

**AN INVESTIGATION INTO FACTORS INFLUENCING  
THE RATE OF READMISSIONS OF SCHIZOPHRENIC  
PATIENTS INTO THE AMANUEL PSYCHIATRIC  
HOSPITAL, ETHIOPIA.**

**By**

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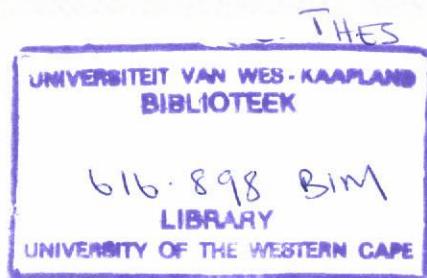
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**Key words**

Schizophrenia

Relapse

Readmission

Influencing factors

Psychiatric services

Care

Family

Stigma

Amanuel Hospital

Ethiopia.



## **Abstract**

The problem of recurrent readmission of schizophrenic patients into the hospital has an impact on the service provision to all patients. Those frequently admitted patients usually occupy most beds and also utilize the limited hospital resources and time of the professionals. This makes it difficult to provide quality service to other psychiatric patients.

The aim of the study was to ascertain the factors associated with recurrent in-patient admissions. The research was conducted at the Amanuel Psychiatric Hospital, Ethiopia. The biopsychosocial model was used as conceptual framework of the study, which represents a holistic approach emphasizing treatment, rehabilitation and prevention of the relapse of schizophrenic patients.

The research employed quantitative survey methods and focus group interviews. The instruments used for data collection was structured interviews and a questionnaire for schizophrenic patients and health professionals respectively and an interview guide for focus group interviews. Samples of 43 schizophrenic patients and 20 health professionals were selected using random sampling methods, and 14 care-givers were selected using a purposive sampling method.

The quantitative data was analyzed using the SPSS program and the data from the focus group interviews was analyzed by generating themes. The findings obtained from this triangulated study has shown that the modifiable factors i.e. medication non-compliance, poor after-care services, poor socio-economic conditions, khat and alcohol abuse, were mainly associated with frequent readmissions of schizophrenic patients. Side effects of the drugs, lack of enough food to tolerate the unwanted effect of the drugs and negative attitudes to the treatment, were the reasons given for the medication non-compliance. The absence of continuity of care and support, lack of community psychiatric services and rehabilitation programs were mentioned as poor after-care services. Lack of money for food, transport and medication as well as stigmatization, rejection and abuse were the main socio-economic problems of the patients. The problems of khat and alcohol abuse were frequently mentioned by the focus group informants as common. More male patients tended to be readmitted than female patients. More than 90% of the patients' themselves and their caregivers did not know the diagnosis of the patient.

Community psychiatric services and psychosocial rehabilitation programs as well as family psycho-education and support systems should be promoted to reduce the risk of rehospitalization. Although the findings of this study is not representative due to the small sample size, it provides a starting point about the problems associated with schizophrenic readmissions and it also serve as a basis for further studies and for the development of an appropriate model for community psychiatric care and services.

I declare that “**An investigation into factors influencing the rate of readmission of schizophrenic patients into the Amanuel Psychiatric Hospital Ethiopia**” is my own work and that all the sources used or quoted have been indicated and acknowledged by means of complete references.

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Signature \_\_\_\_\_

Date \_\_\_\_\_

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## **Definitions and abbreviations of terms**

Relapse	is the emergence of a florid episode of psychotic symptoms in a person previously in a state of stable remission whether it required readmission or not.
Rehospitalization	is repeated readmissions of schizophrenic patients into the Psychiatric Hospital.
Frequent readmission	refers to a schizophrenic patient who had been hospitalized for two or more times in the previous twelve months.
Revolving door	schizophrenic patients who experiences recurrent inpatient Admission.
Delusion	is a false belief based on incorrect inference an about internal reality, and not be consistent with the patient's intelligence and cultural background it can not be corrected by reasoning.
Hallucination	is a false perception experienced without the presence of an external stimulus.
CT	Computerized Topography
DSM IV	Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition
FGD	Focus group discussion

FGI

Focus group interview

PSR

Psychosocial rehabilitation

SPSS

Statistical Package For the Social Sciences

WHO

World Health Organization



## **CHAPTER 1: Introduction**

### **1.1 Introduction**

This chapter presents the background to the study, brief information about the study area, statement of the problem, and the rationale of the study. It also includes the main research question, the aims of the research which centers on the factors influencing the rate of schizophrenic readmissions into the Amanuel Psychiatric Hospital. The first objective is to identify the factors that contribute to the rate of schizophrenic readmissions, and the second objective is to assess the psychiatric services given to the schizophrenic sufferers in improving the quality of their lives. The third objective of the study is to provide operational recommendations for the development of a program for those recidivists so as to address the problem of readmissions.

### **1.2 Background to the study**

Schizophrenia is a major mental disorder, of which there are common factors, which exacerbates the illness, and factors which cause remission of the illness. Remarkable change is taking place in the development of new effective anti-psychotic drugs to reduce the length of stay of schizophrenic patients in the hospital. Hospital care is replaced by community care and treatment. In spite of all these changes and the use of effective anti-psychotic drugs by the patients, the rate of schizophrenic relapse and readmissions remain high due to the recurring nature of the illness. This makes the management of schizophrenic patients challenging and complicated. Many efforts made in this regard to

date have not addressed the question of relapse and readmissions completely (Hertz & Melville, 1980; World Health Organization, 2001).

The nature of schizophrenic disorders can be easily exacerbated by environmental factors. This increased the attention of many researchers to develop an interest in the area of environmental factors, which may influence the re-emergence of symptoms such as delusion, hallucination and behavioral disturbances. The onset of these florid symptoms are often preceded by significant change in the patient's environment. A survey conducted in China revealed that environmental alteration could precipitate schizophrenic relapse (Wrong-min, 1995). Studies conducted on the families of schizophrenic patients suggested that strong emotion expressed by the family members, contribute to the relapse of the patient (Carr, 2001; Kalafi & Torabi, 1996). This idea is supported by other studies that found that family intervention and other interpersonal psychosocial strategies were effective in assisting the schizophrenic patient to cope with the milieu (Falloon, 1992). The study concluded that the quality of life of schizophrenic clients and the prognosis for avoiding relapse are enhanced by a supportive, comfortable and familiar environment.

Several studies that have been conducted in some parts of the world also suggested that there is strong association between substance abuse and readmission (Gillis, Sandler, Jakoet, & Elk, 1986). Lack of a social support system for schizophrenic sufferers result in repeated episodes of relapse and rehospitalization (Beebe, 2002).

The high relapse rate has a destructive and deteriorating effect on the sufferers, which cause tragic and numerous losses to the patient and their families. Studies on the outcomes of relapse indicate that, as the individual response to treatment tend to decrease

per relapse, the disabling effect on their abilities and social functioning increases (Giddes, 2000). Developing insight into, and coping with the situation in the community, becomes more difficult. As a result the patients end up back in the hospital and the phenomenon of the revolving door continue to occur.

The impact of schizophrenic care on individuals, families and community are very large. On families it ranges from economic difficulties to emotional reaction to illness, disruption of the household and deprivation of social activities. The cost and recurrence of the illness may cause unexpected disintegration of family life. The impacts on communities are in terms of the lowered productivity (WHO, 2001).

In developed countries, a report on the global burden of disease has indicated that the mental and neurological disorders account for 30.8% of all years lived with disability. In Africa, it causes for 17.6% of all years lived with disability. The figure gives a lower disability rate compared to the developed countries (WHO, 2001). Some argue that the burden of care for schizophrenic patients is less in developing countries due to strong family and social support system. On the contrary, a study conducted in Africa and China indicated that family and social support are observed only during the first episodes of the illness, but as the relapse continue to occur, family and social support would be replaced by rejection and avoidance (Stockman, 1994). Other similar studies have also indicated that family and social rejection is higher in developing nations due to the misconceptions and beliefs about the cause of mental illness.

The researcher has observed that a significant number of schizophrenic patients are frequently rehospitalised at the Amanuel Psychiatric Hospital even within a few days of

discharge. Some of those readmitted to the hospital were managed with the same treatment they had been taking before admission. The problem of “revolving door” style of treatment makes the outcomes unsatisfactory and disappointing to the patients and service providers. Moreover, it creates considerable pressure and anxiety for the professionals. The impetus for this study come from an interest in finding out which factors are mainly associated with the relapse of the illness following a patients’ discharge.

Short hospitalization has brought dissatisfaction to the families of the patients. The families insist that their relatives should stay in the hospital for longer periods because they fear relapses due to early discharge. In most cases patients are discharged without taking the interest of the families/ caregivers into consideration. There are two main reasons given for not keeping the patient in hospital longer, i.e. shortage of beds, and the deinstitutionalization ideology. The program of deinstitutionalization has been implemented in developed countries since the early 1970s, in an attempt at avoiding the disabling effect of institutional care and its impact on the economic running of hospitals. Although deinstitutionalization is slowly being implemented in developing countries, the impact on the patients and their families is more severe than in developed countries, because of the absence of community psychiatric services to provide care for those sufferers (Blanche, 1999).

The aim of this study is to ascertain the factors that influence the rate of readmission in schizophrenic patients at Amanuel Psychiatric Hospital and to find out ways of reducing the incidence rate of relapse and readmission. Finally, it is hoped that the outcome of the study may be used by other researchers for further studies.

### **1.3 About the study area.**

Ethiopia is a developing country, situated in eastern Africa, occupying a total area of 1.1 million sq. kilometers. It shares borders with Sudan, Kenya, Somalia, Djibouti and Eritrea. The current population of Ethiopia is about 65 million. The population density average is .49persq.km. Most of the population are rural dwellers living on subsistence farming (Alem, 1999; Shibre, 2002). There is great cultural and ethnic diversity in the country. More than 80 dialects are spoken and Amharic is the official language of the federal state and it has its own unique alphabet. Christianity and Islam are the main religions in the country.

As in developing countries, the main health problem of Ethiopia is communicable diseases and malnutrition. Life expectancy at birth was 49.7 for males and 52.4 years for females. The overall health care coverage of Ethiopia was estimated to be 45% (Ministry of Health, 1999).

Mental health services are a recent development in the country. Not much is known about the prevalence of mental illness or about the impact of traditional or modern mental health care. Most people are accustomed to the use of traditional healing places for their health problems: holy water, Christian church, possession cults, priests, sheiks, herbalist, etc. These traditional healers are still attending to a great number of people suffering from all kinds of illness. For instance, almost all mentally ill patients are first taken to those healing places, such as Woliso (spiritual healing place; located 150km South of Addis Ababa), Entoto Merriam church, Ourael church, etc. which are common places for providing healing care for sufferers.

Amanuel Psychiatric Hospital was established fifty years ago. It was initially used for other purposes. Later on it was used as a mental hospital. For a long period of time the hospital was known as a dumping place for mentally ill patients. The number of beds were very few but gradually increased to 360 beds. Most beds were occupied with chronically mentally ill patients, especially those who do not have known relatives and addresses. Until very recently the hospital activities were run by expatriate psychiatrists and general nurses (Alem, 1997).

During the last few years the mental health services have shown some changes, due to the establishment of a psychiatric nursing school in 1987 with the collaboration of the Ministry of Health and the World Health Organization and the training of psychiatric doctors abroad. Currently there are 45 psychiatric clinics in different regions of the country. All of them are run by the psychiatric nurses. There are nine (9) psychiatrists in the country. All of them work in Addis Ababa, capital city of Ethiopia (Shibre, 2002).

Although there has been an improvement, mental health care is still poorly provided for in Ethiopia. The country has only one psychiatric hospital to provide for 65 million people. The hospital is located in the capital city, Addis Ababa. Its boundaries are great wall of the Amanuel church, the overcrowded grain market and the disorganized built old residences against the wall of the hospital. The place is known for its noisiness and inconveniences as a treatment place for mentally ill people. Most people have to travel very long distances to get access to the services. The hospital has 360 beds, of which 100 beds are for female and the rest for male patients. Services rendered by the hospital are outpatient, inpatient, forensic, training of psychiatric nurses and supervision of the community psychiatric clinics in the country. The capacity of the hospital to provide

intensive care is limited by shortage of staff and facilities. The insufficient number of professionals and facilities has made it difficult to use appropriate evidence-based treatment. Patients have to wait a long time to get the limited professional help. Those who require admission may have to wait for more than four weeks to get a bed. As the number of patients increased over time, the number of hospital staff and beds remained unchanged. The mental health care delivery system has historically been unable to respond quantitatively or qualitatively to the mental health needs of the people. This indicates that there has been low attention paid to the field.

#### **1.4 Rationale**

The results of this study may highlight certain issues that have not been brought to the fore and help to find ways through which the major stakeholders may contribute towards the reduction of relapse and readmission rate by improving the situation. Tentative recommendations based on the outcomes of the study may assist policy-makers and planners to design and implement appropriate strategies to improve the psychiatric services in the country.

Finally, the results of this study could enhance the greater understanding of health care providers to provide appropriate psychosocial rehabilitation to both the patients and the families of schizophrenic patients on a regular basis and create awareness through public education within the broader community to minimize the stigma, which can exacerbate the illness of schizophrenic patients.

## **1.5 Statement of the problem**

Readmission of schizophrenic patients into the Amanuel Psychiatric Hospital have been readily increasing in recent years and present considerable health care problems and pose substantial pressure on the hospital. Most of the acute hospital beds are inappropriately occupied by chronic schizophrenic patients due to the high rate of relapse. As a result, these beds are unavailable to acutely mentally ill patients. Those often-rehospitalized schizophrenic patients can also have an effect on the quality of services offered to others. It creates serious disruption to, and diversion of, staff time and attention. It also adversely affects the ward environment for other patients. The number of patients, and severity of their illnesses are disproportionate to the number of staff and facilities. This usually leads the hospital to focus on pharmacological intervention and behavioral therapies are very limited.

The recurrent relapse of the illness has severe psychosocial disabling effects on the patients and the members of the patient's family. They often affect the caring relatives emotionally, socially and economically. The situation is worse when the caregiver is too old and helpless to manage the problems of their mentally ill relatives. A study conducted by Martyns-yellowe (1992) in Nigeria, found that the burden of care for schizophrenic patients are more significant in rural families than urban families. The effects of the burden of care on the families are described in terms of social and leisure activities and financial problems. Despite this burden the relatives receive little support from the professionals engaged in treating the patients. In Ethiopia there is no social security benefit or any other support system for these sufferers.

Although the problems are so common due to the growing burden of mental illness, no studies have been conducted which can assist to solve the problem by finding out the concomitant factors influencing the high rate of readmission of schizophrenic patients.

### **1.6 Research question**

The research questions is: What are the factors influencing the rates of schizophrenic readmissions into the Amanuel psychiatric Hospital?

### **1.7 The aim of the research**

To investigate the factors influencing the rates of schizophrenic readmissions into the Amanuel Psychiatric Hospital.

### **1.8 Objectives of the study**

1. To identify factors contributing to the rate of schizophrenic readmissions into the

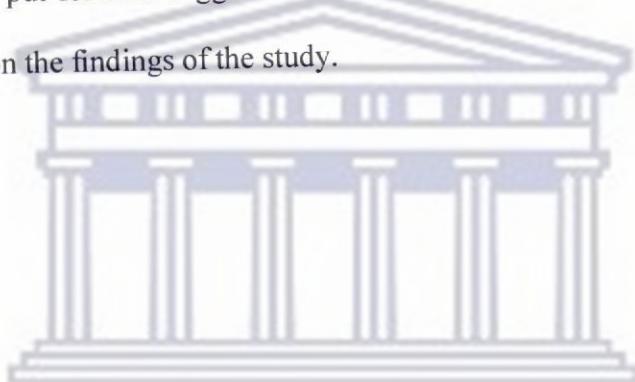
Amanuel Psychiatric Hospital.

2. To assess the psychiatric services given to schizophrenic patients at Amanuel

Psychiatric Hospital.

The thesis consists of seven chapters. The first chapter is the introduction, which provide a summary of the study, its aims, the significance of the study and background information. The second chapter is the literature review, and provides the global view of schizophrenia. Previous research findings on the issues of this topic are reviewed in detail, which could allow for a deeper understanding of the problem of schizophrenic

relapse and readmission. The third chapter provides the conceptual framework. It discusses the biopsychosocial model of health and illness, and the etiology of schizophrenia. Chapter four gives detailed information about the methodology- the sample selection, instruments used in the data collection and the procedure for analyzing and interpreting the data. Presentation of the findings of the study is reported in chapter five. Tables and figures are used to summarize and categorize the values obtained. Chapter six provides discussions of the results. The concluding chapter, chapter seven, summarizes the findings, put forward suggestions for further research and make some recommendations based on the findings of the study.



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## **CHAPTER 2: Literature review**

### **2.1 Introduction**

This chapter provides the literature review related to the study. It refers to relevant issues pertaining to the factors influencing the rate of schizophrenic readmissions. The experiences of other countries have also been reviewed regarding the management and rate of schizophrenic readmissions. At the end of the chapter, the findings of the literature review are summarized in order to compare them with the findings of the present study.

### **2.2. Review of schizophrenic disorders**

Schizophrenia is a psychotic disorder (a group of disorders), where a person's ability to recognize reality, and where his/her emotional responses, thinking processes, judgment and ability to communicate deteriorate so much that his/her functioning is severely impaired (Birchwood & Jackson, 2001).

The term 'schizophrenia' comes from two Greek words, i.e. "split mind". It was coined around 1908, by the Swiss doctor, Eugen Bleuler, to describe the splitting part of mental functions that are regarded as the central characteristic of schizophrenia. Most people confused the splitting part of mental functioning with the split personality of people with multiple personality disorders. The name schizophrenia has been in use for approximately 100 years, and emerged from the work of Kraepelin and Bleuler. However, Kraepelin was the first who described schizophrenia as *dementia praecox* (i.e. premature deterioration). He stated that patients with dementia praecox were usually experiencing a long- term period of deterioration. Bleuler also explained the '4A'S' characterized by

schizophrenia, i.e. abnormal association, abnormal affect, autism and ambivalence (Kaplan & Sadock, 1998).

Kraepeline and Bleuler had the same views about the biological origin of schizophrenia, though they disagreed with respect to the onset of the illness and the outcomes of schizophrenia. Kraepeline believed that the onset of schizophrenia was at adolescence, incurable and followed by gradual deterioration, whereas Bleuler argued that, while it was a chronic illness; recovery was possible (Sattler, Shabatay & Kramer, 1998). However, some questioned the existence of schizophrenia. Szasz(1979) argued that, beyond the mind of psychiatrists, schizophrenia did not exist. It is a strategy to live in an insane world.

The predominant clinical features of acute schizophrenia are delusions, hallucinations and the interference of thinking, which are described as positive symptoms. There are certain disturbances in the areas of affect and the form of thought as well as functioning which are also present. Gradual deterioration takes place due to the effect of disturbances in the psychological processes or phatognomonic symptoms (APA, 1998). The main features of chronic schizophrenia are apathy, lack of drive, slowness, social withdrawal, poverty of speech and emotional bluntness/flatness, which are described as negative symptoms. There are impairments in the areas of functioning such as work, social relations and self-care (APA, 1998).

Other symptoms, which are common in other psychiatric disorders such as depression, anxiety, agitation and suicidal behaviour, may also be present in schizophrenia. Most schizophrenics, if untreated, gradually withdraw from interactions with other people, and

lose their ability to take care of personal needs and grooming. The schizophrenic disorders are a major social tragedy because of the large number of person affected and impaired (Gelder, Gath, & Mayou, 1983, Kaplan, Sadock & Crebb, 1994; Lidow, 2000).

The course of schizophrenia can be divided into three phases. In the first acute phase, the patient has an overt loss of contact with reality that requires intervention and treatment. In the second or stabilization phase, the initial psychotic symptoms have been brought under control but the patients are at risk of relapse if treatment is interrupted. In the third or maintenance phase, the patients are relatively stable and can be kept indefinitely on antipsychotic medication. However, even third phase relapses are not unusual and patients do not always return to full functioning (Maguire, 2002).

Recently some psychiatrists began to use a classification of schizophrenia based on two main types. People with type positive schizophrenia or those who, have a rapid acute onset of symptoms and tend to respond well to drugs. They also tend to suffer more from the positive symptoms such as delusions and hallucinations. People with type negative schizophrenia are usually described as poorly adjusted before their schizophrenia slowly overtakes them. They have predominantly negative symptoms, such as withdrawal from others and psychomotor retardation (slow in mental and physical activities) (Kaplan & Sadock, 1998).

Studies have shown that the amount of social stimulation has a considerable effect on the clinical features of the patient. Negative symptoms are closely related to the patient's poor environmental stimulation, while good environmental stimulation precipitate positive symptoms. The social condition of the patient as an important factor in relapse or

recovery was strongly supported by further surveys conducted at different hospitals. These surveys concluded that an under-stimulating hospital environment is associated with the worsening condition of the patient. On the other hand, an over-stimulating environment can precipitate florid symptoms and lead to schizophrenic relapses and readmissions (Gelder, Gath & Mayou, 1988).

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)(4<sup>th</sup> ed.) American Psychiatric Association (1998) classified schizophrenia into five subtypes. These are Paranoid, Disorganized, Catatonic, Undifferentiated and Residual schizophrenia. The feature of Paranoid schizophrenia is the combinations of false beliefs (delusions) and hearing of voices (hallucinations). The delusions of schizophrenics usually involve thoughts of being persecuted or harmed by others, feelings of jealousy or exaggerated opinions of self-importance. Paranoid schizophrenic patients function at higher levels than other subtypes.

Disorganized schizophrenia is characterized by marked disorganized speech, thinking, and behavior on the patients' part coupled with flat and inappropriate emotional responses to a situation. The patient may act silly or withdraw socially to an extreme extent.

Catatonic schizophrenia is characterized by disturbance of movement that may include rigidity, stupor, agitation, bizarre posturing and repetitive imitations of the movements or speech of other people.

Undifferentiated schizophrenia. This type of schizophrenia does not meet the specific criteria for paranoid, disorganized, or catatonic type. They have the characteristic of both

positive and negative symptoms of schizophrenia. Residual schizophrenia is characterized by patients who have had at least one acute schizophrenic episode, but do not presently have strong positive psychotic symptoms, such as hallucinations and delusions. They may have negative symptoms, such as withdrawal from others or a mild form of positive symptoms commonly associated with mood disorders (APA, 1994)

### **2.2.1. Epidemiology**

Schizophrenia affects about 24 million people worldwide and more than 90% of the untreated sufferers live in developing countries. A number of studies indicated that about one percent of the population is affected with schizophrenic illness regardless of race, social class, level of education, or cultural influences (WHO, 2002).

It is estimated that people who suffer from schizophrenia fill 50% of all hospital beds. However the outcomes may vary from culture to culture depending on the family support of the patient. Although the symptoms of schizophrenia may emerge at any point in life, most of the patients develop the illness in their late teens or early twenties. The male to female ratio in adults is about 1.2: 1. Although, it is uncommon for schizophrenia to be diagnosed in the preadolescent children, patients as young as five or six have been reported (APA, 1994).

In the United States of America, the lifetime prevalence of schizophrenia ranges from 0.6% to 1.9% of the population. Unemployment rates can reach 70-80% in severe cases, and it is estimated that schizophrenic patients constitute 10% of the totally and permanently disabled. About one-third of homeless single adults suffer largely from schizophrenia (American Psychiatric Association, 1994). A recent survey in Israel

showed a prevalence of 0.07%. In urban and rural India the range point prevalence for schizophrenia was 0.25-0.59% and 0.22-0.28% respectively. Similarly, urban and rural China gave a prevalence of 0.14 - 0.56% and 0.08 - 0.46% respectively Kebede & Alem, 1999). In the UK, Falloon (1992) found an annual incidence of 7.4 persons per 100,000 of the population admitted to hospital with schizophrenic disorders. However, a similar study by Falloon (1984) found an incidence of 0.75 per 100,000 of the population.

In Africa, schizophrenia is the most common psychiatric disorder, and a report from the WHO (1999) indicated that mental illnesses, including schizophrenia, affected 3% of the population. In Ethiopia, there is little recent epidemiological data available on the prevalence of schizophrenia. A survey conducted in Addis Ababa, by Kebede and Alem (1999) found a lifetime and one-month prevalence schizophrenia of 0.4% and 0.3% respectively.

The onset of the illness can be insidious or acute and mostly occurs during late adolescence. Although the course of the illness varies from individual to individual, it is generally agreed that most patients remain chronic and the outcome is worse than that of most psychiatric disorders. Studies conducted in this area reported that one-third of the cases recover fully, but two-thirds remain chronic (Kaplan & Sadock, 1994).

It is reported in Kaplan and Sadock(1994) that the successive studies conducted on schizophrenic patients indicated that the prognosis of schizophrenia is improving since the beginning of the century. This shows that after the introduction of modern treatment, a significant change has been observed in the prognosis of schizophrenic patients.

## **2.3 Trends in the management of schizophrenia**

Many studies have found that the combination of modern psychopharmacotherapy and psychosocial treatment had better outcomes than drug treatment alone (Kaplan, Sadock & Crebb, 1994). The management of schizophrenia varies greatly between developed and developing nations and even between treatment centers in the same region. It varies from a range akin to prison to integrated high technological multidisciplinary care (Stockman, 1994).

### **2.3.1 The developed world**

In the developed world, integrated multidisciplinary hospital care and well-organized community-based psychiatric services for patients with schizophrenia are evident. Patients receiving pharmacology and regular psychosocial treatment, are found to be relatively stable in terms of clinical and social measures within two years. Prompt provision centered on combined pharmacotherapy and psychosocial treatment, integrated early detection and intervention, intensive acute care, long-term clinical management and continued monitoring of those at risk have promising outcomes (Wilkinson, Piccinelli, Falloon, Krekorian & Maclees, 1995).

Psychiatric services are mainly delivered by multidisciplinary teams, which consist of psychiatric nurses, psychologists, occupational therapists, recreational therapists, social workers and psychiatrists. At the district level, primary health-care teams support them. This is an integrated approach aimed at rehabilitating patients and improving the quality of life for patients with disabilities and their families. The therapeutic style is used to educate patients and carers and to mobilize community resources in treatment. The main

focus is on the prevention of further episodes of mental illness and improving social functioning (Wilkinson *et al.*, 1995).

Several studies suggest that family psycho-education is effective in the prevention of relapse in schizophrenia. The common elements in such an approach include social support, detailed education on clinical aspects, direct guidance and training in coping skills (Mcfarlane, Lukens, Link, Dushay, Deakins, Newmark, Dunne, Horen, & Toran, 1995). Family intervention programmes to instruct relatives in management and coping skills are often effective in reducing schizophrenic relapse and readmission (Tarrier, 1991). The provision of ongoing support, valid information and appropriate therapies or rehabilitation strategies lead to comprehensive care for schizophrenia. It significantly reduces readmission rates and even reduces time spent in hospital by nearly half a percent (NHS, 2000(a)).

