Causes of Male Mortality in Mozambique. Results of Verbal and Social Autopsies from 2019 to 2022

Milton A. Sengo¹; Azarias I. Mulungo¹; SImeão J. Tivane¹; Sheila M. Nhachungue¹; Mussagy Quimice¹; Christel Bruna¹; Kait Nhamuche¹; Celso A. Monjane¹.

1-National Institute of Health_ Mozambique

Of the 11,366 deaths reported, 45.95% were male, 41.18% were. Among males aged 1 year and older, diarrheal diseases accounted for 31% of deaths in children aged 1 to 59 months. HIV/AIDS was the leading cause of death for males over 50 years. Major determinants included rural residence (72%), being married (50%), and belonging to the highest wealth quintile (23%).

BACKGROUND

Male mortality presents significant disparities globally, driven by social, economic, and demographic factors. In Mozambique, where trauma and infectious diseases remain the leading contributors, it is crucial to understand how these social determinants influence male mortality.

This study addresses a critical research gap by exploring the impact of sociodemographic factors on male deaths. The objective is to identify the key social determinants influencing male mortality. Our hypothesis is that social determinants are correlated with male mortality patterns.

METHODS

- Data on male deaths reported by the Community Health and Vital Events
 Observation System (SIS-COVE) between 2019 and 2022 were used.
- Data collection was carried out in ODK by community health surveillance agents, followed by verbal and social autopsy interviews.
- Causes of death were assigned using InSilicoVA.Sociodemographic determinants were described in tables, considering a 95% confidence interval.
- Data analysis was performed using STATA 17.0 software.Pearson chisquare tests were applied at a 5% significance level.

RESULTS

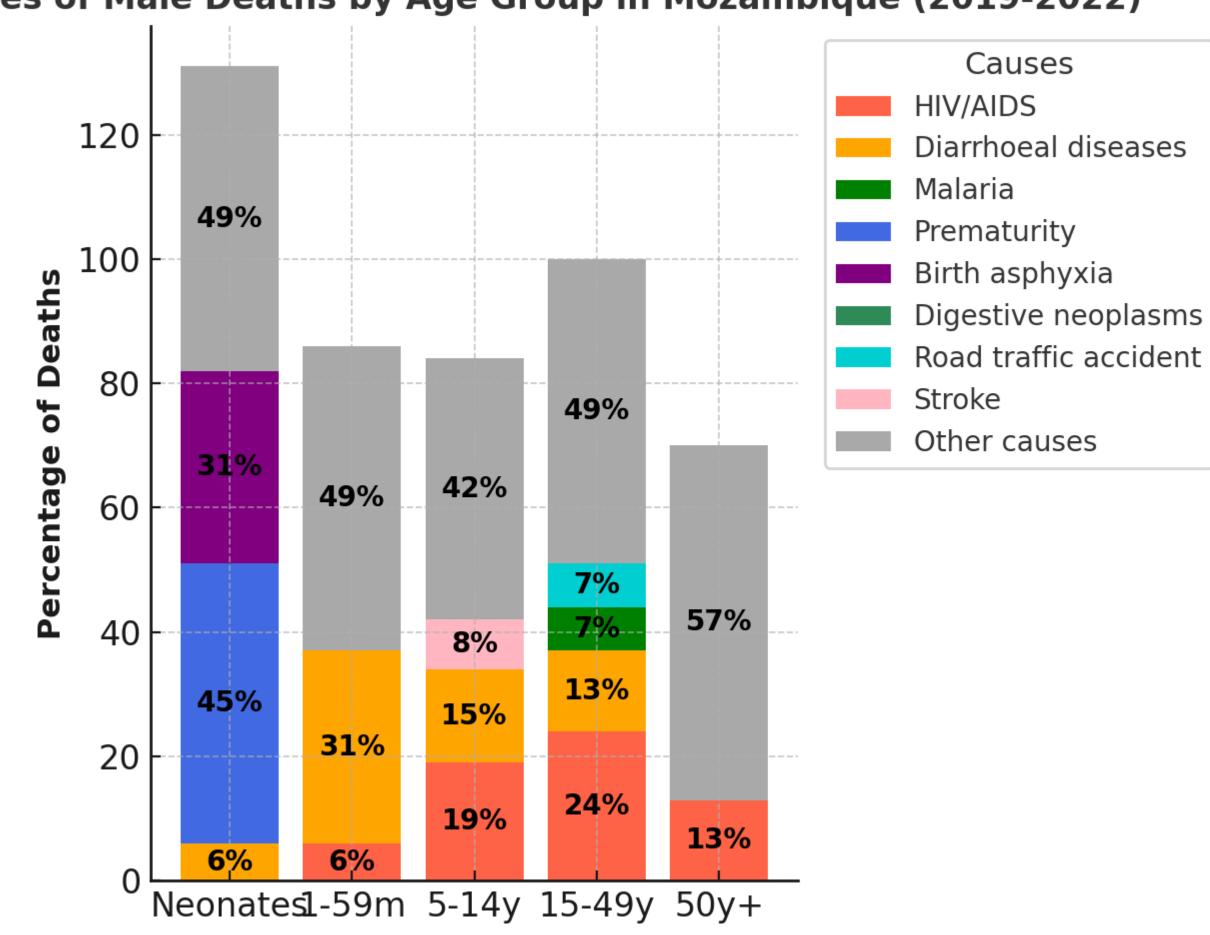
Diarrheal diseases accounted for 31% of deaths in children aged 1 to 59 months, while HIV/AIDS was the leading cause among men over 50 years (24.98% in adults aged 15 to 49 years). Mortality was higher in rural areas (71.5%, CI 95%: 70.1-72.9%) and in the highest wealth quintile (22.64%, CI 95%: 21.3-23.9%). Union de facto accounted for 34.63% (CI 95%: 33.1-36.2%) of deaths.

