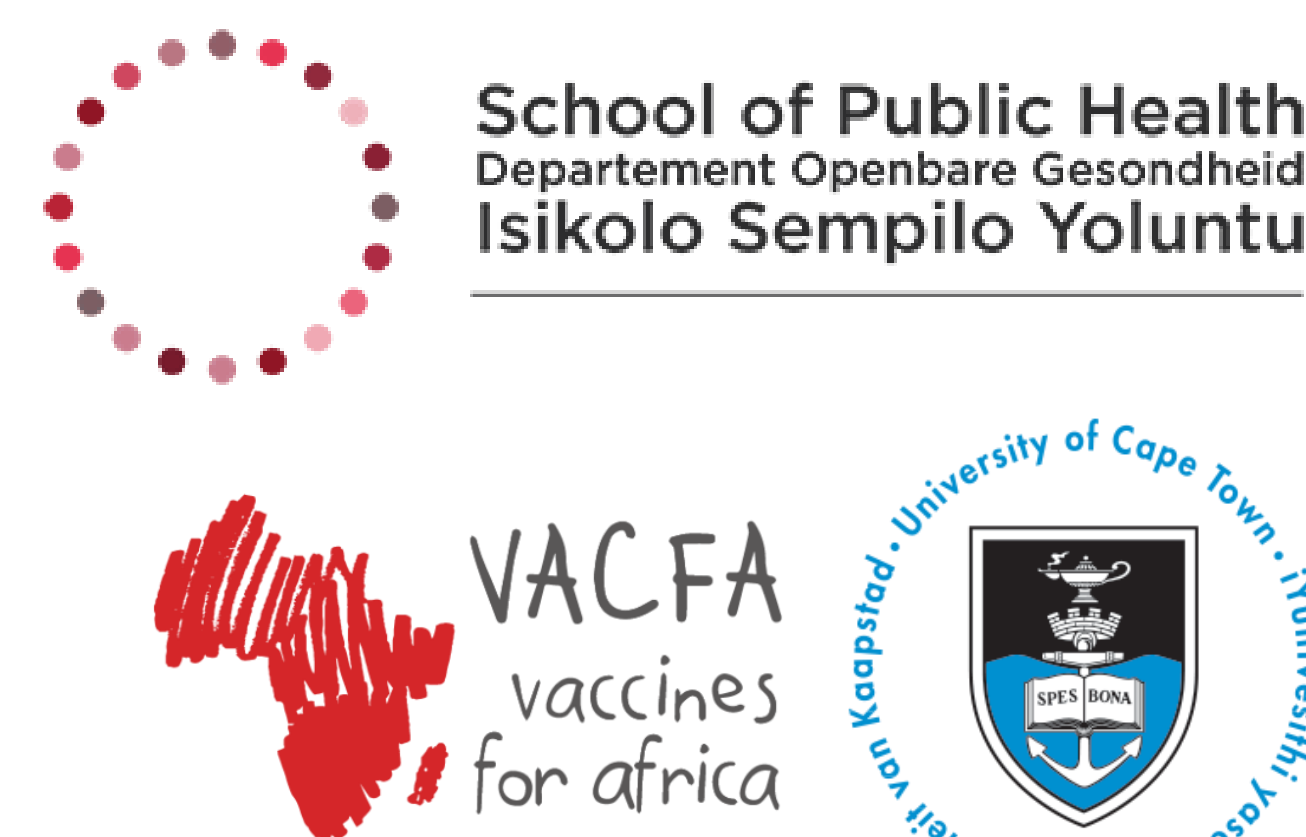


Knowledge, Attitudes, and Perceptions (KAP) of Maternal Respiratory Syncytial Virus (RSV) Vaccines Among Healthcare Workers in Cape Town : A Mixed Method Study



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This study is the first in South Africa to assess healthcare workers' knowledge, attitudes, and perceptions of maternal RSV vaccination ahead of its anticipated rollout. Findings will provide baseline evidence to guide training, communication, and policy strategies, ensuring sustainable vaccine uptake and stronger maternal and child health outcomes.

