# ADDRESSING DISPARITIES FOR PEOPLE LIVING WITH MULTIPLE CONDITIONS

#### PERSPECTIVES FROM AFRICA

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#### Outline

- Background
- Burden of disease
- Patient journey
- Health system gaps
- Chronic Care models
- Summary

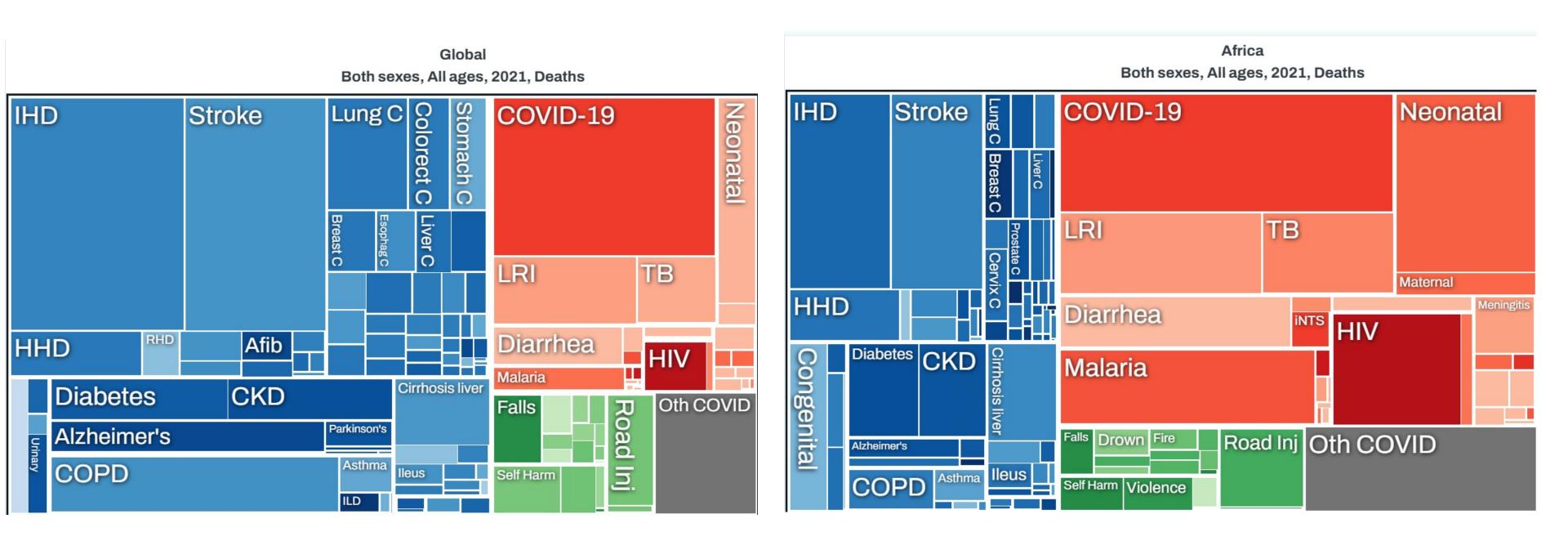
#### Question 1

Which is the leading cause of death in Africa?

