THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

A STUDY TO DETERMINE CONTRIBUTING FACTORS TO DEFAULT FROM TREATMENT AMONG T.B PATIENTS IN CHINGOLA

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LIST OF ABBREVIATIONS

1.	AIDS	-	Acquired Immune Deficiency Syndrome
2.	CboH	-	Central Board of Health
3.	CDHMT	-	Chingola District Health Management Team
4.	CHW	-	Community Health Worker
5.	DOTS	-	Direct Observed Therapy Short Course
6.	DTLCO	-	District Tuberculosis and Leprosy Coordinator
7.	HIV	-	Human Immune-Deficiency Virus
8.	FGD	-	Focus Group Discussion
9.	GRZ	-	Government of the Republic of Zambia
10.	IUATLD	-	International Union Against Tuberculosis and Lung Disease
11.	KAP	-	Knowledge, Attitude and Practice
12.	MoH	-	Ministry of Health
13.	NASTLP	-	National AIDS, STD, TB and Leprosy Programme
14.	NTP	-	National Tuberculosis Programme
15.	OPD	-	Out Patient Department
16.	STD	-	Sexually Transmitted Diseases
17.	T.B	-	Tuberculosis
18.	WHO	-	World Health Organisation

DECLARATION

I hereby declare that the work presented in this study for the degree of Bachelor of Science in Nursing has not been presented either wholly or in part for any other degree and is not being currently submitted for any other degree.

SIGNED:.....

APPROVED BY: .....
SUPERVISING LECTURER

STATEMENT

I hereby certify that this study is entirely the result of my own independent investigation. The various sources which I am indebted are clearly indicated in the paper and in the references.

SIGNED: .....

DEDICATION

This study is dedicated to my husband Nicholas,

Mum and my two children Nicholas Jr. and Emmanuel

for their continued support.

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ABSTRACT

The aim of the study was to establish contributing factors to default from treatment among T.B patients with the view to improve compliance.

The study was conducted in Chingola urban. Data was collected from 50 T.B patients who had defaulted from T.B treatment. Random sampling was used. A semi-structured interview schedule, two focus group discussions comprising of 5 and 7 patients were used and a checklist to confirm whether the defaulting patients indicated in the clinic records were really existing in the community. Checklist was also used to identify the period at which the patient had defaulted from treatment (whether intensive or continuation phase). A descriptive quantitative and qualitative study was under-taken.

The study results revealed that knowledge about Tuberculosis and treatment was still inadequate among patients.

The other factor that was most prominent was the erratic supply of T.B drugs at health centres that forced patients to stop treatment.

Inadequate follow-up of T.B patients was another area of concern. The district also has inadequate health workers specialised in T.B management and as a result many patients are not reviewed to determine their status even after completing treatment.

The results also revealed that relatives had negative attitude towards T.B patients because of the misconception that community has on T.B and HIV.

From the above findings, recommendations have been put forward to the policy makers so that measures to improve compliance are put in place.

CHAPTER 1

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

Approximately one third of the world's population is infected with mycobacterium Tuberculosis. It was estimated that in 1996 alone 8.8 million would progress to tuberculosis disease while 3 million would die. Tuberculosis is one of the leading causes of death above 5 years of age in low income countries. Poor compliance with therapy is the single most important cause of failure in T.B programmes (Hudleson, 1996).

Tuberculosis is also said to be a major problem in the sub- Sahara Africa. For example in 1994, South Africa had an annual notification rate of 703/100,000 (Dick, J. et al, 1996).

Zambia has equally been affected by this escalating problem. Tuberculosis has become one of the leading causes of morbidity and mortality accounting for 13% of all adult hospital deaths, recently being one of the top ten leading admissions (MoH, 1995).

The T.B case rate in Zambia has increased nearly five fold to over 500 per 100,000 population. The number of reported T.B cases was over 40,000 in 1996, more than 100 cases each day (MoH, CboH, 1999).

In the absence of AIDS, the number would have been limited to about 8,000 to 12000 in 1996. With the advent of AIDS epidemic, the

additional number of annual T.B cases due to AIDS could reach about 38,000 by 2004 (MoH, 1999).

The control of tuberculosis has become largely a management problem. Despite the large amounts of money spent annually on effective antituberculosis drugs, the prevalence of tuberculosis is rising slowly. Apart from the adverse socio-economic conditions this can be ascribed to defaulting in TB therapy.

According to Menzies R. et al, 1993, the most serious problem hampering tuberculosis treatment and control is patient non-compliance with therapy. Among patients with Active TB disease who are non compliant, sputum conversion to smear negative will be delayed, relapse rate will be 5-6 times higher and drug resistance may develop.

Despite the availability of highly effective treatment regimes for tuberculosis, cure rate remain unacceptably low in most developing countries. This is attributed to patients not taking the prescribed medications regularly and duration to achieve cure.

Similarly Zambia is one of the countries with such problems. From the strategic plan for 1998 there were 5,957 smear positive cases in treatment and were documented negative at the end of the treatment. 23% completed treatment but had no proof of being negative at the end of treatment, 2 % failed treatment, that is, remained smear positive, 7% died during treatment while 14% defaulted from treatment. (Mukonka

W.M, 1998). The figure of 14% defaulter rate was too high, with good reporting the figure could be higher than what was reflected.

Recognising that T.B is one of the most neglected health crises and that TB epidemic is out of control in many parts of the world, T.B was declared a global emergency in April, 1993 by WHO. (WHO/TB, 1994).

In response to this global emergency, WHO adopted the strategy for effective tuberculosis control known by a brand name as "DOTS" (Directly Observed therapy Short Course). This means that a supervisor watches the patient swallowing the tablets (WHO, 1998). This ensures that the patient takes the right doses and at the right intervals.

1.2 STATEMENT OF THE PROBLEM

Tuberculosis has rapidly become a major problem in the last decade, despite the T.B programme being in existence for a long time.

In Zambia tuberculosis has become one of the leading causes of morbidity and mortality accounting for 13% of all adult hospital deaths, recently being one of the top ten leading causes of admission (MoH, 1995)

Chingola like any other districts in the country has also been affected with the increase in cases of tuberculosis.

According to Chingola District Action Plan for 1998, the incidence for tuberculosis had increased as evidenced by the report for 1996 and

1997 from January to September respectively. The report showed an increase in incidence from 308 in 1996 to 403 in 1997, with about 36 defaulters.

However, the district attributed the rise in incidence to defaulting coupled with late diagnosis of patients.

Figures extracted from health centre monthly returns for 1998, showed a higher increase in incidence of about 1,139, with 148 deaths and 161 defaulters (Health centre reports unpublished of 1998). The figures above could not be the true reflection of the actual problem due to poor reporting system observed from health centre registers.

The district which is mainly a mining town has 8 government health centres out of which only 2 health centres had laboratory facilities for sputum examination. The district has no X-ray services in the government clinic but is dependent on ZCCM hospital where patients are requested to pay. With increased redundancies many patients can not afford to pay the fees, this therefore may contribute to patients defaulting, and in addition the patient may be too weak to walk to the health centre for laboratory investigations.

In order to improve the situation, many interventions have been done in the district. These are health education, defaulter tracing, and "DOTS' strategy has continued as a measure to improve compliance.

Despite all the efforts being mobilised in the control of tuberculosis, the incidence of TB was still increasing and also patients continued to default from treatment. These same patients paused a danger to the

family and the community at large as they would continue to transmit the TB infection.

Many factors could be attributed to patients defaulting from the treatment or drop out of treatment. Firstly it could be that the registration system was weak in that it did not provide for monitoring of patients' attendance, that is, whether patient was regular in attendance or not, whether he had defaulted and at what stage patient had defaulted from treatment. If the registration system did not allow for such calculations, then there was need that the system be analysed so that improvements could be made to this.

The other factor could be that there was inadequate knowledge on the patients, in relation to TB and TB treatment.

In addition to patients' knowledge, the other factor could be that of staff attitude towards patients. The staff may not be keen enough to explain fully to the patient concerning tuberculosis, treatment and the consequences of patient interrupting TB treatment.

In some instances, the staff attitudes could be because of inadequate knowledge by the staff themselves about tuberculosis and treatment.

