

**Standard Management of
Sexually Transmitted Infections and
Genital Conditions In Papua New Guinea**

**A Manual for
Health Workers in PNG**



2006

ACKNOWLEDGEMENT

The book is designed to be used by all health workers in Papua New Guinea and conforms with the policies of the National Department of Health. It follows the guidelines of the National Health Plan 2001 – 2010 and the PNG National Strategic Plan on HIV/AIDS 2004 – 2008.

The manual was begun during the AusAID sponsored Sexual Health and HIV/AIDS Prevention and Care Project and finalised during the National HIV/AIDS Support Project.

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HOW TO GET THIS BOOK

Health workers who deal with patients who have sexually transmitted infections may obtain a copy of this book either through their Provincial Health Adviser, the OIC of the Provincial STI Clinic, or by writing to the address given below.

If you have any suggestions for the improvement of possible further editions of this book, please send them to:

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Standard Management Of Sexually Transmitted Infections & Genital Conditions in Papua New Guinea

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Foreword

Sexually transmitted infections (STIs) are not new and in Papua New Guinea we have long had a problem with the large amount of both acute and chronic infection. When these infections are not treated properly, they are easily transmitted to others by sexual contact and may lead to complications. The presence of any sexually transmitted infection in an individual also increases the risk of that person getting HIV infection and transmitting it to others.

Health workers in Papua New Guinea have been treating patients with sexually transmitted infections for many years. The health workers often have to manage in very difficult and isolated situations. Traditionally, sexually transmitted infections were managed by first making a diagnosis based on a laboratory finding. This meant that diagnosis was difficult in facilities that did not have an equipped and functioning laboratory. Patients were often referred to other health institutions for diagnosis and management. This referral is very difficult especially in rural areas.

The National Department of Health has adopted the Syndromic Approach to the management of sexually transmitted infections. Under this approach, all health workers will be able to treat all the common causes of STI syndromes at the first visit, at whatever health facility the patient visits, be it aid post, health sub-centre, health centre or hospital.

This book provides the guidelines for management of sexually transmitted infections following the syndromic principles and also provides more detailed information as background and revision for clinical health workers in provincial or district level STI clinics.



Dr Nicholas Mann
Secretary for Health

Chapter 1 INTRODUCTION

Sexually Transmitted Infections (STIs) were previously called Sexually Transmitted Diseases (STDs). They are the group of infections, which are passed from one infected person to another person at sexual intercourse. In some cases if a pregnant woman is infected, she may pass the infection to her baby, before during or after birth.

PNG has a reported high prevalence of sexually transmitted infections. Surveys done in both urban and rural areas indicate that many people in the community have STIs without even being aware of it. This is a dangerous situation because they can still be transmitting the infections to their sexual partners, even though they do not realise it. People with chronic STIs may also develop complications of the infections, that may prevent them having children, or in the case of syphilis may even cause permanent damage to the cardiovascular and nervous systems. The presence of any STI in a person, greatly increases his/her chances of also getting HIV infection and of transmitting HIV to the sexual partners.

PNG has the highest recorded prevalence of gonorrhoea and genital Chlamydia in the Asia-Pacific region. In 1995, the Papua New Guinea Institute of Medical Research (IMR) did a community based study of a sample of 300 rural women from ages 15 – 45 years. The women did not know that they had any infection. The results showed that the following proportion of the women had the following infections:

Chlamydia	31%
Syphilis	4%
Gonorrhoea	15%
Trichomonas	46%
PID	14%

Research currently underway in 10 different areas of PNG indicates that these figures are typical of the rest of the country for both men and women.

Many provinces are recording a significant increase in syphilis and congenital syphilis is reported to be the greatest cause of stillbirth in Port Moresby General Hospital.

1 Some of the reasons PNG has a high prevalence of chronic (and sometimes sub-clinical STIs) include the following:

- inability to access health care because of distance, financial problems or embarrassment (shame)
- unfriendly or judgemental health staff
- some people buy antibiotics over the counter at pharmacies and treat themselves. This is very bad practice, because it means that they usually get inadequate treatment, that may make their symptoms better but does not properly get rid of the infection. These people, even though they may not know they are still infected, may go on to develop the complications of STI and to transmit it to their sexual partners.
- many times if a person has an STI, they go to a health worker who is a wantok or relative and ask for treatment. In most cases these people are not properly examined and are given inadequate doses of antibiotics, that may reduce or remove their symptoms but does not properly get rid of the infection.

Experience in other developing countries shows that by reducing the amount of sexually transmitted infections in the community, the incidence of HIV also decreases. Papua New Guinea has adopted the Syndromic Management of STIs as the best method of effectively treating sexually transmitted infections in the community.

The main **advantages** of the Syndromic Management of STIs include:

- management does not depend on a laboratory diagnosis of the infection
- complete treatment of the infection is possible at the first visit
- all the common causes of the infection syndrome are treated effectively

Health workers at Provincial STI clinics may have access to laboratory services but often these services are overworked and the results take time to come back. If we ask patients to return for results and then treat them, we have delayed treatment and there is a big risk that the person may not come back at all, so will not get treatment for their infection. If you have access to laboratory services, then it is good to use them for confirmation of the infection and for data collection but treatment should not be delayed while waiting for results. If we treat the person on syndromic principles, for all the common causes of their "syndrome", then we are offering the best possible service, helping to cure them of their infection quickly, helping to prevent the complications of untreated STI and preventing transmission of that infection and of HIV.

Health workers in health centres, health sub-centres and aidposts should follow the syndromic principles of management of STIs by using the flow charts and treatment protocols as shown in this book.

Chapter 2 IMPORTANT POINTS FOR EFFECTIVE STI MANAGEMENT

Always consider the possibility of the presence of an STI in all patients. Think about those people who are more vulnerable to STIs, or who have risk factors for STIs. Health workers in **all** health facilities including general outpatients departments, family planning clinics or in antenatal clinics should always consider whether their clients have risk factors for STIs and take an appropriate history to bring out those factors as well as performing complete physical examination.

There are some groups in the community who, because of their occupation or other factors are considered more vulnerable to STIs. These include:

- Sexually active teenage girls
- People whose work or education takes them away from their regular sexual partner for long periods of time eg:
 - PMV and truck drivers and crews
 - Mining and drilling camp employees
 - Timber and logging camp employees
 - Sailors
 - Students
 - Defence Force personnel
- Police and Security employees
- Sex workers and their clients
- Dock workers

In the **antenatal and family planning clinics**, it is especially important to ask about the following Risk Factors. If present, then the woman is at higher risk of having an STI.

RISK FACTORS FOR STI

- Is she below 21 years old?
- Is she single?
- Has she had sexual intercourse with more than one person in the preceding three months?
- Has she had sexual intercourse with a new partner in the preceding three months?

Always respect all patients. Do not discriminate between those with STIs and other patients. All humans are sexual beings and each of us has accumulated values which shape our attitudes. Each of us is entitled to his or her own values or standards and none has the right to impose or force his or her values on another. We should respect each other as individuals, whether or not we agree with each other's values, ideas or practices.

Remember that the health worker is not a judge. Many people with STIs do not come to the health facilities for treatment and advice because they are afraid of the judgemental attitude of health workers. Always ensure privacy and reassure the patient of complete confidentiality. It takes a lot of courage for a person to come to talk to a health worker about his/her sexual problem. The attitude of the health worker can go a long way to making the person feel comfortable and confident. If a person has a positive experience when s/he comes for help with a sexually transmitted infection, then s/he is more likely to come back again in the future and also will tell his/her peers. This means that more people in the community will feel free to come to the health facility for help in curing their infections.

- Always **educate** every patient with an STI about how they got their infection, how you are going to **work with them** to cure the infection and how they can **prevent** getting the infection again.
- Always try to help the person get his/her sexual **partners** to come for treatment and advice.

- When a person comes with an STI always take a complete relevant **history** and perform a thorough clinical **examination**. Do not just treat for the symptoms the person describes.
- Always try to ensure full **privacy** and **confidentiality**.
- Try wherever possible to ensure a **gender specific** STI service. This means having female health workers to take history, examine and treat female patients and male health workers to take history, examine and treat male patients.
- **Do not judge** people on their sexual behaviour but rather advise them, how they can avoid getting STI in the future eg stick to one partner or use condoms.
- Encourage people to come for check-ups when they have symptoms of an STI or even if they have no symptoms but think they may have put themselves at risk. Tell them they can have a check-up for STIs even if they feel well.

Always offer appropriate **education** about sexual health to all patients who present with STIs, including advice about:

- how s/he got the infection (sexual contact)
- what the treatment involves
- the importance of completing the treatment to prevent complications
- how s/he might pass the infection on to other sexual partners
- the need for all sexual partners to also come for check and treatment
- the increased risk of contracting HIV if s/he already has an STI
- how s/he can prevent getting infected again

Remember the **ABC** of prevention of STIs:

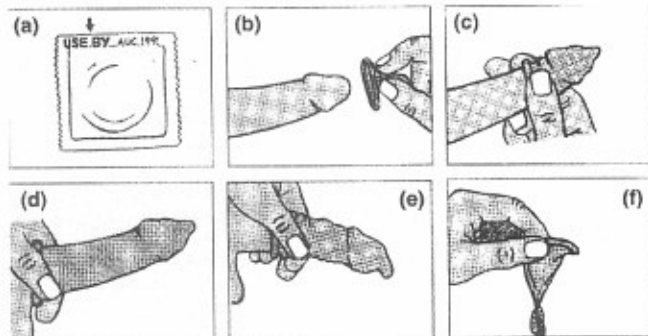
A – abstinence (not having sexual intercourse until with a permanent partner)

B – be faithful to one sexual partner who is also faithful to you
We must also remember that many women in PNG do not have control over their own bodies and are subject to sexual abuse. Many women who are faithful to their husband or partner still get an STI or even HIV, not because of their own risky behaviour but because of the behaviour of their husband or boyfriend. So being faithful may not protect a person if their partner is not also faithful. We must not be judges of people – we do not know what influences led to them getting an STI or HIV.

