

**“A STUDY TO ASSESS THE QUALITY OF LIFE OF  
SCHIZOPHRENIC PATIENTS ATTENDING  
OUTPATIENT DEPARTMENT OF MENTAL HEALTH  
CENTRE, TRIVANDRUM, KERALA.”**

BY

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### **CERTIFICATE**

This is to certify that this thesis, titled **“A STUDY TO ASSESS THE QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS ATTENDING OUTPATIENT DEPARTMENT OF MENTAL HEALTH CENTRE, TRIVANDRUM, KERALA”** Submitted by Mrs. PRIYA RAJAN. C, M.Sc., Nursing (2010-2012 batch) Vivekanadha College of Nursing in partial fulfillment of the requirement of the Degree of Masters Science (Nursing) from the Tamil Nadu Dr. M.G.R. Medical University is her original work carried out under our guidance.

This thesis or any part of it has not been previously submitted for any other Degree or Diploma.

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## DECLARATION

*I hereby declare that this thesis entitled "A STUDY TO ASSESS THE QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS ATTENDING OUTPATIENT DEPARTMENT OF MENTAL HEALTH CENTRE, TRIVANDRUM, KERALA" is the outcome of the original research work undertaken and carried out by me under the guidance and direct supervision of Prof. R. KANAGAVALLI, M.Sc.,(N), (Ph.D) and Speciality Guide Mr. G. RAMAR, M.Sc.,(N) Department of Mental Health Nursing, Vivekanandha College of Nursing (Sponsored by Angammal Educational Trust) Elayampalayam, Tiruchengode, Namakkal District.*

*I also declare that the material of this thesis has not formed in any way the basis for award of any other degree, Diploma or Associate fellowship previously from the Tamil Nadu Dr. M.G.R Medical University.*

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*“Gratitude makes sense of our past, brings peace for today, and creates a vision for tomorrow.”*

*-Melody Beattie*

*In deed this creation has seen the light of the day only because of the constant encouragement and cheerful participation of so many good souls whom I wish to remember and express my gratitude.*

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**PRIYA RAJAN.C**



## **ABSTRACT**

### **STATEMENT OF THE PROBLEM**

**“A STUDY TO ASSESS THE QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS ATTENDING OUTPATIENT DEPARTMENT OF MENTAL HEALTH CENTRE, TRIVANDRUM, KERALA.”**

### **OBJECTIVES**

- To assess the quality of life of schizophrenic patients.
- To determine the relationship between quality of life with the socio demographic variables such as age, sex, marital status, education, occupation, type of family, place of residence, duration of illness and treatment.
- To prepare a health education module for the schizophrenic patients.

The conceptual frame work used for this study was based on Roy's adaptation model. Reviewing the literature of the related study the researcher selected the conceptual frame work.

The research design adopted for the study was non experimental descriptive survey design. The sample consists of 80 schizophrenia

patients attending outpatient department of mental health centre, Trivandrum, Kerala. Convenient sampling was used for the selection of the samples. Quality of life inventory was used to assess the quality of life of the patients. The tool consists of two sections Section I -the demographic variables

Section II- the modified quality of life inventory.

The reliability of the tool was  $r = 0.95$

## **MAJOR FINDINGS OF THE SYUDY**

### **FINDINGS RELATED TO DEMOGRAPHIC VARIABLES**

- Among 80 subjects 36 (45%) were in the age group of 31-40 yrs, 25 (31.25%) were in the age group of 41-50 yrs, 16 (20%) were in the age group of 20-30 yrs, and 3 (3.75%) were in the age group more than 50 yrs.
- Among 80 subjects, 50 (63%) were males, and 30 (37%) were females.
- Among 80 subjects 39 (49%) were Christians, 33 (41%) were Hindus, and 8 (10%) were Muslims.
- Among 80 subjects 52 (65%) were unmarried and 14 (17.5%) were married, and 14 (17.5%) were widow/divorced.

- Among 80 subjects 43 (54%) were illiterate, 20 (25%) were having primary school education, 13 (16%) were having high school education, 4 (5%) were graduates.
- Among 80 subjects 42 (52.5%) were unemployed, 32 (40%) of the samples were cooli workers, and 6 (7.5%) of the samples were private employees, none of the samples were government employees.
- Among 80 the subjects 39 (49%) belongs to the joint family, 23 (29%) of the subjects belongs to single parent family, 18 (22%) of the subjects belongs to nuclear family.
- In this study subjects 64 (80%) were from the rural area, and 16 (20%) from the urban area.
- In this study subjects 61(76%) were having illness for less than 15years, and 19 (24%) subjects were having illness for more than 15 years.
- Among the 80 subjects 69 (86%) were taking treatment for less than 15 years, 11 (14%) were taking treatment for more than 15 years.
- Among 80 subjects 47 (59%) were not taking correct follow up, and 33 (41%) of the subjects were taking correct follow up.

## **FINDINGS RELATED TO QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS.**

The overall quality of life was divided into three categories for easy interpretation as, if the score was less than 65% it was rated as fair level of quality of life, if the score was between 65-85% it was rated as satisfactory level of quality of life, and if the score is more than 85% it was rated as good quality of life.

- In this study the data shows that subjects 67(84%) were having fair level of quality of life, 10 (12%) of the subjects were having satisfactory level of quality of life, and 3(4%) of them having good quality of life.
- The overall quality of life score of schizophrenic patients were 39.58%, with the standard deviation of 32.24 which implies that the patients were having fair quality of life.

## **FINDINGS RELATED TO QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS IN DIFFERENT DOMAINS**

- In this study among 80 patients most of the samples were having fair level of quality of life.

- The data shows that in physical domain 64(80%) of the samples were having fair level of quality of life, 11(13.75%) of the samples were having satisfactory level of quality of life, 5(6.25%) of the samples were having good quality of life.
- The data shows that in psychological domain 65 (81.25%) of the samples were having fair level of quality of life, 12(15%) of the samples were having satisfactory level of quality of life, 3(3.75%) of the samples were having good quality of life.
- The data shows that in social domain 73(91.25%) of the samples were having fair level of quality of life, 6(7.5%) of the samples were having satisfactory level of quality of life, 1(1.25%) of the samples was having good quality of life.
- The data shows that in environmental/occupational domain 65(81.25%) of the samples were having fair level of quality of life, 11(13.75%) of the samples were having satisfactory level of quality of life, 4 (5%) of the samples were having good quality of life.

## **FINDINGS RELATED TO ASSOCIATION BETWEEN THE QUALITY OF LIFE AND THE DEMOGRAPHIC VARIABLES.**

- This study shows that the quality of life was associated with the marital status, education, occupation, family type, place and correct follow up.
- The data shows that there was no association with the age, sex, religion and the duration of the illness and the treatment.

## **RECOMMENDATIONS**

- ♣ The study can be replicated with a large sample there by findings can be generalized to a large population.
- ♣ The study can be conducted with some interventions to improve quality of life of schizophrenia patients for a long duration.
- ♣ A comparative study can be conducted with the quality of life of other mental disorder patients and schizophrenia patients.
- ♣ A comparative study can be done on quality of life of the schizophrenia patients residing in rural and urban area.
- ♣ The study can be done on the caregiver's attitude to improve the quality of life of schizophrenia patients.
- ♣ A comparative study can be done on quality of life among female and male schizophrenia patients.

- ♣ A comparative study can be done on quality of life among schizophrenia patients who were employed and unemployed.

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# CHAPTER I

## INTRODUCTION

*“We are what we think. All that we are arises with our thoughts.*

*With our thoughts we make the world”*

*- Gautama Buddha*

Happiness is the term which usually defines the life satisfaction. If unpleasant things are happening than pleasant things the persons will be dissatisfied and put themselves into unhappy. The important factor which contributes to happiness is “Good Health”. (Elizabeth Hurlock, 2002)

Mental health is the successful performance of mental functions, resulting in the ability to engage in the productive activities, fulfillment of relationship, and change or cope with the adversity. Mental health provides the capacity for rational thinking, communication skills, learning, emotional growth, resilience and self esteem.

The American Psychiatric Association defines mental health as simultaneous success at working, loving and creating with the capacity for mature and flexible resolution of conflicts between instincts, consciences, important other people, and reality.

Townsend (2003) defines mental health as the successful adaptation to stressors from the internal or external environment, evidenced by thoughts, feelings, and behaviors that are age appropriate and congruent with local and cultural norms.

Sadock & Sadock (2007) says that psychiatry definition of normal mental health changes over time and reflects changes in cultural norms, expectations and values of society, professional biases, individual differences, and even the political climate of the time.