In psychiatry, the management of schizophrenia can be challenging. In order to provide effective management to sufferers, primary health-care professionals require a good knowledge of psychiatric medication and their side effects. They also need to ensure that the patient has a long-term follow up and psychosocial program. The family physician must have the support of psychiatrists and mental health professionals in the management of chronic residual symptoms, relapse and complications, such as tardive dyskinesia, depression and substance abuse (Towes, Lockyer, Addington, McDougall, Ward & Simpson, 1996).

The treatment of schizophrenia typically aims to assist in functional, vocational, and interpersonal rehabilitation. It also reduces symptoms, prevents relapses and generally

helps the sufferers to cope with relative effectiveness and to make them more independent (APA, 1997, cited in Beel, 1997).

In conclusion, comprehensive programs for the management of schizophrenia have made prominent advances in psychosocial treatment over the past few decades, particularly in the area of family intervention. The involvement of families in the integrated management program was found to have positive effects on the course of the illness.

### **2.3.2. The developing world**

In the developing world, Psychiatry is not as well developed as other health science fields. A lack of resources and knowledge are the underlying factors for this underdevelopment. Psychiatric services for the assessment and treatment of psychiatric patients are very scarce; hence it is not worth making a global statement about the management of psychiatric patients. Although there are small numbers of severely ill psychiatric patients who may have access to psychiatric facilities, the management of the patient is mostly limited to drug treatment alone (Stockman, 1994).

In Africa, the management of mental illnesses in general, and schizophrenia in particular, is partially determined by culture. The structure of the communities and families plays an essential role in the management of psychiatric disorders. Informal traditional healers are popular and common, while modern drugs and psychological treatment services are usually unavailable. Many mentally ill people seek assistance at traditional healing places. Most common mental disorders are considered as social and spiritual problems and the treatment option is consulting those traditional healing sites (Patel, 1996, Stockman, 1994). In a study conducted in Nigeria and Zimbabwe on psychiatric

interview techniques and the judgment of care providers, over 55% of them explained that the nature of mental disorder is not restricted to physical or emotional illness, but also to social and spiritual ill-health (Patel, 1996). Social support and respect is given at the initial phase of the illness, and a lot of things are done to heal the patient, but if s/he does not improve, s/he is rejected or marginalized both by the family and communities (Stockman, 1994).

In Ethiopia, as in most other African countries, the cause of mental illness is regarded as a supernaturally determined, and the management or the healing process for mentally ill people predominantly depends on traditional means, such as holy water, herbal remedies, witchcraft and other traditional healing methods. It is not uncommon for psychiatric patients to use psychiatric facilities as the last resort. Sufferers may be restrained at home or marginalized from the community.

#### **2.4. Trends regarding the readmission of schizophrenic patients**

Most studies conducted regarding the readmission rates of schizophrenic patients emanate from the western world and are very rare in developing countries. As a result, there is very little literature available on readmission rates in developing countries.

In the United States of America, sufferers of schizophrenia occupy more than half of all psychiatric hospital beds (Kaplan & Sadock, 1998). A five-year follow-up study in Scotland after first admission gave a 20% relapse rate per annum, despite the patients taking anti-psychotic drugs (Scottish Schizophrenic Research Group, 1992). Beel (1997) reported that in Australia, schizophrenic patients occupy between 12 to 16% of all hospital beds. In Israel, a four-year assessment period with a sample size of 832 found

about 50% of patients were readmitted once for a short stay, 22% of them had several rehospitalization, and 8% of them were admitted once and stayed as in-patients for almost a year. In some studies the readmission rates has been reported as high as 64%. The findings showed that higher readmission rates was observed among those who live alone than those who live with families (Brown & Birtwistle, 1998; Lerner, Popper & Zilber, 1989).

The hospital readmission rates of schizophrenia in Jamaica were found to be 69 per 100,000 in 1971 and 35 per 100,000 in 1988. The reason given for such a great reduction in readmission rates was the introduction of broad-based community mental health services. The finding was 5 to 6 times lower than the rates of readmissions reported among Afro-Caribbean people living in the United Kingdom (Hickling, 1991).

In South Africa, the readmission rates were found to be nearly 50%, because of substance abuse and concomitant causes of mental illness (Gillis, 1987). A similar earlier study by Gillis, Sandler, Jakoet & Elk, (1986), using the longitudinal follow-up method, showed that readmission rates are particularly high among the Coloured (54%) and Black (44%) cohorts. The readmission rate for the White cohort was found to be 29%. The high rates of readmission in the Coloured and Black cohorts were mostly associated with substance abuse of drugs such as cannabis and methaqualone (mandrax), as well as alcohol abuse.

There is some evidence that patients who had high EE (expressed emotion) relatives (Tarrier, Barrowclough, Porceddu & Fitzpatrick, 1994) have higher readmission rates than those patients living with low EE relatives after the same period of discharge. There

is no available data for factors associated with the rates of readmissions for other African countries, including Ethiopia.

#### **2.4.1 Effects of antipsychotic drugs on the readmission of schizophrenic patients**

It has been reported that the more relapses patients have, the poorer their response to drug treatment and their prognosis. Davis and his associates found in 23 controlled studies that 20% of patients taking active drugs relapsed compared with 52% of those taking a placebo. In a comparison of drug compliance, they also noted that those taking oral fluphenazine and those taking intra-muscular fluphenazine had the same result, i.e. the relapse rate was 40% in both study groups by the end of the year. The result for treatment with conventional anti-psychotic drugs was found to be a 30-50 % rate of recidivism in a year (Hertz & Mellville, 1980).

Some studies reported 37% and 55% of rehospitalization rates in year 1 and year 2 respectively, after discharge with conventional anti-psychotic drugs (Conley, Love, Kelly, Pharm & Bartko, 1999). They also noted that the combination of depot neuroleptic and oral medication might reduce the rate of relapse in schizophrenic patients. Schizophrenic patients taking second-generation drugs such as clozapine, risperidone were readmitted 18% more than those receiving conventional drugs. Of the patients taking clozapine, 28% were re-hospitalized in 2 years, while 56% of those receiving conventional antipsychotic therapy were readmitted (Conley *et al.*, 1999). Thus, the second-generation antipsychotic drugs have more protective factors against relapse and readmission than conventional anti-psychotic drugs.

Recent studies have suggested that the risk of relapse in schizophrenia is approximately 3.5% per month and the annual relapse rate is 42%. The rate of medication non-compliance is said to be 7.6% per month and the rate of relapse in patients who become non-compliant has been found to be 11% per month (Csernansky & Schuchart, 2002). In a similar study, it was found that the risk of relapse was increased by 100% in patients that interrupted their drug treatment.

Hospitalization care has proven to be very expensive, amounting to up to two-thirds of the total health care cost (Csernansky & Schuchart, 2002). Second-generation anti-psychotic drugs are not available in most of the developing world, because of their expensiveness. However, a comparative study conducted to determine the cost between conventional and second-generation anti-psychotic drugs, showed that the overall cost for both conventional and second-generation drugs is roughly the same. Although the individual dose of clozapine is more expensive than conventional anti-psychotic drugs, it is more effective in minimizing cost through reducing the use of hospital services as well as the rates of readmissions.

To sum up, good compliance with treatment, a successful transition from inpatient care to outpatient care, the selection of second-generation antipsychotic drugs and family education can successfully prevent relapses and the readmission of schizophrenic patients.

## **2.5 Factors associated with readmissions**

It is evident that frequent re-hospitalization among the ‘revolving door’ patients is becoming a major public problem. ‘Revolving door’ patients are those patients who have

a high frequency of re-hospitalization into mental hospitals. Such repeated hospitalizations create suffering both to the patients and to their families/caregivers.

Although there are numerous studies on the revolving door patients, there has been no consensus among the researchers in explaining the phenomena. Some suggests that re-hospitalizations are the effect of deinstitutionalization, inadequate rehabilitation, poor follow-up care and insufficient community psychiatric services. Other researchers attribute re-hospitalizations to medication non-compliance, substance abuse as well as the demographic and socio-economic characteristics of schizophrenic patients (Haywood, Kravitz, Grossman, Cavanaugh, Davis & Lewis, 1995).

A study by Sullivan, Wells, Morgenstern and Leake, (1995) conducted at two state mental hospitals found that modifiable factors (such as medication non-compliance, family rejection and alcohol abuse) are strongly linked to frequent re-hospitalization. Medication non-compliance is related to poor insight into the illness, the side effect of the medication, use of oral rather than injectable medication, negative attitudes towards the medications both by patient and families and demographic factors (see 2.5.2, page 14). Moreover, some findings associate re-hospitalization with the diagnosis of psychiatric disorder, younger age, co-morbidity or personality disorder, poorer psychosocial adjustment and stressful chronic life events (Vogel & Huguelet, 1997).

It has been noted that as the length of in-patient stay decreased due to the de-institutionalization policy, the number of out-patient visitors were alarmingly increased with chronic mentally ill patients (Sullivan, et al. 1999). Some of these factors are discussed below.

### **2.5.1 De-institutionalization**

The term ‘de-institutionalization’ has been on the public agenda since the beginning of its implementation. Consensus has not been reached in defining the concept, for which there are multiple definitions. Some refer to the term as “...the relocation or the shift of the care for mentally ill persons from long-term care to a more independent environment” (Krieg, 2001). Others define it as “...a shift in the role of government of funding long-term hospital care into an independent living and private funding with some federal support systems, largely in the form of social security disability income and supplementary security income”(Krieg, 2001).

Bachrach (1989:165) has defined the word ‘de-institutionalization’ in a broader way:

*“...the shunning or avoidance of traditional institutional settings, particularly state mental hospitals, for chronic mentally ill individuals, and the current development of community based alternatives for the care of this population. This definition assumes three primary processes: depopulation- the shrinking of state mental hospital censuses through release, transfer, or death; diversion- the deflection of potential institutional admission to community based service settings, and decentralization, the broadening of responsibility for patient care from a single physical discreet service entity to multiple and diverse entities with an attendant fragmentation of authority.” p165*

The goal of de-institutionalization is to reduce the amount of care provision in a centralized institution and increase of the capacity of mental health care services at community level (Bachrach, 1989). For instance, in the United States of America there are some 400,000 formerly institutionalized mentally ill patients living in the community and some 114,000 patients still living in the state mental hospitals. Since de-

institutionalization started, the number of patients in state mental hospitals has decreased from 560,000 in 1955 to 125,000 in 1981. More than 13 mental hospitals were closed down in eight states, a few others are partially operational and some others have been converted to community mental health centers (Bachrach, 1989).

Since the policy of de-institutionalization took effect, most chronic mentally ill patients can only be admitted to state hospitals for a few days or weeks. As a result, a number of them have been moved to a nursing home and/ or board- and care home.

De-institutionalization has resulted in unintended consequences for the mentally ill sufferers and to society, due to a lack of proper planning and insufficient community carers. Many of them experience homelessness and rejection by the community (Krieg, 2001). A study conducted in the USA to determine the impact of de-institutionalization indicated that about 30–50% of the homeless people are mentally ill. Schizophrenic patients engaged in violent behaviour were four times greater than the average person, which put increased pressure on the Medicare and Medicaid budgets, increased the fear of potential danger and crime, and laid the burden of care on the families. The sufferers were exposed to social stigma, neglect, hostility, abuse and poor medical care (Arthur, 1989; Davidson, Stayner, Lambert, Smith & Sledge, 1997; Krieg, 2001).

Shadish Lurigio and Lews (1989) stated that chronic mentally ill patient have impairment of cognitive, social, economic and familial functioning. Their response to anti-psychotic treatment is relatively negative. Hence, the rate of frequent relapses and readmissions with schizophrenic patient is high.

Although de-institutionalization is a global phenomenon, its implementation in developing countries, particularly in Africa, is a slow process. In Ethiopia, there were about 50 chronic mentally ill patients who lived in the hospital for long periods of time at one stage. Currently, a small proportion of those patients still live in the hospital, some have already died, others have been discharged to the community, and a few of them have been transferred to the “Geferssa” institutional center (Geferssa is a center for those chronic mentally ill patients who are rejected by their families or for those who do not have families or caregivers). Those discharged into the community and rejected from being readmitted to long-term care, still continue knocking at the door of the hospital. Most of them can only be readmitted for an average of 6- 8 weeks. It appears that the readmission crisis followed their discharge into the community.

### **2.5.2. Demographic factors**

It has been noted that there are gender differences in the presentation and courses of schizophrenic illness. Demographic variables are statistically significant in predicting readmissions (Zeff, Armstrong, Crandell, & Folen, 1990).

**2.5.2.1 Gender:** The onset of schizophrenia is at younger age in men than in women. Men develop more negative symptoms, show poorer response to treatment and reveal greater non-compliance with treatment than women. Hospital records show that males spend more time in hospital than females (Brown & Birtwistle, 1998).

Hospital treatment records indicate that women with schizophrenia revealed lower levels of substance abuse and anti-social behaviour, as well as better responses to family intervention and occupational functioning (Castel & Murray, 1991). Some linked these differences to unrealistic social and family expectations of male schizophrenic patients. Traditional socialization practices also support females to be more dependent on the family than males. Moreover, there are more psychotic symptoms and relapses in men than women due to lack of medication response, non-compliance and the severity of the nature of the illness(Castel&Murray,1991;Meltzer,Rabinowitz,Lee,Cola,Rangan,Findling & Thomson, 1997; Seeman & Lang, 1990).

**2.5.2.2 Age:** Among the revolving door patients, younger males are often seen as potential risk patients for relapses and readmissions. The prevalence of schizophrenia in the elderly population is believed to be 1%. About 10% of older schizophrenic patients have late onset of symptoms, while in 90% of them the onset of symptoms occurred during the adolescent period. Late onset of schizophrenia is more common in women than in men. Compared to younger patients, older patients have greater response and sensitivity to medication. Result from a study by Zilber, Pooper & Lerner, (1990) indicated that, among patients hospitalized for the first time in their life, age was negatively correlated with probability of readmission but for patients who were not first-timers, age was positively correlated to readmission. Marital status was related to readmission, with being single predictive of more readmissions and a long cumulative stay.

### **2.5.3 Length of stay and quality of after-care.**

**2.5.3.1 Length of stay:** A comprehensive literature review was conducted to determine whether there was an association between length of stay and hospital readmission. In response to the historical transition of psychiatric service from mental hospitals to community care, the length of hospital stay has been reduced to days or weeks as opposed to months or years. It was noted that the shorter the length of hospitalization, the greater the rate of readmission (Appleby, Desai & Lunchin 1993; Mojtabai, Nicholson & Neesmith, 1997). A more recent study used two control groups with the sample (n=77). One group was selected from those who were readmitted within 30 days of being discharged. Another group was randomly selected from those who were not readmitted. The mean length of stay for readmitted patients was reduced from 33.6 days to 9.5 days. The mean length of stay for those who were not readmitted was reduced from 27.5 days to 12.7 days. The result of the finding indicated that the rate of readmission was doubled from 5.3 % (7 patients) to 10.8% (30 patients) over the same period of time. The proportions of patients discharged was significantly increased (Oscar, Lisa, Sridevi, William & Regenold, 2002). Hence it is proved that there is an association between the length of stay and readmissions, meaning that the shorter stay of schizophrenic patients in the hospital the higher rate of readmissions or vice versa.

**2.5.3.2 Quality of after-care:** It is generally understood that poor after-care increases the number of revolving door patients. Many argue that the effectiveness of after-care services is dependent on the cooperation of many agencies and stakeholders (Hadley, Turk, Vasko, & McGurrin, 1997).

In conclusion, a longer length of stay, appropriate discharge planning and follow-up visits, including quality after-care, reduce the rate of readmissions.

#### **2.5.4 Previous admissions**

The literature review reveals that previous admissions are the best predictor of rehospitalization. A diagnosis of psychotic disorder such as schizophrenia, is linked with multiple admissions (Vogel & Huguelet, 1997). However, in the findings of some studies, previous admissions are not statistically significant as a predictor of readmission (Zeff, Armstrong, Crandell & Folen, 1990).

#### **2.5.5 Family environment**

Research has shown that social and environmental factors are significantly associated with relapse and the deterioration of schizophrenia. When the relatives show a high degree of emotional expression, hostility, and dominance the rate of relapse in schizophrenic patients is found to be high. Furthermore, a study conducted by (Carr, 2001) pointed out that the risk of relapse rates in the highly emotional family was significantly reduced when the patient had less contact with such family members.

The concept of pseudo-mutuality, (family centeredness is flexible, but has no stable boundary, while individual perception, communication and identity formation are confused and problematic) and pseudo-hostility (chronic conflict and alienation at a deeper level) revealed that families of schizophrenic patients can play a significant role in increasing the rate of relapse of the illness (Becvar, 2000). Kopelowicz and Lieberman (1998) found that some family members or partners view their schizophrenic patients as

malingering, and/or pretending to be helpless and to seek attention, or simply revealing bad and odd behaviour. This lead to criticism, intrusiveness and over-involvement, and confused communication among family members. This is in turn provoked the psychotic symptoms and increased the rate of readmission.

More recently, recordings of patients' psychological responses have confirmed the adverse effect of highly emotional families: appreciable changes in heart rate and sweat gland activity occurred when schizophrenic patients were in contact with emotional relatives. Leff and Vaughn, cited in Hashemi, (1999) found high relapse rates as a result of the interaction between life events and high expressed emotion in the family. The result showed that a minimal relapse rate is observed when the cohesive forces of the family are strong. Patients who live with unprovocative families, or have a low level of contact with provocative families while taking neuroleptics, have a good prognosis with about a 15% chance of relapse nine months after discharge. Hence schizophrenics are more sensitive to environmental arousal conditions such as hostility, exposure to high expressed emotion (EE) family and relatives.

Many cross-cultural studies have been conducted, both in the developed and developing world, on the value of expressed emotion such as emotional over-involvement, hostility and criticism. The results are fairly consistent in predicting relapse in schizophrenia. This has led to the conclusion that social and cultural factors may play an important role in schizophrenic outcomes. The family's influence on the patient and the type and intensity of family bonds and structures tend to make it difficult for the patient to return to the community and remain in remission. As many schizophrenic patients live with family

members, family interventions are the core alternative method for the effective management of schizophrenia.

### **2.5.6 Treatment**

While pharmacological therapy is the primary alternative method of controlling acute psychotic symptoms, its potential adverse effects have always created drawbacks to maintaining treatment sustainability. Patients usually prefer to discontinue their treatment to get rid of the unpleasant side effects of the drugs. Research has shown that low dose therapy is as effective as high dose therapy and increases patient compliance by minimizing the side effects (Beel, 1997; Kaplan, Sadock & Crebb, 1994).

In a similar way Buelow and Herbert (1995) explain how difficult it is to control schizophrenic illness in that more than 20% of patients do not respond to treatment, 30 to 50% are not cooperative in taking medication and 20 to 30% still continue to relapse despite there good medication compliance. In addition to the difficulty of the treatment regimen and nature of the illness, there are many factors contributing to unsatisfactory outcomes. These include running out of medication, unsuitable care setting program, poor therapeutic response among younger men and failure to establish therapeutic relationships with the care providers (Beebe, 2002). The effectiveness of treatment is influenced by different protective factors, such as good premorbid personality, good work record, acute onset and clear precipitance. Females have better outcomes than males, as have those who have little psychopathology in the family (Carr, 2001)

It is evident that psychotherapy, rehabilitation therapy and family psycho-education are very important for better outcomes in the treatment of schizophrenia. The rate of readmissions is claimed to be very high where those integrated interventions are not practiced and the rate of readmissions in the developing world is said to be higher where those interventions are not adequately available.

### **2.5.7 Substance abuse**

The prevalence of substance abuse or dependence is often overlooked or underestimated in individuals with schizophrenia, particularly when the patient is seen during an acute psychotic episode. Estimates of the incidence of concurrent substance abuse or dependence range as high as 40% with schizophrenic patients and the lifetime incidence is even higher - up to 60% in some studies. Substance related disorders are associated with more frequent and longer periods of hospitalization, including homelessness, violence, incarceration, suicide and HIV infection (APA, 1994).

Sanguineti, Samuel, Schwartz, and Robeson (1996) dispute this view and point out that the rate of readmissions is poorly related to co-morbid psychoactive substances. Their results indicate that the patient with a high risk of readmission is usually a young, unmarried, African-American male, who has schizophrenia without co-morbid substance use.

It is clear that some may abuse alcohol, drugs or both. The potential for, and amount of substance abuse has statistical significance for a high risk of relapse and readmission. A study in South Africa by Gillis, Sandler, Jakoet and Elk, (1986) found that there is an association between the rate of readmission and cannabis and alcohol abuse among Black

and Coloured cohorts. The abuse of mixed drugs is more commonly associated with the rate of readmission among White cohorts.

In Ethiopia, although there is no available data on substance abuse and rate of readmission, most schizophrenic patients abuse locally produced alcohol and Khat (a mental stimulant), and this is often mixed in varying amounts. Only the influence of khat will be discussed here.

#### **2.5.7.1 Khat (*Catha edulis*)**

Khat (*catha edulis*) is an evergreen plant commonly grown in Ethiopia, Kenya, and Yemen and at high altitudes in South Africa and Madagascar. It is named ‘chat’ in Ethiopia, ‘qat’ in Yemen, ‘mirra’ in Kenya and ‘qaad’ or ‘jaad’ in Somalia, but it is commonly known as ‘khat’ or ‘qat’ in the literature. People use khat for different purposes such as to increase concentration, energy, alertness, improve self-esteem, for social interaction, for improved farm work, for improved study by high school and college students, for praying by Muslim people and even to alleviate boredom.

Khat contains several psychoactive substances, of which cathinone is the most active central nerve system stimulant, with effects similar to that of amphetamine (Alem, Kebede & Kullgren, 1999; Griffith, Gossop, Wickenden, Dunwarth, Harris & Lloyp, 1997). Some khat-induced psychotic cases among Afro-Arab immigrants are reported from Europe and America. Symptoms include paranoid states, acute schizophrenic symptoms and common manic features. Khat-induced psychosis has also been reported from Ethiopia at Amanuel Mental Hospital in Addis Ababa (Alem, Kebede, & Kullgren, 1999).

A high proportion of schizophrenic inpatients and outpatients abuse khat in Ethiopia.

There is no doubt that khat can increase the rate of relapse and readmissions of psychotic patients, particularly schizophrenic ones.

In conclusion, although the pattern of substance use differs from place to place, and from person to person, substance abuse is strongly associated with the rate of readmission in schizophrenia.

### **2.5.8 Stigma**

Many reports on mental health identify stigma as the most difficult obstacle in the arena of mental illness. There are significant amounts of stigma attached to mental illness, especially schizophrenia, but there are variations across cultures. In Greece, there are many folk beliefs and stereotyped ideas expressed about schizophrenia, generated by strong religious and cultural values. The stigma attached to this severe mental illness has not been adequately studied (Economou, 1999; Perlick, et al. 2001; Phelan, Bromet, & Link, 1998; Yastrebov, 1999).

An American advocacy group of the National Alliance for Mental Illness has indicated that stigma has long been and continues to be a problem for families of psychiatric patients. The feeling of rejection and stigmatization by the community results in attempts at secrecy and concealment of their mentally ill family member. They do not share their experiences outside the family circle (Phelan, Bromet & Link, 1998).

To define ‘stigma’ Phelan, et al. (1998:115) quoted from Webster’s New Twentieth Century:

*“Something that detracts from the character or reputation of a person group, etc., indicating that something is not considered normal or standard”*

*“Goffman defined stigma in terms of undesirable, deeply discrediting attributethat disqualify one from full social acceptance, “(preface) and motivate efforts by the stigmatized individual to hide the mark when possible.”p115*

Another consequence of the stigma of mental illness is the possibility that it engenders a significant loss of self-esteem. Stigma can lead to direct discrimination against the mentally ill, such as the availability of fewer resources for research and treatment, or social, psychological processes that involve the stigmatized person's perceptions of him/herself and the perception of others of the patient (Phelan, Bromet, & Link, 1998).

Fear of rejection can have serious negative consequences. The mentally ill person may fear being stereotyped, looked down upon, and rejected by others. Expecting and fearing rejection, people who have been hospitalized for mental illnesses, may feel less confident or more defensive, or simply avoid contact. The result may be restrained and uncomfortable social interactions with potential stigmatizers, more constricted social networks, poorer life satisfaction, unemployment and loss of income (Link, Struening, Neese-Todd, Asmussen, Phelan, 2001). This would make schizophrenia not merely a mental problem, but also a social problem. In Sri Lanka, the social stigma and misconception about mental illness means that it is usually a problem to seek for help from the community, and a similar result was found in Nigeria (Nalaka, 1990; Patel 1996). A study conducted in rural Ethiopia by Shibre (2002) revealed that there is a significant proportion of stigma attached to the mentally ill person. The result of this

study was supported by the findings of Alem and Kebede 1999) who found social stigma towards mentally ill persons to be a serious obstacle, especially in terms of marital and work prospects. The study indicated that stigma could affect both the family and patient in many aspects. The subjective distress and well-being of the family members influence the outcomes of the person with mental illness. The family response to stigmatization can also be expected to have an impact on the person who has the illness (Perlick,et al. 2001).

### **2.5.9 Summary of chapter**

In this chapter a comprehensive literature survey is presented, and some of the relevant findings are discussed. Although schizophrenic relapses and readmissions are common problems worldwide, the attention given to these problems are minimal in most developing countries. It also varies widely in the management and outcomes of schizophrenic patients. Better outcomes are reported from under-developed countries, as opposed to developed countries, where integrated multidisciplinary care is promoted. The findings reveal that there is a high proportion of stigma attached to the mentally ill person in developing traditional societies. A comparison of the rates of readmission was not possible due to a lack of available data from developing countries. There are slight differences in the rate of readmission even among the developed countries because of certain prevailing factors.

The literature search has revealed some of the predictive factors, which are common across cultures, also modifiable factors, and the consequence of state de-institutionalization policies. The predictive factors are demographic factors (such as, younger age, male, unmarried), co-morbid personality disorders, poor work record, early

onset of the illness and socio-economic characteristics. The modifiable factors are medication non-compliance, family rejection, and substance abuse of mainly alcohol, cannabis and khat in some areas. The results of de-institutionalization are homelessness, hostility and rejection by the community, inadequate rehabilitation and follow-up care, and a shortening of in-patient stay.

The next chapter discusses both the etiology and biopsychosocial model of the management of schizophrenia.



## **CHAPTER 3. Conceptual framework**

### **3.1 Introduction**

Chapter Two provided a review of the literature relevant to this study. The findings of different studies were highlighted and conceptualized into a frame of reference for this study. Conceptualizing such a framework is important, because it helps to integrate and guide the study into a specific and desired direction by first considering theoretical aspects pertaining to the study. It has enabled me to examine the broader multidimensional factors that are associated with the frequent readmissions of schizophrenic patients into mental hospitals.

