



# Rabies research in Uganda: a scoping review

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## Background

- Uganda is endemic for canine rabies, with nearly 90% of the human population at risk (1).
- Rabies is among the prioritized zoonotic diseases.
- Uganda has committed to the global "Zero-by-30" goal to eliminate dog-mediated human rabies deaths by 2030.
- A National Rabies Elimination Strategy (NRES) has been validated in 2022 with WOAH's support (2).
- A workshop (March 2024), in collaboration with SEEG, GIZ (Germany), conducted a SWOT analysis on NRES. Under the theme of "Training and Operational Research," weaknesses identified included the lack of a focused rabies research agenda and insufficient advocacy for research funding.
- This scoping review aims to map and summarize existing rabies research in Uganda, identify knowledge gaps, and guide future research to support evidence-based rabies interventions.

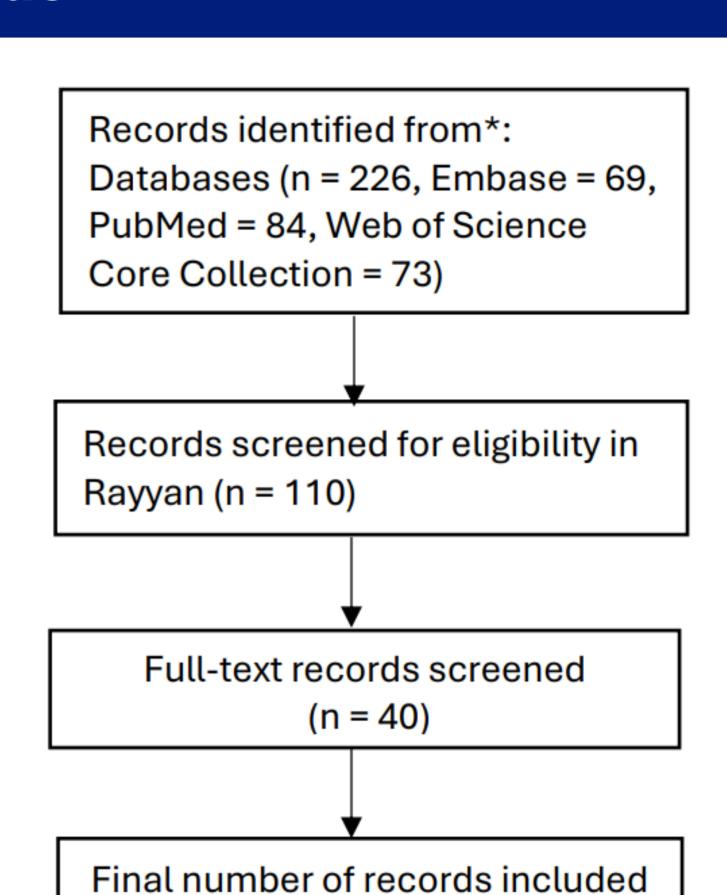


## Methods

- PRISMA-ScR guidelines
- Protocol registered with OSF

### What was investigated?

- Types of research conducted (study design, methods)
- Target population, outcome and risk factors
- Study domains (e.g. One Health approach to address rabies, surveillance systems and diagnostics employed)
- Challenges and gaps identified in the studies