A number of theorists have attempted to define mental health. Most of the concept deals with the individual functioning. Maslow emphasized an individual's motivation in the continuous quest for self actualization, and identified a "Hierarchy of needs" the lower level requires fulfillment before that at higher level can be achieved, with self actualization being fulfillment of one's highest potential. Maslow described self actualization as being "psychologically healthy, fully human, highly evolved, and fully mature.

Wanda K. Mohr (2008) says that the mental health implies mastery in the areas of love, work, play, and relationship. Mentally healthy people can perform meaningful work, this people enjoy life and have a sense of

humor, and are satisfied with the interpersonal relationship that the people are having. The people shows optimism, benefits from rest and sleep, and works well alone and with others. The people accept the responsibility for actions, reaches sound judgments, and expresses strong feelings as appropriate.

Wanda Mohr (2006) says that mental health that contributes to the aforementioned characteristics, consist some elements that are, Self governance: the person acts independently, dependently, or interdependently as the need arises, without losing autonomy. Progress toward growth or self realization: the person is willing to move forward to maximize capabilities. Tolerance of uncertainty: the person faces the uncertainty of life and the certainty of death with faith and the hope. Self esteem: the person's sense of self esteem is founded in self knowledge and awareness of personal abilities and limitations. Reality orientation: the person distinguishes fact from fantasy and behaves accordingly. Mastery of environment, and Stress management: the person experiences appropriate emotions in daily life and can tolerate stress, knowing that the feelings are not going to last forever. People have several means to cope with stress, including humor, outlets (eg. exercises, meditation) a fulfilling



relationship. The person is flexible and can experience failure without thinking of failure.

Wanda Mohr 2003 says that some factors influencing mental health are biological, psychological, and socio-cultural influences.

**Biological influences:** biological influences include the prenatal, perinatal and neonatal events, physical health status, and nutrition, history of injuries, neuro-anatomy and physiology.

**Psychological influences:** psychological influences include the interactions, intelligent quotient, self-concept, skills and creativity, emotional developmental levels.

**Socio-cultural influences:** socio-cultural influences include the family stability, ethnicity, housing, child-rearing patterns, economic level, religion, values & belief.

In addition, society and culture greatly influence views of mental health and mental illness because society largely determines which behaviors are considered acceptable. Mental illness is considered as a clinically significant behavioral or psychological syndrome experienced by a person and marked by distress, disability or the risk of suffering, or loss of freedom. (American Psychiatric Association 2000)

The emergence of mental illness explained in Cichetti's model, as the emergence of serious mental illness is seen as disrupting the resolution of a child's developmental tasks. This is important because many serious illnesses manifest in childhood or adolescence. The developmental stages and particular tasks with which the person is grappling determine the effects of the illness.

Mental illness strikes children, adolescents, and adults. No race, ethnicity, gender difference or socio-economic barriers for the mental illness. Half of all citizens have a mental illness at some time in the livelihood. Most of the people from this group never seek treatment. The reality is that some diagnoses are specific to children, whereas some are specific to adults. (Jensen & Hoagwood, 2000)

The WHO has listed unipolar depression, alcohol use, bipolar disorder, schizophrenia, and obsessive-compulsive disorder, among the 10 leading causes of disability worldwide. (Murrey & Lopes, 2000)

15% of adults with mental illness also have a co-occurring substance abuse problem (a condition termed dual diagnosis) which complicates the treatment. Approximately 1million people with mental illness live in

nursing homes, 50,000 are inmates, 200,000 are homeless and 50,000 live in mental hospitals. (National Institute of Mental Health 2003)

As the aging of the population continues, the incidence of chronic illness and disabilities require mental health care. By 2020, predictions are that violence and self injury will be major disability affecting people worldwide. (Murray & Lopez, 2001)

The term Schizophrenia is Greek in origin, and in the Greek meant split mind. This is not an accurate medical term. In 1887 a psychiatrist, Emil Kraepelin described schizophrenia as a specific mental illness for the first time. In western culture some people believe that schizophrenia is a split personality disorder. But there are two difficult illnesses. Schizophrenia does not manifest with separate personalities.

Schizophrenia is a chronic mental illness which makes the person difficult to distinguish the real and unreal, and the person cannot think logically to have mental emotional responses, and to behave normally in social situations.

In developed countries, the life time prevalence of schizophrenia is about 1%. Symptoms generally appear in late adolescence, or early

adulthood, although that may occur in middle or early adulthood, although that may occur in middle or late adult life. (Sadock & Sadock, 2003)

Schizophrenia affects about 1% of people worldwide. It occurs equally in men and women, but in women it begins later and is milder. 50% of people in hospital psychiatric care have schizophrenia. It is usually diagnosed in people age 17-35 years. Schizophrenia may be that most enigmatic and tragic disease that psychiatrist treat, and perhaps also the most devastating. It is one of the leading causes of disability among young adults. Schizophrenia is prevalent in every 5 persons in 1000 population. The incidence rate is about 0.2 per 1000 per year. Rates vary in different population. Onset peaks in young adulthood. Lifetime risk for male and females roughly equal. (Black & Andreasen, 2003)

National prevalence rate of schizophrenia is 2.3 per 1000 population (Murali Madhavan, 2001). In Kerala 3.2 lakh people suffer from schizophrenia (Dr.PN. Suresh Kumar, Director Institute of Mental Health and Neurosciences (IMHANS), Kozhikode). Schizophrenia was the most common psychotic illness in Kerala. Nearly 30% of the cases can be cured completely and the rest can get 90% improvement by treatment. Schizophrenia is a curable disease. Treatment is effective in the initial stage but more than 50% schizophrenic patients are not getting appropriate

treatment. 90% of the untreated cases are in developing countries. Care for this type patient can be provided at community level with active family and community involvement. There are effective pharmacological and psychological interventions available.

The majority of the chronic schizophrenia patients do not getting the treatment, which contributes to the chronicity. Quality of life of the schizophrenic patients is important outcome of the treatment, yet the factors determining quality of life of these patients are not well known. Studies from the literature shows strong relation of positive and negative symptoms to the poor quality of life.

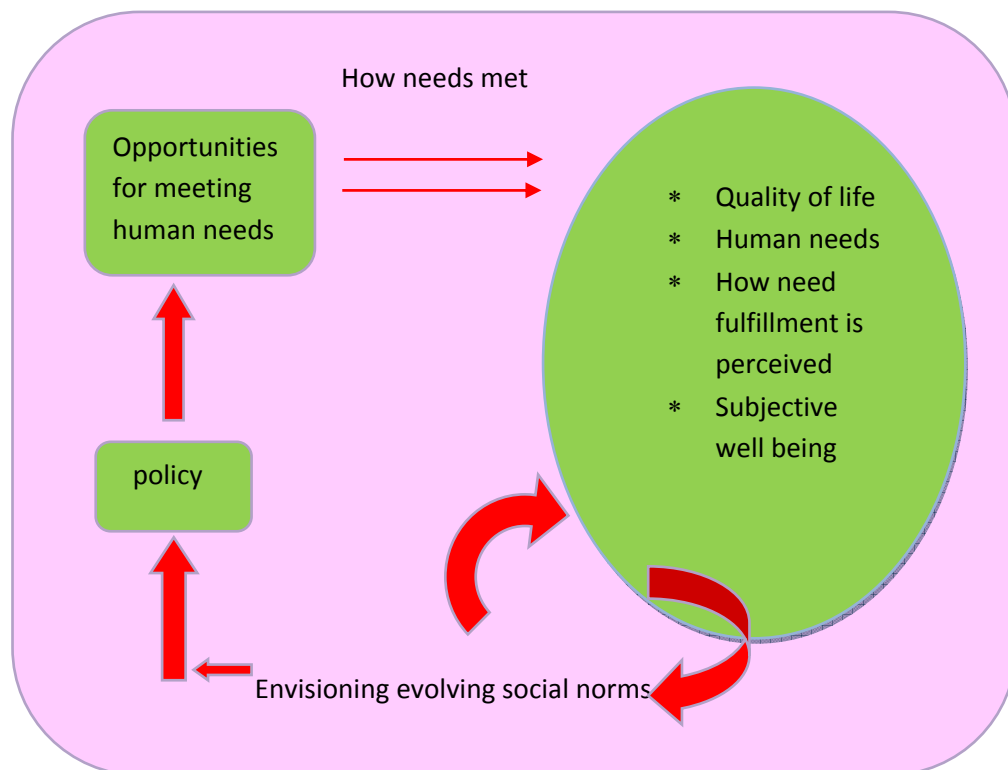
Quality of life is the “subjective” component of well being. Park(2002) states that quality of life is a composite measure of physical, mental and social well being as perceived by each individual or by group of individuals. It is to say happiness, satisfaction and gratification as it is perceived in life concerns like health, family work, financial situations, self esteem, belongingness and trust in others.

