

COUNTDOWN

Calling time on Neglected Tropical Diseases

HEALTH WORKER TRAINING GUIDE FOR MANAGING FEMALE GENITAL SCHISTOSOMIASIS (FGS) IN PRIMARY HEALTH CARE



August 2021 v2



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FOREWORD

Female Genital Schistosomiasis (FGS) is a neglected gynecological condition affecting women and young girls living in schistosomiasis endemic areas. The disease is caused by the presence of trematode *Schistosoma haematobium* eggs in the genital tissues and is associated with vaginal itching, discharge, infertility, menstrual disorders, painful sexual intercourse and other gynecological symptoms. FGS is often misdiagnosed, creating stigma and fear of approaching health care for treatment. This Health Worker Training Guide for managing FGS in Primary Health Care is timely and valuable for the provision of treatment and management of FGS, particularly at Primary Health Care facilities in resource-limited settings where gynaecologists and diagnostic facilities are absent.



The guide is the result of a one-year implementation research project, supported by the COUNTDOWN consortium funded by The Foreign, Commonwealth and Development Office in the UK (FCDO). The guide has been evaluated in schistosomiasis endemic communities in Ogun State with positive results and reviews. I am excited that the guide will enable first-line health workers to diagnose FGS using symptoms, and provide the required care and referral where needed. Hence, I recommend this guide for the training of primary care providers and facilities across Nigeria especially within communities where women and girls are at risk of FGS.

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Honourable Commissioner for Health, Ogun State Ministry of Health

INTRODUCTION

Schistosomiasis is a disease found in many rural and semi-urban areas of Nigeria. It is caused by a parasite called *Schistosoma* (also known as Bilharzia or snail fever). When *Schistosoma* eggs are trapped in tissues of the female reproductive system, it can result in Female Genital Schistosomiasis (FGS). Women and girls are at risk of FGS due to frequent contact with infected water for washing, domestic, occupational or recreation activities. Early diagnosis, treatment and management of FGS is very important for preventing the development of symptoms and irreversible complications of the condition.

Health workers often have limited awareness of FGS because it is not described in current medical textbooks or curricula in any of the countries where schistosomiasis is endemic, therefore health workers have not been able to offer the correct advice, treatment and support to women affected. This training guide will support you to learn more about FGS and how to care for patients who present with these symptoms. Whilst these tools will support care and management of the girl and women, they do not replace other guidance used within your facilities and should work alongside your existing practice as a health worker.

AIM OF GUIDE

The training guide will support you to diagnose suspected FGS, offer treatment, provide counselling and appropriately refer women or girls for further investigation when required.

SPECIFIC LEARNING OBJECTIVES

- ✓ To be able to identify girls (15 to 17 years) and women (18 years and older) who are at risk of FGS
- ✓ To be able to recognize the signs and symptoms of FGS
- ✓ To be able to treat girls and women with suspected FGS
- ✓ To be able to effectively counsel and guide girls and women with FGS
- ✓ To reduce stigma associated with symptoms and misdiagnosis
- ✓ To identify women who might need further care from complications of FGS

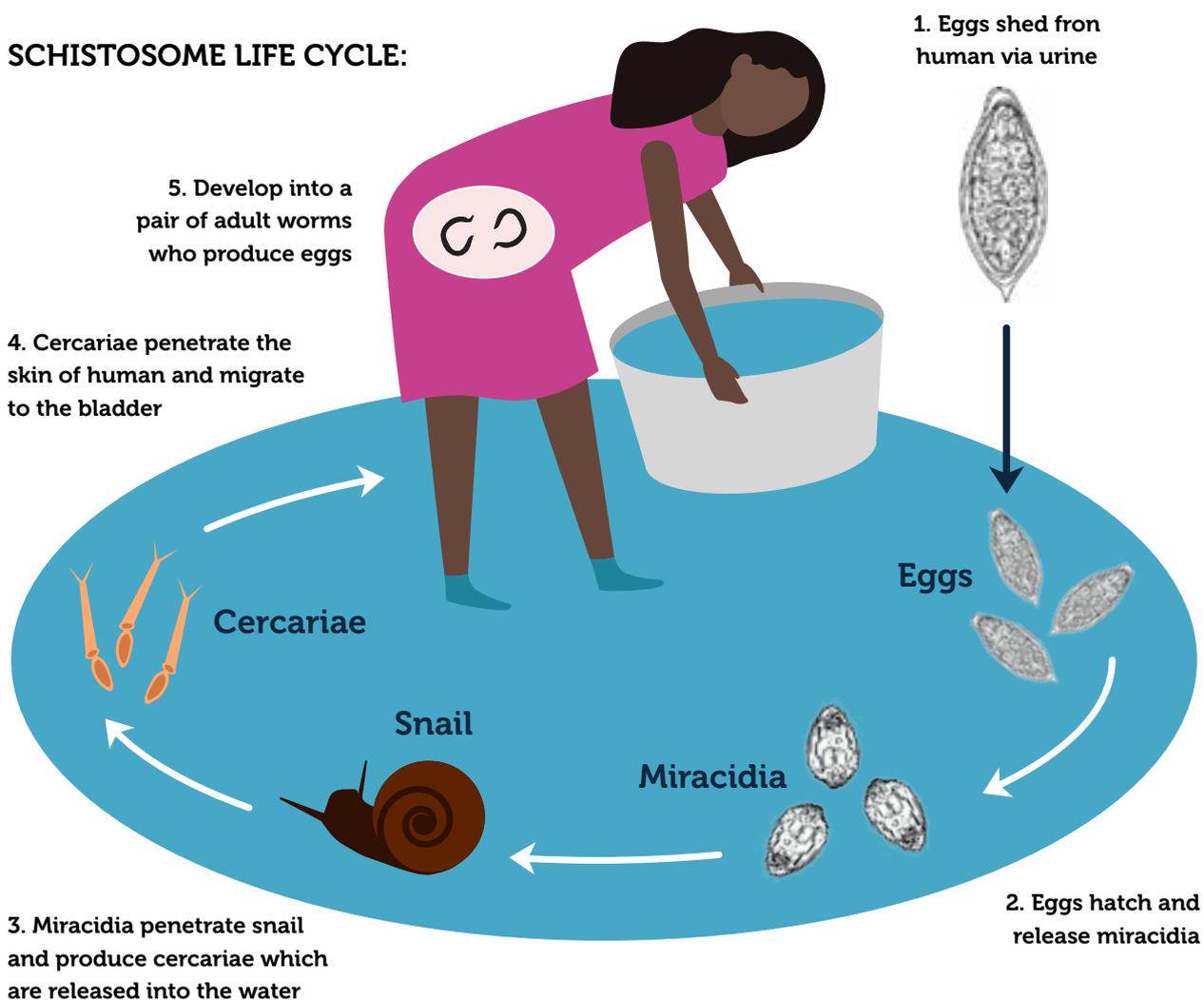


INTRODUCTION TO FEMALE GENITAL SCHISTOSOMIASIS

WHAT IS SCHISTOSOMIASIS?

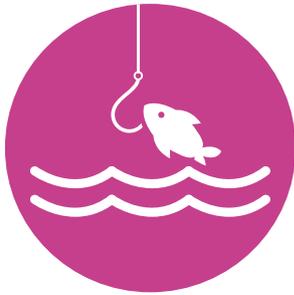
Schistosomiasis is a water-borne parasitic disease caused by infection with trematode worms of the genus *Schistosoma*. Infections may affect humans of all ages and gender, and globally it has the highest burden of disease among the 17 recognised neglected tropical diseases(1). The most common symptoms of the disease include dysuria (painful urination) accompanied with blood in urine in the case of urinary schistosomiasis and blood in the stool in intestinal schistosomiasis (which can lead to cancer of the bladder or rectum), anaemia and, liver dysfunction. The abnormal changes in the genitalia of girls and women due to the presence of schistosome eggs have been defined as female genital schistosomiasis(1). Transmission occurs when urine and / or faeces containing parasite eggs from people infected with schistosomiasis directly or indirectly gets into the water bodies (such as lakes or rivers), the eggs hatch in water and undergo some development in the intermediate snail host into the infective larval form (cercaria) which swims freely in water and can penetrate the skin of anyone who comes into contact with the contaminated water body. In the body, the larvae develop into adult schistosomes. Adult worms live in the blood vessels as pairs (male / female) where the females release eggs. Some of the eggs are passed out of the body in the faeces or urine to continue the parasite's lifecycle. Others become trapped in body tissues, causing immune reactions and progressive damage to organs. Currently, the medication called Praziquantel is used for the treatment of schistosomiasis. Preventive treatment, which should be repeated over many years, will reduce, and prevent morbidity. However, often some community members do not have regular access to the medication as it is only distributed in schools, meaning that adults and out of school children may be missed by the treatment strategies. Furthermore, re-infection when using the same water source will occur(2).

SCHISTOSOME LIFE CYCLE:



BASIC EPIDEMIOLOGY

Schistosomiasis transmission has been reported from 78 countries including Nigeria. Nigeria is reported to have the highest burden of schistosomiasis in Africa with 29 million cases in the world. In Nigeria, the disease has been reported in all the 36 States and the Federal Capital Territory, Abuja(3). Nigeria has the most extensive water system in West Africa with major rivers like Niger, Benue, Cross River, Kaduna, Ogun etc. People get infected during routine activities that bring them actively or passively in contact with infected water. These include agricultural (farming, fishing), domestic (bathing, washing, fetching, wading), occupational (sand dredging, commercial ferry / boats), recreational (swimming). These expose women and girls to the parasite's larva in such water. Furthermore, children are vulnerable due to play habits such as swimming or fishing in infected water(4).