Table 1. Male Mortality Determinants

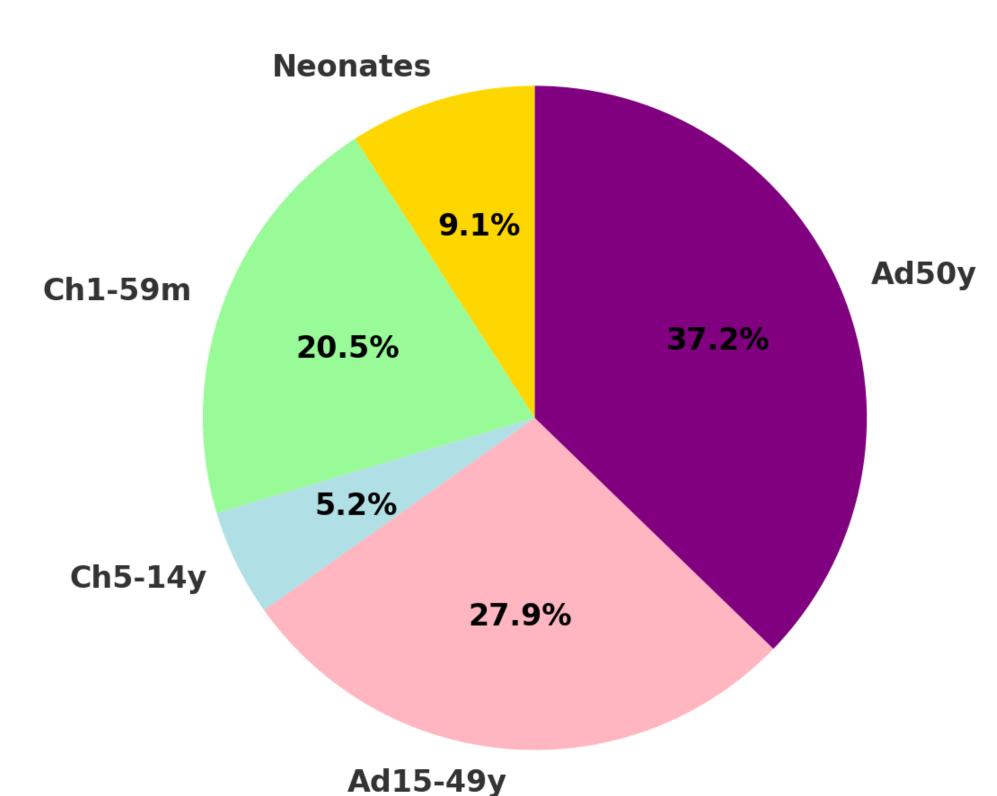
Determinant	Total deaths	(%)	CI 95%
1. Residence			
Rural	3,734	71.5	70.1 - 72.9
Urban	1,487	28.48	27.1 - 29.9
2. Wealth Quintile			
Lowest quintile	998	19.12	17.9 - 20.3
Bottom quintile	957	18.33	17.1 - 19.5
Middle quintile	999	19.13	17.9 - 20.4
High quintle	1,085	20.78	19.5 - 22.1
Highest quintile	1,182	22.64	21.3 - 23.9
3. Marital Status			
Married	589	11.28	10.4 - 12.2
Divorced	193	3.7	3.1 - 4.3
Common-law union	1,808	34.63	33.1 - 36.2
Single	658	12.6	11.7 - 13.5
Widower	233	4.46	3.8 - 5.2
Unspecified	1,736	33.25	31.7 - 34.8

RESULTS CONTINUED

Main Causes of Male Deaths by Age Group in Mozambique (2019-2022)



Distribution of Male Deaths by Age Group in Mozambique (2019-2022)



CONCLUSIONS

Trauma and infectious diseases, particularly HIV/AIDS and diarrheal diseases, are the main causes of male mortality in Mozambique. Death rates are highest in rural areas and among those in civil unions and in the highest wealth quintile. Targeted public health interventions that address social determinants, such as access to health care and education, are crucial to reducing male mortality across different age groups.

ADDITIONAL KEY INFORMATION

Author Contact Information:

- Milton Sengo
- •Email: milton.sengo@ins.gov.mz
- •Funding Source: Financial support from the Instituto Nacional de Saúde de Moçambique. Conflicts of Interest: This publication has no conflicts of interest.

Acknowledgements:

- Special thanks to all co-authors.
- Acknowledgements to the entire SIS-COVE team at INS.

