WHO CALLS ISSVD TO ACTION ON ELIMINATION OF FEMALE GENITAL SHISTOSOMIASIS (FGS)

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INTRODUCTION

WHO calls for a strategy with an objective to eliminate Neglected Tropical Diseases (NTD) by 2030. The NTD strategy includes an objective to eliminate Female Genital Schistosomiasis also by 2030. Human schistosomiasis remains an important public health problem in many tropical settings that are mostly in Africa. At least 261 million people will require treatment for schistosomiasis and up to 659 million people are at risk because of their frequent physical contact with fresh water when they wash themselves and/or wash their kids, when they clean clothes and food articles or just bathe to get some relief from heat or have fun.

Female genital schistosomiasis (FGS) is a manifestation mainly of *Schistosoma haematobium* and more rarely of *Schistosoma mansoni* infection. Signs and symptoms of FGS are frequently mistaken for other common genital tract diseases. Some females will approach health care services because of greenish or yellowish vaginal discharge, pain with sex, infertility, HIV, cervical cancer, or hematuria from bladder disease. Most clinicians have seen cases of unexplained vaginal disease or sex pain but because it is neither part of their training curriculum nor described in the medical textbooks nor clinical management protocols in any of the countries, currently, FGS is not being diagnosed and treated.

Laboratory diagnostics for Schistosomiasis are mostly unavailable or inadequate. For females of reproductive age living or having lived even transiently in areas endemic for *S. haematobium*, FGS remains highly prevalent and under-diagnosed due a low index of suspicion among healthcare professionals. A high index of suspicion will allow a timely diagnosis of FGS pre-operatively for high grade disease of the vagina and or cervix and avoid unnecessary radical surgery for suspected cancer and misdiagnosis of sexually transmitted infections (STIs) through the syndromic management protocols for STIs as suggested by WHO.

KEY FACTS

FGS is a common complication of schistosomiasis also known as bilharziasis in many regions. It is caused by the worm depositing eggs in genital tissues thus creating lesions and inflammatory reaction.

Schistosomiasis can cause urinary disease with macroscopic hematuria. FGS can be present without urinary schistosomiasis and/or hematuria.

FGS may be the most common gynaecological condition in schistosomiasis-endemic areas!

- Symptomatic and asymptomatic FGS remains undiagnosed in most cases and attributed to other diseases such as sexually transmitted diseases (STDs).
- FGS is associated with an increased risk of HIV and human papillomavirus (HPV) infections and cervical cancer.
- In most endemic countries, primary health doctors or nurses who see cancer-looking lesions, will remove parts of the cervix at the point-of-care. These lesions could be FGS.

Human schistosomiasis is widespread in Africa in rural and urban areas.

- It is transmitted by skin contact with infested fresh water.
- The worm lays eggs which are deposited in the organs and some eggs are excreted contributing to endemic presence of schistosomiasis.
- Treatment with oral praziquantel aims to kill the adult worms and prevent new FGS lesions but may not cure the actual lesions and the complications.

SYMPTOMS

- Greenish/yellowish and or malodorous vaginal discharge
- Bloody discharge or spotting
- Bleeding after intercourse
- Genital itching or burning sensation
- Pelvic pain
- Pain during or after intercourse

Girls may present with some of the above symptoms. Some patients may also have bloody urine.

GENERAL COMPLICATIONS

- Infertility
- Spontaneous abortion
- Ectopic pregnancy
- Involuntary urination when coughing, laughing or jumping, etc.
- Vulvar ulcers (in girls)
- Tumours or swelling of the vulva, vagina, cervix

GENITAL COMPLICATIONS

- Anaemia

- Stunted growth
- Abdominal cramps
- Learning difficulties
- School absenteeism.

DIAGNOSIS

For women and girls who present with urogenital symptoms and who have had contact with fresh water in countries endemic for schistosomiasis, the diagnosis of FGS must be considered. FGS is diagnosed by visual inspection of characteristic lesions on the cervix and vaginal wall. Visualization can be improved by using a digital camera or a colposcope. Current laboratory techniques are inadequate for diagnosing FGS.

TREATMENT

The WHO-recommended treatment for schistosomiasis for all, including pregnant women, pre pubertal kids, women and men, is praziquantel 40 mg/kg as a single oral dose.

Treatment kills the adult worms and prevents the development of new lesions. Treatment can improve reproductive health and diminish some FGS symptoms. Residual lesions will persists making follow-up exam difficult to interpret.

If one FGS case is seen, there are probably many others in the family. All who have used the same source of water are at risk. It is especially important to identify children and spouse who may have early schistosomiasis.

To maximize prevention efforts, WHO is recommending the distribution of praziquantel that will prevent the development of cervical cancer and FGS and to perform cervical cancer screening and diagnosis of FGS during routine gynecological examinations.

An integrated approach to disease control would make a considerable impact on women and families and could lend itself to scaling-up to other endemic areas. Moreover, research on FGS in the context of Sub-Saharan Africa will be needed to help us understand the intertwining impact of FGS on HPV and HIV.

CALL TO ACTION

You have seen cases in your clinics: in tourists that have bathed in fresh water while on vacations in endemic areas or in refugee and immigrant women. ISSVD should be addressing the issue in leaflets, on website, on webinars and in congresses.

Complementary resources to support the dissemination process, including a clinical poster and a generic PowerPoint presentation, are available through a dedicated web page at http://fgs.pocketatlas.org.

(see attached pdf of the deworming strategy, our contribution to it was based on this)