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**Proceedings and Summary**

**A National Meeting:  
The Enhancement  
of  
STD Prevention and Control in Zambia**

**November 5 - 6 1998**

**Pamodzi Hotel  
Lusaka, Zambia**

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**Hosted by the CBOH and co-sponsored by  
USAID/Lusaka through FHI/IMPACT and PCI**

*Rapporteurs*  
*Musa M Mwenya and Michael Nalishuwa*

## Session Summary Topics

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## **Background**

The control of sexually transmitted diseases (STI) has been recognized as a priority in Zambia since the early eighties. The importance of an effective STD control and prevention program has become more urgent since documentation of the link between STDs and HIV. Zambia has initiated several efforts to improve STD control and prevention in general, and STD case management in particular. For example, there was the development of national STD treatment guidelines and the training of front-line health workers and district health managers.

Two assessments conducted in 1998 with support from the United States Agency for International Development (USAID) revealed that the approach to STD control and STD case management followed in the field did not always correspond with the guidelines and policies established by the national program. In addition, key players at the national policy development level did not always share a common vision about which approach to follow. This situation demands a resolution. The commitment of key players to move forward set the stage for this national meeting of key players and stakeholders in STD prevention and control in Zambia to review the prevailing situation and reach a consensus on the way forward.

## **Meeting Purpose**

To engage key players in STDs in Zambia in a review and analysis of current STD prevention and control efforts, culminating in suggestions for program enhancement.

## **Meeting Objectives**

- 1 To conduct a critical review of the STD situation and current program strategies in Zambia
- 2 To discuss alternative approaches to STD case management and analyze the most appropriate approach for Zambia, highlighting strengths, problems, and issues with each approach, and strategies to resolve the problems and issues
- 3 To review pertinent study findings and critique the advantages and drawbacks of the different case management approaches for STDs in Zambia, including drug supply, laboratory capability, respective roles and other issues
- 4 To suggest next steps in technical and programmatic areas, including but not limited to
  - action steps to improve STD control
  - national strategy guidelines
  - laboratory and drug policy
  - provider training, supervision and evaluation
  - supporting communications materials for providers and patients
  - partner management
  - provider evaluation
  - interventions for specific groups
  - additional STD studies

**AGENDA**

**A National Meeting: The Enhancement of STD Prevention and Control in Zambia**  
**November 5 - 6, 1998**  
**Pamodzi Hotel**

**Meeting Facilitators**      Mr Philimon Ndubani, Institute of Economic and Social Research (UNZA)  
  
Ms Mary Lyn Field, Family Health International/IMPACT Project

**THURSDAY**

08 30 - 09 00	Registration, coffee and continental breakfast	
09 00 - 09 15	Welcome and opening remarks	
09 15 - 09 45	Introductions and expectations	
09 45 - 10 00	Meeting purpose, objectives, agenda	
10 00 - 10 15	Presentations The public Health Significance of STDs and STD Program goals	Dr S Mphuka, CMAZ Dr P Matondo, UTH
10 15 - 11 00	STDs in Zambia Epidemiology and community behaviours	Dr M Sichone,CBOH, ICASA Dr P Matondo, UTH Mr M Nzima, PCI
11 00 - 11 15	<b>BREAK</b>	

11 15 - 12 30	Health structure and support systems for STD Diagnosis and Treatment Laboratory facilities and Drug supply	Mr Clement Mwale, CBOH, ICASA Dr G Kahenya Dr R M Kampamba Dr Yves Lafort, FHI, IMPACT Dr P Matondo, UTH Dr R Mauchaca
12 30 - 13 30	<b>LUNCH</b>	
13 30 - 15 30	Critical look at the diagnosis of STDs the clinical, etiological and syndromic approaches	Dr Yves Lafort, FHI, IMPACT Dr P Matondo, UTH
15 30 - 15 45	<b>BREAK</b>	
15 45 - 16 45	Where do we go from here?	Dr M Sichone
16 45 - 17 15	Summary comments, review and preview	

## **FRIDAY**

08 00 - 08 30	Continental Breakfast	
08 30 - 08 45	Comments and agenda overview	
0845 - 09 45	Presentations Current provider practices and STD activities in Zambia	Mr M Nzima, PCI/Z Dr A Chomba, UTH Clinic Mr S Mphuka, CMAZ Mr Mutombo Dr Patel

09 45 - 10 45	Components of an Effective National STD case Management Program	Mary Lyn Field and Dr Yves Lafort, FHI/IMPACT
10 45 - 11 00	<b>BREAK</b>	
11 00 - 13 00	Participant action agenda for national STD program enhancement small groups develop recommendations for the STD working group and report back	
13 00 - 14 00	<b>LUNCH</b>	
14 00 - 14 30	Meeting feedback	
14 30 - 17 00	Meeting follow up plans and closing remarks	

**Opening Remarks**  
**Dr Moses Sichone, CBOH**

The issue of sexually transmitted diseases (STDs) has become a major concern for both the health sector as well as to the rest of the economy. The effectiveness of the health sector to remedy the problem of STDs has declined over the years due to the structural disabilities. The health sector must find ways and means to move forward so as to alleviate the problem.

As HIV/AIDS, TB, and STDs rank among the top health problems in Zambia, it is highly significant, therefore, that they are approached with specific importance. The Ministry of Health, therefore, appreciates the purpose of the workshop.

Many approaches are available to remedy STDs, but if effective measures are to be applied, a Zambian approach has to be adopted. We hope, as experts, to come up with viable resolutions to counter STDs, which affect the political, economic and cultural set-up of the nation in one way or another. This workshop should serve as a platform to rethink our strategies and therefore focus specifically on the real problem.

Lastly, similar initiatives in specific areas, such as a working group on mother-child transmission that advises the Ministry of Health has begun work. It is desirable that there be a similar working group advising the Ministry of Health about STDs in Zambia.

**Expectations of Meeting Participants**

The facilitator requested that participants introduce themselves, identify their position and institutional and share their expectations of the meeting.

The participants introduced themselves (participant list is in the appendix to this report) and then shared the following expectations:

- 1 Train and use medical students in STD prevention activities
- 2 Improve the flow of drugs from source to recipients

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- 3 Understand the best way forward and come up with policy or minimum diagnostic tools
- 5 Come up with clear strategies for the STD working group
- 6 Support the meeting outcomes
- 7 Create an understanding between western and traditional medicine to ensure a two-way process
- 8 Identify ways to help make drugs available
- 9 To specify the role of the laboratory by giving laboratories better support
- 10 Find ways to curb the buying of drugs on the streets
- 11 Medical destigmatization of STDs and increasing involvement of the community
- 12 Discuss how the control and prevention of STDs can be done through the improvement of communities, especially by teaching rural people how to control STDs
- 13 Ensure that recommendations are made and implemented
- 14 Identify ways to make drugs available and move syndromic management to community levels
- 15 Since STDs are related to psycho-social factors and poses an economic hazard, it is important to curb alcohol abuse and involve youths more prominently in activities concerning the reduction of STDs
- 16 Improved inmate conditions would reduce STDs in prisons
- 17 Ensure blood safety, especially in syphilis cases
- 18 The defense force clinics should benefit from national activities on STD management
- 19 The workshop was to be the beginning of a process that will translate into improved STD management and networking

**The Public Health Consequences of STDs: An Overview**  
**By Dr S Mphuka**

STDs rank among the five most important causes of years of healthy productive life lost in developing countries. It is therefore significant that practitioners are both good scientists and good managers of STDs.

The control of STDs is critical to the empowerment of health in Zambia for various reasons, some of which are

- STDs have a serious impact on women and children
- The linkage between HIV/AIDS and STDs must be considered. This implies that better STDs services will mean a marked reduction not only in STDs but also in HIV/AIDS.

### Magnitude of STDs

- 340 million new cases of curable STDs per year
- Second cause of healthy life lost in women between 15 - 45 years

The table below shows the global incidence in 1995 of curable STDs

**Table 1 Global incidence of curable STDs in 1995**

T Pallidum	12 million
N Gonorrhoea	62 million
C Trachomatis	89 million
I Vaginalis	170 million
H Ducreyi	7 million
<b>Total</b>	<b>340 million</b>

**Table 2 WHO Estimates - Annual Increase**

Syphilis	12 million
Gonorrhoea	62 million
Chlamydia	170 million

**NOTE** It is estimated that HIV infection will have a cumulative total of 40 million by the year 2000

The consequences of STDs in a country like Zambia and generally in sub-Saharan Africa are as follows

- 1 Greatest impact is on women and children
  - PID and infertility
  - adverse pregnancy outcomes
  - cervical cancer
- 2 Social consequences
- 3 Relationship problems

### Determinants of STD Epidemiology

- 1 Individual
  - Biomedical - circumcision
  - Behavioral - sexual
    - health seeking
- 2 Health structure
  - Policy
  - Services/facilities

It is always, wrongly, assumed that drugs will always be available, but this is highly dependent on the strength of the drug policy and the provision of adequate services or facilities

- 3 Societal/Environmental
  - Stigma in society
  - Place of women in society
  - Cultural beliefs
  - Number of partners for women

### Prevention of STDs

- 1 Education and awareness to reduce risk is important This can be done through
  - (I) monogamy
  - (ii) abstinence
  - (iii) careful partner selection with use of condom
- 2 Identification of infected individuals through careful screening
- 3 Effective clinical services (diagnosis, treatment, counseling) for patients with STDs and the syndromic approach is preferred
- 4 Effective evaluation, treatment and counseling for sexual partners of patients with STDs This can be done through the effective use of core groups

There are several factors that affect the control of STDs and some of these are

- (i) Health services are inadequate
- (ii) Attitudes of providers
- (iii) Lack of drugs
- (iv) No lab support
- (v) Inadequate use of condoms and no use at all

### **Possible Challenges**

- 1 Honesty to recognize the threat of the epidemic and the inadequacy of current responses
- 2 Knowledge to ensure that science and evidence based decisions determine priorities and responses
- 3 Leadership to involve 'community' in a series of incremental steps with shared goals and common purpose

### **Local HIV/AIDS Data**

**Dr M Sichone**

Worldwide statistics show that 30.6 million of adults and children are infected with HIV/AIDS. The area most affected is sub-Saharan Africa. Estimates also show 5.8 million are newly affected with HIV/AIDS each year. It is further estimated that 83 percent of the world's total affected population is in sub-Saharan Africa.

In Zambia, about 19.9 percent of the sexually active population is infected with HIV/AIDS. This has led to a decline in the life expectancy in sub-Saharan Africa. To-date, life expectancy continues to decline.

The biggest gap in HIV/AIDS effort today lies between what we know and what we are actually doing.

### **STD Prevalence and the Link Between STDs and HIV**

**By Dr P Matondo**

#### **STD Prevalence**

The prevalence of STDs is usually difficult to determine for the general population. This is because of the following reasons:

- It is difficult to find volunteers
- Sampling problems
- Limitations of laboratory methods, more sensitive in symptomatic than in asymptomatic patients
- Influence of antibiotic use in population

Available STD Prevalence Data in various groups

#### **Gonorrhoea**

- 11.3 percent pregnant women in ANC (Hira 1996)
- 19 percent pregnant women in std clinics (Ratnam 1980)
- 5 percent of patients with genital warts (Matondo et al 1998)

#### **Syphilis**

- 14.4 percent of pregnant women (Ratnam 1982)
- 8 percent of pregnant women (Hira et al 1990)
- 17.5 percent of pregnant women (de Graft-Johnson 1995)
- 5 percent of symptomatic HIV + persons (Matondo et al 1998)

Recent data suggests younger women are mostly affected by HIV/STD, that is those in the age group of 15 to 25 years. It was also found that 1 out of 3 people with genital warts were HIV positive. It was found that active syphilis is predominant in younger women.

### **Chlamydia Trachomatis**

- 4.7 percent of men with GC arthritis in Lusaka (Salem 1990)
- 1 to 3 percent of women and 3 to 10 percent of men aged 15 to 49 reported having had an STD

The prevalence of STDs is dependent on the following

- 1 who your sample is and
- 2 the age group

### **Implications**

- 1 Link between STDs and HIV
- 2 STD prevention is a strategy and tool for HIV/AIDS control
- 3 There is need for a public health approach to STD control so as to have the greatest impact on AIDS control

### **Conclusions**

HIV is an STD and much of its transmission is through sexual means

<b>Presentation of Findings on Community Behaviors Regarding STDs by Masauso Nzima</b>
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The findings presented are drawn from several different studies, including

- Community capacity study
- Youth knowledge and perceptions
- Health seeking behavior study
- Targeted intervention research STDs

There are three categories which should be considered when one is dealing with community behaviours regarding STDs

- 1 How people perceive and describe the illness (illness conception)
- 2 How they react to treatment
- 3 Service and health worker perceptions and attitudes
  - Biomedical versus traditional medicine

Barriers to resolving the STD problem include the following

- 1 Shortage of drugs
- 2 Lack of privacy in the clinic setting
- 3 Patient opposition to examination by a member of the opposite sex
- 4 High medical fees
- 5 Requests to bring partner for treatment

More information related to community behaviours regarding STDs is appended to this report

**Health Structure and Support Systems for STD Diagnosis and Treatment  
Laboratory Facilities and Drug Supply**

**Health Reform and STDs  
Clement Mwale**

Health reforms are necessary in managing the control of STDs, HIV/AIDS, TB and leprosy These are the major health problems in Zambia

Some of the main reasons to institute adequate health reforms are that

- 1 The health structure has been eroded and could encounter difficulties in resolving major health problems
- 2 Quality and quantity of health has declined hence reform is required
- 3 Staff of medical centers need a 'boost' in morale
- 4 The inadequacy of drugs in health centers needs to be resolved

The preferred vision for the health sector is, therefore, to provide equal access to health care as close to the family as possible

Some of the priorities we should vie for are

- 1 decreasing the impact of HIV
- 2 decreasing resources to curb the epidemic (local or otherwise)

Identify main problems at district level and plan District level should work in collaboration with community level programmes to come up with feasible ideas

STD Prevention and Control- some directions

- 1 Districts should integrate STD services into primary health care

- 2
- 2 Need to design an effective system for referrals
- 4 Revise the existing STD information system
- 5 Provision of user - friendly services is important
- 5 Improve access to condoms by improving availability

Recently there have been efforts to create a national AIDS Secretariat, which should report to the national council. The National council will consist of not only doctors but others from various sectors of society. The council will also be delinked from the CBOH.

The district should also have capacity to identify needs for STD care and a budget for drug requisition.

### Questions, Comments and Responses

**Do you have national guidelines for treatment modalities?**

Treatment guidelines at national level have been integrated in policy and implementation is feasible.

**There is a variation in district prevalences of STDs/HIV, so how is the AIDS secretariat going to harmonize the differences and how will they implement the policy?**

The secretariat will only offer technical and resources for funding advice.

**Some districts such as Nchelenge do not have the institutional capacity to handle planning, accounting and so on, It is therefore unfair and not feasible at the moment to require this.**

Building capacity in the area is a plausible alternative. This can be done through providing areas with extra staff and by using vertical and horizontal programmes.

**The health reforms were formulated to generally provide some type of equity provision of services to various health sectors and to ensure that problems of the past did not resurface. Why hasn't the CBOH achieved its objectives up to now?**

I am not the right person to answer that, but probably the policy and structural framework has not made it easy to achieve the objectives of the health reforms.

## National Laboratory Policy

Dr G Kahenya

### Background

Laboratories provide results based on a scientific approach to patient management. Laboratory diagnostic services, on the other hand, are often excluded in health care delivery in Zambia.