WHO defines quality of life, as individual’s perception of the position in life in context of the culture and value system in which the person lives and in relation to the goals and, expectations standards and concerns.

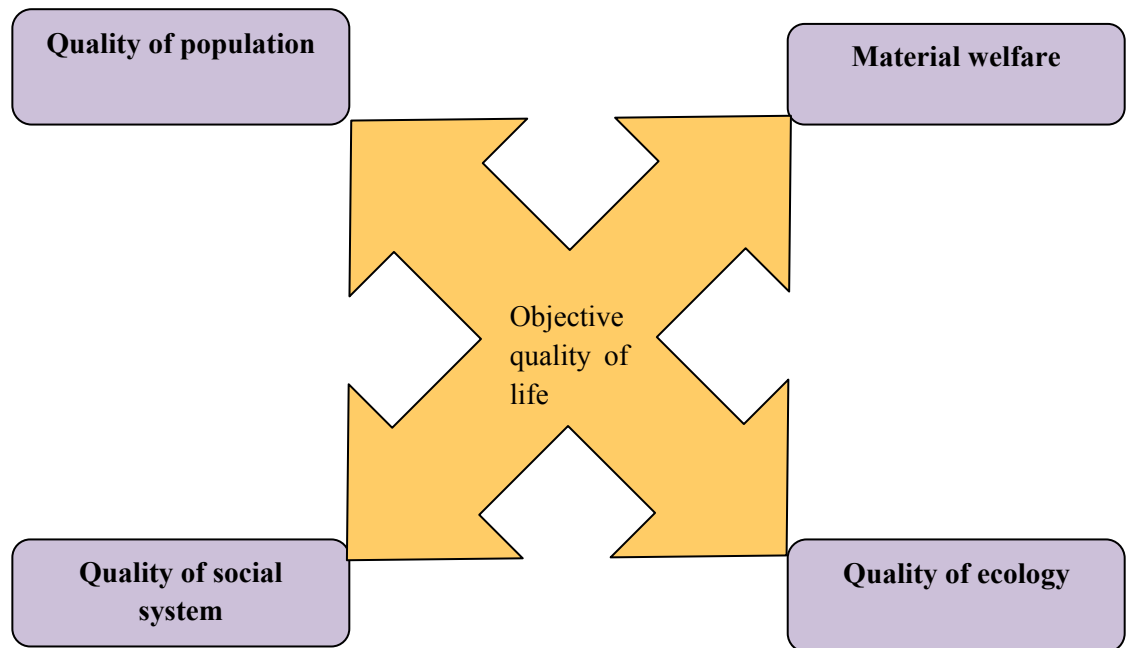
Berlin & Fleck (2003) says that quality of life briefly covers both medical aspect of life, including physical functioning, social functioning and perception of health status, pain and overall satisfaction with life.

Critical four domains of quality of life are physical function, psychological state, social interaction, and somatic sensation (eg. pain, nausea). For the chronically ill patients with schizophrenia, the quality of life may be depended on different factors.

### Subjective quality of life can be represented as follows



## Objective quality of life can be represented as follows



People who were chronically ill with schizophrenia have specific needs to get fulfilled that may influence the existence and subjective quality of life. The important needs are that facing the stigma associated with mental illness, facing family strain, and many patients are having disability due to the illness. Most of the patients were get disconnected from the family and staying in the residential health care settings. So the patient fails to reach the adult milestones like marriage, getting children and being employed. Quality of life of a schizophrenic patient can be improved by meeting the subjective and objective needs of life.

Agency for Healthcare Research and Quality (AHRQ) The Schizophrenia Patient Outcome Research Team (PORT), had forwarded evidence-based recommendations, (1995) to improve the quality and cost effectiveness of care for patients with schizophrenia. Specifically, the recommendations includes Antipsychotic medications, Drug therapy for anxiety, depression, and aggression/hostility, Electroconvulsive therapy, Psychological interventions, Family interventions, Vocational rehabilitation, Assertive community treatment and case management.

## **NEED FOR THE STUDY**

Mental illness is the maladjustment in living. It produces disharmony in the person's ability to meet human needs comfortably or effectively and function within culture. Because of the disharmony in meeting needs the quality of life of the ill people get worsen. Recently health-related quality of life (QOL) has been regarded as the most important dimension of outcome in schizophrenia and other serious mental disorders. This study is concerned about assessing the quality of life of schizophrenic outpatients. The determinants of quality of life are poorly understood in schizophrenia. But studies relied on the subjective and objective quality of life of the patients. There are so many studies are done to assess the quality of life of



the schizophrenia patients. Most of the studies are done using quality of life scale and positive and negative symptom rating scale and global functioning scale.

Quality of life can be indicated through different factors. Living situation, marital status, employment status, and involvement in social activities all these are some of the factors affecting quality of life. Although psychiatric symptoms have been associated with subjective measures of quality of life, symptom reduction alone often does not result in meaningful improvements in quality of life. The results of a meta-analysis suggest that general psychopathology is the strongest contributor to poor quality of life.

The concept of quality of life got a special significance in the medical field in the wake of progressive movement towards rehumanizing 'hi-tech' medicine. Quality of life means the subjective satisfaction with regard to one's own physical, mental and social functioning. In the chronic disorders which have debilitating course gives more significance to the concept of quality of life, in which the treatment is mostly of a non curative nature and continues over a long period. Psychiatry researches on quality of life are in its infancy, although some attempts have been made in recent years for generating measures of quality of life. The researches on quality of life

faces many problems, that includes the lack of a universal acceptance of the definition, and lack of psychometrically valid instruments, lack of consensus about domains of quality of life, generic vs. specific instruments, subjective vs. objective assessment, problems of assessment in multicultural, multiethnic societies and limitation of the influence of culture on the measurement of quality of life, etc.

Sullivan G et al., noted that chronic psychiatric conditions are more prone to get stress, and were having great deficits in the living and so that this people will be dependent, and occurrence of problems in employment, disturbance in social relationship. Reported that quality of life of chronic psychiatric clients (chronic mood disorders, schizophrenia, substance abuse, personality disorders, etc.) is poor especially in some domains like, environment of family, conditions of housing, social network, safety and practical skills, financial circumstances.

Schizophrenia is a severe and debilitating disorder, and it affects health in general, functioning of the body, autonomy, subjective life satisfaction and well being of the patients. Although psychological and pharmacological interventions were advancing for 50 years, schizophrenia remains one major cause of disability in the world.

Early Identification and treatment of mental disorders generally enhances quality of life. Improvement in quality of life is the appropriate goal for maintenance pharmacological treatment in schizophrenic patients. Atypical antipsychotics have been shown to improve quality of life in patients with schizophrenia.

World Health Organization initiated a series of studies which relates quality of life with the health and diseases. In Madras and Delhi a World Health Organization multisite quality of life study was present for developing a questionnaire to measure quality of life across different disease groups. In Madras it was focused on quality of life of patients with schizophrenia, got partial or total recovery. The factors that have an impact on the life of patients with schizophrenia, like psychological factors, interpersonal factors and socio cultural factors had been assessed. So that it will be a good tool for planning the management and for better coping with the illnesses having. The functioning of the schizophrenia patients was improved by all the above strategies and interventions; it reduced the disability caused by the illness, improved self esteem and productivity of the patients, and helps to prevent relapse. Most of the studies related to quality of life had been conducted in developed countries. Kulhara documented that, differences in the duration of the mental disorders and

cultural factorial influence have role on the progress of schizophrenia in developing countries.

One of the largest epidemiological studies on psychoses conducted in India was the Longitudinal Study of Functional Psychoses in an Urban Community (SOFPUC) in Chennai. The study was conducted by Schizophrenia Research Foundation (SCARF) and the Department of Psychiatry, Madras Medical College (Indian Council of Medical Research (ICMR), 1990). Over 100,000 populations were screened. Prevalence rate of schizophrenia was according to the age was 3.87/1000. Other studies have reported prevalence of 0.7/1000 to 14.2/1000 in India.

The ICMR SOFPUC study reported a higher prevalence of schizophrenia in urban slums, in people living alone, illiterate people, and in unemployed people. The higher rate of incidence was reported among males. The incidence rate in this study report was 0.35 / 1000 (Rajkumar et al., 1991), and it shows no difference in the incidence rate among male and females. Although some other studies reported a higher preponderance among males.

Mental health resources are limited in India; around 4000 psychiatrists are only available for over a billion people. The management of the

symptoms was the main aim of treatment using drugs, most of the time psychosocial rehabilitation and psychosocial therapies are neglected. It was also not available in common.

