

Exploring social and gender inequities of intentional injury related mortality in Botswana: surveillance solutions to support national prevention strategies

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Background and Significance

- Intentional injury mortality, including suicide and femicide, is an under-recognized but growing public health problem in Botswana.
- Limited digital surveillance infrastructure constrains the ability to identify high-risk populations and design effective prevention strategies, particularly for gender- and socioeconomically patterned inequities.
- This project will help build capacity for injury related health surveillance and help inform new strategies to prevent or mitigate harms from intentional injury.

Objective: To develop and pilot a national surveillance system for intentional injury mortality in Botswana and to identify context-specific, evidence-based prevention strategies targeting suicide and femicide.

Aims

Aim 1. Pilot test a suicide surveillance system for Botswana by leveraging the nationwide forensic pathology investigations.

- a. Access Botswana Police Service (BPS) records, enter information into REDCap, and conduct basic analyses on the data to determine the incidence and trends of suicide/femicide in Botswana over the past decade.
- b. Assess the feasibility of operating a suicide surveillance system that involves maintaining information access at BPS, data entry, and annual reporting moving forward

Aim 2. Identify suicide/femicide prevention strategies that are evidence-based and that match the circumstances of the most common typologies that occur in Botswana.

- a. Develop an Evidence and Gap Map (EGM) that visually displays the available and relevant evidence of interventions that have been used for preventing suicide in either LMICs or high-income countries (HIC).
- b. Determine the epidemiology and typologies of suicide that occurred in Botswana over the past decade using the forensic pathology records accessed at the BPS.
- c. Working with our Advisory Board, identify prevention strategies from the EGM that appear to have promise for addressing the suicide typologies that our analyses found to be most common in Botswana.

Aim 3. Adapt evidence-based interventions to fit the local needs and context of suicide in Botswana.

- a. Understand barriers, facilitators, and strategies for implementing those interventions in Botswana.
- b. Working with our Advisory Board, identify opportunities for interventions to be deployed in Botswana, considering where, how, and by whom and for whom.

Results (expected)

This project will produce

- (1) a sustainable digital surveillance system and dashboard for monitoring intentional injury mortality,
- (2) empirical evidence on gender and socioeconomic inequities in suicide and femicide
- (3) a set of locally adapted, evidence-informed prevention strategies.