C – condom

Condoms when used properly provide protection against STIs including HIV. Always make sure the patient knows how to use a condom. Demonstrate its use on a penis model - don't just assume s/he knows how it is used. Most of the failures or problems associated with condom use are caused by people not using the correctly.

Putting on a condom:



Remember that condoms should be used once only. If someone tries to use a condom a second time, there is a very high risk that it will break.

Condoms already have some lubricant on them. It is usually not necessary to add more lubricant for vaginal intercourse but it will be necessary for anal intercourse. If a person does want to use more lubricant, he should make sure it is a water based lubricant such as KY, Swit Gris, Wet Stuff or water. Do not use oil-based lubricants such as vaseline, margarine, cooking oil, baby oil, coconut oil, hair oil or similar products. These will cause the condom to break.

Chapter 3 THE STI CHECK-UP

Remember that it has probably been very difficult for the patient to come to see you. STIs cause embarrassment and s/he has probably tried hard to overcome her/his embarrassment and come to see you about the problem. The way you greet and manage the patient will have a very big effect on him/her. Acknowledge the patient's responsible action in seeking treatment. If you manage the patient's problem well, then s/he will probably be cured and will tell his/her peers of the success of the visit. This way you can have a very positive effect on reducing STIs in the community.

Greet the patient and make sure you take the history and do the examination in a private environment where no one else can see or hear you. Ensure the patient of *confidentiality*.

The History

Taking a medical history from a patient who may have run the risk of an STI is no different from history-taking in other fields of medicine. There are several specific points to remember:

Use non-technical language.

- Many people find it difficult to openly discuss sexual matters. Even health workers may become embarrassed at first.
- Patients often find it difficult to express themselves if they detect that the health worker is also uncomfortable with the subject. Always use language that is appropriate and easily understood by the patient and try to use the same language the patient uses.
- You will have to alter the language and terminology you use depending on who you are talking to. Be as specific as possible without causing offence.
- It is important that the patient understands exactly what you mean and there is no room for misunderstanding. The health worker must adapt to the patient's level of understanding.

Specific questioning about symptoms.

- Remember that the problem the patient complains of, may not be the only problem. Often, more than one STI is present at the same time.
- Always ask specific questions about the presence of all the symptoms of all the STIs. For example, even if the patient only complains of pain passing urine, ask about discharge and its amount and character, abnormal vaginal or rectal bleeding, genital sores, swelling in the groins, swelling of scrotum or labia, skin rashes, itching in the perineum, perianal and pubic region, lower abdominal pain and the presence of pain during sexual intercourse.

Drug allergies and the recent use of antibiotics or other medicines.

- Remember that in STI management, you will be using antibiotics. It is very important to first determine whether the patient has any allergy to these drugs.
- Many patients who present with an STI, have first either got antibiotics from a friend or relative (usually not the correct dose) or have gone to a private pharmacy and bought antibiotics over the counter. This also is a problem, because the person will usually not have taken the correct dose, or may even not have taken the right antibiotic. It is important for the health worker to know this, as it may influence the future treatment but also if the patient has taken some antibiotics already, this may suppress or mask the signs, so that you do not get a true picture when you examine the person.

Previous history of sexually transmissible diseases.

- When taking the medical history, always ask about any previous STIs. You may have to explain to the patient what you mean by this – list some symptoms s/he may have noticed in the past.
- Ask if the previous STIs were treated, **where** they were treated and if the person **completed** the full treatment. This can lead into taking the history of the current problem.

It is easier to start with the simpler questions first.

- Ask when the person last had sexual intercourse. Was any contraceptive used?
- Was it with the regular partner or with someone else s/he knows well, or with a person s/he'd only just met?
- Was the intercourse planned and by consent?
- Remember that the patient may have contracted an STI not by his/her own risky behaviour but by the behaviour of his/her partner.

Ask general questions:

- Ask the patient to describe his/her problem to you.
- Ask how long s/he has had the problem and has s/he had it before.
- Ask about any other problems with his/her health.
- Ask if s/he has already taken any treatment for the problem.
- Ask if s/he has had more than one sexual partner or a new partner in the past 3 months.

Ask specific questions:

Females:

- Do you have any vaginal discharge? Is it new or different (not normal for you)? What colour? How much?
- Do you have any itching of the genitals?
- When was your last menstrual period? (Consider the possibility of pregnancy which may alter your choice of medications to be used.)
- Do you have abnormal vaginal bleeding? When? How much? With clots?
- Do you have any sores lumps or rashes on or near the genitals or anus? For how long? Are they painful?
- Do you have any abdominal pain? Where? How long?
- Do you experience pain during sexual intercourse?
- Do you have any lumps or sores or rashes in the armpits?

- Do you have or have you had any dark spots/patches on the palms of your hands or the soles of your feet?
- Have you noticed any loss of hair?

Males:

- Do you have pain when passing urine?
- Do you have a discharge from the urethra/penis?
- Do you have any swelling or pain in the scrotum/testes?
- Do you have any sores, lumps or rashes on or near the genitals or anus? For how long? Are they painful?
- Do you have any lumps or sores or rashes in the armpits?
- Do you have or have you had any dark spots/patches on the palms of your hands or the soles of your feet?
- Have you noticed any loss of hair?

The Clinical Examination

Important Points to Follow in Clinical Examination of Patients:

- ◆ Always ensure that you examine the patient in complete privacy. Make sure that the door is locked if possible and that curtains are closed over windows.
- ◆ Explain what you are going to do and why it is important.
- ◆ Approach the examination in a confident way, never showing uncertainty or embarrassment.
- ◆ Never be rough or conduct an examination against someone's will.
- ◆ Use all the communication skills you have, to put the patient at ease.
- ◆ Try to ensure the health worker is the same sex as the patient. If this is not possible, eg a male HEO or NO to do a vaginal examination, always ensure you have a female CHW or another female who has been identified by the community, to make the woman feel more comfortable/safe and as a reliable witness. Similarly female health workers should not examine the genitals of a male patient without a male escort present.

- ◆ All female health workers should be trained to conduct a genital examination of female patients and all male health workers should be trained to conduct a genital examination on male patients so that a true gender specific service is offered.
- ◆ Always conduct the interview with the patient fully clothed S/he examination.

Step for Examining Male Patients

- 1 Ask the patient to stand up and lower his trousers so that he is stripped from the waist to the mid-thigh or knee. (It is not sufficient for the man to just open his zipper to expose his genitals). It is usually possible to examine him while he is standing up, though occasionally you may need him to lie down. Look at the genitals to detect any obvious abnormality.
- 2 With gloved hands, palpate the inguinal area, feeling for the presence or absence of enlarged lymph nodes.
- 3 Palpate the scrotum, feeling for individual parts of the anatomy: testes, epididymii and spermatic cord. Check for lumps, swelling or tenderness of these parts.
- 4 Examine the penis, noting any rash or sores. Ask the patient to retract the foreskin if present and look at the glans penis and urethral meatus.
- 5 If you cannot see any obvious urethral discharge, gently milk the urethra in order to express any discharge. (Always replace the foreskin if it has retracted).
- 6 Record the presence or absence of any sores, swelling/tenderness or urethral discharge, noting the colour and amount. Allow the patient to dress himself again.

Steps for Examining Female Patients:

- 1 Ask the patient to remove her clothing from the waist down and then to lie on the examination bed. To avoid her embarrassment, use a sheet to cover the parts of her body that you are not examining. If the patient wears a skirt, a discreet examination can be conducted simply by her removing underwear.

2. Palpate the abdomen for pelvic masses and tenderness, taking care not to hurt her. Also palpate the inguinal areas in order to feel for the presence or absence of enlarged lymph nodes.
3. Ask the patient to bend her knees and separate her legs, then examine the vulva, anus and perineum.
4. If you are trained and confident, perform a speculum examination, checking for the presence of discharge, sores or plaques in the vagina or cervix. Follow this with a bimanual examination.
5. Record the presence of masses, tenderness, sores, rashes or discharge (noting type, colour, amount and odour). Allow the patient to dress again.

For every patient:

- ♦ Talk about the **prevention of STI**.
- ♦ Talk about partner management and protecting other **partners** (use contact card whenever possible).
- ♦ Provide full, appropriate, **supervised treatment** according to the type of infection.
- ♦ Offer **condoms** and explain their use and how to get more supplies.
- ♦ Plan for a **review/follow-up** visit if possible and make sure the patient knows that if the symptoms do not completely go away, or s/he is still worried, to return for further advice or treatment.
- ♦ Discuss the patient's needs for **ways to prevent pregnancy** and either refer them to the appropriate clinic as soon as possible or provide the service now.

Remember that every time you effectively treat someone for STI and educate him or her so that they do not get an STI again, you are not only curing that patient and reducing the amount of STI in the community but you are also reducing the transmission and incidence of HIV as well.

Chapter 4 THE SYNDROMIC MANAGEMENT OF STIs

The National Department of Health has adopted the Syndromic Management of STIs as the most appropriate way to effectively treat STIs in Papua New Guinea. What does syndromic management mean? Traditionally STIs were treated by a patient coming to the clinic and after history and examination, having swabs or blood tests taken and then returning later for a laboratory diagnosis and the appropriate treatment. There are problems with this approach because:

- most health facilities at district level or below, do not have adequate laboratory facilities.
- due to distance involved, transport problems and financial difficulties, many patients may not be able to return for a second visit, to get their test results and treatment.

With the syndromic approach to managing STIs:

- any health worker will be able to make a syndromic diagnosis by following set **flow charts** and **treat** the patient at the **first visit**, by using the treatment protocol charts.
- the appropriate drugs to treat STIs are to be made available at all health facilities including aid posts.
- people with STIs will not have to be referred to the health centre but will be able to be treated fully at the primary health care facility at the first visit.

Research has shown that many of the STI infections in PNG are in fact *mixed infections*. This means that:

- many patients who present with a genital discharge actually have more than one infection at the same time. Often it is a mixed infection of gonorrhoea and chlamydia. Sometimes Trichomonas is also present.
- if the health worker sees this patient and diagnoses gonorrhoea only, then the treatment for gonorrhoea will be given and the other infections will not be treated. This could lead to serious complications such as infertility.