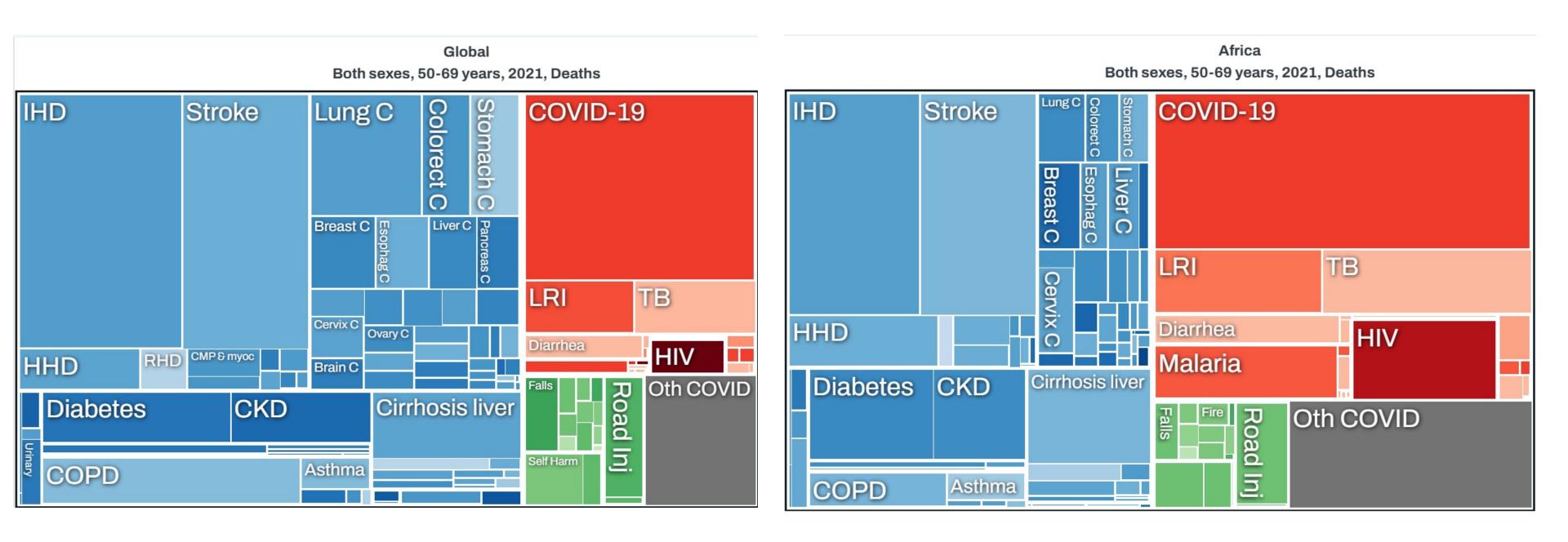
#### Background

- Most African countries are facing a double burden of diseases
- Persistent burden of infectious diseases (HIV, TB, Malaria) and rising burden of NCDs
- Underfunded health systems
  - Reducing donor funding
- Infectious diseases are risk factors for developing NCDs (HIV) and NCDs are associated with development and severity of infections (COVID-19, TB)
- Neglected diseases such as Rheumatic Heart Disease eradicated in many parts of the world

