

4 - 8 胸部疾患検査年次報告 - 1987年



MINISTRY OF HEALTH

CHEST DISEASES LABORATORY ANNUAL REPORT

BY

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INTRODUCTION

The Laboratory was created in 1973 to provide a routine service for the analysis of tuberculosis specimens from all health units throughout Zambia and to participate in various Zambian Government/British Medical Research Council (BMRC) Chemotherapy studies. This Laboratory is now also a reference centre for Leprosy Quality Control (LQC) service in Zambia. It must be mentioned too that the LQC service is not yet fully utilised since only few health units do send their smears as was recommended by the TB/Leprosy Specialist.

The BMRC Chemotherapy studies came to an end in September 1986 and thereafter the Laboratory continued to provide a service to the nation with a funding from the Zambian Government. When the BMRC studies ended, a joint committee comprising of members from the Ministry of Health Headquarters, University of Zambia (UNZA), University Teaching Hospital (UTH), and National Council for Scientific Research (NCSR), was set up to look into the future of the Laboratory. With recommendations from this committee, the Laboratory continued operating from the NCSR premises and to provide:-

- i) smear, culture and sensitivity testing services for all cases of tuberculosis in Zambia.
- ii) a smear service to determine the Bacteriological Index (BI) and Morphological Index (MI) of Leprosy smears.
- iii) an initiation of LQC system for smears examined for Myco. leprae in up country health units.

Because of financial constraints, the Tropical Diseases Research Centre (TDRC) is looking at the possibility of putting the Chest Diseases Laboratory (CDL) under it, administratively and financially although TB is not among the tropical diseases under World Health Organisation (WHO) classification. It is however hoped that even if the TDRC opts to takeover the running of the CDL the Laboratory will have to remain at its present site at the NCSR premises. Dr J. Mwansa of TDRC visited the Laboratory towards the end 1987 with a view to assess the needs for the Laboratory but as up to the time of this reporting, there is no feedback.

.....2.....

Total number of TB smears ..... 7,885  
" " " "cultures..... 7,885  
" " " " sensitivities.....1,440  
" " " " identifications..... 2,880

Total number of Leprosy smears ..... 460  
Positive smears..... 35  
Negative smears.....425  
Total Leprosy Quality Control smears... 125

SPCIMENS

The total number of smears and cultures done dropped by 8,115 from the expected workload of 16,000 as indicated in the 1985 annual report. This is also a drop of 4,088 from the previous year. The drop in smears and cultures does not mean a drop in TB cases in the country but this is due to lack of reliable transport for the station.

TRANSPORT

Lack of reliable transport has greatly affected the smooth running of the Laboratory. This is evidenced by the big drop in the number of specimens done in the year under review. For this same problem the Laboratory did not open on several occasions. The next best solution we did was to move the staining equipment to UTH just to be able to continue providing smear results both for UTH and up country for those units that were sending specimens by post in parcels because the metal boxes used in the sending of specimens were getting stuck whenever they came to CDL. Many are the times this problem has been brought forward to higher authorities ~~but~~ but nothing is being done to alleviate it. The only tangible answer is to ~~make~~ <sup>save</sup> transport available if at all we are to ~~serve~~ <sup>save</sup> the lives of those that would have been ~~served~~ <sup>saved</sup> by the availability of the laboratory results.

STORES

Difficulties were encountered in getting the cheques for the purchase of eggs for the medium and for purchase of metal specimen boxes at the Old Medical Stores unnecessarily. The TB funds are controlled by TB/Leprosy Specialist and the Assistant Director <sup>of</sup> Medical Services for Primary Health Care and not the Deputy Director of Pharmaceuticals. As a result of this confusion, there were no cultures (TB) for one full month of December. A suggestion was made for the Officer to visit the CDL in a bid for him to

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be more enlightened of the activities of the CDL.

Some chemicals were sent to CDL by DR Darbyshire when she was approached to assist but the Old Medical Stores which clears items for the Ministry has not cleared these chemicals which have been at the Airport for now eight months. The laboratory is doing without this very necessary reagent.