To ensure cost effective laboratory services, service delivery should be as close to the family as possible.

### Objectives of Laboratory Policy include

- 1 To incorporate laboratory services into the main component of health reforms
- 2 Document the current status of laboratory services
- 3 Develop diagnostic standards applicable to the local environment

### Main Components of Laboratory Policy

- 1 Test selection and use
- 2 Basic inputs
- 3 Quality Assurance
- 4 Safety
- 5 Ethics

### Role of the Laboratory in STDs

- 1 Help clinics confirm diagnosis
- 2 Identify causative agents
- 3 Break the chain of transmission

### Some Recommendations

- 1 Prioritize basic inputs
- 2 Target laboratories that are falling below the acceptable standards
- 3 Improve training at each level of implementation

## Questions, Comments and Responses

The first contact point for a client with an STD is in the health center, there are only 64 health centers that have a laboratory almost 1000 do not have a laboratory, if this is the case, how can you promote the etiologic approach?

400 centers will be upgraded and they will all have laboratories. The rest will be health posts.

**It is questionable what to do with STDs at health post because it is contrary to the principal of providing care as close to the community as possible**

**There is a lot of unused laboratory equipment in the health centers Where are you going to find people to train?**

We have gone all over the country and in case of imbalances, we will transfer from one place to another

**Mission hospitals have always been much better than government hospitals and they pay more attention to quality They also tend to be close to communities and they provide better services Targeting therefore in STD control and laboratory is significant**

**The sooner we realize that clinical medicine and laboratory medicine is both meant for patients and hence are not mutually exclusive the better**

**It is important to note also that where there are no laboratories, efforts should be made to provide laboratories in those areas**

## **National Drug Policy**

**R M Kampamba**

### **Vision of the National Drug Policy (NDP)**

Overall access to good quality, safe and effective medicines

Some of specific themes of NDP are as follows

- 1 Drug resignation and regulation
- 2 Drug quality assurance
- 3 Local drug production
- 4 Research and development
- 5 Traditional

### **Questions, Comments and Responses**

**“Is there any guarantee that all STDs drugs will be available at each level?”**

Drugs are prescribed in general terms There are certain drugs that can be available at the health center level

**“People should start lobbying for the whole package at all levels ”**

**Laboratory Capability and Drug Supply: Needs and Current Status**  
**Dr Y Lafort**

A brief overview was presented of the role of the laboratory in STD control, emphasizing its role in clinical practice and defining its additional role in public health (surveillance, operations research, reference laboratory) Factors to consider in defining what laboratory tests to perform for STD case management at the different levels were outlined validity/reliability of the tests, feasibility, acceptability, prevalence of STDs, logistical support, financial and human resources, technical capacities of staff, cost-effectiveness, and issues of follow-up, evaluation, coordination and quality control

The WHO STD drug framework was presented Emphasis was put on how to increase drug efficiency by improving drug selection, quantification of drug needs, procurement, storage and distribution, rational prescribing habits and patient compliance The drug selection criteria as established by WHO for STD drugs were presented high efficacy, lowest possible cost, acceptable toxicity, no microbial resistance, single dosage, oral administration and not contraindicated in pregnancy

Results related to laboratory and drug supply from the assessment on the current status of STD control in Zambia performed by Dr Lafort and Dr Matondo in May of this year were presented

In conclusion, it was shown that most health facilities at the primary level in Zambia currently don't have laboratory facilities and those that have can only perform basic tests such as RPR for syphilis, gram stain exam for gonorrhea and wet mount exam for trichomonas and candida, and this is also true at the government level as well as at the non-government clinics Government clinics additionally face serious problems of insufficient lab supplies

It is important to understand that the syndromic approach does not exclude the need for a laboratory back up The laboratory plays a significant role also in the syndromic approach, e g , there would be no algorithms if it weren't for the laboratory

Regarding drug availability, it was concluded that the recommended drugs for gonorrhea treatment are currently not available at the primary level, with the exception of the private clinics Drugs to which neisseria gonorrhoeae has proven resistant are still the most frequently used, largely because effective drugs are not included on the essential drug list as first level drugs For all STD drugs, serious supply problems were found at the government sector

**Questions, Comments and Responses**

**The magnitude of STDs is going to change, hence, we should institute measures for guidelines, which will also change overtime**  
**Policy needs to be changed so that effective drugs are included on the essential drugs list**

**Since a deliberate policy exists, can't there be a way of making these drugs available accessible and affordable?**

It is difficult to monitor drugs for specific use for STDs

### **Antimicrobial Susceptibility Study Finding and Implications** **P Matondo & R Macuacua**

One of the main advantages of having a laboratory in a clinical setting is that it gives access to clinical equipment

Between 1980 and 1996, there has been a lot of work regarding STD-causing organisms. There has been an increasing resistance to drugs that are prescribed for STDs in Zambia and elsewhere.

A 1995 study in Lusaka showed very high levels of resistance of *Neisseria gonorrhoeae* to penicillin (57%), tetracycline (79%), erythromycin (81%), thiamphenicol (38%), and reduced sensitivity to the still commonly used drugs cotrimoxazole (75%) and kanamycin (73%). This study showed that the only drugs that are currently effective for the treatment of gonorrhea are ciprofloxacin, ceftriaxone and spectinomycin.

The major factors leading to antimicrobial resistance are

- 1 Abuse of antibiotics in communities
- 2 Sensitivity patterns outside Lusaka
- 3 Trends overtime
- 4 Lack of rational drug use
- 5 Need for regular monitoring of susceptibility trends

### **Questions, Comments and Responses**

**Three of the drugs listed on the essential drug list are not available in health centers. Why is there no policy change to make these drugs available at the health centers?**

There is a need for drug policy input from specialists because the people who make the procurements often do not have access to adequate data.

There is also a need for integration through the information system.

Other presentations concerned a critical look at the diagnosis of STDs. The clinical, etiological and syndromic approaches.

**A Critical Look at the Diagnosis of STDs: The Clinical, Etiological and Syndromic Approaches**  
**J Kamanga and Y Lafort**

The presenters gave an overview of the Mwanza study, which was conducted in Tanzania from 1991 to 1993. The study clearly demonstrated the positive impact of a strengthened STD control program (using syndromic case management) on HIV incidence. HIV incidence was reduced by 42% in 6 communities where STD case management was strengthened in comparison to 6 control communities.

The presenters highlighted the importance of prompt and effective treatment of patients presenting with STD symptoms and the problems in the diagnosis of the pathogens causing the symptoms. Mr Kamanga presented what a correct etiological diagnosis implies in terms of required laboratory facilities and tests for each of the most common syndromes, i.e., genital ulcer disease, urethral discharge syndrome and vaginal discharge syndrome.

Dr Lafort presented the two alternative approaches: a diagnosis based on clinical grounds, eventually including simple lab tests available at the peripheral level, and the syndromic approach. For each of the three syndromes, he presented the results of a study in the region looking at the validity of both these approaches in detecting the causative pathogens. Conclusions focused on the number of missed cases by each approach and the number of patients receiving treatments for a disease they didn't have.

### **Case Studies**

The presentations were followed by a case study exercise in which each small group discussed a case and decided which diagnostic approach to use, and then discussed the advantages and disadvantages of each approach in that particular case. The groups reported their findings in a plenary session and the plenary discussed the approach they chose.

The case studies were:

- Case 1        Malita has a 'pus coming out down there'
- Case 2        Alexis has a leakage
- Case 3        Sara has a sore on her private parts

All the above studies and discussion are appended to the report.

In summary, the case studies identified the following advantages and disadvantages of each approach:

#### **Advantages of the syndromic approach**

- It is likely to cover possibilities of chancroid and syphilis
- It provides one-stop treatment
-

### **Disadvantages of the syndromic approach**

- low specificity
- no drugs in rural setting
- higher cost of treatment (use of more drugs)

The advantages and disadvantages of the clinical approach were as follows

### **Advantages**

- cheap
- no infection
- one day treatment
- less complicated
- less time

### **Disadvantages**

- increasing possibility to diagnose wrong condition
- misdiagnosis can increase infection to others
- lowering of confidence in individual to come back

Dr Sichone then made the closing presentation of the day, emphasizing "where to go from here" The focus of this discussion was

- 1 Needs of the STD program
- 2 Program ideals for STD program of the CBOH
- 4 WHO's STD program recommendations

Dr Sichone mentioned that the STD program adopted the syndromic approach as its case management strategy for exactly the same reason that were cited as advantages of the syndromic approach in the case study discussions He again emphasized the need for an STD Working Group Dr Sichone cited some lack of progress over the past year due to health reforms The group discussion led to a statement of consensus that **syndromic management is the most viable option for STD management in Zambia at the current time** **Appropriate laboratory support is vital where it is available** **The use of laboratory data is important in improving diagnostic validity**

## **Current Provider Practices and STD Activities in Zambia**

**Masauso Nzima**

Masauso Nzima highlighted selected findings regarding the current status of STD management in Zambia

A health facility survey was carried out in Lusaka and the Copperbelt The methodology used was four fold

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- detailed observations of health care providers (HCPs)
- medical record reviews
- interviews with particular HCPs
- private practitioner assessment

Study included 117 observations of various categories of STD drug dispensing outlets, which included pharmacies, chemists, drug stores and other informal drug sources From this, the following were the results -

- 104 took a complete patient history
- 84 performed thorough observation and examination of patients
- 66/88 wrote effective prescriptions
- 58/66 advised the patient to complete the entire course of treatment
- 42/58 mentioned risk of HIV/AIDS
- 36/42 promoted condoms for HIV/AIDS prevention

**Other Findings**

- People generally believe that injectables are better than other forms of drugs
- Most people use the less formal drug dispensing outlets which includes street hawkers and 'tuntembas'
- The hawkers and street 'tuntembas' procure their supplies from wholesale drug stores
- Workers in chemist shops have little if no training in STD/HIV/AIDS or drugs
- Most people get prescriptions to go and purchase drugs
- Asked whether pharmacies, chemists and drug stores sell the right medicine it was found that they rarely followed any guidelines

**Concerning the cost of drugs on the streets**

- The hawkers will always give out drugs if one can pay the right amount of money
- Some drugs on the streets are in packets labeled IDA, indicating that they are sourced from government clinics
- The storage of the drugs in some outlets, especially on the streets, is incorrect and may lead to a loss of efficacy
- Asked to clarify the proportion of people going to the different drug outlets, the question elicited no significant response

**Findings regarding the current status of STD management in Zambia - part II**  
**Yves Lafort**

Main conclusions were presented of the assessment on the current status of STD control in Zambia, performed by Dr Lafort and Dr Matondo in May of this year These were

- The syndromic approach is currently not used

The major constraints to its utilization are

- lack of awareness
- lack of funding for drug component
- poor follow up and supervision
- insufficient coordination in guideline development and training
- condom distribution at the health facilities is weak
- partner notification is not standardized
- there is a lack of educational aids at the health facilities
- poor coordination exists between the DHMT and parastatal and hospital clinics
- there is a lack of projects targeting STD case management of CSW and truck drivers
- the private sector has so far not been involved in programs promoting the syndromic approach
- the involvement of the informal sector (pharmacies and drug vendors, traditional healers) in STD case management issues could be improved

#### **Comments**

There was disagreement on the finding that condom distribution was weak in Zambia, referring to the good figures in number of condoms distributed by both social marketing as by the health sector through the FP clinics. In reply, it was clarified that the assessment looked only at the availability of condoms along the flow STD patients follow at the health facilities (waiting area, consultation room, laboratory, dispensary) and that condoms may get to the clinic, but they don't get to the STD patients

#### **Status of STD Guidelines in Zambia**

**Dr A Chomba**

Zambia does not have STD guidelines that are available to guide STD management. The problem is the lack of an agreed-upon standard. The STD guidelines should be a working document readily available to the Health workers on the ground and this is not the case today.

The existing guidelines promote condom use and stress the need for partner notification. Currently Zambia uses a flow chart adopted from the Kenya STD programme but there is a need to modify it to make it consistent with local conditions. This is important because of differences in the availability of drugs and issues such as antimicrobial resistance.

It is therefore hoped that this workshop will culminate in a specific and deliberate move to produce a National STD Policy should be based on local doctor and should be revised from as needed. The policy should also emphasize the aspect of training for health workers in the syndromic and etiological management of STDs, availability of essential STD drugs and sufficient laboratory support. In addition, the drugs must be cost effective, given the meager income of Zambia and its people. Zambia is also more likely to adhere to a policy

if Zambians formulate it themselves. If the above measures were in place, Zambia could expect a decrease in STD prevalence in Zambia.

Dr. Musonda reported that TDRC (Tropical Disease Research Center) has been working on a revision of the original guidelines developed a few years ago.

## **Current Provider Practices and STD Activities in Zambia**

### **STD Activities Panel**

**Dr. S. Mphuka, Dr. Patel & Dr. Matondo, Dr. Mphuka**

In 1993 - 1996 STD management guidelines were developed and were distributed by the Morehouse Project. There was a consensus on the guidelines. One hundred ninety-six doctors, nurses and midwives were trained in syndromic management of STD cases at UTH. The guidelines per se were good but they had some shortcomings. For instance, it was taken for granted that drugs would readily be available. It is important to note that injectables were difficult to access especially in the rural areas. Another vital drawback was the lack of an effective supervision system to ensure successful implementation of the guidelines.

Dr. Mphuka stated that CMAZ played a pioneering role in developing treatment guidelines for STD case management.

Dr. Mutombo

There are about 35,000 traditional healers in Zambia. Most of these are community-based, making them accessible to patients in communities. For this reason, it was claimed that 70% of STD patients attend traditional healers. This is also because of drug shortages in conventional hospitals.

Traditional healers are categorized into four (4) specialties. These are

- Traditional birth attendants
- Spiritual faith healers
- Diviners and
- Herbalists

Most traditional healers are illiterate and it is for this reason that some have in the past made false claims that they can cure HIV/AIDS. Some seem to be able to offer some relief with potent herbs to persons experiencing symptoms related to AIDS related complexes (ARCs).

