengthening screening programs for NCDs in PLWH is essential.

Improving control of NCDs especially diabetes and hypertension should be targeted.



## RESULTS

Mean age was  $46 \pm 8.7$  years.

Female participants: 74.6 %.

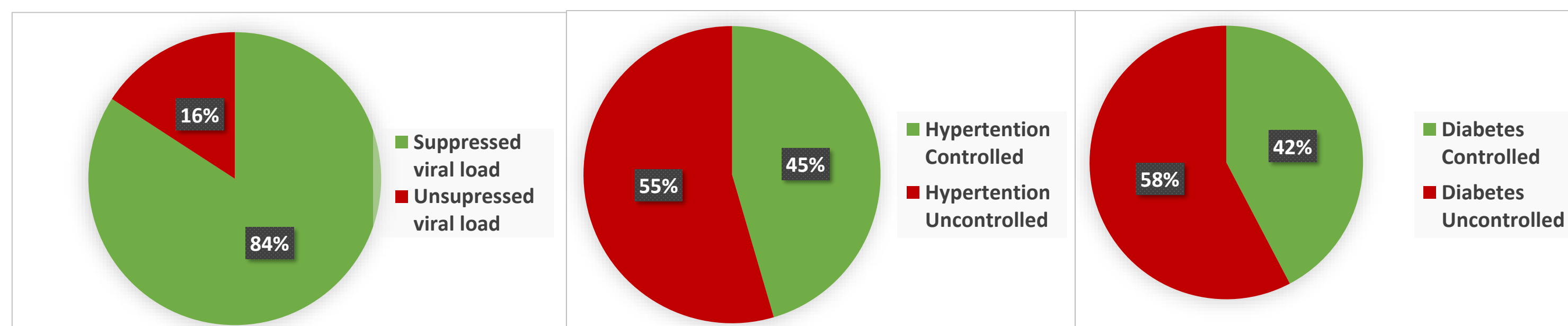