STAFF

- Dr R. de Soldenhoff.....TB/Leprosy Specialist (up to December 1987)
- Dr G.J.Steenbergen.....TB/Leprosy Specialist (as from February 1988)
- Mr K.M.Namaambo.....Senior Med. Lab. Tech/ Officer in Charge
- Mr B.Shumba.....Medical Lab. Assistant
- Mr H.Siwale.....Medical Lab. Assistant
- Mr F.Ngondoma.....Clerical Officer
- Mr Nshimbi.....Laboratory Assistant
- Mr Mumbi ..... " "

The establishment at the Laboratory is still very unsatisfactory as there are only the posts of Senior Medical Laboratory Technologist, Laboratory Assistants ~~and~~ and even include the post of an X-ray Assistant who is not relevant to the laboratory. At the time of reporting Dr de Soldenhoff whose contract expired in December 1987, was already replaced by Dr Steenbergen as the new TB/Leprosy Specialist.

Since September 1986, the laboratory has operated under the supervision of Mr Namaambo who got appointed to Senior Med. Lab. Technologist with effect from October 1987. Mr Shumba acts as the Deputy Officer in Charge although this has to be followed up by the Ministry so that he should be promoted to Principal Laboratory Assistant.

The Laboratory Assistants below the line on the list of members of staff above were posted to the Laboratory for duties but could not stay due to personal problems, though one of them requested to exchange ~~with~~ with his colleague from Chipata.

### TRAINING

Since the inception of the laboratory in 1973, no Officer has ever been sent for further training with a view to up grade the Chest Diseases Laboratory. The present Officers are just Diploma and Certificate holders. In the 1973 - 1986 review it is indicated that Mr Nsamaambo was to proceed on scholarship in 1987 to study for HNC. This has not happened probably because the CDL is not on priority training programme in the Ministry. It is hoped however that the Laboratory Assistants will be given further training when the Ndola School Med. Lab. Technicians ~~openain~~ opens in the near future.

### Accomodation

There is no accomodation specially for the CDL staff. Two Officers are accomodated in single rooms at UTH despite the fact that they are married officers. Their stay there really depends on the whims of the UTH Management Board. It is one reason why the two new Officers could not stay. In future the Ministry should consider accomodating the staff as one very important factor.

ANALYSIS OF SENSITIVITY TEST RESULTS 1987

	LUSAKA%	CENTRAL% SOUTH	WEST %	N/WEST %	LIAPULALA	NORTH %	C/BELT %	EAST %	S %
S S S S	1330/92	76 94 41 100	30 90 6 86	6 86	64 88	27 92	192 96	59 92	
R R S S	83 5.8	4 5	3 8	1 14	4 6		6 3	2 5	
R H S S	9 0.6				2 3	1 4			
R R R S	2 0.3								
S R S S	6 0.4	1 1			2 3		2 1	1 3	
S R S R	1 0.2								
S S S R	2 0.3								
R R S R	5 0.4								
R R R R	2 0.3								
R S S R			1 2			1 4	1 0.5		
TOTAL	1440	81 41	34	7	72	29	201	62	

SS ISONIAZID= H, STREPTOMYCIN= S, ETHAMBUTOL= E, RIFAMPICIN= K.

- SSSS - Sensitive to HSER
- RSSS - " SER, Resistant to H
- RRSS - " ER, " HS
- RRRS - " R, " HSE
- SRSR - " HE, " SR
- SSSR - " HSE, " R
- RRSR - " E, " HSR
- RRRR - Resistant to HSER
- RSSR - Sensitive to SE, Resistant to HR.