Traditional healers constitute a cost-effective user-friendly medical system with a constant availability of roots and herbs. With reference to countries like Kenya, Uganda, Zambia must institutionalize traditional medicine and formulate an effective and practical informal

system between traditional healers and Western medicine This is so given the fact the most people attending traditional hospitals are dissatisfied patients from Western medical institutions

The government and the donor community should help the Traditional Healers Association of Zambia (THPAZ) hold workshops to inform its members of new trends and the exchange of other important information

There is also a pressing need to destigmatize traditional medicines One notable problem with traditional medicines is that healers are reluctant to share information about the active agents in their herbs and roots This is a pertinent hindrance to greater co-operation between traditional healers and medical officers who feel the operations of the former should be made open and preclude secrecy

If the above issues are resolved, it is more likely that traditional medicine can contribute positively to the fight against the HIV/AIDS/STD problem

#### Comments

**It was alleged that traditional healers only heal symptoms and not the underlying problem, which elicited a response that traditional medicine also has specializations**

**Traditional healers are advocating for referral systems between them and Western medicine but why are they not pioneering with a referral system among themselves?**

**Asked whether the Zambia Pharmaceutical Society was doing anything to integrate traditional medicine into Western practice, the response was that due to the nature of their practices it was difficult to integrate traditional medicine more so that little empirical information is available on herbs and roots**

**Are there any scientific studies on traditional "drugs"?**

The Tropical Diseases Research Center (TDRC) has been conducting various studies on traditional herbs and roots and some have been found to contain agents that kill bacteria but not enough is being done The University of Zambia should work with the TDRC, especially in extracting these agents from the roots since they are in a better place to do this There is also need for a grant and external support to fully exploit traditional medicine through exhaustive studies

Dr Patel

There are only 100 family practitioners in Zambia This is despite the important role they play in the health sector Family practitioners are better placed to deal with societal problems such as the STD/HIV/AIDS epidemic because they foster a warm patient-doctor relationship Additionally, family practitioners also counsel their patients and hence they are more receptive to patients This is among a number of other factors that have contributed to a decline in STD cases in Zambia The current STD problem though has been compounded by the HIV/AIDS pandemic and therefore it is important that more

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focus should be directed towards salesmen, truck drivers, building workers, students and other people in the high-risk group It is noteworthy to state that focus should be changed from what in the past has been referred to as high HIV/AIDS risk groups to high-risk behavior As pertains to the Zambian HIV/AIDS scenario, great difficulty is encountered in convincing patients to take HIV test, as they do not consider it to be of benefit to them This poses a problem in identifying people in the "window" period, hence worsening the STD/HIV/AIDS problems

## **Participant Recommendations for National STD Program Enhancement**

The STD meeting broke into small working groups with sessions designed to achieve full participant input and develop policy recommendations for an envisaged STD national policy

### **WORK GROUPS**

#### **Work Group I**

##### **1 Clinical Practice**

(Dr Mukuka, Dr Mwale, Dr Musonda, Dr Nyangu and Dr Kamanga)

The clinical strategies working groups of the STD meeting recommended that the CBOH/STD working group will consider the following

- (i) Syndromic management be the mainstay of STD management with laboratory support for referred patients, surveillance research and validation of syndromes being in cognizant of clinical competencies and the facilities available at various levels of care
- (ii) Research be promoted and adequately funded for purposes of monitoring new infections, drug sensitivity tests and STD behavioral studies
- (iii) Training of Health Workers in both pre-service and post service syndromic management to ensure early effective diagnosis and treatment of STDs
- (iv) Ensure continuous supply of appropriate, affordable and cost effective drugs based on empirical research findings
- (v) Harmonization of guidelines with consensus based on research findings
- (vi) A care group to be formulated and charged with monitoring trends national wide
- (vii) Counseling services should be readily available at the health canter and the community. Additionally, counseling should be trained and adequately paid
- (viii) IEC should be readily accessible
- (ix) Space be made available at health centers for privacy and confidentiality to be upheld
- (x) Peer education be institutionalized and promoted

## **Work Group II**

### **Community Outreach**

The community outreach-working group of the STD meeting recommends that the CBOH/STD working group considers the following

- (i) Include training of nurses, clinical officers and doctors in STDs, communication skills and psychosocial counseling
- (ii) Use medical students for the IEC program in the communities after being trained by the school of medicine in STDs /HIV/AIDS, Psychosocial counseling
- (iii) Produce IEC material and facilitate the training of the outreach personnel in STD/HIV/AIDS programs
- (iv) Liaise with the Ministry of Transport and Communication to integrate STD/HIV/AIDS training as part of the curriculum for truck drivers training
- (v) CBOH should develop a frame work for making condoms and IEC material available at every outpost (i e filling stations, bars and other rest stops)
- (vi) Facilitate the studies into perceptions, practices and attitudes of people towards sexual behavior
- (vii) Recognize community-based organizations and strengthen the link between the local health center and the CBO for effective social marketing
- (viii) Revise proper policy monitoring strategies and ensure successful policy implementation
- (ix) Shift from the concept of 'high risk group' to that of 'high risk behavior'

Note

The Ministry of Education has adopted HIV/AIDS/STD training and integrated it into "skills and entrepreneurship training in school and colleges

## **Work Group III**

### **Drug, Laboratory and Condom**

The drug, lab and condom working group of the STD meeting recommends that the CBOH/STD National Program consider the following

- (i) Drugs should be selected on the basis of sensitivity pattern through out the country
- (ii) Based on sensitivity reports devise 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> line therapy
- (iii) Improve referral system because some of the drugs won't be available at Health Care Level
- (iv) Encourage District hospitals to form drug and therapeutic committees, which can recommend using certain drugs and control drug use
- (v) Develop a central pharmaceutical laboratory to test drug efficiency and quality
- (vi) Government should revise and revamp the revolving fund for pharmaceuticals to ensure sustainable drug funding

- (vii) Develop research on natural remedies and herbs and improve laboratory infrastructure and availability of skilled manpower
- (viii) Sensitize the community that condoms are available everywhere and for free
- (ix) Condom storage conditions should be improved
- (x) Ensure that condoms are made available in prisons even though this is currently illegal
- (xi) Traditional healers should also be used in the distribution of condoms to the community

#### NOTE

- It was generally felt that the illegality of condom access to prisons and inmates based on the ideal to prevent and curb homosexuality in prisons is wrong. This condition should be amended and condoms made available to prisoners if the STD/HIV/AIDS situation is to improve. This is so against a background of high incidence of STDs/HIV/AIDS and TB in Zambian prisons
- xii Poor condom storage conditions especially in rural areas cause condom rupture
  - xiii Measures should be taken to avoid having specific drugs only for STD treatment because people including health providers are prejudiced and perceive STDs, as self-inflicted problems hence there should be wider use of drugs
  - xiv Consideration should also be made to promote single dose treatment, which ensures better patient compliance than multiple day dosages
  - xv That more is done in reaching out to the commercial sex workers, building on the achievement of the Tasintha Programme by educating the commercial sex workers (CSW) about condom use

#### Work Group IV Intersectoral Collaboration

Members of the intersectoral working group of the STD meeting recommended that the CBOH/STD working group consider the following with regards to effective intersectoral collaboration

- (i) That as Primary Health Care providers for Syndromic management of STDs, the following sectors should be included
  - formal Health Care Sector, which includes government clinics and hospitals as well as other government institutions, like TDRC and UNZA School of medicine
  - private Health Care sectors, among which is included General practitioners, Company clinics, as well as parastatal clinics, chemists, pharmacies and drug stores
  - problem-based non-governmental organizations (NGOs) and community-based organizations involved in providing health care services at community level
- (ii) Those necessary facilities such as laboratories and adequate drugs be made available in the interest of clients

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- (iii) that the following sectors integrate and promote syndromic management of STDs for effective STD control
- churches, including the Catholic diocese
  - education sector through school and college curricular
  - the media for effective dissemination of information
  - the traditional healers as regards networking
  - social welfare and community development organizations
  - social clubs to facilitate prevention of STDs and condom promotion and distribution
  - all "Hot sites" for STDs/HIV/AIDS transmission like bars, night clubs and hotels have condom distribution points
- (iv) That the CBOH revisit the proposed cross-referral issue between western medicine and traditional medicine

**NOTE**

- Concern was raised that National health policy is usually confined to the formal health services and thus the workability of the above recommendations may be difficult to achieve
- Ethical questions were raised regarding medical practitioner referrals to traditional healers whose practice is shrouded in secrecy
- The Church Medical Association of Zambia (CMAZ) which is the biggest NGO has for some time been working with the government and other government medical institutions in matters of STD/HIV/AIDS control

**Work Group V**

**Provider Practice Development and Support**

(Training, supervision, evaluation, materials for providers, materials for patients)

The provider practice development and support-working group recommended that the CBOH/STD working group consider the following

- i National policies need to be defined
- ii A training needs assessment should be done
- iii Training of HCP is a district responsibility, but a national training coordination unit has to be defined with a mandate to give guidance in training curriculum development, guideline development and technical assistance in training at the district level
- iv Training in STD case management, using the syndromic approach, needs to be integrated into the general HCP training curricula and forthcoming general training such as the PHP While awaiting these forthcoming trainings, districts should continue to train HCP in the new STD case management approach through separate training
- v MCH providers need to be included in the training

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- vi District level supervisors and trainers need to be trained in STD program management at the national level
- vii Follow-up after training is critical and should be provided through regular supervisory visits by the district level supervisors
- viii STD case management supervision should be integrated into the existing general supervision guides and the national coordination body should give assistance in that respect
- ix District resources for training are scarce and external resources should be found
- x Evaluation tools for STD case management should not be integrated into the supervision or monitoring tools, but done separately through periodic evaluations performed by the central coordination unit
- xi The national coordination unit is responsible for developing and distributing educational materials for health facilities

**National Meeting on the Enhancement of STD Prevention and Control in Zambia  
5-6 November, 1998 – Pamodzi Hotel**

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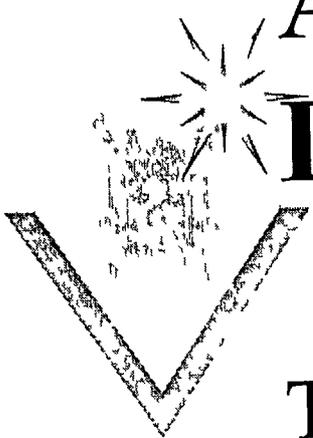
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**A Critical Look at the Diagnosis of STDs:  
The Clinical, Etiological and Syndromic Approaches**

*J Kamanga  
Y Lafort*

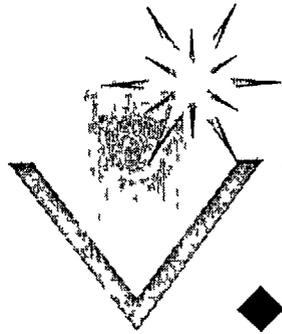
**A Critical Look at the Diagnosis of STDs:  
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Y Lafort*



# **A Critical Look at the Diagnosis of STD's**

The syndromic approach and its  
alternatives



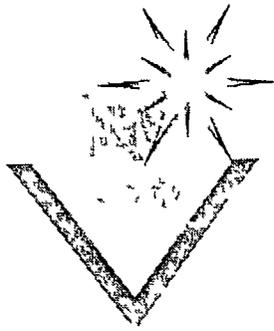
# *STD Control and Prevention*

## ◆ Prevention activities

- ◆ community based
- ◆ health facility based

## ◆ Case management

- ◆ early treatment of symptomatic cases
  - ◆ raise awareness around symptom recognition
  - ◆ promote correct health care seeking behavior
  - ◆ **immediate and correct treatment**
- ◆ detection of asymptomatic cases
  - ◆ screening
  - ◆ partner notification



*What are we looking for?*

*Most important pathogens:*

- ◆ Morbidity: infertility, prenatal and neonatal pathology,...
- ◆ HIV enhancement
- ◆ treatable

**Gonorrhoea**

**Chlamydia**

**Syphilis**

**Chancroid**

**Trichomoniasis**

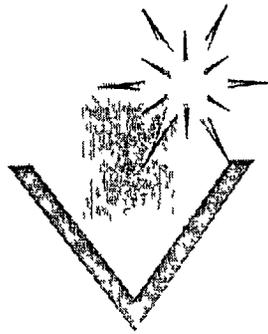
**Neisseria gonorrhoeae (NG)**

**Chlamydia trachomatis (CT)**

**Treponema palidum (TP)**

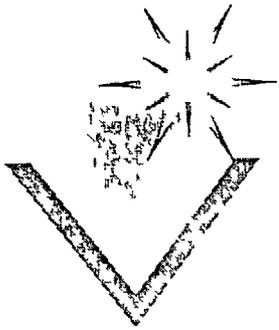
**Haemophilus ducreyi (HD)**

**Trichomonas vaginalis (TV)**



## *Symptoms caused by STIs*

- ◆ Genital Ulcer Disease (*HD, TP, HSV, LGV, GI*)
- ◆ Urethral discharge syndrome (*NG, CT, Mycoplasmas*)
- ◆ Vaginal discharge syndrome (*CA, BV, TV, NG, CT*)
- ◆ Lower abdominal pain (*NG, CT, anaerobes*)
- ◆ Scrotal swelling (*NG, CT, anaerobes*)
- ◆ Inguinal bubo without ulcer (*LGV*)
- ◆ Genital ‘warts’ (*HPV, TP*)
- ◆ Neonatal conjunctivitis (*NG, CT*)



# *What are we looking for?*

## *Other pathogens:*

**Herpes**

Herpes Simplex Virus II  
(HSV)

**Candidiasis**

Candida albicans (CA)

**Bacterial Vaginosis (BV)**

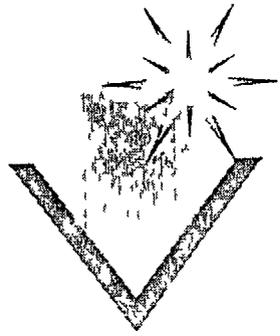
Gardnerella vaginalis, and  
others...

**Lymphogranuloma  
venereum (LGV)**

Chlamydia trachomatis  
strain

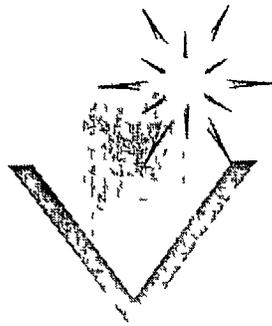
**Donovanosis  
(granuloma inguinale)**

Calymmatobacterium  
granulomatis



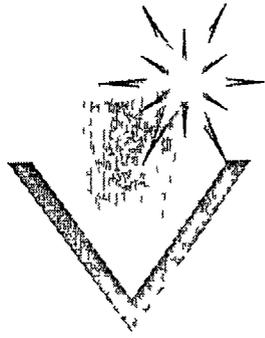
## *The problem in the diagnosis of STIs*

- ◆ Broad range of pathogens requiring different treatments but presenting with similar symptoms
- ◆ No simple diagnostic tests available for most pathogens



## *Possible approaches*

- ◆ **Etiological:** *identify causative pathogen(s) through accurate, laboratory based, techniques*
- ◆ **Clinical:** *treat for most probable pathogen based on clinical grounds (ev including simple lab results), if no improvement treat for second most probable pathogen*
- ◆ **Syndromic:** *treat for all common, harmful and treatable pathogens at once*

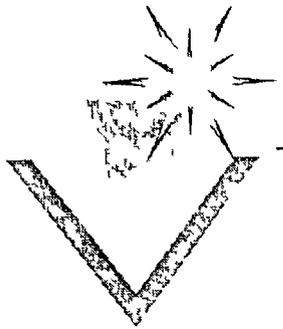


## *Etiological diagnosis: Genital Ulcer Disease*

- ◆ Chancroid: culture or amplification techniques (PCR)
- ◆ Primary syphilis: darkfield microscopy, direct fluorescent antibody tests or PCR

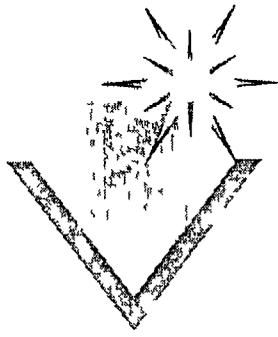
*Serologic tests not sensitive enough due to window period between ulcer appearance and seroconversion*

- ◆ Herpes: culture, direct immuno assay or PCR



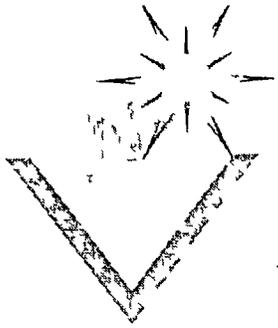
## *Etiological diagnosis: Urethral discharge syndrome*

- ◆ *Neisseria Gonorrhoeae: culture*  
*Microscopic exam may be a good alternative, depending on the conditions in which it is performed.*
- ◆ *Chlamydia trachomatis: DFA tests, enzyme immunoassays, cell culture or PCR*  
*Microscopic exam has low sensitivity.*
- ◆ *Trichomonas vaginalis: culture*