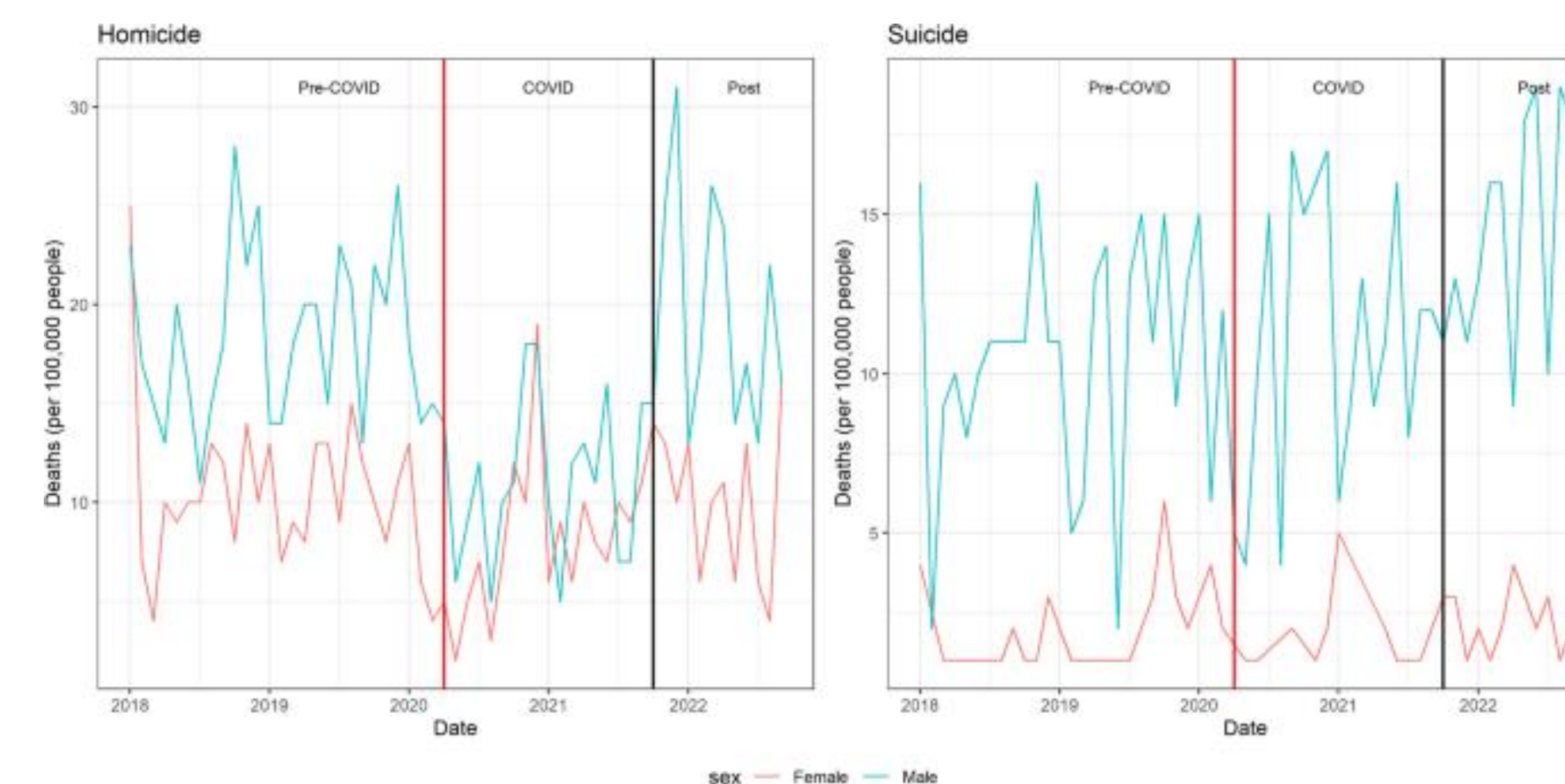
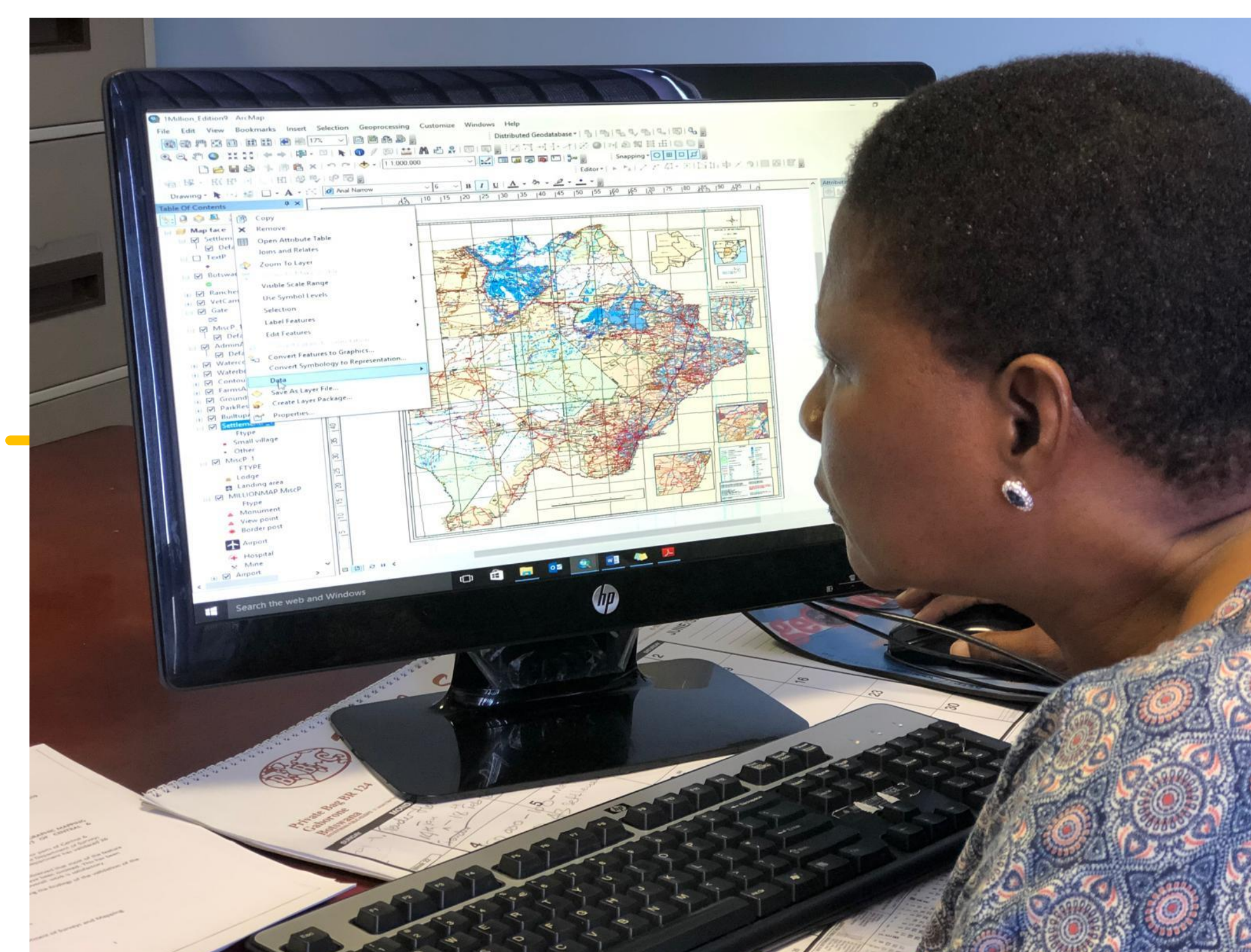


Figure 1: Preliminary results of data entry showing seasonal patterns and trends of homicide and femicide from 2018 to 2023.

Source: Mugoma, S., Wiebe, D., Larson, P.S. *et al.* The impact of COVID-19 and public health measures on homicide and suicide trends in Botswana using an interrupted time series analysis. *Inj. Epidemiol.* 12, 42 (2025). <https://doi.org/10.1186/s40621-025-00592-y>



Conclusions/Implications

- Strengthening surveillance infrastructure is a critical step toward addressing intentional injury in Botswana. By linking improved data systems with targeted prevention strategies, this project aims to reduce inequities and inform scalable approaches to injury prevention across low- and middle-income settings.



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