AGRICULTURAL



DOMESTIC



OCCUPATIONAL

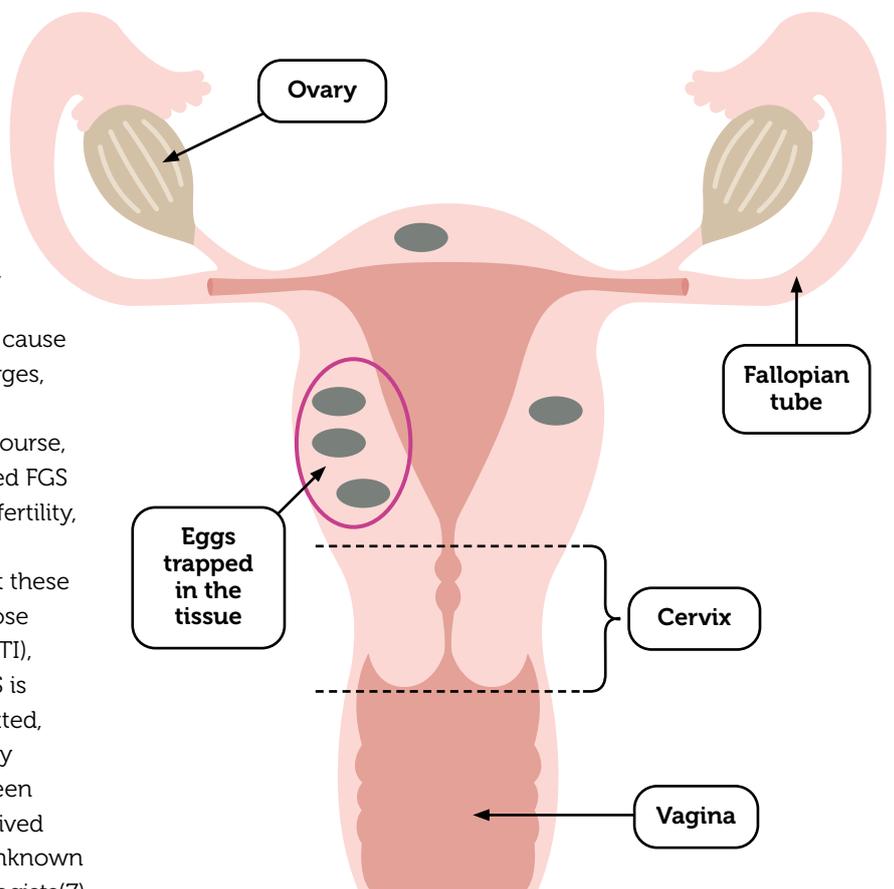


RECREATIONAL

The lack of basic safe water, sanitation and hygiene (WASH) in our communities is responsible for the continuous transmission of schistosomiasis. Also, many rural and semi-urban communities depend on rivers, stream, ponds, and pools for daily water need which is responsible for unavoidable contact with infected water(5). The development of water resources such as dams for fishing and irrigation schemes have spread the diseases to many communities. Lack of sanitation ensures that urine and excreta find their way to water sources during rains, thus transporting the parasite eggs to the freshwater system. Many of our freshwater systems are populated with snails that serve as the intermediate host for the development of the parasites.

WHAT IS FGS?

Female genital schistosomiasis (FGS) is an emerging public health problem for women living in endemic areas. It is a disease condition where eggs laid by the adult parasite migrate and become trapped in genital organs such as fallopian tube, ureter, cervix, and vagina(6). These result in immunological reactions which can cause vaginal itching, bleeding and discharges, vaginal ulcers, bleeding after sexual intercourse and painful sexual intercourse, and pelvic discomfort. If left untreated FGS can gradually cause infertility or subfertility, premature birth, low birth weight, anaemia, menstrual disorders. Whilst these symptoms may appear similar to those of Sexually Transmitted Infections (STI), it is important to remember that FGS is not an STI, and it cannot be transmitted, prevented or treated in the same way as an STI. In Nigeria, FGS has only been reported in Ogun State and has received little attention and is considerably unknown by the health workers and gynaecologists(7).



Picture of Female Genital System

IMPORTANCE OF PRIMARY HEALTH CARE

FGS remains highly prevalent and underdiagnosed due to the low level of suspicion among health care professionals. A high index of suspicion will allow a diagnosis of FGS pre-operatively and avoid unnecessary radical surgery and misdiagnosis of sexually transmitted infections(8).

The importance of Primary Health Care is to detect, treat and prevent FGS before it develops into irreversible gynaecological conditions. Therefore, early diagnosis and treatment at Primary Health Care level are very important for the reproductive health and wellbeing of women and girls living in schistosomiasis endemic areas.

PREVALENCE OF SCHISTOSOMIASIS BY LGAS IN OGUN STATE

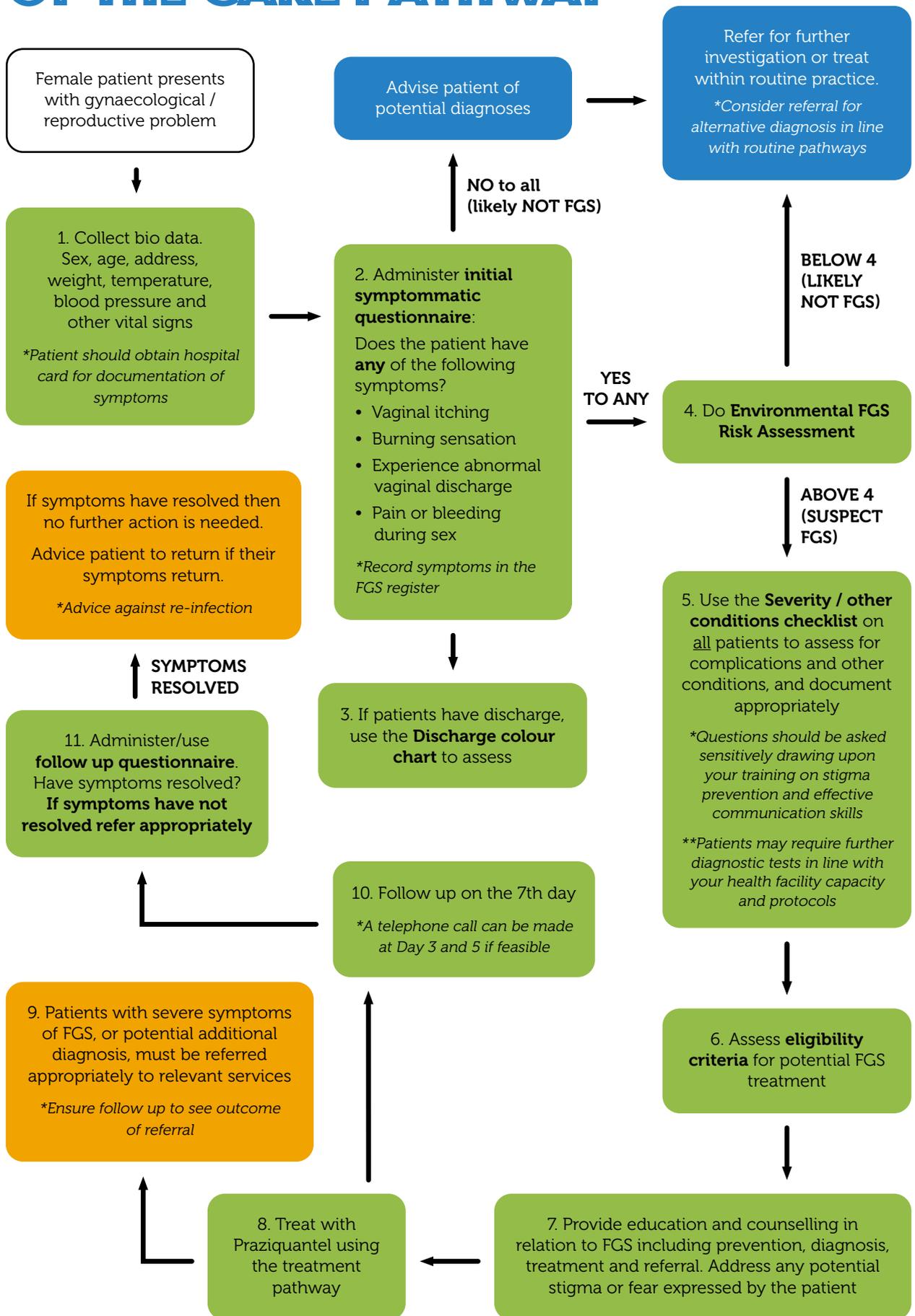
The following figures are provided by Ogun State Ministry of Health(9):

| S/N | LGA | PREVALENCE (%) |
|-----|---------------------------|----------------|
| 1 | Abeokuta North | 84 |
| 2 | Abeokuta South | 13 |
| 3 | Ado Odo Ota | 0 |
| 4 | Egbado North (Yewa North) | 60 |
| 5 | Egbado South (Yewa South) | 40 |
| 6 | Ewekoro | 32 |
| 7 | Ifo | 2.3 |
| 8 | Ijebu East | 40 |
| 9 | Ijebu North | 3 |
| 10 | Ijebu North East | 2 |
| 11 | Ijebu Ode | 4 |
| 12 | Ikenne | 32 |
| 13 | Imeko Afon | 18 |
| 14 | Ipokia | 6 |
| 15 | Obafemi Owode | 30 |
| 16 | Odeda | 67 |
| 17 | Odogbolu | 0 |
| 18 | Ogun Waterside | 44 |
| 19 | Remo North | 18 |
| 20 | Sagamu | 4 |

FGS STATUS IN OGUN STATE

- FGS remains highly prevalent and under-diagnosed in Ogun.
- Clinicians in Nigeria have not been aware of FGS until now.
- Women are likely to present with complaints of infertility or symptoms which may be misdiagnosed as a Sexually Transmitted Infection.
- A study found that up to 70% of women living in endemic areas of Ogun have FGS.
- It's time for action to ensure that schistosomiasis is eliminated in Ogun State.