Due to various socio-economic problems faced by the community, the other factor could be accessibility to health services. This is in reference to distance from home to the clinic, condition of patient at the time of treatment, and socio-economic factors in terms of costs and availability of resources.

In view of the health services being provided today in the era of health reforms, drug availability could be one of the factors that could contribute to patient defaulting. If there is erratic supply of T.B drugs, patient may feel discouraged and may seek other alternative treatment elsewhere.

Many people today have fear of the unknown. With the advent of HIV/AIDS some patients may not comply because of the stigma attached to T.B disease

JUSTIFICATION

Control of tuberculosis is dependent on completion of TB treatment. This can only be successful if patients comply to treatment and follow the duration of treatment. Non- compliance of treatment causes delay in sputum conversion to sputum negative and higher relapse rate. Therefore non-compliance with T.B treatment has many adverse consequences, not only for patients and their families, but also the society in form of increased drug resistance which no country can afford to cure.

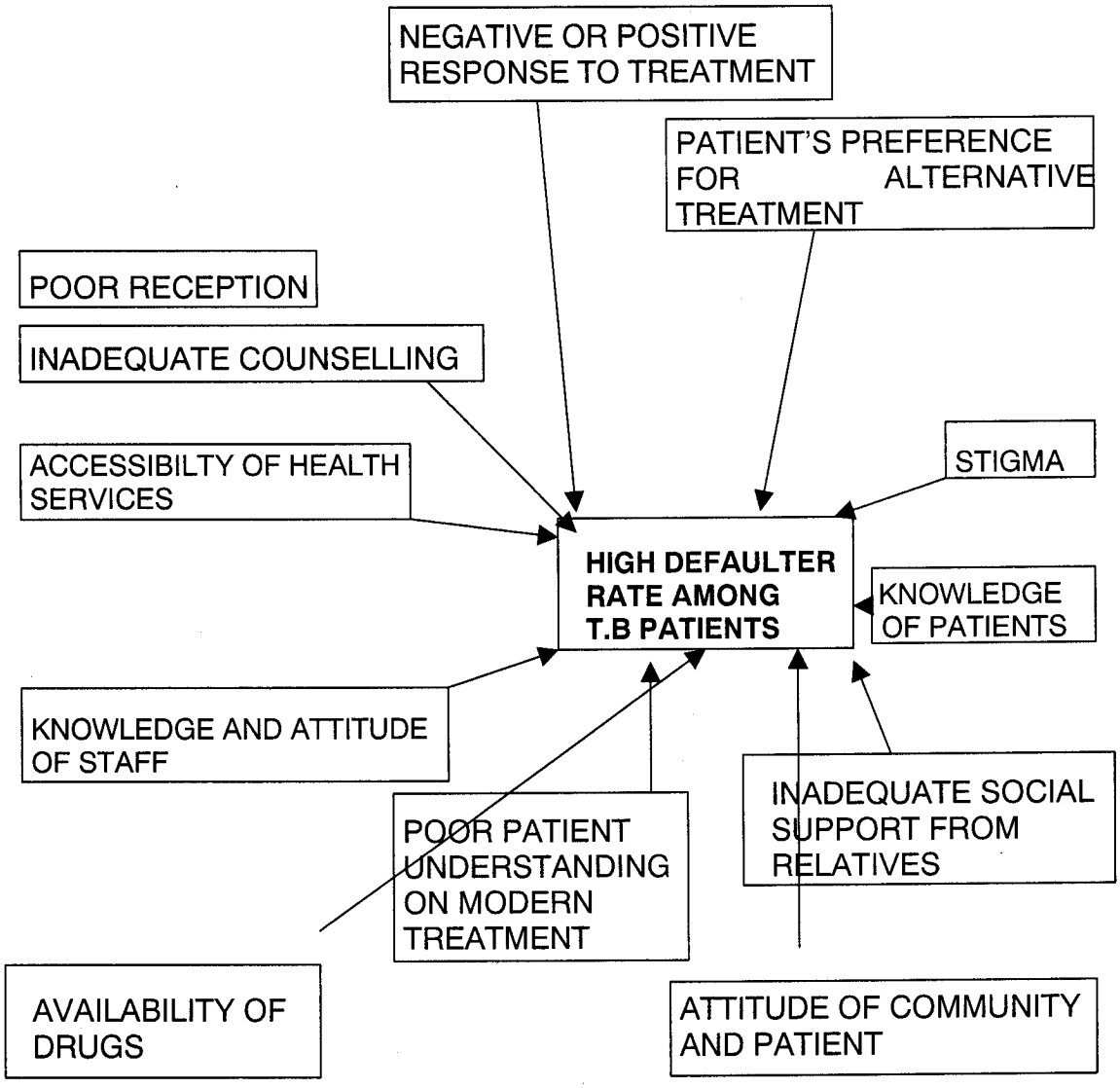
It is for this reason that the researcher felt it was necessary that the study be conducted, so that the study results could be used to make recommendations to relevant authorities so that improvement could be made on the effectiveness of TB treatment.

CONCLUSION

Analysis of the statement of the problem indicated that high defaulter rates could be influenced by service, disease and socio-economic factors.

1.3 PROBLEM ANALYSIS DIAGRAM OF FACTORS CONTRIBUTING TO HIGH DEFAULTER RATE AMONG T.B PATIENTS IN CHINGOLA

SERVICE FACTORS | DISEASE RELATED FACTORS | SOCIO-ECONOMIC AND CULTURAL FACTORS



HYPOTHESES

1. Poor understanding of T.B and T.B treatment will lead to default of treatment among T.B patients.

2. Erratic supply of T.B drugs will lead to default of treatment among T.B patients.

3. T.B patients who receive no support from their relatives are likely to default from treatment.

1.4 OPERATIONAL DEFINITIONS

- **Smear Positive** : At least two sputum positive specimens for acid fast bacilli by microscope

- **Smear Negative**: A patient with at least two sputum negative specimens for acid fast bacilli by microscope.

- **New Case** : Tuberculosis patient who has never taken anti-tuberculosis for more than a month.

- **Relapse** : Tuberculosis in a patient who was previously declared cured.

- **Defaulters** : (i) A patient who fails to attend 14 consecutive days during intensive phase of treatment.
  (ii) A patient who fails to attend to two consecutive monthly clinics during the continuation phase.

- **Cured** : A patient who was initially sputum positive and completed treatment with sputum negative at the end of treatment.

- **Intensive Phase** : First two months of T.B treatment in patients.

- **Compliance** : The patient obeying and sticking to advice Given.

High Density Residential : Thickly populated residential area with houses closely built together known as shanty compounds, inhabited by people of poor social-economic status.

Low Density Residential : Spacely populated residential areas with houses well spaced. Inhabited by opulent (rich) 1st class citizens and families.

- **Accessibility** : Refers to distance or financial, that is. Affordability of medical fees, availability of drugs and time

- **Negative attitude** : Use of unkind words and inadequate treatment between patients and staff

- **Direct observed therapy short course**: Patient being observed swallowing drugs by supervisor, that is, either health staff, relative or any other person entrusted with responsibility.

1.5 OBJECTIVES OF THE STUDY

General Objective

To determine factors contributing to default of treatment among T.B patients, in order to make recommendations for improvement of effectiveness of T. B treatment.

Specific Objectives

1. To determine the factors contributing to default of treatment among T.B patients.
2. To find out whether the stated number of T.B defaulters were real existing.
3. To establish whether patients knowledge about T.B and T.B treatment influence their defaulting from treatment.
4. To assess whether attitude of staff and community influence patient's defaulting from treatment.
5. To establish the extent to which stigma influences patients defaulting from treatment.
6. To establish whether distance from home to health facility influences patients defaulting.
7. To identify socio-economic and cultural factors that may influence defaulting.
8. To utilise study results and make recommendations to relevant authorities for action.