Based on the community prevalence study conducted P.N. Suresh Kumar, director, Institute of Mental Health and Neurosciences (IMHANS), Kozhikode, Kerala, says that an estimated 3.2 lakhs people in the Kerala State suffer from schizophrenia. The studies show that 10% of schizophrenia patients commit suicide; rate is very high among the young and educated. People need to be more educated about schizophrenia and the treatment available in psychiatric centers in the Kerala State.

If the proper education was given to the schizophrenia patients and the family, the prognosis will be good. The patient and the family members should have the knowledge about the importance of regular medication and participation in psychosocial therapies. If the disabled patient is encouraged to participate in the rehabilitation program the disability can be managed at an extent. Proper awareness to the public about the mental disorders is essential to prevent the disorder and for the early detection, treatment, and good prognosis.

## Incidence of schizophrenia

<b>Place</b>	<b>Incidence/ 1000</b>
All over the World	0.2
Aarhus, Denmark	0.18
Chandigarh, India (rural)	0.42
Chandigarh, India (urban)	0.35
Dublin, Ireland	0.22
Moscow, Russia	0.28
Nagasaki, Japan	0.21
Nottingham, England	0.22
Tamil Nadu, India	0.35
Kerala, India	0.32

The researcher observed during the posting period that many of the psychiatric patients were diagnosed with schizophrenia. Most of the patients were chronic cases. The schizophrenic patients are not aware of self and the environment and the patients were neglected from the family. Disorganized thought and speech and behavior were also present in the patients. The patient lost the family because of the unacceptable symptoms

and failed to achieve the usual developments like education, occupation and marriage. The education, occupation and marriage have a major role in good quality of life. Because of the influence of the above factors the schizophrenia patients will get a poor quality of life. In order to assess the quality of life of schizophrenic patients and to find out the factors related to quality of life the researcher selected the problem for research and developed a health education module for the outpatients with schizophrenia to improve the knowledge of the disorder and insight of the patients.

## **STATEMENT OF THE PROBLEM**

**“A STUDY TO ASSESS THE QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS ATTENDING OUTPATIENT DEPARTMENT OF MENTAL HEALTH CENTRE, TRIVANDRUM, KERALA.”**

## **OBJECTIVES**

- To assess the quality of life of schizophrenic patients.
- To determine the relationship between quality of life with the socio-demographic variables such as age, sex, religion, marital status,

education, occupation, type of family, place of residence, duration of illness and treatment.

- To prepare a health education module for the schizophrenic patients.

## **OPERATIONAL DEFINITION**

### **QUALITY OF LIFE**

Schizophrenic patient's perception about the livelihood in different domains like physical domain, psychological domain, social domain, environmental/occupational domain.

### **SCHIZOPHRENIA PATIENTS**

Patients diagnosed as schizophrenic and taking treatment at Mental Health Centre, Trivandrum, Kerala.

### **OUTPATIENT DEPARTMENT**

Department in the hospital where patients will come for the treatment as an outpatient.

## **ASSUMPTION**

- The schizophrenic patients may not have adequate quality of life.
- There will be a relationship between the socio-demographic and clinical details of the individual with the quality of life.



- The quality of life of the schizophrenia patients can be improved by equipping the people with adequate knowledge about schizophrenia and the treatment.

## **LIMITATIONS**

- The study includes only 80 samples so that finding cannot be generalized.
- Samples are the patients who were diagnosed as schizophrenic for more than 1 year.

## **CONCEPTUAL FRAMEWORK**

Polit and Beck (2010) states that, a conceptual frame work is interrelated concept on abstractions, that are assembled together in some rational scheme by virtue relevance to a common theme. It is a device that helps to stimulate and research and the extension of knowledge by providing both directing and impetus. A frame work may serve as a spring board for scientific advancement.

Conceptual model of nursing provides philosophical and pragmatic orientation to the service nurses “provide patients a service which only nurses can provide a service which provide a dimension to total care

different from that provided by any other health professional.” (Johnson 1987)

The Roy’s Adaptation model focuses on the adaptive system response to the constantly changing environment. Adaptation is the core concept of the model. When the adaptive system is unable to cope with the constantly changing stimuli from the internal and external environments in a manner that maintains the integrity of the system, problems in adaptation arises.

The person is identified as an adaptive system. System is identified as “a set of parts connected to function as a whole for some purpose, and it does so by virtue of the interdependence of its part”. Adaptive means that “the human system has the capacity to adjust effectively to change in the environment and in term affects the environment”. (Andrews & Roy 1991)

As per this study the adaptive system is the schizophrenia patients diagnosed as schizophrenia for more than 1 year.

Regulator and cognator are the two major internal control processes in the adaptive system. The regulator subsystem responds automatically through neural, chemical and endocrine coping process. The cognator subsystems respond to inputs from external and internal stimuli that

involve psychological, social, physical and physiological factors. In this study with the schizophrenia regulator activity and cognator activity is diminished and hence more ineffective responses. Regulator and cognator activity is expressed through coping behavior in different response modes.

**Physiological mode:** This is the way how the person is responding to the stimuli as a physical being

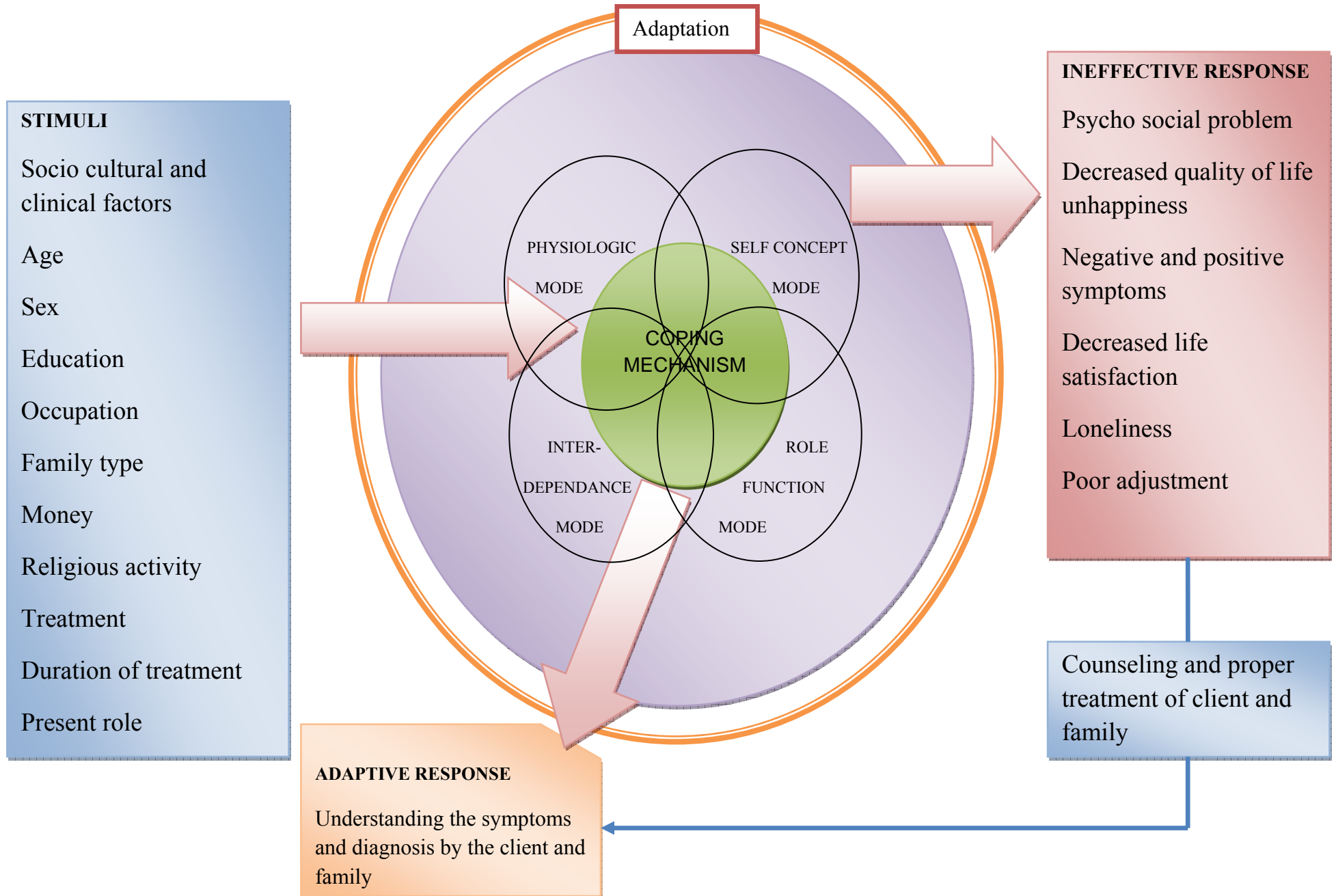
**Self concept mode:** It focuses on the need for psychic integrity that is, “the need to know who one is so that one can be or exist with a sense of unity”

**Role function mode:** This focuses on the need for social integrity that is “the need to know who one can act”. Roles are three types primary, secondary, tertiary. The primary role determines the majority of behavior engaged in by the person during a particular period of life. Secondary roles are that a person assumes to complete the task associated with a developmental stage and primary role. Tertiary roles represent ways in which individual meet the role – associated obligations.

