THE MENTAL HEALTH PROBLEMS OF BURUNDI
REFUGEES LIVING IN TABORA TANZANIA

BY

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OF NAIROBI IN PART FULFILLMENT FOR THE
DEGREE OF MASTER OF MEDICINE (PSYCHIATRY)
of the UNIVERSITY OF NAIROBI.

APRIL 1988.
DECLARATION.

I, Dr. Lucy S. Nkya do declare that this dissertation is my original work. It has not been presented to any other Institution for the purpose of obtaining a degree.

Candidate
Signed Dr. Lucy S. Nkya M.D. (DSM)

Date. 21st June '88

This dissertation has been submitted for the Degree of Master of Medicine (Psychiatry) with my approval.

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University of Nairobi

Date 21st June '88
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SUMMARY

The main objective for this study was to find out the prevalence of mental health problems among refugees and the factors contributing to their development. Literature review revealed that research work in this field is scanty and often very difficult to interpret because of lack of comparison studies. However from the few studies reviewed there is a universal agreement that refugee status per se causes considerable emotional distress.

This prospective study covered 120 cases of refugees from the outpatient clinic at Ulyankulu health centre in Tabora and 120 cases of refugees from the outpatient clinic at Ulyankulu health centre in Tabora and 121 controls from Mzumbe dispensary in Morogoro, Tanzania.

The study and the control populations were obtained by a systematic sampling method and were subjected to a two-stage screening procedure by the author. (Appendix II). The data collected was analysed by computer.
Psychiatric morbidity among the refugees was 56.7% compared to 35.4% among the control group. The prevalence of mental illnesses was higher among the refugees than among the control group. ($X^2 = 10.827$ df = 1 $P = 0.001$).

The leading diagnosis was that of affective disorders with a predominance of reactive depression.

When the prevalence rates of the study and the control populations were compared with those of other community studies they were found to be very high. The possible reasons for such high rates are discussed below.

The pattern of the symptom presentation of the illnesses among the two groups was however not significantly different from those of other community studies done elsewhere in Africa.

The study has not been able to identify specific factors which have contributed to the development of mental health of refugees.
Those discussed below need to be studied individually in order to find out their specific effects on the mental health of refugees.

From this study it is obvious that refugees have a problem as far as their mental health is concerned and that there is a need for a well planned mental health service for the Ulyankulu refugees. The author has formulated some recommendations which are also clarifying the role of the host country, voluntary agencies and the International Community in the promotion of the mental health of refugees.
CHAPTER ONE.

THE BACKGROUND OF THE STUDY:

Africa is not an entity in terms of racial or ethnic considerations. The continent is made up of nations which are based on artificial boundaries. The nations consist of a mixture different ethnic, racial and cultural entities. It is unfortunate that the boundaries have cut across these entities resulting for instance in one ethnic group having some members on one side of the boundary and some on the other. In these circumstances human mobility is not only high but is continuous, making it difficult to say with precision who actually is true African refugee, immigrant or a citizen of a country.

Poverty has complicated the issues. For instance many people keep on crossing borders to find a better way of life and such people may eventually decide to call themselves refugees if political circumstances in their countries change for the worse and if at the same time the refugee status promises better employment and other psycho-social opportunities. On the other hand some genuine refugees may not only fear to pose as refugees because of political implications for their
families back in their country of origin but may find that posing as ordinary citizens of the host country may confer several economic advantages i.e. employment and landownership. Therefore, an adequate definition of an African refugee is not only difficult to find but no single such definition would be applicable to all situations.

On marking the African Refugee Day in June 1987, the Organisation of African Unity (O.A.U.) issued a statement that there are over four million Africans living outside their countries of origin against their wishes. The statement went on to say that the best solution to the refugee problem in Africa is voluntary repatriation. Over 1.3 million refugees had been repatriated voluntarily since 1980, but where reasons of exile had not yet disappeared, voluntary repatriation could not take place ("Daily News", Dar-es-Salaam 20.6.87).

A workshop held in Dar-es-Salaam Tanzania to mark the African Refugee Day in June 1987 cited the following as the causes of the refugee problem in Africa.
1. Lack of democracy.
3. Natural calamities i.e. drought and hunger.
4. Poverty
5. Religious conflicts.
6. Apartheid policy
7. Interference by foreign powers.

The conference also had an opinion that political greediness was one of the major causes of the refugee problem in Africa. (Daily news Dar-es-Salaam 21-6-87). Some leaders do not want to step down and hand over leadership to others. This has been the cause of military take overs, leading to military dictatorships in many countries.

Tanzania is one of the African countries accommodating a large number of refugees from Burundi, Southern Africa and other neighbouring countries.
The Burundi refugees came in a mass exodus between 1971 and 1973. The main inflow was in 1972. These were all Buhutu by tribe and they left their country because of inter-tribal political clashes in which many families were disrupted and in which all their property was lost. The conflict was between the ruling minority tribe, the Watusi, and the majority non-ruling tribe, the Wahutu.

The Hutus came to Tanzania through Kigoma, but could not be settled there because of security reasons. The government of Tanzania in collaboration with the United Nation High Commission for Refugees (UNHCR) settled these people at Ulyankulu in Tabora. This was the first settlement. Later on as the number of refugees increased, other settlements were opened at Katumba and Mishamo near the shores of Lake Tanganyika.

Initially these people were not able to understand Kiswahili which is the "Lingua Franca" in East Africa. But with time a few of them, especially children, are now able to speak
Kiswahili. Another big change was a geographical one. The Hutus were used to living in mountainous or hilly terrain back home where they were cultivating and growing bananas and coffee. Now they live in plains where the environment has forced them to grow cassava, maize, rice and tobacco as cash crops. These changes might be traumatic depending on how they are perceived by individual refugees.

Tanzania has tried to assimilate and incorporate refugees into her socio-economic system in many ways. To mention a few:

1. The former president of Tanzania, Mwalimu Julius Nyerere in 1984 announced that the refugees should be referred to as resident "visitors" (Wageni Wakaazi). This was aimed at removing the stigma of "refugee" and making the indigenous people accept and treat refugees as their visitors. In African society a visitor is regarded an integral member of the community.
2. The Government of Tanzania in collaboration with UNHCR has resettled the Burundi refugees in rural settlements rather than urban areas as has happened with refugees in other countries. The resettlement programme is aimed at making refugees self-reliant in food production and income generation. Now they are no longer in need of monthly allowances or funds and other material assistance as are the urban settled refugees.

3. The refugees who have skills or have professional qualifications are given opportunities of employment in the government or parastatal institutions.

4. Refugees are also provided with basic social services i.e. schools, health services, and recreational facilities.

The only privileges they do not have are:

a) Right to vote or to stand for any political leadership because they are not citizens.
b) They cannot become members of the ruling party.

Reasons for the Study.

Ulyankulu Settlement has been in existence for about fifteen years now. Initially most of the social services were being financed by UNCHR and a few donor agencies through the Tanganyika Christian Refugee Services. A few years ago, the settlement was handed over to the Government of Tanzania to run, the social services as well as the administration of the settlement. The government was to look for ways of integrating the social services in the settlement into the existing social services i.e. health and education.

Although the settlement has some health services, there are no mental health services, either curative or preventive. The only alternative mental health services are provided by a traditional and religious healers in the settlement.
The lack of community and hospital based mental health services in the settlement prompted the Ministry of Home Affairs to persuade the researcher to conduct the study at Ulyankulu instead of the Mazimbo Camp in Morogoro which is serviced by a mobile psychiatric clinic.

The authorities of the Ministry of Home Affairs and the Ministry of Health were interested in the extent and the nature of the mental health problems of the Burundi refugees in the country who will probably remain in Tanzania for sometime.

The findings and the recommendations of the study are expected to help the health authorities in designing appropriate curative, rehabilitation and preventive mental health services for refugees living in Tanzania.