Under syndromic principles of management:

- we do not diagnose gonorrhoea or chlamydia but *urethral discharge syndrome* or *vaginal discharge syndrome*.
- we treat for all the common causes of the syndrome.
- there is much less chance of missing some infections and allowing complications to develop.

Anyone who has any kind of STI also has a greatly increased risk of contracting HIV and of transmitting it to sexual partners. With syndromic management we are greatly reducing the possibility of some infections going untreated, so we are also reducing the risks of HIV transmission.

When discussing syndromic management, we talk about four main syndromes:

- ◆ Urethral Discharge Syndrome In Men.
- ◆ Vaginal Discharge Syndrome In Women.
- ◆ Abdominal Pain Syndrome In Women.
- ◆ Genital Ulcer Syndrome.

1. Urethral discharge syndrome in men.

- Any male who complains of *dysuria* and/or has a *urethral discharge* should be examined for the presence of this syndrome by following the flow chart on page 18 and treated according to the treatment listed on page 19.
- The common causes of the urethral discharge syndrome in PNG are gonorrhoea, chlamydia and sometimes trichomoniasis.

2. Vaginal discharge syndrome in women.

- Vaginal discharge can be caused either by cervicitis or vaginitis or both.
- The common causes of cervicitis are gonorrhoea and chlamydia and the common causes of vaginitis are trichomoniasis and candida (monilia or thrush).
- The flow chart and management protocols for this syndrome are shown on pages 20 and 21.

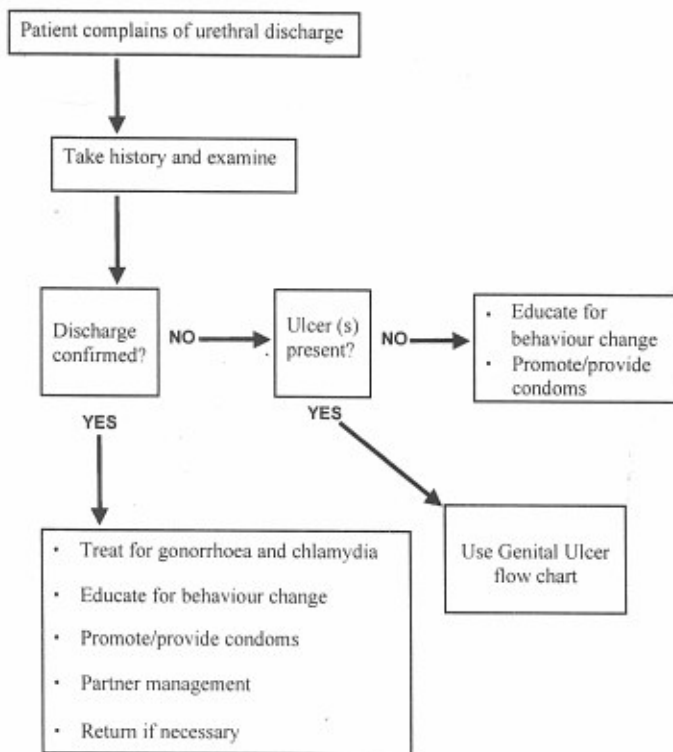
3. Genital ulcer syndrome.

- The common causes of genital ulcer are syphilis and donovanosis.
- Genital herpes infection is also becoming more common.
- Genital warts are not really ulcers but they may become ulcerated.
- Each of these infections presents differently and has different types of ulcers, however sometimes more than one ulcerative STI can be present at the same time.
- Some ulcers may be traumatic or self-inflicted (eg attempted "circumcision" in men).
- The flow chart and management of Genital ulcer syndrome are shown on pages 22 and 23.

4. Abdominal pain syndrome in women.

- Many women in PNG have been affected by this serious problem. It is also called pelvic inflammatory disease (PID).
- The common causes of this syndrome are chlamydia, gonorrhoea and anaerobic bacteria. They enter through the cervix and infect the fallopian tubes and pelvic cavity.
- This syndrome is usually the result of an STI; very rarely it follows childbirth or abortion. When this happens, it is usually because the woman has been a carrier of gonorrhoea or chlamydia in her cervix from before the pregnancy. The flow chart and management protocols for this syndrome are shown on pages 24 and 25.

Flow Chart for Urethral Discharge Syndrome in Men



Treatment of Urethral Discharge Syndrome in Men

Treat for:

- Gonorrhoea
- Chlamydia (Non-Gonococcal Urethritis)

Treatment:

- Amoxicillin 2 grams orally stat plus
- Probenecid 1 gram orally stat plus
- Augmentin 2 tabs orally stat plus
- Azithromycin 1 gram orally stat.

(If there is no Azithromycin available, give Doxycycline 200mg stat, then 100mg orally bd for another 9 days. If there is no Azithromycin or Doxycycline available, then give Erythromycin 500mg orally QID for 10 days.)

(** If Augmentin is not available, give Amoxicillin 3 grams stat plus all the other drugs. Augmentin contains amoxicillin 500mg plus clavulanic acid 125mg. It may have different brand names).

Flow Chart for Vaginal Discharge Symptoms

Patient complains of vaginal discharge

Risk assessment:

- discharge or abdominal pain present
- or
- partner has symptoms
- or
- risk factors positive (see below)

YES

- Treat for cervicitis (see over)
- Educate for behaviour change
- Promote/provide condoms and attend to other contraceptive needs
- Partner management
- Return if necessary

Risk Factors for STI (females)

- Single and sexually active
- Below 21 years of age
- More than 1 sexual partner in the last 3 months
- New sexual partner in the last 3 months
- Sexual assault

Check for signs & symptoms of Candidiasis (itchiness of vulva/vagina with inflamed tissue & white patches)
or
Trichomoniasis (greenish grey frothy discharge +/- itchiness)

YES

- Treat for Candidiasis (thrush) and/or Trichomoniasis (see over)
- Educate for behavior change
- Promote/provide condoms & other contraceptive needs

Treatment for Cervicitis:

Treat for Gonococcal and Chlamydial cervicitis:

- Amoxicillin 2 grams orally stat plus
- Probenecid 1 gram orally stat plus
- Augmentin 2 tabs, orally stat plus
- Azithromycin 1 gram orally stat.

(If there is no Azithromycin available, give Doxycycline 200mg stat, then 100mg orally bd for another 9 days. If there is no Azithromycin or Doxycycline available, then give Erythromycin 500mg orally QID for 10 days.)
(If Augmentin is not available, give Amoxicillin 3 grams plus all the other drugs. Augmentin contains amoxicillin 500mg plus clavulanic acid 125mg. It may have another trade name.)

If patient is pregnant

Treat as above BUT do not use Doxycycline in pregnancy. It is safe to use Azithromycin – or use Erythromycin 500mg QID for 10 days instead.

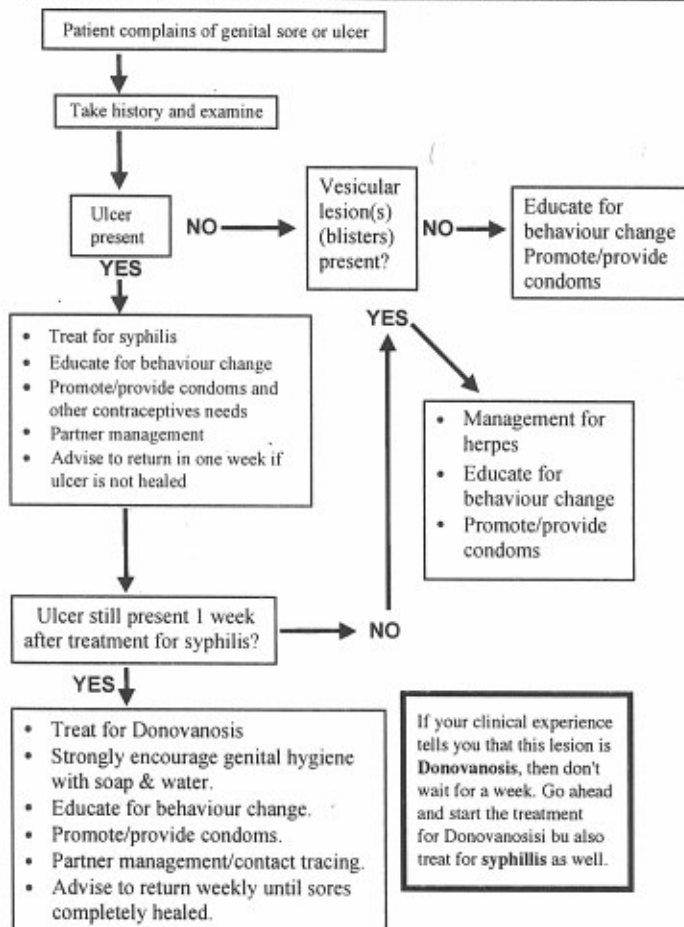
Treatment for Trichomoniasis

Tinidazole 2 grams orally as a single dose. (Warn patients not to drink alcohol for 3 days after taking tinidazole).

Treatment for Candidiasis of vulva/vagina

Canesten (Clotrimazole) 500mg vaginal suppository once only
OR Nystatin 100,000 units (1 pessary) inserted into the vagina twice a day (12 hourly) for 10 days (or 14-days if pregnant).

Flow Chart for Genital Ulcer Syndrome



Treatment of Genital Ulcer Syndrome

Treatment of Syphilis:

Benzathine Penicillin 2.4 million units deep IM stat for primary (genital ulcer present) but weekly for 3 weeks for secondary (skin rash, black marks on palms of hands or soles of feet, or moist lesions in armpits or groins AND history of previous genital ulcer OR reactive VDRL/TPHA).

Treatment of Donovanosis:

Patients should be seen weekly until lesions are healed.