#### Global burden of disease — deaths Global vs. Africa, all ages



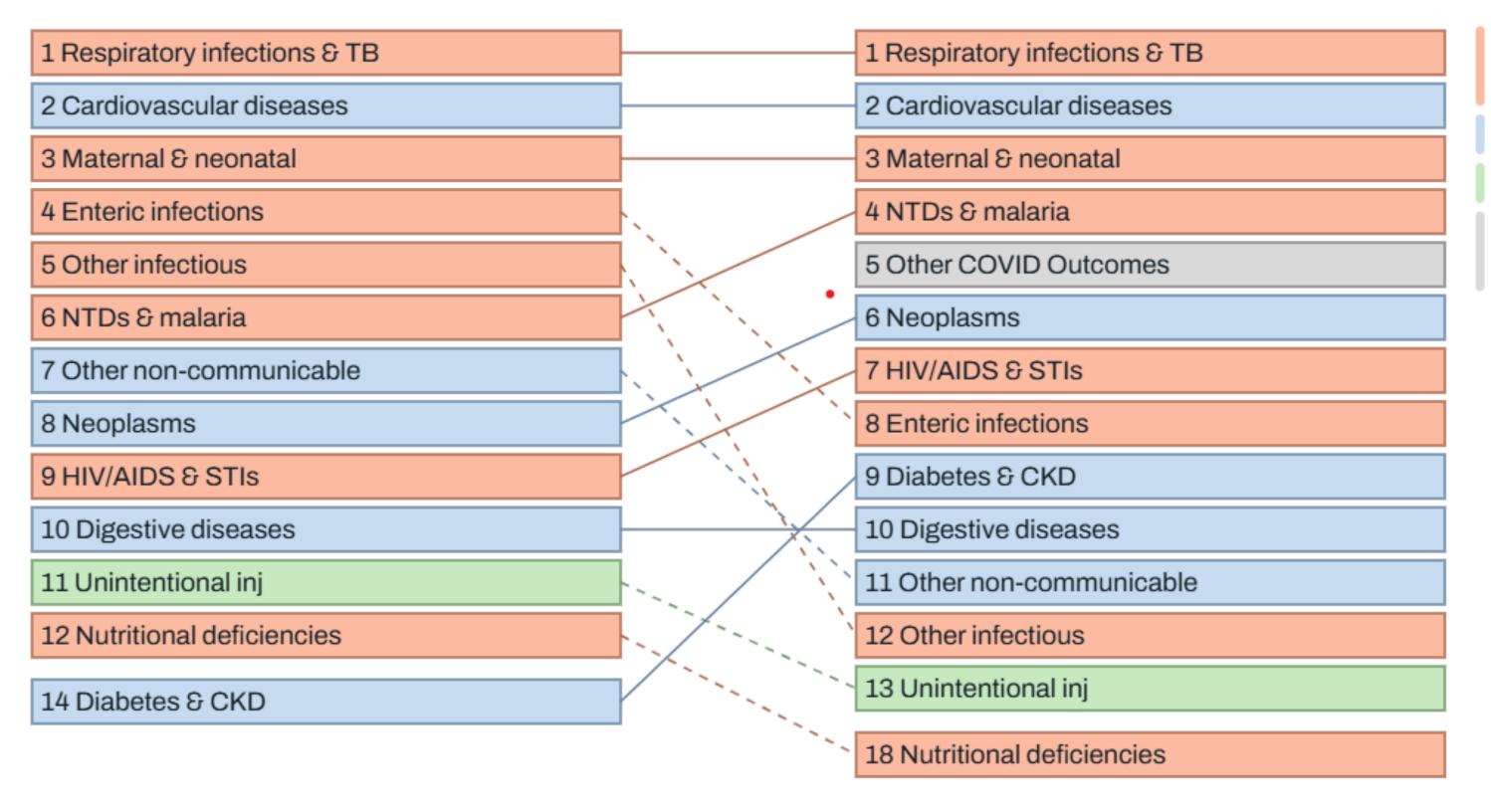
#### Global burden of disease — deaths Global vs. Africa, 50 — 69 years