1.6 VARIABLES, INDICATORS AND CUT OFF POINTS

Dependent variables	Indicator	Scale of Measurement
Defaulter	- Intensive Phase - Continuation phase	- Missed treatment of 2 weeks - Missed drug supply/appointment for more than one month
Independent variables Level of knowledge	Knowledgeable Not knowledgeable	- correct response. - Incorrect response.
Attitude of staff and community	Positive Negative	- use of kind or encouraging words - use of unkind words
Distance from home	Far Near	- More than 1 hour's walk to health centre - Less than one hour's walk to health centre.
Availability of drugs	Available Rarely available Not available	Drugs in stock all the time. Erratic supply of T.B drugs. No drugs at all
Level of education	High Medium Low	- College/University - Secondary school - Primary education
Stigma	Acceptance Does not accept	- Patient accepts diagnosis and able to share information with others - Patient has other perceptions about illness

CHAPTER 2:

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Tuberculosis has remained one of the main health hazards for the people. Inspite of planned programmes and availability of modern effective drugs, case detection and treatment of tuberculosis in many countries has not been successful.

The success of the T. B programme mainly depends on three measures, which are: detecting infectious cases, rendering them non-infectious by prompt treatment and protecting the susceptible population by BCG vaccination (Roy RN, 1985).

The issue of non-compliance or default from T.B treatment among T.B patients remains a major problem in T.B control as compliance to treatment largely depends on the patient.

WHO 1998, guidelines for control of T.B states that there should be a relationship of trust and confidence between the patient and health workers in order to promote adherence or compliance. Adherence needs patient's understanding of the T.B disease and what is necessary for successful treatment and cure.

The literature to which the researcher availed herself includes studies done world-wide, within the region of Africa and within Zambia.

2.2 GLOBAL PERSPECTIVE

World-wide half of the population is infected by mycobacterium Tuberculosis. In 1995, there were about 8 million new cases of T.B, 3 million deaths, out of which 25% comprised of all avoidable deaths in the developing countries (WHO/TB, 1998).

Crofton et al (1992) states that every T.B patient has to be educated on the cause, treatment, prevention and control. This will motivate the patient to effectively use the services and be able to comply with treatment.

In a study conducted in Malaysia in 1999 by Tang B.G et al, on attitude and knowledge of newly diagnosed T.B patient regarding the disease on factors affecting treatment compliance, revealed that inadequate psychosocial and economical factors, insufficient patients/caregiver communication were among factors contributing to defaulting. The feeling of being cured due to resolution of symptoms even though treatment has not completed, lack of motivation due to ignorance and inadequate supervision of treatment were some of the reasons.

In the same study 34% out of 132 symptomatic patients did not know symptoms of T.B, while 29% attributed the disease to common cold, cigarette smoking, overwork and also pneumonia.

A study by Adriaanse in 1992 in Wardha District of India also attributed the reasons for defaulting to poor social support from families and non-relatives and also the awkward relationship with the health care

providers. This study strongly recommended that there is need to educate and supervise the tuberculosis victims, promote social support through health promotive investments.

In another study conducted in Thailand Chaing Rai in 1997, by Ngamvithayapong J. et al on symptomatic HIV related infected individuals, the factors contributing to defaulting from treatment were almost similar with other researchers. In this study 286 (69.4%) out of 412 subjects that were studied completed treatment while 109 (26.5%) defaulted by failing to take medicine more than 60 consecutive days. In addition to other factors already mentioned, the primary reasons for defaulting included out migration or job search, denial of HIV status, perceived drug side effects and confusion about the duration of treatment.

In view of the above factors, it was important to take into consideration patients social factors at the beginning of treatment, so that patients could be counselled and alternative solutions suggested to them. This would assist the patients, for example, out migration would not be an excuse to default from treatment if the patient was well informed because he could seek treatment in his area of migration.

Tiwari V.K (1992), in his report on Health Education in the tuberculosis control programme in India, suggested that for Health Eduction in community to be an effective and important weapon in the fight against tuberculosis, it must address T.B by creating awareness in the community about T.B and educating people about the control

programme services to ensure maximum utilisation and maintaining the provision of treatment for optimum period and minimising non-compliance.

Default to T.B treatment is also brought about by other factors like the quality of services that are provided. Uplekar, M. et al (1998), in his study on tuberculosis patients and practitioners in the private clinics in India, revealed that health services provided by government health services contributed to patients drop out from treatment.

Many patients interviewed said they had confidence in private practitioners and were willing to pay for the services even if the services provided were questionable. 59% of patients in private clinics compared to 30-50% in public sector remained adherent to TB treatment.

It is also important that the problem of defaulting is taken seriously. Sudarshan and Sridhran in their report on tuberculosis control programme in 1995, revealed that when incompletely cured or defaulters return to the community, each sputum positive case can infect about 10 – 14 people in the course of one year.

2.3 REGIONAL PERSPECTIVE

Looking at the regional perspective, the incidence of TB in the Sub-Sahara Africa is estimated to be increasing more rapidly than any other parts of the world, with an annual incident number expected to be

double. An estimated 1 million cases occur in Sub- Saharan Africa (Binkin and Cantwell, 1996).

A study conducted in Lesotho in 1990 by Mohale et al, on factors contributing to late diagnosis and reporting revealed that poor compliance and late reporting was attributed mainly to stigmatization of patients with T.B the findings were that out of 25% of late reports, 6% appeared to be either aware, or refused to acknowledge that they had T.B , they rather mentioned common colds, chest pains, swelling of the stomach and other unrelated symptoms. However 20% of revealed they had to seek traditional treatment because they were confused with other diseases. This therefore shows that it was important that the community was educated on tuberculosis in order to seek treatment easily and control the spread of the disease.

A similar study was conducted in Swaziland in 1990 by Nhlabatsi et al where factors contributing to defaulting were mainly attributed to inadequate knowledge by patients, negative attitudes of the health workers and stigma.

Findings revealed that hardly any of the patients was aware of the biomedical causes of T.B, majority mentioned traditional causes of which 25% mentioned witchcraft. As with regard to stigma, over 113 of the informants stated that they would not like any one to know they had T.B.

However, the compliers were better aware of the reasons for characteristics of modern treatment than poor compliers. In terms of prevention only 65% of defaulters considered their disease to be infectious while 30 % did not know any measure to prevent the disease from spreading.

In another study conducted in Madagascar by Comolet, T. et al in 1998, on factors determining compliance, similar findings were stated. These were transportation costs, time, sex of patient, patient information and quality of communication between staff and patient. In this study the attitude of defaulters towards T.B treatment was another factor, as quite a number of the defaulters were not worried, and associated T.B to a curse, and that it was a shameful disease and felt it was worth hiding it from the rest of the family. 10% of the defaulters said that they were not well informed about the disease in view of the above, considerable effort is paramount by health workers in terms of communication. A well-informed patient had better chances of completing treatment than the patient who was ignorant.

Many authors have looked at factors contributing to default from treatment. Some authors like Nuwala F. (1999) looked at the positive factors contributing to compliance, when he conducted a study on contributing factors to high compliance in ambulatory T.B treatment in Uganda.

Nuwala found the following reasons for success in patient's compliance. He discovered that all health workers in-charge of health

units in Rakai District were trained in T.B management, that is, collection of sputum smears, monitoring and managing drug side effects decision on when to refer patient and good record keeping for future follow-up as compared to Mbarara District which reported high defaulter rates and had few health workers who were trained. When health workers are adequately trained, they felt motivated and usually attitude toward work improved.

2.4 NATIONAL PERSPECTIVE

In Zambia studies have also shown that various factors have led to an increased incidence. The case notification rate has increased from 105/100,000 to 425/100,000 in 1996 (DIGS/KNCVP project, 1997).

In a study conducted in Lusaka in 1993 by Ketata, D.M, the main factors that influenced patients' defaulting from treatment were that patients did not know the importance of completing the prescribed course of treatment. The attitude of health workers was also undesirable as many of them did not have time to explain to patients, on issues concerning treatment and review dates. The other factor was shortage of drugs the patient could not afford to buy TB. Drugs. Lack of follow-up of patients by the nurses responsible also necessitated the patient dropping out from treatment.

Tihon V. (1999) also agreed with the drug situation in Zambia in an interview, in his discussion on T.B and AIDS while preparing for the 1999 World T.B day celebration. He noted that T.B drugs were beyond

reach of many patients, many of whom had to walk long distances to get to health facilities (Daily Mail, 15th February, 1999).