Moreover, no similar studies have been conducted in Tanzania and therefore it was also expected that the study would add on to the research data on mental health problems of refugees in Africa and the world as a whole.
Literature Review

There are only a few documented studies on mental health problems of refugees and other immigrants in Africa and other parts of the world. The only studies done in Africa are on Rwandese refugees in Uganda, on Ugandan and other refugees in Kenya and on Namibian adolescents living in an unnamed African Country (not named for security reasons). These studies are discussed below.

Studies Outside Africa

Eitinger (1959) studied the incidence of mental diseases among refugees in Norway over a ten year period between 1st June 1946 to 31st December 1955. He studied a total of 18,790 refugees.

During the study period he observed that 3.19% of the study population became psychotic. Of these 0.34% were schizophrenics while 2.79% were suffering from reactive psychoses. He compared the incidence of psychoses and found that the calculated incidences for all diagnoses were five times higher than could be expected in
corresponding matched Norwegian population. The majority of schizophrenics broke down during the course of the first five years. He attributed this to constitutional and personality factors and the stress of the actual refugee situation. He also had the opinion that the environmental stress had a greater influence on the constitutionally conditioned reaction process than in the non-conditioned. The pre-morbid personality was found to be of importance in the manifestation of reactive psychoses. He found that more than 40% of the reactive states fell ill during the first and 3rd years of the refugee's arrival in Norway.

Mezey (1960) studied the personal background, reasons for immigration and the mental health disorders in Hungarian refugees living in the United Kingdom between 1957 and 1959. His analysis focused on the following:

1. Childhood and marital status
2. Previous migratory record.
3. Motivation for leaving Hungary
4. Social adaptation.

He found that there was a history of early disruption of the home in 40% of refugees referred for psychiatric disorders. He could not evaluate the significance of this because of lack of comparable data. He also found that there was a relationship between migration within Hungary and the type of psychiatric disorder they manifested in U.K. The schizophrenic patients had emigrated from the countryside to Budapest in a significantly higher proportion than those having other diagnostic categories. The reason for leaving Hungary was political in 45% of the cases. Non-political motives were higher in those suffering from schizophrenia than for other diagnosis.

The mean index of social adaptation deteriorated significantly in England for those suffering from affective disorders but not for schizophrenia. It was concluded that
in the two year period covered by the investigation the stresses of immigration did not play an important causal role in schizophrenia.

Rahe et al, (1978) conducted a psychiatric clinic in a Vietnamese Refugee Camp in the United States of America (U.S.A.) for six months, starting from June 1975. They studied a random sample of 203 refugees. They found that individuals seen during the first month had gross behavioural disturbances i.e. psychoses. By the 2nd and 3rd months of the Camp's existence, anxiety and depression became the most common presenting problems. Suicide attempts rose from a single case in June 1975 to 4 cases in July and declined to 3 cases in August, 2 cases in September and no case in October. Only one case was successful. Towards the closing of the camp they observed that many of the cases referred to them for consultation comprised of depressed and potentially suicidal unaccompanied children (age not specified).

They reported that the refugees were feeling extremely low in regard to their current life perceptions but this was most likely a
transient phenomenon when compared with their projected ratings for the future.

The refugees total body symptomatology scores on the Cornell Medical Index (CMI) were found to be a sensitive index for psychological stress.

**Studies in Africa**

Bennett and Assael (1970) conducted an uncontrolled community survey among Rwandese refugees at Kasangati in Uganda. They found high rates amongst the Rwandese of alcoholism, depression and antisocial behaviour. They attributed these to social isolation, insecurity and cultural disorientation. They did not encounter cases of anxiety and other neurotic illness. The explanation they have given to this is that a possible alcoholic excess and acting out in antisocial behaviour served as anxiety-reducing mechanisms.

Muhangi (1978) studied the nature and extent of psychiatric disorders among Ugandan refugees living in Nairobi, Kenya between 1975 and 1977.
The diagnostic breakdown of the study population showed that the majority of the patients (70%) belonged to the psychoneurotic group of disorders, namely anxiety and depression. This observation was not found among Rwandese refugees studied by Bennett and Assael (1970).

Muhangi's conclusion was that the study was not able to show a positive or a negative relationship between the refugee status and mental health status of the refugees because it was not a controlled study.

Acuda (1985) conducted a similar study on African refugees living in Nairobi between January, 1978 and June 1979. He saw about 3.29% of all the refugees registered in Kenya. They were Ugandans, Ethiopians, Rwandese, Mozambicans and Burundis. In this study the duration of refugee status and the onset of Psychiatric illness was usually within three to six months of their becoming refugees. Previous history of mental illness was present in 11.9% of the cases and of all of these were
suffering from chronic conditions i.e. schizophrenia, epilepsy, and hypochondriasis. The clinical presentation of the psychiatric illness in the study group was as follows:

1. Over 40% presented with physical complaints. This was also reported by Mezey (1960)

2. 17% of the cases presented with recognised symptoms of depression e.g. persistent insomnia.

3. 10% were cases of attempted suicide. These cases were reported as being dramatic but none of them were successful. It was observed that 83% of those who attempted suicide had secondary school education or equivalent and were under 25 years of age. The author explained this by saying that it was possible that education gave them more insight to their problems and whenever they could not get an immediate solution they resorted to desperate measures. He went on to say that the uneducated were probably satisfied with their lot and left their future to fate.
The unexpected findings of Acuda's study was the rarity of paranoid ideas or delusions among the study population. This condition has been repeatedly found to be common among minority refugees due to social isolation, cultural differences and language barriers with the host population (Mezey, (1960) and Rahe, et al; (1978).

The commonest psychiatric disorders seen were depressive illnesses and most of them were reactive in nature. The patients attributed these to the problems they were experiencing at that time i.e. loneliness, inadequate financial support and continuing instability in their home countries.

Chissana and Celetano (1985) studied depressive symptomatology among Namibian adolescent refugees living in an unnamed African country. They studied a total number of 56 youths in secondary schools. Out of these, 25% reported all the symptoms of depression except suicidal ideation and self - depreciation. Their findings were
contrary to previous findings that expressions of worthlessness, sadness, guilt feelings and self reproach are rare in African populations (German, 1972). The study fulfilled the authors' expectations that depression would be prevalent in that population given that those youths were in exile.

The etiology of mental disorders among Refugees.

The question whether the incidence of mental illness is greater among refugees than among the host population has been answered in the affirmative and with results that leave no room for doubt. Eitinger (1959) gave the following reasons as the possible causes of higher incidence of mental illnesses among refugees:

1. A priori, that there is a higher incidence of mental illnesses in the native land of refugees.
2. The pre-morbid personality of the refugees.
3. The mental and physical stress during the interval between uprooting and the outbreak of the disorder.
4. Other authors have come up with the following theories:

i. Selection and segregation theory. It was shown by several studies that the refugee patients in many ways represented a "minus people" or people with unstable personalities even in their countries of origin (Mezey; 1960). The migratory process was viewed as a reflection of a pre-psychotic persons' attempt to free himself from social ties and thus solve or evade existing conflicts. This is in support of the selection and segregation hypothesis.

ii. Loss of object relationship - the loss of this relationship has been thought to be an important factor underlying severe depression found in refugees. The patients expressed these feelings as "home sickness" (Bermett and Assael; 1970).

iii. Frustrations due to events in their homeland; for example persistent political persecutions and economic deprivations in their home countries; have been thought to be responsible
for deliquency, psychopathic and alcoholic behaviour among the Rwandese refugees in Uganda. (Bennett and Assael; 1970).

iv. Discrepancy between ideals, moral values and social codes of the new environment and that of the country of origin. This has been thought to be an important cause of hypocondriasis (Benett and Assael 1970).

v. Isolation - This could be social, cultural, economic or political. Loss of financial status, lack of opportunities for leadership, cultural and language barriers have been found to be the underlying causes of paranoid reactions and other reactive psychoses. (Eitinger 1959, Mezey 1960, Rabe et al 1978).