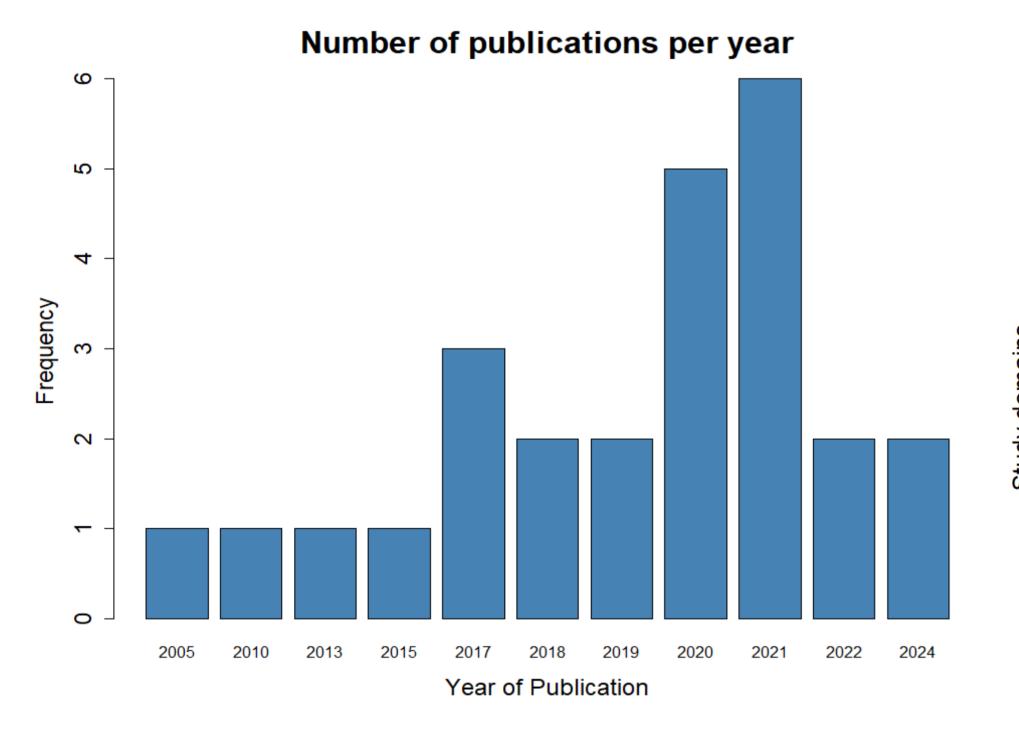


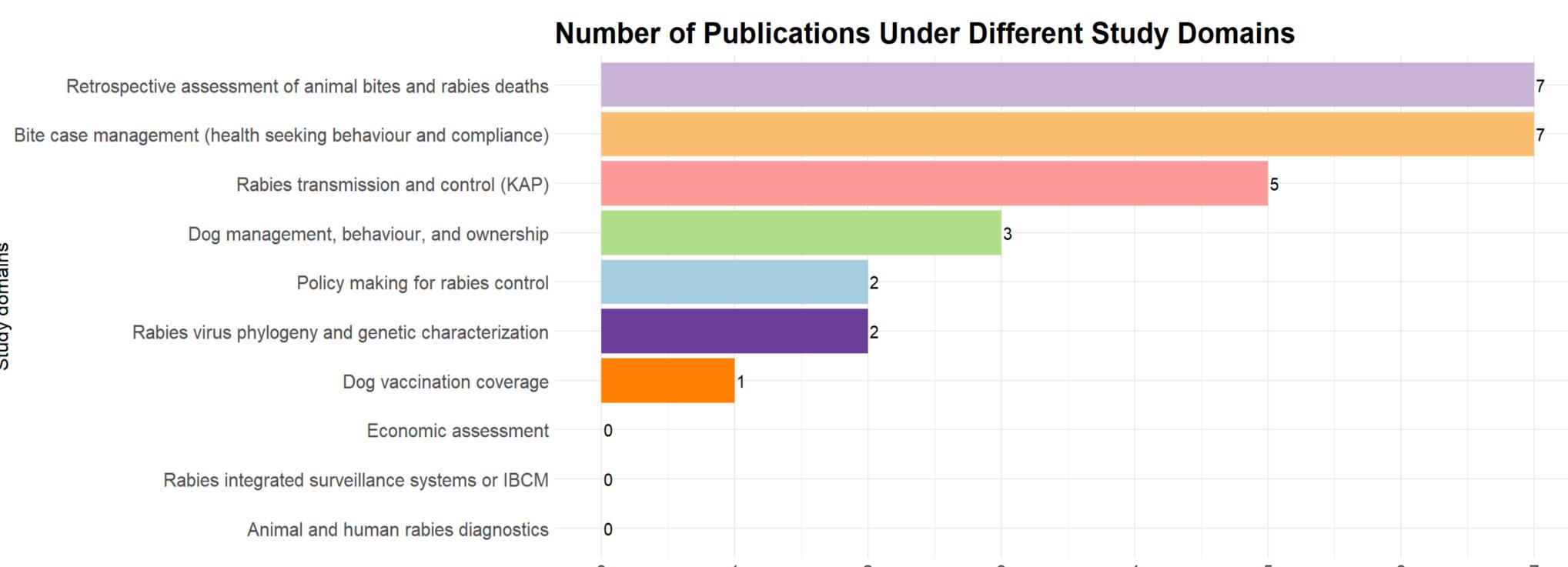
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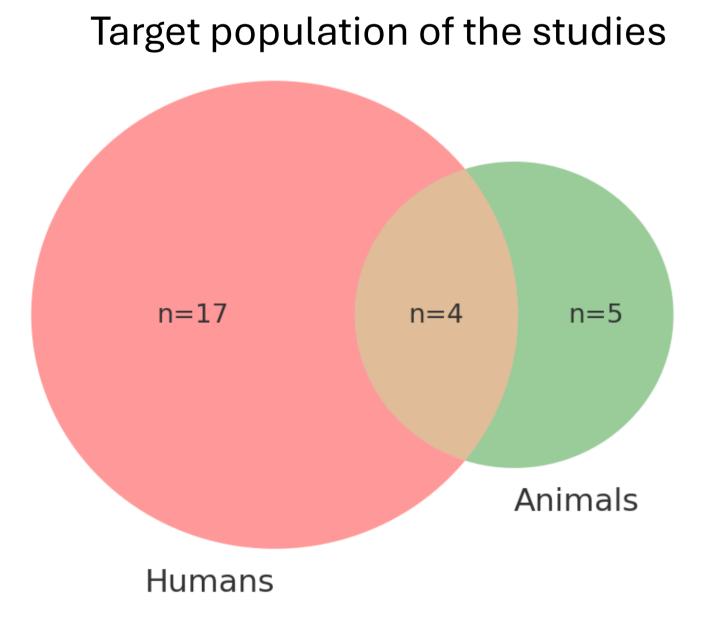
Original research regarding rabies studies that were based in Uganda were included in the review.