- Azithromycin 500mg orally daily for 7 days OR 1 gram weekly for 4 weeks
- OR**
- Chloramphenicol 500mg orally QID until lesions heal (at least 21 days)
- OR**
- Doxycycline 100mg orally bd until lesions heal (at least 21 days)

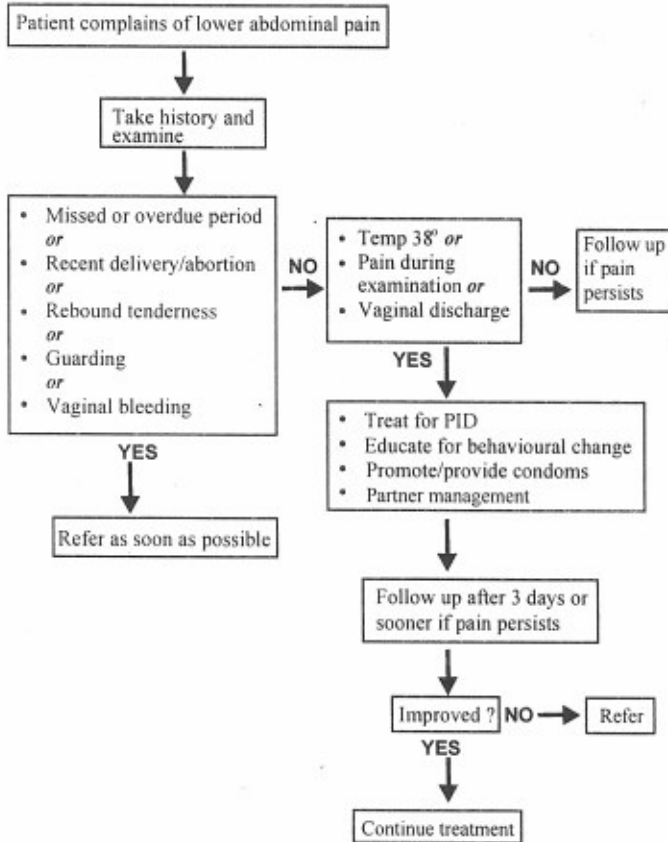
If patient is pregnant:

Azithromycin is safe to use in pregnancy. Do not give Doxycycline during pregnancy/lactation. If there is no Azithromycin available give Chloramphenicol as above. If in the last month of pregnancy, do not use Chloramphenicol; use Erythromycin 500mg orally QID until lesions are fully healed (at least 21 days).

Management of Genital Herpes:

- Pain relief as necessary
- Educate on need to keep lesions clean and dry
- Educate for behavioural change - explain the infectious phase
- Promote / provide condoms
- Explain that the lesions will go away but may recur.

Flow Chart for Lower Abdominal Pain Syndrome in Women



Treatment for Lower Abdominal Pain Syndrome in Women

Treat for:

- Gonorrhoea
- Chlamydia
- Anaerobic infections

Treatment:

- Amoxicillin 2 grams orally stat **plus**
- Probenecid 1 gram orally stat **plus**
- Augmentin 2 tabs orally stat **plus**.
- Azithromycin 1 gram orally stat.

Follow this with:

- **Amoxycillin 500mg tds for 5 days and
- **Tinidazole 1gram orally bd for 3 days.

(If Azithromycin is not available, give Doxycycline 200mg stat, then 100mg orally bd for another 9 days. If there is no Azithromycin or Doxycycline available, then give Erythromycin 500mg orally QID for 10 days.)

(If Augmentin is not available, give Amoxicillin 3 grams **plus** all the other drugs as the stat dose, then follow as above.)

Remember: with every woman of reproductive age who has lower abdominal pain - always think of the possibility of **ectopic pregnancy** - always ask about the menstrual history - if ectopic pregnancy is possible - refer urgently.

If patient is pregnant and has lower abdominal pain syndrome:

PID in pregnancy is not common since the plug of mucus in the cervix and the foetal sac in the uterus prevent ascending infection. Give the treatment as above but if there is no Azithromycin, use Erythromycin 500mg QID orally for 10 days instead. **Do not give Doxycycline.** The other drugs are safe to use in pregnancy.

Chapter 5 OTHER GENITAL CONDITIONS

Vulval abscess

- This may either be due to infection of a Bartholin's gland or a simple abscess of the labia.
- It is often due to gonorrhoea, therefore treat for gonorrhoea and chlamydia.
- A simple skin abscess of the labia will also need incision and drainage. If it is a Bartholin's abscess, it will need marsupialisation. See the reference under Bartholin's abscess in the Manual of Standard Managements in *Obstetrics and Gynaecology for Doctors, HEOs and Nurses in Papua New Guinea (little red book)*.

Swelling in the Scrotum

This is commonly caused by epididymitis, orchitis or a combination of the two - epididymo-orchitis. Sometimes a man with an inguinal hernia is mistakenly diagnosed as having orchitis. In the case of a hernia which protrudes into the scrotum, the scrotal swelling is usually soft and if you listen with a stethoscope you may hear bowel sounds in the scrotum. If you suspect an inguinal hernia, refer the patient to a medical officer for assessment.

Epididymitis is the inflammation of the epididymis – the structure at the back of the testis where sperm cells mature and are stored, before being passed up the vas deferens. Epididymitis is usually caused by an STI (chlamydia or gonorrhoea).

- The man will complain of painful swelling in the scrotum.
- He may or may not give a history of urethral discharge.
- On examination, the scrotum may appear uneven, with one side larger than the other.
- Palpation will reveal a tender hard swelling at the back of the testis, which may extend above the testis.
- If there is no obvious discharge from the urethra, the person may still have a gonococcal or chlamydial infection.

Orchitis is the inflammation of the testis. It is less common than epididymitis and may be caused by trauma, STI, mumps or a urinary infection.

Treatment for epididymitis and orchitis:

Amoxycillin 2 grams stat plus
Probenecid 1 gram (2 tabs) stat plus
Augmentin 2 tablets stat plus
Azithromycin 1 gram (2 tabs) orally stat plus
Doxycycline 100mg BD after food, for 21 days.

- ❖ If the patient has had supervised treatment for the initial STI and then presents later with epididymitis, it is most likely that he has not completed the treatment properly.
- ❖ Repeat treatment as above and make sure he understands the importance of taking the full 21 days of bd Doxycycline.
- ❖ Educate the man about getting his regular sexual partner and all other sexual contacts examined and treated.
- ❖ Supply him with condoms and make sure he knows how to use them properly.
- ❖ Remember that epididymitis is a common cause of **infertility** in males.
- ❖ If the scrotal swelling does not respond to the above treatment, refer the patient to a doctor (non-emergency), in case a tumour is present.

Special Problems

If a teenage boy or young man in his early twenties presents with acute severe pain in the scrotum and examination shows the two sides of the scrotum appear uneven (one testis may be higher and twisted and very tender), this may be **torsion of the testis**. This condition needs **urgent surgical referral**.

Balanitis

This is inflammation of the glans penis.

- It is not an STI but is usually related to poor personal hygiene and almost always occurs only in uncircumcised men.
- There may be other factors involved eg balanitis is more common in diabetic men.

Treatment:

- This condition does **not** need medication in most cases.
- The basis of treatment is to keep the glans and foreskin clean and dry.
- If the foreskin is easily retractable, the patient should clean the glans with water only, 2-3 times a day and dry very gently with a soft towel (dabbing, not rubbing).
- If the foreskin is too tight, the patient should not force it back as paraphimosis may occur. If the balanitis is recurrent, despite improved hygiene as described above, or the foreskin is tight, he should be referred for proper circumcision.
- If the balanitis is caused by candida (thrush), after cleaning he can apply Canesten cream (clotrimazole) to the glans 3 times a day for up to a week after the candida is gone. (Canesten can be purchased from the Chemist).

Posthitis

This is inflammation of the underside of the prepuce (foreskin). Its cause and treatment are the same as for balanitis (see above).

Pubic lice (Pediculosis Pubis)

- The diagnosis of this condition is made on seeing pubic lice (crabs) on the pubic or genital skin, or nits (eggs) attached to the pubic hair.
- There is usually a history of itching in the pubic area.

Treatment:

Gamma benzene hexachloride (scabies lotion) rubbed gently but thoroughly into the infested area and adjacent hairy areas. (Men should apply the lotion from chest to knees). The lotion can be washed off after 8 hours.

Circumcision / penile dorsal slit

There is a common **false belief** among many young men and boys in PNG that circumcision will protect them from STIs and HIV.

- Circumcision is a surgical procedure, which completely removes the foreskin.
- Many young men in PNG today, undergo another procedure at home or with friends, where the top of the foreskin is cut and the two sides allowed to hang down under the glans penis. This is **not** a circumcision but a dorsal slit. Unfortunately, many times these cuts lead to complications, such as bleeding, infection and painful scar formation.
- Some men also insert foreign bodies at the time of doing the dorsal slit. These may consist of ball bearings, buttons, filed ends of a toothbrush, marbles etc. This practice should be discouraged as it frequently leads to infection and painful scar tissue formation.
- Foreign bodies are also irritants and may release chemicals into the body which, in time can cause diseases, including cancer. Often these foreign bodies have to be removed surgically at a later time.
- The only medical indications for circumcision are recurrent balanitis/posthitis, phimosis and paraphimosis. (Balanitis

and posthitis are defined above. *Phimosis* means that the foreskin cannot be retracted over the glans penis and *Paraphimosis* means that the tight foreskin has been forced back behind the glans penis and causes a tight band there. There is usually swelling of the tissues around the glans penis.)

- There is some evidence from overseas experience that proper surgical circumcision performed on young boys before the beginning of sexual intercourse does decrease the chances of the male contracting HIV. The evidence for this is that certain cells called Langerhans cells which are located on the under side of the prepuce are known to facilitate the entry of HIV and these cells are removed at proper circumcision. It must be remembered however that the Langerhans cells are not the only site of entry for HIV in the male and even circumcised men still become HIV positive if they have unprotected sexual intercourse.
- Circumcision does not protect from other sexually transmitted infections with the possible exception of donovanosis, which is usually seen in uncircumcised men.

