From CDs to NCDs Dominance

Insights from Morbidity and Mortality data (2008-2024)

J. Maraka[1 2], P.G. D'Arbela[1 2], J Ssekitto[1] et al.

[1] St. Francis Hospital Nsambya

[2] Uganda Martyrs University Mother Kevin Postgraduate Medical School

BACKGROUND

Uganda, like many sub-Saharan African countries, is beleaguered by high rates of communicable diseases (CDs). But recent times have brought marked alleviation of CDs' impact on these communities in terms of severity, hospitalization and mortality, with a shift from infectious to non-communicable diseases (NCDs) [1;2]

Health systems remain primarily structured for infectious disease care, despite rising NCD admissions [3].

There is limited longitudinal hospital-based data to quantify this shift and guide policy implementation [4].

We conducted a study evaluating 2 two-year periods 15 years apart; using morbidity and mortality data from St. Francis Hospital Nsambya; to highlight the changing trends of disease burden so as to inform resource allocation and planning.

AIM OF STUDY

To determine and quantify the change of disease pattern from CDs to NCDs.

METHODOLOGY

Study Design: Retrospective comparative M&M review

Duration: 2007–ongoing (comparing 2008–2010 and 2022–2024)

Data Source: Department of Medicine M&M records compiled monthly by since 2007

Data Entry: Microsoft Excel via KoboTool system; cross-checked with patient records

Analysis: Excel statistical tools; stratification by age, gender, and disease category (CD vs NCD)

Sample Size (n): 9,075

2008–2010 admissions (5,249) and 2022–2024 admissions (3,826).

FINDINGS AND DISCUSSION

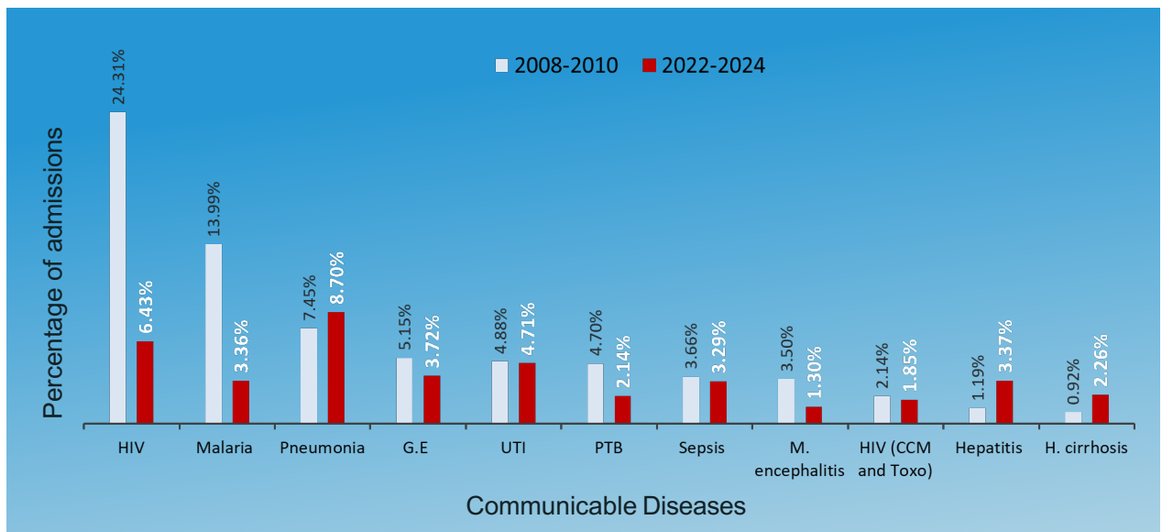


Table 2 - Demographic characteristics

Time period	Total samples (n)= 9,075	Gender		Mean age	Age category				
		M	F		<21	21-40	41-60	61-80	>80
2008-2010	5249	2520 (48.0)	2729 (52.0%)	45.4 yrs	8.2%	30.3%	34.5%	20.1%	6.9%
2022-2024	3826	1953 (51.0%)	1873 (49.0%)	57.2 yrs	5%	15.4%	44.2%	26.5%	8.9%

Rise of NCDs

Hypertension: from 7.5% to 24.4%.

Diabetes Mellitus: from 9.8% to 15.5%.

CKD: from 0.6% to 9.7%.

Stroke: from 3.5% to 10.2%

GI- bleeding: from 1.1% to 3.9%

GERD: from 4.2% to 8.1%

CCF: from 2.1% to 5.2%

Thromboembolism: from 1.1% to 3.6%. [7;8]

Decline of CDs

• HIV admission rate dropped from 24.3% to 6.4%... Attributed to ART access, HIV care decentralization, and public health efforts.[5;6]

• The malaria and TB drop is due to national and international efforts: Multiple benefactors are involved, MOH-Uganda, WHO, Bill & Melinda Gates Foundation, and PEPFAR

• Impact of Trump's new directives!

Attributes of the NCDs Surge

• Urbanization, sedentary lifestyles, and poor dietary habits are driving risk factors [9;8].

• Lack of early screening and preventive services limits detection and control of NCDs.[10]

• Weak integration of NCD care into PHC systems. [11;12]

• Underfunding of NCD programs, with most resources still focused on infectious diseases. [4]

• Policy and awareness gaps; leading to low prioritization of NCDs at community and health system levels and inconsistent collaborative efforts from multisectoral and political will to engage in public awareness and engagement

• Increased comorbidity: Stroke and CKD linked to hypertension and diabetes.

Policy & System Recommendations

Infrastructure:
Available at affordable dialysis, Equiped Cardiology-units countrywide (regional referrals), Utilization of rehabilitation units with integration of physiotherapy services

Workforce:
Advanced training into different specialties

Prevention:
Community screenings, lifestyle programs.

Budgeting:
Rebalance between rising NCD care needs and not to abandon the CDs.

Data collection framework:
National regular data collection and analysis to guide local policies implementation; reduce dependence on WHO programs.

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Correspondence

janetmaraka44@gmail.com
musokesenior@gmail.com
sekitto43@gmail.com