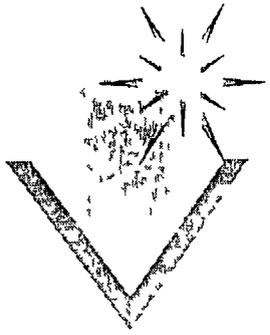
## *Etiological diagnosis: Vaginal discharge syndrome*

- ◆ *Neisseria Gonorrhoeae*: culture  
*Microscopic exam is not accurate enough for vaginal or cervical secretions*
- ◆ *Chlamydia trachomatis*: as for urethritis
- ◆ *Trichomonas vaginalis*: wet mount or culture
- ◆ *Candida albicans*: wet mount or culture
- ◆ Bacterial vaginosis: microscopic exam combined with clinical aspects of discharge



## *Genital Ulcer Disease: Prevalence of pathogens*

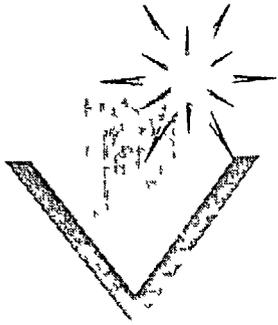
- ◆ prevalence estimates complicated by low sensitivity of former laboratory techniques.
- ◆ recent studies suggest that mostly chancroid and herpes were underestimated.
- ◆ chancroid remains the most important cause of GUD in Africa, followed by syphilis and herpes.
- ◆ Herpes is growing in importance
- ◆ Mixed infections are common
- ◆ LGV and donovanosis are less important



## *GUD Example : Lesotho*

### *Clinical approach*

- ◆ 92 cases of GUD
- ◆ 61% chancroid, 24% syphilis, 25% HSV
- ◆ clinical:
  - ◆ 31% of syphilis and 95% of chancroid cases detected
  - ◆ 83% of those treated for syphilis and 66% of those for chancroid had the disease
  - ◆ only 62% received adequate treatment
- ◆ RPR:
  - ◆ 57% of syphilis cases had positive RPR

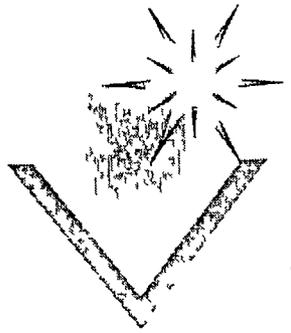


## *GUD Example : Lesotho (Cont.)*

### *Syndromic approach*

*Treat all for syphilis and chancroid*

- ◆ All syphilis and chancroid cases treated
- ◆ 37% of those treated for syphilis and 61% of those for chancroid had the disease
- ◆ 92% received adequate treatment

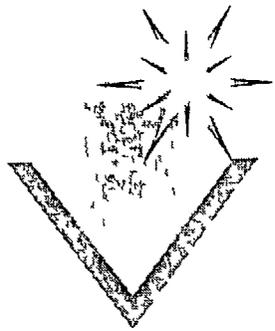


## *GUD Example : Lesotho (Cont.)*

### *Syndromic approach*

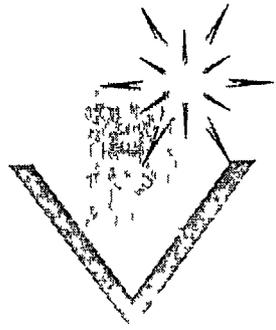
*Treat all for syphilis and chancroid after exclusion of herpes*

- ◆ 94% of syphilis and 98% of chancroid cases detected
- ◆ 43% of those treated for syphilis and 65% of those for chancroid had the disease
- ◆ 90% received adequate treatment



# *Genital Ulcer Disease:* *Clinical diagnosis*

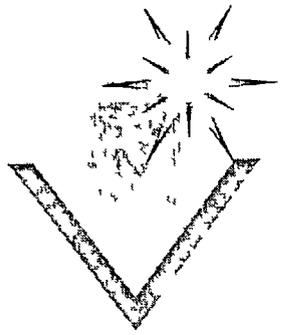
- ◆ clinical diagnosis is complicated by:
  - ◆ atypical lesions, aggravated by self treatment
  - ◆ mixed infections
- ◆ clinical diagnosis misses an important number of cases
- ◆ clinical diagnosis leads to overtreatment
- ◆ only the clinical diagnosis of herpes is specific



# *Genital Ulcer Disease: Stepwise approach*

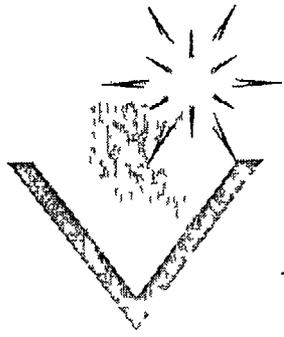
*Treat first for one, if no improvement treat for  
other*

- ◆ a great number continues infected for a while
- ◆ loss to follow up
- ◆ loss in confidence
- ◆ overtreatment



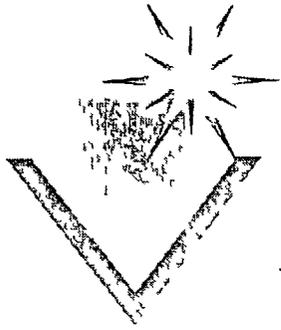
## *Genital Ulcer Disease: Syndromic approach*

- ◆ all important pathogens treated
- ◆ overtreatment, mostly for syphilis
- ◆ overtreatment can be reduced by excluding herpes



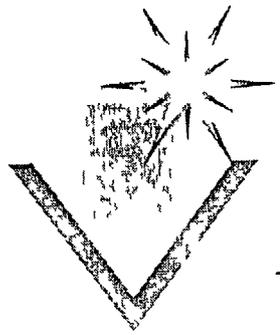
## *Urethral discharge syndrome: Prevalence of pathogens*

- ◆ *Neisseria Gonorrhoeae* is by far the most common pathogen of urethritis in Southern Africa.
- ◆ *Chlamydia* is also common although its prevalence may be lower in Zambia.
- ◆ *Trichomonas vaginalis* is not uncommon, but its role is not clear yet.
- ◆ The above pathogens may also be common in urethritis without visible discharge
- ◆ Mixed infections are common



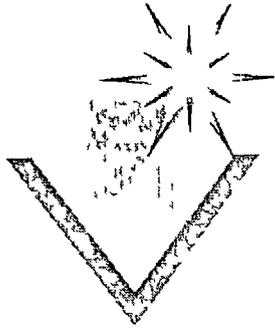
## *Urethral discharge Example: Brazil*

- ◆ 472 cases of urethritis
- ◆ 53% NG, 16% CT
- ◆ clinical:
  - ◆ 86% of gonorrhoea and 49% of chlamydia cases detected
  - ◆ 83% of those treated for gonorrhoea and 18% of those for chlamydia had the disease
  - ◆ 75% received adequate treatment



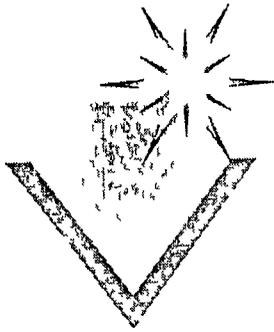
## *Urethral discharge Example: Brazil*

- ◆ syndromic: treat all with visible discharge
  - ◆ 99% of gonorrhoea and 91% of chlamydia cases detected
  - ◆ 58% of those treated for gonorrhoea and 16% of those for chlamydia had the disease
  - ◆ 97% received adequate treatment
- ◆ syndromic: treat only GS positive for NG
  - ◆ 97% of gonorrhoea cases detected
  - ◆ 99% of those treated for gonorrhoea had the disease
  - ◆ 96% received adequate treatment



## *Urethral discharge syndrome: Clinical diagnosis*

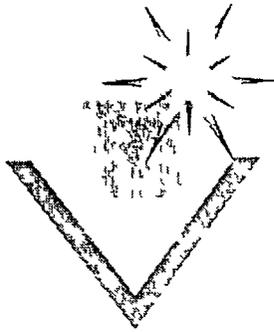
- ◆ Clinical differentiation between NG and CT based on the type of discharge is not specific enough.
- ◆ Particularly for CT infections, it is hardly better than random treatment



## *Urethral discharge syndrome: Stepwise approach*

*Treat first for NG, if no improvement treat  
for CT*

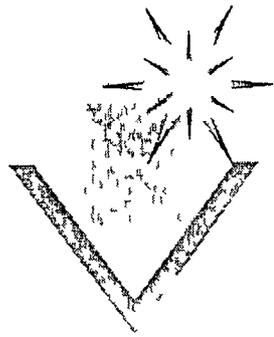
- ◆ less overtreatment for CT
- ◆ most CT will be missed



## *Urethral discharge syndrome: Syndromic approach*

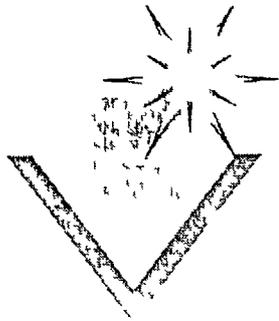
*Treat all for NG and CT*

- ◆ all pathogens treated
- ◆ serious overtreatment for CT
- ◆ eventually treat only those with positive gram stain for NG



## *Vaginal discharge syndrome: Prevalence of pathogens*

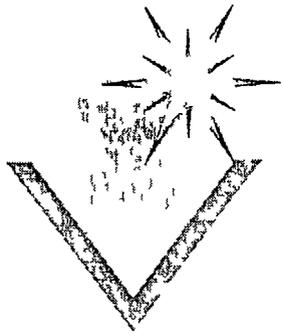
- ◆ Most vaginal symptoms are caused by vaginal pathology: CA, TV and BV
- ◆ NG is common in women with vaginal symptoms in Africa, particularly Southern Africa
- ◆ Data on CT are much less consistent, but are very high in some studies.
- ◆ Mixed infections are very frequent, both of NG with CT, as of TV with BV and CA.



# *Vaginal discharge example*

## *Cervicitis: Malawi*

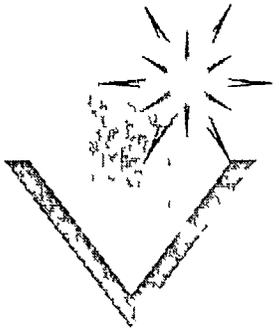
- ◆ 550 cases with vaginal discharge syndrome or LAP
- ◆ 20% NG and/or CT (17% NG, 4% CT)
- ◆ Clinical approach
  - ◆ without speculum exam:
    - ◆ 16% of cervicitis cases detected
    - ◆ 34% of cases treated had either NG or CT
  - ◆ with speculum exam:
    - ◆ 46% of cases detected
    - ◆ 33% of cases treated had cervicitis



# *Vaginal discharge example*

## *Cervicitis: Malawi (Cont.)*

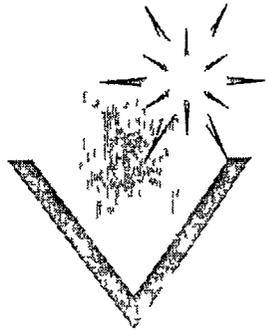
- ◆ Risk scores
  - ◆ WHO criteria
    - ◆ 43% of cases detected
    - ◆ 28% of treated cases had cervicitis
  - ◆ WHO criteria, including speculum exam
    - ◆ 62% of cases detected
    - ◆ 27% of treated cases had cervicitis



# *Vaginal discharge example*

## *Cervicitis: Malawi (Cont.)*

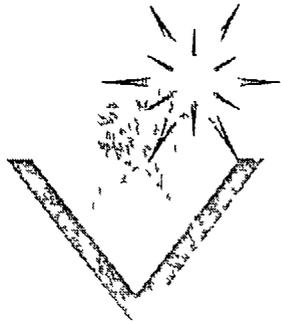
- ◆ Adapted risk scores
  - ◆ History only
    - ◆ 59% of cases detected
    - ◆ 31% of treated cases had cervicitis
  - ◆ Including speculum exam
    - ◆ 72% of cases detected
    - ◆ 29% of treated cases had cervicitis
  - ◆ Including physical exam
    - ◆ 69% of cases detected
    - ◆ 32% of treated cases had cervicitis



# *Vaginal discharge example*

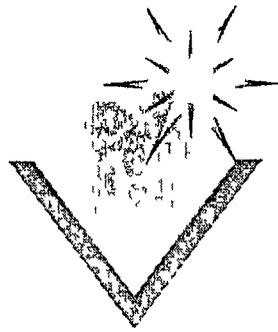
## *Vaginitis: Brazil*

- ◆ 334 women with vaginal discharge syndrome
- ◆ 18% TV, 15% BV, and 18% CA
- ◆ Clinical approach (with speculum exam)
  - ◆ 44% of TV cases detected
  - ◆ 61% of cases treated had TV
- ◆ Syndromic approach: treating all with visible discharge
  - ◆ 94% of cases detected
  - ◆ 35% of cases treated had TV



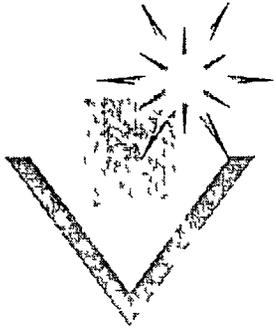
## *Vaginal discharge syndrome: Clinical diagnosis*

- ◆ Clinical detection of cervicitis: speculum exam can be very specific, but is not sensitive.
- ◆ Clinical differentiation between NG and CT is not possible.
- ◆ Clinical differentiation of either TV or BV with CA based on the aspect of the discharge is both not specific and not sensitive.
- ◆ Speculum exam may improve this differentiation, but is still mostly not accurate enough



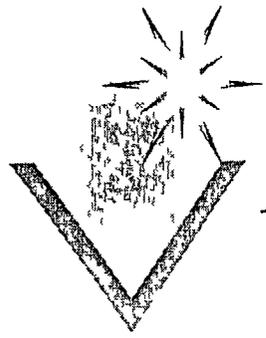
## *Vaginal discharge syndrome: Vaginitis*

- ◆ *Stepwise: treat first for TV/BV, if no improvement treat for CA*
- ◆ *Syndromic: treat all for TV/BV and CA*



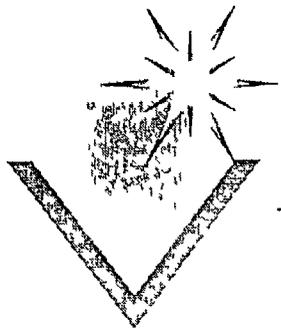
## *Vaginal discharge syndrome: Cervicitis*

- ◆ NG and CT are not really bound to a specific syndrome
- ◆ prevalence in vaginal discharge patients is low
- ◆ NG and CT are harmful
- ◆ risk scores based on demographic and behavioral data, clinical symptoms and signs, and/or LED improve specificity at the cost of the sensitivity
- ◆ best performing score dependent on each setting



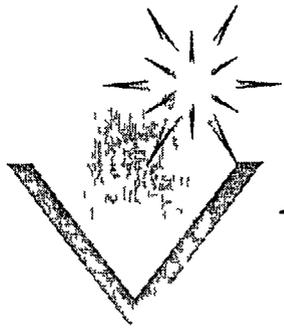
## *Lower abdominal pain*

- ◆ Importance of treating PID immediately
- ◆ NG and CT are most frequent causes of PID
- ◆ No simple diagnostic tools exists
- ◆ The complaint of LAP is not specific enough
- ◆ Limiting treatment to those with vaginal discharge or fever or cervical motion tenderness increases specificity
- ◆ Including risk assessment can further increase specificity



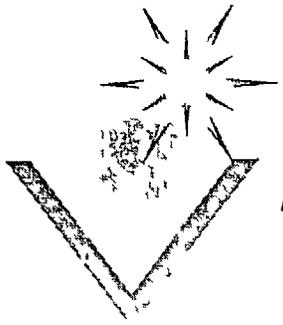
## *Epididymitis*

- ◆ NG and CT most frequent causes of epididymitis in developing countries
- ◆ No simple diagnostic criteria possible to determine causal agent
- ◆ Therefore routine treatment for both NG and CT justified



## *Neonatal conjunctivitis*

- ◆ Both NG and CT common in developing countries
- ◆ Diagnostic tests introduce a too great time delay with increased risk for complications (blindness)
- ◆ Clinical aspects of conjunctivitis not specific enough to differentiate between NG/CT
- ◆ Routine treatment for both NG and CT is therefore justified



## *Screening for NG and CT*

- ◆ NG and CT infections are often asymptomatic
- ◆ Screening algorithms with clinical symptoms as starting point have shown low sensitivity
- ◆ Screening algorithms based on risk assessment have better validity, although sensitivity and specificity remain low
- ◆ Including physical, speculum and/or microscopic exam may improve validity
- ◆ No universal risk score

## **Community Behaviors**

*Masauso Nzima*

# ***Illness Conceptions: Recognition and Interpretation of Symptoms***



When having STD symptoms, especially 'leaking' or discharge in men, men report this comes from the '*dirt*' in women - common also among women and traditional healers

No distinction made for symptoms describing 'Akaswende' [syphilis] and/or 'Akasele' [gonorrhoea] true for Traditional Healers too



For men generally an STD was reported as having an accident 'kubunkinsa', while women blamed for promiscuity 'bucilalelale' or 'ubucende'.