**Interdependence mode:** This also focuses on the need for social integrity.

Interdependence is “a way of maintaining integrity that involves the willingness and ability to love and accept love and respect given by other”

## CONCEPTUAL FRAMEWORK: BASED ON ROY'S ADAPTATION MODEL



## **SUMMARY**

This chapter dealt with the need for the study, statement of the problem, objective of the study, operational definitions, assumptions, limitations, conceptual framework.

## CHAPTER II

### REVIEW OF LITERATURE

*"Literature always anticipates life. It does not copy it, but moulds it to its purpose."*

- Oscar Wilde

Review of literature is an important step in the research process. It helps the researcher to gain information about the process and what studies has been done before on the problem. It throws light into the feasibility of the study.

According to Polit & Hungler, review of literature is a critical summary of literature is a critical summary of research on a topic of interest generally proposed to put a research problem in context or to identify gaps and weakness in prior studies so as to justify new investigation. A review of literature involves systematic identification, location scrutinizing and summary of the written materials that contain information on a research problem.

The investigator collected extensive review of literature relevant to the research topic to gain knowledge and collect information for laying the foundation of the study.

Review of literature organized under two headings:

- Literature related to schizophrenia and quality of life.
- Studies related to quality of life among schizophrenic patients.

## **LITERATURE RELATED TO SCHIZOPHRENIA AND QUALITY OF LIFE**

The term *schizophrenia* was coined in 1908 by the Swiss psychiatrist Eugen Bleuler. The word was derived from the Greek *skhizo* means split and *phren* means mind. (Mary C. Townsend, 2007)

Schizophrenia is a chronic brain disorder that structurally and functionally affects cortical and sub cortical regions of the brain that influence cognitive, emotional and motivational aspect of human behavior. (Kasai et al., 2002)

Lines from a journal say that schizophrenia is a serious brain disorder. It affects the thinking, acts, emotions, perceptions. Schizophrenia is a chronic and disabling disease among the mental illness. (Mental health and Schizophrenia, 2011)

In the late 1800s, Emil Kraepelin first described the course of the disorder as dementia praecox. In the late 1900s, Eugen Bleuler renamed the



disorder schizophrenia, meaning split minds, and began to determine that there was not just one type of schizophrenias. (Mary Ann Boyd 2008)

Among all the severe mental illness schizophrenia causes long hospitalization, more conflict in family life, more exorbitant costs to individuals and family, and more fears than any other. (Mary C.Townsend, 2007)

Schizophrenia affects about 1% of people worldwide. It occurs equally in men and women, but in women it begins later and is milder. It is usually diagnosed in people age 17-35 years. Schizophrenia may be that most enigmatic and tragic disease that psychiatrist treat, and perhaps also the most devastating. It is one of the leading causes of disability among young adults.(Black & Andreasen, 2003)

Risk factors for schizophrenia include stresses in the perinatal period, obstetrical complications, and genetic and family susceptibility. There has been recent evidence that parental age may also be a risk factor. (Byrne et al., 2003)

Birth cohort studies suggest that the incidence may be higher among individual born in urban settings than those born in rural ones and may be somewhat lower in later-born birth cohorts. (Harrison et al., 2003)

The cause of the schizophrenia is still uncertain. Plenty of hereditary factors play a role in the development of schizophrenic disorders. Studies shows that relatives of the individuals with schizophrenia have much higher probability of developing the disease than does the general population. The siblings or offspring of an identified client have a 5 to 10 percent risk of developing schizophrenia. (Ho, Black & Andreasen, 2003)

Various biochemicals have been implicated in the predisposition to schizophrenia. Abnormalities in the neurotransmitters norepinephrine, serotonin acetylcholine, and gamma aminobutyricacid and in the neuroregulators, such as prostaglandins and endorphins. (Mary C.Townsend, 2007)

Epidemiological data indicate a high incidence of schizophrenia after prenatal exposure to influenza. Another study found an association between viral infections of the central nervous system during childhood and adult-onset schizophrenia. (Brown et al., 2004)

There is no scientific evidence to indicate that stress causes schizophrenia. It is very probable; however, that stress may contribute to the severity and course of the illness. It is known that extreme stress can precipitate psychotic episodes. (Goff, 2002)

Four subtypes of schizophrenic disorders are recognized, it includes a category for people who don't fit neatly into the first three categories.

1. *Paranoid type*: the paranoid type of schizophrenia is characterized by preoccupation with one or more delusions or frequent auditory hallucinations. Patients with paranoid schizophrenia are typically tense, suspicious, guarded, reserved, and sometimes hostile or aggressive but these people can perform adequately in social situations.

2. *Catatonic type*: the classic feature of the catatonic type is a marked disturbance in motor function; this disturbance may involve stupor, negativism, rigidity, excitement or posturing.

3. *Disorganized type*: the disorganized type of schizophrenia is characterized by a marked regression to primitive, disinhibited, and unorganized behavior and by the absence of symptoms that meet the criteria for the catatonic type

4. *Undifferentiated type*: frequently, patients who are clearly schizophrenic cannot be easily fitted into one or another type. (Ho et al., 2003)

Studies have found that symptoms occur earlier in men than in women. The premorbid personality often indicates social maladjustment or schizoid or other personality disturbances. (Ho, Black & Andreasen, 2003)

The premorbid behavior is often a predictor in the pattern of development of schizophrenia, which can be viewed in four phases,

*The schizoid personality:* these people will be having indifferent social relationship and a very limited range of emotional experience and expression.

*The prodromal phase:* characteristics of this phase include social withdrawal, impairment in role functioning, neglect of personal hygiene and grooming, blunted or inappropriate affect, disturbance in communication

*Schizophrenia:* this is the active phase of the disorder, psychotic symptoms are prominent. Characterizes with positive and negative symptoms.

*Residual phase:* schizophrenia is characterized by periods of remission and exacerbation. A residual phase usually follows an active phase of the illness. Symptoms in this phase are similar to those of the prodromal

phase. A return to full premorbid functioning is not common. (Mary Ann Boyd, 2008)

Persons who were typically affected with schizophrenia believes that their private thoughts are being Broadcasted to other people, that thoughts are being injected to mind, or the thoughts are being controlled by external force. (Maher, 2001)

Positive symptoms of schizophrenia are thought to be caused by dopamine hyperactivity in the mesolimbic tract, which regulates memory and emotion. It is hypothesized that this hyperactivity could result from the nucleus accumbens. (Kandel et al., 2000)

Negative symptoms and cognitive impairment are thought to be related to hypoactivity of the mesocortical dopaminergic tract, which by its association with the prefrontal and neocortex contributes to motivation, planning, sequencing of behaviors in time, attention, and social behavior. (Jibson & Tandon, 2000)

The process of diagnosing schizophrenia however, presents a potential threat to the area of neutrality, based as it is entirely on clinician's judgments of behavior and reports of private experiences. (Mary boyle, 2002)

About 20-50% of people with the diagnosis of schizophrenia attempt suicide, and 10% commit suicide either as a result of psychosis in acute stages or in response to depression in the chronic phase. (De Hert et al., 2001)

When a person is diagnosed with schizophrenia the mental health of that person will be decreased significantly for the first few years, they will respond less to the treatment over time and repeated episodes. (Dr. Miller, 2006)

Because failure to take prescribed medications is the primary reason most people with schizophrenia relapse. Adherence to a drug regimen is critical to successful treatment and relapse prevention. (Wanda K. Mohr, 2006)

The atypical antipsychotics control the most alarming symptoms of schizophrenia and it also improves the quality of life of the patients. Two types of antipsychotics are used to treat schizophrenia: traditional and atypical. Studies show the relation of quality of life and the medications. The benefits from the drugs may vary, and the side effects may be a reason for the discontinuation of the drugs. Maximum benefits on quality of life during treatment were observed with clozapine (more adverse effect),

selective serotonin reuptake inhibitor and benzodiazepines(less adverse effects). Moderate benefit was observed with conventional antipsychotics and tricyclics (more adverse effects), atypical antipsychotics(less adverse effects). Minimal benefit was observed with reserpine (more adverse effects), vitamin B6 (less adverse effects). (Kuo, 2004)

Individual and group therapies that focuses on gaining insight into unconscious material are not recommended for most clients with schizophrenia because these therapies may result in regression and transference, which can be harmful to the clients. (Lehman et al., 2000)

