

# A formative appraisal of female genital schistosomiasis (FGS) score card results against point-of-care gynaecological and molecular parasitological information within four counties of Liberia

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## Abstract

Liberia (West Africa) has an extensive (co)burden of urogenital and intestinal schistosomiasis; each largely restricted to more inland areas. Where urogenital schistosomiasis is endemic, as both disease surveillance and case management are nascent, many women may unknowingly be living with Female Genital Schistosomiasis (FGS). Using a recently developed FGS score card, we appraised FGS score card valuations with point-of-care gynaecological and molecular parasitological evaluations as undertaken within typical primary care settings of four Liberian counties. A total of 400 women, 100 participants from each of four endemic inland counties, underwent a cursory gynaecological examination using a speculum for visible FGS lesions, undertaken by a midwife, and provided a urine sample that was examined by centrifugation with microscopy for *Schistosoma* ova. Urine-sediments in ethanol were later analysed with a high-resolution melt (HRM) real-time (rt) PCR assay to screen for *Schistosoma* genetic markers. Using a combination of clinical and parasitological information, overall prevalence of UGS and FGS was 15 km from a local river were less likely to present with FGS. In this resource-poor setting of Liberia, active surveillance for FGS with either clinical or parasitological methods remains challenging such that sole future use of the FGS score card is most pragmatic for primary care.