Initially, symptoms are dismissed as unimportant or something that will heal spontaneously

*"I didn't think at first that it was an illness."*

*"I waited to see if the sores...itching would go..."*

*Illness conceptions:...*  
*contd.*

Causes of STDs cited: 'utushishi' [insects] &/or 'dirt' as immediate; promiscuity or multiple sexual partners a higher level cause; most serious is violation of sexual taboo [i.e. sex with a menstruating woman, a recently widowed woman or one associated with a recent death].

# ***Treatment Behaviors: Therapy Seeking***



The majority of people waited 5 days - over 1 month before seeking care.

Men visit STD clinics more than women here:

- men were less likely to bring their partners [irregular sex encounters ⇒ problems for marriages or regular unions];
- women, especially antenatal moms, successful in partner treatment;

# ***Treatment Behaviors: Therapy Seeking***

Majority of men with STD, regardless of type, in the past 12 months self-medicated vs. seeking care in the formal health sector

with:

- concocted herbs or roots;
- capsules [red & black] or antibiotics;.

(Mostly recommended by peers/elders).



# *Service Delivery Perceptions*

Traditional healers are seen as cheaper, more sympathetic, more accessible than clinic providers, but clinic care is seen as “fast” and “strong.”

Providers use different and/or complicated terms than patients for the same set of symptoms;

# Cosmopolitan vs. traditional treatment

Other barriers include:

- shortage of drugs;
- lack of privacy;
- long queues;
- examination by member of opposite sex;
- high medical fees;
- poor medical personnel attitudes;
- request to bring partner for treatment

## **The WHO/UNAIDS Perspective**

*M Sichone*

# Syndromic Management of STDs

## The WHO/UNAIDS Perspective

Dr. M. Sichone  
NASTLP

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# Syndromic Case Management of STDs - Issues

## ■ Health Services and STD Case Management

- » Effectiveness of the general health service
- » Configuration of STD services
- » Diagnostic services
- » Training of health workers
- » Access to services
- » Availability of drugs

# *WHO/UNAIDS SYNDROMIC MANAGEMENT APPROACH*

- Uses clinical algorithms based on STD syndrome
- STD syndrome used to determine treatment

# ■ THE ROLE OF DIFFERENT LEVELS OF CARE

# CENTRAL LEVEL

- Laboratory support for referred patients
- Syndromic management of new patients
- Note:
  - Most patients should be seen at HC level
  - Consider need for teaching (students, inservice etc)

# Intermediate Level (eg District Hospital)

- Syndromic management for new patients
- Syndromic +/- basic lab. support for referred patients

# PHC Level (Urban/Rural HCs, OPD, GPs)

- Syndromic Management
- Minimal Laboratory support eg. RPR in ANC

Syndromic Management of STDs

The WHO/UNAIDS Perspective

Dr. M. Sichone  
NASTLP

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## **The Zambia National Drug Policy**

*Dr R Kampamba*

*erthm*

# THE ZAMBIA NATIONAL DRUG POLICY

## DRUG SELECTION AND RATIONAL USE

### POLICY FRAMEWORK AND THE SYSTEM IN PLACE FOR IMPLEMENTATION

How a disease control programme can participate and influence decision

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A paper presented to the workshop on integrated management of Sexually Transmitted Diseases

Thursday, 5th November, 1998

By Ronald Mutati Kampamba

# NATIONAL DRUG POLICY

## I 0 BRIEF OVER VIEW

### I 1 Vision

The vision of the Zambia National Drug Policy is to provide Equity of Access to all Zambians to good quality, Safe and Efficacious drugs (medicines) which are affordable as close to the family as possible

### 1 2 Themes

Themes of the National Drug Policy are -

1 2 1 Drug Legislation and Regulation

1 2 2 Drug Quality Assurance

1 2 3 Drug Financing, Procurement storage and distribution

1 2 4 Local Drug Production

1 2 5 Rational Drug Use

1 2 6 Drug Selection

1 2 7 Human Resource Development

1 2 8 Drug Research and Development

1 2 9 Traditional medicines

1 2 10 International cooperation

### 1 3 Situation Analysis

The summary on situation analysis describes the Zambian pharmaceutical situation at the time of formulating the National Drug Policy

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*Ronald Mutati Kampamba*

It thus explains the course for concern and the need for a unified wholistic multisectoral, multifocal way forward to addressing the pharmaceutical/drug issues in Zambia through the National Drug Policy

1 4 Details and Status

The National Drug Policy Document should be consulted for details on the goals of each theme and the statements of intent to which the government of Zambia has committed itself through Cabinet

The National Drug Policy was approved by Cabinet in November, 1998

2 **DRUG SELECTION AND RATIONAL DRUG USE**

Of immediate relevance to the Sexually Transmitted Diseases (STD) Control Programme are the themes on Drug Selection and Rational Drug Use, and hence, subsequently the system in place for implementing the National Drug Policy with regard to these two themes

In this paper, therefore, we shall dwell more on the ZNDP - directives on Rational Drug Use and especially Drug Selection

2 1 Rational Drug Use

2 1 1 Vision

- To achieve good prescribing, dispensing and compliance in all treatments at the lowest possible cost

2 1 2 Aims

- To ensure rational use of drugs measurable by various indicators
- To ensure that all access to drugs is accompanied by adequate information necessary for rational use, and
- To eradicate unnecessary and inappropriate drug use at all level of society

2 1 3 Policy Statement

Rational drug use shall be addressed in three ways

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- through regulation
- better management, and
- through education

Regulatory interventions include

- drug registration
- marketing controls
- distribution categories
  - i e -
  - prescription only medicines (POM)
  - Pharmacy medicines (P)
  - General Sale List (GS)
- Prescribing and dispensing controls

The responsibility (authority) for implementing the policy on regulatory interventions for Rational Drug Use is vested (by the policy itself) in the Pharmaceutical Regulatory Authority (PRA)

Managerial interventions include

- treatment guidelines
- Zambian National Formulary
- Monitoring and evaluation of prescribing and dispensing practices
- The Zambia National Formulary Committee (ZNFC) is implied here

Education Interventions are aimed at both health care practitioners and the patients (or public, and include)

- courses in rational drug use
- requirement of continuing education for continued placement on professional registers
- public awareness campaigns

The responsibility (authority) for implementing policy directions on Educational interventions for rational drug use has been vested in training institutions (for health care practitioners) the PRA and the Central Board of Health

## 2.2 Drug Selection,

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2 2 1 Vision

To have in place a bottom up process of drug selection based on the principles of efficacy, safety, quality and cost, using generic names

2 2 2 Aims

- To provide policy direction for selection of drugs at different levels of health care
- To select the drugs through a participatory approach by the district Pharmacy and Therapeutic Committees (PTCs)
- To develop drug list for each level of health care-----
- To select the drugs as first, second and third line alternatives

2 2 3 Policy statements

- The Zambia National Formulary Committee (ZNFC) shall be responsible for the ZNF and have an advisory role to assist districts in the selection of drugs at different levels of health care
- PTCs shall be formed under the District Health Boards and at all major hospitals, (central, provincial, private etc)
- Essential Drug List (EDL) shall be developed for each health care level community, health centre, first referral, second referral, third referral for all the health sector
- Basic criteria for selection shall be Quality, Safety and Efficacy
- The EDL shall be harmonised with treatment guidelines
- The district and hospital PTCs in collaboration with the ZNFC shall be responsible for the development of Essential Drug Lists, from which the National Essential Drug List and the Zambia National Formulary shall be derived

Thus responsibility (authority) for Drug Selection is vested in the district/hospital PTCs and the ZNFC

3 0 **THE SYSTEM IN PLACE FOR IMPLEMENTING POLICY ON DRUG SELECTION AND RATIONAL DRUG USE**

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Ronald Mutati Kampamba

What system do we have in place for implementing policy on Drug Selection and Rational Drug Use?

3 1 District and Hospital Pharmacy and Therapeutic Committees

- Guidelines for Pharmacy and Therapeutic Committees (PTCs) are in place and a number of such committees are already functioning and are at various levels of development and degrees of activity

Functions of PTCs are -

- Selection of drugs
- promotion of Rational Drug Use
- obtain drug use returns
- monitoring and evaluation
- make recommendations

3 2 The Zambia National Formulary Committee (ZNFC)

The Zambia National Formulary Committee is in place, active, and has the following terms of reference -

- (a) To review, update, and publish the Zambia National Formulary at suitable intervals
- (b) To act as the National expert committee on the selection of drugs for use at various levels of health care delivery in Zambia
- (c) to coordinate the activities of the Pharmacy and Therapeutic Committees/drug committees at various levels of health care delivery in Zambia
- (d) To liaise with the essential health packaging working group on relevant matters related to selection and use of drugs at all levels of health care particularly the public sector in Zambia
- (e) To do such other activities at the National level, as are relevant or incidental to the selection and use of drugs

3 3 The Pharmaceutical Regulatory Authority

In general terms the PRA can be perceived conceptually as the legally instituted body basically responsible for the assurance of QUALITY, SAFETY and

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EFFICACY of medicines in a given National pharmaceutical market

In that regard, therefore, the current Pharmacy and Poisons Board (PPB) has been performing some functions of a Pharmaceutical Regulatory Authority (PRA)

However, the full functions of the PRA as intended by the ZNDP are more extensive. The status is more autonomous, the intended funding more reliable and the desired effectiveness thus more assured

The PPB - as well as the PRA -

- licences all legitimate pharmaceutical importers, manufacturers, wholesalers and retailers in Zambia
- (with effect from 1993) registers drugs for marketing in Zambia
- assigns distribution categories to drugs, whether
  - Prescription Only Medicines
  - Prescription, or
  - General Sale

4 **ACTIVITIES THAT HAVE TAKEN PLACE OR ARE TAKING PLACE IN IMPLEMENTING POLICY ON DRUG SELECTION AND RATIONAL DRUG USE**

What activities have taken place or are taking place in the area of Drug Selection and Rational Drug Use

4.1 The Essential Drug List (EDL)

The Final Draft of the Essential Drug List has been finalised

The Zambia Essential Drug List (ZEDL) has been classified according to levels of health facility, and therapeutic categories

Level I	=	Health Centre level
Level II	=	District Hospital
Level III	=	General Hospital
Level IV	=	Central and specialised Hospitals

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The therapeutic categories are

- 1 Drugs used in anaesthesia
- 2 Drugs acting on gastrointestinal system
- 3 Drugs acting on central nervous system
- 4 Drugs used in the treatment of infections
- 5 Drugs acting on the endocrine systems, obstetrics and gynaecology and contraception
- 6 Drugs used in the treatment of diseases of the respiratory system and allergy
- 7 Drugs used in the treatment of diseases of the cardiovascular system
- 8 Drugs used in the treatment of malignant disease/anti neoplastic drugs
- 9 Drugs acting on the eye
- 10 Drugs acting on the blood
- 11 Nutritional supplements
- 12 Drugs acting on the skin
- 13 Drugs used in the treatment of diseases of the ear, nose and throat
- 14 Drugs used in the treatment of musculoskeletal disorder
- 15 Immunological products
- 16 Antidotes and other substances used in poisoning

Of immediate relevance to the STD Control Programme are categories -

- 4 Drugs used in the treatment of infections, and
- 12 Drugs acting on the skin

The STD Control programme may wish to study these categories well

#### 4.2 The Zambia National Formulary (ZNF)

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of Sexually Transmitted Diseases Thursday, 5th November, 1998

The Zambia National Formulary (ZNF) is being revised and the revision exercise is nearly complete. Therapeutic categories of the drugs in the ZNF are the same as for the Essential Drug List (EDL)

However, the ZNF has more information on each drug, of course

Entries made on each drug in the Zambia National Drug Formulary (ZNF) generally include

- presentation
- Indications
- Dose
- side effects
- caution
- contraindications

## 5 HOW CAN THE STD CONTROL PROGRAMME PARTICIPATE IN THE DRUG SELECTION PROCESS?

The STD Control Programme can participate in the Drug Selection Process by

- participating in district/hospital pharmacy and therapeutic committees
- participating in the Zambia National Formulary Committee
- Making written recommendations to the above committees

It is the normal procedure of the drug selection and National Formulary Process to consult and involve experts and interested parties

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Thank you,

R M Kampamba

Thursday 5th November, 1998

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A paper presented to the workshop on integrated management  
of Sexually Transmitted Diseases Thursday, 5th November, 1998

Ronald Mutati Kampamba

**The National Medical Laboratory Policy on Laboratory  
Diagnosis of Sexually Transmitted Diseases**

*G Kahenya*

# THE NATIONAL MEDICAL LABORATORY POLICY ON LABORATORY DIAGNOSIS OF SEXUALLY TRANSMITTED DISEASES STD

- **BACKGROUND INFORMATION:**

Laboratory results often provide the only scientific approach to patient management, empowering clinicians to make timely and accurate diagnosis to rationalize drug use and preventing antibiotic resistance.

1. Laboratory diagnostic services are often excluded in health care delivery services. The Zambian Laboratory Policy Formulation was considered essential in promoting advocacy and defining inputs for on going restructuring of the health delivery process.