The chapter starts with a description of the bio-psychosocial model, which serves as a framework for this study. This is followed by the rationale for the selection of the model. Some relevant factors are identified which are useful in the treatment of schizophrenic patients, particularly in reducing the risk of readmissions. These factors are categorized as biological, psychological and social aspects. The chapter also briefly describes the etiology of schizophrenia, which also provides part of the framework of the study. This in turn enables us to situate the study within the perspectives of the multi-causal theories of schizophrenic disorders.

### **3.2. The biopsychosocial model of health**

The bio-psychosocial model is a holistic approach in health care management. It is concerned with the provision and utilization of integrated health care practices within the overall context of medical care delivery systems, by recognizing the mutual influence of

the biological, psychological and social factors in health and illness. It takes into account the patient as a whole including the social context in which s/he lives and the multidimensional nature of medical problems (Bernard & Krupat, 1993; Davison & Neale, 2001; Straub, 2002).

The model is based on systems theory in which all nature is organized as a systems hierarchy (from the smallest subsystems to the largest). Human beings are taken as part of the larger system, which includes the family, neighbourhoods, societies and culture (Straub, 2002). Straub explains how this theory works in the health system, by taking a person with a weakened immune system as an example. The weakened immune system affects a specific organ in that person's body and in turn affects the person's overall biological health, which in turn affects his relationship with his social environment (such as family, friends and community).

Therefore, the rationale for incorporating the biological, psychological, and social factors in the overall treatment of an individual seems to be scientifically grounded, holistically based and allows for the optimal utilization of health care services (Bernard & Krupat, 1993; Robert, Kisselica, Mark & Fredrickson, 2002; Sarafino, 1990). Moreover, it reinforces the role of medical practitioners in involving the needy person and his/her family in determining the appropriate health care for him/her, or in determining such care on behalf of chronically disabled mentally ill persons. It also avoids the barriers that exist between the customers and health care providers (Peat, 1997). This factor, in addition to the substantial challenges presented by the traditional biomedical paradigms, has led to the need to develop a bio-psychosocial model.

The bio-psychosocial model was established in 1970's as an alternative to the biomedical model. The biomedical model is criticized for focusing only on disease and illness as entities of physical problems existing independently of psychological and social factors; for using expensive drugs and technological treatments rather than preventive aspects; it is accused of being part of the medical industry, which has robbed people of the ability to cope with pain and illness (Senior & Viveash, 1998; Sheridan & Radmacher, 1992). Furthermore, people are influenced to perceive drugs as the sole cure for their illness (Senior & Viveash, 1998).

The adoption of the bio-psychosocial approach to health care, and the criticism of the biomedical model led the World Health Organization (WHO) to propose an extensive definition of health as a "...state of complete physical, mental, and social well-being, not mere absence of disease or infirmity" (Marks, Murray, Evans & Willing, 2000). The definition widened the scope of health care to consider not only the well-being of the individual, but also of the community. The acceptance of the model by the international community has promoted the gradual shift from biomedical care to bio-psychosocial health care systems. The shift in approaches provides an opportunity for mental health care services to assess and promote the preventive aspects of care delivery systems within a specific culture and society (Peat, 1997). The bio-psychosocial approach is favored in this study, due to its attempts to increase an understanding of the total health care system as an alternative to biomedical approaches. It links the individual to families, communities and societal networks, and enables him/her to utilize the existing social services (Taylor & Field, 1993).

It has been proven that looking into a single causative factor could not reflect the whole picture of a person's health and illness. Particularly in the treatment of mentally ill people, a narrow reductionist approach could not effectively examine the existing problems (Straub, 2002). The bio-psychosocial model identifies different levels of multidimensional factors, which are relevant in understanding the psychopathology of the schizophrenic patient (Senior & Viveash, 1998). The main objective of the bio-psychosocial model is to provide effective, affordable and sustainable care and support to mentally ill people. The scope of the health care services ranges from medical care to psychological and social support, as it is determined by the multi-etiological factors namely, the biological, psychological and social aspects. The role of the biological, psychological and social aspects are briefly discussed below.

### **3.2.1 Biological factors**

Biological factors include the genetic characteristics inherited from our parents, and level of chemicals (neurotransmitters) in the brain. In general, our genes provide us with healthy/normal or unhealthy/abnormal conditions. Like most psychological disorders, schizophrenia can be explained in terms of several mechanisms. The psychopathological conditions, which arise due to biological factors, can be treated by using pharmacotherapy (Straub, 2002). At the same time, it constantly interacts with psychology. Schizophrenic patients, for example, are more vulnerable to stress-related relapses of illness because of environmental triggers, and tend to react angrily to daily hassles (Sarafino, 1990; Straub, 2002). This clearly points out that the integration of bio-psychosocial treatments outranks the biomedical approach in the management of schizophrenic disorders.

### **3.2.2 Psychological factors**

Psychological factors determine how well a person copes with successive life events/experiences. Events that are appraised as overwhelming, pervasive and beyond our control take a greater toll on us, both physically and psychologically (Sarafino, 1990).

Psychological factors are important in the treatment of chronic illnesses such as schizophrenia and arthritis. It also teaches patients how to manage their tension by lessening negative reactions to treatment. Moreover, psychological intervention helps the patient to cope with everyday stressful or negative life events such as bereavement, joblessness, divorce or relocation (Sarafino, 1990; Straub, 2002).

### **3.2.3. Social factors**

In the social context an individual is a member of a family, community, culture, society, nation and world and lives within a specific socio-economic class. All of these influence the behavior and beliefs of an individual, including those related to health. A person, who suffers from mental illness, is actually the victim of an environment that is hostile to him. The bio-psychosocial model certainly takes all of these factors into account (Straub 2002). Where a spouse, significant others and friends provide important sources of social support to a sufferer of a chronic disease like schizophrenia, the feeling of being supported by others may serve as a buffer that mitigates the output of stress hormones and keeps the body immune defenses strong during a traumatic situation (Sarafino, 1990). It also promotes better health habits, regular checkups and the easy screening of worrisome symptoms. Social influence are important areas to be considered in the

treatment of schizophrenia, given that any one context cannot work in isolation and it is a mistake to focus only on one context (ibid).

### **3.3 The biopsychosocial model in the treatment of schizophrenia**

The widely acceptable model of treatment in schizophrenia is the bio-psychosocial model, which includes biomedical, psychological and social aspects. The primary biological intervention consists of pharmacotherapy and electro-convulsive shock therapy, especially in the treatment of catatonic schizophrenia. To illustrate the continuum care of schizophrenia, there are different stages of therapeutic strategies. For instance, in the beginning the emphasis is on controlling behavior and agitation and relieving positive symptoms. After about two weeks of therapy, the care shifts to cognitive improvement therapy, negative symptoms relief, improving the mood and relieving symptoms of depression. Thereafter, relapse prevention is a key factor through skills training and rehabilitation (Maguire, 2002; NHS, 2000(a)).

Comprehensive care for schizophrenia involves ongoing support, valid information about the illness, psychotherapeutic intervention, rehabilitative strategies including skills training and economic support, protecting the patients and the families from alienation and stigmatization, family intervention through supportive educational and therapeutic interaction, cognitive behavioral therapy, and assertive community treatment (NHS, 2000(b)).

Therefore, the bio-psychosocial approach in the treatment of schizophrenia is believed to be effective in reducing the risk of relapse and hospital stay, as well as integrating the person to stay in contact with his/her community and to continue functioning normally.

### **3.4. Etiology of schizophrenia**

Schizophrenia is a group of psychotic disorders with heterogeneous causes and mostly tends to manifest in early adulthood. Genetic studies do not totally explain the etiology of schizophrenia, and there are significant influences from environmental factors, which may cause the disorder to develop (Maguire, 2002). This has led to the development of the stress-diathesis model, which integrates biological, psychological and environmental factors as causes for the development of the disorders. The environmental elements can be biological and psychological factors (Kaplan, Sadock & Grebb, 1994; Maguire, 2002).

#### **3.4.1 Biological theories.**

Schizophrenic disorders tend to run in families, which suggests a genetic predisposition to the disease. Genetic studies have demonstrated that there is a 50 percent concordance rate in monozygotic twins and 12 percent concordance rate in dizygotic twins. This indicates that schizophrenic cannot be totally genetic. The risk of getting a schizophrenic disorder is 40 percent when both parents have the disorder and the risk is lower when only one parent has the disorder (Kaplan, Sadock, & Grebb, 1994; Maguire, 2002; Senior & Viveash, 1998). More recently, biological theories have focused on chemical imbalances in the neurotransmitters of the body. The Dopamine Hypothesis suggests that an increased level of dopamine in the brain is also associated with schizophrenic disorders (Kaplan, et al. 1994; Senior & Viveash, 1998). Others suggest that there may be a viral (e.g. influenza) explanation, which leads to the disorder developing later in life. Exposure to such a virus by a pregnant woman may affect fetal development in the

womb, particularly during the 25–30 week stage of pregnancy (Maguire, 2002; Senior & Viveash, 1998; Smith, Sell & Sadbury, 1996).

Magnetic Resonance Imaging (MRI) has shown that all patients with schizophrenic disorders have larger ventricles than those who do not have schizophrenic disorders. The enlargement of the brain ventricles is associated with cognitive impairment, poor response to drug treatment and more negative symptoms than positive symptoms (Kaplan,et al. 1994; Smith, Sell & Sadbury, 1996).

### **3.4.2 Psychological theories**

Most psychological theories focus on behavioral disorders in order to locate the source of mental illness. A number of these theories have explained the relationship between the patient's personal experiences of early childhood and mental disorder in later life.

#### **3.4.2.1 Psychodynamic theories**

Psychodynamic theories argue that there are crucial stages in the emotional development of the child. Freud suggested that problems of early fixation and ego defects occurred in an individual's development as a result of poor object relation, and this contributed to the development of the symptoms of schizophrenia. Others suggest that separation from the mother and recognition of sexual identity, strong close attachments between mother and child and unresolved conflict at this stage remain in the person's unconscious mind and later in life the person may develop the disorder (Kaplan,et al. 1994).

### **3.4.2.2 Learning theories**

According to this theory, schizophrenia is a learned behavior consisting primarily of attention problems. It suggests that the child learns irrational reactions and ways of thinking by imitating parents who may have their own emotional problems. The poor interpersonal relationships of schizophrenic persons also develop due to poor models, which s/he learns from his/her childhood. Schizophrenic behavior can be altered through reinforcement therapies (Meyer & Salmon, 1988; Smith, Sell, Sadbury, 1996).

### **3.4.2.3 Humanistic – existential theories**

According to this theory, a person may attempt to adapt to the “insane” situation in his/her family. The antipsychiatrist Szasz (1979) attacked the current theories of mental illness as well as treatments of mental illness by substituting environmental for biological and chemical theories of causation and proposing ex-hospital therapies instead of institutionalization. He argued that schizophrenia was not “madness”, but strategies for living in an insane world. It is a label given to some to reinforce society’s need to enforce social norms. Family and culture play significant roles in producing psychotic behavior. Those who view such abnormal behavior as madness are not aware of the fact that the environment contributes to such behavior (Sarason & Sarason, 1984).

### **3.4.2.4 Social theories**

Some studies have shown that a higher rate of schizophrenic incidence is found among the lower socio-economic classes than among the higher classes. However, other studies indicate that the differences seem to be more evident in urban than in rural areas. The

social class explanation comes from the sociogenic hypothesis, which argues that the stressful experiences of being in the lower social class produce schizophrenia. However, other researchers question this hypothesis. They argue that schizophrenia occurs equally in all classes, but due to social drift caused by e.g. family disruption due to schizophrenia, loss of job, migration and poverty, schizophrenics tend to end up in the lower social classes, leading to this perception. Nevertheless, both the sociogenic hypothesis and drift hypothesis are less than conclusive (Smith, Sell & Sadbury, 1996).

#### **3.4.2.5 Family theories**

Family theories suggest that a schizophrenic mother who develops a faulty relationship with her children can also cause schizophrenia in the children. Hypotheses about marital schism (with one parent getting overly close to a child of the opposite sex) and marital skew (e.g. a dominant partner) suggest that the family can be the cause of schizophrenia (Smith, Sell, Sadbury, 1996). This hypothesis has little support due its methodologically fraught controversies.

The etiological hypotheses represent various perspectives on biological and social influences, which aid us in understanding the causative factors leading to schizophrenia. These facets of schizophrenia arise from the person's developmental relationships with his/her family and environment at large. The psychobiological view emphasizes that schizophrenic behavior are symptomatic of deeper organic processes. The environmental and family influences on the schizophrenic person are not restricted to predisposition, but persist through adolescence and adulthood. This has inspired the researcher to use the

multiphasic causation theories in schizophrenia as a framework for the study to explain the disease whose manifestations are primarily behavioral.

This approach provides a conceptual framework for the study to investigate factors influencing the frequent readmissions of schizophrenic patients. The point of departure for the bio-psychosocial conceptual framework is the biomedical model. The study takes a holistic view of the person from the multidimensional perspectives such as the provision of health care delivery systems, social and environmental influences including family situations and work conditions and other concomitant factors.

### **3.5. Summary of chapter**

This chapter describes the bio-psychosocial model as its conceptual framework to investigate factors influencing the rate of schizophrenic readmissions. The reviewed literature on the bio-psychosocial approach discuss some basic concepts which are vital in understanding the factors that contribute to re-hospitalizations, and the acceptable way of managing the health care of schizophrenic patients. The basic points are summarized as biological, psychological, and social components, which are both etiological factors leading to the development of the disorders, and at the same time triggering factors for frequent relapses of the illness and re-hospitalizations. The biological factors comprise genetic and chemical imbalances; psychological factors are behavior, stress, trauma, coping mechanisms; while social components comprise stigma, joblessness, family problems, rejection/ alienation, hostility, substance abuse, health care systems, and rehabilitation. These three factors have been established as the conceptual framework of this study. The next chapter deals with the research methodology.

## **CHAPTER 4: Research methodology**

### **4.1 Introduction**

This chapter provides the research methodology that was used to carry out the study. It commences with a discussion of the research design, followed by different topics and subtopics, such as participants and sampling methods, research instruments used and the techniques of quantitative as well as focus group data collection. Ethical considerations as well as validation of the research instruments are also discussed.

### **4.2 Research design**

The purpose of this study is to investigate factors influencing the rate of schizophrenic readmissions. This study made use of both quantitative and qualitative approaches through a quantifiable survey and focus group interviews. Researchers make use of different research designs depending on the purpose of the study, nature of the research question, the skills and resources available to the researchers (Leedy, 1997). The process of using different combinations of research methods is called ‘triangulation’ (De Vos, 2002). The research design is a set of guidelines and instructions to be followed in conducting the research in order to address the research problems (Babbie,& Mouton, 2001). The survey used in this study included random sampling methods, a specific study population, structured interviews and a questionnaire. The data was analyzed using the SPSS program. The qualitative focus group study included purposive sampling methods, a semi-structured interview guide, and specially selected participants. The process of thematic data analysis was applied here.

The structured interviews were used to collect information from the 43 schizophrenic respondents. These structured interviews were designed, which included both open ended and closed ended questions, to gather information regarding the sociodemographic characteristics of the schizophrenic patients, and clinical information mainly associated with factors contributing to the rate of schizophrenic rehospitalizations. It focused on obtaining substantial information on the adequacy and efficiency of the in-patient and out patient psychiatric services in reducing the rate of readmissions. It also served to measure the existing community support and participation and the problems in the management of schizophrenic patients. The reasons that structured interviews were used for schizophrenic respondents were their mental illness and their unfamiliarity with questionnaires. It would have been easy for them to respond to self-administered questionnaires. Hence the structured interview was appropriate to collect the required information from the schizophrenic respondents (See Appendix G)

Questionnaires were used to collect information from 20 health professionals. Both open ended and closed ended questionnaires were designed to answer question related to factors influencing the frequent rehospitalization of schizophrenic patients. The same items used in the structured interview were also replicated in the self-administered questionnaire. The reasons questionnaires were used for health professionals were the fact that the health professionals were familiar with the self-administered questionnaires and they understood the content of the questions and could respond to it without difficulty (See Appendix H)

An interview guide was used to collect information from the care taking family members. The purpose of using an interview guide was to collect detailed and pertinent information

including the experiences of the care taking families pertaining to the factors influencing the rate schizophrenic readmissions (See Appendix I).

#### **4.2.1 The survey**

A survey is very useful in eliciting a wide range of information from the study population in a short period of time. All surveys aim to describe or explain the characteristics of a specific population, such as socio-demographic conditions (e.g. age, sex, education, income), people's physical health conditions, emotional problems, drug use patterns and utilization of health care services, behavior such as smoking and drinking, societal and economic circumstances and people's attitudes and opinions (Burns, 2000).

Survey research provides us with epidemiological information about the state of health, illness and treatment patterns in a given community, insight into the issues of the prevalence of causes of morbidity and mortality of a specific population as well as theories concerning the causes of illness in a community (Beaglehole, Bonita & Kjellstrom, 1993; Grady & Wallston, 1988; Polgar & Thomas, 2000). This gave me enough ground to choose the survey method as an approach to answering the research question: "What are the factors influencing the rate of schizophrenic readmissions into the Amanuel Psychiatric Hospital?"

For the purposes of the survey, structured interviews and questionnaires were employed in this study to collect information from the respondents. Hall and Hall (1996) state that social surveys designed to obtain information through questionnaires, is widely recognized as a standard method of data collection. Furthermore, it addresses the issues of replicability of the results by the same method, which increases confidence in the

findings related to the question of reliability and validity. In a survey, the samples are representative of the general population and the findings are normally statistically significant (May, 2001). However, representivity may be difficult to ascertain, when researching health related problems. This is explained later in this chapter.

#### **4.2.2 Focus group interview**

A focus group interview is a qualitative research tool in which a small number of participants is organized into a group to explore a specific set of issues, such as people's views and experiences (Lunt & Livingston, 1996; Morse, Swanson & Kuzel, 2001). Focus groups are widely used in health research, because they provide rich sources of insights and interpretation from the participants (Polgar & Thomas, 2000). A focus group interview involves discussion among a small group of people which includes a moderator or facilitator. The role of the facilitator is to introduce the topics or questions for discussion and to help each member of the group to participate in the discussion (Polgar & Thomas, 2000).

In this study, focus group interviews were conducted to complement or add to the information obtained through the survey. Family members of schizophrenics are primary persons who can provide their views and experiences about the characteristics, behaviour and illnesses of their schizophrenic relative. Accordingly, focus group interviews were held over two days in two sessions with family members of schizophrenic patients. Lunt and Livingston (1996) state that focus groups are useful in investigating what participants think about particular issues or topics, as well as in articulating their views and experiences about particular subjects or issues. Moreover, it helps the researcher to

explore a wide variety of perceptions and opinions about specific areas of interest (Morgan, 1997). Focus group interviews are powerful means of exploring reality and investigating complex behaviour and motivation (De Vos, 2002). Thus, the focus group interview is an important qualitative tool that can be used in order to reveal the problem associated with the rate of schizophrenic readmissions and to triangulate the results obtained through the statistical investigation.

#### **4.2.3 Triangulation**

Triangulation is the use of two or more methods of data collection in the study of some aspects of human behaviour. It is used both by quantitative and qualitative social researchers to measure or observe the matter from different angles or viewpoints rather than looking at it from one direction (Burton, 2000; Neuman, 2000). Qualitative and quantitative approaches assist each other in a number of ways. For instance, qualitative approaches can be used to validate quantitative survey data by helping to interpret statistical relationships and offering case studies illustrations. In the same way, survey data can validate some of the views drawn from qualitative research (Burton, 2000).

Triangulation is used in this study, as it enables the researcher to see all aspects of the issues being researched, and helps to obtain more rigorous and detailed information through different methods of observation. Carley (1981:174), quoted in Burton (2000:298), emphasizes the importance of triangulation. He stated that:

*“Objective social indicators are based on counting the occurrences of given social phenomena, and subjective social indicators are based on report from individuals about their feelings, perceptions and responses.*

*Neither type, used alone, has managed to give us an accurate window on reality and they are best developed and used in conjunction." P298*

Burton (2000) and Neuman (2000) note that it could be very difficult to use more than one approach; as it may increase the chance of error, especially when the different methods provide different results. However, it increases the opportunity to make a creative synthesis and develop new ideas. Furthermore, using more than one method enables the researcher to strengthen the validity of his/her findings and provides mutual confirmation.

#### **4.3 Research setting**

The study was conducted in Ethiopia at Amanuel Psychiatric Hospital, Addis Ababa (the capital city). Amanuel Psychiatric Hospital was established half a century ago for other purposes. Eventually it was converted into a mental hospital, where the mentally ill were simply left by their relatives. A few expatriate psychiatric professionals and local nurses provided psychiatric services. In the public view, the name of the hospital has a bad name. It was known as a place of punishment. The name "Amanuel" is linked to "crazy". Anyone who is seen visiting this place for any reason or problem, is marked as a crazy person. Even professionals, who are working in the hospital, are considered, to be abnormal by the community. This has a great impact on their day-to-day social interactions and relationships. Working in Amanuel Mental Hospital is morally discouraging and demotivating due to the social stigma. This might be the reason why so many professionals refuse to work there, or leave the hospital. This in turn affects the quality of the psychiatric services given to the patients and the outcomes of the services.

However, in the past decade, there has been a gradual change in the attitude of society due to increased public awareness about mental illness.

The hospital is situated in a slum area of the city, surrounded by a big congested grain market, overcrowded with pack-animals, loaded trucks, street vendors, passengers, etc. Everyone has to cross this congested place to reach the Amanuel Psychiatric Hospital. Many patients and their families, especially those who come from rural areas to this hospital, are often mugged in this market. Old shanty houses built against the wall of the hospital make it easier for the patients to jump over the fence onto the roofs of these houses to get access to substances such as khat and alcohol. This also contributes a lot to the non-compliance to treatment and frequent relapse of the illness, especially among schizophrenic and manic patients.

Additionally, the open sewers of this impoverished area contributes to the unhealthy environment. This has made the Amanuel Psychiatric Hospital the most neglected and non-stimulating place to both health providers and patients. Neither the former nor existing government have made any attempts to change the site of the hospital into a more comfortable and therapeutic environment. Through my research, I hope to raise awareness of the environmental impact in the patients and health providers, and also to encourage others to do more research in this area in order to influence the government to change the site of the hospital.

The capacity of the hospital to provide adequate psychiatric services is limited due to the shortage of professionals and resources. In some professional areas, there has been a marked decline in the number of professionals working at the hospital. For instance, four

years ago there were 11 psychiatrists, and now there are only nine (9); in the same period, there were three (3) psychologists and three (3) social workers, but now the hospital only has one psychologist and one social worker. The number of psychiatric nurses, on the other hand, shows an increase. About thirty psychiatric nurses are currently working at this hospital. There are two pharmacists and two druggists working in the pharmacies of this hospital. The hospital has two pharmacies; one providing free medication, and the other selling medication to the general public as a means of generating an income for the hospital. There are two senior and one junior laboratory technicians providing laboratory services to the patients and staff. The School of Psychiatric Nursing was established in 1987. It is located inside the hospital, poorly staffed, has only one acting director as its staff. However the school is operating under the administration of the hospital.

As part of psychiatric services in Ethiopia in general, Amanuel is particularly dependent on drug treatment. To date psychosocial rehabilitation therapies have not been available in the hospital. The demand for mental health services are increasing from day to day, however, the efforts made to meet this demand is still unsatisfactory due to socio-economic factors. The Postgraduate School of Psychiatric Training for doctors came into existence at the beginning of 2003. It is a great change in the history of this hospital and the country as a whole, but the psychosocial aspects of services have not yet been improved.

#### **4.4 Participants and sampling methods**

Sampling can be described as selecting a small portion of the total population. The purpose of selecting a sample is to draw a representative sample from the population. The

selection of a sample usually depends on the aim and the availability of resources for the researcher (De Vos, 2002; Polgar & Thomas, 2000). The population used for this research were schizophrenic patients, health professionals, and the families/or caregivers of the schizophrenic patients. As stated earlier, the study involved both quantitative and qualitative approaches. A survey sampling method was used with the schizophrenic respondents and health professionals, while a purposive sampling method was used with families/or caregivers in order to conduct focus group interviews.

#### **4.4.1 Survey sampling method**

A random sampling method was used to select schizophrenic respondents and health professionals. Schizophrenic patients were first identified from the file record by using DSM-IV diagnostic inclusive criteria for schizophrenia. Those selected were aged between 21 and 50, had been undergoing treatment for the last two consecutive years and had been admitted two or more times into the Amanuel Psychiatric Hospital. Both genders were included in the study. Due to the limitations of time, finance and the scope of the study, it was restricted to schizophrenic patients who were living in Addis Ababa and those that were admitted to the hospital during the time of the study.

The nature of the study, as well as the number of variables grouped in the data, has also restricted the researcher to a small sample size. Polgar and Thomas (2000) state that sampling in health science research is usually difficult and costly due to the fact that individuals who suffer from some sort of disease may not even able to respond, while others may not seek treatment or be wrongly diagnosed. Therefore, it was convenient to study a subset or a sample of the schizophrenic patients at the hospital and to generalize

the findings to the population from which the participants were drawn. After the index patients were identified, it was necessary to use screening criteria for those who were severely ill and could not respond to questions. This also helped to minimize the time and biases that would have been created during replacement of the respondents to fulfill the required sample of population. The screening criteria used were as follows: patients were selected who had insight into their illness, were able to concentrate and could respond to questions. Screening was done with the help of staff and families.

Two hundred and thirty-one (231) schizophrenic patients who passed the screening criteria were listed, of whom 68 were in-patients and the rest were outpatients. Most researchers suggest that 32% is a justifiable number to select a representative sample, when the total population is 200. The final sample of 46 constituted 20% of the total 231 schizophrenic patients who passed the screening test.

Simple random sampling gives an equal chance of being selected to all populations being studied (Bless & Higson-Smith, 2000). There are various techniques of selecting samples randomly. For this study, the lottery system was used to select the sample size. The patient's file number was coded and written on pieces of paper, which were carefully folded and mixed well in a container. After that, pupils at the Hospital randomly drew 46 lucky numbers. Structured interviews were used to collect information from forty-six schizophrenic respondents. However, three (3) questionnaires were disqualified due to incomplete responses and eight (8) of the respondents, who refused to answer any questions, were also replaced by other randomly selected respondents.

The health professionals involved in the study were psychiatric nurses, physicians,a psychologist and a social worker, who had direct contact in treating and caring for the patients. Fewer than ten physicians were involved, and there was only one psychologist and one social worker working in the hospital during the time of the study. In spite of these low numbers, I decided to include them in the study, as their contribution would be valuable. Thus, a hundred percent sampling method were used to collect information from these groups of physicians, psychologist and social worker, excluding those who had participated in the pilot study. Twenty-six (26) psychiatric nurses were listed from which a representative sample size could be selected. De Vos (2002) recommends that 80% of a sample should be taken, when the total population is 30. Using the same analogy, twenty psychiatric nurses were determined to be the representative sample size of the total population. The same lottery technique was used to draw twenty names out of the total population of twenty-six. However, seven of these nurses failed to return the questionnaires.

