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Introduction

Women's health in limited resources settings can benefit from the integrated management of high burden diseases, such as female genital schistosomiasis (FGS) and HPV-related cervical cancer. In schistosomiasis endemic countries, such as Madagascar, evidence on prevalence of FGS and HPV is lacking and preventive measures are absent. The present study aims to estimate FGS and HPV prevalence in rural Madagascar and examine associated risk factors to identify opportunities for improving women's health.

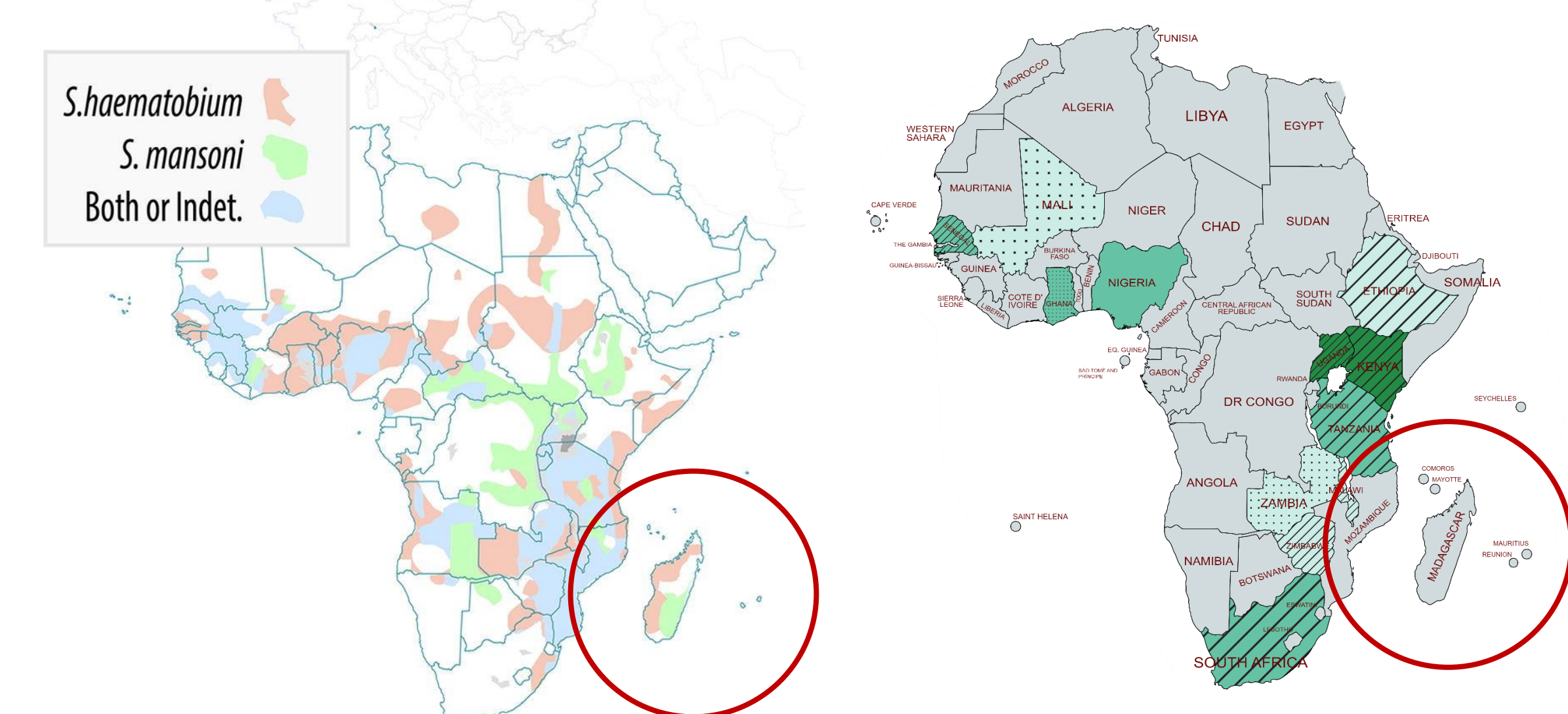


Figure 1a : Presence of schistosomiasis in sub-Saharan Africa (SSA). Christinet et. al. Int. J. Parasitol. 2016

Figure 1b : Lacking HPV vaccination in SSA. Kutz et. al. BMC Public Health. 2023

Methods

Women aged 18 to 49 years were recruited in 2021 at three Primary Health Care Centres in the district of Maravoay. FGS was detected via colposcopy. Colposcopy images were reviewed by two independent specialists through double-blinded review. A Luminex bead-based assay was performed on cervical vaginal lavage (CVL) for HPV typing. Adjusted prevalence ratios (APR) were estimated for associations between FGS and HPV positivity and selected risk factors.