OVERALL FLOW DIAGRAM OF THE CARE PATHWAY



Key: ● FGS pathway ● Other conditions pathway ● Potential outcomes for patients with FGS

DIAGNOSIS

In this section, you will learn about how to recognize the symptoms of FGS using a symptomatic questionnaire. The symptomatic questionnaire has been produced as other current tools for diagnosis are inadequate, or not available currently in primary care facilities (see appendix for tools available at secondary / tertiary care and some health facilities).

DIAGNOSTIC TOOL: SYMPTOMATIC QUESTIONNAIRE

In recognition of the limitations with current diagnostic tools, the symptomatic questionnaire and flow diagram has been developed. By the end of this section, you will be able to recognise the signs and symptoms of FGS and be able to use the tools provided (FGS diagnosis flow diagrams and symptomatic questionnaires) to support the diagnosis of 'suspected' FGS. This tool will also aid decision making about the severity of symptoms, the possibility of an alternative diagnosis, and the need for further investigation and referral.

STEP 1: COLLECT BIO-DATA

Ask the patient for their hospital card and record weight, vital signs including blood pressure and symptoms. Return card to the patient.



STEP 2: CHECK SYMPTOMS AND DOCUMENT

All women of reproductive age (15 years and above), who present with any gynaecological or reproductive complaint, should be asked if they have **any** of the symptoms below:

- **Vaginal discharge**
- **Bleeding after intercourse or spotting**
- **Pelvic pain (lower abdominal pain) or pain during or after intercourse (8)**
- **Bloody discharge**
- **Genital itching or burning sensation**

If any of these symptoms are present then the following symptomatic checklist should be used and documented in FGS register and hospital card, before proceeding to step 3.

To assess how severe discharge is, you may ask her how frequent it is and if she requires to use pads?

INITIAL SYMPTOM QUESTIONNAIRE

| QUESTION | CIRCLE THE RESPONSE | | | |
|---|---------------------|----------|--------------|--------------|
| Do you have genital itching or burning? | Yes | No | | |
| If yes, how severe is the itching / burning? | Mild | Moderate | Severe | |
| Do you have vaginal discharge? | Yes | No | | |
| If yes, how heavy is the discharge? | Mild | Moderate | Severe | |
| Do you have pain during sex? | N/A | Rarely | Occasionally | All the time |
| Do you have spotting / bleeding during / after sex? | N/A | Rarely | Occasionally | All the time |

■ Patients may need referral or further investigations.

If the woman / girl has severe symptoms, is distressed or you clinically suspect other conditions in addition to FGS, then the patient should be referred appropriately immediately for further investigation in line with your routine practice and should be advised about the reasons for her referral.

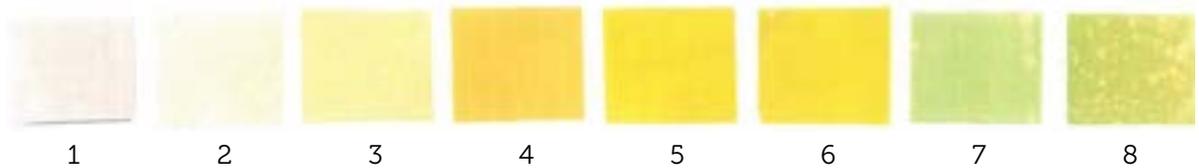


STEP 3: DISCHARGE COLOUR CHART

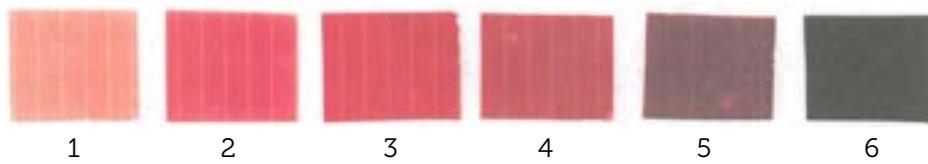
ADDITIONAL ACTION: If the woman / girl has reported discharge - show the **colour discharge chart**. Record the colour of discharge on referral form and consider if the woman / girl should have further investigations as routine practice and / or referred to secondary care if any of the above also present.

COLOUR DISCHARGE CHART

a) Discharge (normal / abnormal)



b) Discharge (traces of blood)



COLOUR CHART DESCRIPTION: The colour charts are in two categories: a and b.

The category "a" shows series of colour of vaginal discharge that ranges from normal discharge to discharge due to infection / abnormal discharge (colour 1-8). Colour 1 and 2 are normal if not accompanied by vaginal itching or odour. Colour 3 and above are abnormal and could indicate a potential gynaecological condition (such as infection / inflammation etc). Ranging from pap-like (bi eko) to cheese-like (bi wara) accompanied with itching, pains, and fishy smell. Further investigations may be needed.

The colours in category "b" are indicative of traces of blood which ranges from pink to black which can be normal during menstruation or mid cycle. Reddish to pinkish colour suggests fresh bloody discharge from the lower genital area while blackish discharge suggests stale or bloody discharge from the upper genital area.

STEP 4: ENVIRONMENTAL RISK ASSESSMENT

If any of the symptoms are present, conduct a Risk Assessment.

The scoring system (1-10): **Above 4 high risk, below 4 low risk.**

If the woman or girl scores 4 and above in the risk assessment, plus has any of the conditions in step 1, the woman or girl has suspected FGS and will proceed to the treatment algorithm / guideline to see if she is eligible for treatment.

| FGS RISK ASSESSMENT QUESTIONS | YES | NOT SURE | NO |
|--|-----|----------|----|
| <p>Have you had direct (active) or indirect (passive) contact with river / stream water now or in the past?</p> <p><input type="checkbox"/> Fishing</p> <p><input type="checkbox"/> Washing cloth</p> <p><input type="checkbox"/> Bathing*</p> <p><input type="checkbox"/> Walking through / crossing</p> <p><input type="checkbox"/> Swimming</p> <p><input type="checkbox"/> Defecating</p> | 4 | 2 | 0 |
| Have you had painful urination or bloody / cloudy urine in the past? | 2 | 1 | 0 |
| Is there anybody in the family or anyone you lived with that has history of blood in urine or reported cloudy urine? | 2 | 1 | 0 |
| Is there anybody in the community suffering from this? | 2 | 1 | 0 |

NB: The most important question is contact with water.

*Active contact is having direct contact with stream / river water while passive contact is having contact with water fetched from the stream / river by someone else but not direct contact with stream / river water.

Bathing can be using the water which has been collected from the infected river / stream / water source.

If the person is not sure for all the questions, make further discussion to gain clarity. Discuss with your supervisor if you are unsure whether she should be treated or not.

STEP 5: SEVERITY OR OTHER CONDITIONS CHECKLIST

The woman or girl must be asked a series of questions, which will help you decide if the patient needs to be referred for further investigation. You may decide to refer if she has severe symptoms or complications of FGS, or because she may have another condition as well as suspected FGS.

Go through the following questions on the '**Severity or other conditions checklist**', and if she answers yes to any, document this and then refer her appropriately. Consider if any further tests should be done in line with your health facility capacity and protocols.

See step 9 for further guidance on referral.

If in the **initial symptom questionnaire**, she answered that any of her symptoms were severe or if she had multiple symptoms which were either moderate or severe, then she may need further investigation. If one of these symptoms is abnormal discharge, then present the colour discharge chart, and ask what colour her discharge is. This should be documented on any referral forms for further investigations.



If you are unsure if the patient should be referred, then please discuss with your supervisor.

SEVERITY OR OTHER CONDITIONS CHECKLIST

Complicated symptoms associated with FGS or other potential conditions that should be referred to a secondary / tertiary health care facility. Ask the following questions with all women presenting with initial symptoms. If yes to any of Q1-8 then record and refer to secondary care for further investigations. Make sure you counsel the women on the need for referral.

1. Do you involuntarily pass urine? (Passing urine when you do not intend to?)
E.g. when laughing, coughing, or carrying any heavy object? If yes, ask and document when it occurs (is it all the time or during coughing, laughing, or carrying heavy objects?)
2. Do you find it difficult to get pregnant?
3. Any previous pregnancy loss?
4. Do you have any sores or ulcers in your genitals?
5. Do the ulcers bleed?
6. Do you have any genital swelling?
7. Using the symptomatic questionnaire, does the girl / woman score 'Moderate' or 'Severe' symptoms on multiple symptoms or 'severe' on one symptom?

If it is within your scope of practice, and the health facility has adequate facilities and resources, consider vaginal examination or other investigations.