#### **4.4.2 Focus group sampling method**

In qualitative research the focus group interview is a useful tool to generate new ideas for a hypothesis, in exploring group norms, and for ascertaining the dynamics around issues and topics. It is also commended for the richness of data it generates in contrast to the data collected from the questionnaires (May, 2001; Neuman, 2000; Polgar & Thomas, 2000). The focus group interview allows the participants to share their thoughts and experiences freely. In this way they spark new ideas and enable researchers to reach some kind of consensus about the topics under discussion (Bless & Higson-Smith, 2000).

It is recommended that focus group members should be homogeneous enough to reduce conflict, but should not include friends and relatives (Neuman, 2000). A purposive sampling method was employed to recruit participants. This sampling method is appropriate for the selection of a representative sample based on the researcher's knowledge of the population under study and the research objectives (Bless & Higson-Smith, 2000). In selecting the sample size, most researchers have a variable range of selecting the group size. For instance, Neumann (2000), Rubin & Rubin (1995) and Stewart & Shamdasani (1990) suggest that the focus group interview is usually composed of 6-12 people in a room including the moderator. Krueger (1994) points out that the focus group size should be kept to no more than seven participants. Others also recommend seven to ten participants (Morse & Field, 1996).

Therefore, fourteen participants were recruited at first from the families/ caregivers of the schizophrenic patients. The discussants were split into two groups. Each group consisted of seven participants. This is a more reasonable number to handle, and a small group encourages full participation from the members. It is also more cohesive and interactive (Polit & Hungler, 1995). The two sessions were held in one week. Two hours were given for each discussion, because the average time suggested by many researchers is between one and two hours.

Although some researcher recommend a neutral place to conduct the focus group discussion, De Vos (2002) asserts that no matter where the location is, it must meet the needs of both parties. Burton (2000) carried out most of his focus group interviews in the offices of the workplaces. On the basis of these assumptions, the participants were allowed to choose the place for the discussion. All of them agreed that the discussions

could be held in the Amanuel Psychiatric Hospital, because they all were familiar with the place and comfortable with the environment.

#### **4.5 Research instruments**

It is clear that the essential point in the data collection process is to understand the fundamental principles of the concepts of measurements. All measurements in social science research have specific rules to obtain valid and relevant data. Survey research instruments and focus group interview guides were designed to collect the data.

##### **4.5.1 Survey research instrument**

There are two basic goals in designing survey instruments: to obtain relevant information and to ensure the reliability and validity of the data collected. Bulmer and Warwick (1993) emphasize that in order to obtain relevant information, the researcher must specify the precise type of data required for the study and then design the question or interview schedule. Adding to this, Burns (2000) indicates that a well-planned and carefully constructed questionnaire increases the response rate and facilitates summarization of collected data in analysis.

The structured interview schedule containing open-ended questions, which were not pre-coded, and closed questions, which were pre-coded and designed to collect information from schizophrenic respondents (Appendix G). The same type of questionnaire was designed to collect data from health professional respondents (Appendix H). Social science researchers often recommend using a combination of open-ended and closed questions for effective and fruitful results. The choice between closed and open questions

further depends on the subject matter of the survey, the attitude of respondents toward the content of the given questions, as well as the characteristics of the respondents such as education or professions and experiences with survey research (Bulmer & Warwick, 1993).

Each of the above mentioned questionnaire and structured interview consisted of four parts. The first part identified the socio-demographic characteristics of the participants such as age, gender, marital status, educational level, and employment status. The second part measured clinical information from the patients, and problems associated with readmission and treatment. The third part was questions related to patients' interaction with their families and community as well as the role of community in the management of the patients. The last part measured both the attitudes of patients and professionals toward the adequacy of the services and the attitudes of communities towards mentally ill people. All of the instruments for this study were formulated based on the research question and objectives, and developed directly from the literature review.

Since all measurements/instruments were framed in English, the researcher decided to translate the structured interview schedule into a major regional language, but it was not necessary to translate the questionnaire designed for health professionals into a local language, because all of the professional respondents could read and write English well.

The interview schedule was translated from the original English language into the local language (Appendix I). A second translator then translated the interview independently from the local language to the original language. The result was compared to identify and correct semantic errors in translation. The process of back translation served to ensure

the literal accuracy of the concepts and meanings in translation. In this study, further translation into local dialects was not needed for three reasons:

- (1) I am from the same area as the respondents, and the interviews were conducted by me
- (2) The population being studied was drawn from diverse cultures; and
- (3) Through further translation, the questions might have lost their original meanings.

Legally certified bilingual translators were used in translations.

#### **4.5.2 Focus group interview guide**

Data collected from the focus group interviews was used as supplementary sources of information for this study, which relied primarily on the surveys. Stewart and Shamdasani (1990) point out that in preparing an interview guide for focus group research, the researcher should clearly formulate the problems that need to be solved, what information is sought and for what purpose. The purpose and objectives of this study has been already identified clearly in terms of ascertaining the factors contributing to the rate of schizophrenic readmissions.

The importance of the interview guide is to help the interviewer to remember the purpose and to provide directions for the group discussants (Stewart & Shamdasani, 1990). They further suggest that interview guides should consists of fewer than a dozen questions. However, De Vos (2002) argues that interview guides should be fewer than ten questions. A preliminary interview guide was drafted (Appendix H), which started from more general questions and moved to more specific questions about the same topic. It consisted

of nine interview guide questions, which had an opening and introduction, demographic characteristics, body of the study questions and a concluding question.

#### **4.6 Techniques of data collection**

The basic objectives of gathering information in social science research is to obtain facts and opinions about a phenomenon from people who are informed about particular issues (De Vos, 2002). Data was collected through using survey methods and focus group interviews.

##### **4.6.1 Survey data collection**

The structured interviews and questionnaire were clearly designed and worded at the level of understanding of the target populations. Appointments were arranged with respondents for the structured interview. After explaining the purpose of the study and ensuring confidentiality, the respondents were asked to answer the questions step by step, as it appeared on the questionnaire. I conducted all the interviews myself. This method of data collection involves direct personal contact, which helped me to clarify the questions for them and measure their verbal and non-verbal reactions.

Burns (2000) and De Vos (2002) point out that the structured interview may be suitable in some cases, such as for those who are unable to read and write as well as for mentally handicapped persons, hence it is largely applicable in developing countries. Moreover, compared to the self-administered questionnaire, the structured interview, with responses noted by the interviewer, is much more advantageous. It helps to overcome misunderstandings and misinterpretation of words or questions. The answer given is

usually clear, and it also covers all the questions. However, personal interviews are costly and time-consuming, especially with mentally ill people like schizophrenic patients. In this study, it was fairly difficult to complete all the questions once the interviews had started. There was a lot of interruption due to lack of concentration, which is probably due to the nature of the illness as well as the side effects of the drugs. At times, second appointments were essential in order to complete the interview.

The questionnaire was handed to the respondents to be completed on their own, and appointments were made to collect the questionnaire. I was also available all the time to clarify issues in case problems were experienced, and I encouraged them to continue to complete the questionnaire in time, although it was difficult to avoid delays. Most researchers agree that, with self-administered questionnaires, the respondents feel a high degree of freedom in completing the questionnaire, and relevant information can be obtained because of the absence of the influence of the researcher (Babbie & Mouton, 2001; Burns, 2000; De Vos, 2002).

#### **4.6.2 Conducting the focus group interviews**

A semi-structured interview guide was prepared by me and reviewed by an expert. Both focus group interviews were conducted after the survey research was completed. The grouping of discussants was made based on gender sensitivity, sociocultural and residential differences and rate of readmissions. Each focus group interview was composed of seven discussants. I was assisted by an experienced facilitator and note-taker, who had a background in health. The facilitator was completely familiar with the questioning route and well prepared mentally.

The essential equipment used in recording the interviews consisted of two tape recorders (one battery operated and a larger one electrically operated). This was done not to miss any information in case there was a power failure. The room was prepared beforehand and we ensured that no disturbances would be created. I introduced the topic, the purpose of the study and the recruitment procedure to the respondents. The confidentiality of the information was ensured for the discussants and informed consent was obtained to use the tape recorder.

The interview guide questions were presented step by step. The facilitator attentively followed the verbal and non-verbal responses and comments from the participants. At the same time, I was also attentively observing the attitudes, reactions and perceptions of the participants as the interview related to their needs in terms of the services, experiences and problems in dealing with their mentally ill patients. The facilitator took detailed notes. As soon as the session ended, we had a debriefing session to discuss points such as themes that were more frequently mentioned by the participants, their expectations, and the findings. The themes that were emerging were highlighted. The time spent with each focus group interview was two hours (i.e. from 14h00 to 16h00).

#### **4.7 Pilot study**

The objective of a pilot study is to gain insight into how subjects would respond prior to administering the full research instruments. It helps to develop, adapt or check the feasibility of the techniques to determine the adequacy of measurements and to refine and improve clarity or remove any problems (De Vos, 2002; Polgar & Thomas, 2000).

I conducted a pilot study to determine the effectiveness of the questionnaire and structured interview questions with five non-randomly selected schizophrenic patients and five health professionals, respectively. Those who participated in the pilot study were not included in the main research.

I assessed the responses to the questionnaire, which was successfully completed with the exception of a few questions needing further clarification. A pilot study for a focus group was not conducted, as it is not practical in most focus group research.

#### **4.8 Procedure**

Survey research methods take many forms, however, structured interviews and a personal questionnaire, as well as focus group interviews were employed for this study. Scheduled structured interviews constituted the major part of the study. The structured interviews were conducted with 43 schizophrenic respondents and the time allocated to conduct the interview with each respondent was not absolutely fixed due to the slow response rate among some respondents, however, the range was between 20 and 40 minutes. Before the beginning of the interview the researcher introduced himself to each of the respondents, explained the purpose of the study and the confidentiality of the information. The questions were put one by one to the respondents.

The questionnaires were distributed to 20 professional respondents with a letter attached to the questionnaire indicated who the researcher was, purpose of the study and the confidentiality of the information. Most questionnaires were collected back within ten days.

The interview guide was used to collect information from 14 focus group participants.

The focus group interview was conducted in two groups of seven participants. The groups were conducted once for two hours each.

In the structured interviews, the interviewer followed the instructions provided by the research principles to help the respondents in formulating and verbalizing their responses to the open-ended and closed questions, in which the interviewer actively engaged the respondents. This helped me to have a deeper understanding of certain opinions, attitudes and behaviours of the subjects of the study.

The recruitment procedure was conducted with the permission of the schizophrenic respondents, and their families or caregivers were contacted to obtain informed consent. The study participants were interviewed in the hospital as inpatients and during their clinical follow-up time. Those who were not accessed at the hospital were interviewed at home. The questionnaire was distributed to the recruited participants with the letter stating confidentiality attached to each of the questionnaires. In the focus group interview, the participants' consent was obtained by asking whether they were willing to participate in the study. The focus group discussions were held at the newly constructed building of Amanuel Hospital library room.

#### **4.9 Data analysis**

The nature of data analysis depends on the nature of the data gathered. The statistical/analytical software of the Statistical Package for Social Sciences (SPSS) version 11 was used to analyze the data obtained from survey methods with the aid of an experienced person in the field. The response for both closed and open-ended questions

were coded in numbers to facilitate the data capturing process in the computer, and the analysis was done using the SPSS (Statistical Package for the Social Sciences) program. Data was summarized, compiled and grouped into frequency tables and graphs. The associations and relationships among the variables were examined. The statistical significance of tests based on the research question was produced. The recorded data collected from the focus group interviews was transcribed and reorganized with the notes that were taken during the discussions. Data was analyzed by generating themes and categories.

#### **4.10 Validity**

Validity refers to the degree and effectiveness to which an instrument measures what it is supposed to be measuring. Content validity is concerned with the sampling adequacy of the content being measured. A combination of research methods such as quantitative and qualitative methods increases the validity of the instruments (Babbie & Mouton, 2001; De Vos, 2002).

Despite the difficulty in testing the validity of the research instruments used for this study due to a lack of time and insufficient resources to get an optimum sample size for the study, it is presumed that the combination of the research methods used as a way of triangulating evidence, the results obtained from the pilot study, the successful completion of the questionnaire and obtaining the required information could be suggestive of the increased validity of the instruments used in the study.

#### **4.11 Ethical consideration**

Ethics in research is all about the responsibility of the researcher to respect the right of the respondent, as the subject of investigation can be harmed in a physical or emotional manner.

Permission to conduct the study was sought from the hospital ethical committee and the medical director. The purpose of the study and procedure used to recruit the participants were clearly explained both in a letter and verbally. The respondents were ensured that their identity would remain anonymous and their responses confidential. Respondents were provided with sufficient information to allow them to decide whether they wished to be part of the research or not. Furthermore, they were allowed to withdraw from responding at any point in time. The participants in the focus group interviews were also additionally ensured of the right to privacy, which included their right to object to the use of tape recorders and cameras.

#### **4.12 Limitations of the study**

The discussion of this issue is vitally important in this study, because I encountered a serious problem in conducting retrospective file assessment. There was no reliable data to determine the rate of schizophrenic readmissions into the mentioned hospital. An attempt was made by employing three people from January 15-30, 2003, to find the record files/folders of schizophrenic patients who had been readmitted to the hospital for two or more times, since 1998 (five year file assessment). Most old cards were discarded and others were misplaced or dumped somewhere, because of the reconstruction of the

hospital; in particular, files before 2001 could not be found, and even those found were incomplete.

In many ways, this situation was difficult to overcome. The hospital did not have any trained statistician to do the statistical work. It was simply conducted by assigning staff from other departments to do some statistical reports in addition to their routine work. There was no proper file arrangement system in the hospital. Some physicians did not keep records of patients they had seen in the outpatient departments. This has made it difficult to know the exact number of schizophrenic patients. The code given to the diagnosis of the patients also made it difficult to identify schizophrenic patients, because the code was too general and unspecific.

Relying on inadequate and incomplete sources of information could dangerously skew the research results. I therefore decided to omit the retrospective file assessment study and to focus on the prospective survey and focus group qualitative methods.

#### **4.13 Summary of chapter**

This chapter describes the methodology employed in the study. It discusses the research design, which includes the quantitative and qualitative research paradigms, research settings, participants and sampling methods, pilot study, the procedure used for data collection and the program used for data analysis. It also explains the validity of the instruments, the ethical clearance procedure and the limitation of the study. The next chapter is a presentation and discussion of the findings

## **CHAPTER 5: Data presentation and analysis**

### **5.1. Introduction**

This chapter provides the data presentation and analysis of the factors influencing the rate of schizophrenic readmissions. The data was obtained from structured interviews, questionnaires and focus group discussions described in detail in the methodology. In order to recapitulate the attention is drawn to the main research question and objectives of the study, which are to find out, which factors are associated with frequent readmissions of schizophrenic patients. Structured interviews were carried out with 43 schizophrenic patients who had been readmitted for two or more times into the Amanuel Psychiatric Hospital. It was designed to ascertain the factors mainly responsible for the rehospitalizations and to determine the nature of social stigma and community attitudes towards mentally ill people and challenges and barriers encountered in providing care for these sufferers. Data was also drawn from questionnaires, which were completed by 20 health care providers. The measurement scale used by the structured interview and the questionnaire was similar. The responses from both the structured interview and the questionnaire were coded into numerical order of highest frequency. The score for each section was calculated using descriptive statistical methods. The results were represented in the form of frequency distribution tables. Descriptive statistics was also used to conduct cross tabulations.

Focus group discussions comprised of 14 participants of the care giving family members. It was conducted for two hours (2pm-4pm) in two groups. The first FGD was conducted on 30Jan.2003 and the second FGD was conducted on 4Feb.2003. Each group consisted

of seven (7) participants. The data from the focus group interviews were presented into main themes, i.e. substance abuse and default of medication, socio-economic conditions, family problems in caring for the patients, the quality and adequacy of services, and treatment and care of the patients. Direct quotations were taken from the raw data to illustrate the themes. Profiles of focus group discussants were summarized in Appendix A and B)

## **5.2. Presentation and interpretation of data: (Socio-demographic characteristics of schizophrenic respondents).**

### **5.2.1 Age categories of schizophrenic respondents**

Table 5.2. 1 Age categories of schizophrenic respondents

	Age interval	Frequency	Percentage (%)
1	20-29	15	34.88
2	30-39	18	41.86
3	40-49	10	23.26
	Total	43	100

Mean = 33; Sd = 7.69

Eighteen (18) (i.e. 41.86%) of the respondents were in their thirties. This is the category with the highest frequency. The second highest category is the age between 20 and 29, with a frequency of 15 (34.88%) of the sample. Third is the category of age 40 – 49 with a frequency of 10 (23.26%). There were no respondents younger than 20 and older than 49.

### 5.2.2 Gender and marital status of the respondents

Table 5.2.2 Gender and marital status

Gender	Frequency	%	Response	Frequency	Percentage (%)
1.Male	30	69.77	1.Single	34	79.10
2.Female	13	30.23	2. Married	5	10.16
			3. Divorced	3	6.98
			5. Separated	1	2.33
Total	43	100		43	100

The majority of the schizophrenic patients were male (N= 30/ or 69.77%), and single (34 or 79.07%). Five of the schizophrenic patients (10.16%) were married and 3 (6.98%) were divorced. There was only one (2.33%) of the respondents who was separated.

### 5.2.3 Educational status of the respondents

Table 5.2.3 Educational status of the respondents.

Response	Frequency	Percentage (%)
1. Elementary school	4	9.30
2. Grade 7 & 8	2	4.65
3. High school	26	60.46
4. Diploma	5	11.63
5. Degree	6	13.95
Total	43	100

Twenty-six (60.47%) of the schizophrenic respondents had a secondary level of education and 11(25.58%) of them have got either a diploma or a degree. The rest, i.e. 6 (13.95%) had attained an elementary or grade 7 or 8 level of education. There were no respondents who were illiterate.

#### 5.2.4 Employment status and type of job of the respondents

Table 5.2.4 Employment status and type of job

Employ. status	Frequency	%	Type of job	Frequency	(%)
1. Employed	7	16.28	1. Unskilled labour	5	11.63
2. Unemployed	28	65.12	2. Skilled labour	10	23.26
3. Private employee	8	18.60	3. Professional	9	20.93
	---	---	4. Running own business	3	6.97
	---	---	5. Never worked	16	37.21
Total	43	100		43	100

As can be seen from the table, 28 (65.12%) of the schizophrenic respondents were unemployed, whilst 7 (16.28%) of them were employed in an organization and 8(18.61%) of them were running their own private businesses. It is also indicated in the table that 5 (11.63%) of the respondents were unskilled labourers and 10 (23.26%) were skilled labourers. Professional workers (9, i.e. 20.93%) had the second highest frequency of those who worked. Sixteen (16) (i.e. 37.21%) of the schizophrenic respondents had never worked.

### 5.2.5 Number of family members living together

Table 5.2.5 Number of family members living together.

No. of family members	Frequency	Percentage (%)
1. 1 – 3	17	39.54
2. 4 – 6	15	34.88
3. 7 – 9	6	13.95
4. 10 & above	5	11.63
Total	43	100

Seventeen (17) (39.54%) of the schizophrenic patients live with between one and three family members and 15(34.88%) of them live with 4 to 6 family members. Five (5) of the respondents (11.63%) lived with more than 10 family members. The rest, i.e. 6(13.95%) of the schizophrenic respondents lived with 7 – 9 family members.

### 5.2.6 Head of household

Table 5.2.6 Head of household

Response	Frequency	Percentage(%)
1. Father	14	32.56
2. Mother	14	32.56
3. Brother	1	2.33
4. Sister	6	13.95
5. Himself	6	13.95
6. Relatives	2	4.65
Total	43	100

As can be seen from the table, family members headed by a father and a mother is equal, which is 14(32.56%) and family members headed by a sister and by the patient himself/herself were also equal 6(13.95%). One respondent had the family headed by a brother. The rest, i.e. two (2) (4.65%)respondents lived with their relatives.

### 5.2.7 Living conditions of the schizophrenic respondents

Table 5.2.7 Living conditions of the schizophrenic respondents

Response	Frequency	Percentage (%)
1. Privately owned house	19	44.19
2. Rented public house	16	37.21
3. Rented private house	8	18.60
4. Hostel	0	0
5. On the street	0	0
Total	43	100

Regarding the living conditions of schizophrenic patients, 19 (44.19%) responded that they lived in their own built house, whereas 16 (37.21%) of them lived in a rented public house. Eight (8) schizophrenic patients lived in a privately rented house. No respondents reported living in a hostel and also no one reported living on the street.

### **5.3. Characteristics of schizophrenics' readmissions**

#### **5.3.1 Number of readmissions**

Table 5.3.1 Number of readmissions

Response	Frequency	Percentage(%)
1. 2 times	9	20.93
2. 3 times	11	25.58
3. 4 times	7	16.28
4. 5 times	7	16.28
6. 6 times	0	0
7. 7 times	0	0
8. 8 times	1	2.33
9. 9 times	0	0
10. 10 times	2	4.65
11. 11 times	2	4.65
12. 12 times	4	9.30
Total	43	100

Average=4.93

Table 5.3.1 shows that 11(25.58) of the schizophrenic respondents had been readmitted three times and 9 (20.93%) of them readmitted twice to the psychiatric hospital, whereas 7 (20.93%) of them had been readmitted four or five times. Four (4) of the schizophrenic patients indicated that they had been readmitted twelve times.

### 5.3.2 Reason for schizophrenics' readmissions (multiple answers)

Table 5.3.2 Reasons for readmissions

Response	Frequency	Percentage (%)
1. Medication default	32	36.36
2. Socio-economic problems	25	28.41
3. Substance abuse	13	14.77
4. Psychiatric symptoms	13	14.77
5. Inadequate psychiatric care	3	3.41
6. No response	2	2.27
Total	88	100

Twenty of the schizophrenic respondents gave three reasons for their readmissions into the psychiatric hospital, while 12 of them gave two reasons. Nine of the schizophrenic respondents gave only one reason. Two of them didn't respond to the question.

As can be seen from the table the majority 32(36.36%) of the schizophrenic patients were readmitted due to medication default. Socio-economic problems were mentioned as the second most important for readmission (by 25(28.41% of them). Thirteen (13) (14.77%) of them mentioned substance abuse as the main cause of their readmission. Psychiatric symptoms were mentioned as the reason for readmission also by 13(14.77%) of schizophrenic respondents. Inadequate psychiatric care was the least mentioned factor as the reason for readmission into the hospital.

### 5.3.3 Difficulties mixing with neighbours/friends

Table 5.3.3 Difficulties mixing with neighbours/friends

Response	Frequency	Percentage(%)
----------	-----------	---------------

1. No	24	55.81
-------	----	-------

2. Yes	19	44.19
--------	----	-------

Total	43	100
-------	----	-----

Table 5.3.3 shows that 24(55.81%) of the respondents did not have problems regarding socializing with friends and neighbours, while 19(44.19) of them had problems in socializing and communicating with other people.

### 5.3.4 Difficulties they have had with their family members

Table 5.3.4 Difficulties with their families

Response	Frequency	Percentage (%)
----------	-----------	----------------

1. Yes	23	53.49
--------	----	-------

2. No	19	44.18
-------	----	-------

3. No response	1	2.33
----------------	---	------

Total	43	100
-------	----	-----

As indicated in the table, 23 (55.81%) of the respondents expressed that they had difficulties with their family members, while the rest, i.e. 19(44.18%) of them had no problems. One (1) (2.33%) of the respondents ignored the question.

### 5.3.5 Conflictual relationship with their family members

Table 5.3.5 Conflictual relationship with family members.

Response	Frequency	Percentage (%)
1. Exist	22	51.16
2. Not exist	21	48.84
3. No response	0	0
Total	43	100

Table 5.3.5 depicts that 22 (51.16%) of the respondents had conflictual relationships with their families, however, 21(48.84%) of the respondents reported having no serious conflictual problems with their family members.

### 5.3.6 Attitude of the community towards the mentally ill patients

Table 5.3.6 Attitude of community

Response	Frequency	Percentage (%)
1. Very good	2	4.65
2. Good	24	55.81
3. Average	4	9.30
4. Bad	5	11.63
5. Very bad	1	2.33
6. Don't know	7	16.28
Total	43	100

The above table shows that 24(55.81%) of the respondents perceived the attitude of the community towards them as good, and 2(4.65%) of them indicated that the community had a very good attitude towards them. Others, i.e. 4(9.30%) of them responded that the community has both positive and negative attitude towards them. Five (11.28%) of the respondents regarded the attitudes of the community as negative and only 1 (2.33%) respondent perceived the community attitude as very bad. Seven (16.28%) of the respondents did not respond to this question.

### 5.3.7 Experiences of perceived stigmatisation

Table 5.3.7 Experiences of stigmatisation

Problems	Frequency and Percentage (%)			Total	100%
	Yes	No	NR		
1. Stigma	13(30.23%)	29(67.44%)	1(2.33%)	43	100
2. LSS	17(39.53%)	26(60.47%)		43	100
3. Harassment	6(13.95%)	37. (86.05)		43	100
4. Isolation	15(34.88%)	28(65.12%)		43	100

\*LSS= lack of social support

\*NR= no response

As can be seen from the table, 13(30.23%) of the respondents have experienced social stigmatization, while 29(61.44%) of them had denied any experiences of stigmatization. The majority of the respondents, i.e. 26 (60.47%) had social support for their mental illness, but 17 (39.53%) of the respondents complained about not having social support.

Social harassment was experienced by 6(13.95%)of the respondents. Out of the total sample (N=43), 15(34.88%)of them complained about social isolation.

### 5.3.8 Preferred management of the schizophrenic patients as viewed by themselves

Table 5.3.8 Preferred management of the schizophrenic patients

Response	Frequency	Percentage (%)
1. In the community	35	81.40
2. Institutional care	4	9.30
3. In rehab. center	2	4.65
4. No response	2	4.65
Total	43	100

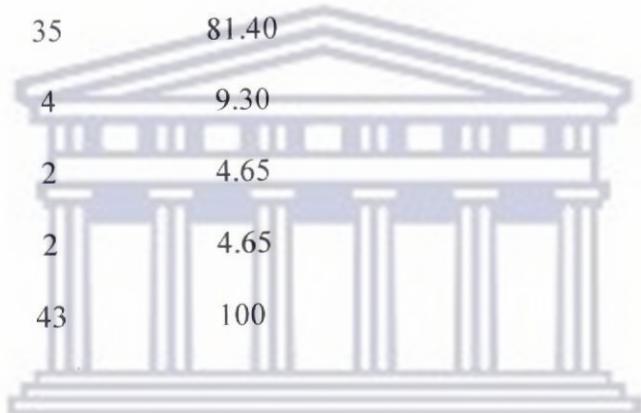


Table 5.3.8 shows that community psychiatric care is taken as the most preferred management by 35(81.40%) of the schizophrenic respondents. While 4(9.30%) of them indicated that institutional care is better for them. Two (2) (4.65%) of the schizophrenic respondents preferred rehabilitation center treatment and the rest, i.e. 2(4.65%) of the respondents, did not answer the question.