#### Africa

#### Both sexes, All ages, Deaths per 100,000

1990 rank 2021 rank



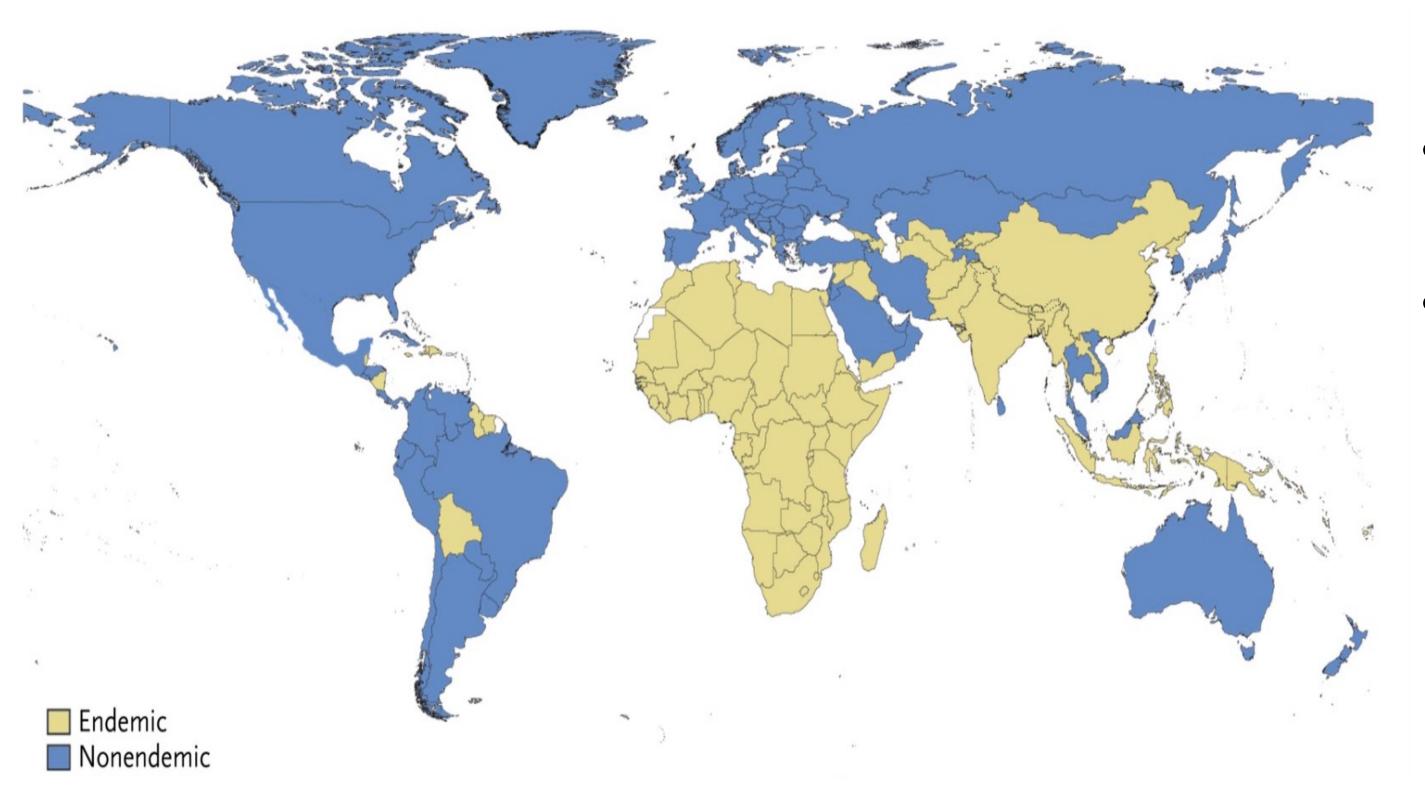
Communicable, maternal, neonatal, and nutritional diseases

Non-communicable diseases

Injuries

Other COVID-19 pandemic-related outcomes

#### Rheumatic Heart Disease — global disparity



- Fully preventable
- Burden driven by poverty and health system weaknesses

#### Rheumatic Heart Disease burden

- Has disabling long-term complications heart failure, atrial fibrillation, stroke, infective endocarditis and pregnancy-related complications.
- Burden of RHD is disproportionately borne by young,
   economically active people
- Increase in women of childbearing age with RHD
- Maternal mortality is nearly ten-fold higher among the pregnant women with RHD