Background

- Respiratory Syncytial Virus (RSV) is the leading cause of acute lower respiratory infections in young children, responsible for ~33 million cases, 3.2 million hospitalizations, and nearly 60,000 in-hospital deaths globally each year.
- The burden is greatest in LMICs, where HIV exposure, overcrowding, and limited healthcare access increase vulnerability.
- In South Africa, infants under two months bear the highest risk of RSV-related hospitalization, with major strain on health systems and families.
- Maternal RSV immunization with the RSVpreF vaccine (Abrysvo) has demonstrated efficacy in preventing infant hospitalizations.
- The vaccine is approved internationally but has not yet been introduced in the South African public sector.
- Healthcare workers (HCWs) are pivotal to vaccine uptake as their knowledge, attitudes, and recommendations directly influence maternal vaccination acceptance and trust. Despite this, no baseline data exists on HCWs' perceptions of maternal RSV vaccination in South Africa, representing a critical evidence gap ahead of rollout.

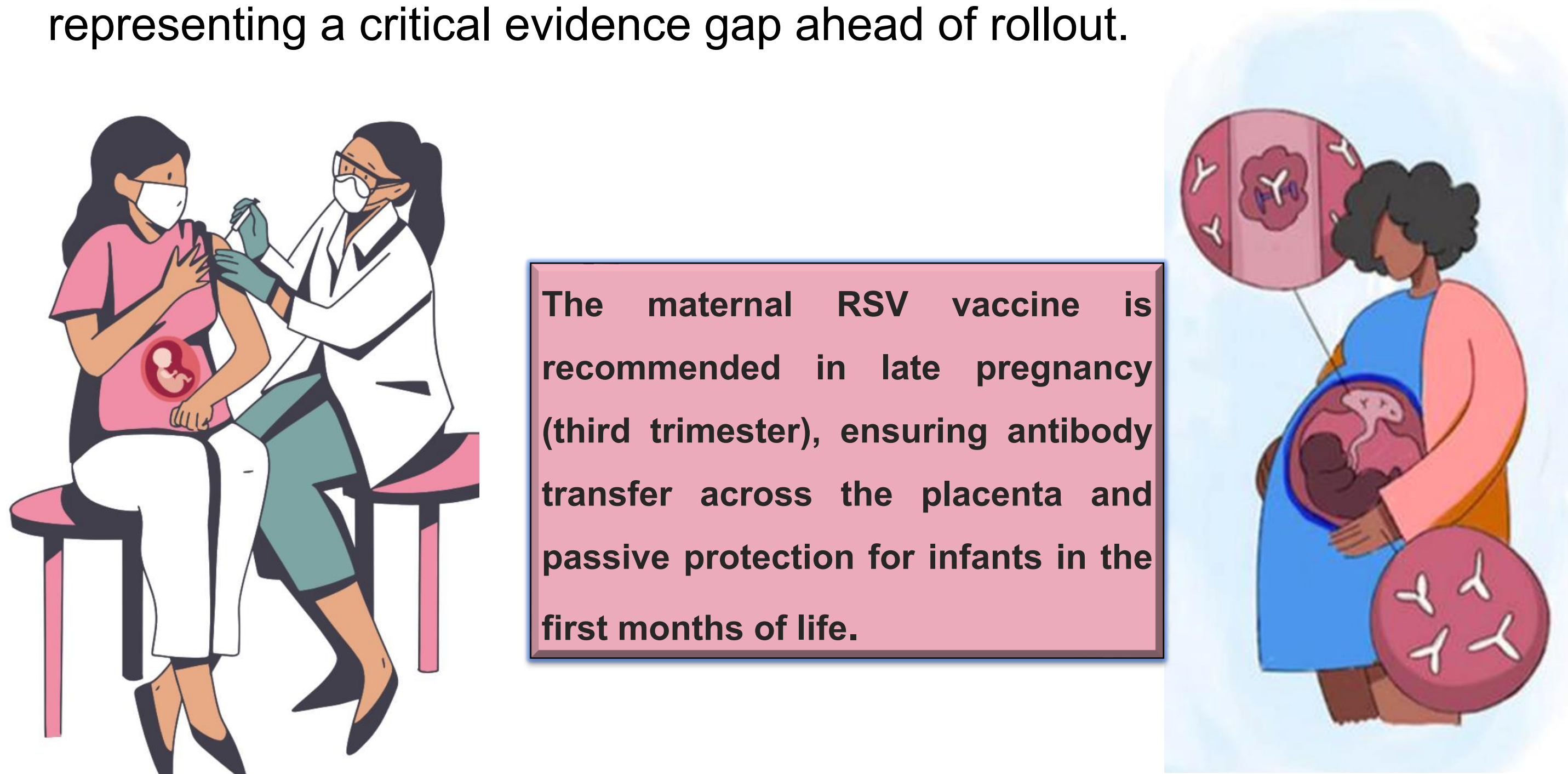


Figure 1. Mechanism of maternal RSV vaccination: administration during late pregnancy enables antibody transfer across the placenta, providing passive protection to infants for up to 6 months after birth.