Paranoid states were rare among the Ugandan refugees living in Kenya. This was explained by the fact that Ugandans could easily assimilate themselves into the Kenyan community because of their common background (East African Community) and common language i.e. English and to some extent Kiswahili (Muhangi, 1978 and Acuda, 1985).
Eitinger, (1958) had a view that isolation occurred when groups of refugees disintegrated due to resettlement. Inability to adjust to the influence of isolation and the new environmental stimuli can result in a total breakdown of personality, leading to psychiatric illness.

vi. Poverty - Clinard (1968) defined poverty as insufficiency of material possessions relative to the local standards of living. This can lead to a formation of a subculture of deviant behaviour and attitudes due to economic uncertainty. This has been thought to be the underlying cause of alcoholism and antisocial behaviour among some groups of refugees. (Bennett and Assael 1970).

vii. Lack of social support - social support has been found to have a moderating effect in the relationship between stress and depression. The study of depression among Namibian adolescents confirmed that the presence of social support was negatively correlated with depression \((r = 0.20)\) i.e. those with high social support scores tended to report
fewer symptoms of depression (Chissana and Celento 1985).

Low levels of social support could also be conceived of as a stressor and hence capable of triggering depression. On the other hand low social support may imply that the person is socially isolated which may indicate withdrawal from social contacts which in itself is a significant sign of depression.

Chissana and Celentano (1985) quoted Cobb's theory which says that self-esteem support leads to self-confidence and emotional support which leads to comfort, enabling the person to change in order to fit into an altered environment. Therefore, they concluded that providing a supportive environment assists in the coping and adjustment process and hence promotes a better individual - environment fit in the new environment.
CHAPTER TWO

OBJECTIVES OF THE STUDY.

1. To find out the prevalence of psychiatric morbidity among the refugees and control group.

2. To find out the diagnosis and symptom distribution of the psychiatric disorders in the study population.

3. To find out whether there are any significant contributory factors among the refugees towards mental illness as compared to the control population.

4. Recommendations.
The Hypothesis:

The prevalence of mental diseases is higher among refugees than among the host population.

Null Hypothesis

Mental health problems occur in the same proportions in refugees as in the host population.

Definitions:

For the purpose of this study the definition of a refugee is based on the definition of a refugee adopted by All African Conferences of Churches in 1982. The definition is as follows:- "A refugee is a person who leaves his or her Country of origin mostly for political reasons (and) crosses the border of another Country for fear of persecution". In addition to this the individual should be registered with the United Nations High Commissioner of Refugees. (U.N.H.C.R.).
Material and Methodology

The study was a controlled prospective study for a period of three months.

a. The Study Population:

The study population was comprised of refugees from Burundi who are living at Ulyankulu settlement in Tabora, Tanzania.

They were all Bahutu by tribe and came to Tanzania in a massive exodus between 1971 and 1973. The settlement has well planned villages and a population of over 40,000. See map Appendix I.

There is one health centre (H.C.) with a capacity of thirty beds and five dispensaries. The H.C. is run by a Medical Assistant, a Rural Medical Aid, one assistant Laboratory technician, a nurse midwife and a few nursing assistants. Drugs are supplied by U.N.I.C.E.F. through the Essential Drug Programme. The supply of drugs is on monthly basis.
The refugee settlement is administered by the Ministry of Home Affairs and the social services are controlled by their respective Ministries through the local governments.

The study population was drawn from the refugees who attended the outpatient clinic at the health centre during the months of April and May 1987.

b. The control population was the patients who attended the outpatient clinic at Mzumbe dispensary during the month of June 1987. This dispensary is situated in Morogoro rural district in Tanzania. This particular place was chosen because it resembles Ulyankulu in many ways, i.e. it is a rural settlement, with well defined village systems and the inhabitants are mainly peasants cultivating cassava, maize, rice and beans for food and cotton for cash. It is a homogeneous population made up of mainly one tribe, the Waluguru.

The Criteria for inclusion.

1. The subjects who fulfilled the criteria of a
refugee as defined by the All African Conference of Churches and who are registered as such by the U.N.H.C.R. (see above).

2. Subjects who were aged fifteen years and above and were not born in exile

3. The controls were matched with study population for age and sex.

4. Subjects who were willing to enter the study.

Criteria For Exclusion

1. Those who did not fulfil the criteria of a refugee as defined by the A.A.C.C. and not registered by the U.N.H.C.R.

2. Subjects who refused to enter the study.

3. Subjects who were below fifteen years of age or were born in exile.

4. Subjects who were too ill to enter the study.
Data Collection Techniques

The study was a cross-sectional survey. The study and the control populations were obtained by a systematic sampling method. Every 3rd person passing through the registration was subjected to the questionnaire. (see appendix II).

Every individual was given an explanation about the study and a consent to participate was requested.

Those who consented were then subjected to a questionnaire which was in three sections:-

SECTION I.

This consisted of demographic data, history of drug abuse and the reason for consultation. In the reasons for consultation the complaints were noted according to the system affected. This section was administered by a psychiatric nurse who was also used as an interpreter.
SECTION II

This consisted of 3 parts.

Part I: This was the World Health Organization (W.H.O.) instrument for Alcoholism.

Part II: This was the self rating questionnaire (SRQ). It consisted of two parts, the neurotic screening section and the psychotic screening section.
Those who scored eleven points and above on the W.H.O. core and 8 points or more on the neurotic section and one or more points on the psychotic section of SRQ were further subjected to part III of the questionnaire.

PART III: This was the standardized psychiatric interview (SPI). This section was administered by the researcher.

SECTION III: Other procedures. This consisted of physical examination and the relevant Laboratory investigations for all the cases seen. Also the non-cases were examined physically in order to motivate others.
The following is the summary of the data collection technique.

Clinic Mzumbe/ Ulyankulu

Demographic Data
History for Drug Abuse
Reasons for Consultation

WHO core Screening S.R.Q.
Physical examination and Lab. investigation

Non-cases
excluded

CASES
S.P.I.

Diagnosis based on ICD9 - classification.

Appropriate Treatment given or Referred to Tabora Psychiatric Unit.
Pre-testing:

The pre-testing of the questionnaire was done on the patients attending a community psychiatry clinic at Kariobangi, health centre in the City of Nairobi. It was found suitable for the study.

Data Processing:

The data collected was coded and was analysed by computer using the personal Editor programme for frequency analysis and Microstat programme for crosstabulations, chi-square \((x^2)\) probability tests and difference of proportions.

Data Analysis.

1. Data was analysed according to frequency distributions and cross tabulations.

2. Analysis of relationships was done by use of contingency tables, chi-squares, degrees of freedom, tests and differences of proportions.

Difficulties Encountered.

1. Language - There were a few refugees who could not speak fluent Kiswahili, so the Psychiatric Nurse was also used for translation. This procedure consumed more time than expected.
CHAPTER THREE

RESULTS:

The total number of refugees studied was 120.
The controls were 121.
The demographic data is summarised in Table I below.

**TABLE I:**

<table>
<thead>
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<th>Variable</th>
<th>Refugee</th>
<th>Control</th>
<th>P - Values</th>
</tr>
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<tbody>
<tr>
<td><strong>1. Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>15 years</td>
<td>16 years</td>
<td>P = 0.3193</td>
</tr>
<tr>
<td>Maximum</td>
<td>68 years</td>
<td>68 years</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>29.8</td>
<td>36.9</td>
<td></td>
</tr>
<tr>
<td><strong>2. Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>67</td>
<td>50</td>
<td>P = 0.0242</td>
</tr>
<tr>
<td>F</td>
<td>53</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td><strong>3. Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>20.8%</td>
<td>28.9%</td>
<td>P = 0.1492</td>
</tr>
<tr>
<td>Married</td>
<td>71.7%</td>
<td>57.9%</td>
<td></td>
</tr>
<tr>
<td>Separated/Divorced</td>
<td>3.3%</td>
<td>6.6%</td>
<td></td>
</tr>
<tr>
<td><strong>4. Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No-education</td>
<td>51.7%</td>
<td>24.0%</td>
<td>P = 0.000166</td>
</tr>
<tr>
<td>Primary</td>
<td>45%</td>
<td>60.3%</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>3.3%</td>
<td>15.7%</td>
<td></td>
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### TABLE I. CONT'