Chapter 6 HIV/AIDS

HIV is one of the sexually transmitted infections. PNG is in a generalised epidemic of HIV and it is important that all health workers have a clear understanding of HIV infection.

Causative organism: Human Immunodeficiency Virus

Type of organism: virus (retrovirus)

Route of transmission: Exchange of body fluids:

- Sexual intercourse (vaginal, anal or oral)
- Blood transfusion of contaminated blood.

Vertical – mother to baby
Improperly cleaned and sterilised instruments and equipment, including needles, syringes, blades, forceps sutures etc. (including the sharing of razors and needles).

Portal of entry: Mucous membrane
Damaged tissue, eg from STI
Directly to blood stream eg blood transfusion with HIV +ve blood
From HIV +ve mother to foetus or baby.

Development of the infection:

- The virus usually enters the body at the time of sexual intercourse with an infected person
- HIV is present in the blood, semen and vaginal fluid, from the time the virus first enters the body.
- This means that the person can pass on HIV through sexual contact or from blood contact even when the person feels healthy and does not know they are HIV positive.
- The level of virus in the body becomes high at first and then after a few weeks, it levels off for a period of years.

During this time the person usually remains well but can still transmit the virus during sexual intercourse.

- When the levels of virus increase again years after the infection entered the body, the person becomes very sick with multiple infections as their immune system collapses. This is when the person has AIDS, at the end of the disease process.

CD4 Cells

- The Human Immunodeficiency Virus (HIV) attacks the body's immune system.
- The immune system fights infections with white blood cells. One type of these white blood cells, called T helper cells, are very important in enabling other cells in the immune system to perform their functions. In order for the T helper cells to carry out this very important role, they must have a CD4 molecule attached to them. These CD4 cells, are gradually destroyed by the HIV.
- A healthy person has a count of over 1000 CD4 cells per microlitre of blood. The virus attacks these CD4 cells.
- At first the body can produce enough CD4 cells to replace those that are destroyed but over time, these important cells decrease to a count of less than 500 per microlitre of blood. In some people, this is as short as two years, in some it takes 10 years.
- When this has happened, the person's body cannot fight infections as well as previously but they can usually still be helped with antibiotics.
- Later, when the infected person has a count of less than 200 CD4s per microlitre of blood, the body cannot fight infections at all, so the person becomes very ill with severe infections. The person now has AIDS.

Remember that HIV and AIDS are not the same thing. HIV is the virus or organism that causes the infection that eventually leads to AIDS. To be HIV positive means that the person has HIV in their body. AIDS is the disease syndrome, which occurs at the end of the long disease process and is characterised by multiple serious infections that do not respond well to treatment.

The HIV Blood Test

- The HIV blood test used in PNG does not test for the presence of the HIV virus. The HIV test can only detect the body's response to the virus – an antibody to HIV.
- It is only about 4 weeks after the HIV enters the body, that enough antibodies are formed, as a response to the presence of the virus (seroconversion). Only then will the HIV test (which is a test for antibodies to HIV) become positive. The person has already had the virus for several weeks.
- If we test for the antibody in these early weeks, the result is negative, even though the actual virus is in the body. This is called the **window period**. It is usually from 2 to 10 weeks. The virus is there but we cannot detect the antibodies until after the window period.
- A special case is the baby of a mother, who is HIV +ve. All babies have their mother's antibodies in their blood for up to 18 months. If we test this baby at birth, the test will be positive, because we are finding the mother's HIV antibodies. We have to wait 18 months before we can do a test and tell the parents if the baby has the virus or not.

The Serodia test

- This is the test used in PNG for screening for HIV. It is a very good test for detecting anti-HIV antibodies. If this initial test is negative, we can pass the result on to the person during the post-test counselling.
- Unfortunately, sometimes it may be reactive when the person does not have HIV.
- Any time a person has a reactive Serodia test, we need to send the blood to a registered Confirmatory Laboratory such as the Central Public Health Laboratory (CPHL), in Port Moresby for confirmation of the result. The patient is only told the result, **after** it has been confirmed by the confirmatory laboratory. The result of the confirmatory test will be sent back to the person who ordered the test and it is this person who must tell the patient the result.
- Initially the only Confirmatory Laboratory in PNG was CPHL in Port Moresby - now there are HIV Confirmatory

Laboratories in Regional Hospitals also (Mt Hagen, Lae and Nonga in Rabaul).

- Remember that blood cannot be tested for HIV unless the patient first gives **informed consent**. S/he **must** also have pre and post-test counselling.

The HIV/AIDS Management and Prevention Act (HAMP Act).

This act was passed in Parliament and Gazetted in 2004. The act makes it very clear that all HIV testing **MUST** be accompanied by **pre and post test counselling** and only occur after the client has given **informed consent**. There are only 3 situations where a HIV test can be performed without the person's informed consent. These are:

- Where a court has ordered the test – this will usually be in the case of a proven sexual offence where there is a risk that the offender may be HIV +ve
- In the case of a minor who is legally not able to give informed consent and in that case the parent or legal guardian may give the consent
- A medical officer may order the HIV test on an unconscious patient only where the knowledge of the person's HIV status will have a vital influence on the management to save the life of the patient.

Pre-test counselling

- Before the test is done, the patient must have **pre-test counselling**.
- S/he must be informed about the test and what the results may indicate and the probable outcomes, depending on those results.
- S/he must be aware that there is no cure for HIV/AIDS but that there are measures that can be taken to help the person maintain quality of life and prevent the infection from affecting others.
- The person should be encouraged to think of such things as: who s/he might tell if the result is positive, what will s/he do to lower her/his risks if the result is negative.

- Only after the person then gives his/her consent, can the blood be taken and sent for testing.
- Inform the person that s/he must return for the results and assure her/him of confidentiality.

Post-test counselling

- When the results are returned to the person who ordered the test, that person will then provide post-test counselling, during which the result of the test will be told to the patient.
- Whether the result is negative or positive, the post-test counselling must include advice on the prevention of STIs (ie ABC).
- If the result is positive and if the patient gives permission, the clinician may then call in a counsellor to assist and help support the person.
- The Provincial Counselling Coordinator, at the PAC office will be able to provide the names and contact numbers of the counsellors available.

Who should be tested?

Ideally we would like to be able to screen every person who is seen for an STI, or who requests screening. Unfortunately, we cannot do this at every health facility at the moment.

Currently, testing is limited to:

- all blood donations;
- those who are having multiple infections which do not respond to antibiotics, or relapse after therapy is completed;
- those who have severe disease, whose diagnosis is uncertain; or
- those who have other clinical indicators.
- People who have had a high-risk sexual contact and who request testing.
- Health workers who have sustained "needle stick" injuries in the work place (occupational exposure)

- In addition to these people, there will be from time to time, Sentinel Surveillance studies carried out at various centres. The purpose of this testing, is to get an accurate idea of the epidemiology of HIV in PNG.
- It is also planned to set up Voluntary Counselling and Testing (VCT) sites in various places. Some Provincial STI Clinics are already performing this function. In some provinces VCT is also available from approved Church and NGO groups who have counselling centres already established.
- It is also planned to introduce HIV Rapid Test Kits in the near future and these will make VCT services much quicker and more readily available.

This testing policy may change from time to time as testing facilities and resources change. Policy changes will be notified by the National Department of Health and the National AIDS Council Secretariat.

When does an HIV positive person get sick from the HIV virus?

Approximately 2 – 4 weeks after the HIV, enters the body, the person may be unwell for a short time. This is called the seroconversion illness and it occurs in about 50% of people who are infected with HIV.

- The seroconversion illness feels similar to malaria or flu – the person will have fever, aches and pains, sore throat and possibly diarrhoea.

After a couple of weeks, this illness stops and the person then remains well for a period of from 2 – 10 years (average in PNG probably 4 – 6 years). During this time, the person is HIV +ve but does not have AIDS.

- Even though they are well and physically fit, the HIV virus is still in their body and every time they have sexual intercourse without a condom, there is the risk of transmitting the infection to the sexual partner.
- Toward the end of this period, there may be times when the person has night sweats, swollen glands and/or Candida albicans (thrush) in the mouth. These conditions are related to the HIV virus but the person still does not have AIDS.

- These problems usually respond to antibiotics (or antifungals eg nystatin or fluconazole for the Candida).

It is only when the number of CD4 cells has dropped, that infections become common. Development of AIDS related infections is often accompanied by:

- a big loss of weight,
- fever for more than a month,
- diarrhoea for more than a month.
- other clinical features eg persistent cough, headache, swollen glands for more than a month, fast growing brown lumps on the skin, recurrent (or multi-dermatomal) Herpes zoster or oro-pharyngeal candidiasis.
- infections which do not respond to the standard treatments

NOTE: It is not a good idea to include these symptoms in public awareness programs, as people may mistakenly label individuals as having AIDS. This has already happened in some areas where people with TB or cancer or other illnesses, have been wrongly labelled by the community as having AIDS, because they have weight loss, cough or diarrhoea etc.

Treatment

- There is no treatment to cure HIV infection or AIDS.
- Currently in some centres in PNG, Anti Retroviral Therapy (ART) is available for HIV positive people. This treatment is NOT a cure for HIV but helps the person to stay healthy and not develop AIDS for a long period. Taking the treatment is not easy. The person must take the medicine 100% faithfully for the rest of their lives. There are several side effects of the medicines and monitoring of these patients is not easy. Not everyone who is HIV positive is suitable to begin on ARTs. These medications can only be prescribed by medical officers who have completed a special ART Prescribers' course and be registered with the NDoH.

Many people these days are selling **herbal treatments**, which they claim will cure HIV and AIDS. Unfortunately HIV positive people spend a lot of money for these treatments. We must remember that there is NO cure for HIV & AIDS at this time.