5.3.9 Advantages of schizophrenic treatment at community level, institutional care or rehabilitation center.

Table 5.3.9 Advantages of community level, institutional care or rehabilitation center treatment for schizophrenic patients.

Response	Frequency	(%)
1. CBT-improve social skill; self care & independent living	27	62.79
2. Inst. care for Patients, who don't have relatives & support	7	16.28
3. Treatment in the rehabilitation center.	3	6.98
4. No response	6	13.95
5. Total	43	100

\* CBT- Community-based treatment.

The advantages of community care were viewed as the most important by 27(62.79%) of the schizophrenic respondents, because of family and social support availability. It was mentioned that it helped to interact and participate in social activities. It also encourages them to work and support themselves and their families. Seven (16.28%) respondents recommended institutional care for those who have no relatives or support. Three (6.98%) respondents answered that schizophrenic patients should be treated in a rehabilitation center. Six (13.95%) respondents did not answer the question.

### 5.3.10 Deficiencies of the hospital

Table 5.3.10 Deficiencies of the hospital

Response	Frequency	Percentage(%)
1. Provision of inadequate services & care	25	58.14
2. Inconveniency of the hospital site for the Rx. of mental illness	6	13.95
3. Unrelated answer	5	11.63
4. No response	7	16.28
5. Total	43	100

\*Rx: treatment

The above table shows that 25(58.14%) of the respondents had indicated that the services and care provided by the hospital was not adequate. In addition, 6(13.95%) of the respondents complained that the site of the hospital was not convenient for the treatment of mentally ill people.

### 5.3.11 Substance abuse at the time of the interview

Table 5.3.11 Substance abuse at the time of interview

Type of subs. abuse	Frequency and percentage (%)			Total %	
	Yes	No	NR	Total	100%
Alcohol	11(25.58%)	31(72.09%)	1(2.33%)	43	100
Khat	18(41.86%)	25(58.14)	--	43	100
Drugs	2(4.65%)	38(88.37%)	3(6.98%)	43	100

\*NR: No response

\*Khat: psycho stimulant plant

As depicted in the table the majority of the respondents 31(72.09%), 25(58.14%) and 38(88.37%) had denied the use of alcohol, Khat and psychoactive drugs respectively. The question pertinent to alcohol was ignored by 1(2.33%) respondent and 3 (6.98%) had refused to answer regarding the use of drugs. However, 11 (25.58%) of the schizophrenic respondents had reported excessive use of either or both alcohol and khat(18) on a daily bases.

#### 5.4. Data from the health care providers

##### 5.4.1 Age categories of health care providers

Table 5.4.1 Age categories of health care providers

Response	Frequency	(%)
1.20 -29	1	5.00
2. 30- 39	6	30.00
3.40- 49	10	50.00
4.50- 59	2	10.00
5.No response	1	5.00
Total	20	100

Table 5.4.1 shows that there were 20 participants in the study, among which 10(50%) of the respondent were aged between 40 and 49. This is the category with the highest frequency. The second highest frequency of age category is between 30 and 39, with a frequency of 6(30%) of the sample.

There were 2(10%) respondents older than 50, and only 1(5%) respondents was between 20 and 29 years old.

#### 5.4.2 Gender of health care providers

Table 5.4.2 Gender of health care providers

Response	Frequency	Percentage(%)
1.Male	14	70
2.Female	6	30
Total	20	100

Out of the total of 20 participants, the majority 14 (70%) of the respondents were male, whereas 6(30%) of the respondents were female professionals.

#### 5.4.3 Health care providers by profession

Table 5.4.3 Health care providers by profession

Response	Frequency	Percentage(%)
1. Psych.Nurse	14	70
2.Psych.residents	2	10
3. Psychiatrists	2	10
4. Social worker	1	5
5. Psychologist	1	5
Total	20	100

As it can be seen from the table, most 14(70%) of the respondents were psychiatric nurses. Two (2)(i.e. 10%) of them were psychiatrists and 2(10%) of them were resident doctors. There were only 1(5%) psychologist and 1(5%) social worker working in the hospital.

#### 5.4.4 Number of years worked at Amanuel Psychiatric Hospital

Table 5.4.4 Number of years worked at Amanuel Psychiatric Hospital

Response	Frequency	Percentage(%)
1.0-4yrs	3	15
2. 5 -9	3	15
3. 10 – 14	10	50
4. 15 – 19	4	20
5.Total	20	100

The above table shows 10(50%) of the respondents had between 10 to 14 years of experience working at the Amanuel Psychiatric hospital. This is the category with the highest frequency and 4(20%) of the respondents worked between 15 to 19 years, while 3(15%) worked five to nine years and the rest, i.e. 3(15%) worked in this hospital for less than four years.

#### 4.5 Number of years worked with schizophrenic patients

Table 5.4.5 Number years worked with schizophrenic patients

Response	Frequency	(%)
1. 0-9	5	25
2. 10 - 19	11	55
3. 20 - 29	2	10
4. No response	2	10
4.Total	20	100

Table 5.4.5 shows that the majority 11(55%) of the respondents had worked between 10 to 19 years with schizophrenic patients and 5(25%) of them worked for less than 9 years. Two (10%) of them had more than 20 years of experience working with schizophrenic's patients. The rest, i.e. 2(10%) of the respondents did not answer this question.

#### 5.4.6 Perceived duration of schizophrenic patient stay in the hospital after admission

Table 5.4. 6 Perceived duration of schizophrenic patient stay in the hospital after admission

Response	Frequen	Percentage
1. 4 – 8 wks	1	5
2. 2 – 3 months	8	40
3. 3 – 4 months	3	15
4. 4 – 6 months	6	30
5.More than 6 months	2	10
6.Total	20	100

As it can be seen from the table, 8(40%) of the respondents indicated that schizophrenic patients stay two to three months in the hospital, and 6 (30%) of them said that the duration of stay in the hospital is four to six months. Three (3) (15%) of them said three to four months, while 2 (10%) respondents gave more than 6 months duration of stay, and only one (5%) gave one to two months as their view of the average duration of stay of patients.

#### 5.4.7 Frequent readmissions of schizophrenic patients

Table 5.4.7 Frequent readmissions of schizophrenic patients

Response	Frequency	Percentage(%)
1. Yes	18	90
2. No	2	10
3.Total	20	100

Eighteen (18)(i.e. 90%) of the respondents agreed that there were frequent readmissions of schizophrenic patients, while only 2(10%) of them did not agree about frequent readmissions of schizophrenic patients.

#### 5.4.8 Major reasons for schizophrenic readmissions

Table 5.4.8 Major reasons for schizophrenic readmissions (multiple answers).

Response	Frequency	%
1. Poor after care services	14	38.9
2. Medication default	13	36.1
3. High rate of subs. use	9	25
4. Total	36	100

In this question, respondents were allowed to give more than one answer. Thus, out of the total of 36 responses, 14 (38.9%) of them indicated that poor after care services were the major reasons for frequent readmissions of schizophrenic patients. The second highest frequency, i.e., 13 (36.1%) of the responses indicated medication default as the main factors for the high rate of readmissions, while substance abuse was taken as the third factor for the rate of readmission by 9 (25%) of the respondents.

#### 5.4.9 Adequacy of mental health care services in the Amanuel Psychiatric hospital

Table 5.4. 9 Adequacy of mental health care services in the Amanuel Psychiatric Hospital

Response	Frequency	Percentage(%)
1. SA	1	5
2. A	14	70
3. DA	3	15
4. SD	2	10
5. Total	20	100

**Legend:** SA=strongly agree; A= agree; DA= disagree; SD=strongly disagree

As depicted in the table, 14(70%)of the respondents agreed that the mental health services given to the patients were adequate, whereas 3 (15%) of the respondents did not agree about the adequacy of the psychiatric services. Two (10%) of the respondents strongly disagreed that the services provided were adequate.

#### 5.4.10 Professional feelings in treating schizophrenic patients

Table 5.4. 10 Professional feelings in treating schizophrenic patients

Response	Frequency	Percentage (%)
1. Confidence	6	30
2. Indifferent	4	20
3. Worry	9	45
4. No response	1	5
4. Total	20	100

Nine (9)(i.e. 45%) of the respondents said that they had worries in treating schizophrenic patients, 6 (30%) of the respondents stated that they had confidence in treating schizophrenic patients. However, 4(20%) of them responded that they had indifferent feelings in treating schizophrenic patients.

#### 5.4.11 Barriers in the provision of psychiatric care

Table 5.4. 11 Barriers in the provision of psychiatric care (more than one answer was allowed).

Response	Frequency	%
1. Insufficient psych. service & facilities	17	37.8
2. Shortage of qualified professionals	14	31.1
3. Poor after care service	14	31.1
Total	45	100

In this question each respondents could gave more than one answer. The majority 17(i.e.37.8%) of the responses indicated that insufficient services and facilities were the main barriers in providing adequate care, and 14 (31.1%) of the responses indicated that the shortage of qualified professionals were the barriers to the provision of adequate and quality services. Another 14(31.1%) of the responses indicated that poor after care services were the barriers for the hospital in their effort to minimize the problem of readmissions.

### **5.5.Contingency tables and crosstabulations**

One of the basic prerequisites for conducting a chi-square test is a big sample size so that each of the cross tabulations would have an expected frequency of greater than 5. But my sample size was very small resulting in less than 5 expected frequencies of some cells of each cross tabulation. Thus, it was impractical to apply a chi-square test. I have also looked into other alternatives, which may help to conduct a chi-square test in the case of small sample size, such as large N's, a 2x2 table, Fisher's exact test, Yates correction in a 2x2 contingency table and by combining different levels of variables. However, it was still very difficult even after recoding to do a 2x2 table by combining and adding the frequencies, most tables were 2x3 or 3x2, so these also did not seem to be applicable and reliable. Because of that I decided to use descriptive statistics from the cross tabulation of my data.

Table 5.5.1 Number of admissions : Male versus Female

	Number of admission	Gender		Total
		Male	Female	
2-3 times	Count	12	8	20
	Expected Count	14.4	5.6	20.0
	% Within , Gender	38.7%	66.7%	46.5%
4-5 times	Count	12	2	14
	Expected Count	10.1	3.9	14.0
	% Within , Gender	38.7%	16.7%	32.6%
6 times+	Count	7	2	9
	Expected Count	6.5	2.5	9.0
	% Within , Gender	22.6%	16.7%	20.9%
Total	Count	31	12	43
	Expected Count	31.0	12.0	43.0
	% Within , Gender	100.0%	100.0%	100.0%

The cross tabulation indicated that more males (38.7%) tend to be readmitted either 2-3 time or 4-5 times, whereas most females (66.7%) tend to be readmitted 2-3 times. The number of female readmissions tends to dominate only in 2-3 times in the readmissions categories.

Table 5.5.2 Number of admissions in age categories

Number of 2-3 admission times	Count	Age group			Total
		20-29	30-39	40-49	
Number of 2-3 admission times	Count	10	7	3	20
Expected Count	7.0	8.4	4.7	20.0	
% Within , Age group	66.7%	38.9%	30.0%	46.5%	
4-5 times	Count	5	7	2	14
Expected Count	4.9	5.9	3.3	14.0	
% Within , Age group	33.3%	38.9%	20.0%	32.6%	
6 times+	Count	0	4		5
Expected Count	3.1	3.8		2.1	
% Within , Age group	.0%	22.2%		50.0%	
Total	Count	15	18		10
Expected Count	15.0	18.0		10.0	
% Within , Age group	100.0%	100.0%		100.0%	

The majority of the patients (66.7%) who tend to be readmitted 2-3 times were in their twenties. Those who were in their thirties (38.9%) were more likely to be readmitted either 2-3 times or 4 -5 times and those who were in the age category between 40-49(50%) tend to be readmitted 6 times and above. It also indicated that the proportions of readmissions increase as the age of the patients' increase. Within the age category between 20 – 30, the number of readmissions decreases along the column line, whereas in the age categories of 40-49, the number of admissions tend to be more in the third row, i.e. 6 times and above. The cross tabulation showed that the younger age group were the more likely to be readmitted 2-3 times.

Table 5.5.3 Number of admissions in educational categories

		Edu. status		Total
	Count	Primary	Secondary	Tertiary
Number of 2-3 admission times		5	13	2
	Expected Count	2.8	12.1	5.1
	%Within	,83.3%	50.0%	18.2%
	Educational status			
4-5 times	Count	0	8	6
	Expected Count	2.0	8.5	3.6
	%Within	,0%	30.8%	54.5%
	Educational status			
6 times+	Count	1	5	3
	Expected Count	1.3	5.4	2.3
	%Within	,16.7%	19.2%	27.3%
	Educational status			
Total	Count	6	26	11
	Expected Count	6.0	26.0	11.0
	% Within	,100.0%	100.0%	100.0%
	Educational status			

Most of the patients (83.3%) who were in the categories of primary level education and most of the patients (50%) who had secondary educational level more likely to be readmitted 2-3 times. Most of the respondents (54.5%) who had a tertiary level education were more likely to be readmitted 4 -5 times. Within the tertiary level of educational categories, the number of readmissions seems to increase along the column for these patients. In the category of 2-3times of readmissions, the number of readmissions decreases with increased of educational level. It seems that educational level has effect on the number of readmission.

Table 5.5.4 Number of admissions : Married versus Unmarried

Number of admission	2-3 times	Count	Marital status		Total
			Unmarried	Married	
		18	2	20	
		Expected Count 17.7	2.3	20.0	
		% Within ,47.4%	40.0%	46.5%	
		Marital status			
4-5 times	Count	12	2	14	
		Expected Count 12.4	1.6	14.0	
		% Within ,31.6%	40.0%	32.6%	
		Marital status			
6 times+	Count	8	1	9	
		Expected Count 8.0	1.0	9.0	
		% Within ,21.1%	20.0%	20.9%	
		Marital status			
Total	Count	38	5	43	
		Expected Count 38.0	5.0	43.0	
		% Within ,100.0%	100.0%	100.0%	
		Marital status			

The majority of the unmarried patients (47.4%) tended to be readmitted 2-3 times, whereas, the majority (40.0%) of married patients tend to be readmitted either 2-3 times or 4 -5 times. The higher proportions of the readmitted schizophrenic patients were unmarried in the case of first categories of 2-3 times number of readmissions. However, in the second row categories of 4 -5 times number of readmissions, married patients tend to be more readmitted. In the third row categories of 6 and above readmissions both married and unmarried patients more or less the same admissions. Regardless of the two categories of marital status, the number of readmissions decreases along the column for all patients, meaning that in the total column the number of readmissions decreases as we go from top to bottom (i.e. 46.5%, 32.6%, and 20.9%). This indicated that more patients were readmitted 2-3 times and few were readmitted 6 or more times.

Table 5.5.5 Number of admissions in the category of length of stay

	Number of admission	Lengthy of stay			Total
		0-2 months	2-4 mon.	4 mons.+	
,Number of 2-3 times	Count	3	10	7	20
	Expected Count	3.3	12.1	4.7	20.0
	% within ,Lengthy of stay in the hospital	42.9%	38.5%	70.0%	46.5%
4-5 times	Count	3	9	2	14
	Expected Count	2.3	8.5	3.3	14.0
	% within Lengthy of stay in the hospital	42.9%	34.6%	20.0%	32.6%
6 times+	Count	1	7	1	9
	Expected Count	1.5	5.4	2.1	9.0
	% Within, Lengthy of stay in the hospital	14.3%	26.9%	10.0%	20.9%
Total	Count	7	26	10	43
	Expected Count	7.0	26.0	10.0	43.0
	% Within, Lengthy of stay in the hospital	100.0%	100.0%	100.0%	100.0%

The majority (42.9%) of the patients whose length of stay were between 0-2 months were more likely to be readmitted either 2-3 or 4 -5 times and (38.5%) of the patient with length of stay between 3-4 months tend to be readmitted 2-3 times, whereas (70%) of them who had 6 and above months of length of stay tend to be readmitted 2-3 times. This shows that the number of admissions were more likely to decrease with increase length of stay in the hospital. Regardless of the three categories of length of stay, the number of readmissions decreases along the total column for these patients. This finding is consistent with other earlier studies.

Table 5.5.6 Number of admissions: Rate of contact with friends/neighbours

Number of admissio n	Count	Rate of contact with friends/neigs.			Total
		Active	Intermedia	Passive	
		te			
2-3 times	5	6	9	20	
Expected Count	3.3	6.0	10.7	20.0	
% within ,Rate of	71.4%	46.2%	39.1%	46.5%	
contact					
withfriends/neigh					
bs.					
4-5 times	1	7	6	14	
Expected Count	2.3	4.2	7.5	14.0	
% Within,Rate of	14.3%	53.8%	26.1%	32.6%	
contact					
withfriends/neigh					
bs.					
6 times+	1	0	8	9	
Expected Count	1.5	2.7	4.8	9.0	
% Within, Rate of	14.3%	.0%	34.8%	20.9%	
contact					
withfriends/neigh					
bs.					
Total	7	13	23	43	
Expected Count	7.0	13.0	23.0	43.0	
% Within, Rate of	100.0%	100.0%	100.0%	100.0%	
contact with					
friends/nighbs.					

The cross tabulation indicated that the proportions of schizophrenic patients who were passive (less participations) were more likely to be readmitted than those patients who had active and intermediate participations. However, the proportions of readmissions in the categories of 2-3 times number of readmissions, the patients (71.4%) belong to the active participation group seem to be readmitted more than the intermediate and passive ones. Within the passive column categories the majority of patients (39.1%) and (34.8%) were found to be readmitted 2-3 times and 6times respectively, whereas in the

intermediate column categories the majority (53.8%) of them tend to be readmitted 4 -5 times. The majority of the patients who had active participations were found to be readmitted less, i.e. 2-3 times. It seems that positive social interaction tends to decrease the number of readmissions. Regardless of the three interactions categories, the total number of readmissions decreases along the column line for these patients.

Table 5.5.7 Number of admissions : Difficulties in the families

Number of 2-3 times admission	Count	Difficulties in the families		Total
		Yes	No	
4-5 times	Count	10	10	20
	Expected Count	10.7	9.3	20.0
	% Within, Difficulties in the families	43.5%	50.0%	46.5%
6 times+	Count	9	5	14
	Expected Count	7.5	6.5	14.0
	% Within , Difficulties in the families	39.1%	25.0%	32.6%
Total	Count	4	5	9
	Expected Count	4.8	4.2	9.0
	% Within, Difficulties in the families	17.4%	25.0%	20.9%
The cross tabulation showed that the higher proportions of patients (50%) who did not have difficulties with their family members tend to be readmitted less, i.e. 2-3 times. In the second row categories of number of readmissions there were more proportions of patients (39.1%) who had family problems who tended to be readmitted, than those patients (25%) who did not have family problems. The finding of this result is consistent with the findings of earlier studies. However, in the third row categories of number of readmissions the majority (53.8%) of them tend to be readmitted 4 -5 times. The majority of the patients who had active participations were found to be readmitted less, i.e. 2-3 times. It seems that positive social interaction tends to decrease the number of readmissions. Regardless of the three interactions categories, the total number of readmissions decreases along the column line for these patients.				

The cross tabulation showed that the higher proportions of patients (50%) who did not have difficulties with their family members tend to be readmitted less, i.e. 2-3 times. In the second row categories of number of readmissions there were more proportions of patients (39.1%) who had family problems who tended to be readmitted, than those patients (25%) who did not have family problems. The finding of this result is consistent with the findings of earlier studies. However, in the third row categories of number of readmissions the majority (53.8%) of them tend to be readmitted 4 -5 times. The majority of the patients who had active participations were found to be readmitted less, i.e. 2-3 times. It seems that positive social interaction tends to decrease the number of readmissions. Regardless of the three interactions categories, the total number of readmissions decreases along the column line for these patients.

readmissions the finding between those who had family problems and those who did not have family problems are contradictory with the result of earlier studies. The lower proportions of patients (17.4%) who had family problems tend to be readmitted 6times and above, whereas a greater proportions of patients (25%) who did not have family problems tend to be readmitted 6times and above.

Table 5.5.8 Number of admissions: Rejection/stigma

	Number of admission	Rejection/stigma		Total
		Yes	No	
Number of 2-3 times	Count	11	9	20
admission	Expected Count	11.2	8.8	20.0
	% Within , Rejection/stigma	45.8%	47.4%	46.5%
4-5 times	Count	8	6	14
	Expected Count	7.8	6.2	14.0
	% Within , Rejection/stigma	33.3%	31.6%	32.6%
6 times+	Count	5	4	9
	Expected Count	5.0	4.0	9.0
	% Within , Rejection/stigma	20.8%	21.1%	20.9%
Total	Count	24	19	43
	Expected Count	24.0	19.0	43.0
	% Within , Rejection/stigma	100.0%	100.0%	100.0%

The cross tabulation showed that the majority of the patients (45.8%) who experienced social stigma and rejection tended to be readmitted 2-3 times, whereas, only (20.8%) of them tend to be readmitted 6 times and above. The majority of patients (47.4%) who did not experience social stigma tended to be readmitted 2-3 times, and a less number of patients tended to be readmitted 6 times and above. In all the row categories of readmissions, the proportions of patients who experienced social stigma and those who did not have social stigma had more or less the same number of admissions. Similarly in the yes/no column categories the number of readmissions decreases along the column

line. In this study the findings of social stigma and/or rejection is contrary to the results of the previous studies. This is probably due to the small sample size.

Table 5.5.9 Number of admissions : Alcohol use

Number of 2-3 times admission	Count	Alcohol		Total
		Yes	No	
4-5 times	Count	3	16	19
	Expected Count	4.5	14.5	19.0
6 times+	% Within , alcohol	30.0%	50.0%	45.2%
	Count	4	10	14
Total	Expected Count	3.3	10.7	14.0
	% Within , alcohol	40.0%	31.3%	33.3%
	Count	3	6	9
	Expected Count	2.1	6.9	9.0
	% Within , alcohol	30.0%	18.8%	21.4%
	Count	10	32	42
	Expected Count	10.0	32.0	42.0
	% Within , alcohol	100.0%	100.0%	100.0%

Greater proportions of patients (50%) who did not abuse alcohol tended to be less readmitted, i.e. 2-3 times, whereas the lower proportions of patients (30%) who abused alcohol tend to be less readmitted, i.e. 2-3times. The majority of patients (40%) who abused alcohol tend to be readmitted 4 – 5 times, whereas a lesser proportions of patients (31.3%) who did not abuse alcohol tend to be readmitted 4 – 5 times. In the third row categories of readmissions, of those patients (30%) who were abusing alcohol were more likely to be readmitted 6times and above than those patients (18.8%) who did not abuse alcohol. This indicated that abusing alcohol increases number of readmissions

Table 5.5.10 Number of admissions : Khat abuse

Number of admission	2-3 times	Count	Khat		Total
			Yes 9	No 11	
4-5 times	Expected Count	7.9	12.1	20.0	
	% Within , Khat	52.9%	42.3%	46.5%	
	Count	5	9	14	
	Expected Count	5.5	8.5	14.0	
	% Within , Khat	29.4%	34.6%	32.6%	
	6 times+	Count	3	6	9
Total	Expected Count	3.6	5.4	9.0	
	% Within , Khat	17.6%	23.1%	20.9%	
	Count	17	26	43	
	Expected Count	17.0	26.0	43.0	
	% Within , Khat	100.0%	100.0%	100.0%	

Greater proportion of patients (52.9%) who abused khat tend to be less readmitted, i.e. 2-3times, whereas lower proportions of patients who did not abuse khat tend to be less readmitted, i.e. 2-3times were (42.3%). Similarly, both in the third and fourth rows categories of readmissions, the proportions of patients (34.6%) and (23.1%) who did not abuse khat tend to be readmitted more than those patients (29.4%) and (17.6%) who abused khat. It seems that khat does not have effect on the number of readmissions. This is probably due to small sample size and the information obtained may not have been reliable. However, further deeper studies should be conducted in order to provide adequate information on the effect of khat. In this study, it was found that those respondents who used khat tended to be less readmitted for psychiatric care.

Table 5.5.11 Number of admissions : Isolation

		Isolation		Total
		Yes	No	
Number of admission	Count	5	15	20
2-3 times	Expected Count	7.0	13.0	20.0
	% Within , Isolation	33.3%	53.6%	46.5%
4-5 times	Count	5	9	14
	Expected Count	4.9	9.1	14.0
	% Within , Isolation	33.3%	32.1%	32.6%
6 times+	Count	5	4	9
	Expected Count	3.1	5.9	9.0
	% Within , Isolation	33.3%	14.3%	20.9%
Total	Count	15	28	43
	Expected Count	15.0	28.0	43.0
	% Within , Isolation	100.0%	100.0%	100.0%

The patterns of readmissions with socially isolated patients were consistent through out the categories of readmissions column (i.e. 33.3%). The majority of the patients (53.6%) who did not have problems of social isolation tend to be readmitted 2-3times, whereas lower proportions of patients (33.3%) who were socially isolated tend to be readmitted 2-3times. In the second row categories of readmissions, both those who were socially isolated and those who were not socially isolated patients (33.3%) and (32.1%) respectively tend to be readmitted 4 –5 times. This is more or less the same result. However, in the case of the third row categories of readmissions, there were more proportions of patients (33.3%) who had social isolations who tended to be readmitted 6 times and above than those patients (14.3%) who did not have social isolations who tended to be readmitted 6times and above. It seems that the number of readmissions rates decreases when the patients do not have problems of social isolation.

## **5.6. Results from the focus group discussions**

A semi-structured interview guide was used during the focus group discussions. The focus group discussion per group (two groups) was conducted at the premises of the Amanuel Psychiatric Hospital, in the library of the newly constructed building. The participants were selected from care-giving family members of the schizophrenic patients whose mentally ill relatives had been readmitted into the hospital for two or more times. Themes emerging from the discussions were: Substance abuse and medication default, socio-economic conditions, family problems in caring for the patient (such as behavior of the patient, social stigma and attitudes, lack of financial resources, and inadequate support from health providers and the community), quality and inadequacy of services, and treatment and care problems.