Medical laboratory vision statement is in accordance with the National Health Vision and affirms a commitment to **PROVIDE ZAMBIANS WITH QUALITY COST EFFECTIVE APPROPRIATE LABORATORY SERVICES AS CLOSE TO THE FAMILY AS POSSIBLE.**

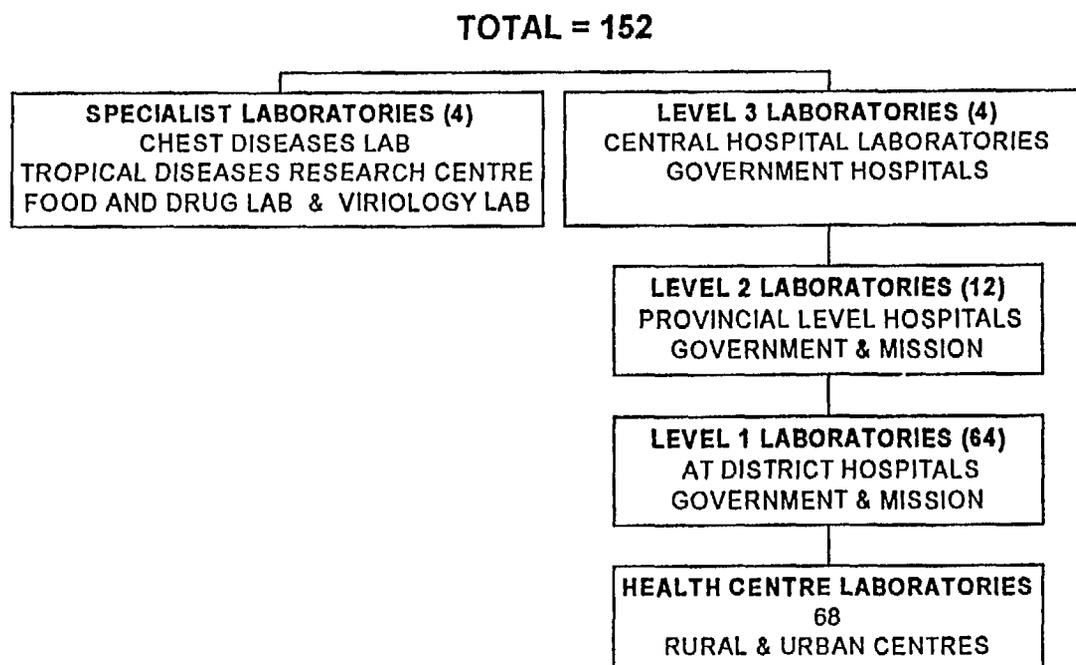
# OBJECTIVES OF LABORATORY POLICY

- To ensure incorporation of laboratory services into ongoing health sector reform.
- To document the current status of laboratory services in Zambia.
- To develop diagnostic standards appropriate to the local environment.
- To formulate policy in a consultative participatory manner
- To develop a strategy for implementation.

# MAIN COMPONENTS OF THE LABORATORY POLICY

- Test selection and use (standardization of essential tests equipments and supplies)
- Basic inputs (Human Resource, infrastructure, equipments and supplies).
- Quality Assurance (Internal Quality Control and External Quality Assessment)
- Safety
- Ethics
- Research and development
- Local regional and international collaboration.

# CURRENT LABORATORY FACILITIES CAPABLE OF PERFORMING LABORATORY TESTS IN THE DIAGNOSIS OF STD



# THE ROLE OF LABORATORY TESTS IN DIAGNOSIS OF STD

- The role of laboratory in STD is to help clinicians confirm diagnosis, identifying the causative agents so that appropriate treatment can be instituted there by breaking the chain of transmission by the causative agents quickly.
- Laboratory tests provide accurate and early diagnosis of STD which is essential in disease control and prevention.
- Innovations and improvement in laboratory diagnostic procedures have helped to improve detection of STD move accurately and efficiently. This has helped to enhance the control of STD.

# USEFUL LABORATORY TESTS FOR STD DIAGNOSIS WHICH ARE PERFORMED AT EACH LEVEL OF CARE ARE:

## 1 DIRECT MICROSCOPY

- Direct light microscopy
- Darkfield microscopy
- Fluorescence microscopy - has limited use in diagnosis of STD
- Other Tzanck Test - microscopy test is a useful quick technique for diagnosis of genital herpes

## 2. SEROLOGY TESTS

Non treponemal tests (reagin)

VDRL - Venereal Disease Research Laboratory Test

RPR - Rapid Plasma Reagin Card Test

These tests measure the anti lipid antibodies formed by the host in response to lipoidal materials released from damaged host cells early in the infection as well as lipid from the treponema itself the tests are sensitivity moderately specific

## Treponemal Tests

## Treponemal

- TPHA - Treponema pallidum hemagglutination Assay
- Fluorescence Treponema Antibody

Absorption (FTA/ABS) test are confirmatory tests. The confirmatory tests distinguishes between a true positive (syphilis) are false positive (non syphilis) reactions. These tests use Treponema Palladium as the antigen and are based on the detection of antibodies directed against cellular components.

Both tests are highly specific and highly sensitive.

Other serology tests for STD

- Complement fixation test (CFT) for herpes simplex and lymphogranuloma venereum (LGV) for chlamydia infection.

## CULTURE METHOD

The “Gold Standard” for laboratory testing in STD is by culture of the pathogenic agents. It is assumed that culture method provides specificity and sensitivity approaching almost 100%. In STD culture methods are essential confirmatory tests for several of the causative agents.

# IMMUNO ASSAY

- Enzyme immuno Assays are immunological techniques for detection of antigen - Antibody reactions monitored by enzyme measurement.

# LABORATORY TESTS PERFORMED AT EACH LEVEL OF CARE

## Health Centre Laboratories

1. Direct microscopy provide immediate confirmatory and only diagnostic tool in the diagnosis of non gonococcal urethritis and common bacterial e g .  
gonococcal, fungal and parasitic infections  
Gram stained smears - for bacterial agents  
Wet mount smears for parasites, fungus

Gram stain of urethral smears is a very sensitive test for diagnosis of Neisserige gonorrhoea a sensitivity of 96.4% and a specificity of 83.3% can be achieved. But in women gram stain cervical/vaginal smear are less sensitive about 89% than male urethral smears

Wet mount smear microscopic examination from genital mucosal lining is very useful and quick confirmation test for genital parasitic infections (e g T Vaginalis), fungal infections (e g candidiasis) and Ecto-parasites infections (e g pubic lice and sarcoptes scabiei). In these STD's there is no other better diagnostic laboratory tests

## 2. Darkfield Microscopy

The only quick confirmatory test for primary and secondary syphilis. In Darkfield Microscopy T. Palladium are identified directly from the wet smear from wet syphilitic lesions. For optimal results good specimen collection is critical.

## 3. SEROLOGY TESTS.

RPR and VDRL

# DISTRICT HOSPITAL LABORATORIES LEVEL 1

All Health Centres tests for STD's plus culture methods in those facilities with microbiology laboratory.

## GENERAL HOSPITAL LEVEL 11

All Health Centres test and Districts Hospital cultures methods plus treponemal tests FTA/ABS and TPHA.



## RESEARCH CENTRES SPECIALIZED LABORATORIES

All the above tests plus Enzyme Immuno  
assay (ELISA).

# MAIN CONSTRAINTS

Basic inputs - equipment (microscopes, incubators, autoclaves) and supplies/reagents.

## RECOMMENDATIONS

- Prioritise Basic inputs
- Target those labs falling below critical minimum standards.
- Provide training during implementation of standard operating procedures at each level of care.
- Improve quality control and external quality control.

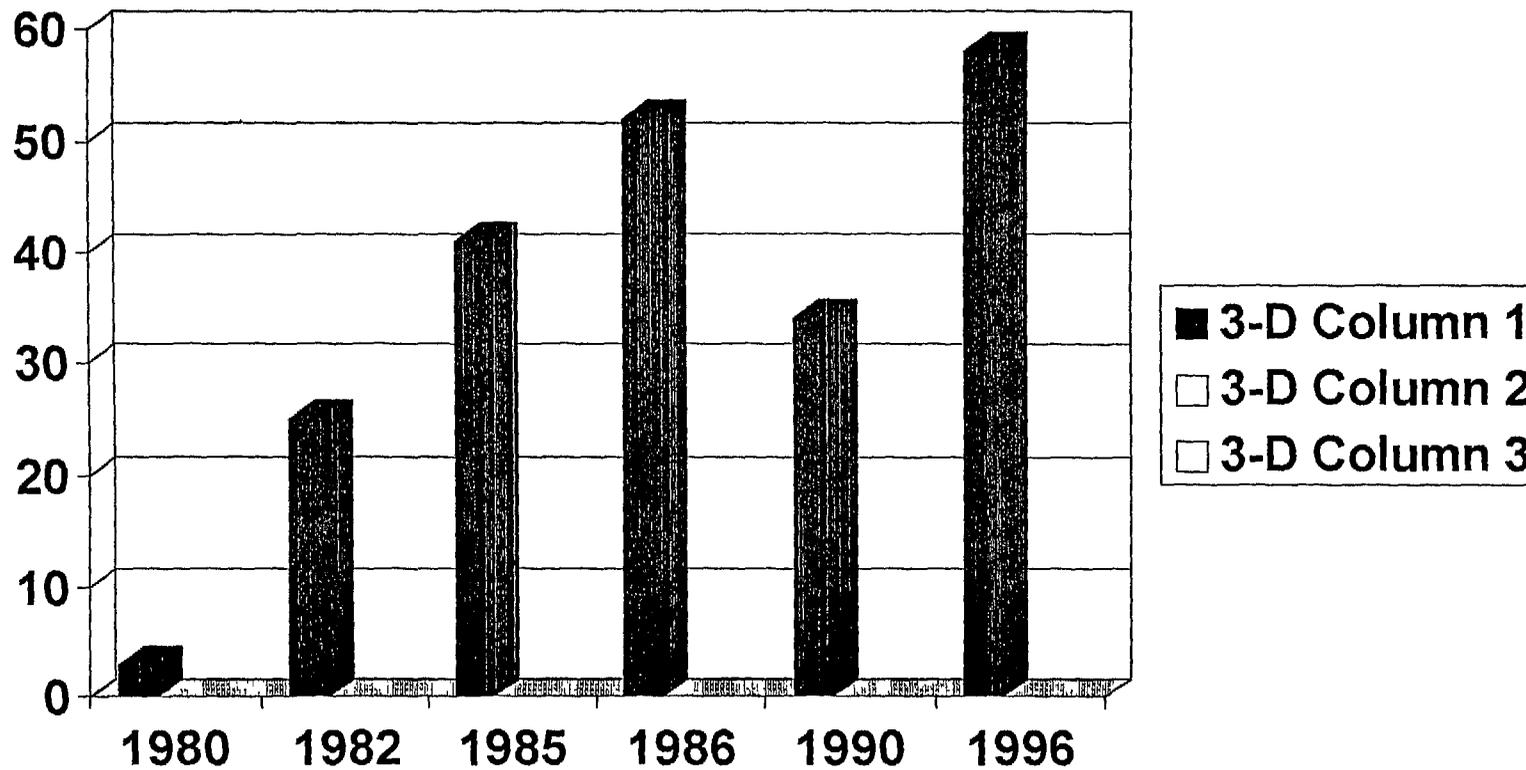
## **The Link Between STDs and HIV Transmission**

*Dr P Matondo*

# Implications

- Link Between STD and AIDS Control
- STD is a strategy and tool for AIDS control
- Need Public Health approach to STD control to have greatest impact
- Evidence: STD control can slow down HIV epidemic
- Need targeted interventions for greater impact

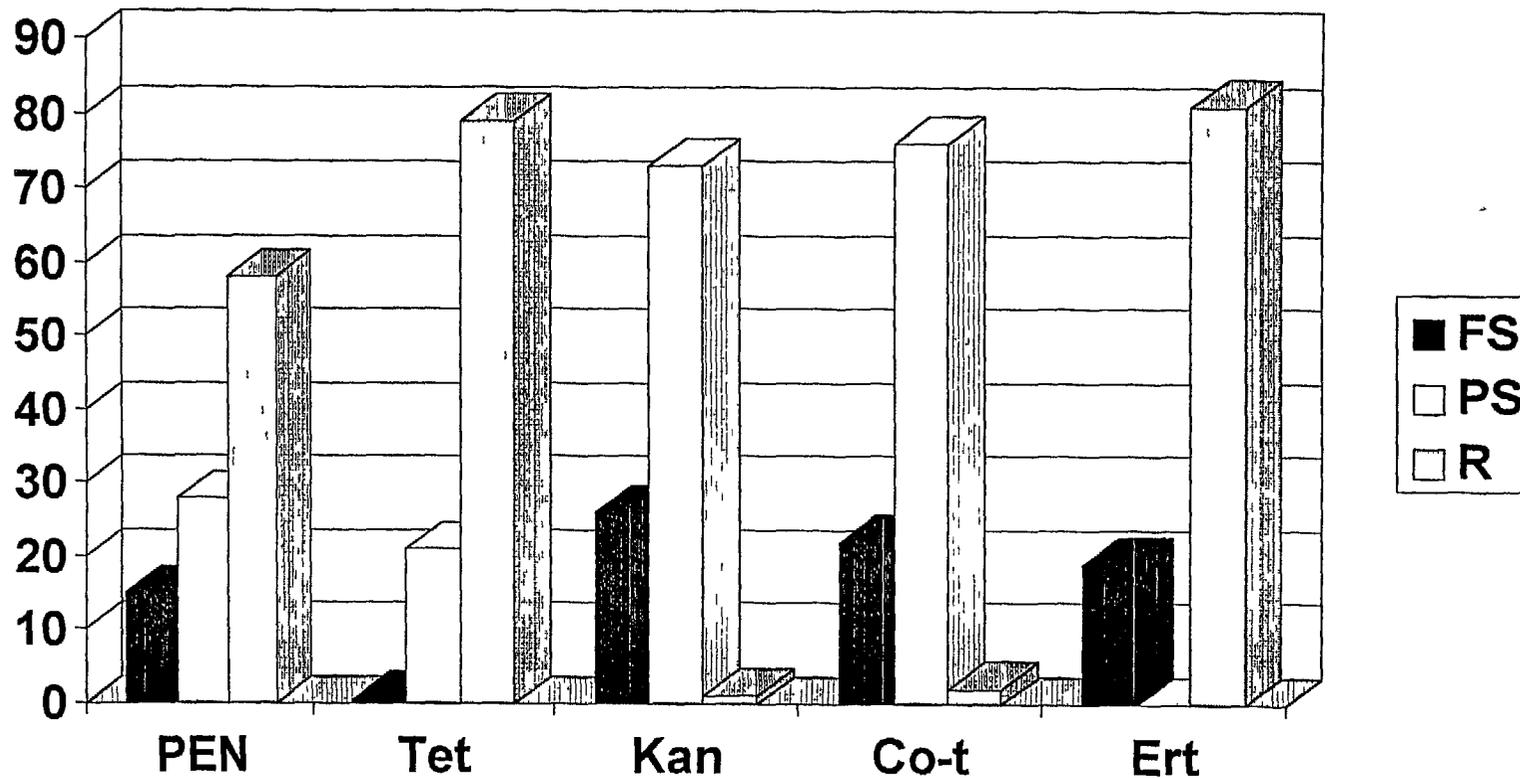
# Trends in PPNG in Zambia



# Implications:

- **Questions about:**
  - ration drug use
  - abuse of antibiotics in community
  - Sensitivity patterns outside Lusaka
  - trends over time
- **Need for regular monitoring of trends**

# Antibiotic Sensitivity Patterns of *N. gonorrhoeae* isolates, Lusaka 1996



# STD Prevalence

Usually difficult to determine for general population:

- Difficult to find volunteers
- Sampling problems
- Limitations of laboratory methods:  
more sensitive in symptomatic than asymptomatic patients
- Influence of antibiotic use in population

## Gonorrhoea

- 11.3% of pregnant women in ANC(Hira 1986)
- 19% of Pregnant women in STD clinics( Ratnam 1980)
- 5% of patients with genital warts (Matondo et al 1998)

## Syphilis

- 14.4% of pregnant women(Ratnam 1982)
- 8% of pregnant women(Hira et al 1990)
- 17.5% of pregnant women(deGraft-Johnson 1995)
- 6 % of symptomatic HIV +ve persons (Matondo et al 1998)

## *Chlamydia trachomatis*

- 4-7% of men with GC urethritis in Lusaka(Salem 1990)

Self Reported std in past 12 months  
(DHS 1996):

- 1-3% women and 3-10% of men aged 15-49 reported having had an STD

## **Laboratory and Drug Supply**

*Yves Lafort*

*The STD Laboratory*

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# *The Role of the Laboratory*

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## ■ *Clinical practice*

- *diagnosis*
- *case finding/ screening*

## ■ *Public health*

- *surveillance*
- *operational research*
- *reference laboratory*

*Handwritten notes:*  
The role of the laboratory in public health is to provide a service to the community by carrying out research, diagnosis, and surveillance.