- The management of HIV positive and AIDS patients is preventive and symptomatic.
- The person should have as healthy a life style as possible.
- This includes good personal and environmental hygiene, a healthy balanced diet, adequate rest, adequate exercise,
- If the HIV positive person does get an infection s/he needs to be treated quickly and completely to prevent complications.
- Ongoing **counselling** support is very important in the management of people living with HIV or AIDS. Health workers should encourage clients to liaise with accredited counsellors who can help support them and may be able to also arrange home based care. Health workers and trained counsellors should work together as a team in the management of people living with HIV or AIDS. Check with the Provincial Counselling Coordinator at your PAC office to find out who are the trained HIV counsellors in your area.

Chapter 7 PARTNER MANAGEMENT (Contact tracing)

Partner management is aimed at treating and educating all sexual partners of the patient you first see. This is very important because it can break the cycle of STI transmission.

- Often patients receive effective treatment and after they leave the clinic, have unprotected sexual intercourse with the same person from whom they got the first infection, leading to reinfection of the patient.
- If possible, all sexual partners of the patient in the previous two months should be treated, even if they have no symptoms.

There are two main methods used in PNG to notify partners to come for examination and treatment.

- One method is to ask the patient to verbally notify all his or her sexual partners and to ask them to come for treatment. This way works sometimes but not very often.
- The other way, which seems to work better at the STI clinics that are enthusiastic about it, is to provide the patient with a card for each of his/her partners. After education about how important it is to treat all sexual partners, the patient is then asked to give the card to his/her sexual partners and ask them to bring the card to the clinic or health centre.
- The card simply has a short message, which asks the contact to come to the clinic or health centre for treatment.
- There are no names written on the card at all. It is useful if you just write the date and the patient's STI register number on the card, so that when the partner comes in and hands the card in, you can easily and quickly check the register to see what the initial patient was treated for. This will ensure that the partner is treated for at least those STIs that the initial patient was treated for.
- Remember that we must **not** refuse to treat a patient until they bring their partner in too. The importance of partner management should be explained carefully during the education of the patient.

- It is important that when the sexual partners or contacts come in, they should be treated with respect and a full history taken, followed by examination, diagnosis and treatment. Their partners should then also be followed up and advised to come in to the clinic too.
- Remember to give the patient positive comments on attending the clinic and taking the responsibility for treatment. Emphasise his/her responsibility to other partners to prevent complications, re-infection and spread of the infection.

The following is an example of a partner referral card. It does not have to be a printed card. It can just be hand written on a piece of paper.

Date: 10 January 1008
 Register No: 08 - 15
 Please bring this card to:
Sr Josephine Sipore
 at: *Bamahuta Health Centre*
 as soon as you can

In the case where the first patient was a female, then the card to be give to her partner would have the name of a male health worker on the card.

The Date would be the date you first saw the patient and gave him/her the card to give to his/her partner. The Register Number is the register number of the original patient, so that you can crossreference when the partner brings the card in. In the space after "Please bring this card to", write the name of the appropriate health worker, remembering that wherever possible, the health worker named should be the same sex as the partner who will bring the card in. Instead of "Bamahuta Health Centre", write the name of your own health facility.

Chapter 8 RAPE AND OTHER SEXUAL ASSAULT

Rape is any type of penetrative sexual intercourse without consent. Health workers must always remember that they are not in a position to certify that rape has taken place. That decision must be left up to the courts. If a person has been brought into the health facility alleging that rape has occurred, the health worker should take a thorough history and record it very carefully and accurately. A complete physical examination should be undertaken and details recorded, including findings relating to the condition of the person's clothes and any signs of trauma anywhere on the body. The health worker should also record whether or not the person has bathed or changed clothes since the alleged rape took place. If there are laboratory services available at the health facility, then a high vaginal swab (HVS) should be taken and a wet mount done to test for the presence of spermatozoa. These findings should also be recorded.

Women who allege to have been raped should also be treated for gonorrhoea and Chlamydia infections using the standard treatment and also should be given the "morning after pill" (MAP) as described on pages 73 and 74 of *Manual of Family Planning for Doctors, HEOs and Nurses in Papua New Guinea*. 2nd Ed., 2000.

If any person has been raped or otherwise sexually assaulted, then they have been traumatised. Health workers should always remember to be sensitive and supportive but without making a judgement, either verbal or written about whether or not rape or other sexual assault has actually taken place. Do not write in the notes that the person has been raped or sexually assaulted but write instead that the person alleges or says that they have been raped or sexually assaulted. All the health worker can do is to take a good history and as thorough an examination as the facility and situation allows and to record the findings as mentioned above.

If the examination of the person shows that there is trauma that cannot be managed at the aid post or health centre, then the person should be referred to the nearest medical officer for assessment and management. There is no point in referring someone to the

hospital just for a vaginal swab to detect the presence of sperms if the alleged rape took place more than 24 hours before the time the woman will arrive at the hospital.

Male sexual assault.

A male alleging sexual assault should be treated with the same degree of care as a female alleging rape or other sexual assault. The person must be examined carefully including oral and rectal examination where indicated. If anal rape is alleged to have occurred and laboratory facilities are available, rectal swabs should be taken and tested for the presence of spermatozoa. All findings including any anal trauma, the state of the clothes and all findings from general physical examination must be recorded as with the case of an alleged rape of a female, in case legal proceedings occur. Again health workers must take care to record accurately all details of the history and the physical examination. The person should be treated for gonorrhoea and Chlamydia infection, using the standard treatments.

HIV Testing of a person following sexual assault.

Any person who alleges to have been sexually assaulted where penetrative intercourse is said to have occurred, should be counselled about the need for HIV screening. If the initial blood test for HIV is negative, then the result should be recorded and the person counselled about the need to have the test repeated in 6 – 12 weeks and also to use a condom every time they have sexual intercourse, whilst waiting for the second blood test. This situation is best handled by a trained counsellor if one is available.

Chapter 9 CHILDREN WHO HAVE AN STI

The medical treatment of children who have an STI is prescribed in the standard management manuals.

The following management and referral guidelines are quoted from the PNG manuals.

Standard Treatment for Common Illnesses of Children in Papua New Guinea. 7th Ed. 2000, pages 96 – 98. (The little blue book).

The management of congenital syphilis is described on page 96 and 97.

The management of Gonococcal conjunctivitis is on page 97 and the management of genital infection in children is described on pages 97 and 98.

It is followed with this very good advice:

-
- Discuss the problem with a medical officer if you can.
Check the child for evidence of other sexually transmitted
- infections and treat if present
Discuss the problem with the child's family if you feel this
- is the right thing to do.
If possible check the adult members of the family for evidence of sexually transmitted infections and treat if present.

REMEMBER: However you deal with this very difficult problem, your first responsibility is to do what is best for the child.

Child Health 7th Ed 1999 Biddulph Stace and Danaya. Pp248,249: (big green book) states the following:

"Treatment in Child Abuse includes treating the child's physical damage, protecting the child from further abuse, and, most difficult, treating the immediate emotional and mental trauma to the child and preventing long term emotional and mental damage."

If you suspect that a child has been abused:

- Ask immediately for a doctor's help.

If a doctor is not available it is best to:-

- Notify your senior staff
- Admit the child
- Treat the physical injuries
- Carefully observe the behaviour of the child and the guardians.

In cases of rape it is necessary to:-

- Treat for sexually transmitted infections
- Prevent pregnancy occurring in older girls.

Sometimes the parents or guardians refuse to cooperate. It may be necessary then to use the provisions of the Child Welfare Act which allows for a Child Welfare Officer or Police Officer to act to protect the child.

After the immediate crisis of a non-accidental injury or sexual abuse is over, there remains the problem of how to protect the child from further injury. In making a decision, it is usually necessary to discuss the situation with the child's guardians (and particularly in Papua New Guinea with the head of the family). It may also be necessary to include other persons such as pastors, village councillors and in the city areas, Welfare Officers. Sometimes it is necessary to involve the Police. In reaching a solution, the most important thing to consider is what will be best for the child. In Western society, abused children are sometimes removed from the parents and looked after by foster parents. Sometimes the person who has abused the child is put in prison.

These solutions are possible in Papua New Guinea but in many cases it may be possible to solve the problem within the extended family system.

When health workers are faced with an abused child they will have feelings not only of compassion for the child but also of anger against the abuser.

It is important to control these feelings of anger because they do not help the child and may interfere with making difficult decisions. Even though it is difficult to be compassionate to people who abuse children, it is important to recognise that some of them are in need of help themselves."

HIV testing of children who have an STI

As with any person who has been sexually assaulted or who has an STI, it is important to think about the need for HIV testing. Before the test is done, the parents or legal guardians need to be counselled and must give consent for the HIV blood test to be performed. If the first HIV test is negative, it must be repeated in 6 – 12 weeks.

Chapter 10 REFERRAL GUIDELINES IN THE MANAGEMENT OF STIs AND HIV/AIDS

Who and When to refer.

From time to time patients who have HIV/AIDS or any other STI may need referral. People with other STIs may need referral if their condition does not respond to standard management or if severe complications arise (see below). *Guidelines have been produced by the counselling and home care advisers of NACS/INHASP for use with people who request voluntary HIV testing or who are advised to have HIV testing on clinical grounds.* This testing is currently only available at provincial and some district centres, so referral to these centres may be necessary if the blood cannot be drawn and the serum sent to the lab safely and reliably, from the rural health facility. It is imperative that all health workers who order HIV testing must ensure proper pre and post-test counselling is provided. Only designated health workers may order HIV testing.

Patients who have an STI other than HIV infection.

Genital Discharge (usually Gonorrhoea and/or Chlamydia)

In most cases people who present to a health facility with a genital discharge can be managed well at that facility by following the flow charts and treatment protocols used in the syndromic management of STIs. If patients re-attend with the same problem following proper treatment it is usually because they have either not completed their treatment (especially the 10 days of Doxycycline) or have been reinfected. It is important to check on sexual partners and arrange for their treatment also. The person who does not complete treatment properly, runs the risk of developing complications such as inflammation of the fallopian tubes, PID, or in the case of males, epididymitis. Any of these complications may have long-term effects, such as chronic pain and/or infertility.