<table>
<thead>
<tr>
<th>Variable</th>
<th>Refugee</th>
<th>Control</th>
<th>P - Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>100%</td>
<td>24.0%</td>
<td>N.S</td>
</tr>
<tr>
<td>Yes</td>
<td>0%</td>
<td>7.49%</td>
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<tr>
<td>6. Dependents</td>
<td></td>
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</tr>
<tr>
<td>None</td>
<td>28.3%</td>
<td>28.1%</td>
<td>P = 0.0273</td>
</tr>
<tr>
<td>1 - 5</td>
<td>55%</td>
<td>54.5%</td>
<td>N.S</td>
</tr>
<tr>
<td>6 and above</td>
<td>16.6%</td>
<td>17.4%</td>
<td>N.S</td>
</tr>
<tr>
<td>7. Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>15.89%</td>
<td>35.5%</td>
<td></td>
</tr>
<tr>
<td>Not employed</td>
<td>84.2%</td>
<td>64.6%</td>
<td>P = 0.0008</td>
</tr>
<tr>
<td>Housewife</td>
<td>12.5%</td>
<td>7.4%</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>3.3%</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>Peasant</td>
<td>55.0%</td>
<td>43.0%</td>
<td></td>
</tr>
<tr>
<td>8. Religion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Practicing believer</td>
<td>8.3%</td>
<td>31.4%</td>
<td>P = 0.000422</td>
</tr>
<tr>
<td>ii. Non - Practicing</td>
<td>90.8%</td>
<td>67.4%</td>
<td></td>
</tr>
<tr>
<td>iii Non - believer</td>
<td>0.8%</td>
<td>0.8%</td>
<td></td>
</tr>
</tbody>
</table>
The age at which the refugees left Burundi ranged from 1 to 53 years. The average age was 14 years. The mode was 10 years. The main reason for leaving Burundi was political. This contributed 56.7% of the cases. This was followed by social reasons (these were groups which left Burundi because their parents/guardians and or spouses were leaving). This reason was given by 42.5% of the cases.

There were only a few reported cases of physical abuse by soldiers. This constituted 5.8% of the refugees studied.

Previous history of mental illness was positive in 13.5% of refugees seen at the Clinic. The problems were distributed as the following:

i. Neuroses 3.3% of refugees

ii. Epilepsy 3.3%

iii. Others 6.7% (These were mainly reported as confusions associated with malaria).

All the refugees seen had come directly from Burundi to Tanzania. The average duration of stay in Tanzania was 15 years.
The Main Complaints:

This was recorded according to the systems involved. If a patient presented with complaints in more than one system they were all recorded if they were considered to be equally distressing to the patient. The results are summarized in table 2 below.

**TABLE 2**

<table>
<thead>
<tr>
<th>System</th>
<th>Refugees</th>
<th>Control</th>
<th>P.V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNS</td>
<td>53 (44.2%)</td>
<td>41 (33.9%)</td>
<td>0.0509</td>
</tr>
<tr>
<td>GI</td>
<td>32 (26.7%)</td>
<td>44 (36.4%)</td>
<td>0.0526</td>
</tr>
<tr>
<td>RS</td>
<td>29 (24.3%)</td>
<td>28 (23.1%)</td>
<td>0.4257</td>
</tr>
<tr>
<td>CVS</td>
<td>13 (10.8%)</td>
<td>6 (5.0%)</td>
<td>0.0453</td>
</tr>
<tr>
<td>GU</td>
<td>7 (5.8%)</td>
<td>11 (9.1%)</td>
<td>0.1681</td>
</tr>
<tr>
<td>M.S.S.</td>
<td>28 (23.3%)</td>
<td>43 (35.5%)</td>
<td>0.0169</td>
</tr>
</tbody>
</table>
The history of drug abuse - The results are summarized in table 3.

**TABLE 3.**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Refugee</th>
<th>Control</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarettes</td>
<td>15(12.5%)</td>
<td>22(18.2%)</td>
<td>.1106</td>
</tr>
<tr>
<td>Marijuana</td>
<td>5(4.2%)</td>
<td>4(3.3%)</td>
<td>.3623</td>
</tr>
<tr>
<td>Khat</td>
<td>0(0.0%)</td>
<td>0(0.0%)</td>
<td>0.00</td>
</tr>
<tr>
<td>Tranquilizers*</td>
<td>14(11.7%)</td>
<td>3(2.5%)</td>
<td>0.0026</td>
</tr>
</tbody>
</table>

* Mostly used for treatment, more frequently to induce sleep.

There were no significant difference between refugees and the control population in regard to drug abuse.

The reasons given for the use of the other drugs were:
- For socialisation
- For relaxation
- For 'no reason at all'
The ratings of the quality of life in the two groups is summarized in table 4 below.

**TABLE 4.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Refugees</th>
<th>Control</th>
<th>P - Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Backhome</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horrible (H)</td>
<td>45.3%</td>
<td>not</td>
<td></td>
</tr>
<tr>
<td>Bad (B)</td>
<td>0%</td>
<td>rated</td>
<td></td>
</tr>
<tr>
<td>Fair (F)</td>
<td>4.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent (E)</td>
<td>48.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>God knows (G)</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Present life</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>42.5%</td>
<td>47.9%</td>
<td>P = 0.2339</td>
</tr>
<tr>
<td>B</td>
<td>6.7%</td>
<td>6.6%</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>31.7%</td>
<td>20.2%</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>7.5%</td>
<td>5.8%</td>
<td></td>
</tr>
<tr>
<td>G.K.</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td><strong>3. Future Life</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>47%</td>
<td>44.6%</td>
<td>P = 1660</td>
</tr>
<tr>
<td>B</td>
<td>4.2%</td>
<td>4.1%</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>19.2%</td>
<td>15.7%</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>15.8%</td>
<td>26.4%</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>5.0%</td>
<td>6.6%</td>
<td></td>
</tr>
<tr>
<td>GK</td>
<td>8.3%</td>
<td>2.5%</td>
<td></td>
</tr>
</tbody>
</table>
The W.H.O. core Screening Instrument

Those who scored 11 points and above were regarded as having alcohol problem.

Findings:

Refugees 21.6% of all cases seen. Control 8.3% of all cases seen. These cases were subjected to S.P.I and the results are included in the diagnoses given below.

The S.R.Q.

This had two parts: Part I was the Neurotic Screening: Those who scored 8 or more were regarded as Cases for S.P.I.

Part II. The psychotic screening. Those who scored 1 point or more were also subjected to S.P.I. The results of S.P.Q are summarized in table 5 below.

<table>
<thead>
<tr>
<th>Test</th>
<th>Refugee</th>
<th>Control</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurotic Screening</td>
<td>42.1%</td>
<td>26.4%</td>
<td>0.0057</td>
</tr>
<tr>
<td>Psychotic Screening</td>
<td>27.5%</td>
<td>16.5%</td>
<td>0.0196</td>
</tr>
</tbody>
</table>
Diagnosis:

The diagnosis was based on the ICD9 classification. There were two types of diagnoses given.

i. The Principal diagnosis

This is what was regarded as the major problem of the patient after excluding organic illnesses. The refugees diagnosed as primarily suffering from psychiatric problems were 56.7% of all the cases seen. This can be taken among the refugees attending the outpatient clinic at Ulyankulu Health Centre.

The prevalence of Psychiatric Morbidity among the control groups was 35.4%.