Aims & Objectives

- Assess healthcare workers' knowledge, attitudes, and perceptions toward maternal RSV vaccination.
- Identify barriers and facilitators that may influence HCWs' readiness to recommend and deliver the vaccine.
- Generate baseline evidence to inform training, communication, and policy strategies that will support sustainable vaccine rollout in South Africa.

Methods

This study uses a mixed-methods study design comprising of a quantitative self-administered survey, and qualitative semi-structured interviews with a subset of HCWs.

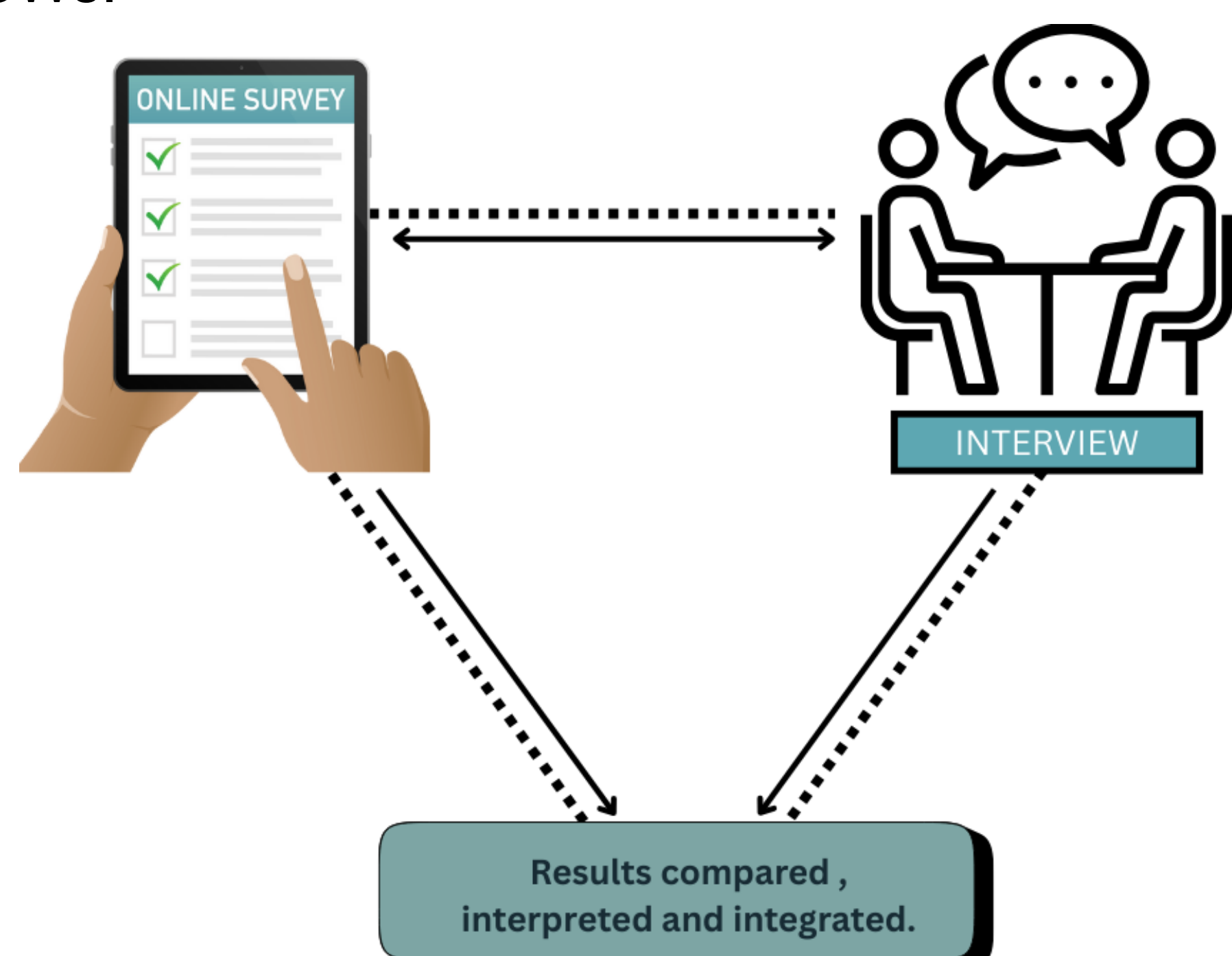


Figure 2. Mixed-methods study design and triangulation, through which results are compared and integrated.

Preliminary Findings

As of September 2025, 135/250 healthcare workers have been enrolled from select health facilities in the Cape metropolitan region. The sample includes nurses, doctors, midwives, and pharmacists, with distribution shown in Figure 3.