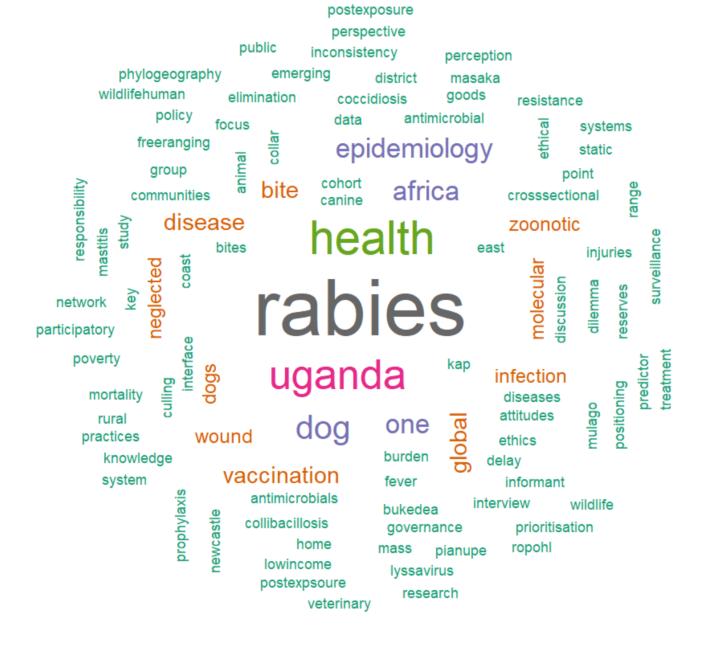


## Results and Discussion









Study type	Study design	n
Quantitative	Descriptive (Cross sectional surveys, questionnaires and KAP studies)	15
	Observational retrospective	5
	Interventional cross-sectional	3
	Analytic laboratory (sequencing)	2
Qualitative	Descriptive (Cross-sectional interviews, KIIs and FGDs)	5
	Participatory workshops	1

This scoping review presents the first comprehensive analysis of rabies research in Uganda summarizing findings on research focus, trends, and gaps from 26 selected studies,

Number of Publications

We identified a need for increased in-country motivation, investment, and institutional responsibility for Ugandan researchers to drive and lead research efforts within the country.

There is a need to enhance research by integrating intervention-based and longitudinal studies beyond descriptive analysis.

While 12 studies had intersectoral collaboration in research, only 6 adopted a One Health approach. Studies that focus on operationalization of One Health framework into interventions are thus crucial.

There is a lack of studies demonstrating integrated rabies surveillance systems, diagnostics, serology, and molecular epidemiology, highlighting the need for Integrated Bite Case Management (IBCM) and strengthened in-country laboratory facilities.

#### References:

- 1. Wallace et al., 2017. The impact of poverty on dog ownership and access to canine rabies vaccination: results from a knowledge, attitudes and practices survey, Uganda 2013. *Infectious Diseases of Poverty*, 6(1), 97. https://doi.org/10.1186/s40249-017-0306-2
- Iyadi, L. (2022, March 10). Uganda validates a national strategy on rabies elimination. WOAH Africa. Retrieved from https://rr-africa.woah.org/en/news/uganda-validates-a-national-strategy-on-rabies-elimination/