Cognitive behavioral therapy is an option for schizophrenia, is aquisitionable intervention that has not been researched widely with this population. Cognitive behavioral therapy aims to improve motivation, socialization, and reality testing by means of goal setting and increasing coping and problem solving skills, self esteem and sense of control. (Turkington et al., 2003)

Social skill training can improve the social incompetence of people with schizophrenia, resulting in improved adaptive functioning in the community. It had no clear effects on the employment status, relapse prevention, or psychopathology. (Bustillo et al., 2001)

Relapse can occur at any time during treatment and recovery. One of the major reasons for relapse is noncompliance with the medication regimen. Even with newer medications, noncompliance leading to relapse continues to be a problem. (Leucht et al., 2003)

About 15-20 percent of schizophrenic patients enjoy a full recovery, and some long term studies reports higher estimates. (Modestin et al., 2003); (Robinson et al., 2004)

Many factors are associated with the recovery of schizophrenic disorders. A patient has a good prognosis, when the onset is sudden rather than gradual, the onset has occurred at later age, the patient's social and work adjustment were relatively good prior to the disorder, the proportion of negative symptoms is less, the patient's cognitive functioning is preserved, the patient shows good adherence to treatment, the patient has a healthy and supportive family system. (Cancro & Lehman, 2000); (Lieberman et al., 2002)

People with schizophrenia often have a poor quality of life, especially older people, who may have spent many years in a long-term hospital. Simple changes, such as arranging for different roommate or improving



access to social activities by meeting transportation needs, can greatly improve a patient quality of life. (Mary Ann Boyd, 2008)

Critical four domains of quality of life are physical function, psychological state, social interaction, and somatic sensation (eg. pain, nausea). For the chronically ill patients with schizophrenia, the quality of life may be depended on different factors. The health related quality of life impairment syndrome occurs before the first psychotic episode and persists throughout the course of the illness. (Michael S.Ritser et al., 2007)

The researcher and clinicians could pay particular attention to note the affective state of the person at the time of self appraisal of quality of life. (A George Awad et al., 2007)

Continuity of care has been identified as a major goal of community mental health systems for patients with schizophrenia because this people are at risk for becoming “lost” to service if left alone after discharge. Discharge planning encourages follow up care in the community. (Mary Ann Boyd, 2008)

## **STUDIES RELATED TO QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS**

**Tatiana Fernandes et al., (2011)** conducted study on Quality of life of patients with schizophrenia in Psychosocial Care Centers in Brazil. A cross-sectional study was carried out in a sample of schizophrenic spectrum patients who have been enrolled in 2008 in psychosocial care centres at Brazil. Quality of life was assessed using Quality of Life Scale (QLS-BR), Positive and Negative Symptoms Scale (PANSS) to assess psychiatric symptoms. Seventy nine patients were included, of whom 74 (93.7%) presented some impairment in quality of life. The most frequently affected area was occupational performance. Variables that showed a significant association with severe impairment of quality of life were: marital status, race, occupation, who patients lived with, homelessness, having children, previous psychiatric hospitalization, and negative symptoms.

**Anna Galuppi et al., (2010)** conducted the study on Schizophrenia and quality of life: importance of symptoms and functioning. The study was carried out in schizophrenic out patients attending outpatient department of community mental health centre, Bangalore. The study was conducted among 60 subjects. The tool used was the WHO-QOL instrument for the

psychiatric rating scale, and the Personal and Social Functioning Scale to assess the level of functioning. Subjects showed an intermediate satisfaction on the overall quality of life and health; these data can be juxtaposed to the national standard sample rates. Quality of life resulted positively associated to personal and social functioning, while it was negatively related to psychiatric symptoms. 76% patients showed a fairly good satisfaction in regard to their quality of life. The severity of psychiatric symptoms is one of the elements influencing quality of life, together with personal and social functioning that plays a relevant role.

**Adeianzen C et al., (2010)** published the result 3 year observational study on association of treatment adverse events with quality of life of patients with schizophrenia. The study was conducted among 30 patients. In this study a mixed model with repeated measures was used to evaluate the association between health related quality of life and pre-specified covariates including: severity of illnesses, extra pyramidal symptoms tardive dyskinesia, sexual dysfunction, and clinically significant weight gain. Differences were obtained in the direction and magnitude of the association between each adverse event with health relative quality of life may contribute to improved adherence of patients with schizophrenia to antipsychotic therapy.

**Anneli Pitkanen et al., (2010)** conducted study on improving quality of life of patients with schizophrenia in acute psychiatric wards. The researchers assessed subjective quality of life of 35 patients and the effect of different patient education methods on patients' quality of life was compared. In this study their important quality of life areas were health, family, leisure activities, work or study, and social relationships. The findings were as follows, the quality of life of 89.7% patients were impaired. Evaluation of different patient education methods showed that patients' quality of life improved significantly during follow-up.

**RK Solanki et al., (2010)** conducted Comparative Study on Disability and Quality of Life in Schizophrenia and Obsessive Compulsive Disorder. It was a comparative study carried out in Jaipur. Samples were 50 patients with obsessive compulsive disorder and 47 patients with schizophrenia. The assessment was done using World Health Organization Quality of Life Instrument, the Global Assessment of Functioning scale, and the Indian Disability Evaluation Assessment Scale. The data collected from the patients were analyzed with descriptive and inferential statistics. About the results there were no significant differences in quality of life domains between the 2 groups. 78% patients with obsessive compulsive disorder had lower scores in all the domains of disability and it was statistically

significant. The researchers concluded the study as the ill effects of the disorder affects the quality of life and functioning in schizophrenia and obsessive compulsive disorder. For the better outcome of both the conditions a planned management should be applied.

**Abjodun et al., (2010)** conducted a study on Subjective Life Satisfaction and Objective Living Conditions of Patients With Schizophrenia in Nigeria. The samples were 99 outpatients. The tool used for the assessment was WHO- brief version quality of life scale. In contrast to the poor living conditions of the patients, they expressed a high level of life satisfaction. The 91% patients scored high rates include satisfaction with self, life meaningful, enjoying life, and overall quality of life; and got the lowest scores in personal relationships, transport, money, and capacity to work. Of 12 satisfaction items, only four (daily living, sleep, relationships with same gender individuals, and living place conditions) items were significantly correlated with objective measures. The researcher concluded the study that the correlation between subjective life satisfaction and objective living conditions of Nigerian patients with schizophrenia was poor. Quality of life is considered an important outcome in the treatment of schizophrenia, but it has not been clearly conceptualized and its measurement has not been clearly defined.

**Ram Kumar Solanki et al., (2008)** conducted a study on Impact of quality of life in Schizophrenia patients at Jaipur. The study was to assess quality of life in patients with schizophrenia and to determine influence of clinical factors and socio-demographic variables on quality of life schizophrenic patients. It was a cross sectional study conducted among outpatients in Department of Psychiatry, SMS Medical College, Jaipur. The samples were 50 schizophrenia patients as per ICD-10 diagnosis with minimum duration of illness begin 2years and attending outpatient department for the maintenance treatment. The assessment was done using Quality of Life Instrument (WHO QOL - BREF) and positive and negative syndrome scale (PANSS). The 82% patients scored the lowest quality of life scores in social relationships domain of WHO QOL - BREF scale. Social relationship domain of quality of life was significantly negatively correlated with occupation with employed patients reporting better quality of life in this domain. The total monthly income was significantly correlated with social relationship domain and total quality of life. Scores on positive subscale and total positive and negative syndrome scale were significantly negatively correlated with physical, Psychological, social relationship domains and total quality of life.

**Rohit Garg et al., (2007)** conducted study on Quality of life after electroconvulsive therapy in persons with treatment resistant schizophrenia. The sample size was 30. Thirty consecutive patients of treatment resistant schizophrenia were given ECT sessions twice a week and assessments were made. The tools used for the assessment was Positive and Negative Syndrome Scale of Schizophrenia (PANSS), WHO QOL BREF. The 74% patients improved after ECT in all the domains of the quality of life scale except the satisfaction with social relation domain. There was no change in the total score of Positive and Negative Syndrome Scale of Schizophrenia after 6 ECT (mean at base line=86.7, mean after ECT=65.5).

**Karow et al., (2006)** reviewed on Insight and quality of life in schizophrenia: recent findings and treatment implications. In the recent findings contradictory results were found regarding the relationship between insight into illness and quality of life in patients with schizophrenia. Although previous studies shows an inverse or no significant association, recent studies reports that greater insight into illness is significantly associated with an increase in depression and poor subjective quality of life. The researchers summarize the review as: Patients with good insight might realize their restrictions more clearly. The

increase of depression and suicidal ideation and decrease in subjective quality of life in patients with better insight underline the importance of insight for the clinical course in schizophrenia. The inclusion of psycho educational modules focusing on depressive symptoms and quality of life related aspects might help to improve the insight without the risk of deteriorating mood and quality of life.