While Kamanga J. a Zambart project researcher in his speech during 1999 world T.B day, said that causes of T.B are known, but the only problem was the patients delay in getting treatment, when not diagnosed early and drugs were not readily available (Daily Mail, 24th March 1999).

At the same celebration, a United Nations HIV/AIDS volunteer peer educator Winston Zulu said that several people did not have drugs after they were diagnosed with T.B when he, himself was diagnosed with T.B in 1998, he had to buy T.B drugs form South Africa because the drugs were not readily available in Zambia. How about those that could not afford, what happened to them since T.B treatment is a long-term regime?

According to CboH) (1999), because of inadequate treatment, some cases of T.B among HIV infected and uninfected people drug resistant strains were appearing, it was yet more difficult and expensive to treat T.B

Tihon, V. et al (2000) in a study conducted in Lusaka on whether HIV is a risk for non- adherence among TB patients to treatment, revealed that stigma associated with HIV may deter T.B patients from attending and concurrent morbidity may make it difficult to attend. In the study analysis of a cohort of 385 patients who were studied, 293 were tested

for HIV, 243 tested positive, 29 (10%) were confirmed to have interrupted T.B treatment. The researcher recommended that additional support and training might increase adherence to treatment.

In a related study conducted by Kaunda, H. (1999) in Lusaka on why patients with asymptomatic cough delay in seeking treatment also revealed that psychological attitudes of all levels of community which included perception of the disease by patients and their relatives, motivating factors were issues that could be taken into consideration. Many patients today thought that T.B is the same as HIV as there was an element of stigma that was attached to the disease.

CONCLUSION

After various studies conducted by various authors, main factors in these studies were inadequate patients' knowledge about T.B and treatment, accessibility of health services, availability of T.B drugs and laboratory facilities, stigmatization, attitude of patients, health workers, relatives and community towards T.B. This could affect the T.B treatment compliance among T.B patients.

Compliance to T.B treatment largely depends on the patient. It was for this reason that health workers should be seen working towards improving patient compliance to treatment. If this problem was corrected there would probably be a reduction in morbidity and mortality due to T.B infection.

CHAPTER 3

3.0 METHODOLOGY

3.1 RESEARCH DESIGN

A descriptive quantitative and qualitative study was used. It involved systematic collection and presentation of data in an effort to show the causal effect of the relationship between the dependent and independent variables.

A study was quantitative in that data collected was quantified in numerical values and percentages for easy manipulation and for the purpose of making statistical inferences. The study was also qualitative as it sought to identify and explore factors contributing to default from treatment among T.B. patients.

3.2 RESEARCH SETTING

The study was carried out in Chingola one of the mining towns in the Copperbelt province of Zambia. The town has a population of about 203,711 with an area square kilometres of 1,678 and the population density of 123 persons/square kilometre.

The district which had 7 government health centres has now 8 health centres after the handing over of some health facilities from Zambia consolidated copper mines to the government. Out of these health centres only three urban clinics have laboratory facilities.

Within the district there are two hospitals which were former ZCCM hospitals now one being under Konkola Consortium mines while one being under the Nchanga Management Health Board which took over in March 2000.

The clinics have no x-ray facilities and as such depend on the two hospitals where patients are requested to pay fees.

3.3 SAMPLING METHOD

Stratified random sampling method was used, to select a strata that was used in the study. Stratified sampling, is the process of dividing the population into groups, called strata, such that each element of the population would belong to one and only one stratum (Bless and A Chola, 1988).

The population was selected from three health centres in the district using the T.B register. A population of 50 T.B defaulters was selected. These patients were initially on T.B treatment for a period of one to 12 months and were appearing on the T.B register from July 1999 to August 2000.

Simple random sampling was used to select these patients.

3.4 DATA COLLECTION TECHNIQUE

Data collection was in two categories, that is, qualitative and quantitative data collection. An interview schedule and checklist was used to collect data from T.B defaulters, while a focus group discussion

was used to collect data from general T.B patients who were still on treatment.

INTERVIEW SCHEDULE

This is a direct method of obtaining information which involves direct personal contact with a participant who is asked to answer questions.

This tool was selected for the study because of the following advantages

- It had a high response rate.
- It allowed the interviewer to rephrase some questions to enable the respondent to understand the question.
- It enabled the researcher to ensure completeness of the responses.
- It also helped the researcher to clarify questions as it catered for both literates and iliterates.

DISADVANTAGES

The disadvantage with the tool was that the presence of the researcher influenced the subjects responses, but this was controlled by explaining the purpose of the study.

It was also time consuming because some clients were not found at home and some had shifted to another locality which meant moving from one place to another and some clients had to be visited more than once because they were not at home.

FOCUS GROUP DISCUSSION (FGD)

A focus group discussion was developed to collect information from other T.B patients. The discussion sought to gather information on factors contributing to defaulting from treatment among T.B patients in order to compliment the findings. This tool was chosen because it facilitated free discussion. The researcher was able to collect in-depth information about the contributing factors to defaulting from T.B treatment, and possible solutions to improve compliance.

3.5 PILOT STUDY

The pilot study was conducted in the first week of July 2000 at U.T.H. chest clinic. The pre-test assessed the suitability and clarity of the interview schedule, checklist and focus Group Discussion Guide.

After pre-testing a few changes were made in the phrasing of questions and the number of questions reduced from the original number of 37 to 35. The researcher discovered that questions 6 and 7 were not directly related to the study, questions 19 and 18 were similar. This enabled the researcher to remove questions 6,7 and 19 to avoid collecting unnecessary data and repetition.

3.6 DATA COLLECTION

Data collection was commenced after getting a written permission from U.T.H. for the pilot study and Chingola District Health Board for the main study.

3.7 ETHICAL CONSIDERATION

A written permission was sought from UTH Executive Director and District Director of Health in Chingola. Verbal permission was also sought from the patients before conducting the interview, and at no time was the patient forced to participate in the interview.

CHAPTER 4

4.0 DATA ANALYSIS AND PRESENTATION

Data collected is not useful unless arranged in a meaningful manner so that it is possible to derive patterns of relationships (Polit and Hungler 1983).

Data from T.B defaulters was collected using a structured interview schedule, and a checklist. Focus Group Discussion was also used.

All the tools used, that is, interview schedule, Focus Group Discussion Guide and a checklist were prepared in English but the actual exercise was carried out by using the language that the respondent understood, these were; Nyanja, Bemba and also Tumbuka.

All interview schedules were checked for accuracy, completeness and consistency in responses. Responses from open-ended questions were categorised and coded.

All data was handled manually using a pocket calculator. Descriptive statistics by frequency distribution and percentages have been used in tabulating data.

Tabulated data has been presented in single frequency tables and cross tabulated tables for easy interpretation and for the purposes of drawing meaningful inferences.

TABLE 1: SEX DISTRIBUTION OF RESPONDENTS

SEX	FREQUENCY	PERCENTAGE
MALE	22	44%
FEMALE	28	56%
TOTAL	50	100%

Table 1, shows that there were more female respondents 28(56%) than males 22(44%).

Table 2: **RESPONDENTS AGE GROUP**

AGE GROUP	FREQUENCY	PERCENTAGE
<10	5	10%
11-20	6	12%
21-30	20	40%
31-40	13	26%
>40	16	32%
TOTAL	50	100%

Table 2 indicates that more respondents were in the age group between 21-30 (40%) than in the age group less than 10 years (10%).

TABLE 3: RESPONDENTS RESIDENTIAL AREA

RESIDENTIAL AREA	FREQUENCY	PERCENTAGE
MEDIUM	13	26%
HIGH	35	70%
OTHERS (FARMS)	2	4%
TOTAL	50	100%

Table 3 show that many defaulters live in high residential areas 35(75%) while only 2(4%) live on the farms.

TABLE 4: RESPONDENTS' EDUCATIONAL LEVEL

EDUCATIONAL LEVEL	FREQUENCY	PERCENTAGE
NO EDUCATION	7	14%
PRIMARY	24	48%
SECONDARY	19	38%
TOTAL	50	100%

Table 4 indicates that many respondents had primary education 24(48%) while 7(14%) had no basic education.