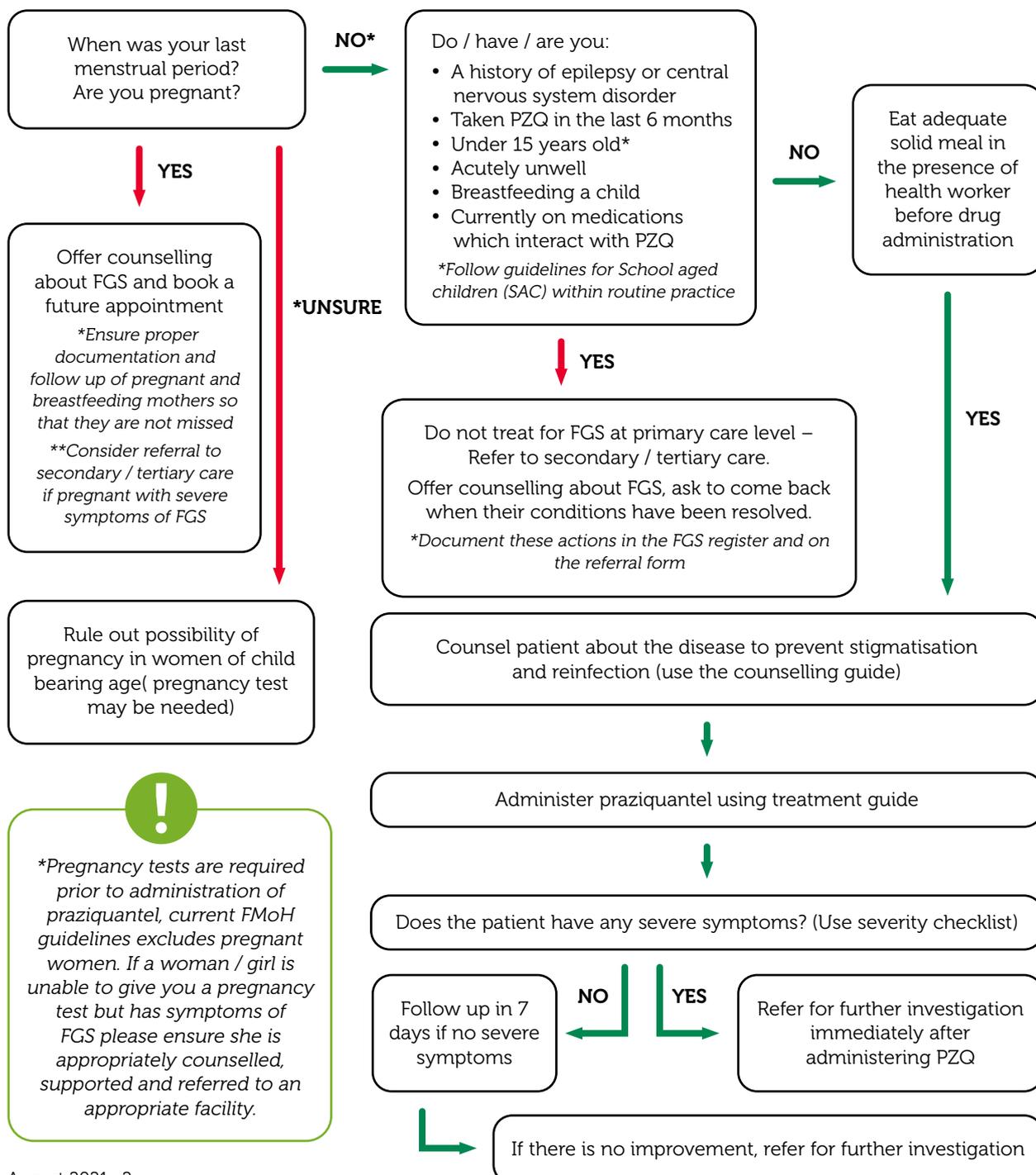
TREATMENT AND MANAGEMENT OF FGS

In this section, you will learn what is the current treatment for FGS, how it should be given, who is eligible for treatment, and what are the potential side effects.

Schistosomiasis is a curable parasitic infection that, if left untreated, can persist for 30 years even though the parasite cannot reproduce in its human host(10).

Praziquantel is the treatment of choice to use. It kills the adult worms and provides relief or improvement from symptoms. Whilst a few studies have reported that praziquantel has no effect on established grainy lesions, or damage already caused, it eliminates the adult worms which prevents further egg deposition in the tissues and thus the development of new lesions. Early treatment, especially in childhood, is the most effective intervention to prevent the occurrence and development of complications associated with urogenital schistosomiasis.

TREATMENT PATHWAY FOR PATIENT AT RISK OF FGS



ELIGIBILITY FOR TREATMENT:

STEP 6: CHECK ELIGIBILITY FOR TREATMENT

If the woman or girl has suspected FGS, then the following inclusion and exclusion criteria should be checked. Inclusion and exclusion criteria have been adapted from FMOH guidelines (11, 12).

FGS INCLUSION CRITERIA FOR PRAZIQUANTEL TREATMENT

- Girls / women from 15 years and above with a gynaecological / urinary / lower abdominal complaint.
- Girls / women with a suspected diagnosis of Female genital schistosomiasis.
- Girls / women from schistosomiasis endemic community.

FGS EXCLUSION CRITERIA FOR PRAZIQUANTEL TREATMENT

- Girls / women who are pregnant (you can offer a pregnancy test on all girls / women to clarify pregnancy status).
- Girls / women who have been treated with praziquantel during the last 6 months.
- Girls / women with central nervous system disorders, epilepsy, or Sickle Cell Anaemia.
- Children younger than 15 years will be treated in accordance with routine health facility protocols and procedures.
- Girls / women not consenting to the treatment.
- Girls / women on any other medication that interfere with PZQ. See examples on page 39.
- Girls / women acutely unwell. Girls / women who are ill on the treatment day can be treated at a later date.
- Girls / women currently breastfeeding a child.

If the woman or girl is excluded from treatment with Praziquantel for one of the reasons stated above, then the woman or girl must be counselled and referred for further investigation by an appropriate health professional. Please remember to document the reason why the woman / girl did not receive Praziquantel.



Women / girls who are pregnant or breastfeeding are currently excluded from PZQ in line with national policy. Please support them to follow up with the health facility when they are no longer breast feeding. Other treatment in line with routine local maternal health policy can be given to support symptom reduction.



Proper documentation of pregnant and breastfeeding mothers for follow up on would be made using forms provided.



Ensure that any patient who has been excluded from treatment is documented, and follow up or refer as appropriate.



STEP 7: EDUCATION AND COUNSELLING

Adequately educate and counsel the woman / girl throughout the whole process of diagnosis, treatment, follow up and referral. **See the health education and counselling and stigma section below for further information.**



Before praziquantel is administered, please counsel the woman or girl about the need for treatment and any potential side effects. You can **see the Counselling section for more guidance** on this aspect.

If the woman or girl is eligible for treatment, then she must consume a meal or adequate food in the presence of the health worker before Praziquantel administration. This is because evidence has demonstrated that there are less significant side effects if the medication is taken with food.

STEP 8: HOW TO ADMINISTER TREATMENT

Materials needed: Taken and adapted from FMOH guidance(12)



Standard Treatment Register and writing tools



Water for drinking and cups



Handwashing station with soap



Praziquantel 600 mg tablets



Standard dose pole

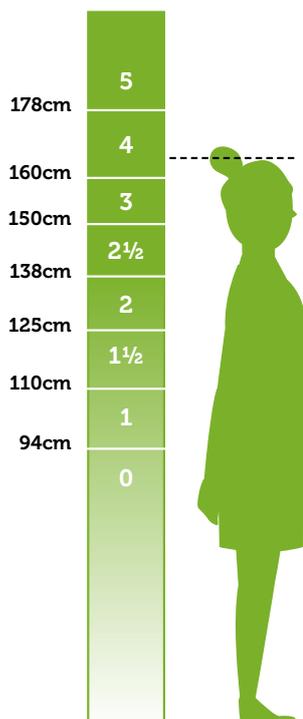


Ensure the client to be treated praziquanteleats a solid meal prior to treatment in the presence of Health Worker

1. Facilitate handwashing with soap before treatment
2. Register girls / women (name and age) and before treatment, ask individuals the following questions:

| QUESTIONS TO ASK THE PATIENT | ACTIONS FOR HEALTH WORKER TO TAKE |
|---|---|
| Have you eaten today? | Ask the patient to get a meal and eat it in front of a health worker before medication is given. Women / girls who have recently consumed alcohol (on same day) should not receive treatment at the same time and should be asked to return for treatment when they have not consumed alcohol the following day. This should be communicated sensitively. |
| Are you currently sick? | If the answer is YES then stop and do not treat. Ask the patient to return when they are well to take the treatment. |
| Are you currently on medications? | Look at the list of contradictive medicines in the annex and if the patient is taking any, provide the patient with counselling and refer to the next level of care for treatment. If patient is due to complete medication soon then advise them to come back to you when their treatment is completed. |
| Do you have history of seizures? | If the answer is YES then stop and do not treat. Refer the patient appropriately for secondary / tertiary care. |
| Are you pregnant? When was your last period? | If the patient is pregnant then stop and do not treat. Make an appointment for the patient to return once they have had the baby (or refer to secondary / tertiary care if they have severe symptoms). A pregnancy test can be offered during counselling and before treatment. |

3. Measure the height of the girl / woman against dose pole to determine the number of tablets of Praziquantel to administer.



DOSE POLE: The pole must be propped vertically against a wall, and each individual is classified, according to her height (40mg/kg), in one of the seven intervals corresponding to the number of praziquantel tablets(13).

Please ensure weighing scales are used instead of dose pole if the woman / girl has short stature / dwarfism, or has mobility issues and cannot stand.

Shoes should be removed to measure height.