The only time a patient may need referral is in the case of someone who has developed complications of untreated or inadequately

treated gonorrhoea and/or Chlamydia. Of these complications, the commonest in PNG would be PID, the advent of a bleeding ectopic pregnancy (a medical emergency) from previous PID, and infertility. The management and referral procedure for each of these conditions is clearly set out in the Manual of Standard Managements in Obstetrics and Gynaecology for Doctors, HEOs and Nurses in Papua New Guinea, 4th Edition, 2000. (PID on pages 93 to 97, ectopic pregnancy on pages 51 to 53 and infertility on pages 66 and 67). (See Annex 2)

Genital Ulcer or Lesion

Under the syndromic management principles for STIs in PNG, used at district level and below, all genital ulcers are initially treated for syphilis and if no improvement, are treated for Donovanosis. However if any health worker has adequate experience to be able to accurately diagnose Donovanosis in the primary health care setting, then s/he should **not** wait for a trial of syphilis treatment but should instigate the treatment for Donovanosis immediately. If it is not possible to test for syphilis also (VDRL and TPHA), then the patient should also be treated for syphilis at the same time. This is important, as a person who has Donovanosis may well have syphilis and Donovanosis but the lesion of syphilis may not be seen in the Donovanosis lesion. Syphilis is also becoming more common in PNG.

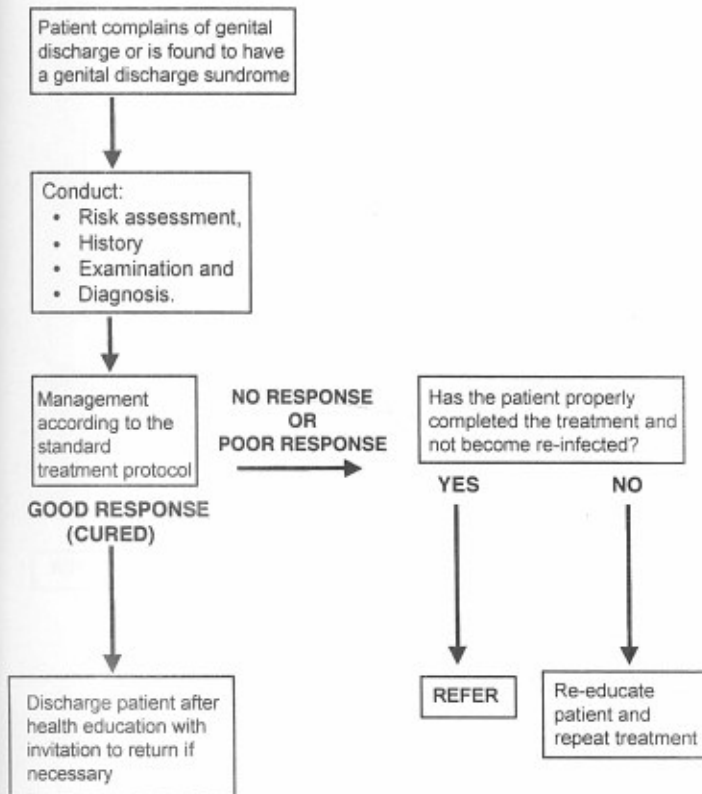
If the genital ulcer or lesion does not improve on the standard treatment as mentioned above, the person will need to be referred to a medical officer because they will need to have a biopsy taken, in case the ulcer is cancerous. Before referring the patient, it is best to give him/her a course of Tinidazole, 2grams daily for 3 days, in case the ulcer is caused by amoeba.

In the case of patients who have secondary or latent syphilis, where the treatment recommended is for 3 doses of intramuscular Benzathine Penicillin at weekly intervals, the best policy where-ever possible, is to have the complete course of therapy at the same health facility. Where this is not possible, because of the patient's plans for travel, then the usual procedure already followed by health workers around the country, should be followed. A referral letter

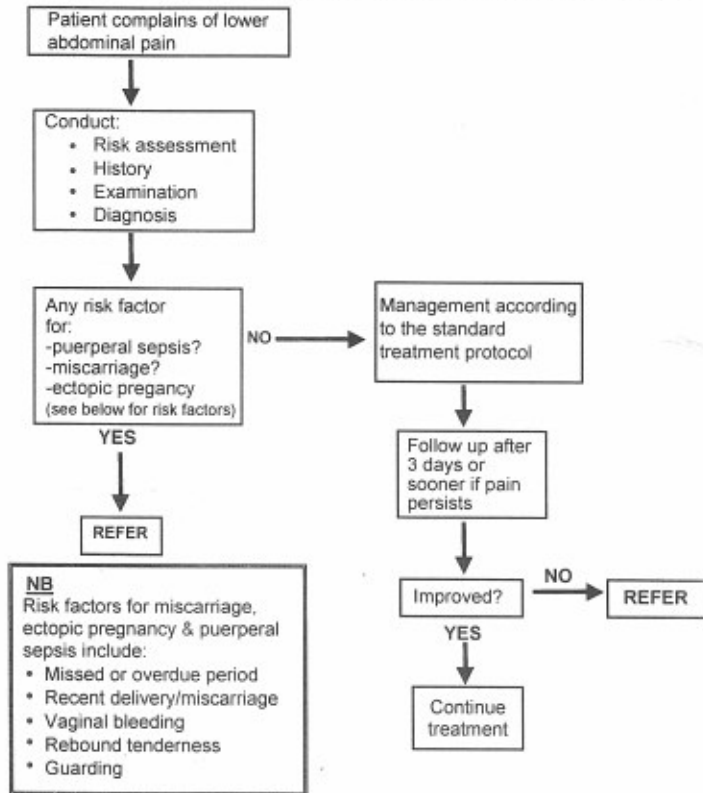
should be written by the health worker, giving a full history of the patient's condition, any laboratory test results that are available, the treatment already given and the treatment still to be completed, noting dosage and time (date) the treatment is due. The patient must clearly understand the importance of completing the treatment, the times when the next and subsequent treatments are due and the importance of avoiding unprotected sexual contact until the treatment is completed. The referral letter should be given to the patient to present at the closest health facility to where s/he is when the next treatment is due.

Some genital lesions may be caused by trauma. If a female patient has bleeding from a wound of the vulva or vagina and the local health worker is unable to suture the wound and/or stop the bleeding, she should be referred to medical officer care or hospital. Some males perform dorsal slit (cutting the top of the foreskin) of the penis with a razor. This quite often leads to bleeding and infection. If the health worker is unable to suture the wound and/or stop the bleeding, this person also will need referral to a health facility where suturing can be done.

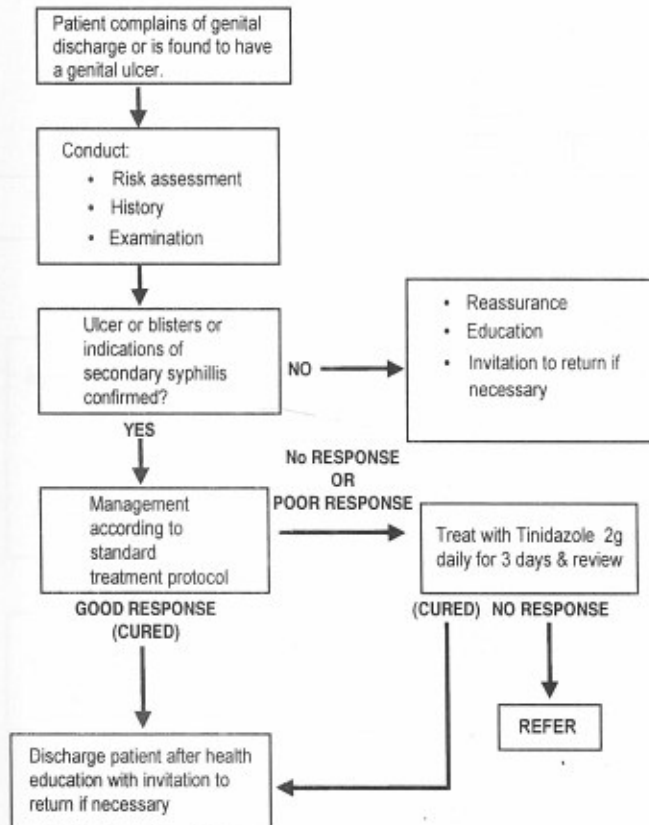
Referral Guideline for Patients with a Genital Discharge Syndrome



Referral Guideline for Patients with Lower Abdominal Pain



Referral Guiding for Patients with Genital Ulcer Syndrome



Referral Guidelines from District Health Facility to Provincial level for PLWHA

PLWHA with opportunistic infection not responding to standard treatment or whose general condition is causing distress

Discuss the situation with patient and guardians/carers about their desires for possible referral to provincial hospital or desire to return home or stay in H/C

PLWHA wants to be referred to Provincial Hospital

- Wherever possible the health worker should discuss the case with the medical officer at the Provincial Hospital first, to determine whether or not there is anything to be gained by the PLWHA in referring her/him.
- Remember that referral to another centre usually involves considerable cost and complicated arrangements for the PLWHA and/or family/carers.

PLWHA wants to stay at H/C or return home

- Assist with all possible measures for patient comfort and symptomatic relief.
- Request permission of PLWHA to organise extra help from community level health workers, counsellors and other community based support groups.

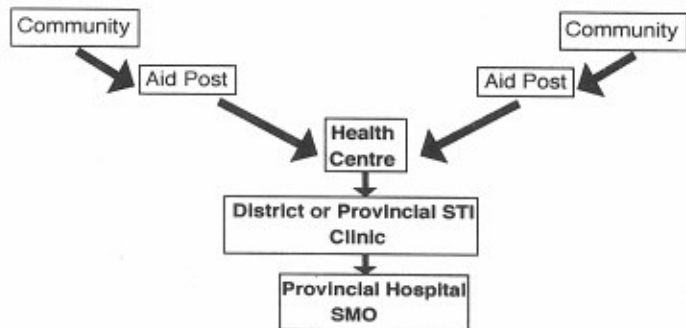
Refer to Provincial Hospital if advised by medical officer and desired by PLWHA.