# Limited of data on the burden of multimorbidity in Africa



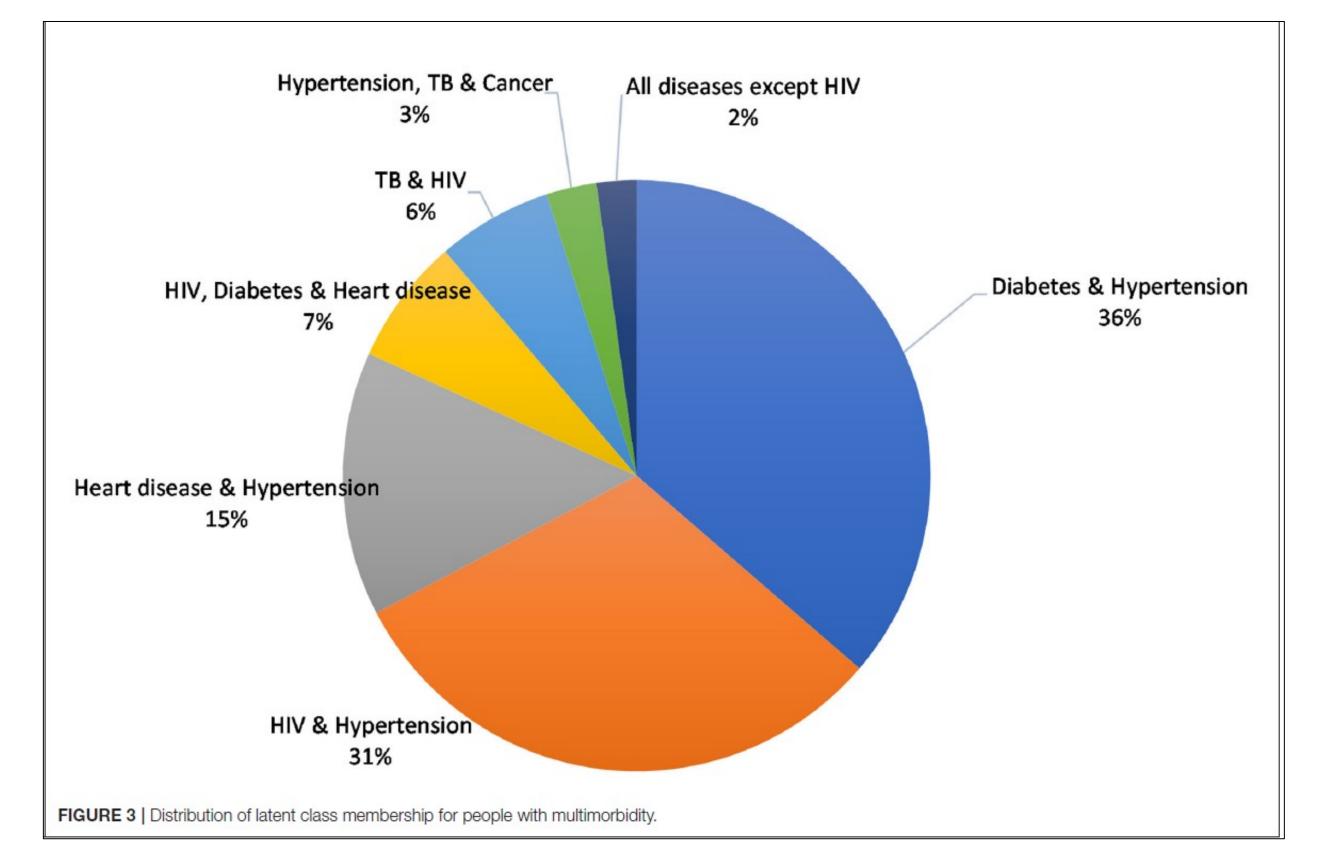
#### Chronic multimorbidity among older adults in rural South Africa 8

D Angela Y Chang<sup>1</sup>, Francesc Xavier Gómez-Olivé<sup>2</sup>, Collin Payne<sup>3</sup>, Julia K Rohr<sup>4</sup>, Jennifer Manne-Goehler<sup>5</sup>, Alisha N Wade<sup>2</sup>, Ryan G Wagner<sup>2</sup>, Livia Montana<sup>4</sup>, Stephen Tollman<sup>2</sup>, Joshua A Salomon<sup>6</sup>
Correspondence to Dr Angela Y Chang; angela.chang@mail.harvard.edu