*[Signature]*  
K.M. Namambo



MINISTRY OF HEALTH  
CHEST DISEASES LABORATORY

ESTIMATION FOR 100 TB PATIENTS ( NB NOT 100 SPECIMENS)

1. Transport (Landrover S/W or Pick Up with Canopy)
2. Universal bottles 28ml -300
3. Mac Cartney bottles 28ml -200
4. Slides - 1000
5. Autoclave - 1
6. Inspissators - 2
7. Centrifuges - 2
8. Beater fan for Incubation room - 1
9. Brushes, small, medium and large - 100 each
10. Polythene containers 20L - 4
11. Bottles flat side and narrow mouth - 200ml - 5  
300ml - 5
12. Automatic dispenser - 1
13. Refridgerators electric - 2

Ma MEDIUM REAGENTS

1. Potassium di hydrogen phosphate - 2Kg for one year
2. Magnisium sulphate - ..... 1Kg "
3. Magnisium di citrate (tribasic).. 1Kg "
4. L. Asparagin ..... 3Kg "
5. Sodium pyruvate ..... 4Kg "

STAINS

1. Auramine " O " ..... 5Kg
2. Potassium permanganate..... 500g
3. Malachite green ..... 500g
4. Phenol crystals ..... 5Kg
5. Basic fuchsin ..... 500g

Id IDENTIFICATION CHEMICALS

1. Para-nitrobenzoic acid ..... 1
2. 2-Furoic acid hydrazide..... 5
3. Thiophen-2-2-carbonic acid..... 5
4. Sodium nitrate..... 1
5. Sulphanilamide.....

Mumba K. Namaambo *[Signature]*  
Officer in Charge



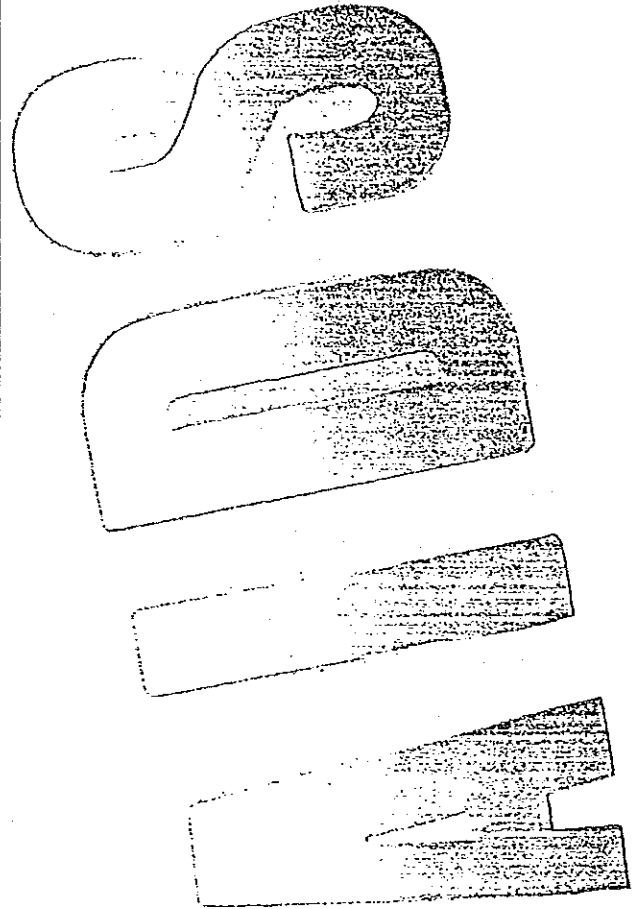
4 - 9 ザンビア側発行エイズ啓蒙パンフレット



YOU CAN AVOID AIDS BY :

- avoiding sexual contact with many partners
- avoiding sexual contact with persons known to have AIDS
- avoiding the use of unsterile needles or syringes, including razor blades
- maintaining a high standard of cleanliness.

Persons suffering from AIDS need your sympathy like any other ill persons. Remember: it could be you! And there is no reason to think you can get AIDS by handshake or simply being around a patient of AIDS.



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MINIMIZE YOUR  
CHANCES OF INFECTION

#### WHAT IS AIDS ?

AIDS stands for Acquired Immune Deficiency Syndrome.

It is Acquired because it is a disease one gets from someone or something as opposed to a disease one is born with.

Immune Deficiency means that the body's ability to defend itself against certain diseases is lost.

Syndrome refers to the symptoms one gets as a result of loss of the body's ability to defend itself against certain diseases.