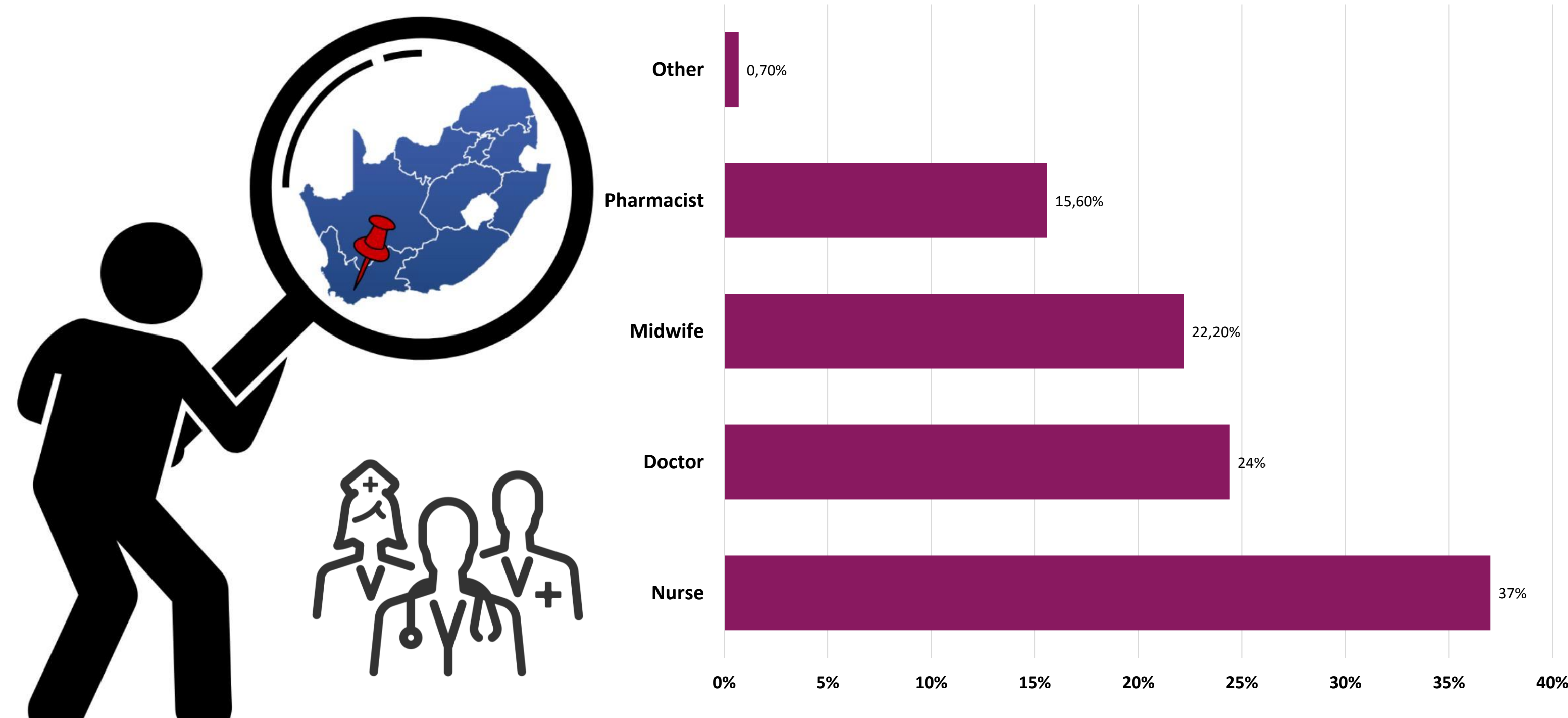
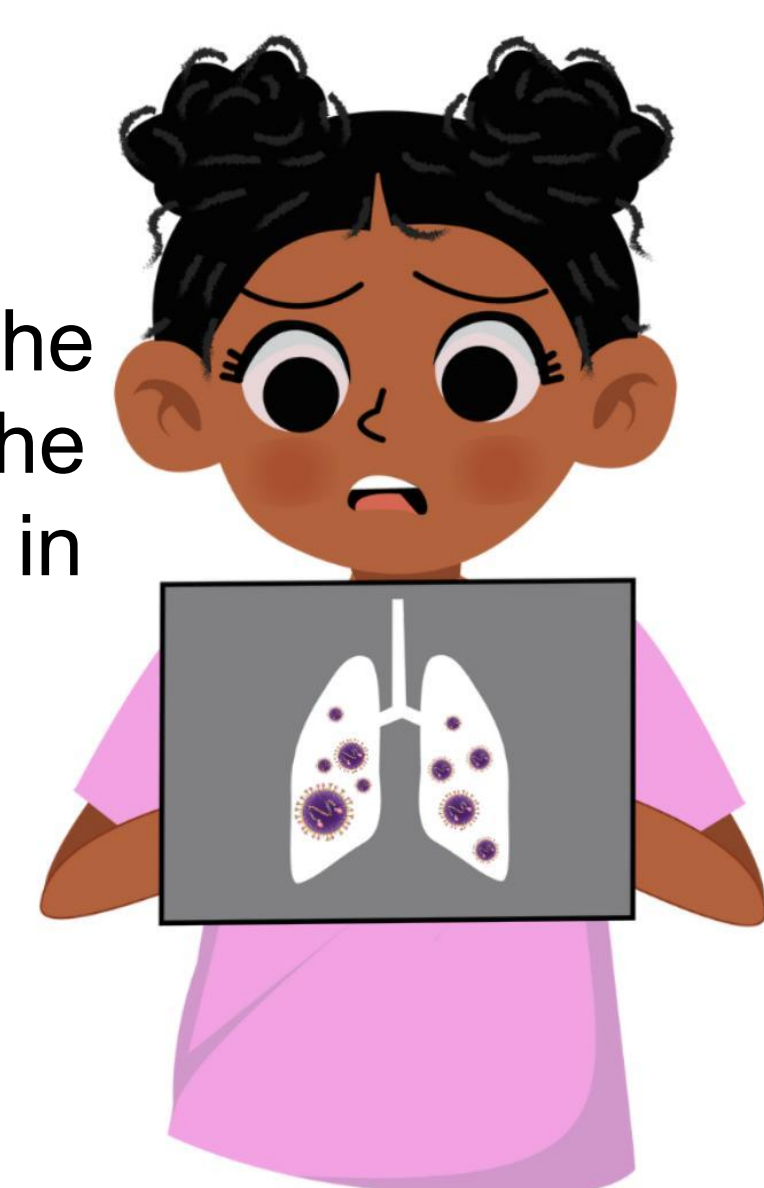


Figure 3. Horizontal bar graph of participants by professional cadre (n = 135)

Perceptions of RSV burden in South Africa were mixed, with almost half of participants reporting that they were unsure of the national burden (44%). Only 17% perceived it as high, while the remainder rated it as moderate or low. These findings, shown in Figure 4, highlight substantial uncertainty among HCWs and underscore the need for targeted training and information on RSV ahead of vaccine rollout in the public healthcare system.



Innovation: First study in South Africa to generate baseline evidence on HCWs' knowledge, attitudes, and perceptions of maternal RSV vaccination.
Adaptability: Mixed-methods design ensures findings are relevant across diverse healthcare settings and responsive to rollout needs.
Sustainability: Equipping HCWs with knowledge and skills is a long-term investment for integrating new vaccines into routine care.