The distribution of the diagnoses was as in table 6 below.
### TABLE 6:

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Refugee</th>
<th>Control</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organic Psychosis</td>
<td>3(2.4%)</td>
<td>5(4.2%)</td>
<td>0.2397</td>
</tr>
<tr>
<td>2. Schizophrenia</td>
<td>8(6.6%)</td>
<td>4(4.1%)</td>
<td>0.152</td>
</tr>
<tr>
<td>3. Affective disorders</td>
<td>14(11.7%)</td>
<td>7(5.8%)</td>
<td>0.0528</td>
</tr>
<tr>
<td>4. Paranoid states</td>
<td>3(2.5%)</td>
<td>0(0%)</td>
<td>0.0400</td>
</tr>
<tr>
<td>5. Neurotic disorders</td>
<td>39(33.3%)</td>
<td>19(13.7%)</td>
<td>0.0014</td>
</tr>
<tr>
<td>6. Personality disorders</td>
<td>0(0%)</td>
<td>1(0.8%)</td>
<td>0.1592</td>
</tr>
<tr>
<td>7. Mental retardation</td>
<td>1(0.8%)</td>
<td>0(0%)</td>
<td>0.1571</td>
</tr>
<tr>
<td>8. Sexual disorders</td>
<td>0(0%)</td>
<td>1(0.8%)</td>
<td>0.1592</td>
</tr>
<tr>
<td>9. Drug Abuse</td>
<td>0(0%)</td>
<td>1(0.8%)</td>
<td>0.1571</td>
</tr>
</tbody>
</table>

ii. An ancillary diagnosis was made if the psychiatric condition was found to occur together with a primary disorder e.g. physical illness.

10.2% of refugees had an ancillary psychiatric diagnosis, which were found to occur concomitantly with hookworm anaemia, malnutrition, malaria and other parasitic infections.
Among the control group there were 8.1% of cases with an ancillary diagnosis. The conditions were neuroses, sexual disorders, alcohol dependence syndromes and one case of mental retardation.

Analysis of relationships

I. The comparison of psychiatric morbidity between the two groups was done. See table 7 below.

TABLE 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Refugee</th>
<th>Control</th>
<th>Total</th>
<th>P - Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Psychiatric Morbidity</td>
<td>52</td>
<td>78</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Psy. Morbidity</td>
<td>68</td>
<td>43</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>121</td>
<td>241</td>
<td></td>
</tr>
</tbody>
</table>

\[ X^2 = 10.827 \quad df = 1 \quad P = 0.001 \]
It is statistically significant below the level of 0.05 that there was more psychiatric morbidity among the refugees than the control population.

II. Comparison of alcohol related problems as diagnosed by Standardized Psychiatric Interview. (S.P.I.)

See table 8.

<table>
<thead>
<tr>
<th></th>
<th>Refugee</th>
<th>Control</th>
<th>Total</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcoholism</td>
<td>12</td>
<td>3</td>
<td>15</td>
<td>0.0078</td>
</tr>
<tr>
<td>No Alcoholism</td>
<td>108</td>
<td>118</td>
<td>216</td>
<td>0.0078</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>121</td>
<td>241</td>
<td></td>
</tr>
</tbody>
</table>

\[ x^2 = 5.838 \quad \text{df} = 1 \quad 0.0157 \]
III. Symptomatology:

The severity of symptoms was assessed by the results of S.P.Q. and S.P.I.

a) Neurotic Symptoms

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Refugees</th>
<th>Control</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>61(50.8%)</td>
<td>89(73.6%)</td>
<td>0.00013</td>
</tr>
<tr>
<td>1 - 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>32(26.67%)</td>
<td>20(16.53%)</td>
<td>0.0279</td>
</tr>
<tr>
<td>8 - 14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe</td>
<td>21(17.5%)</td>
<td>12(9.92%)</td>
<td>0.0434</td>
</tr>
<tr>
<td>15 - 20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>120(100%)</td>
<td>121(100%)</td>
<td></td>
</tr>
</tbody>
</table>

X = 13.7612  df = 2  P = 0.001

It is statistically significant that the refugees presented with more neurotic symptoms than the control groups.
b. Psychotic symptoms were significantly different between the two groups.
   \[ P = 0.0196. \]
   (See table 5.)

c. The symptomatology based on the S.P.I. scores:
   It was found that the refugees had higher symptomatology scores than the control group.
   \[ X^2 = 8.8148 \quad df = 3 \quad P = 0.00319 \]

The behaviour was more disturbed in the refugees than in the controls at \( P = 0.004 \). There were more disturbances of mood among the refugees than in the control group \( (P = 0.0045) \).

The disturbances of cognition were significantly higher in the refugees than in the control group \( (P = 0.0137) \).

VI. Other Variables.

i. The religious habits:

There was a significant difference in religious habits between the two groups. The refugees had more non-practicing believers. The difference was statistically significant at \( P = 0.000000422 \). (See table I).
When religion and principal diagnoses were compared there was no correlation established.

ii. There was a correlation between the age at which the refugees left Burundi and th psychiatric morbidity. Psychiatric morbidity was found to be higher in the group which left Burundi between 1 - 20 years of age.

\[ X^2 = 26.4116 \quad df =12 \quad P = 0.0094 \]

iii. Education

There was a significant difference in education between the two groups at \( P = 0.000166 \). There was no single refugee with University education or equivalent. (See table 1).

iv. Occupation:

The refugees were mainly peasants and very few were in salaried employment. Those who were employed were mostly church workers who had no fixed salaries.

The occupational difference of the two groups was statistically significant at \( P = 0.008 \). (See table 1.)
v. Dependents:

The refugees had more dependents than the control group. But the difference was not statistically significant $P = 0.0273$. (see table I).

vi. Rating of the quality of life

Almost half (48.3%) of the refugees rated their lives back home as being "excellent". The present and future life ratings were compared among the two groups and they were found to have statistical differences. They both predominantly rated these as unsatisfactory or "horrible". Probably this was influenced by the prevailing economic crisis in the host country. (see table 4).
CHAPTER FOUR:

DISCUSSION:

This study compared the prevalence, diagnosis and symptom distribution of psychiatric disorders between Burundi refugees living in the Tabora region of Tanzania and the host population.

A total of 120 refugees and 121 controls were seen in their respective health facilities. As shown in table I the refugees had a much younger mean age than the controls, being 29.8 years while that of the controls was 36.9 years. Acuda (1985) found that 95% of the refugees he studied were below 39 years of age.

The predominance of the younger age group can be explained as follows:

i. This could be due to the fact that in unstable political situations it is the young adults who are more likely to flee the situation than the old people.

ii. In this particular situation the health centre at Ulyankulu is very far from most of the villages.
The average distance is more than 20 Km.

There is no easy means of transport to the health centre. The only means of reaching the health centre is by walking or by using a bicycle. So this means that it is the young people who can walk or cycle long distances to the health centre. Probably the old do go to the nearest village dispensaries for treatment.

The control population have a relatively good transport from their villages to the health facility. This is why the people seen were of all age groups.

This study was supposed to have been controlled by age and sex, but the screening procedures eventually distorted the pattern of age distribution.

From the table I it is evident that the refugees had a higher marriage rate (71.7%) than the controls (51.9%) but the separation/divorce rates were lower than in the controls.
The differences between the two groups could be due to their religious differences. The refugees were mostly Christians while the control predominantly Moslems. Among Christians, divorces and separations are not easily granted while among Moslems, divorces and separations were a matter of unilateral decision by the husbands. So this could have been the possible cause of the high rate of separation/divorce rates among the control population. Also single parenthood is possibly unacceptable among the refugees due to Christianity but were tolerated among the control population due to their culture.

Muhangi (1978) found that 57 patients out of 103 were married at the onset of the illness.

A large number of refugees had no formal education. (51.7%) some (45%) had primary school education ranging from class IV to class VIII, and very few had secondary school education. None had university or equivalent education. The controls had a better rate of education. The differences in education could be due to:
i. At the time the refugees arrived in Tanzania, they could not be placed in school immediately before the settlement was established. This could probably account for the large number of young adults with minimum or no education at all.

ii. The refugees still prefer the educational system back home to the Tanzanian system. This could have contributed to the disruption of schooling by many students. Some refugees expressed their wishes of wanting their children to be taught in the same style as it was in Burundi.

iii. The language barrier could have also contributed to the failure of refugees continuing with their education in the Tanzanian schools.

iv. There is also a problem of getting sponsorship for higher education. Probably the situation will improve because the settlement is now being run by the government of Tanzania. This will probably increase the chances of getting government bursaries for those with qualifications for higher education.
Both groups had about the same distribution of the number of dependants. This can be explained by the similarities in their socio-cultural backgrounds. Both the refugees and the controls had a belief that bearing children is a fulfillment of God's wish, and that it was a duty of the women to bear children for their husbands.