4. Give each girl / woman the appropriate number of Praziquantel tablets to swallow with water. They should not chew. Praziquantel is bitter.
5. Ask the girl / woman to open their mouth to confirm that they have swallowed the tablet.
6. If the person is having trouble swallowing the Praziquantel tablets, break the tablet in half or quarters and provide more water to ease swallowing. **DO NOT FORCE** a person to swallow any of the medicines as this may cause choking.
7. Fully record the treatment of a girl / woman on the FGS treatment register.
8. Keep girls / women nearby for 1 hour after treatment for observation and proper management of any side effects.
9. You may wish to consider other treatments in addition to treat symptoms such as pain and itching (with analgesia, topical creams, lubricants and others that are available to your knowledge) in accordance with your local protocols.



MONITORING FOR SIDE EFFECTS OF PRAZIOUANTEL

When the patient is given praziquantel, it is advisable that the patient should sit at the health centre for observation to monitor for any of the side effects (see below) for a minimum of 1 hour. If the patient does not manifest any of the signs stated below after 1 hour then release her but if she experiences any of the following, treat in accordance with table shown below and local protocol / guidelines. Any side effects which you are unable to manage seek help immediately or refer the patient appropriately.

Adverse reactions that may occur when a person takes Praziquantel tablets may include mild headache, fever, body aches, dizziness, decreased appetite, malaise, nausea, and vomiting. However, these reactions are rarely experienced, provided medicines are taken after a meal.

Any person who experiences any of the above adverse reactions after taking the medicines should go to the **appropriate health facility**(11).



If patient has mild side effects during the observation time, such as dizziness which resolve, please check vital signs before releasing the patient to go home.

FMOH TABLE OF REACTIONS AND ACTIONS

| SIDE EFFECTS OR REACTIONS | MANAGEMENT |
|---|--|
| <p>Abdominal pain, nausea, vomiting, diarrhoea, and / or malaise.</p> <p>(MINOR, unless they persist longer than 2 hours)</p> | <ul style="list-style-type: none"> Put patient at rest, protected from excessive temperature, noise and light, and provide drinking water. Use traditional remedies to manage nausea and vomiting (i.e., sour fruit juices). Watch for signs of dehydration. If these side effects last longer than 2 hours, refer the patient to the appropriate health facility or hospital. |
| <p>Dizziness, rashes, fever, itching, and / or wheezing.</p> <p>(MINOR, unless they persist longer than 2 hours)</p> | <ul style="list-style-type: none"> Check airway, make sure person is not choking. Give painkillers such as paracetamol tablets according to recommended doses. If these side effects last longer than 2 hours, refer the patient to the appropriate health facility or hospital. |
| <p>Persistent malaise or long-lasting symptoms (more than 2 hours), seizure, shock, unconsciousness, very sick individual.</p> | <ul style="list-style-type: none"> Immediately refer to the appropriate health facility or hospital. |

The above information has been taken from FMOH guidance(12).

Severe adverse events (SAEs) are out of the ordinary and are not expected to be seen during Praziquantel administration and require immediate referral to an appropriate health facility or hospital for management. These include; persistent malaise or long-lasting symptoms (more than 2 hours), seizure, shock, unconsciousness, very sick individual.

In the event of a SAE, remember to ensure that the SAE experience report is filled, appropriately endorsed and submitted to the Head of NTD division FMOH or the WHO NTD Desk Manager, as indicated at the bottom of the SAE form through the reverse cascade of reporting(12).



STEP 9: REFERRAL PATHWAY

WHO TO REFER?

- ✓ Women / girls with multiple severe symptoms.
- ✓ Women / girls with complicated cases of FGS (such as genital lesions / ulcers / sub fertility etc).
- ✓ Women / girls experiencing gender-based violence or psychological distress.
- ✓ Women or girls with symptoms of FGS but excluded from treatment due to contraindicated medications or health conditions.
- ✓ Women or girls with symptoms of FGS who decline praziquantel or are unable to consent to treatment at primary health care.
- ✓ Women or girls whose symptoms have not resolved at 7 days follow up.

HOW TO DOCUMENT?

The referral is a two-way referral. A referral form will be retained at the health facility and the other sent with the patient to the referral centre.



WHERE TO REFER?

The referral facility for FGS cases is the Federal Medical Centre, Abeokuta, while patients identified with other conditions are to be referred along routine referral pathways.

Patients should be referred for laboratory diagnosis as appropriate if the health workers deem it necessary.

WHO TO CONTACT?

The health worker referring a patient should contact the referral facility ahead to book an appointment with the FGS focal physician at the referral centre. The Community Medicine and Primary Care (CMPC) department of Federal Medical Centre Abeokuta has been identified as the referral entry point for FGS related cases and from where they will go to the gynaecological clinic to see the gynaecologists.

REFERRAL PATHWAY



FOLLOW UP

STEP 10: HEALTH FACILITY FOLLOW UP

If the woman or girl does not have additional symptoms which need a referral, then make an appointment with her to come back to the health facility in 7 days for follow up. Follow up calls on day 3 and 5 are not compulsory, the recommended follow up is on the 7th day, however patients should be encouraged to come back to the health facility or contact the health worker if she has deteriorating symptoms before the 7th day follow up appointment. Advise the woman or girl about the importance of the follow up appointment.

When the woman or girl comes back for follow up with you, ask about any improvement in symptoms. You can use the following follow up questionnaire to guide you.

FOLLOW UP QUESTIONNAIRE

| QUESTION | CIRCLE THE RESPONSE | | |
|---|---------------------|----------|--------|
| Do you still have genital itching or burning? | Yes | No | N/a |
| If yes, how severe is the itching / burning? | Mild | Moderate | Severe |
| Has this reduced since taking PZQ? | Yes | No | |
| Do you still have vaginal discharge? | Yes | No | N/a |
| If yes, how heavy is the discharge? | Mild | Moderate | Severe |
| Has this reduced since taking PZQ? | Yes | No | |
| Do you still have pain during sex? | N/A | Yes | No |
| Do you still have spotting / bleeding during / after sex? | N/A | Yes | No |

If any answers are **RED** please consider if further investigations/tests for other conditions are needed, or if the woman/girl should be referred immediately for further care of FGS or other conditions.



STEP 11: REFERRAL AT FOLLOW UP

If symptoms have not improved, then refer her for further investigation. Document that she has received Praziquantel with no improvement in her referral form.

If she has improved and symptoms resolved, then no further action is needed. Advise her to return if symptoms come back and to take precautions against re-infection (see section on the next page).

HEALTH EDUCATION AND COUNSELLING

Several reasons explain why stigma is such an important consideration for social and health policy and clinical practice. The emotional impact of social stigma adds to the burden of any illness in various ways, and as noted already, stigma may delay appropriate help-seeking or impact on treatment. For diseases and disorders that are highly stigmatized, the impact of the meaning of the disease may be as great or a greater source of suffering than symptoms of the disease. Make sure that you provide a comfortable and private place to provide treatment and counselling. Counselling for all women / girls must be carried out in an appropriate space to protect confidentiality. For girls 15-17 years who attend with parents / guardian, please ensure that you speak to the girl without the presence of the parent / guardian to protect their confidentiality.

Counselling should address issues including:

- Importance of each step along with the guidelines.
- Address stigmatization.
- Preventive measures against re-infection.
- Remove fear from the patients.
- Confidentiality of the process.
- Symptoms regression.

KEY QUESTIONS AND ANSWERS FOR COUNSELLING

COUNSELLING FOR DIAGNOSIS:

What are the potential patient concerns around diagnosis?

Reassure the patient about the outcome of the diagnosis that whichever way, she can be treated, let her know it cannot be transmitted sexually to her partner. If an examination is required, though the gynaecological examination could be invasive, reassure her that it will be conducted by a trained health worker, in an appropriate environment and this will be confidential to her and her health care team.

What information will be given to the girls / women about the diagnosis?

Tell them about the disease and the common signs and symptoms of FGS, how to differentiate FGS from other diseases like STI. The process of the diagnosis should be explained in detail to the patient and should allay her fear.

COUNSELLING ABOUT TREATMENT:

What are the potential patient concerns around treatment?

Reassure her about treatment and counsel against re-infection.

What information will be given to the girl / woman about the treatment?

Let her know about the potential side effects and the need for follow up and prevention, as well as the importance of eating before treatment to minimise side effects. Tell her about the dosage, it is single dose and can only be repeated after 6 months. Tell her that symptoms may not cease at once, it will be gradual. If other medications are given for symptoms in line with routine practice, be sure to provide information about these additional treatments too.

COUNSELLING FOR CLINICAL SYMPTOMS:

| S/N | SYMPTOMS | COUNSELLING |
|-----|---|---|
| 1 | Vaginal discharge | <ul style="list-style-type: none"> • Personal hygiene • Cleaning vulva with water after passing urine • Wearing cotton and dry underwear • Menstrual hygiene • Changing and washing sanitary wears regularly and sun-drying them |
| 2 | Bleeding during, after intercourse or spotting | <ul style="list-style-type: none"> • Adequate foreplay to release natural lubricants • Lubricants |
| 3 | Genital itching / burning sensation | <ul style="list-style-type: none"> • Personal hygiene • Cleaning vulva with water after passing urine • Wearing cotton and dry underwear • Menstrual hygiene • Changing and washing sanitary wears regularly and sun-drying them |
| 4 | <p>Complication manifestations Pregnant women should be counselled to return to the health facility after delivery and could be given medications (in line with routine practice) like, analgesic, etc to relief her of the symptoms before then.</p> | <ul style="list-style-type: none"> • Counsel to allay fear and reassurance |

COUNSELLING ABOUT REFERRAL:

What information will be given to the girl / woman around referral?

The patient should be advised about the reason for referral and her confidence must be gained, let her know the implication of not going to the referred health facility. Be clear about the referral services needed by the patient, referral could be for diagnosis, treatment, and further care.