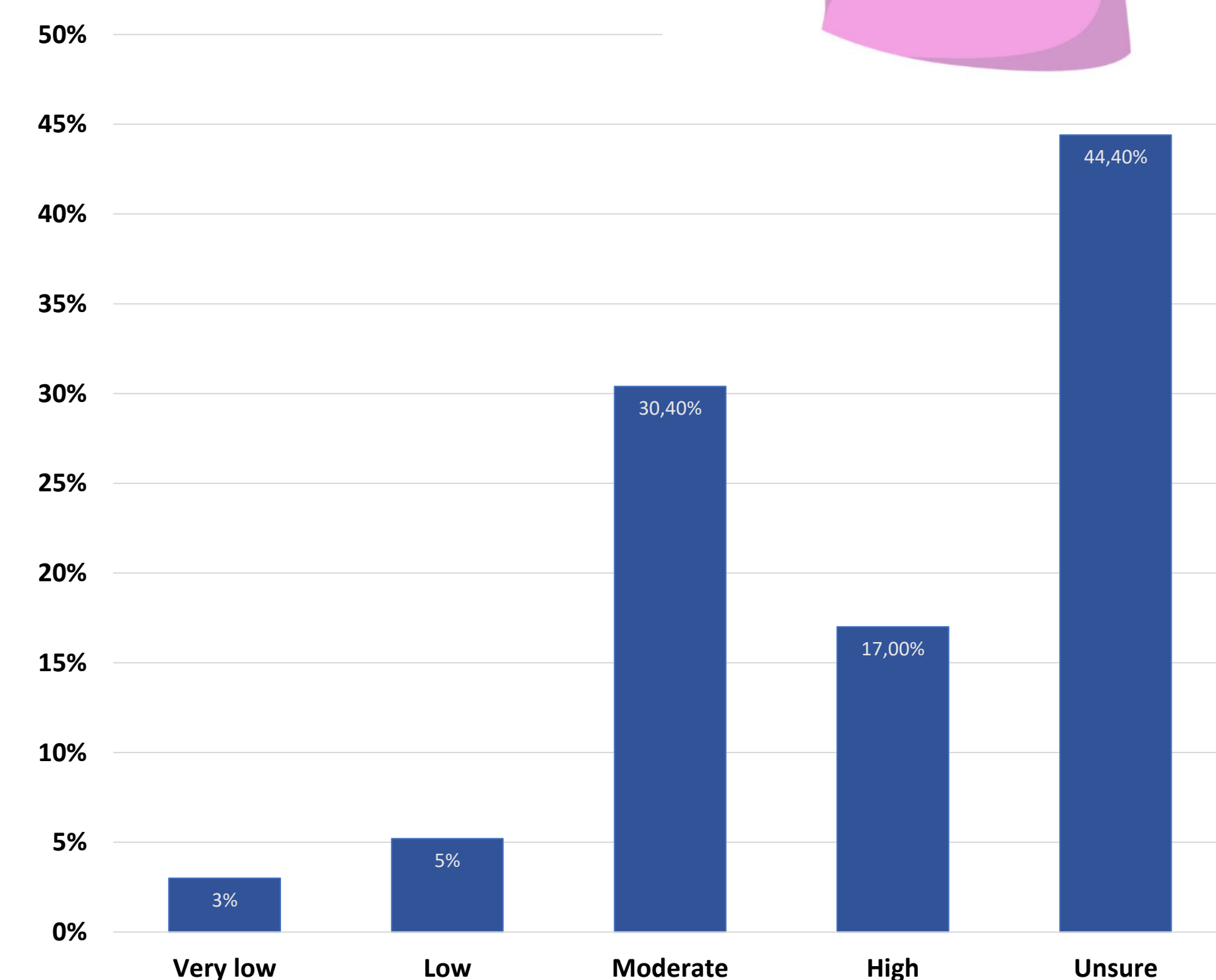


Figure 4. Healthcare workers perceived burden of RSV in South Africa (n = 135).

Conclusions & Next Steps

- Data collection is ongoing**, and findings presented here are preliminary.
- Early results reveal gaps in awareness, training, and knowledge of RSV, highlighting the need for capacity-building before vaccine rollout.
- Final results will provide evidence to guide policy, training, and communication strategies for maternal RSV vaccination in South Africa.

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