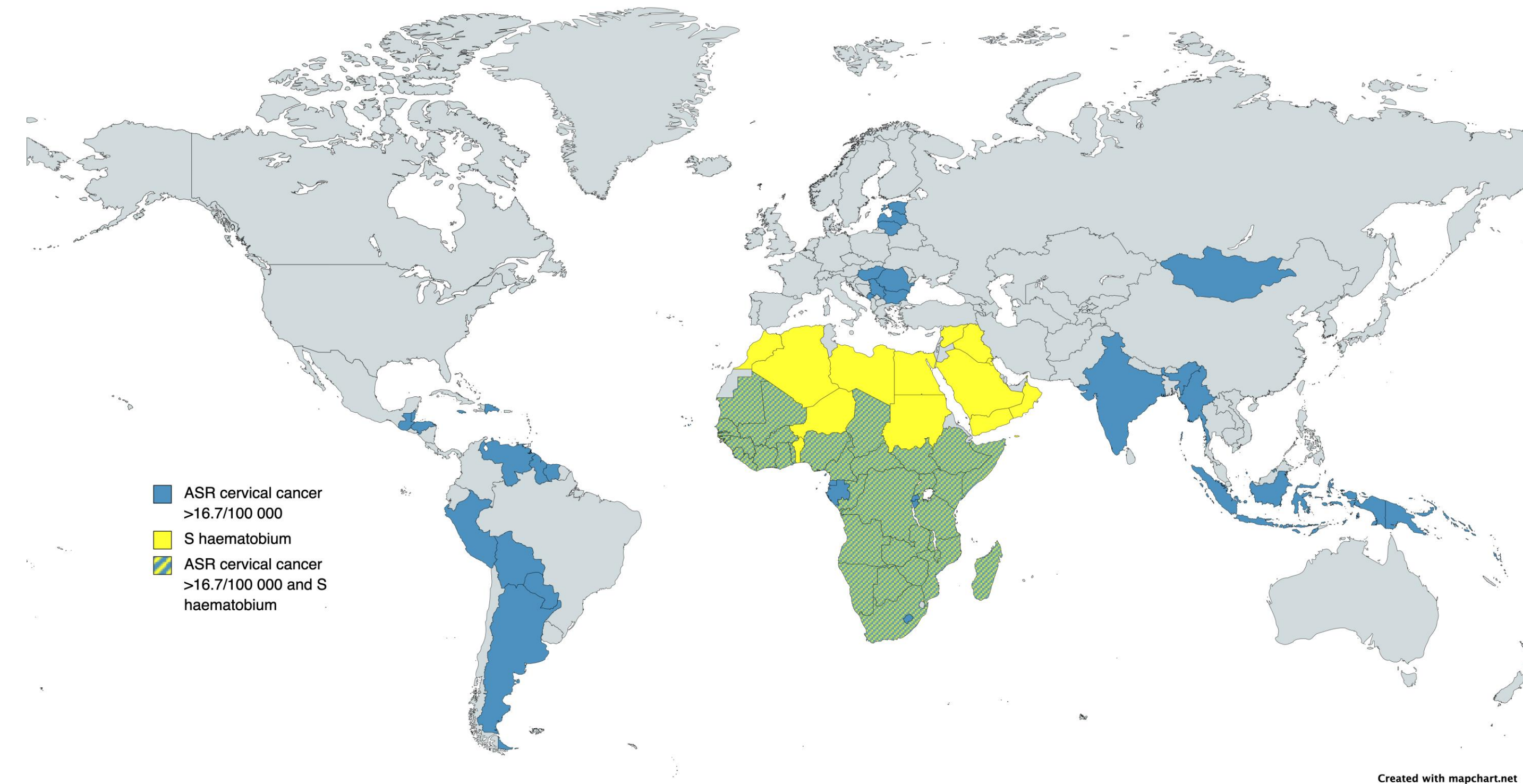


Figure 2: Co-dominant presence of FGS and CC worldwide. Marchese et. al. Front. trop. dis. 2023.



Figure 3 : Logo of the FIRM-UP project. Female Genital Schistosomiasis in rural Madagascar: improving community understanding and promoting integration into primary health care services.