# *Clinical Practice*

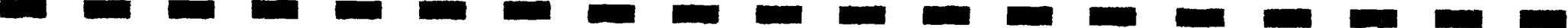
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## ■ *Criteria for lab tests*

- *validity/reliability*
- *feasibility*
- *acceptability*

## ■ *Levels of diagnosis*

- *peripheral level*
- *intermediate level*
- *central level*



# *Clinical Practice*

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## *Factors to consider:*

- *prevalence of STDs*
- *logistical support and financial and human resources*
- *technical capacities of staff*
- *cost-effectiveness*
- *follow-up, evaluation, coordination and quality control*

# *Drug supply*

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# *STD Drug Framework*

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## ■ *Ensuring:*

- *Availability*
- *Accessibility*
- *Affordability*
- *Rational use*

## ■ *Through:*

- *Increase efficiency*
- *Allocate adequate funding*
- *Recovering costs*

# *Drug Selection Criteria*

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- *High efficacy*
- *Lowest cost*
- *Acceptable toxicity*
- *No microbial resistance*
- *Single dosage*
- *Oral administration*
- *Not contraindicated in pregnancy*



# *Increase Efficiency*

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- *Selection*
- *Quantification*
- *Procurement*
- *Storage*
- *Distribution*
- *Rationale prescribing*
- *Patient compliance*

# *STD Control and Prevention Assessment*

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*Y. Lafort - P. Matondo  
FHI/IMPACT - UTH*

# *Introduction*

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- *Informal assessment on current status of STD control and prevention in Zambia*
- *Performed by IMPACT/FHI and UTH in May - June 1998*
- *Focus on quality of STD case management, training, supervision and monitoring issues*
- *Including private and other sectors*

# *Methods*

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- *Informal qualitative assessment*
- *Key informant interviews*
- *Visits to 5 districts as representative as possible for the country*
- *Visits to 14 representative health units*
- *Interview of 12 HCP and record review*

## *Findings: Laboratory facilities*

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- *The 4 health centers with laboratory had sufficient conditions to perform RPR, gram stain and wet mount exam.*
- *Three of these had run out of RPR tests and one out of gram stain reagents.*
- *The mission hospital and the private company clinic had identical conditions, but no problems of supplies.*
- *Only the 2 STD reference clinics had access to NG culture.*

# *Conclusions: Laboratory facilities*

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- *Most health centers don't have access to lab facilities*
- *The tests available for routine care to those that have access are:*
  - *RPR*
  - *Wet mount exam*
  - *Gram stain exam*
- *Supplies for the government clinics are irregular*

## *Findings: Drug supplies*

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- *Spectinomycine was nowhere found*
- *Ciprofloxacin only in one government clinic and the 2 private clinics*
- *Three centers used kanamycine, 6 gentamycine and 3 cotrimoxazole for NG*
- *Seven of the government clinics had run out of benzatine penicillin, 2 out of doxycycline, 6 out of metronidazol, 4 out of erythromycin and 5 out of nystatine*

## *Conclusions: Drug supply*

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- *The recommended drugs for STD treatment are not available at the government clinics*
- *The recommended drugs for gonorrhoea are not on the essential drug list*
- *District drug budgets are insufficient to finance all needed drugs*

## **Current Provider Practices**

*M Nzima*

# Objectives

- Ascertain appropriateness of clinical management provided to male and female health facility attendees (urethral discharge in men, GUD in men and women);
- determine proportion of health facility attendees reporting with complaints of STD who receive appropriate advice regarding condom use and partner notification;

# Objectives

- Assist in the identification of problems and potential solutions in the health facilities for appropriate case management of STD

# Methods

- a detailed observation of HCPs managing STD cases (observation questionnaire);
- an interview with each HCP in the STD clinic (interview questionnaire);

# methods

- medical record reviews (records questionnaire);
- private practitioner assessment (mystery client-provider encounters & client interviews)

# Some results

- 117 Total observations made;
- 104/117 Obtained a complete history ;
- 88/104 Performed a thorough physical examination

# results

- 66/88 Wrote an effective prescription;
- 58/66 Advised the patient to complete the entire course of treatment;
- 42/58 Mentioned the risk of HIV/AIDS;

## Results Contd..

- 36/42 Promoted condoms for HIV/STD prevention;
- 31/36 Provided/sold condoms to the patient (among facilities with condoms) ;
- 23/31 Instructed patient on condom use

# Some findings & Recommendations

- Inappropriate diagnosis and treatment:

- 85% made <sup>Clinical</sup> ~~etiological~~ diagnosis, but only 24% of these had test results

## Contd..

- Training helps syndromic management:
  - 65% of trained providers prescribed effective treatment vs 33% of untrained
- Provide and train on guidelines
  - 70% of providers report following any guidelines

# Health Facility Survey - PI6/7

## Preliminary Results

## Contd...

- Emphasize complete history and examination
  - 75% of observations included both
- Emphasize partner notification
  - 75% of observations included a verbal request for notification
- Emphasize condom promotion
  - 58% promoted condom use and 34% provided condoms

**Components of an Effective National STD Case  
Management Program**

*ML Field  
Y Lafort*

# Model of the Role of Health Services in STD Management

Total Population  
Sexually Active Population  
Population with Symptoms  
Presenting for Treatment  
Correct Diagnosis  
Correct Treatment  
Treatment Completed  
Cure  
Partner Referral

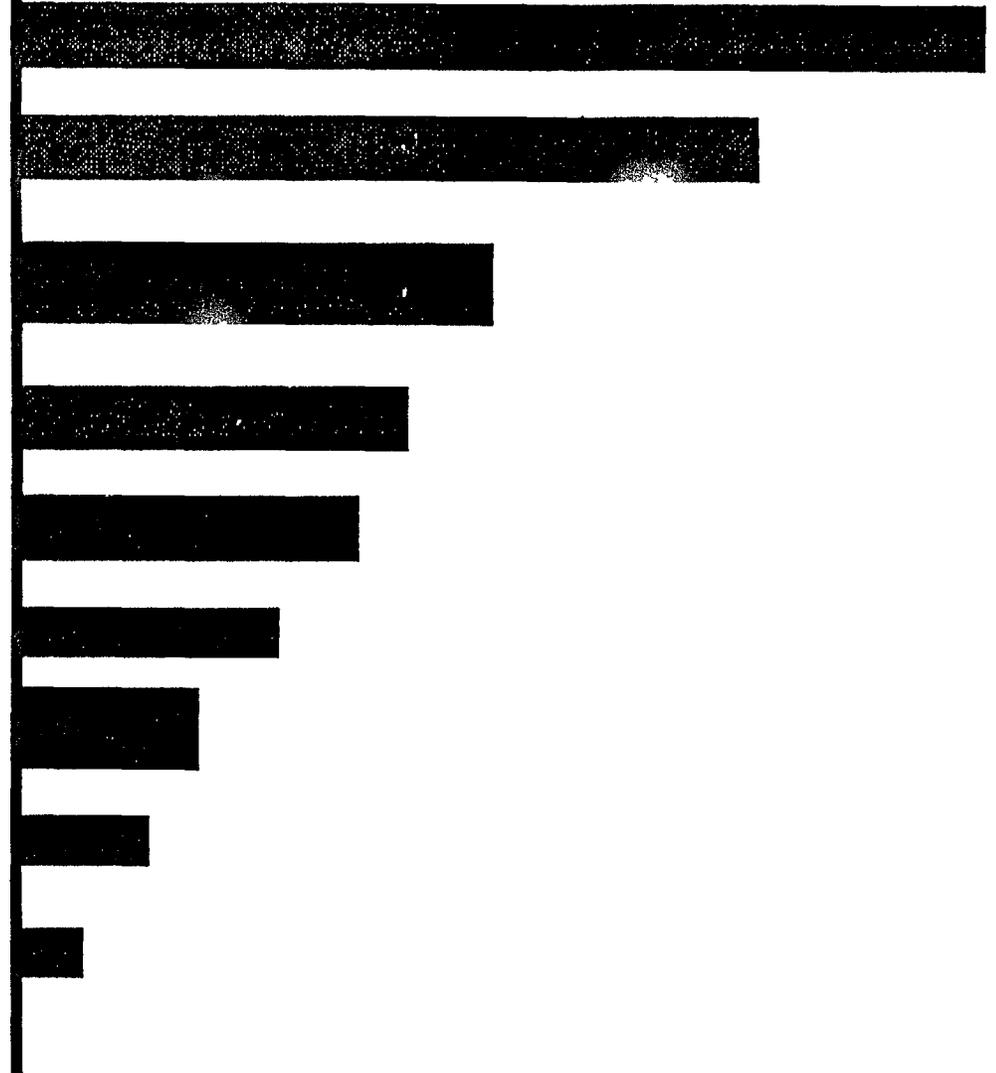
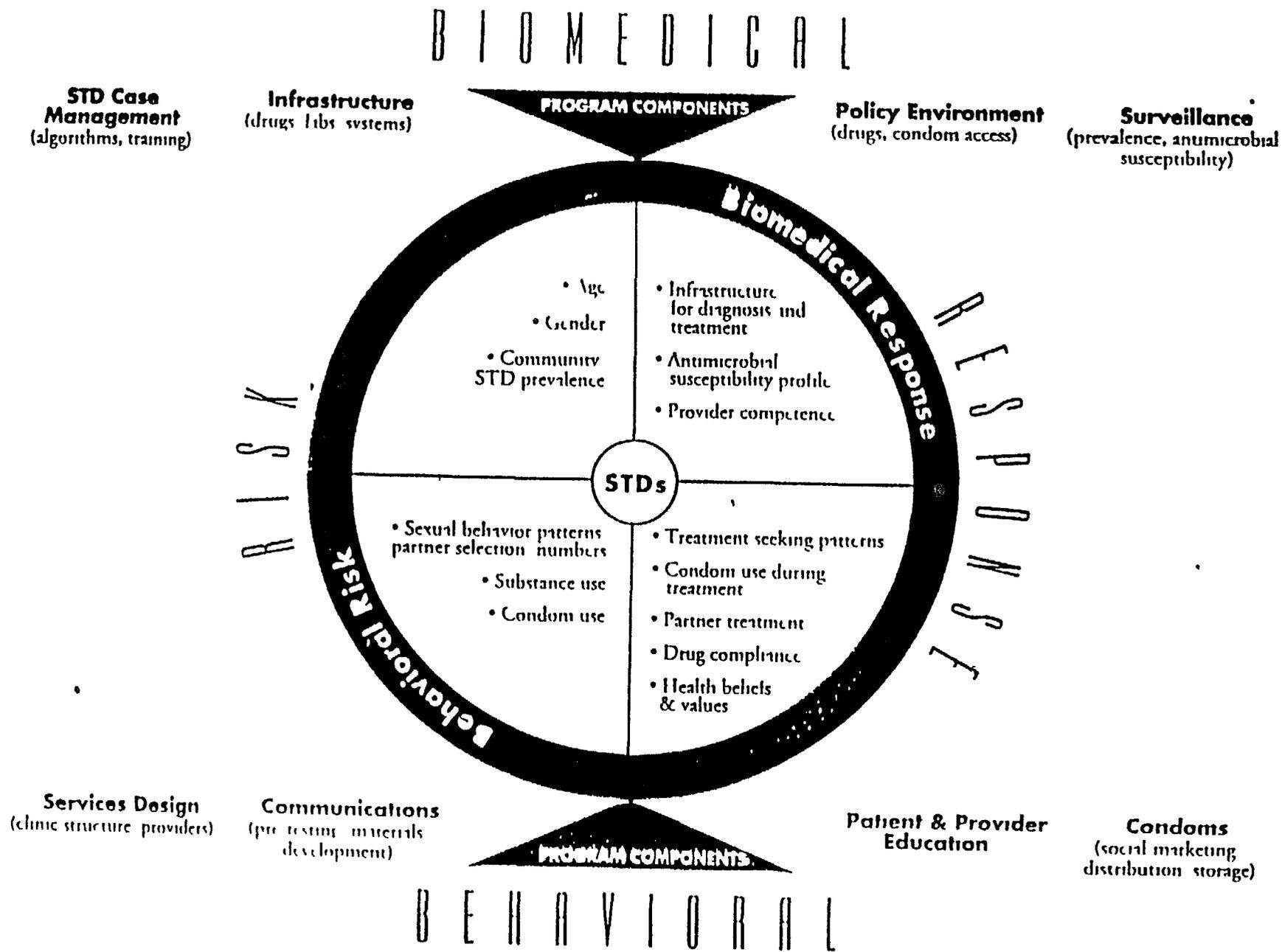
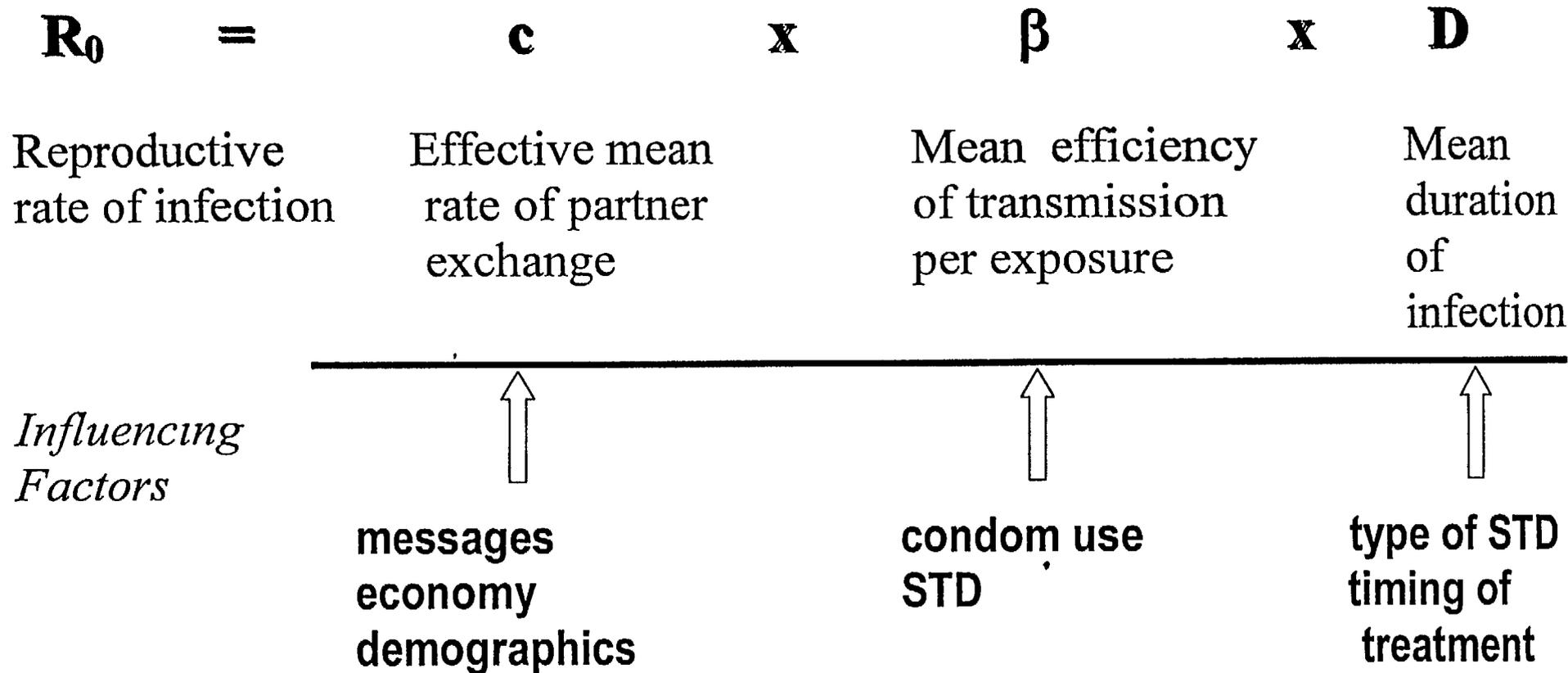