The refugees were predominantly peasants (55%) with very few in salaried employments as compared to the control population. The control population consisted of 43% peasants and 35.5% in salaried employments.

The religious habits of the two groups were interesting in that there were more non-practicing believers (90.8%) among the refugees while the controls had fewer non-practicing believers but with a larger number of practicing believers (67.4% and 31.4% respectively).

This can be explained by the fact that there was a high rate of emergence of independent churches without formal places of worship at Ulyankulu as compared to the control.
Also many of the independent churches were against the use of alcohol and the growing of tobacco, by their followers. This could have possibly led to the high rate of defaulting by their members. Many people took to drinking as the only means of socialisation available in that place. So many people despite the fact that they were believers opted not to go to church rather than sacrificing their economic and social rights.

The average age at which a large number of refugees seen at the clinic left Burundi was 14 years. This is perhaps due to the fact that young people with no families to plan could easily flee than those with families. Acuda (1985) had the same opinion about the reason for the predominance of younger age group among his study group.

The main reason for fleeing their country was political (56.7%) followed by social reasons (42.5%). Most of these people were forced to run away as an alternative to death. Mezey (1960) found that 45% of the Hungarian refugees left their home country because of political reasons.
Use of non-prescribed drugs was found to be a rare problem among the refugees and the control population. The most frequently used drugs were the tranquiliser group (Largactil and Diazepan) and were mainly used as treatments of a known psychiatric condition or induce sleep. A few youngsters abused Marijuana in order to "feel high", socialise or for "no purpose at all" (probably due to curiosity). The rarity of drug abuse in both groups is possibly due to their geographical situation more than anything else. The impact of religion could or could not have played an important role in the prevention of drug abuse among the two groups.

Alcohol screening by W.H.O. core screening test revealed that the refugees had more drinking problems than the controls. The differences could have been due to religion and socio-culture differences.

A large number of the refugees are probably drinking excessively because of lack of alternative recreational facilities. Drinking and going to the church were the only forms of social activities available in that settlement. The only few cinema halls were found at Urambo and Tabora towns which were hundred
of Kilometres away from Ulyankulu. The control population stayed about 20 - 25 km away from Morogoro town and transport was good and regular so they were able to go to the town for recreational activities. Also the control population were mostly Moslems by religion so drinking is strictly forbidden among them.

The prevalence of past history of mental illness was the same in both groups (13.5%) This may imply that sometimes back the prevalences of psychiatric morbidity in the two groups could have been the same. So the differences in the present research could be due to some factors which are specific to refugee status. The factors will be discussed below. Acuda (1985) found 11.9% of the refugees had a positive past mental illness. Mezey (1960) reported that 50% of the Hungarian refugees had a past history of mental illness. This was a high rate compared to the results of this study. Mezey's study also showed that a large number of his study group had migrated within Hungary so probably those who left their country did so because of psychiatric disorders.

The Prevalence of mental Health Problems

The first objective of this study was to find out whether mental health problems were more
prevalent among refugees than in the host population. The findings confirm that the prevalence of mental health problems is higher among refugees than in the host population. The rates were 56.7% for refugees and 35.4% for the control ($X^2 = 10.827$, $df = 1$, $P = 0.001$).

Acuda (1985) found a prevalence of 8.7% among the refugees he studied. This figure is very small as compared to the findings of this study.

Eitiner (1959) found that the prevalence of mental illness was five times that of the host population. Mezey (1960) had the same findings.

When these findings are compared with the results of other community studies it is evident that they are very high. Ndetei and Muhangi (1979) found a prevalence of 20% in a rural setting in Kenya, and Van Lujik (1969) found a prevalence of 19% among a clinic population in Ethiopia.

The high prevalence rates of psychiatric morbidity among refugees and the host population could probably be explained by the following:
i. It could be that the prevalence rates for the control population is within the epidemiological rates for Tanzania, but there are no previous studies of the same kind to compare with.

ii. It could also be a relative increase for the refugees. They could have had high prevalence rates from their native land.

iii. The high rates in the refugees and in the control populations could be attributed to the economic hardships which Tanzania has been undergoing. This is further supported by rating the quality of life by the two groups. Both rated the present and future life as being horrible and they attributed this to the economic hardships in the country.

The refugees' increased psychiatric morbidity could further be attributed to other various factors i.e.

i. The refugee status per se

ii. Loss of object relationships

iii. Undetermined future

iv. Environmental factors.
The Refugee Status

The refugees were not happy about their status as refugees. They felt that they had lost their social - economic and political status back home and here they are people without status. Most of them expressed their dissatisfaction by saying "After all we are out of our country so things cannot be the same" while others went as far as saying, "After all we are refugees which means people without any status".

The object Loss

The loss of object relationships can be explained in various ways. First there was the loss of friends, separation from their close relatives i.e. parents, brothers, sisters, children, spouses and the rest of their clan members. Then there was separation from the motherland. They were used to certain geographical outlooks, certain types of jobs, crops and a particular style of farming. Now here they are in a land which can yield crops only after use of expensive fertilisers. The loss of object relationships as a contributory factor towards the
development of mental illness was also as a cause of alcoholism and antisocial behaviour among the Rwandese refugees in Uganda (Bennett and Assael, 1970).

Future Life

The refugees expressed their feelings of uncertainty about the future by their negative rating for the future. Table 4 shows that 47% of the refugees expected their future life to be horrible. This in a way can be explained by their failure to identify with their native country because of the political trends in that country. The confusion is even worse for the younger age groups who have grown up in Tanzania but have been taught to believe in the social and cultural cues of Burundi. This may lead to cultural incongruency which may cause conflicts between the traditional parents and the adolescents. This could have contributed to emergence of a few adolescents who have taken to abusing drugs and alcohol.

The Diagnosis and Symptoms Distribution:

The diagnostic distribution of mental health problems are shown in table 6.
The leading diagnosis for the psychotic conditions were affective disorders (11.7%) with the predominance of depressive disorders.

The number of schizophrenic disorders was slightly higher than in the controls. The rates were 6.6% as compared to 4.1%, Acuda (1985) reported rates of 3.4% Bennet and Assael, (1970) reported no cases of schizophrenia. Acuda (1985) had the opinion that the 3 cases were due to heredity. Eitinger (1959) reported that the incidence of schizophrenia was five times that of the Norwegian population. His findings also confirmed that the reactive psychoses were five times greater in refugees than in the host population.

The community studies in East Africa did not report cases of psychosis in their findings (Ndetei and Muhangi 1979). Muhangi (1978) argued that, due to infections and malnutrition in our society, it was hard to diagnose or differentiate between functional psychosis from organic psychosis on the first visit. The cases of functional psychosis would only come up after a prolonged follow up. He was of the opinion that under these
circumstances most of the refugees were manifesting acute psychotic episodes (Bouffée délirante) and not schizophrenia. He reported 7 cases of bouffée délirante.

The organic brain syndromes were equally distributed among the refugees and the controls. The conditions found (confirmed by Laboratory findings) were Malaria, hookworm anaemia, and other tropical infections. They manifested as acute and sub-acute confusional states.

There were 3 (2.5%) cases of paranoid states among the refugees and none among the control group. Acuda (1985) reported 3 cases in Ethiopian refugees while Bennett and Assael (1970) and Muhangi (1978) reported no cases of paranoia.

The European studies, Mezey (1960) and Eitinger (1959) attributed paranoia to social isolation, cultural differences and language barrier with the host population. This can perhaps explain in the rarity of the conditions among the Ugandan and Rwandese refugees studied in Kenya and Uganda respectively (Acuda, Muhangi) Most of the East African refugees had no language problems and their
culture was not very different from that of the host countries. The Burundi refugees in Tanzania have been exposed to language barriers, culture differences and social isolation. This may explain the presence of paranoia in these people and in the Ethiopian refugees in Kenya.