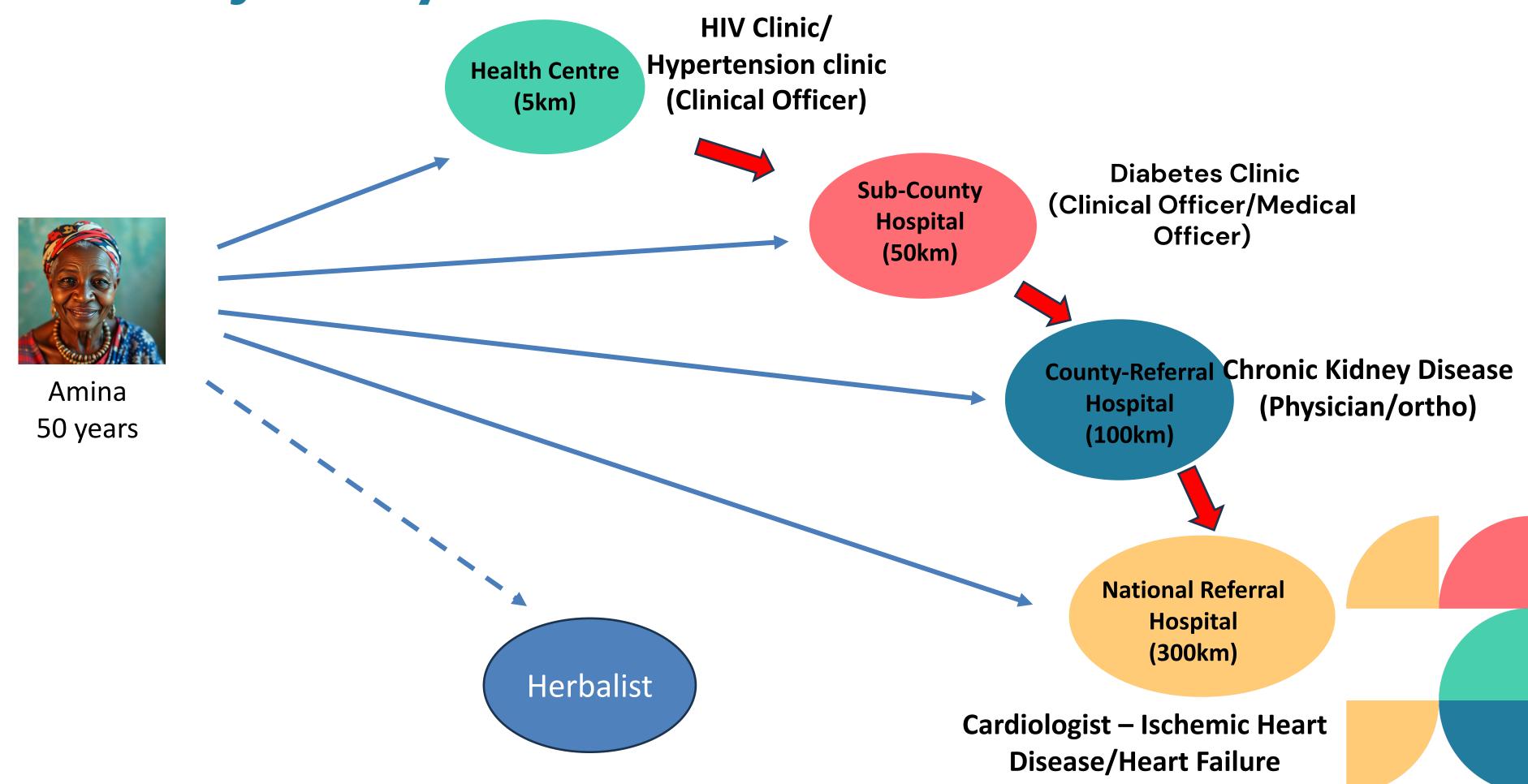
- Individuals 40+
- 69.4 % of the respondents had at least two conditions
- Common conditions: Cardiometabolic, mental disorders, HIV, anemia