TABLE 5: RESPONDENT'S OCCUPATION

TYPE OF OCCUPATION	FREQUENCY	PERCENTAGE
FORMAL EMPLOYEMENT	7	14%
SELF EMPLOYED	23	46%
UNEMPLOYED	20	40%
TOTAL	50	100%

Table 5 indicates that more respondents were in informal employment 23(46%) than in formal 7(14%) employment.

TABLE 6: RESPONDENTS' SEX DISTRIBUTION IN RELATION TO LEVEL OF KNOWLEDGE ON CAUSES OF T.B

SEX DISTRIBUTION	LEVEL OF KNOWLEDGE ON CAUSES OF T.B.		TOTAL
	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	
MALE	6(12%)	16(32%)	22(44%)
FEMALE	7(14%)	21(42%)	28(56%)
TOTAL	13(26%)	37(74%)	50(100%)

Table 6 indicates that majority of respondents with poor knowledge on causes of T.B were females 21(42%) than males 16(32%).

TABLE 7: RESPONDENT'S LEVEL OF KNOWLEDGE ON WHETHER T.B. CAN BE CURED IN RELATION TO LEVEL OF EDUCATION

LEVEL OF EDUCATION	LEVEL OF KNOWLEDGE ON WHETHER T.B. CAN BE CURED IN RELATION TO LEVEL OF EDUCATION		TOTAL
	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	
NO EDUCATION	5(10%)	2(4%)	7(14%)
PRIMARY	16(32%)	8(16%)	24(48%)
SECONDARY	14(28%)	5(30%)	50(100%)

Table 7 indicates that majority of respondents who were knowledgeable on whether T.B can be cured had Primary education 16(32%) and Secondary Education 14(28%) while 8(16%) out of those with primary education were not knowledgeable.

TABLE 8: RESPONDENT'S KNOWLEDGE ON WHETHER T.B IS PREVENTABLE

WHETHER T.B. IS PREVENTABLE	FREQUENCY	PERCENTAGE
YES	38	76%
NO	12	24%
TOTAL	50	100%

Table 8 indicates that majority of defaulters 38(76%) knew that T.B can be prevented while only 12(24%) had no idea.

TABLE 9: RESPONDENT'S LEVEL OF EDUCATION IN RELATION TO LEVEL OF KNOWLEDGE ON METHODS OF PREVENTING T.B

LEVEL OF EDUCATION	LEVEL OF KNOWLEDGE ON METHODS OF T.B. PREVENTION		TOTAL
	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	
NO EDUCATION	3(8%)	4(10%)	7(18%)
PRIMARY	14(37%)	5(13%)	19(50%)
SECONDARY	9(24%)	3(8%)	12(32%)
TOTAL	26(69%)	12(31%)	38(100%)

Table 9 indicates that majority of respondents with Primary Education 14(37%) had knowledge on methods of T.B prevention than those without basic education 4(10%).

TABLE 10: PERCEPTION OF T.B. DISEASE BY RELATIVES IN RELATION TO LEVEL OF KNOWLEDGE ON CAUSES OF T.B

PERCEPTION OF DISEASE BY RELATIVES	LEVEL OF KNOWLEDGE ON CAUSES OF T.B.		TOTAL
	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	
POSITIVE PERCEPTION	6(12%)	3(6%)	9(18%)
NEGATIVE PERCEPTION	7(14%)	34(68%)	41(82%)
TOTAL	13(26%)	37(74%)	50(100%)

Table 10 indicates that majority of respondents whose relatives had negative perception about the disease 34(68%) were also not knowledgeable about the causes than those whose perception was positive and had knowledge on the causes 6(12%).

TABLE 11: SOCIAL SUPPORT RECEIVED IN RELATION TO SEX DISTRIBUTION

RECEIVED SOCIAL SUPPORT	SEX DISTRIBUTION		TOTAL
	MALE	FEMALE	
YES	22(44%)	20(40%)	42(84%)
NO	-	8(16%)	8(16%)
TOTAL	22(44%)	28(56%)	50(100%)

Table 11 indicates that majority respondents who received social support were males 22(44%) than women 20(40%).

TABLE 12: FOLLOW-UP VISITS DONE IN RELATION TO RESIDENTIAL AREA

RESIDENTIAL AREA	FOLLOW-UP VISITS DONE		TOTAL
	YES	NO	
MEDIUM DENSITY	10(20%)	3(6%)	13(26%)
HIGH DENSITY	15(30%)	20(40%)	35(70%)
OTHER FARMS	-	2(4%)	2(4%)
TOTAL	18(36%)		50(100%)

Table 12 indicates that majority of respondents who were not visited were from high density residential area 20(40%) than those from medium residential area 3(6%).

TABLE 13: RELATIVES' AWARENESS ABOUT THE DIAGNOSIS IN RELATION TO KNOWLEDGE ON CAUSES OF T.B

RELATIVES' AWARENESS ABOUT T.B. DIAGNOSIS	LEVEL OF KNOWLEDGE ON THE CAUSES OF T.B.		TOTAL
	KNOWLEDGEABLE	NOT KNOWLEDGEABLE	
YES	10(20%)	36(72%)	46(92%)
NO	-	4(8%)	4(8%)
TOTAL	10(20%)	40(80%)	50(100%)

Table 13 indicates that only 10(20%) of respondents who were knowledgeable informed their relatives while majority respondents who were not knowledgeable 36(72%) informed their relatives.

TABLE 14: AWARE ABOUT THE USE OF T.B IDENTITY CARD

AWARE ABOUT USE OF T.B. IDENTITY CARD	FREQUENCY	PERCENTAGE
YES	10	20%
NO	40	80%
TOTAL	50	100%

Table 14 indicates that majority 40(80%) of respondents were not told about the use of T.B identify card while only 10(20%) were informed.

TABLE 15: RESPONDENTS WAITING TIME IN RELATION TO RECEPTION BY HEALTH WORKERS

WAITING TIME	RECEPTION BY HEALTH WORKERS		TOTAL
	WELL RECEIVED	POORLY RECEIVED	
Less than 30 minutes	34(68%)	2(4%)	36(72%)
30 minutes to 1 hour	10(20%)	3(6%)	13(26%)
More than 1 hour	44(88%)	6(12%)	50(100%)

Table 15, shows that 68% of respondents who spent less than 30 minutes at health centres, had good reception, whilst 2% of respondents who spent more than 1 hour had poor reception.

TABLE 16: AVAILABILITY OF DRUGS IN RELATION TO BEING SENT AWAY WITHOUT DRUGS

BEING SENT AWAY WITHOUT DRUGS	AVAILABILITY OF DRUGS		TOTAL
	ALWAYS AVAILABLE	SOMETIMES AVAILABLE	
YES	2(4%)	25(50%)	27(54%)
NO	15(30%)	8(16%)	23(46%)
TOTAL	17(34%)	33(66%)	50(100%)

Table 16, indicates that majority of respondents who were sent away without drugs 25(50%) found drugs were sometimes not available, while 15(30%) who always found drugs did not experience being sent home without T.B drugs.

TABLE 17: RESPONDENTS REASONS FOR DEFAULTING

REASONS FOR DEFAULTING	FREQUENCY	PERCENTAGE
SOMETIMES NO DRUGS AT HEALTH CENTRE	25	50%
WEAK TO WALK	4	8%
FEAR OF SIDE EFFECTS	11	22%
FELT WELL	5	10%
OTHERS	6	12%
TOTAL	50	(100%)

Table 17 indicates that majority of respondents 25(50%) defaulted because of shortage of T.B drugs while 4(8%) because of the inability to walk to the health centre.

TABLE 18: RESPONDENT'S UNDERSTANDING ON THE CONSEQUENCES OF NOT CONTINUING WITH TREATMENT

CONSEQUENCES OF NOT CONTINUING WITH TREATMENT	FREQUENCY	PERCENTAGE
DEATH	26	52%
CONDITION WILL WORSEN	11	22%
RELAPSE OF DISEASE	9	18%
RESISTANT TO TREATMENT	4	4%
TOTAL	50	100%

Table 18 indicates that majority of respondents understanding on consequences of defaulting were 26(52%) death, while the least said resistant to T.B treatment 4(8%).