What are the potential concerns around referral?

Concerns may include cost of diagnosis, treatment, and transportation. She may also express her concern about stigmatization at the referral centre. You should discuss these concerns with her and offer advice where possible. The referral centre should be close to the patient's community.

COUNSELLING ABOUT FOLLOW UP:

What information will be given to the girl / woman about follow up?

Explain the importance of follow up and that she should come back to the health facility after a week. Explain the importance of minimising risk to re-infection, where possible.

ASSESSING THE GIRL / WOMAN'S COMPREHENSION OF THE COUNSELLING GIVEN:

How will the girl / woman's comprehension of the information be assessed?

Ask the patient questions throughout counselling to check she understands.

REASSURANCE ABOUT CONFIDENTIALITY:

How will confidentiality be maintained?

Assure the patient that data will be kept confidential and stored properly in such a way that it is not accessible to the public.

COUNSELLING CHECKLIST TO PREVENT RE-INFECTION:

- The patient must be able to identify how she got infected
- The patient should be informed of the knowledge of transmission
- Avoid exposure to the source of infection (water body contact) where possible
- Reduce water body contact to the barest minimum
- Identify alternative water supply
- For fishing, wear protective coverings, clothes, and shoes (knee-length boots and raincoat)
- Personal hygiene
- Proper sanitary disposal
- Taking PZQ annually during MDA or to return to the clinic if symptoms return (PZQ should be taken yearly - minimum 6 months between doses)
- Ensure follow up
- Health education
- Early diagnosis and prompt treatment

KEY VERBAL / COMMUNICATION SKILLS

Communicate in a local language which is understandable to your patient. Use the pictures / posters provided to help you explain complex information. Communication skills needed for diagnosis, treatment, counselling, and referral include; non-judgemental, non-stigmatising, respectful, promotes dignity, builds trust, gains consent for procedures, medications etc. Since health educators are not usually present in all health facilities, every health worker should demonstrate all the skills listed above. Counselling should be done with empathy.

Below is a list of communication skills to help you carry out this task effectively:

- ✓ Be friendly - People who communicate with a friendly tone and warm smile almost always have a better response
- ✓ Think before you speak
- ✓ Be clear - use the clearest way to communicate
- ✓ Do not talk too much, be empathic
- ✓ Be your authentic self
- ✓ Practice humility - having a modest view of one's importance
- ✓ Speak with confidence: Self-assurance
- ✓ Keep focused and watch your body language
- ✓ Learn the art of listening
- ✓ Keep an open mind and avoid inducing judgement about the event.
- ✓ Avoid distraction.

KEY NON-VERBAL / COMMUNICATION SKILLS:

- ✓ Gestures
- ✓ Facial expression
- ✓ Tone of voice
- ✓ Eye contact
- ✓ Body language
- ✓ Touch
- ✓ Other ways health workers can communicate without using language.

STIGMA MANAGEMENT AND PSYCHOSOCIAL SUPPORT

WHAT IS STIGMA?

- A negative response to our differences
- They can be obvious, for example name calling or making someone sit somewhere else because of who they are.

OR

- They may be well meaning intentions but where we haven't thought through the potential negative impacts of our responses. For example, asking them why they look like that or why they don't have children.
- When we do these things because someone has a health condition, like FGS, we call it 'health related stigma'.

TYPES OF STIGMA INCLUDE:

- ✓ **'Experience' stigma:** someone is treated differently because of their health condition e.g. Loses their job.
- ✓ **'Anticipated' stigma:** when someone is scared that people will treat them differently because of their health condition.
- ✓ **'Internalised' stigma:** when someone holds a negative belief about a health condition and, if diagnosed with it they then apply these feelings to themselves.

WHAT CAUSES STIGMA?

- ✓ A social process that leads to a group being labelled or thought of as 'different' and can lead to social isolation or rejection. Society sees people as inferior based on their differences.
- ✓ We may stigmatise because of fear, unease, associations, values and beliefs, policies or legislation or use of inappropriate pictures of language or comments from health workers.



The content of this training has been adapted from the International Federation of Anti-Leprosy Associations (ILEP) / Neglected Tropical Disease NGO Network (NNN) Guides on Stigma and Mental Wellbeing to be relevant to FGS. The full guides are available here:
<https://www.infontd.org/toolkits/stigma-guides/stigmaguides>

WHY IS DIAGNOSTIC COMMUNICATION IMPORTANT?

The way diagnosis is communicated to people is really important. Prior to diagnosis, people may not feel they are particularly 'affected' by something. They may notice change in their body or experience pain, they may have even started to worry or become anxious but often they will not realise how they are impacted until they are told what is wrong.

Communicating what we think is affecting someone in a careful and constructive way becomes critical in shaping how they manage the news.

THE GOLDEN HOUR

- This is the time when someone receives their diagnosis or understands what may be causing them pain or discomfort. Often, they will want to be 'cured' straight away.
- FGS (and its symptoms) may be stigmatised, so receiving such a diagnosis could be thought of as bad news.
- A feeling of 'bad news' may be particularly the case for women and girls who have been diagnosed and or referred multiple times for treatment but who are still experiencing discomfort and pain or who are struggling to conceive.
- Some women and girls may reject or believe the diagnosis is wrong or they may isolate themselves, run away, or seem in a state of despair.

This '**golden hour**' then becomes very important- it is your opportunity to support the patient through a sense of anticipated loss- how much they feel this loss will depend on how they are treated during this '**golden hour**'.

The moment of first diagnosis is really important, but remember for FGS, women and girls may have received this diagnosis before, or have sought care and support several times - and stigmatisation may develop through time.

SHARING THE DIAGNOSIS

It is very important to keep an open door of communication for the patient and family member to come back as needed, but you should make every effort to provide all the key information at the golden hour because there might not be a second chance to do it. Think about the following things:

COMMUNICATING:

The way you communicate the diagnosis is very important:

- Listen to the patient's distress and address her questions with warmth and empathy that you feel is appropriate.
- Some topics must be addressed immediately:
 - **Transmissibility:** FGS is not transmitted from person to person - it is transmitted through bathing, washing, swimming in contaminated water.
 - **Progress of symptoms and the treatment regime:**
 - If you take praziquantel each time it is offered in your community symptoms of FGS may never appear.
 - If treated early with praziquantel lesions associated with FGS are curable
- Taking praziquantel right away instead of a few days or months later is extremely important to alleviate the fears in the mind of the patient. This is the case even where you think you need to refer the patient for follow up support.

When you explain the diagnosis to the person, keep the following in mind:

- Take the time the person needs. Do not rush this stage.
- Find out what the person already knows and suspects.
- Assess the gap between the person's knowledge and reality.
- Provide just the necessary information.
- Allow the person to absorb the information.
- Encourage the person to express their feelings.
- Clarify doubts, misconceptions and fears.
- Briefly state the treatment plan in simple language, using the patient treatment card provide (see Annex 6).
- Assure the person that you are available for further clarification.



DISCLOSING:

The person affected must be given freedom to decide if they want to disclose their condition to others. Their decision must be respected. To come to this decision, they should be encouraged to talk about their fears of disclosure.

Useful questions to ask include:

- Have you talked about your disease to anyone?
- Would you like any of your family or friends to know about your disease?
- If so, to whom do you want to disclose it?
- Would you want me to talk to them about it in your presence?
- What and how much would you want me to disclose?
- If you do not wish to disclose, do you want to discuss any issues related to keeping it secret?

When the person is ready to disclose their condition, you should:

- Offer help and assurance to talk to family members. Ask the person affected if they prefer to be alone or with a family member when the diagnosis is discussed.
- Sometimes in-laws, husbands or sexual partners, may force themselves to be present in the room, it can help to tell them that it is policy to talk to the affected person alone. If it is not appropriate for a male health worker to be left alone with a female patient, you may need to source a female health worker or ask for a chaperone.
- Avoid unnecessary and involuntary disclosure. Do not conduct home visits without the patient's prior informed consent.
- The connection to the disease name should be carefully thought out in order to avoid involuntary disclosure or linkage of the disease to the patient and the family. With FGS, it is particularly important that the distinction is made from FGM - you might want to think about the best way to describe each of these conditions in your community so the explanation is very different.

**COMMUNICATION WITH HOUSEHOLD MEMBERS:**

Even if the individual allows you to disclose to those who are living in the same household, you should be cautious in what to tell family members. For example, in some situations if the individual fears that someone may react negatively it may be better to talk about the disease in more general terms and not mention its name, at least in the initial stages.

**MANAGING PATIENT REACTIONS**

You need to be prepared as a health worker to manage the different emotions that someone may express when you share a new disease diagnosis with them. In managing and supporting emotional interactions, you should ensure that you:

- Acknowledge and accept the reactions of the person, however strong they may be. For example, you might reply, 'I can see that you are upset'.
- Encourage expression of feelings. If people are crying or are angry, convey to them that they can feel free to express themselves and that they have reasons to feel the way they feel. Assure them of your understanding presence.
- After they settle down, help explore the reasons for their feelings, for example by asking questions such as 'What makes you feel this way?' and 'What is upsetting you?'
- Encourage the person to discuss the situation in detail.
- Help the person to explore options to manage the situation.

The golden hour is crucial in the course of the treatment as a key moment to promote adherence to treatment, promote contact examination, and prevent mental health problems.