To whom to refer.

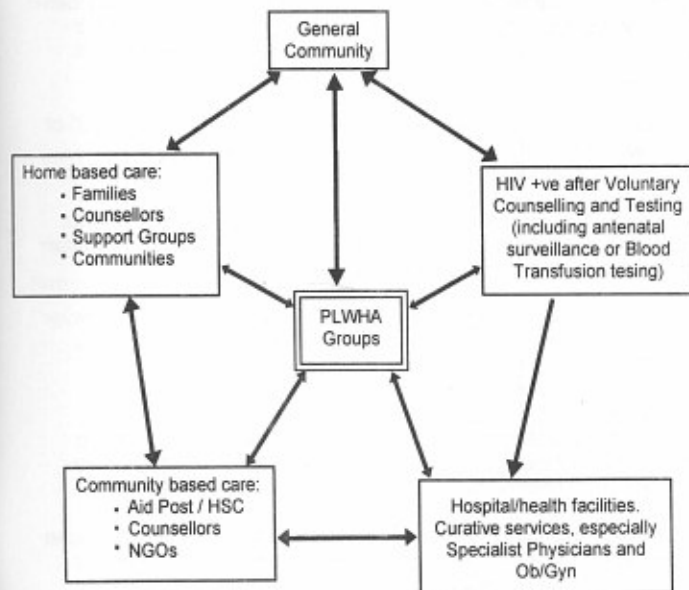
- Persons in the community who either have HIV infection or any other STI should access the nearest health facility. This will usually be an aid post but may be a health centre if that is geographically closer.
- If the aid post worker (usually a Community Health Worker) needs to refer the patient for any of the reasons mentioned above, then s/he should refer them to the local or supervising health centre. Should referral from the health centre be necessary, that will be to the district hospital if that facility exists, or if not, to the provincial STI clinic or the provincial hospital as appropriate.
- If health staff at the provincial STI clinic need further advice in the management of a patient, they will consult the physician or at the provincial hospital. In the case that the physician may require extra advice or consultation, s/he may make telephone consultation with the National Centre for Sexual Health in Port Moresby.
- At provincial level if there is no physician at the provincial hospital and the available clinician needs to consult for further advice about the management of a patient who has an STI or HIV/AIDS, that consultation will be by telephone (where such communication exists) to the National Centre for Sexual Health.
- Counselling services are already available in some areas and it is anticipated will be increased in all provinces in the near future. Health workers must remember the important role that trained counsellors may have, in the management of people who have HIV or AIDS or any other STI. **After** obtaining the individual patient's consent, it is appropriate to arrange a referral to the designated trained counsellor for the area. It is noted that many of the counselling services available in aligned with NGOs and Churches.

- *Laboratory services* are available at some district hospitals and at provincial and national referral hospitals. The range of services available even at these limited sites varies widely. Bacterial culture and sensitivity testing is available at some hospital laboratories and most can offer microscopy (and staining) and syphilis and HIV serology (provided stains and reagents are available). The syndromic management of STIs does not rely on laboratory diagnosis but where these services are available they should be used for confirmation of diagnosis. This may require some negotiation with the laboratory staff, depending on the amount of testing anticipated. In the management of patients who have complications of STIs, these laboratory services will be very helpful and if feasible, patients who have complications of STIs that do not respond to standard management may need referral to health facilities that have a laboratory service.

It must be remembered that **referral of patients is a 2-way road** and that after initial management, the patient should be referred back to the facility or health worker who initially referred him/her. The following schema shows Referral Pathways for patients with an STI other than HIV infection:



Multiple models for facilitating the continuum of care for PLWHAs have been presented in the international literature. The following model is suggested for PNG at present but it must be kept in mind that as situations change, so the model must change.



How to refer

When a patient who has developed any complications of an STI which require his/her referral, or a PLWHA needs clinical assistance or advice beyond what is available at the health facility s/he is currently attending, the health worker, after explaining the situation and the need for the referral to the patient should obtain the patient's permission for the referral before writing the referral letter. The patient and his/her family/guardians must consider whether they can arrange transport and afford the transport, admission costs to the next health facility, accommodation, food etc before the referral is arranged.

When referring a patient who has any STI (including HIV or AIDS) or the complications of an STI, the referring health worker must remember the vital importance of confidentiality. The referral letter should be written on a separate sheet of paper and sealed in an envelope and given to the patient him/herself to take to the referral centre. Referral letters and confidential matters should not be written in the patient's health record book.

If the referral is an urgent one (eg ectopic pregnancy) then wherever possible, the referring centre should contact the referral centre to inform them that the patient is coming. As recommended in the Obstetrics and Gynaecology Manual referred to previously, wherever possible before referring a patient who has PID or infertility, every attempt should be made to communicate with the SMO Ob/Gyn at the referral centre to discuss the case, to ensure that there is something to be gained by referring the patient.

Similarly with PLWHAs who seek referral to a higher centre because of complications or deteriorating status, wherever possible, every attempt should be made by the referring health worker to communicate with the relevant medical officer at referral centre to ascertain that it is to the patient's advantage to refer them and that there is something to be gained for the patient, by the referral. In many cases referral at this late stage is not only difficult and very

expensive for the family but may not offer much benefit to the patient. The health worker needs to exercise good judgment and advise the patient and family honestly about whether there is any real expected advantage in transferring the patient.

Expected outcomes at each referral point

Records

- All clinical findings and treatments given must be recorded as with any other patient.
- Records must be kept with the greatest confidentiality and stored appropriately.
- When the patient is referred to another facility or health worker, the referral letter must be kept with the patient's file in the centre to which s/he is referred and be treated with the same high confidentiality as the other medical records. The referring centre should also keep a copy of the letter.

Referral forms

- In most provinces in PNG, referral forms are not used - the health worker writes a referral letter on plain paper.
- It is unlikely even if special referral forms were introduced, that their supply would be sustainable so it is not advisable to introduce them.
- The referral letter should contain the patient's details, history and examination findings, diagnosis and any treatments or other interventions given. Any improvement after the treatment or lack of response, or any deterioration, should also be recorded in the letter that must, in addition record the patient's own wishes and intentions.
- The referral letter should be given to the patient him/herself to take to the referral centre, and wherever possible should be in a sealed envelope.

Reporting

- To enable accurate epidemiological studies and planning based on accurate statistics, it is essential that all new cases of STIs must be reported.
- It is just as important that we avoid over-reporting and that each infection only be reported once.
- Currently aid post staff forward their records monthly to their supervising health centre. These records include the number of cases of genital discharge and of genital ulcer that are seen in the aid post for that month. The supervising health centre should include these figures in the statistics they report monthly via the Provincial Information Officer, to the national Health Information System (HIS).
- Currently provincial STI clinics are reporting separately to the STI/HIV Unit NDOH. It is anticipated that this will change in the future with the introduction of an integrated STI reporting system.
- New cases of confirmed HIV infection are reported directly from the Confirmatory Laboratory to the statistics officer at the National AIDS Council Secretariat (NACS) and a copy is sent via the provincial laboratory, to the clinician who requested the test.
- When referring a patient who has either HIV/AIDS or any other STI, it is important for the referring health worker to also include in the referral letter, whether or not that particular case of infection has already been reported through the system.
- In the case of referring a PLWHA the referring health worker should include in the letter, when the HIV infection was confirmed and the reporting site. This again helps to avoid repeat reporting.

Feedback

- As with all referral systems, feedback is very important. When the patient is discharged from the referral centre, a letter should also be written back to the facility or health worker that the person is being referred back to.

- This letter should contain an acknowledgement of the original referral, mention the findings and interventions during the referral period and list all the medications and other management the person is now on.
- Recommendations should also be made as to probable future management at the original health facility to try to prevent the need for future referral of the same person

Remember that referral to another centre usually involve considerable cost and complicated arrangements by the PLWHA and/or the family/carers.

It is anticipated that these guidelines will be used by all health workers at all levels of health care facility when the need arises to transfer a patient who has any STI or complications of an STI that does not respond to the standard treatment protocols, or who has complications of HIV infection.

Abbreviations

AIDS – Acquired Immune Deficiency Syndrome
BD – twice a day (preferably 12 hourly)
CHW – Community Health Worker
CPHL – Central Public Health Laboratory (Port Moresby)
FP – Family planning
HEO – Health Extension Officer
HIV – Human Immunodeficiency Virus
MO – Medical Officer
NAC – National AIDS Council
NO – Nursing Officer
NRL – National Reference Laboratory (also CPHL)
PAC – Provincial AIDS Committee
PID – Pelvic inflammatory disease
PNGIMR – Papua New Guinea Institute of Medical Research
QID – Four times a day (preferably 6 hourly)
STI – Sexually Transmitted Infection
TDS – Three times a day (preferably 8 hourly)
TPHA – Treponema Pallidum Haemagglutination Assay (the confirmatory blood test done for syphilis and yaws).
VDRL – Venereal Disease Research Laboratory (the blood test done to screen for syphilis and yaws).

Definitions

Balanitis – inflammation of the glans penis (the head of the penis)
Circumcision – The surgical removal of the foreskin of the penis
Dorsal slit – cutting along the top of the foreskin of the penis (as is done by many boys/men in PNG. This is not circumcision.)
Dyspareunia – Pain experienced during sexual intercourse
Dysuria – pain or irritation when passing urine
Epididymitis – inflammation of the epididymis
Marsupialisation – a surgical procedure where the top of the Bartholin's gland is left open, following the incision of a Bartholin's abscess.
Orchitis – inflammation of the testis
Paraphimosis – the tight foreskin has been retracted back over the glans penis and has formed a tight band behind the glans (head of the penis). This causes oedema of the glans penis and adjacent tissues.
Phimosis – the opening of the foreskin is too tight to allow the foreskin to be retracted (drawn back) over the glans penis (head of the penis)
Posthitis – inflammation of the underside of the foreskin of the penis
Window Period – That period of time between when the HIV enters the person's body, until the blood test becomes positive (2 to 12 weeks).

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