Figure 3.  
**BIOMEDICAL AND BEHAVIORAL FACTORS AFFECTING STD RISK, RESPONSE AND PROGRAMMATIC ELEMENTS**



# Factors that influence STD transmission in a community



# HEALTH-SEEKING BEHAVIORS IN STDs

What is the problem

Why is it a problem

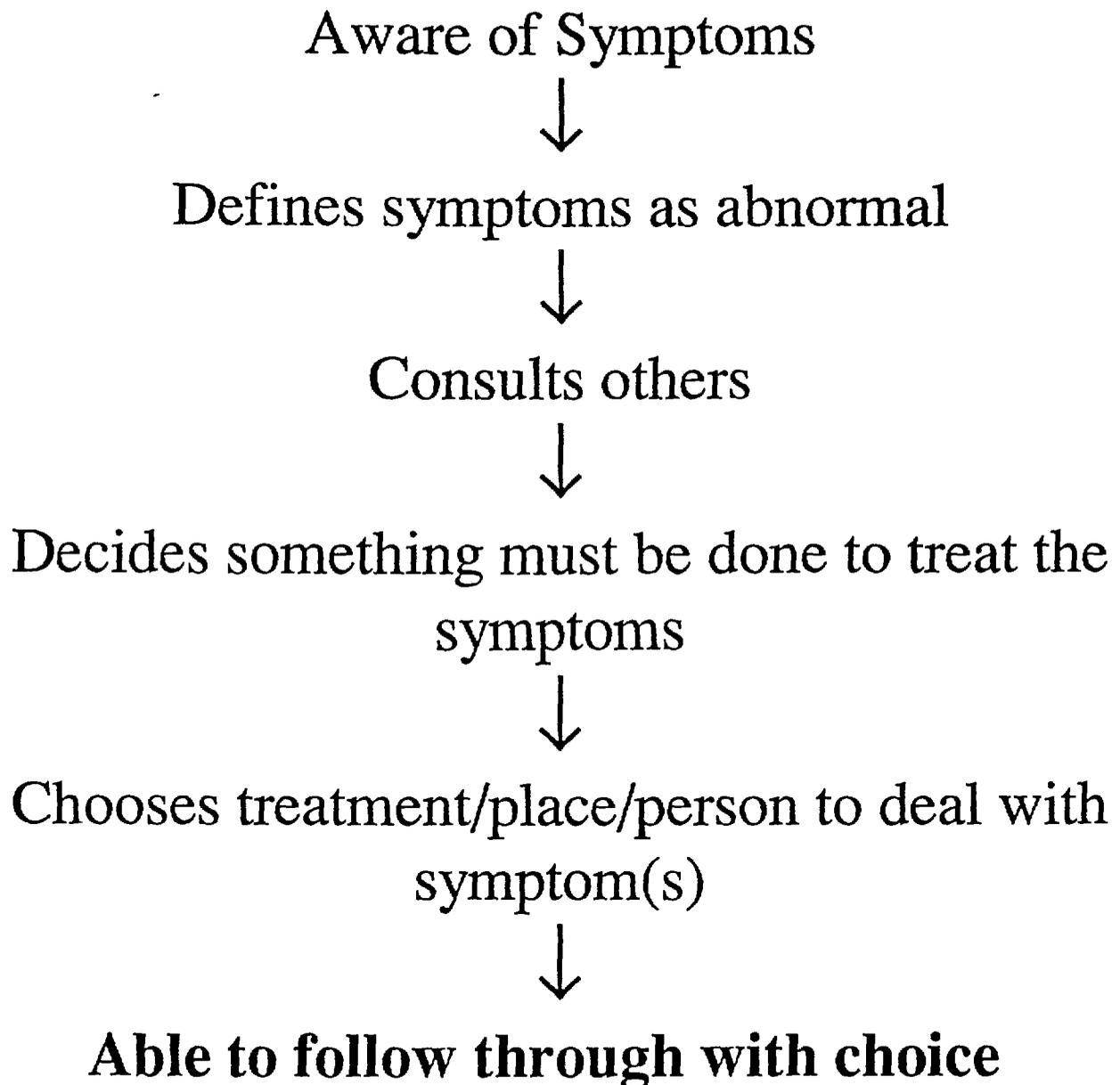
What are the pathways to care

Issues and Approaches?

(communities, clients, services and providers )

What should we do to improve early,  
effective treatment of STDs in communities?

# The Pathways to Care



Continued

## Pathways to Care

Supported in choice by persons of  
influence and/or authority



Undertakes treatment



Satisfied or dissatisfied



Completes or abandons treatment and tries another  
option



Symptoms resolve or complications ensue



Reports success or failure to peers, family.

## Pathways to Care: Issues, Approaches and Comments

Issue	Approach	Comments
Asymptomatic women (May be the case for 70% of infected women)	Self-risk assessment in high and low risk women  Screening and mass treatment in high risk women	Screening test not available  Risk assessment on asymptomatic women not validated

**Defines the symptom(s) as abnormal**

<b>Issue</b>	<b>Approach</b>	<b>Comments</b>
STD symptom perceived to be normal	Community education	Change community norms Use channels outside the clinic to reach non attenders
Description of symptom not clearly communicated	Training for health workers	Talk about symptoms, not names  Communications skills

**Chooses treatment/place/person to deal with symptom(s) →  
Able to follow through with choice**

Issues	Approach	Comments
Many with STDs go to other places for care		Reasons are many. stigma, long lines, lack of privacy, provider attitudes
Clinic location affects attendance  Transport can be a problem	<ul style="list-style-type: none"> <li>◦ Place clinic services discreetly, conveniently</li> <li>◦ Provide transport</li> <li>◦ Establish mobile services</li> <li>◦ Increase number of clinics</li> <li>◦ Provide periodic services to remote locales</li> </ul>	Where patients lack confidence in confidentiality of information, distance from home is desirable Otherwise, convenience important STD patients should not be identified as such when entering.

**Chooses treatment/place/person to deal with symptom(s) ➔**  
**Able to follow through with choice**

Issue	Approach	Comments
<p>Inconvenient clinic hours, excessive waiting time.</p>	<p>Decrease waiting time.</p> <p>Utilize waiting time in useful, pleasant manner.</p> <p>Adjust hours to community needs</p>	<p>Long waiting lines with no place to sit is a common complaint of patients.</p> <p>Hourly wage workers cannot afford to attend during work hours.</p> <p>Adolescents need special times</p>
Issue	Approach	Comments
<p>Patients lack confidence that they will be treated with respect and with a successful outcome</p>	<p>Improve quality of care</p> <ul style="list-style-type: none"> <li>● Nonjudgmental,</li> <li>● empathetic providers</li> </ul>	<p>Syndromic approach efficient, effective</p>

	<ul style="list-style-type: none"> <li>• supply of correct drugs</li> </ul>	<p>Ineffective drugs lead to loss of patient confidence</p> <p>Patients complain of being scolded. Adolescents, in particular, are treated judgmentally by providers. Women are embarrassed.</p>
Lack of privacy and confidentiality of information	<p>Provide curtains, rooms where patients won't be heard by others.</p> <p>Train providers in need for confidentiality and set policies.</p>	<p>Patients often do not attend because they know the staff.</p> <p>Stigma about STDs makes this a critical component of care.</p>

**Chooses treatment/place/person to deal with symptoms(s) →  
Able to follow through with choice**

Issue	Approach	Comments
<p>Client: Knows how to describe the problem.</p> <p>Provider: understanding patient's language, local terms, metaphors, etc.</p>	<p>Community education, provider facilitation of patient communication</p> <p>Provider training in local terms, metaphors patients use</p>	<p>In many countries providers and patients use different terms for the same symptom</p> <p>If embarrassed because others can hear, patient makes up non-STD related symptoms.</p>
<p>Lack of money to pay for visit and/or drugs</p>	<p>Use approaches to make care affordable (sliding scale, deferred payment)</p>	<p>Attendance can decrease when fees introduced or increased</p>

→ Undertakes treatment → Satisfied or dissatisfied → Follows through with regimen or abandons regimen and tries other option  
 → Symptoms resolve or complications ensue → Reports success or failure to peers, family

Issue	Approach	Comments
<p>Client must understand how to take the recommended treatment and is clear about the meaning of advice given re: prevention, partner notification, etc.</p> <p>Confidence in Rx important to outcomes.</p>	<ul style="list-style-type: none"> <li>◦ Provider or other clinic worker: clear instructions, time for Questions</li> <li>◦ Take-home instructions</li> <li>◦ Single dose, low side effect profile therapies</li> </ul> <p>Provider explicitly states confidence in the treatment.</p>	<p>Patients often confused, stop drug before course completed, forget to take pills as instructed</p> <p>This can foster patient hope for a positive outcome</p>

# Core Group Focus

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**In situations in which a small number of individuals form a high proportion of sexual partnerships, the greatest impact on STD control is achieved by interventions directed at this group.**

## **WHY?**

Core groups eventually have interactions with non-core members.

Example of Thailand 100% condom only brothels

# **Partner Management**

## **Why important?**

- **Interrupts chain of transmission**
- **May identify partners who are asymptomatic**
- **Opportunity to provide focused STD/HIV education**

# **Principals Partner Notification**

**Voluntary participation**

**Confidentiality**

**Accessibility**

**Quality assurance**

**Do no harm**

# Partner Notification

## Strategies:

Patient referral

Provider referral

Combination referral

## **Partner Notification Activities**

- **Educating patients about how to prevent transmission to others**
- **Referring patients for medical evaluation if necessary**
- **Notifying partners of identified by patient**
- **Treating partners epidemiologically**
- **Educating partners on how to reduce future risk**
- **Referring partners for medical evaluation if necessary**

# What to Refer

## Partners of male index patients with:

- Urethritis
- Genital ulcer disease
- Positive syphilis serology
- Infant with gonococcal ophthalmia neonatorum

## Partners of female index patients with:

- Genital ulcer disease
- Pelvic inflammatory disease
- Positive syphilis serology
- Purulent cervical discharge
- Infant with gonococcal ophthalmia neonatorum

## Feasibility of Partner Notification and Relative Impact on STD Program by Type of Partner

Type of Partner	Feasibility	Impact on Program
Spouse/steady partner	+++*	+
Casual partner	++	++
High risk partner	+	++++

\* May not be acceptable in some cultures.

# Targeting: Key Issues

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- Identify core groups
  - Commercial sex workers
  - Persons away from home
  - Youth
- Avoiding stigmatisation

# Targeting: Key Issues

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- CSW
  - regular screening
  - brothel based services
  - clinic based interventions
    - integrated
    - specialised
  - private sector
  - peer health educators

# Targeting: Key Issues

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- Persons away from home
  - truck drivers
  - military
  - large companies in remote areas
- Adolescents
  - youth friendly clinics

# Inter Sector Co-ordination

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## *Treatment seeking behavior*

- program-driven ethnographic research
- Private sector
- Traditional healers
- Self treatment
  - pharmacies
  - street vendors
  - family and friends

# Inter Sector Co-ordination: Key Issues

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- Private sector
  - training
  - guidelines
  - reporting
- Traditional healers
  - mutual respect
  - prevention
  - case management

# Inter Sector Co-ordination: Key Issues

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- Self treatment
  - pharmacy training
  - marketing prepackaged therapy
    - through health facilities
    - through pharmacies
    - through shops

# *Conclusions*

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- *The syndromic approach is currently not used*
- *Major constraints:*
  - *lack of awareness*
  - *lack of funding for drug component*
  - *poor follow up and supervision*
  - *insufficient coordination in guideline development and training*

## *Conclusions (Cont.)*

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- *Condom distribution is weak*
- *Partner notification is not standardized*
- *Lack of educational aids*
- *Poor coordination with parastatal and hospital clinics*
- *Lack of targeting CSW and truck drivers*
- *Private sector not involved*
- *Involvement of informal sector could be improved*

# The Role of Training

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- *To introduce a syndromic approach the providers deserve training*
- *Providing sufficient resources shows respect for the behavior change that is being requested of providers who have been using the etiological or clinical approach*

# Training: Key Issues

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- Integration
- Decentralisation
- Co-ordination

# Training: Key Issues

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- Needs assessment
- Training methodology
- Resources
- Participant selection
- Course content
- Appropriate training techniques
- Comprehensive STD case management

# Training: Key Issues

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- Evaluation plan
- Follow-up/supervision
- Continuous training
  
- Private sector
- Informal sector

# The Role of Supervision

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- *Follow-up and continuous training*
- *Enhance moral*
- *Detect and resolve problems*

# Supervision: Key Issues

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- Integration
- Decentralisation
- Training of supervisors
- Integrate evaluation into supervision
- Appropriate supervision techniques and tools
- Co-ordination across sectors

# The Role of Monitoring and Evaluation

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- Monitoring

*Tracks and counts events, activities, people and objects and can consist of either periodic or continuous data collection*

- Evaluation

*Measures and analyzes progress towards attainment of stated goals and objectives*

- To ensure appropriate and high-quality services

# Monitoring: Key Issues

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- Setting objectives and goals
- Monitor what?
  - Service delivery - PI6/PI7
  - Staff performance
  - Client satisfaction
  - Resource needs
- Integration
- Co-ordination with other sectors

# Evaluation: Key issues

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- Method of evaluation
  - Surveillance data
  - STD-related morbidity indicators
  - Special studies
- Use of information and data

# Drug Supply: key Issues

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- Allocate adequate funding
  - Reconciling budgets
  - Reallocate budgets
  - Seeking external support
- Increase efficiency
  - Selection
  - Distribution

# Laboratory capability: Key issues

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- Diagnostic and screening tests at each level
- Quality control
- Strengthening supply systems
- Reference laboratory
  - Surveillance
  - Research

# The Role of Condoms

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- Consistent use of condoms reduces risk of exposure
- Individuals who have STDs are prime candidates
- Condom promotion should be part of any comprehensive case management

# Condom availability: Key Issues

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- Improving condom promotion
  - Condom education and counselling
  - Condom skill building
  - Condom distribution

# Condom availability: Key Issues

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- Involvement of all staff
- Linking with community based organisations
- Linking with social marketing programs
- Accessibility
- Educational materials
- Linking to treatment
- Sources of condoms in the community
- Linking to FP/MCH services

# Condom availability: Key Issues

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- Distribution
- Storage
- Evaluation
- Private sector
- Informal sector
- Other barrier contraceptives