### **5.6.1. Medication non-compliance and substance abuse**

With regard to factors influencing the rate of readmissions of schizophrenic patients into the Amanuel Hospital, almost all of the focus group participants believed that medication default and substance abuse, such as chewing chat, drinking alcohol, smoking cigarettes and marijuana, are the major factors which contribute to the increased rates of schizophrenic readmissions. For example an elderly female participant (age 49) said:

*“He was repeatedly admitted to this hospital; his mental illness always relapses soon after discharged from the hospital, because he interrupts his medication and because he chews “khat”, drinks alcohol and smokes marijuana excessively. He improves, when he is admitted to the hospital, but the problem is, he continues chewing khat and drinking alcohol. No one*

*can control and prevent him from using these substance in the family as he is the eldest son."*

The participants further described that lack of adequate community awareness about the danger of substance abuse by the mentally ill people, social and family neglect, the maltreatment of schizophrenic patients and weak interventions of the state as some of the major factors. However, two participants opposed the above description by saying

*"One should not simply blame the society/ community as responsible factors for readmissions of schizophrenic patients. Rather, it is better to ask the basic question 'What is the tragedy and miracle behind lack of remedy/ cure for those patients who were admitted into the hospital for so many times with plenty dosages of drugs'?"*

Therefore, it is not the community or the government who should be blamed, but this study in particular must find out the answer to this question. Yet, this does not mean that society and the government are not responsible for the factors that exacerbate the illness and repeated admissions of mentally ill patients.

In further discussions, the participants elaborated on how the community and the government, including the Amanuel Psychiatric Hospital, are the main causes for the increased rate of readmissions of schizophrenic patients. An overwhelming majority of the focus group participants (10 out of 14) felt that the majority of the Ethiopian society provides alcohol, cigarettes, khat and even marijuana in some settings to mentally ill people. Instead of helping the affected and afflicted individuals, society provokes them into further relapses and a worsening of the illness. Almost all schizophrenic patients roam around begging for money in order to buy khat, alcohol, cigarettes or marijuana. Some young men in the neighbourhood even invite the patients to chew khat, smokes

hashish (Marijuana) and alcohol, then use them for their own purposes or to carry out anti-social activities.

A participant who is caring for his 45 years old wife shared interesting experiences by saying that

*“Khat chewing in my place is taken as culture. Leave alone the mentally ill people, even a seven-year-old child chews khat, smokes cigarettes, and drinks alcohol. There is a moral crisis among the youth. The existing situation obviously leads the youth to madness. Surprisingly enough, these days unemployment and the number of street children are increasing. They do not have anything to do except chewing khat and drink alcohol. It is the government’s responsibilities to protect them and find a solution.”*

A participant who is caring for her mentally ill brother explained that because of the khat sellers, they encountered great problems. She illustrated this by saying:

*“My brother did not have the habit of chewing khat or drinking alcohol, and he did not have a relapse for a long time before he started chewing khat. A lady who sells khat encouraged him to chew khat by giving it to him for free the first time. After that he gradually increased his consumption of khat and he likes to be with her all the time. He is out of our control and always demanding money for khat. He refuses to take his medication and chews the already used and left-over khat day and night. The lady abuses his labour for khat. After he has consumed it excessively, he becomes restless, insulting, and aggressive towards people, provoking others to fight with him. Due to this khat he has frequent relapses and readmissions. Currently his condition is getting worse.”*

In addition to the above, environmental factors contribute significantly to the problem of treating mentally ill patients. There is excessive local alcohol production, and khat and marijuana sellers abound in the area as well as video houses, which provoke mentally ill

people to engage in crimes to get the dangerous substances. Participants in this study laid the blame on the government. Instead of banning the use of such dangerous substances, which influence the rate of readmissions and exacerbation of the illness, the government appeared to encourage them to use these substances. People in government were only looking after their own interests, and did not care about such huge social problems.

### **5.6.2 Socio-economic problems**

Some informants in the focus group discussion (FGD)(7 out of 14) also highlighted the socio-economic conditions of individual schizophrenic patients as the main causes of readmissions into the hospital. They believed that the community held negative attitudes towards the mentally ill people and even towards their families as well. The socio-economic conditions included family disharmony, economic difficulties, social isolation, and labelling or stigmatisation. As one elderly brother in the focus group discussion (age 39) stated, the main causes of readmissions are:

*“ ...a lack of adequate knowledge about mental illness in the community, social rejection of the patients, avoidance, teasing and pointing at the patient by saying ‘wof (bird), ‘wofefe’ or ‘nik’ (hypomanic), ‘cherkunyetale’ (naked), ‘Ibd’ (mad), etc. are some of the factors exacerbating their mental illness.”*

The community member who brought a schizophrenic girl from the street described somewhat different experiences regarding reasons for schizophrenic readmissions. She stated:

*“Look I brought this girl to your hospital from the street. She has nobody to care for and protect her; therefore, in my opinion, the lack of a caretaker and guardian may aggravate the mental illness and the patient would be readmitted*

*so many times. I think those who do not have family and caregivers would visit the hospital repeatedly. Hence, lack of proper care by relatives other community may be one factor for frequent readmissions.” Participants from FGD (age, 38).*

### **5.6.3 Family problems in caring for the patients.**

#### **5.6.3.1 Behaviour of the patients**

In terms of the major problems confronting the families in providing care for their mentally ill relatives, all of the FGD participants indicated their major difficulties with the disease and its complications in ascending order. At the top of list was the frequent change in a patient’s behavior; for example, often s/he appears normal and calm, however all of a sudden s/he becomes aggressive, hostile, destructive, beating family members and others, attempting to commit suicide or homicide, and running out of the home. Secondly, participants of the FGD indicated that the demands of the mentally ill patients were extremely difficult to accommodate, since the majority of them were poor and unemployed. They did not have adequate resources to address the demands of the mentally ill patients, particularly when the demand was for money for khat, cigarettes (or marijuana) and alcohol. The third problem was that many patients refused to take the prescribed medication. The majority of the participants felt that this was a crucial problem which they found difficult to resolve.

#### **5.6.3.2 Social stigma and negative attitude**

Family members caring for schizophrenic relatives are also intensely affected by social stigma and the negative attitude of the community towards the mentally ill patients. In this regard the families faced a great challenge in their day-to-day life while treating their

mentally ill relatives, due to the negative attitude of the community towards the patients. In addition, many community members teased and harassed the mentally ill, and young criminals looted their homes and stole their property. A 54-year-old father of a patient revealed the following:

*"Let me tell you of my experiences with a practical example: Our society is a 'parasite' to my son, they are involved in harassment, some youth members take the shoes, clothes and money of my mentally ill son after inviting him to take some kind of substances and alcohol, so that in such conditions how could be the patient get better? The culture, the norm and values, the laws etc. are not well organized by our society to protect the rights of mentally ill people. In my opinion, all these are challenges for the family to care for and protect our patients."*

Some participants of the FGD (6 out 14) group added that the youth groups in the neighbourhoods provoked the mentally ill patients to become aggressive and hostile by throwing stones at them and by using insults that touched the dignity of the patients and the care-taking families. In addition they also said that the care-taking families were also facing difficulties with social interaction and face rejection and ostracism by community members and close relatives. This in turn had a negative effect on the care-taking families in responding to their mentally ill relatives. The community refrained from sharing the burden of illness and this situation brought an additional challenge to the care-giving families.

#### **5.6.3.3 Lack of financial resources**

The third major theme to emerge was the lack of financial resources or the prevalence of acute poverty, which did not allow the care-taking families to play a significant role in

the sustainable treatment of their mentally ill relatives. In this respect a 38-year-old lady in the FGD stated that:

*"Our poor economic condition and housing problems made us unable to provide sustainable and proper care for these chronically mentally ill patients. If those patients were cared for and protected well, with the help of Allah, I am sure they would be completely cured, but the existing living conditions do not permit this. This situation always disturbs me. What can I do?"*

Finally, an overwhelming majority of the participants claimed that the major problem they were facing was that the needs of the patients were unlimited, but they could not provide for all these needs (money, friends, works, etc.). The responsible stakeholders like the government needed to show its full capacity to respond to the problems of the patients and caregivers. Therefore, the challenges confronting the caregivers were complex and multifaceted.

#### **5.6.3.4 Lack of support**

The majority of participants (11 out of 14) raised issues like lack of proper attention by the health workers when the family brought the patients to hospital in an emergency situation, especially during the evenings when there was not any adequate support and help from the staff on duty in order to minimize the risk and complications of the illness.

Moreover, the hospital guards and some staff members of the hospital were not cooperative in controlling and protecting the patients from escaping. As a result, many patients jumped over the fence or escaped through the main gate. In this situation patients were lost, and nobody knew if they were still alive, had been killed in accidents or

committed suicide. This was a big tragedy and loss to their families. They were also easily engaged in substance abuse and criminal activities.

In addition, the lack of home visits by the health workers to assess what would happen to the discharged patients as well as the lack of proper counseling for caregivers in handling the patients in their settings, were serious problems. They reported that because there was no proper follow-up system or home-based care by hospital staff, the conditions of some of the patients worsened after discharge from the hospital, and their families suffered a lot as they tried to cure them with whatever means at their disposal. They claimed that some staff members of Amanuel Mental Hospital were reluctant to assist the patients when the families brought them back to the hospital. An informant from FGD had this to say:

*“One of this hospital’s doctors decided by himself not to treat my relative in the hospital anymore. He told me that I must restrain him and keep him at home. He wrote on the file that my relative should not be accepted into the hospital anymore, and put his signature on the file. This is a big problem and a disappointing response by the hospital.”*

They further stated that although the community had the potential to share the burden, about 80% of the society was not supportive. When somebody was affected by this illness, it was common that somebody else would also be affected by it. They further added that of course, “...the community is not the only one to be blamed, but also ourselves and the government at large,” regarding the challenges associated with the lives and situations of schizophrenic patients. This was because families were primarily the ones who were faced with the challenge of showing love and affection to the patients,

instead of the community and the government. However, this did not mean that there were no problems on the side of the families, as stated earlier. The community distanced itself from such challenges and even aggravated the existing problems. In addition, the government was blamed because it did not show any initiative to assist both the patients and their families in addressing these huge problems.

However, the participants in general appreciated some of the community members and some of the staff members of the hospital where this study was conducted, who had shown a positive attitude and helped those patients who were living in extreme misery due to a lack of caretakers.

Finally, one participant emphasized the following:

*“Although families of schizophrenic patients are in fact obliged to shoulder the challenge of care and support, the problems of these patients are not restricted to an individual or family, but that of the larger community or country. Therefore, the community and government should give much more attention to these sufferers.”*

#### **5.6.4 Quality and adequacy of services**

With regard to reference to the services provided by the Amanuel Mental Hospital, the majority of the participants (10 out of 14) reported that this hospital was the only mental hospital for the whole nation and that it was doing relatively well. However, the attention given to it by the government and the burden it shouldered were not properly aligned. They further stated that the institution had major constraints or bottlenecks in fully providing services to mentally ill people. In this regard, the lack of adequate and appropriate psychiatric treatment and follow-up care, were sited by the majority (10 out

of 14) of the informants, while some felt that the lack of home- and community-based care systems were the main constraints. The informants further highlighted that the hospital was lacking adequate budgets and facilities to provide appropriate services for mentally ill patients. Others indicated that neglect by the staff members caused one of the bottlenecks at the institution. As one informant in FGI (focus group interview) (age 39) pointed out:

*"As far as my knowledge is concerned, this hospital never did any assessment regarding issues of those patients who were ill for so long, but unable to get improvement and... readmissions into the hospital are common. What are the major causes for relapse and then readmission, etc. are some of the basic questions never found answer by the hospital. Therefore, they had never performed studies especially psychological, financial, medical and social aspects of the schizophrenic patients. In addition, there were no options of rehabilitation and recreations... so as to make the patients to relax and function well. These would further contribute to the amelioration of the problems of the patients. The hospital did nothing to establish a conducive environment with the long term care giving family and also did no assessment regarding the coping mechanisms and challenges encountered by care givers and schizophrenic patients as well."*

Most of the caregivers share the same idea that during relapses of the illness, there were a lot of problems in getting patients readmitted due to the shortage of beds or the lack of an urgent response from staff. Long-term patients were not properly handled in the hospital.

According to the report from some participants (8 out of 14), lack of proper care and protection from the staff was also observed in safeguarding the patients. This led to some families being unable to find their relatives, when they came to visit them in the hospital. Because of such problems in the hospital, the patients were engaged in antisocial acts like chewing khat, alcohol abuse, smoking cigarettes or hashish, which aggravated the illness.

In discussing these issues, the focus group participants said that if the hospital was unable to take proper measures to prevent patients from escaping and engaging in different antisocial activities, how could the families alone help and protect them? Patients usually respected and accepted what they were told or advised by the doctors rather than their family members.

While participants in focus group-2 appreciated the services provided by the hospital with some limitations, participants 4 and 7 from focus group-1 expressed complete dissatisfaction, particularly about some sections of the hospital staff.

#### **5.6.5 Treatment and care of schizophrenic patients**

With respect to the treatment of schizophrenic patients the informants suggested patients whose condition could not be improved, should be treated in the hospital as in-patients, because their families could not shoulder the burden of care of such patients. Treating chronic schizophrenic patients requires physical labour, time and economic resources. The physical labour involves basic health care monitoring techniques (services), walking to and from the home to hospital, a distance of 5 –15 kilometers and accessing follow-up medication, all of which consumed too much time for family members who had other duties such as their normal work.

Some informants disagreed on the issue of the treatment of patients in the hospital. However, they strongly supported the establishment of institutions offering recovery services for chronic mentally ill patients. According to the informants, such institutions should integrate their services with vocational training and education. Nevertheless, it seemed that these caregivers were afraid of the demand placed on them in treating the chronic mentally ill patients. Some informants felt that the government should take the initiative in providing vocational training, and should place the trainees in productive institutions, so that the patients could become self-supportive citizens.

The informants further believed that the government should not carry out this task alone, but that the community, particularly the families of the mentally ill patients, should be actively involved and participate in supporting the government. Other participants believed that the government should take strong measures in preventing many of the social problems, in particular, prohibiting the sale of khat and alcohol to the mentally ill and creating an awareness of the harmful effects of substance abuse on such people. The participants argued that the government should provide social grants for the care-taking families who were living under serious financial constraints.

## **5.6 .6 Summary o f chapter**

### **5.6.6.1 Socio-demographic factors**

The findings of the socio-demographic data showed that the majority of the subjects of the study were in their thirties, while the rest were in their twenties. There were more than twice as many males than females. The majority of the subjects had discontinued their high school education. A few of them managed to go beyond high school. In this

study group none of them were illiterate. Most of them were single and lived with their parents.

With regards to employment, the study revealed that most of them were unemployed during the time of the study. Some of them had never worked before or after their mental illness. Of those who were working, the majority was engaged in skilled work and only a few of them were doing professional work.

#### **5.6.6.2 Results of the clinical data**

The findings of the study in the Amanuel Mental Hospital associated rates of schizophrenic readmissions with several modifiable factors. The modifiable factors, which appeared to have the greatest effect on schizophrenic readmissions, were: medication default/non-compliance, substance abuse, poor aftercare services and the socio-economic conditions of the patients. Most of the schizophrenic participants gave unreliable answers to the questions related to substance abuse. It is not uncommon for schizophrenic patients to lie about their habits of substance use. The results of the findings, obtained from three angles (i.e. from schizophrenic respondents, health professionals, and families/caregivers) showed slight variations in terms of prioritizing the major factors (medication non-compliance, substance abuse, poor aftercare services) associated with the rate of readmissions. However, these factors are interconnected and linked to one another to increase the rates of readmissions. In further examining the data, it was found that most schizophrenic patients were non-compliant to treatment due to substance abuse, poor aftercare, social stigma and economic problems.

The most striking findings concerned the diagnosis of their mental illness. Most of them, including their family members in the focus group discussions, reported not knowing the diagnosis. What they all knew were simply that the patients suffered from “mental illness.” Hence, patients and families knew far too little about the illness, and families found it difficult to understand and cope with their mentally ill relatives.

The findings related to difficulties with their family members revealed that more than half of them had experienced persistent conflicting relationships with their family members. It is also noted that the responsibilities and the burden of care for these chronic mentally ill people was left to the families. The poor economical status of the family was one of the biggest challenges in providing the necessary care for their mentally ill relatives. The majority of the focus group discussants also regarded community attitudes and social stigma as major problems. Both the subjects of the study and the family members had experienced social stigma, isolation or rejection and harassment.

It is important to note that the extent of the social stigma was not covered by this study, and further research needs to be conducted to provide adequate information on this area. In this study, the findings on the non-modifiable factors (i.e. sex, age, etc.) are not significantly associated with frequent re-hospitalizations of schizophrenic patients. This is probably due to the small sample size. Nevertheless, this does not mean that they are not associated with re-hospitalizations.

Chapter Six will provide a detailed discussion on the findings of this study.

## **CHAPTER 6: Discussions of the results**

### **6.1 Introduction**

This chapter discusses the major research findings in relation to the literature review, the main research question and objectives of the study. The main research question was “What are the factors influencing the rate of schizophrenic readmissions into the Amanuel Psychiatric Hospital?” The objectives of the study were: to identify factors associated with the rate of schizophrenic readmissions and to assess the psychiatric services given to schizophrenic patients at the Amanuel Psychiatric Hospital. The major themes discussed in this chapter are: socio-demographic characteristics; medication non-compliance; substance abuse; poor aftercare services and socio-economic conditions.

Finally, the chapter provides a summary of the discussions. The conclusion, recommendations of the study and implications for further research are provided in Chapter Seven.

### **6.2 Socio-demographic characteristics**

#### **6.2.1 Gender**

In this study, the survey results revealed that more male schizophrenic patients had multiple re-hospitalizations than female schizophrenic patients. The finding was consistent with previous research findings. It also confirmed my practical experiences and observations. Male patients occupy three-fourths of the hospital beds. Perhaps female patients are not brought to hospital for admissions for the following reasons:

- Families and communities are more tolerant of female patients than their male counterparts.
- The norms and culture of the society are more protective of female patients than male patients;
- Female patients are less violent and aggressive than male psychotic patients, so that their families can handle them at home.

The results of the study by Haywood, Kravitz, Grassoman, Cavanaugh & Lewis (1995), support the above finding that men were more times hospitalized compared women. The findings of other studies have also shown similar results.

### **6.2.2 Marital status**

In this study, more than 70% of the schizophrenic participants were unmarried and a small number were divorced. The cross tabulation (see Table 5.4) shows that unmarried schizophrenic patients seem to be readmitted more only in the first 2-3 times of readmissions. The results were not consistent with the findings of other studies as far as the first 2-3 times of readmission were concerned. In most of the cases, schizophrenic illness started during the end of the period of adolescence. This means that patients are affected by the illness before they have completed their high school education or before they start working. Once the illness has developed, the chance of getting married is quite difficult due to the relapsing nature of the illness and the social stigma attached to it. Divorce is fairly common when one of the spouses becomes mentally ill.

The study conducted by Peen and Dekker (2001) indicates that being single, divorced or living alone is associated with multiple re-hospitalizations.

### **6.2.3 Unemployment**

The result showed that most of the schizophrenic participants were unemployed. Most of them developed the disorders at a youthful age. Because of the disabling nature of the illness, it is difficult for those sufferers to complete their education and look for employment. It is also easy to lose their jobs unless they have appropriate and adequate support and care from both the family and communities in general. Unemployment leads to socio-economic deprivation and this in turn results in multiple re-hospitalizations. In this study, it was found that unemployment does not affect the rates of schizophrenic readmissions. Perhaps this is because of the smaller sample size. The study by Peen and Dekker (2001) has shown that there is a significant relationship between socio-economic deprivation and multiple admissions of schizophrenic patients. However, socioeconomic deprivation and readmission rates may also vary according to the different categories of the diagnosis of schizophrenia.

### **6.2.4 Educational level**

The study showed that the majority (74.41%; N=32) of the schizophrenic participants did not complete their education. With the early onset of the schizophrenic illness, continuing education is difficult and one could also argue that this is due to a lack of timely treatment and care to reduce the deteriorating effect of the disorder. Most Ethiopians have little knowledge of the modern treatment of psychiatric illnesses. As a result they usually end up taking their mentally ill relatives to different traditional healing sites. Only a few of them use the mental health facilities as the last resort.

The findings of this study (see Table 5.3) showed that educational achievement only affected the rate of readmissions for the first 2-3 times, whereas the rate of readmissions tended to increase as the educational level increased. Nevertheless, this finding is contrary to earlier research findings. Previous studies have indicated that education is significantly associated with re-hospitalizations of schizophrenic patients.

### **6.3 Length of stay, rate of contact with others, and difficulties with families**

This study showed (see Table 5.5) that the number of readmission were fewer if patients stayed in hospital longer. Therefore the length of stay affects the rate of readmissions, which is consistent with the findings of other studies. The study indicated that those schizophrenic patients with active participation and interaction in their recovery processes, were less likely to be readmitted than those who were passive participants. It seems that helping schizophrenic patient to participate in community activities, decreases the rate of readmissions. The results also revealed that those schizophrenic patients who had family problems tended to be readmitted more times than those without family problems. All the above findings are consistent with the results of previous research.

### **6.4 Medication non-compliance**

The study revealed that the majority of schizophrenic patients (36.36%; N=32) was readmitted into the Amanuel Mental Hospital due to medication default or non-compliance. The reasons given for medication non-compliance were the side effects of the drugs, negative perceptions about the treatment, and a lack of food to help them tolerate the side effects of the drugs. It seems that most psychotic patients suffer from the side effect of the anti-psychotic drugs. The side effects of the drugs are that they make

the patients drowsy, decrease their activities, socialization and communication with other people. It also makes them weak, so that they find it hard to maintain their personal hygiene and neatness. As a result, they can easily be identified as psychotic patients and are stigmatized.

Some also reported that it is difficult to wake up early to go to work and to concentrate on their jobs while they are taking medication. This made them decide to discontinue their medication. Some claimed that the anti-psychotic drugs increase their appetites, and they do not have enough food to eat to help them tolerate the side effects of the drugs. Hence the result of this study pointed out that medication non-compliance is the main reason for the frequent readmissions of schizophrenic patients into the Amanuel Mental Hospital. This is consistent with the findings of other studies.

The literature review has indicated that poor insight into their mental illness, negative attitudes towards the medication both by the patients and their families, lack of support as well as more oral medication than injectable treatment regimes, are associated with medication non-compliance (Conley, Love, Pharm, Kelly and Bartko, 1999). Medication non-compliance is strongly linked to schizophrenic re-hospitalizations. A phenomenological and participatory research project conducted in the United States of America revealed that schizophrenic patients discontinued their medication in order to seek re-hospitalization due to the availability of safety, respite and food in the hospital (Davidson, Stayner, Lambert, Smith & Sledge (1997). Other findings showed that substance abuse and medication non-compliance were significantly associated with a high frequency of re-hospitalization (Haywood, Kravitz, Grossman, Cavanaugh, & Lewis, 1995). These findings are comparable with the findings of the focus group

interviews conducted at the Amnuel Psychiatric Hospital. A similar study by Sullivan, Mongenstern and Leak (1995) pointed out that more than half of the schizophrenic participants were non-compliant with anti-psychotic medications, despite the fact that they understood that the medication is helpful.

Lack of money for transport and medication was given as reasons for medication default and relapses of the illness. This is consistent with the findings in the United States that financial barriers to medication and transport to out-patient mental health care were also associated with medication non-compliance.

This study estimated that the prevalence of medication default in this study is as high as 36.36%(N=32), but this can not be generalized to the total population due to small size of the study population, However, the results from the focus group interviews revealed that most schizophrenic patients have discontinued their medication after discharge from hospital. Csernansky and Schuchart(2002) found that a previous history of medication non-compliance, a history of substance abuse, poor insight into the nature of the experienced symptoms and poor alliance between patients, care providers and family were predictors of non-compliance with drug treatment. This is also true in the case of Amanuel Psychiatric Hospital. The results of the study from three angles have indicated that schizophrenic patients in Ethiopia have poor professional as well as family support in their follow-up treatment and care. Family support is mainly dependent on the existing economic conditions and the family's understanding of the illness.

## **6.5 Substance abuse**

The survey results revealed that substance abuse (see Tables 5.9 & 5.10) have a smaller effect on the rate of frequent re-admissions compared to medication default, socio-economic circumstances and poor aftercare services. The results from both the schizophrenic respondents (14.77%; N= 13) (see Table 5.3.2) and health care providers (25%; N= 9)(see Table 5.4.8) responses, respectively revealed that substance abuse is less frequently related to the re-hospitalization of schizophrenic patients in the Amanuel Psychiatric Hospital. This is contrary to the findings obtained from the focus group discussions. Most of the focus group participants agreed that substance abuse was a major factor in frequent re-hospitalizations. They reported that the abuse of alcohol and khat was the biggest problem in providing care for their mentally ill relatives. It was very difficult to prevent the patients from abusing those substances, because they became aggressive and violent towards them, if they did not get those substances.

Another finding of the study is that schizophrenic patients abuse substances to reduce the unpleasant effect of anti-psychotic drugs. Vogel and Huguelet (1997) indicated that there is an association between psychotic illnesses and the abuse of drugs or alcohol, leading to frequent re-hospitalizations. Recent studies demonstrated that the rate of drug or alcohol abuse is higher among chronic schizophrenic patients. Schizophrenics appear to be particularly susceptible to the negative effects of substance abuse. This includes psychiatric and social complications with anti-social behavior, particularly violent behavior.

### **6.5.1 Alcohol**

The majority of Ethiopian women in the poorer parts of the country commonly brew their own alcoholic beverages for commercial purposes. Alcohol production is a livelihood for them. Most schizophrenic patients therefore have access to these very cheap locally produced alcoholic beverages. They can also get it free. It is not illegal to provide alcohol and drugs or khat to mentally ill people. Under normal circumstances people use alcohol and khat for different purposes, such as for socialization, entertainment, or to relieve boredom.

The survey result revealed that 25.58% (N=11) of the schizophrenic participants abused alcohol. This is a lower result compared to the findings of the focus group interviews, in which almost all the participants revealed that most schizophrenic patients abused alcohol and khat. The result of this study is supported by the findings of Haywood, *et al.* (1995) that most schizophrenic patients abuse substances. The findings of the literature review show that there is a strong relationship between substance abuse and medication non-compliance. This reaffirms that substance abuse and medication non-compliance can affect the rate of frequent re-hospitalizations.

The reasons for the lower result of the present survey study seem to be due to inaccurate answers, or denial on the part of the schizophrenic participants as well as the small sample size of the study population. In general, the study estimates that the prevalence of medication default ranks the highest (36.36%; N=32 out of 88 responses), whereas the prevalence of substance abuse ranks the lowest. There is substantial evidence to support the present result that schizophrenic patients who abuse alcohol and khat are at greater

risk of re-hospitalization and frequent behavioral changes. However, further studies are required to facilitate a better understanding of the effects of substance abuse on those sufferers in Ethiopia.

### **6.5.2 Khat**

Khat is a commercial crop in Ethiopia. The government earns a high income in tax from those selling khat. It mostly grows on the highlands and in medium climatic conditions. Most of the population of the country chew the green fleshy part of the leaves of the plant for its psycho-stimulant effect. Khat consumption is part of the culture in some parts of the country.