Figure 4 : Midwife performing colposcopy during training in Mahajanga, Northwestern Madagascar.

Results

- 500 women enrolled
- 302 had complete information on FGS and HPV diagnosis and were thus eligible for analysis.
- 189 (62.6% [CI 56.9; 68.1]) cases of FGS were reported.
- 129 women (42.7% [CI 37.1; 48.5]) tested positive for HPV.
- In total 80 women (26.5% [CI 21.6; 31.8]) tested positive for both conditions.
- No association was observed between FGS and HPV positivity
- Previous pregnancy and younger age are showing a lower APR for HPV.

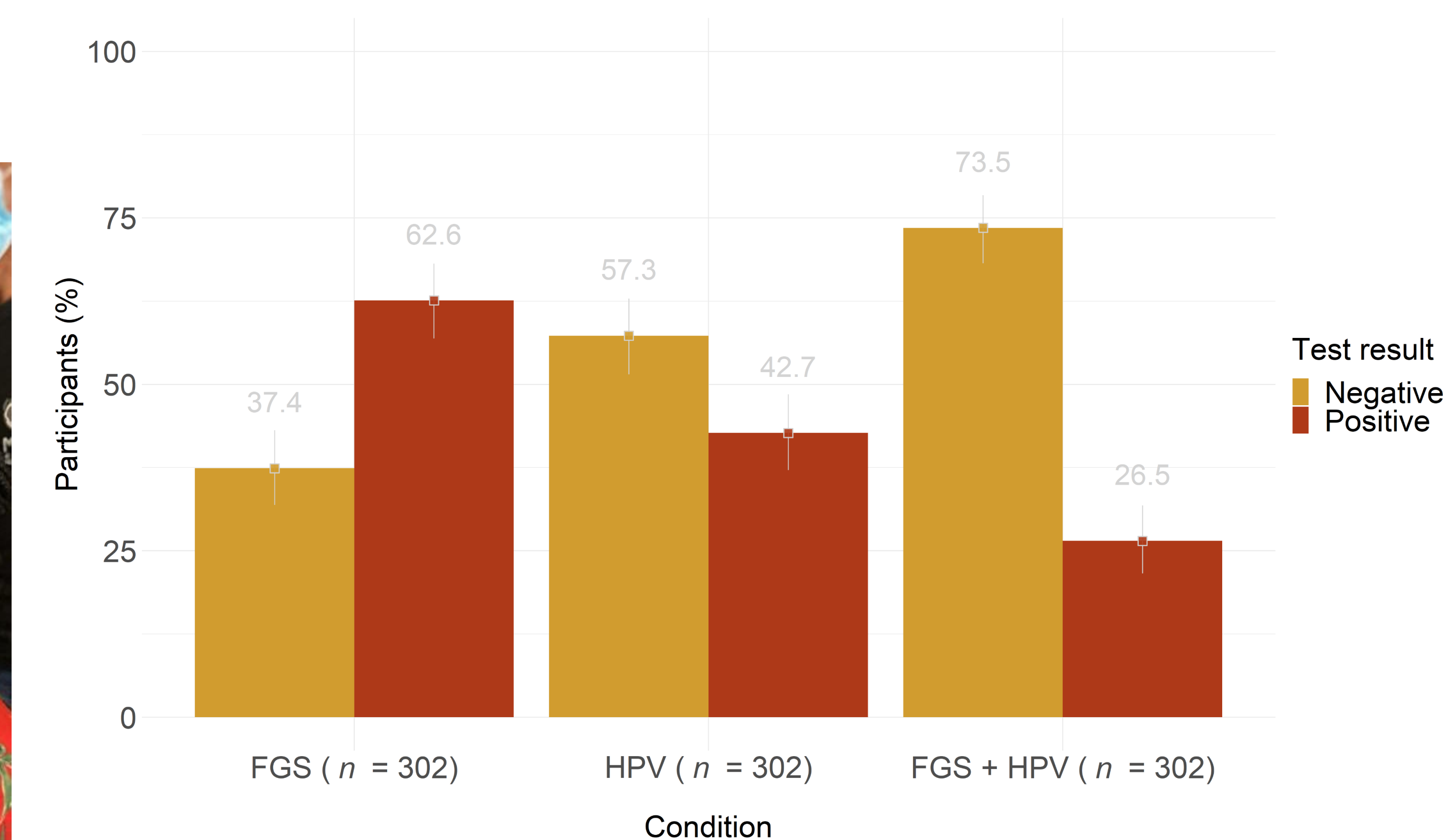
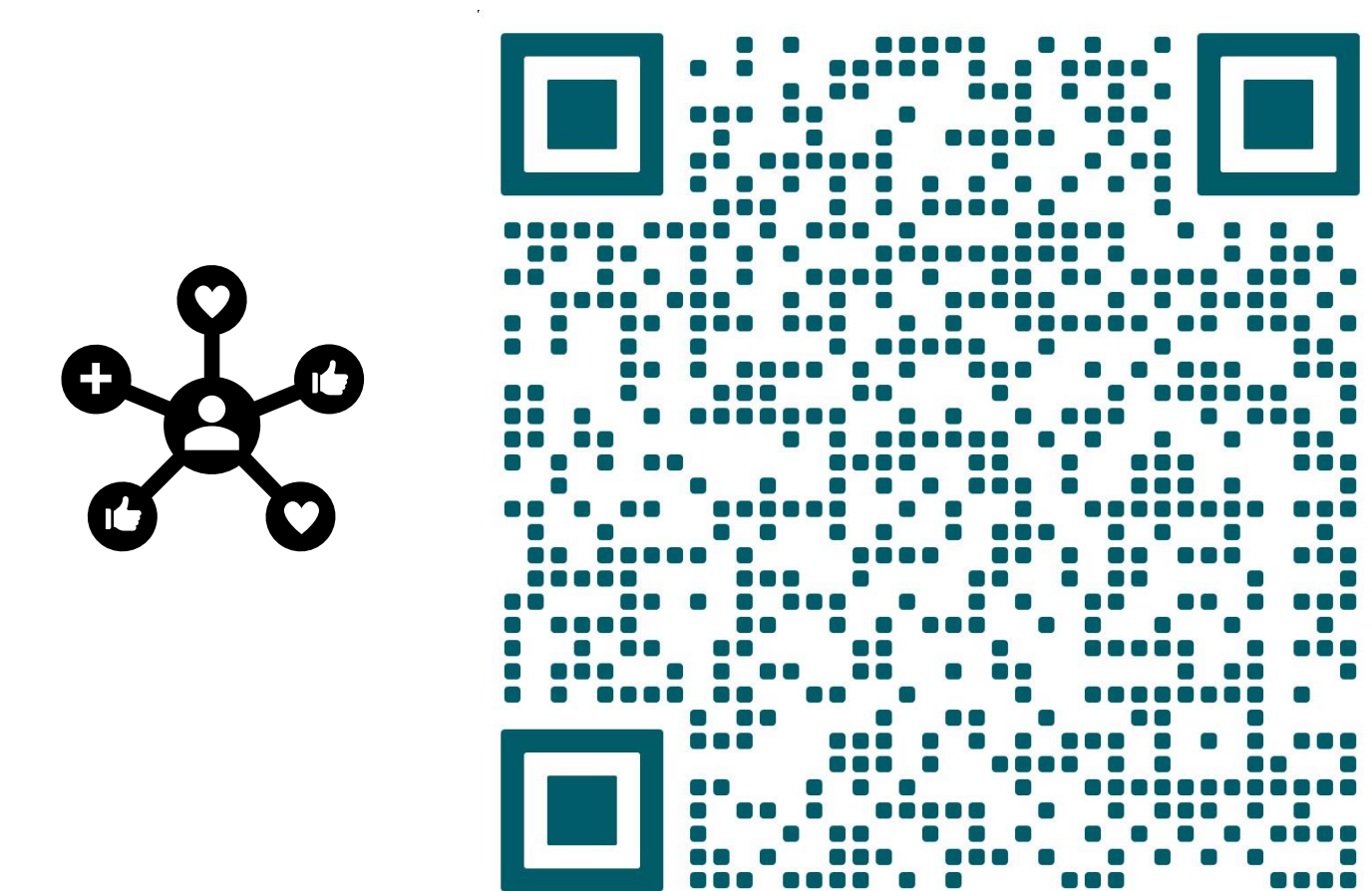


Figure 5 : Prevalence and 95% confidence intervals for FGS; HPV and FGS+HPV from 302 women.

Conclusion

- FGS and HPV are highly prevalent in rural Madagascar.
- The concurrent prevalence of these two conditions requires urgent adaptations of public health strategies to improve women's health
- Such as: integrated services at primary level of care.

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