Neurotic disorders were the leading diagnosis among the refugees. The rates were 33.3% as compared to 13.7% of the controls. Neurotic depression was the major diagnosis among the refugees. Muhangi (1978) reported 70 cases out of 103 as suffering from psychoneurotic conditions, namely anxiety and depression. Bennett and Assael (1970) reported 7 cases of depression. Acuda (1985) reported depressive illnesses as the commonest psychiatric disorder seen in his group of refugees. Rahe et al (1978) reported that anxiety and depression were the commonest presenting problems among the Vietnamese refugees. Anxiety states were only 5 cases of refugees as compared to 3 cases in the controls. Bennett and Assael (1970) reported no cases of anxiety. They attributed this to the overriding damping down of anxiety reactions by depression. In the case of Burundian refugees the duration of stay in exile could have accounted for rarity of overt
anxiety reactions in these people. Probably anxiety could have been there at the onset of the depressive illnesses, but the group of the patients seen could have been anywhere in the trough of depression.

Sexual disorders were rare among the refugees. There was only one case of impotence as compared to 4 cases in the control population. This is another unexpected finding because with such a high rate of depression one would have expected a correspondingly high rate of sexual disorders as a symptom component in depression.

This low rate of sexual disorders could be explained by the fact that most sexual disorders in the African set up are thought to be due to witchcraft or to be a punishment of marital infidelity. So a large number of patients with sexual problems might have opted for traditional or religious healing rather than coming to the hospital.

There were no cases of attempted suicide in both the two groups. Acuda (1985) reported 15 cases. All of them were below 25 years of age and 83% had secondary or equivalent education.
He argued that education probably gave them more insight into their problems and this could have made them resort to desperate measures whereas the minimally educated ones were probably contented with their meagre income and left their future to fate. This could have been the case with the Burundi refugees. A large number of them had no education or had only primary education. This plus the fact that they were believers probably made them leave their future to fate and God rather than resorting to suicide. Bennett and Assael (1978) reported no cases nor did Muhangi (1978). This may also support the belief that suicide is a social stigma in most traditional African societies. So most traditionally oriented people would try as much as possible not to resort to suicide whenever they are faced with any problems because they would not want to stigmatise their families and clan.

Rahe et al. (1978) reported an increase in attempted suicides during the first three months of the camp's existence. From his study it is evident that attempted suicides appeared in the individuals are trying to adjust to the new environment and forget their home countries. This is a period of maximum stress so any problem however
small may produce adverse reactive conditions. This study group had passed this period of increased risk of suicide which is probably why there were no cases reported to the Health Centre.

Alcoholism was a problem among refugees as compared to the controls. Standardized psychiatric interview revealed that 10.8% of the refugees were having central nervous system alcohol related problems, (Alcoholic hallucinosis and psychosis) and 11 cases of alcohol dependence syndrome. Among the control there were 7 cases of alcohol dependence syndrome. The increased incidence of alcoholism could be accounted for by four factors.

i. Local brews were the cheapest drinks around. A bottle of "chang'aa" popularly known as "Gongo" in Tanzania would cost between 5 - 8 TSHS. ($0.6 - $0.9) depending on the quality. The people there were selling their cash crops to the local cooperative union which pays them in instalments so they are assured of continuous source of money.

ii. Brewing was the only continuous source of income for many families in the settlement.
Due to frequent droughts and lack of water, most women could not grow vegetables for commercial purposes so they resorted to commercial brewing. Even most of the young people obtained their income from brewing and selling alcohol.

iii. The settlement is very much isolated from the major town centres in Tabora region. Therefore the only means of recreation was visiting the "Pombe" shops. Also there were no other recreational facilities i.e. sports grounds, dancing or cinema halls, e.t.c.

iv. Lack of shortage of soft drinks, and sugar for tea left them with no choice of drinks. This was volunteered by many patients as a cause of their drinking alcoholic brews. They also went on to complain that the water there was salty and unpalatable so they had no other means of quenching their thirst apart from drinking alcohol.
Bennett and Assael (1970) reported high rates of alcoholism among the Rwandese refugees at Kasangati. They attributed this to social isolation, insecurity and cultural disorientation. Muhangi (1978) reported only 3 cases of alcoholism and all of them were males. He attributed the low rate of alcoholism to two reasons:

i. This could have resulted from a tendency of not reporting abuse of alcohol.

ii. The low income of the refugees meant that there was little cash to spend on alcohol.


Personality disorders were not found among the refugees. There was one case in the control group. Bennett and Assael (1970) reported 8 cases of psychopathic personality, delinquency and antisocial behaviour which they attributed to the refugees' feelings of ambivalence towards their home countries. The frustrations and anger towards events in their native land was expressed through the antisocial behaviour.
The frequency of symptoms by body systems affected are shown in table 2. The most frequent symptoms complained of were those associated with the central nervous system (headaches, dizziness, insomnia and blackouts). This was followed by the complaints in the Gastro intestinal system (epigastric pain, abdominal pain and fullness, constipation and loss of appetite). Respiratory system (chest tightness, pain and frequent prolonged coughs). Musculoskeletal system (lower backache, joint pain, shoulder pain and heaviness) and cardiovascular system palpitations, feeling as if the heart was flying off).

Few complaints were associated with genitourinary system. No patient complained of spontaneous feelings of sadness or depression. Most of the depressive cases presented with somatic complaints of which no organic causes were found. Feelings of sadness were only volunteered during the standardized psychiatric interview.

The same pattern of complaints was reported by Ndetei and Muhangi (1978) Acuda and Cawthon (1981) Dhadphale, Ellison and Griffin (1983) and Acuda (1985)
THE FACTORS CONTRIBUTING TO MENTAL DISORDERS AMONG THE REFUGEES

This study has not been able to come out clearly with a theory of the causes of mental health problems among the Burundi refugees living in Tanzania because of 3 main reasons.

1. There are no other studies showing the epidemiology of mental health problems in Tanzania. This makes it difficult to assess the importance of prevalence rates obtained from the control.

2. Both the prevalence rates among the refugees and the control were higher than the findings of community studies done elsewhere in East Africa.

3. The economic situation in Tanzania just before and during the time of this study could have contributed to the high prevalence rates in both groups.
Now then, if the high prevalence rates among the two groups could be partly due to unknown reasons, why is it that the refugee rates are higher than that of host population? Is there an additional stress arising from the refugee status?

Many studies indicate correlations between forced emigration and mental illness, (Eitinger 1959, Bennett and Assael 1970 and Muhangi 1978, and Rahe et al 1978). The factors which could be postulated as contributing to the development of mental illness in the refugees are as follows:

i. Refugee status per se

ii. Change of environment

iii. Culture differences.

These three factors acting together or individually can lead to psychological imbalance which can manifest in various ways.

For the Burundi refugees, being a refugee was a forced situation. Fleeing was the only alternative to death, that is why the majority of them gave the reasons for
leaving their native land as "political" (56.7%). One would have expected these people to feel happy and relieved because they are now out of danger. Instead they are still having low self esteem which is expressed in their perceptions of present and future life. For these people being a refugee is a sign of helplessness and failure as far as their social and political status is concerned.

Muhangi (1978) attributed high incidence of psychoneuroses among the Ugandan refugees to the refugee status.

The change of environment could amount to loss of complex object relationships. Some of these people had lost their homes, farms, contact with their family members and their familiar surroundings; i.e. the hills and the evergreen scenery of coffee and banana plantations.

The change of culture could have contributed to their negative perceptions of life. The great majority of refugees were not happy with
the idea of making their women pay the Development Tax (Levy) popularly known as ("kodi ya maendeleo").

The educational system was not accepted by many refugees. They expressed wishes of wanting their children to study in Kihutu and French because they are still identifying with their native country.

It is unfortunate that studies on African refugees show that the refugee status has a negative effect on their psychological well being, while some other immigrants e.g. the Jews, used the facilities available in their host countries for their successful adaptation and assimilation.