The survey result revealed that 41.86% (N= 18 of 43) of the schizophrenic patients abuse khat. This result does not give the real figures of schizophrenic khat abusers in the hospital due to the fact that substance abusers are renowned for their denial that their abuse of certain substances puts them at a greater risk. This finding is contrary to the results of the focus group interview, that the overwhelming majority of the focus group participants have revealed that their mentally ill relatives consume khat in large quantities. Furthermore, it showed that after they have consumed a lot of khat, they become restless, irritable, unable to sleep, aggressive or violent towards their family members. They also refuse to take their medication. This is then followed by a complete relapse of the illness and re-hospitalization. After they are discharged from the hospital, they go back into the same community. Problems continue to recur.

A few studies conducted in England and in Ethiopia by Griffith, Gossop, Wickenden, Dunworth, Harris and Lloyd, (1997) and Alem, Kebede and Kullgren, (1999) respectively, indicated that khat can induce psychosis. From this we may conclude that khat abuse is significantly associated with re-hospitalizations. However, the result of cross tabulation (see Table 5.10) showed that khat abuse (as reported by respondents) has little effect on the rate of re-admissions. Nevertheless, no studies have as yet been conducted on the association between Khat abuse and frequent re-hospitalizations.

## **6.6 Poor after care services**

The results of this study revealed that the service and care given for schizophrenic patients are responded as poor. The psychiatric services given at Amanuel Psychiatric Hospital are bio-medically oriented, which is criticized for focusing only on disease and illness as entities of physical problems existing independently of psychological and social factors. The bio-psychosocial model is the acceptable model of treatment for schizophrenic patients, which is a holistic approach focusing on the multidimensional aspects of biological, psychological and social factors. Schizophrenia is exacerbated by the combined influences of biological, psychological and social factors. Treating the biological problems alone, thereby undermining the major parts, i.e. the psychological and social factors, results in poor outcomes and prognosis. As is evidenced by the results of the present study, it increases the risk of re-hospitalizations as well as the suffering of the patients.

The survey results revealed (see Table 5.4.11) that there are insufficient psychiatric services available to the mentally ill. About 31.1% of the responses (14 of 45) of the

survey participants revealed that poor aftercare service given to the schizophrenic patients was one of the major reasons for the frequent re-hospitalizations of schizophrenic patients. These findings are consistent with the results of the focus group interviews.

Most participants in the focus group interviews revealed that there was no continuity of care and support to these mentally ill people once they were discharged from the hospital. The burden of caring for these sufferers was left to the family, even though the majority of these families were poor and had insufficient or no knowledge on how to provide adequate care for the patients. The focus group participants also revealed that they received little professional help from the health care providers. Furthermore, they stated that it was very difficult to get urgent professional help or responses, especially during the time of early relapse, to avoid a complete relapse and further complications.

The other findings of the study showed that there was poor communication between the health providers and the care-taking family members. The follow-up appointment between the patients and the professionals were also loosely structured and lacked accountability on both sides. As a result, most schizophrenic patients missed their appointments. The length of time between the follow-up appointments created a big gap between the two parties, especially during the initial appointments. This in turn created conditions for medication non-compliance and refusal to use the services. The results also showed that during follow-up time, the patients were not allowed to explain their problems to the therapist. The therapists just handed over the prescriptions to them, and went on to the next patient. Perhaps this is due to the shortage of professional staff. It is extremely disappointing to both to the patients and the care taking family members to return home without having explained their problems to the medical professionals.

The absence of psycho-education and rehabilitation services affected the patients and the family physically, psychologically as well as in terms of time, resources and energy. It also affected the health care providers in terms of time, resources and energy. A lack of public or community support, inadequate treatment and care facilities are the greatest challenges for the families in providing care for their mentally ill relatives.

### **6.7 Socio-economic conditions**

The survey result revealed that the socio-economic problems of the patients increased the rate of frequent re-hospitalizations. However, in this study, the problem of socioeconomic conditions 25(28.41%) was ranked second to medication non-compliance/default, i.e.32 responses (36.36%) as indicated by the schizophrenic respondents (see Table 5.3.2). The focus group interviews also showed more or less the same result, with half of the focus group participants confirming that socio-economic conditions were strongly linked to re-hospitalizations.

They further explained that negative community attitudes and stigmatization tended to increase the mental illness of an individual person. The cross tabulation (see Table 5.5.11) shows that social isolation increases the rate of readmissions. Krieg (2001) indicates that schizophrenic patients are exposed to homelessness and rejection due to de-institutionalization. Moreover, they were exposed to social stigma, neglect, hostility, abuse and poor medical care (Arthur, 1989; Davidson & Neale, 2001). In a similar way, the results from the focus group interviews revealed that some community members harassed, exploited, discouraged, and gave nicknames to the patients, which touched the moral virtue of the person. Some of the peer groups also provoked the mental illness of

the individual patients by giving them alcohol, khat and then abusing them. This might be the reason why schizophrenic patients have difficulty in socializing or mixing with the communities

The present study has revealed that poverty is a major concern to both schizophrenic patients and their family members. This is because most schizophrenic patients are totally dependent on the mostly insufficient income of the family members. Most family members have no regular income. The burden of care for those sufferers is left to the families. It is evident that the poverty of the mentally ill patients is linked to re-hospitalizations. The research showed that the length of stay and the increased proportion of patients readmitted into the mental hospital were related to socio-economic deprivation. In other words, there is a significant relationship between the rate of readmission and socio-economic deprivation.

It is clear that families tolerate a great deal of the difficult behavior of the patient. However, families lack knowledge about the nature of the patients' illness and receive little help from professionals in the management of such difficult behavior, except in times of crisis.

It is evident from the review of the literature that families in poor communities and the patient relative have little knowledge about schizophrenia as an illness. Perhaps this indicates the importance of intervention treatment through providing adequate information or psycho-education to the patient and the care-taking families. One of the most important steps to be taken in the management of the mentally ill, is to provide accurate information and psycho-education.

The questions used to assess the families' relationships with the patients found that more than half (53.49%; N=23) of the schizophrenic participants had difficulties with their families (see Table 5.3.4). The above findings are also supported by further assessment of the family dynamics. The majority (51.16%; N=22) of the survey participants revealed that their families were always in conflict with them (see Table 5.3.5). The findings of this study are also consistent with the study of Zeff, *et al.* (1990), which showed that about 22% (N=29) of schizophrenics perceived that their families were critical of them. Schnur, Friedman, Dorman, Redford and Kesselman (1986) found that patients who were admitted often reported greater family conflict and less freedom to express emotions.

A similar result was revealed in the focus group interviews. In most cases, families did not understand the problems of their mentally ill relative. They thought that patient was 'acting out' or pretending. Even if such patients were in remission, they did not have a say in family issues or about things that concern them. Every family member wanted to restrict them. They are always under the control of their family members and yet they do not get adequate support in terms of their basic needs, such as clothing, shoes, food and privacy, as well as emotional support. Some families chased their mentally ill relatives away due to the burden of care and the patients' behavior. This always creates a conflictual relationship among the family members and in turn this exacerbates the mental illness.

A study conducted to find out the expressed emotion determined by the number of critical comments, and the amount of emotional involvement and hostility, indicated that schizophrenic patients with multiple admissions perceived their families as more conflict-

ridden and less permissive of free expressions (Zeff *et al.* 1990). In spite of all these problems they get little support from either the government or community.

### **6.8 Summary of chapter**

In conclusion, this study resulted in some important findings regarding the influence on the rate of schizophrenic re-hospitalizations to the Amanuel Psychiatric Hospital: These are medication non-compliance/default, poor aftercare services, socio-economic deprivation and substance abuse. Increased emphasis on the importance of medication compliance, abstinence from alcohol, khat and other substances and improving the aftercare services through integrated programs between the health providers, care-taking families and community can provide important preventive intervention to help to break the revolving door cycle of schizophrenic patients and improve their health outcomes.

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## **CHAPTER 7: Conclusions, recommendations and implications for further research**

### **7.1 Conclusion**

In conclusion, it is time now to ask whether the research question posed at the beginning and objectives of the study were answered, or not. The main research question was to investigate the factors influencing the rate of schizophrenic readmissions into the Amanuel Psychiatric Hospital. The objectives of the study were: (1) to identify factors influencing the rate of schizophrenic re-hospitalizations, and (2) to examine the psychiatric services and care given to schizophrenic patients at the Amanuel Psychiatric Hospital.

The conceptual framework of the study served to locate the factors related to schizophrenic relapses and re-hospitalizations and how they should be treated using the appropriate treatment model to reduce frequent readmissions and improve their quality of life. The bio-psychosocial model of schizophrenic treatment is a widely acceptable approach in health care delivery systems. The model is concerned with the provision of integrated health care practices by recognizing the influence of biological, psychological and social factors. It also helped the researcher to have an in-depth understanding of the matter as well as the interplay between the different matters in influencing the rate of re-hospitalizations. The findings are briefly reviewed as follows:

### **7.1.1 Factors associated with frequent readmissions of schizophrenic patients into the Amanuel Psychiatric Hospital**

The major findings of the survey and qualitative focus group study listed the following factors as the primary ones influencing the rate of schizophrenic readmissions: medication non-compliance, poor aftercare services, socio-economic conditions of the patient and substance abuse. Although previous studies have shown an association between the socio-demographic characteristics of the population and readmissions of schizophrenic patients, the results of this study showed that socio-demographic conditions had a smaller effect on the rate of readmissions. This is contrary to the findings of those previous studies, but this inconsistent result is probably due to the small sample size of the present study and the fact that the sample did not include relatively equal representation from the socio-economic groups.

#### **Medication non-compliance**

The study has demonstrated that there is a substantial relationship between the medication non-compliance and the rate of frequent readmissions. The results from the survey and focus group interview have revealed that most schizophrenic patients interrupt their medication. The reasons given for the interruption of the medication were: economic problems (lack of food, money for transport and medication), negative attitudes towards the treatment, family rejection due to the burden of care and hopelessness, social stigma, side effects of the drugs, poor aftercare services and substance abuse.

## **Quality of the aftercare services**

The study has shown that, in spite of the remarkable efforts that had been observed on the part of the Amanuel Hospital psychiatric services, the hospital is at present unable to provide biopsychosocially oriented psychiatric care and treatment. Psychosocial rehabilitation treatment and care is totally unknown to the Amanuel Psychiatric Hospital. This is absolutely contrary to the modern way of psychiatric treatment, which is the bio-psychosocial approach to health care practices. Dispensing pills to the patients without a basis of evidence is an outdated system of treatment with little or no effect. The majority of the participants have reported that the aftercare services given to the schizophrenic sufferers are inadequate. There are no community psychiatric services available for those chronic mentally ill schizophrenic patients.

The study has revealed that without community psychiatric services, it is difficult to provide continuity of care and support to those chronic mentally ill patients. All patients from around Addis Ababa are expected to come to Amanuel Psychiatric Hospital for regular follow-ups. Such visits are quite expensive and exhausting. The hospital is overcrowded with both acute and chronic psychotic patients, and at the same time has been suffering from a severe shortage of professionals in various fields. This makes the hospital unable to provide adequate and appropriate aftercare services for those sufferers.

The study of the home environment has shown that families do not understand the nature and type of disorder suffered by their mentally ill relatives, and that such people are frequently rejected due to social stigma and the burden of care. Perceived criticism and intrusive relationships were also indicated as problems in the findings of this study.

Patients lack safety and security and emotional support from their care-giving families and the community. More than ninety percent of the patients (as well as their families) did not know the diagnosis or prognosis of their mental illness. This is due to a lack of psycho-education both to the patients and families. Community stigmatization and harassment are also perpetuating factors for frequent relapses and re-hospitalizations of schizophrenic patients. The study has also found that follow-up appointments are very loosely scheduled, so that missed appointments between patients and health care providers are not uncommon. This has led to the patients developing mistrustful relationships with their healthcare providers and this in turn has lead to medication non-compliance and re-hospitalizations.

It is clear that there are mutual responsibilities to be shared by the healthcare providers, patients and families of the patients. Clarifying and describing what is expected from each party may bring about a situation marked by cooperation rather than one-sided prescription.

In conclusion, the aftercare services received by schizophrenic patients at the hospital are inadequate, with very limited professional and social support.

### **Socio-economic problems**

Both the survey and qualitative study have shown that schizophrenic patients have severe socio-economic problems. They have difficulties in mixing and socializing with the rest of the community because of the negative attitudes and stigmatization of the community. It was further revealed that some of the community members harassed the mentally ill patients by insulting and robbing them. Many community members have misperceptions

about the causes of mental illness. They link the cause of mental illness to evil spirits or supernatural forces. Thus, the community ostracizes not only the mentally ill patients, but also their family members. Therefore, the negative attitudes and rejection of the community were found to be potential risk factors leading to frequent readmissions of the patients.

It is evident from the data that the families of the patients were the only ones caring for, and supporting their mentally ill relatives. In most cases the mother or the sister of the patient bore the brunt of the responsibility for the treatment and care of the patient. Because of the nature of the disorder, schizophrenic patients frequently develop hostility and hatred towards their closest relatives, who are also the victims of the patients' frequent violent behavior. The incomes of the caring families were also found to be inadequate for the task of caring for schizophrenic relatives. They were frequently unable to pay for transport to bring the patient to the hospital for their regular treatment, and to provide adequate food for the patients, which made the patients irritable and aggressive. This in turn led to substance abuse, crime, medication non-compliance and eventually relapse and re-hospitalization. The hospital is the best alternative source of regular feeding for the patients. At present, there is no social and public support system for these sufferers. The existing situation perpetuate and aggravate the illness. Being unable to meet the needs of the patient also influenced family members to reject and/or avoid their sick relative. Therefore, poverty is one of the major factors, which influences the rate of frequent readmissions to the Amanuel Psychiatric Hospital.

### **Alcohol and Khat abuse**

The findings of this study indicated that the abuse of alcohol and khat is the major contributing factor to the rate of schizophrenic re-hospitalizations. It is indicated that such substance abuse makes it hard for the families to care for their mentally ill relative. Such abuse makes the patients aggressive, irritable and abusive. Unless serious measures are taken by the government to prevent such substance abuse, it is beyond the capacity of the family to prevent their mentally ill relatives from abusing alcohol and khat. The study found that almost all patients had access to these potentially dangerous substances. Because of this, patients refused to have regular treatment. The patients explained that they used alcohol and khat to overcome the side effect of the drugs and to reduce their appetite due to the lack of food.

Therefore, the factors influencing the rate of readmissions of schizophrenic patients into the Amanuel Psychiatric Hospital are diverse and multifaceted. Any form of treatment needs to take all these multidimensional factors into account.

### **7.2. Recommendations**

In this study I described the findings of the survey and qualitative focus group study in ascertaining factors accountable for the rate of schizophrenic readmissions to the Amanuel Psychiatric Hospital. Several issues with regard to factors influencing readmissions were addressed, such as substance abuse, medication non-compliance, family environment, community attitudes and stigmatization and the role of families in the management and readmissions of schizophrenia. Much attention has also been paid to psychiatric services and the care given to schizophrenic patients, specifically to factors

that contribute to the relapse and re-hospitalization of schizophrenic patients. The results of this research will be used to design and promote psychiatric care and the recognition of the importance of planning with individual patients and their social networks. Therefore, based on the findings of the study and the conclusions, I would like to make the following recommendations. There is a need for

- Creating family intervention programs, which should include: psycho-education about schizophrenia; therapeutic strategies designed to improve stress management by all family members through channeled communication and problem-solving skills.
- Strengthening the capacities of the care-taking families to cope with the burden of care and improving their economic conditions. This should include sustainable social grants, coping skills training and the management of schizophrenic patients.
- Removing the sole burden of care and responsibilities from poor family members.
- Designing an appropriate program that is aimed at increasing community awareness with regards to mental illness; the dangerous effects of substance abuse on mentally ill people; improving the attitudes of the community as well as their participation in assisting the families of schizophrenic patients.
- Providing legal protection for these mentally ill sufferers, to prevent people from selling dangerous substances to them as well as refraining from abusing or harassing mentally ill people.

Furthermore,

- This study has demonstrated that it is possible for the government and researchers to work together to conduct studies, which allows for local policy makers to gain new insights into how to improve mental health services.
- The introduction of more innovative funding mechanisms such as capitalization of managed care approaches in the community mental health systems across the country which will increase the motivation of all parties concerned to work together, to identify patients and families and factors influencing the rate of readmissions and improving the efficiency of the Amanuel Psychiatric Hospital.
- Minimizing the adverse effects of the drugs may help to optimize the long-term treatment of patients, because it helps to improve treatment compliance.
- Providing appropriate and short appointment follow-up care based on mutual responsibilities and understanding, and building a trustful relationship will improve the existing situation of the schizophrenic patients.
- Early identification of the type of psychiatric patient who is likely to be readmitted (pre-lapse program) is necessary to enable the planning and implementation of a specific program of ambulatory care to prevent re-hospitalization.
- A community integration approach should be established to reduce re-hospitalizations through preventing the perpetuating factors.
- Evidence-based treatment should be put into practice.

- A psychosocial rehabilitation program and support group should be established for schizophrenic patients.

### **7.3 Implications for further research**

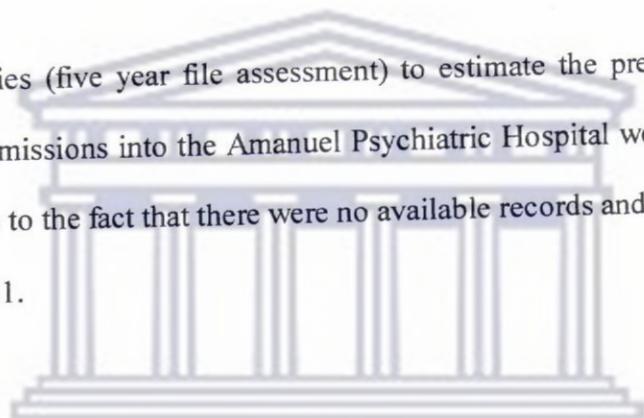
Further research in the area is clearly needed for the following reasons:

- To explore and describe the experiences of the care taking family members of schizophrenic patients in more detail.
- Wider and more thorough studies are needed, which involve a representative sample of schizophrenic patients from the entire country.
- To explore and describe the caring capacity of the family members and the burden of care.
- A study should be conducted to assess the economic impact and consequences of schizophrenic patients.
- Further research is needed to test strategies for changing risk factors or for reducing the readmission rates of schizophrenic patients.
- To conduct a situational analysis of schizophrenic patients and the provision of psychiatric services at Amanuel Psychiatric Hospital.
- To investigate the cost effectiveness and therapeutic effect of the new generation drugs.

#### **7.4. Limitation of the study**

The study had the following limitations:

- Due to a lack of time and economic constraints, I was unable to conduct a detailed study.
- Due to the small sample size of the study population it was problematic to conduct an association between variables using the chi-square test.
- Retrospective studies (five year file assessment) to estimate the prevalence of schizophrenic readmissions into the Amanuel Psychiatric Hospital were omitted from this study due to the fact that there were no available records and files of the patients before 2001.



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## **APPENDICES**

### **APPENDIX A:Profile of focus group I participants**

Code No	Sex	Age	Districts	R/N with patient	Work conditions
FGDI-1	Female	22	1	Wife	Housewife
FGDI-2	Female	38	5	No blood r/s	Housewife
FGDI-3	Male	39	19	Brother	Company employee
FGDI-4	Female	49	7	Mother	House
FGDI-5	Male	54	20	Father	Pensioned
FGDI-6	Female	43	7	Mother	Housewife
FGDI-7	Female	50	5	Mother	Housewife

Source: Own survey (30Jan,2003,Addis Ababa)

### **APPENDIX B: Profile of focus group II participants**

Code No	Sex	Age	Districts	R/N with patient	Work condition
FGDII-10	Male	59	05	Father	Priv. business
FGDII-11	Female	30	05	Sister	Unemployed
FGDII-12	Female	40	01	Mother	Housewife
FGDII-13	Female	35	16	Sister	Secretary
FGDII-14	Female	35	17	Sister	Priv.employee
FGDII-15	Male	48	01	Husband	Priv.business
FGDII-16	Female	32	27	Sister	House wife

Source: Own survey (4Feb,2003, Addis Ababa)

## **APPENDIX C**

12 DECEMBER 2002

### **TO WHOM IT MAY CONCERN: Letter of introduction.**

This serves to certify that Million Shifweraw Bimerew is a student at the University of the Western cape, Bellville, Republic of South Africa. His student number is 2155601 and he is studying towards the Masters Degree (M.CUR) in Psychiatric/Mental Health Nursing.

Mr Bimerew will return to Ethiopia on December 2002 to do his data collection for his thesis at the Amanuel Psychiatric Hospital, Addis Ababa, Ethiopia. We expect him to be back at the university on Wednesday, 5 March 2003, at the latest.

If every thing progress according to our planned programme Mr Bimerew should complete his studies by the end of December 2003.

Yours sincerely

PROFESSOR F.C. SONN

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(HEAD: DEPARTMENT OF NURSING)  
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## **APPENDIX D**

**Letter regarding consent from the medical director to the center**

**The medical director  
Amanuel psychiatric Hospital**

**Addis Ababa, Ethiopia.  
1January 2002**

**Dear Sir:**

**Re: Permission to use the Amanuel Psychiatric Hospital for study.**

I am a post-graduate student registered in the Department of Nursing at the University of the Western Cape. The research I am doing will be submitted to the University of the Western cape Senate in partial fulfillment for the requirements of a Masters of Science Degree in Psychiatric Nursing.

I am humbly asking for permission to use the Hospital for study purposes, because I am interested to know the factors associated with frequent readmission of schizophrenic patients into this hospital. I will like to assure you that the information I will get both from the schizophrenic and Professional staff respondents will be kept at most confidential.

Your assistance in this regard will be highly appreciated.

Truly yours,

Million

## **APPENDIX: E**

### **Letter of ethical approval**

#### **Minutes of Meeting**

Participants: Dr Tefera Muche  
Ato Fekadu Bekele  
Mrs Madhavi Hattiarachehi

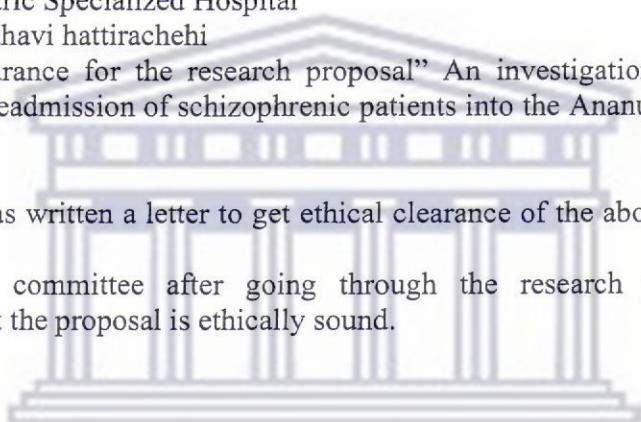
Date 05/05/95 E.C

Place Amanuel Psychiatric Specialized Hospital  
Minutes record by: Madhavi hattirachehi

Agenda : Ethical clearance for the research proposal” An investigation into factors influencing the rate of readmission of schizophrenic patients into the Ananuel psychiatric hospital, Ethiopia”.

Ato million Shiferaw has written a letter to get ethical clearance of the above mentioned study.

The ethical clearance committee after going through the research proposal has unanimously agreed that the proposal is ethically sound.



## **Appendix F**

### **Letter of consent to the respondents**

Date: December 2002

I am a post graduate students registered in the Department of Nursing at the University of the Western Cape. The final result of this research will be submitted to the University of the Western Cape in partial fulfillment for the requirements of a Masters of Science Degree in Psychiatric Mental Health Nursing.

The purpose of this research is to ascertain the factors influencing the rate of readmission of schizophrenic patients into the Amanuel Psychiatric Hospital. Reflecting on the existing real situations will contribute to obtaining valid base-line data.

You are cordially invited to answer this questionnaire by using your experiences. The questionnaire should take less than 30 minutes of your time. Your participation is highly appreciated and will make a worthwhile contribution towards finding solutions for a pressing problem.

Be assured that all information will be handled totally confidentially.

Thank you for your cooperation and contribution

Million S Bimerew

## **Appendix G: Questionnaire for the schizophrenic respondents.**

### **English version**

Time Interview started: \_\_\_\_\_

#### **I. Basic demographic questions**

1. ID: -----

2. Age: -----

3. Sex: 1. Male ; 2. Female

4. Marital status: 1. Single ; 2. Married ; 3. Divorced ; 4. Widowed  
; 5. Separated ; 6. Other

5. Level of Education: 1. Illiterate ; 2. Read and write ; 3. Primary school ;  
4. 7-8 grade ; 5. High school ; 6. Diploma ; 7. Degree(one)  ; 8. more  
than two degree

6. Employment status: 1. Employed ; 2. Unemployed ; 3. Self employed

7. What kind of work did you do? -----.

8. Number of family members living together: -----

9. Head of the household-----

10. Where do you live?

1. Privately owned house; 2. Public rented house ; 3. Private rented house;

4. On the street ; 5. Hostel ; 6. No response

11. With whom are you living?

(1). With parent  ; (2). With family; (3) sister/brother  ; (4). Alone  ;  
(5). Relatives  ; (6). Friends

#### **II. Characteristics of schizophrenics readmissions**

12. Do you know the diagnosis of your mental illness?

(1). Yes ; (2). No

13. How has your mental illness been over the last three(3) months?

- (1). Better than usual
- (2). Same as usual
- (3). Worse than usual
- (4). Much Worse
- (5). Don't know

14. When were you admitted into the psychiatric hospital for the first time?-----

15. How many times have you been admitted to the psychiatric hospital altogether?

- (1). 2 times
- (2). 3 times
- (3). 4 times
- (4). 5 times
- (5). 6 times
- (6). More than 6 times
- (7). Don't know



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16. What is your normal length of stay in the hospital after admission?