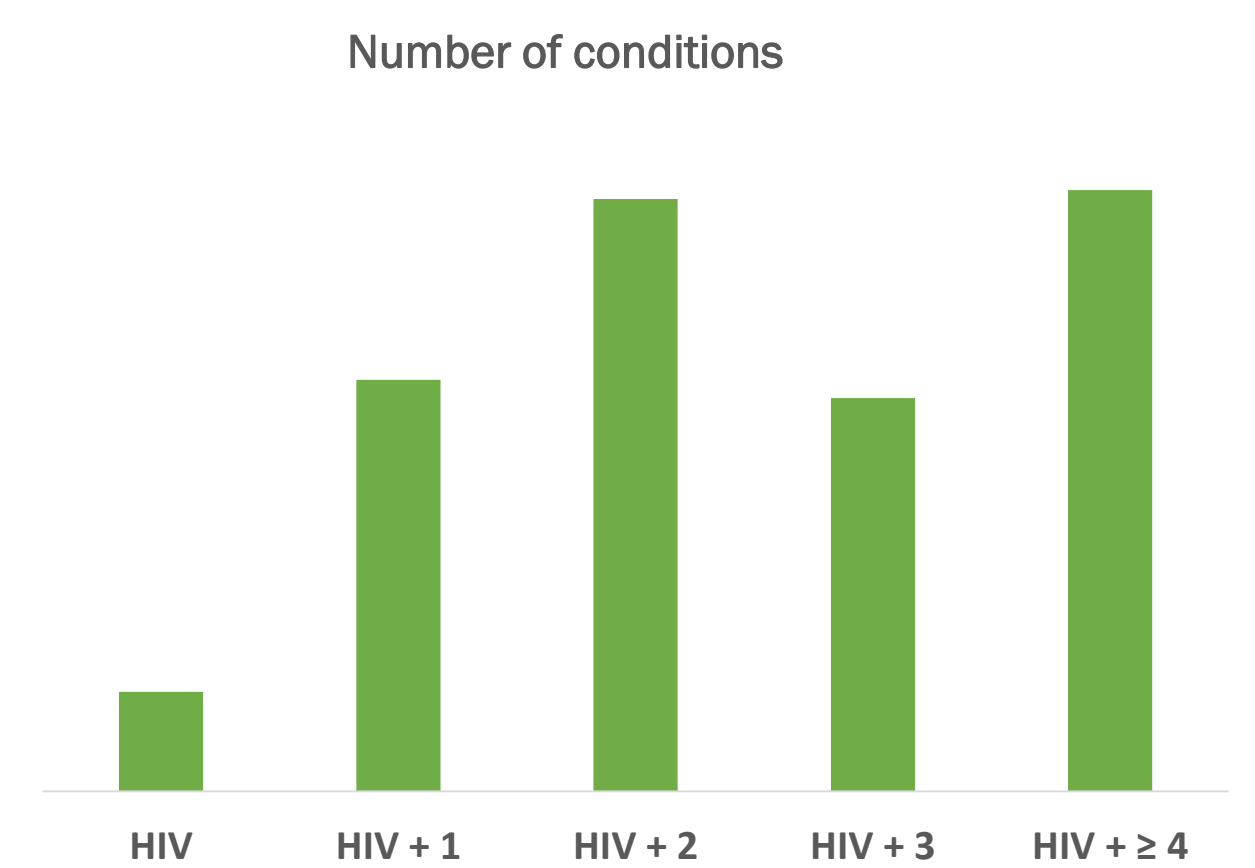
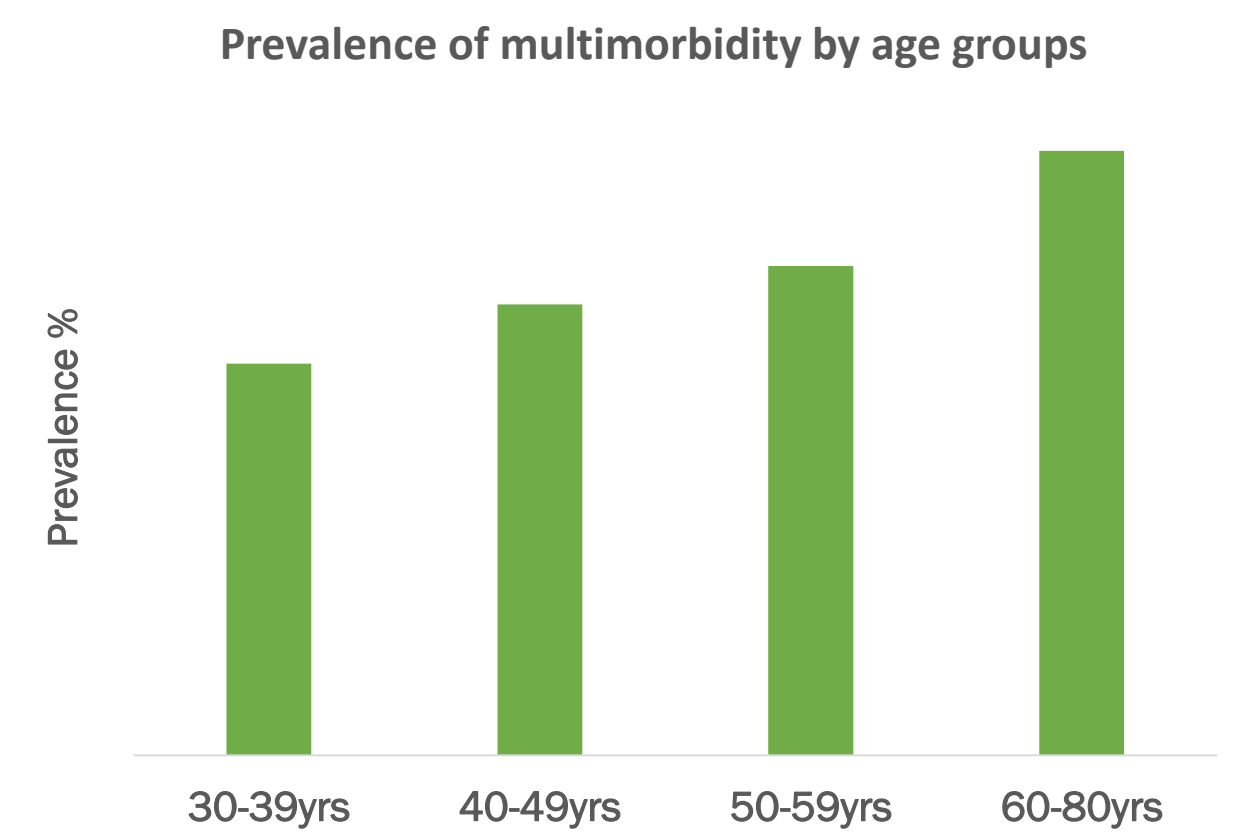
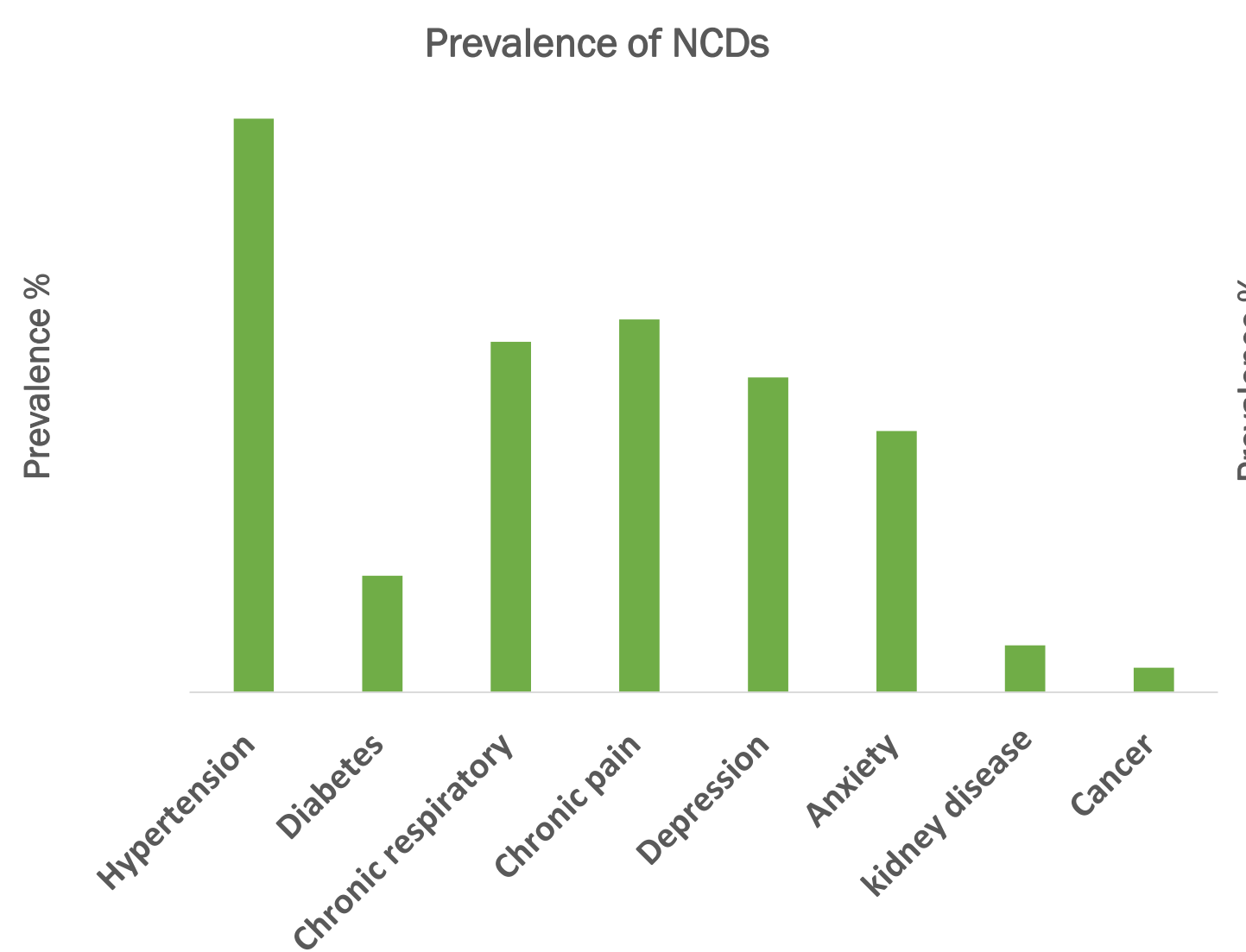
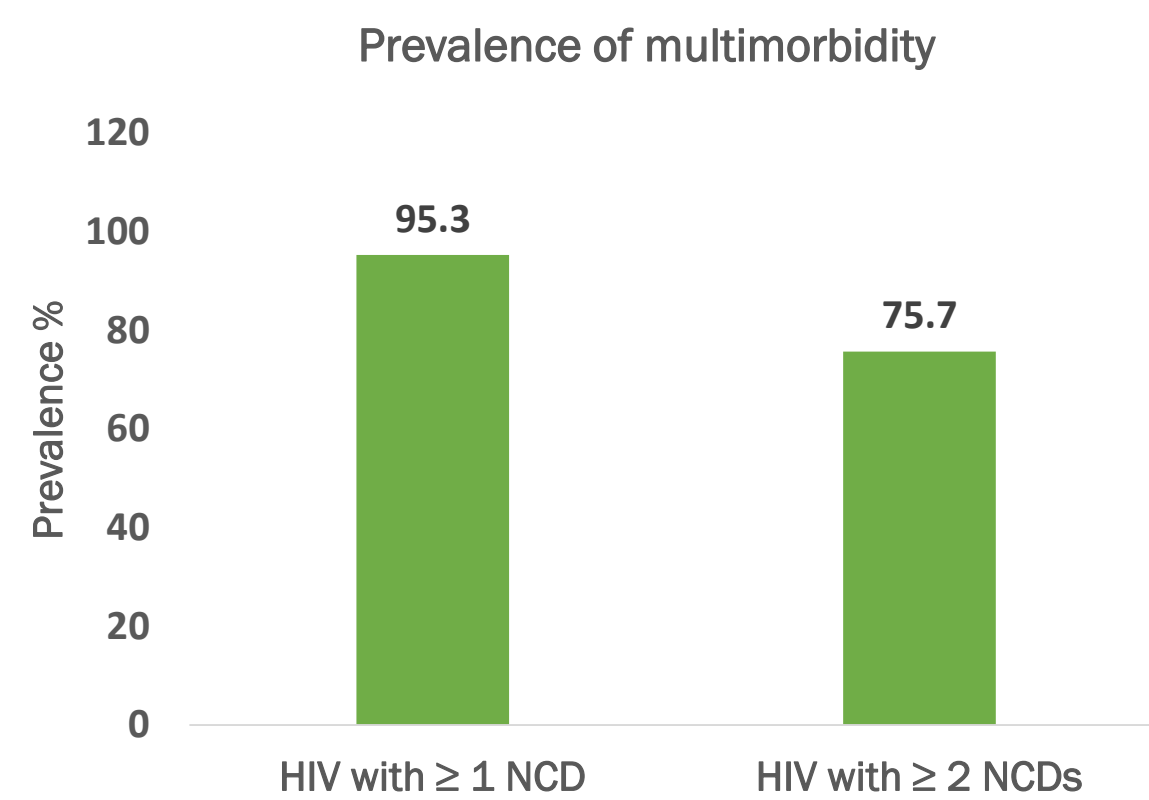
Prevalence of multimorbidity with 2 or more NCDs: 75.7% (95%CI: 71.5 – 79.3 %).

Overall multimorbidity was positively associated with:

- Age (OR= 1.05, 95%CI: 1.03 – 1.09),
- Obesity (OR=3.06; 95%CI: 1.81 – 5.18)

Overall multimorbidity was negatively associated

- Sense of coherence (OR = 0.29; 95%CI: 0.16 – 0.54).



## CONCLUSION

Antiretroviral therapy has successfully reduced HIV-related morbidity and mortality, but HIV / NCD multimorbidity is very common in people attending the Gugulethu CHC.

Attention needs to be given to optimizing control of these NCDs, especially hypertension and diabetes.