CHAPTER 5

5.0 DISCUSSION OF FINDINGS AND IMPLICATIONS ON THE HEALTH CARE SYSTEM

5.1.1 INTRODUCTION

The aim of the study was to determine the contributing factors to default from T.B treatment among T.B patients in Chingola, in view of making recommendations to relevant authorities for action.

The researcher was prompted to carry out such a study due to the increase in number of defaulters. These patients who default remain a danger to the community because of the risk of spreading the disease to others, and also the risk of having drug-resistant T.B which is difficult and very expensive to treat.

The assumptions for the study were:-

(i) Poor understanding of T.B and T.B treatment contributed to patient's default from T.B treatment.

(ii) Erratic supply of T.B drugs had led to patients' default from T.B treatment.

(iii) T.B patients who received no support from their relatives were more likely to default from treatment.

The researcher looked at factors that could have contributed to patients' non-compliance. These were Educational level, knowledgeable on T.B and treatment, socio-economic status, stigma attached to the disease.

Community attitude and support accessibility to health facilities and availability of drugs at health centres.

The target groups for the study consisted of T.B patients who had defaulted from treatment. The discussion was based on the data collected and analysed.

5.1.2 **SOCIO-DEMOGRAPHIC DATA**

The study population comprised of 50 respondents who were all defaulters, among which the majority were females 28(56%) while males were 22(44%) Table 1.

This could be attributed to the fact that tradition has it that women are the principal caregivers in the households in Zambia, this adds to the negative impact on their health and well-being (Duncan T. et al, 1996). The study also indicates that there were more defaulters between the age groups 21-30 years 20(40%) than 31-40 years 13(26%) and between 11-20 years 6(12%) Table 2.

This could be alluded to the fact that the age group between 21-30 years is very active and very mobile which makes it difficult to continue taking T.B drugs regularly coupled with the long treatment regime of eight months.

Proudfoot et al (1989) in a study conducted in Zimbabwe also found out that young males were more mobile, difficult to trace and to keep on treatment.

The findings also revealed that the majority 18(36%) of the respondents were single, while only 14(28%) were married.

This could be due to inadequate support from the relatives and community, and misconception about the causes of the disease as many individuals today relate the causes to immorality to which many young and single women are associated with.

Majority of respondents came from high density residential area 35(70%) while 13(26%) came from medium density residential and other places like the farms 2(4%). (Table 3). The disparity could be that T.B is often thought to be the disease of the poor, and these areas are associated to the compounds like shanty compounds where the living conditions are bad coupled with over crowding.

The educational level of respondents was satisfactory with majority of respondents having attained primary education 24(48%) secondary education 19(38%) and except for few with no basic education at all (Table 4).

The majority of respondents 23 (46%) were self employed, 20 (40%) unemployed and 7(14%) not employed (Table 5). This shows that the problem of unemployment is crucial in Chingola. This has been worsened by privatization of the Nchanga Copper Mines which has led to a lot of retrenchments.

The high number of unemployment suggests that most people are away from home most of the time looking for employment elsewhere and means of earning a living, which makes it difficult for T.B patients to comply to treatment. Proudfoot (1989) had similar findings in his study in Zimbabwe. He found that most unskilled labourers showed to be more irregular to treatment due to mobility. Similarly observations were made by Comolet and Rakotomalala (1998) in a study in Madagascar who also observed that majority of people who did not comply to treatment were in informal employment because they were most of the times away from their homes in search of jobs, and mechandise for their living.

5.1.3 KNOWLEDGE ON T.B AND T.B TREATMENT

WHO, 1998, guidelines for control of T.B states that adherence to treatment needs patients understanding of the T.B disease and what is necessary for successful treatment and care.

The study findings on knowledge on what TB is revealed that 37(74%) were not knowledgeable as opposed to 13(26%) who had knowledge. The majority of respondents not knowledgeable did not know what the disease was 34(68%), others said it was same as HIV 4(8%) while those with knowledge said it was a serious disease of the lungs which was characterised by coughing and ill health, 8(16%) mentioned that it was a disease of the lungs which brought about wasting of muscles.

The high percentage of ignorance could be attributed to the misconception about tuberculosis and HIV. With the era of HIV/AIDS pandemic people are unable to distinguish between T.B and HIV/AIDS.

Similarly findings by Kaunda H, (1998) in a study in Lusaka on why patients with symptomatic cough delayed in seeking treatment found that most people today are scared as they think T.B is the same as HIV.

The focus group discussion also revealed that respondents felt that there was no distinction between HIV/AIDS and T.B today, because the symptoms are similar. They also said that long ago those who were said to have T.B had the T.B germ in the sputum and also the x-ray was positive, unlike today even those who have sputum negative are said to be on T.B treatment. The level of knowledge on the causes of T.B suggest that majority respondents were not knowledgeable 37(74%) while 26% displayed some knowledge.

The majority of respondents not knowledgeable 28(56%) had no idea what the causes were, while 4(8%) mentioned promiscuity others 5(10%) said hard working especially in the dust like miners and charcoal burners, eating with the sick, bad food and inherited from the family.

Where as the relationship between sex and knowledge show that more women 21(42%) were not knowledgeable than men 16(32%) (Table 6).

This can be attributed to the fact that there is a disparity between men and women who are educated, as the Zambian Education system had given more chance to boys than girls in terms of being enrolled to both primary and secondary schools (Kelly, 1994).

When women are less educated they tend to neglect their own health. The findings of the study also revealed that majority of respondents were aware that T.B can be cured 35(10%) as opposed to only 15(30%) who displayed some ignorance.

The level of knowledge on whether T.B can be cured was not related to the level of education as most respondents who were knowledgeable had primary education 16(32%) than those with secondary education 14(28%) (Table 7). This could be associated to the complex that educated people have that they know much when in the actual fact they miss most of the important information.

Out of 35 respondents that acknowledged that T.B could be cured 33(94%) had knowledge on the methods of curing T.B, with only 2(4%) being ignorant.

Despite the knowledge displayed, respondents still defaulted from T.B treatment. This could be that maybe the respondents were not convinced that T.B could be treated.

The findings further revealed that level of education was not related to level of knowledge on methods of T.B prevention because there is a concept that the higher the education the better the understanding of

issues. This was not the case as majority of respondents who were knowledgeable had primary education 14(37%) than those with secondary education 7(14%) (Table 9). Those not knowledgeable had vague answers like having no sexual partner, personal hygiene and also use of condoms.

During focus group discussion the patients also mentioned less sexual partners, avoid sex contact with those who are sick and completion of T.B treatment.

The above results show that majority of the people had inadequate knowledge about the disease coupled with the misconception about T.B and HIV/AIDS. This implies that if the misconceptions are not cleared many people will continue to default from treatment.

5.1.4 **STIGMA**

Stigma has great influence on defaulting to treatment because it brings about feelings of guilt and patient feels disgraceful as the disease is perceived to be humiliating on the part of the patient.

The study findings revealed that majority of the respondents informed relatives about their diagnosis that they had Tuberculosis 46(92%) while only 4(8%) did not tell their relatives because some 2(4%) did not accept the diagnosis while others did not just want to.

Despite majority of respondents having informed their relatives, the majority of the respondent's relatives had negative reaction about the

disease. For instance 14(28%) did not accept the diagnosis but related it to HIV infection, while 6(12%) blamed the patients for the disease and 21(42%) were worried about whether the patient would be cured (Table 10).

The above misconceptions about the disease may have caused a lot of guilt feelings and consequently defaulting from treatment.

5.1.5 **SOCIAL SUPPORT**

Majority of the respondents acknowledged having received support from their relatives 42(82%) while only 8% said they did not receive any support at all.

Despite having received support respondents continued to default from treatment. This could be due to the negative attitude displayed by the relatives as shown on Table 10, where majority of respondents perceived their relatives to have negative reaction to the T.B diagnosis 41(82%) and only few 9(18%) perceived the relatives to have positive reaction.