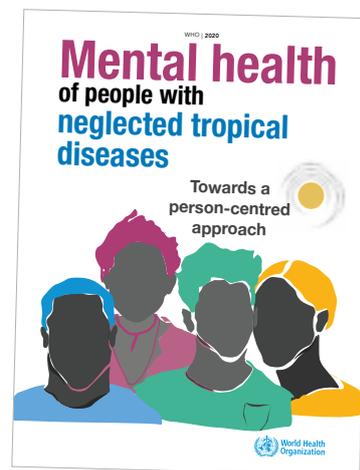
WHAT IS PSYCHOLOGICAL DISTRESS?

This is shaped by the worry, fear, sadness and insecurity often experienced by people with FGS as a result of the associated stigma. This can lead to reduced social functioning and isolation.

Without acknowledgement and support, psychological distress associated with NTDs may lead to the development of mental health conditions, for example, depression or anxiety. Mental health conditions are characterised by changes in thoughts, perceptions, emotions and behaviours that affect relationships and ability to perform social roles.



For more information, you could look at WHO's guidance document: Mental Health and Neglected Tropical Disease available here: <https://www.who.int/publications/i/item/9789240004528>



WHY IS IT IMPORTANT?

People with FGS are at risk of developing mental health conditions; and people with mental health conditions are at risk of FGS. This is because many of the social factors that shape vulnerability are the same. These include:

- **Poor access to healthcare**
- **Poverty**
- **Poor employment or loss of earnings**
- **Discomfort**
- **Unstable livelihoods**

Stigma reinforces the relationship between FGS and mental health conditions and we therefore need to address stigma and provide psychosocial support where necessary to ensure that our health services respond to people's needs.

PROVIDING PSYCHOSOCIAL SUPPORT

Psychosocial support, sometimes referred to as counselling is a supportive relationship that involves working with a person to address the feelings (emotions), thoughts and beliefs, behaviours and relationships that are associated with the diagnosis.

Providing this support relies on key skills, particularly those related to listening. These are similar to those you need when communicating the diagnosis, but you now need to be much more responsive to what the patient is telling you. These skills are essential throughout your whole consultation. To be an initial psychological support, good listening requires use of your heart, mind, eyes and ears.

THE HEART AND MIND:

Your attitude is important. Respect, empathy, acceptance and genuine listening are the beginning of the journey toward good health and wellbeing. Try to see potential, create value and give hope to the patient. You can create a supportive environment by:

- **Providing a warm greeting**
- **Organising respectful seating arrangements: try to ensure a confidential space, be focused and minimise interruptions, make the person feel valued.**



THE EARS:

Pay close attention to the words people use. Listen to indications for feelings and emotions. Emotions may be expressed physically through tears or anger. Try to listen to what they think about themselves.



REPORTING AND DOCUMENTATION

WHAT DATA TO COLLECT ON FGS?

- The woman's / girl's details should be captured in OPD on first visit but subsequently captured in FGS register
- Patient bio-data: This includes name, age, sex, vital signs (BP, temp, pulse) and address
- History: This includes information about their contact with water bodies and symptoms, and health history
- Complaint at first contact
- Treatment and management that has been conducted
- The counselling provided
- What referral was done and why
- Verbal informed consent to treatment



HOW TO COLLECT THE DATA?

(Aside from the ones currently in use at the Health Facility, some other tools will be provided for data collection)

- Outpatients register
- Referral forms
- Hospital card / Appointment card
- FGS register
- FGS monthly reporting form



WHY IS DATA COLLECTION IMPORTANT?

Data collection is important because:

- ✓ It helps to identify problems of the patient
- ✓ It helps to solve the identified problem
- ✓ It helps to provide evidence for decision and policy making



YOUR RESPONSIBILITY IN DATA COLLECTION

- ✓ Ensure you record data accurately
- ✓ You examine your data



Data, recommendations, documented practices, and challenges are important as they will be used to ensure the quality of the care package. This documentation will help improve the quality of this service for women and girls, and the care which can be provided to them with FGS.

SUPERVISION AND MONITORING

Monitoring refers to the process of continuous observation and collection of data on the Schistosomiasis programme to ensure that the programme is progressing as planned while evaluation, on the other hand, is the systematic and critical analysis of the adequacy, efficiency and effectiveness of the programme, its strategies as well as achievements. Monitoring and evaluation are only possible through the periodic collection and analysis of data to measure changes that occur during programme implementation.

PROCESS MONITORING

Process monitoring tracks programme activities to make sure they are being done according to plans. It measures programme inputs, processes, and immediate outputs. Process monitoring identifies challenges in the implementation process. Subsequently, process monitoring data is used to make desired changes to programme implementation before the next round of Intervention or, in some instances, during the current Intervention roll out being monitored. It is useful for overall quality improvement within deworming programme components (i.e. drug management, training cascade, MAM, etc.)

TYPES OF SUPERVISION TO BE ADOPTED:

A. SUPPORTIVE SUPERVISION (IN PERSON AND THROUGH WHATSAPP):

Supportive supervision is the process of directing and supporting programme implementers (at all levels) so that they may effectively perform their duties. It is also a process of guiding, helping and encouraging staff to improve their performance so that they meet the defined standards of the tasks.

The supervisors or programme focal points at each administrative level are the ones responsible to conduct supportive supervision at lower levels during this Intervention.

B. SUPERVISORY VISITS:

Supervision visits by the state and LGA will take place regularly.

C. MONTHLY REPORTING FORM ON FGS:

A monthly reporting tool developed by will be used to capture information about services provided for women and young girls with FGS related symptoms seeking care at the health facility or during an outreach. Each health facility is to send their monthly reporting form to the State through the LGA, the LNTD at the LGA will be responsible for collecting the FGS monthly reporting form from the health facilities implementing FGS services at an agreed date (e.g. 3rd Friday of the month) every month. Information gathered from the monthly reporting tool will help in monitoring FGS services at each of the health facility. See annex for a sample of the monthly reporting form.

FGS MONTHLY REPORTING FORM

1. Year: 2. Month of the year: 3. Name of health facility:

4. LGA: 5. State:

6. Number of health workers trained on FGS case management:

7. Number of persons with FGS related symptoms that presented at the health facility:

8. Number of persons diagnosed as FGS cases:

9. Number of persons screened for FGS but referred for other condition(s):

10. Total number of persons treated: 11. Total number of drugs used:

12. Number of persons treated within age range:
 5-14 years 15-17 years 18 years and above

13. Number of persons excluded from praziquantel treatment:
 Underaged Pregnancy Breastfeeding
 On other medications Other reasons

14. Number of persons followed up after treatment:

15. Number of persons whose symptoms has resolved at follow up visit:

16. How many persons expressed side effect after taken praziquantel?:

17. Number of SAE forms completed?:

18. Number of persons treated and referred for: FGS Other conditions

DRUG STOCK

19. What is the estimated quantity of Praziquantel left in your store?
 Opening stock balance Number received Number used
 Number Loss Closing stock balance

20. What is the expiry date of the praziquantel with you?:

PREGNANCY STRIP TEST STOCK

21. What is the estimated quantity of pregnancy test strip left in your store?:

Health facility officer submitting report: Name: Signature:
 Date: Phone no.:

LNTD officer submitting the report: Name: Signature and date:

FGS focal person at the State: Name: Signature and date:

FGS MANAGEMENT SUPERVISION CHECKLIST

HEALTH FACILITY CHECKLIST:

1. Local Government Area:
2. Name of Health Facility visited:
3. Date of visitation:
4. Has the Health Worker been trained to diagnose and treat FGS at PHC level? Yes No
5. Has any FGS management been done in the Health Facility? Yes No
- 5.a. If yes, how many cases have you verified?

NB: The supervisor should check the FGS register and confirm the number of patients enrolled / treated.

Probe: Ask about management done - Inspect and check if appropriate management was given by reviewing the FGS treatment register. The type of management done should be documented.

6. Is PZQ still available at the time of the visit? Yes No
7. Is PZQ active ingredient 600mg per tablet? Yes No
8. Is the praziquantel properly stored as recommended by the manufacturer? Yes No
-

PATIENT CHECKLIST:

Insert patient ID number:

9. Did the enrolled patients meet the inclusion criteria?
- a. Is the patient from endemic region? Yes No
- b. Is the patient pregnant? Yes No
- c. Did you determine the pregnancy status of the patient? Yes No
- d. Is the patient unwell or currently on another medication? Yes No
- e. Has the patient taken praziquantel in the last six (6) months? Yes No
- f. Does the patient have a history of Seizures, Central Nervous System Disorder or Sickle Cell Anaemia? Yes No
- g. Is the patient older than 15 years? Yes No
- h. Has the patient taken a good meal? *(If patient is present)* Yes No
10. Was appropriate dosage given? Yes No
11. Were there any side effects? Yes No

12. If yes, how was / were the side effects managed? Explain briefly in the box below.

13. Was any referral done? Was it properly channelled and documented?

Yes

No

14. Were other medications or treatment given?

Yes

No

14.a. If yes, what, and why?

15. Was patient followed up?

Yes

No

15.a. If yes, were symptoms resolved?

16. What communication was given to the patient about:

(Health workers describe the advice given)

a. FGS Management

b. FGS Prevention

c. Addressing Stigma

THE CHECKLIST MUST BE DULY SIGNED AND DATED, TO BE SUBMITTED TO THE MINISTRY OF HEALTH.

Name of Health Worker in Charge

Name and Signature of Supervisor

SENSITISATION STRATEGY FOR FGS MANAGEMENT WITHIN ENDEMIC COMMUNITIES

Sensitisation of the endemic community and mobilisation of patients to the health facility is very important to the success of FGS care management. All category of persons should be sensitised about FGS and no one should be left behind, for example, men should also be included in sensitisation strategies.