#### WHAT CAUSES AIDS ?

AIDS is caused by infection with the AIDS virus.

#### DOES AIDS EXIST IN ZAMBIA ?

Yes, studies have confirmed that there is AIDS in Zambia.

#### HOW CAN ONE CATCH AIDS ?

AIDS is passed on mainly through sexual contact. But one can also get it by:

- \* direct contact with AIDS-contaminated blood such as through blood transfusion
- \* use of unsterile needles or syringes infected with AIDS virus

Available evidence indicates that AIDS is not spread through the air or by touch.

#### WHO CAN GET AIDS ?

In Africa AIDS affects both males and females equally.

The chance of getting AIDS is high among people

- with many sexual partners
- who use unsterile needles and syringes to inject drugs into their veins
- and children born to mothers who also have AIDS.

#### HOW CAN YOU SUSPECT AIDS ?

Because of the loss of the body's ability to defend itself against certain diseases, the following symptoms are common:

- \* prolonged cough
- \* fever and night sweats
- \* prolonged weakness
- \* prolonged diarrhoea
- \* unexplained weight loss
- \* enlarged glands, mainly in the neck and armpits.

THERE ARE A LOT OF OTHER REASONS TO EXPLAIN THESE SYMPTOMS. AIDS is only suggested if no other explanation can be found.

If one has any or a combination of these symptoms, one should get medical advice. The decision of who has AIDS should be made by doctors.

[付録 1 : エイズ予防対策教育用パンフレット]

AIDS あなたの感染の機会を少なくしましょう。

AIDSとは何ですか？

AIDSは後天性免疫不全症候群 (Acquired Immuno deficiency Syndrome) の略です。

\*生まれつきの病気ではなく、人から人に伝染する後天性の病気です。

\*免疫不全とは、ある病気に対する体の抵抗力が失われているのを指します。

\*症候群とは体の病気に対する抵抗力が失われた結果生ずる色々な症状を指します。

AIDSの原因は何ですか？

AIDSウイルスの感染により起こります。

ZAMBIAにもAIDSはありますか？

はい、あります。調査の結果ザンビアにもAIDSが確認されました。

どのようにしてAIDSに罹かるのでしょうか？

AIDSは主に性的接触により罹かります。しかし次の場合も罹かります。

\*AIDS汚染血液と輸血などによる直接接触する場合。

\*AIDSウイルスに汚染した滅菌しない針は注射器を使用した場合。

AIDSは空気も接触では伝播しないことがこれまでの事実で証明されています。

AIDSには誰が罹かるのですか？

アフリカではAIDSは男にも女にも罹かります。

次のような人々がAIDSに罹かる機会が多い。

\*多くのセックスパートナーを持っている人。

\*静脈に薬を注射する際、滅菌しない針と注射器を使用する人。

\*AIDS感染の母親から生まれた子供。

AIDSの疑いがあるかどうかはどのようにして分るか？

病気に対する体の抵抗力が消失するので、次のような症状が普通見られます。

\*長期間の咳

\*発熱と寝汗

\*長期間の衰弱

\*長期間の下痢

\*原因不明の体重減少

\*リンパ節、主に頸と脇の下のリンパ節の腫脹

これらの症状は多くの他の原因でも見られます。他の説明ができない時にだけAIDSを疑います。もしもこれらの症状を一つまたはいくつかの組合せが見られたら、医学的アドバイスを受けて下さい。AIDSかどうかの決定は医師によって下されなければなりません。

あなたはこうすればAIDSに罹かりません。

\*多くのパートナーと性的接触をしない。

\*AIDSに罹かっている人と性的接触をしない。

\*かみそりの刃をも含めて、滅菌しない針は注射器は使用しない。

\*極力清潔を保つこと。

AIDSに罹かっている人は、他の病気の人と同じようにあなたの同情を必要とします。覚えておいて下さい：あなたも罹かるかもしれません。

AIDS患者と握手をしたり単に居合わせるだけではAIDSに罹ることは絶対ありません。











JICA