For instance majority of respondents relatives were worried because they were afraid their patient would not get cured 21(42%) while 14(28%) related the diagnosis to HIV/AIDS, 6(12%) blamed the patient for the disease.

Barnhoon and Adrianse (1992) had similar findings in a study in India in which they observed that T.B patients who complied were those who

perceived the attitude of their families to be positive than those who perceived their attitude to be negative.

This implies that individuals do not only need material support but they also need emotional and spiritual support for them to have courage and the will to continue with treatment and to have positive feelings about the disease. The finding also revealed that there was Gender disparity among respondents who received social support. There were more males 22(44%) than females who received support from the relatives (Table 11).

The Gender disparity could be due to tradition which put the blame mainly on women bearing in mind the misconception about T.B which has been related to HIV/AIDS.

5.1.6 **ACCESSIBILITY TO HEALTH FACILITY**

Accessibility to health facility is not only geographical, but also resources for example availability of drugs coupled with the attitude of health workers.

The study findings reveal that 42(84%) of respondents had no problems in reaching the health centre, while only a few 8(16%) had problems which they attributed to long distance, inability to walk and transport cost.

With respect to waiting time and reception of patients by health workers at the health centre. The findings revealed that majority of respondents who had good reception 34(68%) spent less than 30 minutes at the

health centre, while 4(8%) who spent between 30 minutes to 1 hour and 1(2%) who spent more than 1 hour at the clinic claimed to have had poor reception. (Table 15).

This suggests that the attitude and delivery of services by health workers had improved tremendously as opposed to what Ketata M.D (1993) found in a study conducted in Lusaka, in which she observed that in most government institutions the long waiting hours and negative attitude of health workers towards T.B patients influenced their defaulting.

Follow-up care strengthens patients morale and consequently compliance to treatment. The findings revealed that residential areas of the respondents influenced the follow-up visits done. As shown in (Table 12) which indicates that majority of respondents who resided in the high density areas were not followed up 20(40%) as opposed to only 3(6%) whose resided in medium density area. The bias in follow-up visit by health workers could be that these high-density areas are mainly the shanty townships. In the shanty for example Kapisha compound, the houses are just grouped in sections, there are no proper roads and also numbers of houses are not in sequence and it is quite difficult to locate patients if they defaulted.

The study findings also revealed that 40(80%) respondents were not informed about the use of T.B identity cards. (Table 14) while only 10(20%) had the information.

The rationale of giving the patient an identity card is to enable the patient make use of it to seek treatment elsewhere other than the usual health centre, in times of drug shortage, or in case he/she travels to another town for a period of time. If the patient is not availed of this information he may not have the initiative. This could have contributed to some patients defaulting.

5.1.7 **AVAILABILITY OF DRUGS**

The study revealed that there was a relationship between patients being sent away without drugs and availability of drugs at health centres.

Majority (50%) of respondents who were sent home without drugs, found that drugs were not available at times, while respondents who had no such experience of being sent away always found that drugs were available. (Table 16).

Whatever the condition, availability of drugs is the basis for patient's compliance. T.B drugs are quiet expensive to buy especially that majority of T.B patients are from poor families. Unless the issue of drugs is addressed patients will continue to default.

In support to the above problem, Daily Mail Newspaper of March 1999, Tihon V, while commenting on drug situation in Zambia said that T.B drugs were beyond reach of many patients in Zambia who had to walk many long distances to get to the health centre.

Zulu W. a United Nations HIV/AIDS volunteer peer Educator also confirmed of T.B drugs being in short supply because he had to buy T.B drugs from South Africa when he was diagnosed T.B.

With regard to reasons for defaulting majority of respondents mentioned the shortage of drugs (50%) while 11(22%) said fear of the effects of T.B drugs they cited (painful legs, rashes, and weakness). 5% said they defaulted because they felt well after taking drugs for sometime, 4(8%) said inability to walk while 6% had other reasons like wrong diagnosis, too many tablets, went away to the village and also that cure was not fourth coming (Table 17).

Such responses like fear of drug effects suggests that Health Education is hardly effective. The above results also suggest that maybe the health workers are so much in a hurry that some issues or information that are pertinent are hardly mentioned.

The findings also reveal that 100% of respondents were well aware of the consequences of not continuing with T.B treatment as the majority (26%) mentioned death as one consequence, 11(22%) said that the condition would worsen, 9(18%) said the disease would come back while only 4(8%) of respondents said that the disease would be resistant to treatment (Table 18).

Nulabatsi et al (1990) had similar findings in a study conducted in Swaziland in which relapse of the disease, resistance of germs and

death were said to be reported in the study as the main consequence both the compliers and non compliers had.

This suggests that many respondents were scared of the disease but due to misconception they continued to default.

From the focus group discussion, the patients for instance stated that the disease was very serious and it was scaring because many patients have died already. The findings from the checklist revealed that 49(98%) of respondents were found to have actually defaulted from treatment as indicated in the health centre records with an exception of 1(2%) who was an irregular patient.

This indicates that the recording system of the health centres is good. Results further revealed that majority respondents defaulted in continuation phase 32(64%) than in intensive phase. This could be due to the long treatment regime, as patients start feeling better they drop out on the way. While those who dropped out in the intensive phase could be associated to the shortage of T.B drugs especially Rifina which was reported to be in short supply from 1999 to the first quarter of the year 2000.

The researcher also observed that many patients did not go for review, as this was alluded to distance to Kabundi clinic where the T.B clinician was stationed. The very clinician was not adequate to cover all health centres both rural and urban.

5.2 IMPLICATIONS TO THE HEALTH CARE SYSTEM

Interruption of T.B treatment should worry every health worker as resistance of the disease to treatment would be very expensive to manage.

It is believed that T.B is more prevalent in the strata whose knowledge of the disease is rather poor.

In this study it has been found that many patients who defaulted from treatment had no knowledge on T.B.

Therefore Health Education on T.B and T.B treatment should be intensified with an emphasis on the benefits of completing treatment. The Health Education should also be directed to clearing the misconceptions about T.B and HIV/AIDS so that families and community should be seen to participate more actively in the care of their sick relatives.

The knowledge and reality of the disease will help the patient to appreciate the need for completing T.B treatment according to the stipulated period.

There is also need to improve drug supply to health centres and health workers specialised in T.B management as a way of providing comprehensive and quality care to the patient which will lead to treatment compliance.

5.3 CONCLUSION

Among other related factors to defaulting from treatment, the researcher mainly found out that:-

1. Knowledge on T.B and T.B treatment was not adequate. There was little emphasis on benefits of completing treatment, knowledge on T.B, the causes and methods of prevention was also not adequate.

2. Non availability of drugs at most of the health centres forced patients to stop treatment.

3. Negative attitudes from the families also had an influence on defaulting mainly coupled by the misconception about T.B and HIV/AIDS.

4. Inadequate follow-up of T.B patients was also another factor, though the attitude and services had improved in terms of patient reception and waiting time.

5. The inadequate trained health workers who were specialised in T.B management was another factor as many patients could not be reviewed.

The above findings will need to be taken seriously and measures put in place to improve compliance and consequently prevent the spread of Tuberculosis in the community.

CHAPTER 6

6.0 RECOMMENDATIONS

The vision of the government is to provide Zambians with equity of access to effective quality health care as close to the family as possible.

This vision can only be made possible if the government is committed to providing the much needed resources like T.B drugs which are very expensive for the majority of Zambians to buy.

Therefore these recommendations are put forward for the attention of policy makers and service providers, so that improvement to compliance is viewed as being critical as it will be very difficult for a developing country like Zambia to treat drug resistant T.B in the near future. The following are the recommendations.

1. There should be provision of adequate drug supply so that at no time should health service facilities run out of T.B drugs.

2. There should be equal emphasis put on T.B awareness campaigns as it is with HIV/AIDS programmes. After all T.B is under the same program as for HIV/AID. A lot of awareness campaigns will clear the misconception that people have on T.B.

3. Health providers should intensify Health Education not only at the health centre, but programmes should be drawn to reach as many people as possible in the community.

4. Attractive Health Education material on T.B should be developed for patients and the public which should bear key messages on T.B and the benefits of completing T.B treatment.