- (1). Less than 2 weeks
- (2). 2-4 weeks
- (3). 1-2 months
- (4). 2-3 months
- (5). 3-4 months
- (6). 4-5 months
- (7). 5-6 months

(8) more than 6 months

(9) Don't know

17. What are the three(3) major reasons for your readmission into the hospital? Please explain in order of importance:

(1).-----

(2).-----

(3).-----

18. If you are on medication, do you find your medication is

(1). Very helpful

(2). Helpful

(3). Indifferent

(4). Unhelpful

(5). Very unhelpful

(6). Don't know



19. What kinds of treatment and care do you receive from this hospital?

	1 Given	2 Not given	3 Refuse to answer
(1) Medication			
(2) Psychotherapy			
(3) Psychosocial rehabilitation			
(4) Occupational therapy			
(5) Recreational therapy			
(6) Regular follow up and visit care			
(7) Other:-----			

20. Do you think that the therapies you receive mentioned in 19 are :

(1). Very helpful

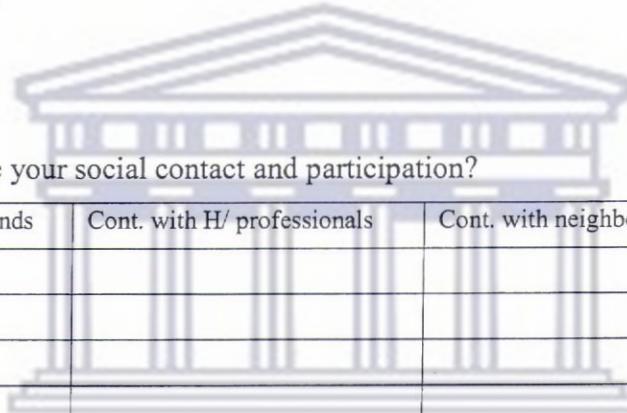
(2). Helpful

- (3). Indifferent
- (4). Unhelpful
- (5). Very unhelpful
- (6). Don't know

### **III. Social and family functioning related questions**

21. Do you have any difficulties mixing with your neighbors or friends?

- (1). Yes ; (2). No



22. How would you rate your social contact and participation?

		Cont. with friends	Cont. with H/ professionals	Cont. with neighbors	Cont. with others
1	Active				
2	Intermediate				
3	Passive				
4	Don't know				

23. Your performance in the job you had:

- (1). Very good
- (2). Good
- (3). Average
- (4). Poor
- (5). Very poor
- (6). Don't know

24. Do you have difficulties in the families? (1). Yes ; (2). No

25. What are these difficulties?

	1	2	3
	Yes	No	Refuse to answer
(1) Rejections/stigma			
(2) Inability to cope			
(3) Problem of shelter			
(4) Problem of food			
(5) Financial problems			
(6) Other:-----			

26. How is your family interaction at home?

	1	2	3
	Exist	Doesn't exist	Refuse to answer
(1) Helping and protecting			
(2) Belittling			
(3) Not flexible			
(4) Intrusive			
(5) Coercive			
(6) Confictual			
(7) Critical			
(8) No interaction			

27. How would you rate your family relationship?

a) Emotional support: (1). Very good

(2). Good

(3). Average

(4). Poor

(5). Very poor

b) Intrusive relationship: (1). Very high

(2). High

(3). Average

(4). Low

(5). Very low

c) Conflict: (1). Very high

(2). High

(3). Low

(4). Very low

(5). Not at all

#### **IV. Patient attitude questions**

28. How do you rate the attitudes of the community towards you?

(1). Very good

(2). Good

(3). Average

(4). Bad

(5). Very bad

(6) Don' know

29. Do you experience any of the following problems in the community?

	1	2	3
	Yes	No	Refuse to answer
(1) Stigma			
(2) Lack of social support			
(3) Harassment			
(4) Isolation			
(5) Other:-----			

30. What are your feelings about the health professionals in Amanuel Psychiatric Hospital?

(1). Very good

(2). Good

(3). Bad

(4). Very bad

(5). Unsure

31. What do you think the health personnel feel while treating you?

(1). Very good

(2). Good

(3). Bad

(4). Very bad

(5). Unsure

32. How do you think schizophrenic patients like you should be treated?

(1). Institutional care in the hospital

(2). In the community

(3). In a rehabilitation center

(4). Don't know

(5) No response

33. What do you think are the advantages of your answer in item 31? -----

34. How satisfied are you with the services that you receive from the hospital?

(1). Very satisfied

(2). Satisfied

(3). Neither satisfied nor dissatisfied

(4). Dissatisfied

(5). Very dissatisfied

(6) No response

35.What are three of the reasons for your answer in 34

(1)-----

(2)-----

(3)-----

36. What are some of the barriers of the hospital in the provision of psychiatric services?

Please provide three(3) barriers:

(1)-----.

(2)-----.

(3)-----.

37. Do you use the following substances? Write a 1 for very often; 2 for sometimes and 3 for perhaps once a year.

	1	2	3
	Yes	No	Refuse to answer
(1) Alcohol			
(2). Khat			
(3) Drugs (narcotics/psychotropic)			
(4) None			
(5) Other:-----			

38. How frequently do you use the substance that you indicated that you very often use?

(1). Daily, with excessive amount

(2). Daily, with little amount

(3). Once or twice weekly, with excessive amount

(4). Once or twice weekly, with little amount.

39. What suggestions do you have for the improvement of the psychiatric services?

Please provide three suggestions in order of priority:

(1)-----.

(2)-----.

(3)-----.

Time Ended: \_\_\_\_\_

THANKYOU FOR YOUR COOPERATION AND CONTRIBUTION

#### **APPENDIX H :Questionnaire for the health professionals**

1. ID: -----

2. Age: -----

3. Gender: - 1.Male ; 2. Female

4. Profession:-----

5. Rank in profession:-----

6. Number of years at Amanuel Hospital:-----

7. Number of years working with schizophrenic patients at Amanuel Hospital:-----

8. Number of years working in your profession:-----

9. What is the average duration of the stay of schizophrenic patients after the first admission?

(1). 2-4weeks

(2). 4-8weeks

(3). 2-3months

(4). 3-4 months

(5). .4-6 months

(6). More than 6 months

10.Are there frequent readmissions of schizophrenic patients?

(1)Yes ; (2).No

11.What do you think are three of the major reasons for the recurrent readmission of schizophrenic patients? Mark the most important reason as 1; second most important as 2 and third most important as 3.

Reason	Response1, 2 or3
(1) Shortage of medications	
(2) Medication default	
(3) Inadequate in-patient care	
(4) Problem of shelter	
(5) Poor after-care services (after discharge)	
(6) High emotional and provoking families	
(7) High rate of substance abuse	
(8) Joblessness	
(9) Lack of food	
(10) Other, specify:-	

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12. Would you please indicate the regular psychiatric service and care provided by the hospital? (More than one answer is possible)

	1 Given	2 Not given	3 Refuse to answer
(1) Medications			
(2) Individual psychotherapy			
(3) Group psychotherapy			
(4) Psychosocial rehabilitation			
(5) Occupational therapy			
(6) Recreational therapy			
(7) Regular follow up and visit			
(8) Family psycho-education			
(9) Other, specify:-----			

13. The mental health care given to the patient by the hospital is adequate:

- (1). Strongly agree
- (2). Agree
- (3). Undecided
- (4). Disagree
- (5). Strongly disagree

14. How do you feel about treating schizophrenic patients?

1	2	3
Comfortable	Indifferent	Worry a lot

15. How do you feel about the outcome of schizophrenic patient treatment at the Amanuel Psychiatric Hospital?

- (1). Very satisfactory
- (2). Satisfactory
- (3). Unsure
- (4). Unsatisfactory
- (5). Very unsatisfactory

16. What are three of the important barriers in the provision of psychiatric care for the schizophrenic patients in the Amanuel Psychiatric Hospital?: In order of importance:

- (1)-----
- (2)-----
- (3)-----

17. How would you like schizophrenic patients to be treated? Provide three (3) ways of treatment in order of importance:

- (1)-----
- (2)-----
- (3)-----

18. What suggestions do you have for the removal of the barriers to effective and quality treatment of schizophrenic patients? Provide three (3) suggestions in order of priority:

- (1)-----
- (2)-----
- (3)-----

THANK YOU FOR YOUR CONTRIBUTION.

## **APPENDIX I: Interview guide for the focus group questions**

1. ID-----
2. Age-----
3. Gender-----
4. Marital status-----
5. Educational level-----
6. House hold member-----
7. Head of household-----
8. Occupation-----
9. Income-----
10. Please tell me any thing you like about your mentally ill family members.
11. What, in your opinion, are some of the causes of his/her illness?
12. What are the reasons, in your opinion for his/her repeated admission into the Hospital?
13. In your opinion, what are some of the major problems confronting you in caring for the patient?
14. What are some of the negative response and challenges that you experience from your neighbours and other community members regarding the patient?
15. What is your opinion of the services rendered to the patient by the Amanuel Hospital?
16. Please describe the patient's relationship with (1) his/her family members' (2)

friends and (3) colleagues (workmate).

17. Can you tell me how a mentally ill person should ideally be treated and provide reasons your opinions.
18. You are welcome to provide me with any comments or suggestions regarding the readmission of schizophrenic patients.

THANK YOU FOR YOUR COOPERATION





# በና ቴርጉም ዕ/ቤት

## BENA TRANSLATION OFFICE

### Appendix I: Amharic version of the questionnaire

#### በኢትዮጵያ ስነዥ ስምምነት የጥረት መመሪያ

##### 1. መመሪያ የአገልግሎት ጥናት ጥያቄዎች

1. መለያ —————

2. ዕድሜ —————

3. ደታ:-

1) መንደኛ

2) ሲት

4. የጊዜ ሁኔታ:-

1) የሳባት

2) የንግድ

3) የተከተሉ

4) ባለ/ማረስት የሞተብት

5) የተለያየ

6) □ ሊተ

5. የተምህር ደረጃ:-

1) ማንበብና መጽኑ የማይቻል

2) ማንበብና መጽኑ የሚቻል

3) አንድና ደረጃ

4) 6-8 ክፍል

5) ክፍትና ደረጃ

6) የተለመ

7) የግራ (አንድ) □

8) ካሁለት የግራውን በላይ □

6. የቅጥር ሁኔታ:-

1) በሥራ ገዢ ያለ

2) በሥራ አጥ

3) በግራ ሥራ የሚተዳደር

7. ፈጂን ዓይነት ሥራ ስርተዋል? —————

8. አጠርምት የሚኖሩ የቦተሰበ በዘት —————

9. የቦተሰበ ታክሏ —————

10. የት ነው የሚኖሩት?

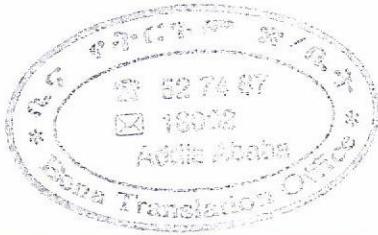
1) በግራ መኖረው በት

2) በከራይ በት

3) በመንገዶች ላይ

4) ሆነቱል

5) መልሰ የለም



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Dr. A. G. D. BENE  
BENE TRANSLATION  
OFFICE, ADDIS ABABA,  
ETHIOPIA

11. ከማን ወር ነው የሚኖሩት?

- (1) ከወለደ ወር
- (2) ከእሁት/ወንድም ወር
- (3) ለብቻ
- (4) ከዘመድች ወር
- (5) ከወዳጅች/ጋድጋች ወር

## II የሥነ-አኩምርአዊ ታሪክ ጥያቄዎች

12. የአኩምር ስመምዎን የጥምርመራ ወጪት ይውጥል?

- (1) አውጥለሁ
- (2) አለው-ቁጥሮ

13. ባለቤት ህብት (3) ወረት ወሰጥ የአኩምር ስመምዎ እንደሆት ነው?

- (1) ከተለመደው የተሳለ
- (2) ልከ እንደተለመደው
- (3) ከተለመደው የከፋ
- (4) በጥም የከፋ (የባለ)
- (5) አለው-ቁጥሮ

14. ለመጀመራው ገዢ ወደ አኩምር ሆነታቸል የገበት መቻ ነበር? -----  
UNIVERSITY of the  
WESTERN CAPE

15. በአጠቃላይ ወደ አኩምር ሆነታቸል ለበንት ገዢ ያህል ገበተዋል?

- (1) አንድ ገዢ በቻ
- (2) h2-3 ገዢዎት
- (3) h4-5 ገዢዎት
- (4) h 5-6 ገዢዎት
- (5) h6 ገዢዎት በላይ
- (6) አለው-ቁጥሮ



16. ወደ ማስታቸው ከነበሩ በቃላ መደበኛ የቆይታ ገዢዎች ፈጻል ነው?

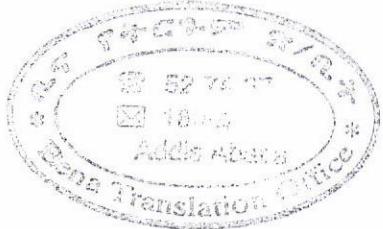
- 1) ከሁለት ስምንታት ያኝነ
- 2) ከ2-4 ስምንታት
- 3) ከ1-2 መሬት
- 4) ከ1-2 መሬት
- 5) ከ4-6 መሬት
- 6) ከ6 መሬት በሳይ
- 7) እሌው·ቁዴ·ጥና

17. ወደ ማስታቸው ይገመዙ የገበባቸው ሰነት (3) የኩ የኩ ምክንያቶች ፍንድን  
ናቸው? እቅዱው እንደ እስራተኞቸው በቅድም ተከተል ይገልጻ?

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

18. መደብኬት (ከኩን) እየወሰኑ ከሆነ መደብኬቱን (ከኩኬን) እንደሆት እጥናት?

- 1) በጣም መቋሙ ነው
- 2) መቋሙ ነው
- 3) በቅተኛ ጥሩት እለው
- 4) የማይረዳ ነው
- 5) በጣም የማይረዳ ነው
- 6) እሌው·ቁዴ



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Dr. A. M.  
PAULINE  
18 APRIL 2014  
Computer Network

19. Ի՞նչ ՄԱԴՐԱՏ ԹՎՆ ԳԵՐԻԴ ՀԱՀԹՎԹԻ ՀՅԱՍՏԱԹԻ ՔՐԴԱ?

	1	2	3
	ԲԵՆՈ	ՔԱԴՈՒՈ	ԱՄԱՋԱՆ ՀՅԱՍՏԱԹ
1) ԲԱՋԱՆԻ (Խ.Դ) ՀԱՀԹՎ			
2) ՔԱՆԹԱԾ ԱՌԺ ՔՄԻԸՆ ՄԵՐԵԴ ՀԱՀԹՎ			
3) ԱՄԱՋԱՆ ՄԵՐԵԴ ԴԱՄԱՆ ՔԼՂՖՄՆ ՔՄԳՃՃԵԴԻ ՔՄԱՆ ՄԿՓՔՄ ՀԱՀԹՎ			
4) ԱԲ ՔՄՆ ՀՅԱՍՏԱԹ ԱՄԱՋԱՆ ՔՄԳՃ ՀԱՀԹՎ			
5) ՔՄՉՔԽԴ (ՀԱԽԴ) ՀԱՀԹՎ			
6) ՄԵՋՈՒ ԻԴԻԴԱՆ ՔԴ-ԱՌԴ ՀՅԱՍՏԱԹ			
7) ԱԿ -----			

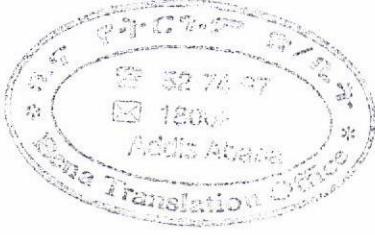
20. ԱԿՐԸ 19 ԱՅ ՔԴԱՀ-ԴԻ ՔԴՓՈԼՎԴՄ ՀԱՀԹՎԹԻ ԹՎՆՅՆ ԳԴՄ?

- 1) ԱՊԹ ՄՓՄՆ ԳԴՄ
- 2) ՄՓՄՆ ԳԴՄ
- 3) ԱՓԴ-Ը ԴՀ-Դ ՀԴՄ
- 4) ՔՄԳՃՃ
- 5) ԱՊԹ ՔՄԳՃՃ
- 6) ՀԴՄ-ՓԹ

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ՏԵՐ ՀԱՅԻ  
ԽԱՆԱ ԲԱՐԱԿ  
ՔԸ ԱՎ ԱՎԻՆԻ  
Հայու Վահագու



III. ከማካብር-ዋና ከንወጣን እና ከበተሰባዊ ከንወጣን የር የተዘመኝ. ተያቄዎች

21. ከንድታቸው ወይም ከነጋጌቸው የር የመቀለቀል ቅጂዎች አለበው?

- 1) አለበት
- 2) የለበቸውም

22. ማሳቢው-ግንኙነትዎንና ተሳትራምቸውን በጥንት መለከ ይገልጻቸል?

		ከንድታቸው የር ያለው ግንኙነት	ከጠና ባለሙያዎች የር ያለው ግንኙነት	ከነጋጌቸው የር የለው ግንኙነት	ከለሎች የር የለው ግንኙነት
1	ንፃ				
2	መከከለኛ				
3	ፍቅር የሰለው				
4	እሳው-ቁም				

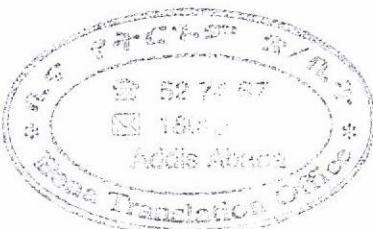
23. በሥራው እና የነበረው የሥራ ከንወጣ፡-

- 1) በጣም ጥሩ ነበር
- 2) ጥሩ ነበር
- 3) መከከለኛ ነበር
- 4) ነቅ ያለ ነበር
- 5) በጣም ነቅ ያለ ነበር
- 6) እሳው-ቁም

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የኢትዮጵያ  
የደንብ ዴንብ  
የደንብ ዴንብ  
የደንብ ዴንብ



24. በዚተሰበችው ወሰኑ ቅጂዎች (መሰናከሱች) እለባቸው?

- 1) አለብች
- 2) የለብችም

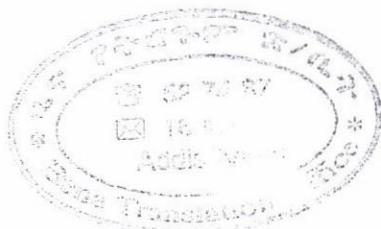
25. እነዚህ ቅጂዎች ጥንቃጭ ፍቃው?

	1	2	3
	አዋ	አይደለም	ለመመለስ እምበ ማለት
1) ተቀባይነት ማማት /መጥሪ ስም			
2) ቤኬታዎችን መቆቻዎች እለመቻል			
3) የመጠለያ ቅጂዎች መኖር			
4) የምግባ ቅጂዎች መኖር			
5) የገንዘብ ቅጂዎች መኖር			
6) ሌላ -----			

26. በመኖሩም በት ወሰኑ የቤተሰቦዎች ተባብር የመሥራት ሁኔታ እንዲታ ነው?

	1	2	3
	ተብብር አለ	ተብብር የለም	ለመመለስ እንዲታ ማለት
1) መርዳታና መከታታ መሆኑ			
2) ማንኛዜስ (እንደን ስው በቁዎችና ተፈሳሽ አይደለሁም በለው እንዲስማወው ማድረግ)			
3) እንዲስፈልጊሚ ካህናታዎች ዝር እለመለዋዎጥ			
4) ጥልቻ ጉባ መሆኑ			
5) አስተዳደር መሆኑ			
6) ቁርኬ (ግዢት) ዲጂር መሆኑ			
7) ስህተት ዲጂር መሆኑ			
8) የመጀመሪያ ተብብር /ተዕለያ/ የለም			

፩



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Dr. S. M.  
MAELI BARAKA  
Prof. Dr. R. M. M.  
General Manager

27. հԱՐՈՂՄ ՀԵ ՔԱՂՋ ՊՅՈՒՆԻ ՈՄՈՒ ՄՈԱՀ ՔԵՂՔԻԴԱ?

v) ՈԼՄԵԴԻ ՔՄՂՋՀԵՐ ԸՑԺՒ:-

- 1) ՈՂԹԱ ՔՇ.
- 2) ՔՇ.
- 3) ՄՈԺԻԽԱՂ
- 4) ԱՎԻԴԻ
- 5) ՈՂԹԱ ԱՎԻԴԻ

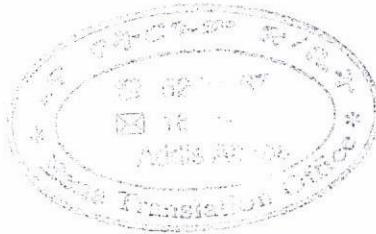
h) ՊԱՓ ԴԱՇ ՀՎԻ, ՊՅՈՒՆԻԴԱ:-

- 1) ՈՂԹԱ ԻԳԻԴԻ
- 2) ԻԳԻԴԻ
- 3) ՄՈԺԻԽԱՂ
- 4) ԱՎԻԴԻ
- 5) ՈՂԹԱ ԱՎԻԴԻ

h) ՊԲԻ /ՈՒ/:-

- 1) ՈՂԹԱ ԻԳԻԴԻ
- 2) ԻԳԻԴԻ
- 3) ԱՎԻԴԻ
- 4) ՈՂԹԱ ԱՎԻԴԻ
- 5) ՄՈ-Ն- ՈՄ-Ն- ՀԵՂԱԹԱ

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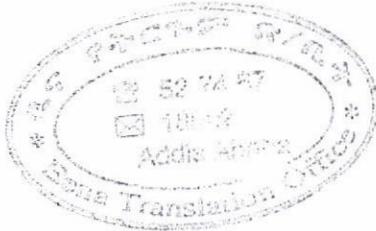
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2010-2011  
WATERMAN  
FOR THE LIBRARY  
General Manager

#### IV. የበሽተኛ የእመለካከት ጥያቄዎች

28. ማህበረሰቦ በእርስዎ ገዢ የለውን አመልካክቶች በጥንት የህል መጠን ይገልጽታል?

- 1) Աղջու Դհ
  - 2) Դհ.
  - 3) Թահինաչ
  - 4) Թաթե
  - 5) Աղջու Թաթե

	1 አም	2 የአም	3 ለመመለስ አምበ, ማለት
1) መተሪ, ስም			
2) የማህበራዊ ዴሞክ እጥረት			
3) በተደረገውን የማስጨሻዎች የማስፈጸመ-ት በኋታ			
4) መግለጫ			
5) ሌብ —————— —————			



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~~✓~~

30. በአማካናል የእኩምር ህጻታቸል ወሰን ስለመያዥ ስሜቶችው ተንሃኒት  
ናቸው?

- 1) በጣም ጥሩ
- 2) ጥሩ
- 3) መተሪ
- 4) በጣም መተሪ
- 5) እርግጫዊ አይደለሁም

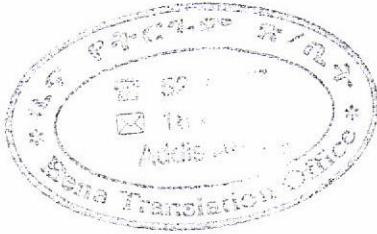
31. የጤና ለራተኞች በሚያከናወል ጥሩን ይሰጣቸል በለው ያስቀል?

- 1) በጣም ጥሩ ስሜት
- 2) ጥሩ ስሜት
- 3) መተሪ ስሜት
- 4) በጣም መተሪ ስሜት
- 5) እርግጫዊ አይደለሁም

32. እንደእርስዎ በአክምር በሽታ የሚሰጥበት በሽታቸቱ እንደነት መታከም አለባቸው  
በለው ያስቀል?

- 1) በሆነታቸል ወሰን ከተቋሙ ጽር የተያያዘ አከምና
- 2) በማህበረሰቦች ወሰን
- 3) በመፈጸም ማቅረብ ማስከላ ወሰን
- 4) አገዣቸው

33. በቀጥር 31 አይ የሰጠት መለሰ ተቋሞች ተንሃኒት የቸው?



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Dr. S. M. Naidoo  
Chairperson  
Examination Committee  
General Manager

34. ԻՄՈՒԺԱ-ՌԵԴԻՎԻՎ ՀՂԱՊԼՈՒՔ ԹՎՆ ՔՍԱ ՔՔՈՒՓԱ/ ՀԻՒՓԱ?

- 1) Աղջու ՀԻՒՓԱ/ ՔՔՈՒՓԱ
- 2) ՀԻՒՓԱ
- 3) ՀԻՒՓԱ-Թ ՀԱՀԻՍ-ԹՐ ՄՂՆԴ ՀԵՖԱԹ
- 4) ՀԱՀԻՍ-Թ
- 5) Աղջու ՀԱՀԻՍ-Թ

35. ԱՎՐԸ 34 ՄՈԱԾՄ ԾՈՒՅՔ ԹՎԻՆՔ ԹՎՆՁՆ ԳԻՎԱ?

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

36. ՄՈՒԺԱ- ՔՀԱԹԸ ՀԻՒՓԱ- ՀՂԱՊԼՈՒՔ ԱՄԱՐՓԱ- ՂԽ ՀՅԱՅՅ:

ՄՈԱԾՄ ԹՎՆՁՆ ԳԻՎԱ?

- UNIVERSITY of the  
WESTERN CAPE
- ՀՊԻՄ ԾՈՒՅՔ (3) ՄՈԱԾՄ ՔՓԱ-  
1) \_\_\_\_\_  
2) \_\_\_\_\_  
3) \_\_\_\_\_

37. ՔՄՀԻՒՆԴՆ ԿԱԾՔ ՔՄՈՒՊԱ? Աղջու ԱԽ ՂԽ ՔՄՀՄՈՒՊԱ ԻՄՆ 1 ԱԼՄ:  
ՔՀԿ: ՀՅԱՅՅ ՂԽ ԻՄՆ 2: ԹՎՆՁՆԴԹ ԱԿՄՈՒ ՀՅԱ ՂԽ ԻՄՆ 3 ԱԼՄ:  
ՔՀԿ:::



	1	2	3
	አዎ	የአጥም	ለመመስልና አጥቢ ማለት
1) አልከል			
2) መለት			
3) አድንበኩር ዕክታ (ፍርዴትከሰ/ እንቅልና አጥቢ, ስለታ)			
4) ፍጤም የአጥም			
5) ሌላ -----			

38. በጣም በዚ ገዢ እንደሚጠቀሙ የመለከተችን ይጥረኞባ የንግድ የንግድ የህል ገዢ  
በተደረገውን ይጠቀሙታል?

- 1) በየፊልቱ፣ ከመጠን ባለፈ በዘመት
- 2) በየፊልቱ፣ በተቀጥ መጠን
- 3) በገምጃት እንደ ወይም ህ-ለቱ፣ ከመጠን ባለፈ በዘመት
- 4) በገምጃት እንደ ወይም ህ-ለቱ፣ በተቀጥ መጠን

39. ለእኔም አካላዊ አገልግሎቶች መሸሻል የንግድ የማረቻቻዎች ሁኔታ አለዋ?  
እባክዎ ቅድመኛ የሚሰጣቸውን ስለት ሁኔታዎን በቅድም ተከተል የቻርብ፡-

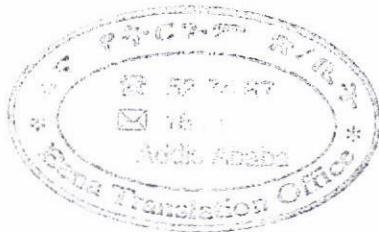
- 1) -----
- 2) -----
- 3) -----

### ስለትበብርዎና አስተዋጽኑ እናመስማትዎች፡፡

ቀን የካር 25/1995

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ወ/ሮ ዘ/ዴ  
ወ/ሮ ዘ/ዴ  
ወ/ሮ ዘ/ዴ  
General Manager