On the whole, this study has found it difficult to substantiate the specific roles played by the postulated factors in the production of mental health problems among the Burundi refugees living in Tanzania. Other studies, designed to study the effect of the individual factors are necessary for the future clarification of this problem.
Recommendations:

The findings of this study have suggested that there is a problem as far as the mental health of this particular group of refugees are concerned. Now the next step is to find out the measures which can solve the problem for them and for the other groups of refugees living in other settlements in Tanzania and elsewhere.

These measures can be grouped into 3.

1. The responsibilities of host countries in the promotion of mental health for refugees living in their countries.

2. Responsibilities of the voluntary agency organisations.

3. Responsibilities of the international community.

THE ROLE OF THE HOST COUNTRY (TANZANIA)

The Government of Tanzania is now responsible for the administration and running of the social services in many of the refugee settlements in the
country. The Ministry of Health should try and set up curative and preventive services in all the refugee settlements in the country, as part of the National Mental Health programme.

The Curative Services.

At the time this study was being conducted there was no specialised form of treatment for mental illnesses in the settlement. The mental health services can be integrated within the existing health facilities if only the members of staff are given an orientation on how to detect and treat the commonest types of mental illnesses seen in that area.

Another alternative could be to have a mental health worker stationed at the health centre. His main responsibility would be to give treatment, follow ups to patients and training to the dispensary workers. If he is given a motor cycle he could run mobile clinics in the peripheral dispensaries.

Counselling services could be offered by church workers, teachers, and the community development workers if they are given the basic training through seminars.
The role of local healers should not be ignored. However these people need to be reminded of the limits of their resources. Collaborative services could be established for the good of the society.

The Ministry should look for possible ways of providing a continuous supply of the essential or basic psychotropic drugs. The present essential drugs system run by U.N.I.C.E.F. is not adequate. They supply a tin of 100 tablets of 25 mg of Largactil each month. Given the number of psychotics this amount is far from being adequate. In a remote area like this, injectable chlorpromazine is necessary for the treatment of acutely disturbed patients. The large number of depressive illnesses, a good supply of antidepressants is desirable. The cheap preparations like Imipramine and Amitryptiline should be available in the same amounts as that given to the district hospitals which are serving almost the same number of patients as those attending the health centre.

It is also recommended that if possible, Fluphenazine decanoate (moderate) injections should be available in the health centre and dispensaries for chronic cases of schizophrenia.
The Preventive Services:

The Ministry of Health should set up community mental health services in the settlements.

This could be done by the public health nurses, church workers, priests, village party leaders and the community development workers. These people need to be trained through seminars on the community problems found in the settlements. Then they should be asked to participate in designing the mental education programmes for their respective settlements.

The public health nurses need to be alerted on the high rates of malaria and hookworm infestations as the causes of organic psychoses and severe anaemia in the settlement. They should encourage building of proper pit latrines, clearing the compounds and wearing shoes.

The Role of Voluntary Agency Organization:

The Burundi refugees settlements in Tanzania have been run by the Tanganyika Christian Refugee Services and all the help from other agencies has been channelled through this organization.
Most of these agencies have concentrated their efforts on providing blankets, shelter and food. None of these organizations have shown interest in promoting mental health services for refugees. These agencies should evaluate the psychosocial needs of refugees and look for ways they can participate actively. I would suggest that the best way these agencies could participate in the promotion of mental health of refugees is to provide funds for training seminars, assist in drug supply and provide motorcycles and bicycles for the community mental health workers.

The International Community

The international community should try to ensure the implementation of the Declaration of Human Rights. Muhangi (1978) commented that this declaration was only in paper as far as most African countries are concerned. He recommended that a way must be found to educate the defaulting African countries that stable national government, that changes smoothly are in everyone's interest. The only lasting solution to the refugee problem in African countries is to create stable individual
governments. This can be achieved in two ways.

1. Through national unity and respect of democracy. It should be remembered that among the roots of the refugee problems in Africa are tribalism and religious conflicts. It is hard for any one country to eradicate tribalism and establish national unity, in another country. But if we made it a duty and a responsibility for each member of the OAU, to not interfere or reinforce tribalistic uprising in other African countries, we might be able to rescue our continent from impending civil wars and disunity.

2. External agents should stop interfering with the internal affairs of the poor countries. The policy of the superpowers of extending their spheres of influence in Africa at the expense of causing national disruptions should be condemned. All the same, it is the duty of the O.A.U. to reinforce the policy of non-interference in our continent if we really need a long lasting peace.

The superpowers should be persuaded to divert the help they are giving to warring factions to a better use, e.g. for promotion of health services and
increasing food production in developing countries. Indeed we need more food and medicines rather than guns and military vehicles.

**Future Areas of Research:**

The interpretations of the results of this study have been difficult because of lack of data on the epidemiology of mental health problems in the host country. This has prompted the need of further studies as suggested below.

1. Epidemiological studies for the refugee settlements and the host country.

2. Studies of mental health problems of the arriving refugees.

3. Follow up studies of mental health problems of refugees for duration of time beginning at the time of arrival in order to assess the relationship between the appearance of special disorders and duration of stay in exile.

4. Controlled study on the effects of refugee status on the mental health of adolescents and refugee children in different types of settlements.
5. There is a need to replicate the study done by Chissana and Celentano (1985), which studied the Depressive symptomatology among Namibian adolescents refugees, to find out if there is any difference in the Mental Health of the Urban settled and the rural settled adolescents.
CHAPTER FIVE

Appendix One shows the map of the layout of Ulyankulu settlement.

The Health Centre which is serving the settlement is situated along road number 10 as marked by the red arrow.
APPENDIX II.

THE QUESTIONNAIRE:

PART ONE:

NAME.............................. DATE..............................

HOSPITAL NO. ............ SERIAL NO. ......................

1. Age of respondent in Years

2. Sex 1 - Male
   2. Female

3. Marital Status
   1. - Single
   2. - Married
   3. - Separated/Divorced
   4. - Widowed

4. Children/Dependants (how many)

5. Education - the highest class
   or grade completed (years)

6. University Education
   1. - Yes
   2. - No

7. Occupation
   1. Working
   2. Not working
   3. Housewife
   4. Student
PART III

WHO "CORE" SCREENING INSTRUMENT.

1. How often do you have a drink containing alcohol?
   0-NEVER 1-MONTHLY OR LESS 2. TWO TO FOUR TIMES A MONTH
   3-TWO TO THREE TIMES A WEEK 4. FOUR OR MORE TIMES
   A WEEK

2. How many drinks contain alcohol do you have on a
   typical day when you are drinking?
   0-1 or 2. 1-3 or 4 2-5 or 6 3-7 to 9 4-10 or more

3. How often do you have six or more drinks on one
   occasion?
   0-NEVER 1-LESS THAN MONTHLY 2-MONTHLY 3-WEEKLY
   4-DAILY OR ALMOST DAILY

4. How often during the last year have you found it
difficult to get the thought of alcohol out of
   your mind?
   0-NEVER 1-LESS THAN MONTHLY 2-MONTHLY 3-WEEKLY
   4-DAILY OR ALMOST DAILY

5. How often during the last year have you found that
   you were not able to stop drinking once you had
   started?
   0-NEVER 1-LESS THAN MONTHLY 2-MONTHLY 3-WEEKLY
   4-ALMOST DAILY OR DAILY

6. How often during the last year have you been
   unable to remember what happened the night
   before because you had been drinking?
   0-NEVER 1-LESS THAN MONTHLY 2-MONTHLY 3-WEEKLY
   4-DAILY OR ALMOST DAILY.
19. Do you have uncomfortable feelings in your stomach?

20. Are you easily tired

21. Case?

B. PSYCHOTIC SCREENING QUESTIONS

22. Do you feel that somebody has been trying to harm you in some way?

23. Are you a much more important than most people think?

24. Have you noticed any interference or anything else unusual with your thinking?

25. Do you ever hear voices without knowing where they come from, or which other people cannot hear?

26. Have you ever had fits, concussions, or falls to the ground, with movements or arms and legs, biting of tongue or loss of consciousness?