5. Training Health workers who would specifically assist the T.B patients in their respective health centres is inevitable since the health centres in Chingola District are far apart such that one T.B specialised personnel cannot afford to see and review all patients.

6. It is also important that Ministry of Health policy makers should consider allowing CHWs to be trained in the distribution of T.B drugs so that those that stay very far from the health centres collect T.B drugs from the nearest CHW in their area.

7. The health providers should consider follow-up visits as one of the important activities in the treatment of T.B patients.

6.1 LIMITATIONS OF THE STUDY

It was not possible to conduct the study on a large scale with a larger sample size due to limited time in which the study was to be completed and submitted to the University of Zambia.

Time for data collection was also stretched to a period of over one month because sometimes patients were not found at home, and the fact that some patients had shifted, some gave wrong addresses, which meant that the researcher had to move from one place to another covering long distances. This resulted into few patients being interviewed in a day, and this increased the cost of the study.

The results from this study could not be generalised because the sample was restricted to Chingola Urban.

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APPENDICES

FOCUS GROUP DISCUSSION GUIDE

TITLE: A STUDY TO DETERMINE FACTORS CONTRIBUTING TO DEFAULT OF TREATMENT AMONG T.B PATIENTS

Number of participants .....

Date .....

Time ..... Place .....

Name of facilitator .....

Name of rapporteur .....

INTRODUCTION

The aim of the discussion is to find out contributing factors defaulting from treatment among T.B patients, in order to make recommendations to relevant authority on how compliance can be improved.

1. Have you ever heard of the Disease T.B?
2. What causes T.B?
3. Can T.B be cured?
4. Is T.B preventable?
5. Is T.B a common problem in your community?
6. *Is T.B a serious condition?*
7. *Why do you think T.B patients stop taking T.B drugs before they* complete the course?
8. Do you have any suggestions on how to make it easier for T.B patients to continue taking T.B drugs regularly?

CHECK LIST FOR COLLECTING PATIENT DATA FROM RECORDS

Questionnaire No.:……

Patient number……

Dates when compiled ……

Age of patient ……

1. Attendance: Regular ☐ Irregular ☐ Defaulter ☐

2. If defaulted at what stage

   Intensive phase ☐ Continuation phase ☐

3. Date started treatment. ……

4. Number of months missed. ……

   Treatment status ……

   Defaulted ☐

   Discharged/Cured ☐

   Transferred out to another district ☐

   Died ☐

   Unknown ☐

5. Number of hospital reviews ……

INTERVIEW SCHEDULE FOR T.B DEFAULTERS AND T.B PATIENTS WHO SUCCESSFULLY COMPLETED TREATMENT

Date: .....

Centre: .....

Questionnaire number: .....

Instructions to the interviewer

1. Introduce yourself to the respondent.
2. Explain the purpose of your interview.
3. Assure respondent that No name will appear on the Questionnaire and that all information will be treated with confidentiality.
4. Tick (√) against the appropriate number of response in the boxes provided.
5. Write other responses in the space provided.

DEMOGRAPHIC DATA

FOR OFFICIAL USE

1. Sex: (a) Male ☐ (b) Female ☐ ☐

2. What is your age? ……

3. Where do you live?

   (a) Low residential area ☐

   (b) Medium residential area ☐

   (c) High residential area ☐

   (d) Others specify …… ☐

4. What is your marital status?

   (a) Single ☐

   (b) Married ☐

   (c) Divorced ☐ ☐

   (d) Widowed ☐

   (e) Separated ☐

5. What educational level have you attained?

   (a) No education ☐

   (b) Primary ☐ ☐

   (c) Secondary ☐

   (d) College/University ☐

6. What is your occupation?

   (a) Formal employment ☐ ☐

   (b) Self employed ☐

   (c) Not employed

7. Is your income enough to sustain the whole family?

(a) Yes ☐

(b) No ☐

B. PATIENT'S KNOWLEDGE ON T.B AND TREATMENT

8. What is T.B? (Explain in your own language)

……

……

9. What causes T.B?

……

……

10. Is T.B a preventable disease?

(a) Yes ☐

(b) No ☐

11. If yes how is it prevented?

……

……

12. Can T.B be cured?

(a) Yes ☐

(b) No ☐

13. If yes explain how

……

……

14. For how long have you been on T.B treatment? ……

15. How long did the doctor say you will take T.B treatment?

(a) 2 months ☐

(b) 4 months ☐

(c) 6 months ☐

(d) 8months ☐

(e) Others specify ……

16. How often do you take (drink) your T.B drugs?

(a) Daily ☐

(b) Whenever I remember ☐

(c) When I am not feeling well ☐

17. How often do you collect drugs?

……

……

C. STIGMATIZATION

18. Did you tell your relatives that you have T.B?

(a) Yes ☐

(b) No ☐

19. If No, what made you conceal the information?

(a) Fear of being rejected ☐

(b) Difficult to accept diagnosis ☐

(c) Fear of being labelled ☐

(d) Other reasons specify ……

COMMUNITY ATTITUDE TOWARDS T.B

20. If yes to Question 22, what was the reaction of relatives towards your condition?

Explain……………………………………………………………………

……………………………………………………………………………

21. Do you get any support from your family on your condition?

(a) Yes ☐

(b) No ☐

☐

22. If yes, what kind of support do you get?

……………………………………………………………………………

……………………………………………………………………………

D. <u>ACCESSIBILITY TO HEALTH SERVICES</u>

23. Do you face any difficulties to get to the health centre?

(a) Yes ☐

(b) No ☐

☐

24. If yes, why? Elaborate

……………………………………………………………………………

……………………………………………………………………………

25. When you go for review how long does it take you to be seen?

(a) Less than 30 minutes ☐

(b) 30 minutes to one hour ☐

(c) More than 1 hour ☐

☐

E. AVAILABILITY OF DRUGS

26. Have you ever been sent home from the clinic without T.B drugs?

(a) Yes ☐

(b) No ☐

27. If yes, why?

(a) No drugs at health centre ☐

(b) Wrong day ☐

(c) Staff that give T.B treatment not present ☐

(d) Other specify ……

28. Are T.B drugs available at health centre?

(a) Always available ☐

(b) Sometimes ☐

(c) Not available ☐

29. When you were diagnosed T.B, were you ever told you Could collect T.B drugs from any OPD clinic out of Your station, if you had a T.B OPD card?

(a) Yes ☐

(b) No ☐

30. How are you received by staff at the health centre?

(a) Well received ☐

(b) Poorly received ☐

(c) Others specify

31. Have you ever been followed or visited at home by health Workers with regard to your condition?

(a) Yes ☐

(b) No ☐

32. If yes explain

……

……

33. Why have you stopped going for treatment regularly?

Explain ……

……

34. What are the problems of not continuing with T.B treatment?

……

……

……

35. Do you have any suggestions on how to make it easier for T.B patients to take T.B drugs regularly

……

……

……

Thank you for your participation.

University of Zambia
School of Medicine
Department of Post Basic Nursing
P.O. Box 50110
LUSAKA

Permission Granted
Would like
asset
Please

23rd June, 2000

The Managing Director
UTH Board of Management
P.O. Box RW1
LUSAKA

U.F.S: The Head of Department
Chest Clinic
UTH Board of Management
P.O. Box RW1
LUSAKA

U.F.S.: The Head Post-Basic Nursing
School of Medicine
P.O. Box 50110
LUSAKA

UNIVERSITY OF ZAMBIA SCHOOL OF MEDICINE BASIC NURSING DEPT. OF POST 2000-07-03

Dear Sir/Madam,

RE: PERMISSION TO UNDERTAKE A PILOT STUDY

I am a fourth year student pursuing a degree in Nursing at the University of Zambia, School of Medicine.

As part of the course requirement, I have to carry out a pilot study before I can conduct a major research study in Chingola. I am therefore, asking for permission to use chest clinic for my pilot study.

My study topic is: "A study to determine factors contributing to default of treatment among T.B patients. The target population will be general T.B patients who will be used for focus group discussion, 5 patients who have defaulted from treatment and 5 who have completed treatment.

Thanking you in anticipation.

Yours faithfully,

Chima

Chima Lackness Banda