**Kunnikata H et al., (2006)** published their study on factors affecting WHQOL-26 scale community dwelling patients with schizophrenia. Study was a longitudinal study to clarify the relation among the quality of life, self esteem, depressive mood and uncooperativeness of schizophrenia patients. Sample size was 61. The result of the study shows that self esteem had a significant positive effect on the WHOQOL-26 while depressive mood and uncooperativeness were without significant effect.

**K Gorna et al., (2005)** had conducted study on objective and subjective quality of life in schizophrenic patients after a first hospitalization. The study evaluated objective and subjective quality of life in schizophrenic patients 1 month after hospitalization and in one year follows up. The study conducted in 86 samples (52males, 34 females); subjective quality of life scale, social functioning scale, and structured questionnaire were used. This study shows that both subjective and



objective quality of life are significantly decreased directly after hospitalization, and it become stable in 64% patients in 1 year follow up.

**Minquez Martin L et al., (2005)** published the result of their study on adverse effect of antipsychotics and quality of life transversal study was done on 78 males and female patients. Results were found; treatment with atypical antipsychotics is significantly associated with fewer extra pyramidal adverse effects, but not with a better quality of life in the scales applied. Probably quality of life does not only depend on treatment.

**Sim Ket al., (2004)** had conducted the study on subjective quality of life in first episode schizophrenia spectrum disorders with co morbid depression. 66 consecutive subjects with first episode schizophrenia spectrum were evaluated in early psychosis intervention program. The results shows that 59% subjects with a co morbid depressive syndrome had greater awareness of their mental illness, its social consequences and treatment efficacy, but poorer overall quality of life, especially in the physical, psychological health, social relationship and environmental domains.

**Marianne Goodman et al., (2002)** had conducted study about measuring quality of life in schizophrenia. The quality of life research was

focused on 3 key areas: descriptive studies in which the quality of life of various populations of chronically mentally ill are measured and compared; association studies in which patient characteristics are associated with quality of life; and intervention studies in which quality of life is used as an outcome variable. Continued refinement of quality of life measures to accurately assess meaningful variables in subjective life satisfaction for the pharmacologic and psychosocial interventions holds for improvement in treatment and life course.

**Lobana A.Mattoo SK et al., (2001)** conducted study on quality of life in schizophrenia in India: comparison of two approaches. The study compares ratings of quality of life in patients with established schizophrenia in both subjective and objective view points and between patients' and relatives' ratings. Subjective and objective quality of life was assessed in 38 patients with schizophrenia using the Quality of Life Interview - Brief Version and WHO Quality of Life - BREF scale. Key family members were also interviewed using the same scales. The result shows Subjective and objective quality of life are moderately well correlated ( $r = 0.43$ ) and similar agreement was found between patients and relatives ( $r = 0.46$ ).

**Duno et al., (2001)** conducted a study on Subjective Quality of Life in Schizophrenic Outpatients in a Catalan Urban Site. It was a cross sectional study and the study assessed the subjective quality of life of chronic schizophrenic outpatients living in urban site in Spain during a stable phase of the illness. The sample size was 44; the samples were the patients with a DSM-IV diagnosis of psychotic disorder. Socio demographic, clinical, and treatment variables were obtained. Subjective quality of life was assessed by the Lehman Quality of Life Interview-short version. Both were compared and the result shows that socio demographic, clinical, premorbid adjustment and treatment variable were only related to subjective quality of life in particular domains and in a non conclusive way. The descriptive analysis of the subjective quality of life shows 63% of patients have moderate level of satisfaction in most subscales.

**S. Priebe et al., (2000)** conducted a study on quality of life in first admitted schizophrenia patients and this was a follow up study in Germany. 86 patients were examined after the first admission and then 51 patients were interviewed at follow up. Results were compared with samples of in-patients and outpatients with long term schizophrenia. The instrument used was a German version of the Lancashire Quality of Life Profile. Some objective quality of life data were more favorable in first

admitted patients. Subjective quality of life was lower than the other groups. On a group level, 78% patients showed a slight improvement in subjective quality of life at follow up, but it was not statistically significant. The researchers found that the individual changes over time were not predicted by initial data, but were correlated with changes in anxiety/depression.

**Enab Sayed Ramadan et al., (2000)** had done study on relation between insight and quality of life in patients with schizophrenia. The study throws light on the impact of unawareness of mental illness on the quality of life (QOL) in patients with schizophrenia. Scale of Unawareness of Mental Disorder (SUMD) was applied to each schizophrenic patient recruited and then 2 groups of 30 schizophrenic patients were established; Patients of both groups were subjected to Schizophrenia Quality of Life Scale (SQOLS). Results show that patients with poorer insight showed significantly higher scores in aspect Quality Of Life than those with better insight. The researchers concluded the study as Quality Of Life is linked to patient awareness of his mental illness.

**Norman RM et al., (2000)** conducted study on the relationship of functioning level and symptoms to quality of life scale. One 128 patients from Canada completed the General Well-Being Scale and were rated on

the Quality of Life Scale as well as scales assessing positive and negative symptoms. While negative symptoms, level of functioning and positive symptoms all were related to the scores on the Quality of Life Scale, General Well-Being Scale scores were primarily related to positive symptoms, particularly reality distortion.

## **SUMMARY**

This chapter includes the literature related to schizophrenia and studies related to schizophrenia.

## **CHAPTER III**

### **METHODOLOGY**

*“Even when you think you have your life all mapped out, things happen that shape your destiny in ways you might never have imagined”*

- Deepak chopra

Research methodology involves systematic procedures, starts from initial identification of problem to its final conclusion. The role of methodology consists of procedures and techniques for conducting a study. (Polit and Hungler, 2004)

This chapter deals with methodological approach for the study. Research methodology helps the researcher to solve the research problem in a systematic way.

It includes

Research approach, Research design, Study setting, Sample and sampling technique, Development and description of the tool, Validity, Reliability, Pilot study, Data collection procedure, Plan for data analysis.

### **RESEARCH APPROACH**

Research approach will act as a guide to the researcher for research, where to collect data, from whom the data to be collected, any intervention

to be made, how to analyze the data, how to interpret the result, in view of the nature of the problem selected for the study and the objectives to be accomplished. (Celia Ewills, 2004)

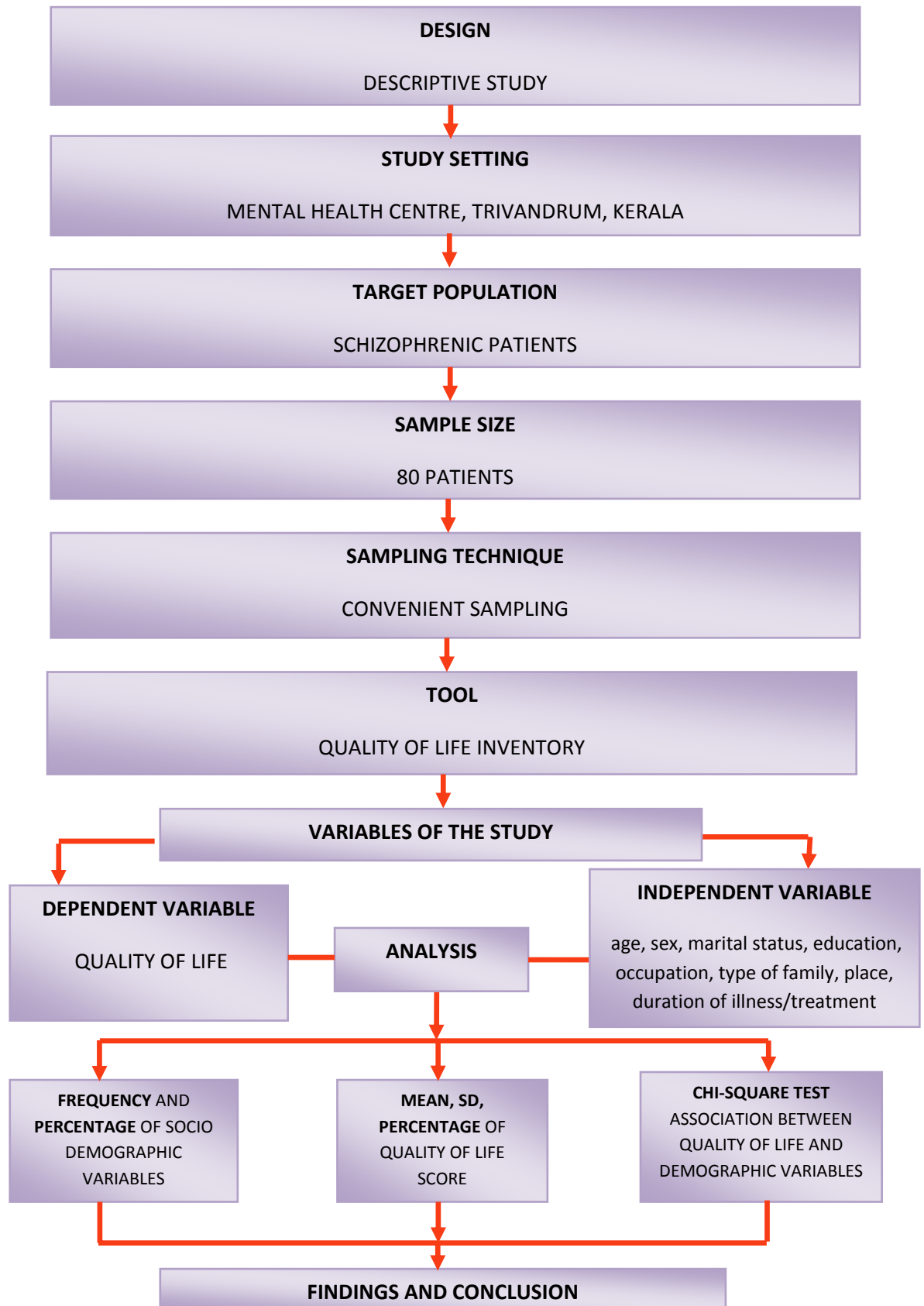
A non experimental approach was considered as an appropriate research approach for this study. This approach helps to explain the variables. The present study aims to assess the quality of life of the schizophrenic patients.