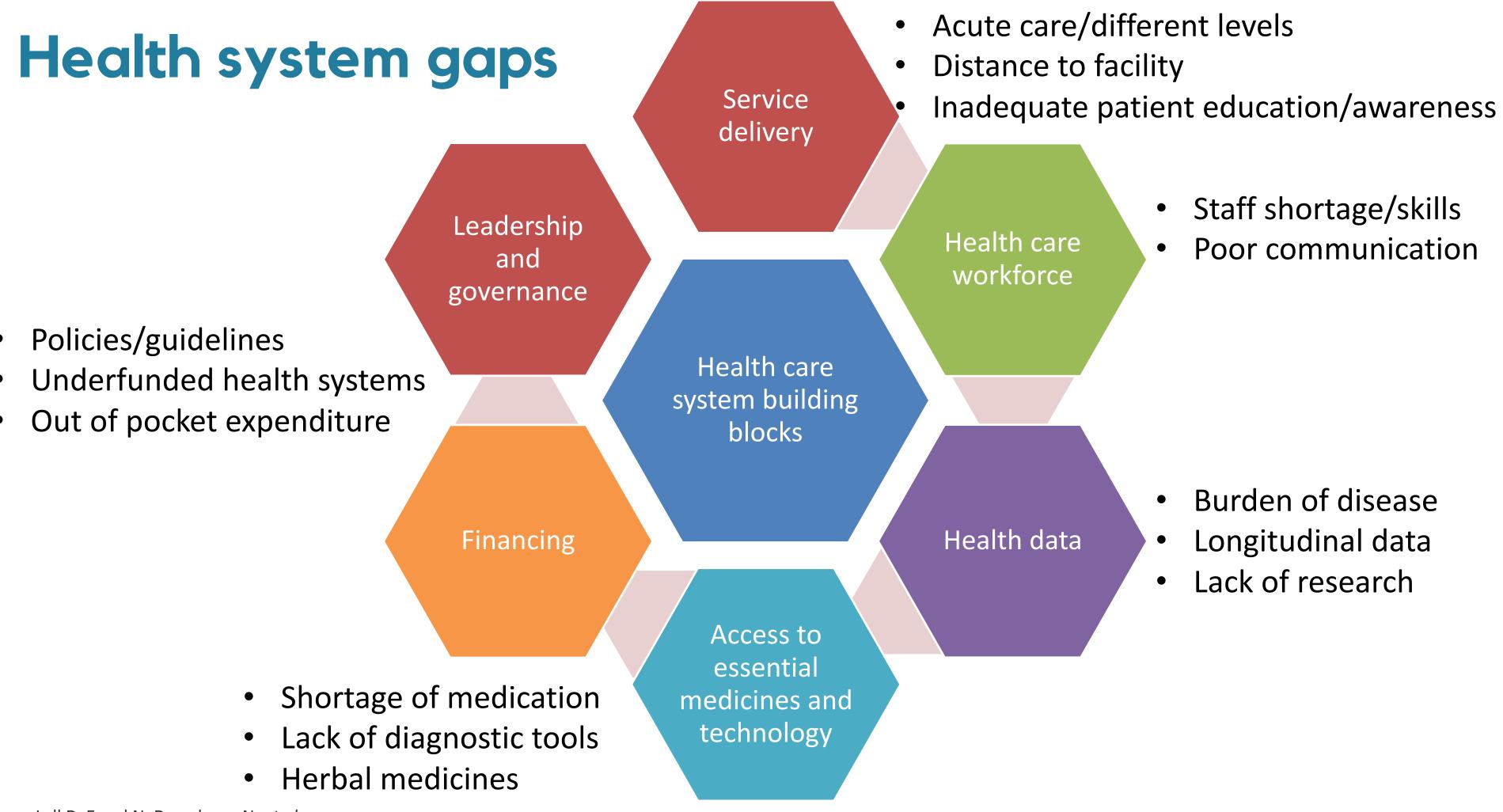
#### Multimorbidity Patterns in a National HIV Survey of South African Youth and Adults