IEC materials should be used to support sensitisation. Key information to include in the IEC material should be:

- **What FGS is.**
- **How it is transmitted.**
- **The health, social and mental impact of FGS.**
- **The long-term consequences of FGS.**

The following platforms have been used for sensitisation and found effective:

- **Whole site sensitisation - that is telling everyone working in the health facility environment / place of work**
- **Infant and child welfare clinic / Immunisation**
- **Antenatal clinic (ANC)**
- **Family planning**
- **WDC meetings, CDA meetings and other meetings**
- **Schools, Church, Mosque etc**
- **Meetings with Baale / community heads**
- **Market sensitisation**
- **One-on-one sensitisation**
- **CDDs**
- **The health workers should discuss and identify other types of sensitisation that may be used within and outside the health facilities.**

In addition, in situations where the distance from the community to the health facility is far, the Community Drug Distributor (CDD) should be invited to the health facility and trained on how to sensitise and mobilise persons affected by FGS to seek support from the health facility. Distance may discourage persons affected by FGS to go to the health facility for care, in such cases, an outreach to the endemic community should also be considered.

CASE STUDY FROM OUTREACH TO A REMOTE COMMUNITY

Prior to the community outreach, the health facility workers were trained on FGS care and treatment, however during three months, only two patients were seen, despite several efforts made by the health workers to sensitise people on FGS. Therefore, the health workers suggested that an outreach visit be made to this specific community. The team of health workers and researchers visited the community. On arrival the team asked for the community head and requested for permission to treat girls / women who are suffering from FGS. The leader made arrangement for the women and girls in the community to be visited. A total of 15 women presented with FGS related symptoms. Out of these, four were excluded from treatment while one woman declined treatment due to past reactions to Praziquantel. The treated women were asked to come to the health facility after 7 days for follow up but none of them showed up for the appointment. Therefore, it is important for health workers to plan for how women treated will be followed up. Community outreach for sensitisation and treatment may enable more people to access the treatment, however cost of outreach, safety and logistics need to be carefully considered by the health workers prior to visiting the community, and support mechanisms put in place to ensure that any women or girls treated are followed up. It is also important to respect local protocol and pay a visit to the community leaders as appropriate to raise the profile of FGS and available management of symptoms.



COUNTDOWN

Calling time on Neglected Tropical Diseases

ANNEX

August 2021 v2

ADDITIONAL DIAGNOSTIC TOOLS FOR FGS

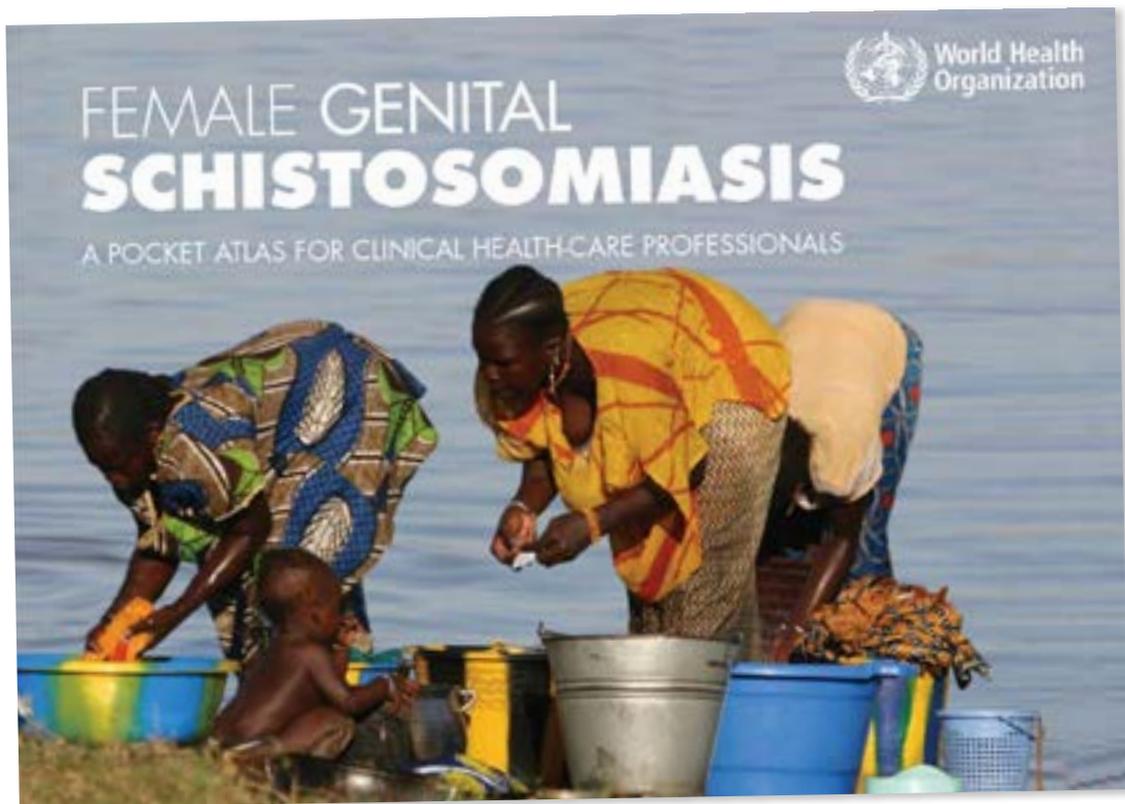
OTHER TOOLS INCLUDE:

- **Urine tests:** Microscopy of urine and hematuria are nonspecific and insensitive predictors of FGS but may help in some situations, although they require the provision of microscope. If your facility currently offers urine tests to check for schistosomiasis then this may be used in addition to the symptomatic questionnaire, however, studies in *S. haematobium* endemic areas have also shown that high number of women may have FGS without blood in urine or schistosome ova in the urine. (Kjetland et al., 2005).
- **Visual examination:** FGS may create characteristic lesions and inflammation in the genital tract due to the parasite's deposition of ova in the genital mucosa. This may appear as singular grains, grains in clusters, and as homogeneous yellow areas. The health workers can carry out physical examination of the vaginal orifice using speculum examination where it is available. However, accurate examination may require specialized camera equipment, such as a colposcopy. The World Health Organisation FGS Pocket Atlas was developed to support this diagnosis. However, this requires a specialist to be able to accurately diagnose which may not currently be available at your facility.



For further information please access The WHO's Pocket Atlas on FGS:

<https://www.who.int/schistosomiasis/resources/9789241509299/en/>



WEIGHT TABLE

Table: Number of praziquantel tablets needed for different body weight ranges for praziquantel administration dose of 40–60 mg/kg.

Body weight range (kg) No. of tablets of praziquantel (600 mg).

| S/N | BODY WEIGHT RANGE (KG) | NO. OF TABLETS OF PRAZIQUANTEL (600 MG) |
|-----|------------------------|---|
| 1 | 10 - 14.9 | 1 |
| 2 | 15 - 22.4 | 1 ½ |
| 3 | 22.5 - 29.9 | 2 |
| 4 | 30 - 37.4 | 2 ½ |
| 5 | 37.5 - 44.9 | 3 |
| 6 | 45 - 59.9 | 4 |
| 7 | 60 - 75.0 | 5 |

Excerpts from Helminth control in school age children, a guide for managers, 2nd Edition WHO 2011.

MEDICATIONS KNOWN TO INTERACT WITH PRAZIQUANTEL

The following has been taken from Multum, C. 2021. MEDICATIONS KNOWN TO INTERACT WITH PRAZIQUANTEL. Drugs.com (online) <https://www.drugs.com/mtm/praziquantel.html> (accessed) 10.08.21

A

- abametapir topical
- albendazole
- aminoglutethimide
- amobarbital
- apalutamide
- armodafinil

B

- bexarotene
- bosentan
- brigatinib
- butabarbital
- butalbital

C

- carbamazepine
- cenobamate
- chloroquine
- cimetidine

D

- dabrafenib
- darunavir
- deferasirox
- dexamethasone
- doravirine
- duvelisib

E

- echinacea
- efavirenz
- elagolix
- enzalutamide
- eslicarbazepine
- etravirine

F

- fedratinib
- felbamate
- fosphenytoin
- fostamatinib

G

- glycerol phenylbutyrate
- griseofulvin

H

- hydroxychloroquine

I

- idelalisib
- isavuconazonium
- itraconazole
- ivosidenib

L

- larotrectinib
- lefamulin
- lemborexant
- lesinurad
- letermovir
- lonafamib
- lorlatinib

M

- mephobarbital
- metreleptin
- mitotane
- modafinil

N

- nafcillin
- nevirapine

O

- oritavancin
- oxcarbazepine

P

- pentobarbital
- pexidartinib
- phenobarbital
- phenylbutazone
- phenytoin
- pitolisant
- primidone

R

- ribociclib
- rifabutin
- rifampin
- rifapentine
- rucaparib
- rufinamide

S

- secobarbital
- selpercatinib
- sodium iodide i-123
- sodium iodide-i-131
- somapacitan-beco
- somatrem
- somatropin
- sotorasib
- st. john's wort
- sulfinpyrazone

T

- tazemetostat
- telotristat
- troglitazone
- tucatinib

V

- vemurafenib

PRAZIQUANTEL ALCOHOL / FOOD INTERACTIONS

There is 1 alcohol / food interaction with praziquantel

PRAZIQUANTEL DISEASE INTERACTIONS

There are 4 disease interactions with praziquantel which include:

- cysticercosis
- epilepsy
- arrhythmias
- liver impairment

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NOTES

A series of horizontal dotted lines for taking notes.

COUNTDOWN

Calling time on Neglected Tropical Diseases

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