

## Schistosomiasis: the ‘feminist issue’? – Review by Jose Carlos de Sousa Figueiredo

One of the worst pathological implications of the debilitating parasitic disease, schistosomiasis, is female genital schistosomiasis (FGS). Until recently, FGS was largely regarded as an issue of low importance when considering schistosomiasis research and control. This, however, has changed in the last decade with reports that this syndrome can affect up to 75% of women of childbearing age living in endemic areas.



Female genital schistosomiasis is not just a medical condition, but also associated with stigma. Copyright José Figueiredo

A recent review published in *Trends in Parasitology* highlights the importance of FGS in schistosomiasis research, and serves as a very complete bibliographic reference for those in, and out of, schistosomiasis research. We now know that blood vessel anastomoses between the pelvic organs are responsible for the ‘spill-over’ of *Schistosoma* eggs into the genital tract, particularly the cervix. This will lead to the formation of macroscopic sandy patches on the cervix and contact bleeding. If left untreated, the pathology will worsen leading to increased frequency of urination, disfiguration of the genital tract, decreased fertility, ectopic pregnancies, abortion and even death due to complications during labour.

One important issue raised in this review is the association between FGS and the HIV epidemic in Sub-Saharan Africa. The cervix is the suggested site for most HIV acquisition, and the relative frequencies of the mucosal immune cells are crucial determinants to HIV transmission. In this review, the authors highlight the fact that the tissue around the *Schistosoma* eggs trapped in the genital tract is rich in blood vessels, and the presence of ‘lesions’ increases the influx of an array of immune cells, including HIV-receptive CD4 cells. Since many public health interventions against HIV have focused in the syndromic management of sexual transmitted diseases, the authors note that FGS should henceforth be considered as well. In fact, it is worthy to note that many STD treatment studies (many taking place in schistosomiasis endemic areas) have been marred by the lack of effects on incidence of HIV infection, indicating that FGS may be a neglected cofactor for HIV transmission in endemic areas.

Combating schistosomiasis and FGS is crucial for the achievement of two Millennium Development Goals, particularly in Sub-Saharan Africa.

The full review article is accessible here:

<http://www.sciencedirect.com/science/article/pii/S1471492211001863> A review of female genital schistosomiasis. 2012. Kjetland EF, Leutscher PD, Ndhlovu PD. *Trends Parasitol.* 2012

This review was written by Jose Carlos de Sousa Figueiredo a PhD student from the Natural History Museum.