<u>Rifqah Abeeda Roomaney</u> <sup>1,2,\*</sup>, <u>Brian van Wyk</u> <sup>2</sup>, <u>Annibale Cois</u> <sup>1,3</sup>, <u>Victoria Pillay-van Wyk</u> <sup>1</sup>



Multimorbidity 5.9% Higher among females Patient journey





#### Health Financing

- -Underfunded health systems
  - Domestic government spending on health 7.3%
     (Abuja declaration 15%)
- -Low insurance coverage (20%)
- -High out of pocket expenditure (OOP) (15-20%)
- -Majority of funds at tertiary care level
- Limited funding for prevention

#### OOP

WHO region	2021
Global	28.16
Africa	32.95
Americas	29.04
South-East Asia	36.35
Europe	26.07
Eastern Mediterranean	33.38
Western Pacific	16.46

#### Health Workforce

- Disparity
  - -Africa: 24% disease burden, 3% health workforce
- Inadequate local training opportunities
- Redesign workforce generalist vs. specialist
- Role of task-shifting/task-sharing while retaining quality

#### Data

### Limited understanding of the burden, risk factors and effective interventions and treatments

#### Health research in Africa

- 15% world population
- 25% burden of disease
- 2% of health research output

#### Research

- Not a priority in national policy
- Over reliance on external funding hence loss of control
- Negative perceptions about research feasibility in Africa
- Commercial (dis)interest

#### Integrated care

► AIDS. Author manuscript; available in PMC: 2019 Oct 7.

Published in final edited form as: AIDS. 2018 Jul 1;32(Suppl 1):S33−S42. doi: 10.1097/QAD.000000000001887 ☑

#### Models of integration of HIV and noncommunicable disease care in sub-Saharan Africa: lessons learned and evidence gaps

Benson Njuguna <sup>a</sup>, Susan Vorkoper <sup>b</sup>, Pragna Patel <sup>c</sup>, Mike JA Reid <sup>d</sup>, Rajesh Vedanthan <sup>e</sup>, Colin Pfaff <sup>f</sup>, Paul H Park <sup>g</sup>, Lydia Fischer <sup>h</sup>, Jeremiah Laktabai <sup>i</sup>, Sonak D Pastakia <sup>j</sup>

#### Challenges:

- What to integrate
- Underfunded health system
- Lack of guidelines
- Lack of data on outcomes and cost-effectiveness
- Sustainability

#### Question 2

 Do you think technology can help address the challenges patients with multiple conditions in Africa face? (Yes/No/I don't know)

#### Innovative service delivery models

- Leverage on technology mobile health, telemedicine, decision support, Artificial Intelligence
- Factors to consider
  - Health/technology literacy
  - Infrastructure
  - Language barriers,
  - Inequities
  - Sustainability

Skou ST, Mair FS, Fortin M, Guthrie B, Nunes BP, Miranda JJ, Boyd CM, Pati S, Mtenga S, Smith SM. Multimorbidity. Nat Rev Dis Primers. 2022 Jul 14;8(1):48. doi: 10.1038/s41572-022-00376-4. PMID: 35835758; PMCID: PMC7613517.

Kraef C, van der Meirschen M, Free C. Digital telemedicine interventions for patients with multimorbidity: a systematic review and meta-analysis. BMJ Open. 2020 Oct 13;10(10):e036904. doi: 10.1136/bmjopen-2020-036904. PMID: 33051232; PMCID: PMC7554457.

# Focus on prevention programs — Individual and population-level



- Smoking status
- High alcohol intake
- Decreased physical activity
- Poor diet quality

#### Address social determinants of health

#### Summary

- LMIC face unique multimorbidity patterns and health system challenges
- Need effective care models (research), policies and guidelines
  - Involve persons living with multiple conditions
- Strengthen capacity at primary health care level task-sharing, diagnostics, access to medicines
- Increase prevention programs: Individual and policy level
- Improve patient education and self-management
- Advocacy to reduce financial burden (out of pocket expenditure)
- Opportunity to leverage on technology

### ASANTE