## **RESEARCH DESIGN**

Research design means the overall plan to obtain answers for the research problem. Research design points the logical manner in which individuals or other units are compared and analyzed, it is the basis of making interpretation from the data. (Arvind Kumar, 2005)

The research design for the present study was descriptive in nature, with the objective to assess the quality of life of schizophrenic patients and to find out the association between quality of life and socio demographic variables such as age, sex, marital status, education, occupation, type of family, place of residence, duration of illness and treatment.

**FIG.3.1 SCHEMATIC REPRESENTATION OF STUDY DESIGN**





## **STUDY SETTING**

Setting is the physical location and condition in which data collection takes place in the study. (Polit and Beck, 2004)

Area selection was the initial step in the data collection. The selection of the hospital for the present study was on the basis of

- Availability of subjects
- Feasibility of conducting study
- Economy of time and money

The study was conducted in Mental Health Centre, Trivandrum, Kerala. This is the second largest mental health centre in India with more than 150 inmates. The Mental Health Center is located at Oolampara, Peroorkada and is under the administration of the Trivandrum Medical College. Many patients are coming for the follow up who were diagnosed as schizophrenia.

## **TARGET POPULATION**

The population is the entire group of person or subjects that is of interest to the investigator. (Dorothy Young & Smarir.T, 2003)

Target population in this present study was comprised of schizophrenic patients attending outpatient department of Mental Health Centre, Trivandrum, Kerala. All the patients who fulfill the inclusion criteria will be selected for the study.

## **SAMPLE AND SAMPLING TECHNIQUE**

Sample is the subset of the population selected for the research. Sampling means a process of selection of sample which is a portion of the population, in order to represent the entire population. (Polit and Beck, 2004)

In the present study the sample consists of 80 schizophrenic patients who were attending the outpatient department of Mental Health Centre, Trivandrum, Kerala. Consent from the superintendent of the Mental Health Centre was obtained. Random sampling was chosen for the selection of the study subjects.

## **CRITERIA FOR THE SELECTION OF SAMPLE**

### **INCLUSION CRITERIA**

1. Schizophrenic patients who were attending the outpatient department.

2. The patients diagnosed as schizophrenia for more than 3 months.

## **SELECTION AND DEVELOPMENT OF INSTRUMENT**

Instrument is a device or technique that a researcher uses to collect data. Instrument for the study is act as a vehicle which obtains best data in order to draw conclusion pertinent to the study. (Treece & Treece, 2004)

The quality of life inventory will be used as the research tool to assess the quality of life of schizophrenic patients, and it was considered as the most suitable instrument for the present study. The quality of life inventory was prepared by modifying WHO-BREF and quality of life inventory by Gloria Noriega Gayol.

## **DESCRIPTION OF THE TOOL**

The quality of life inventory was organized in two sections. Section A and Section B. Section A consists of 12 items regarding socio demographic variables of patients. Section B consists of statements on four domains, (physical domain, psychological domain, social domain, environmental/occupational domain). Each domain consists of 10 statements.

## **SECTION A**

Section A consists of 12 items regarding socio demographic variables of patients. The socio demographic variables are age, sex, religion, marital status, education, occupation, family income, type of family, place of residence, duration of illness, duration of treatment, and regarding follow up care.

## **SECTION B**

Section B consists of four domains (physical domain, psychological domain, social domain, environmental/occupational domain). Maximum score given was 160. The answer options were graded like never-1, sometimes-2, often-3, always-4. Scores below 65% were graded as fair level of quality of life and 65-85% scores were graded as satisfactory level of quality of life, high scores above 85% indicates good quality of life.

## **VALIDATION OF THE TOOL**

Validity is an important methodological criteria for evaluating any measuring instrument.

All the questions in each section were translated in Malayalam (Native language) and edited by language experts. The content validity of the tool

was assessed and obtained from experts in nursing and psychiatry. The experts suggested adding some items, simplification of statements, and reduction of technical words. As per the suggestion from experts question on correct follow up and questions regarding occupation environment also added. All modification done and the tool were finalized.

### **RELIABILITY OF THE TOOL**

The tool was administered to 10 patients attending outpatient department in Amachi Veedu Temple Trust Hospital at Kollam, Kerala. The reliability was established with split half method. It was found to be  $r=0.95$ , which indicates the tool was highly reliable to conduct study.

### **PILOT STUDY**

Polit and Hungler (2007) states that pilot study is a small scale version for a major study. The function of the pilot study is to assess the feasibility.

Permission from the concerned authority was obtained for the pilot study. Pilot study was conducted in the month of September 2011. 10 Patients were selected by convenient sampling method from the outpatient department of the hospital. All the selected patients co-operated well and answered the questions.

## **PROCEDURE FOR THE DATA COLLECTION**

The data was collected in the month of October 2011. The study was conducted in the Government Mental Health Centre at Trivandrum, Kerala. The patients were selected by convenient sampling method from the outpatient department in Mental Health Centre.

Consent was obtained from the District Medical Officer, Trivandrum. After getting permission samples were collected. Consent from the patients were obtained and the purpose of the study was explained to the patients with self introduction. Data collection was done from morning 8.30am to 2pm. Daily 5-6 patients were collected. On Sundays outpatient department was closed. Total 4 weeks got permission for the data collection. Most of the patients co-operated well with the data collection.

## **PLAN FOR DATA ANALYSIS**

The data was analyzed in terms of objectives of the study using descriptive and inferential statistics. The data collected were organized in the master sheet and frequencies and the percentage for analysis of the socio demographic variables will be obtained. Range score, mean score, standard deviation, and mean score percentage for the level of quality of life will be obtained. Chi-square analysis was used to find out the

relationship between the demographic variables and the level of quality of life

## **SUMMARY**

This chapter was dealt with the research methods of the study. It includes research approach, research design, study setting, target population, sample size, sampling techniques, selection and development of tool, pilot study and plan for data analysis.

## **CHAPTER IV**

### **DATA ANALYSIS**

*“It's no use saying, "We are doing our best." You have got to succeed in doing what is necessary.”*

**- Winston Churchill**

This chapter deals with analysis and inter-relation of the collected data from the schizophrenic patients (80) who were attending the outpatient department of Mental Health Centre, Trivandrum, Kerala.

The purpose of the analysis is to convert the collected data to an interpreted meaningful form, so that the results can be found and associations can be identified.

Statistical analysis helps the researcher to make sense of quantitative information. Statistical procedure enables the researcher to summarize, organize, evaluate, interpret & communicate numeric information. (Polit and Hungler, 2008)

The data collected using the quality of life inventory was analyzed using descriptive and inferential statistics, it provides the summary by results in relation to the objectives of the study.



## **OBJECTIVES OF THE STUDY**

- To assess the quality of life of schizophrenic patients.
- To determine the relationship between quality of life with the demographic and clinical details.(age, sex, religion, education, occupation, family type, place, duration of illness and treatment, correct follow up)
- To prepare a health education module to the patients.

## **PRESENTATION OF THE DATA**

### **SECTION I**

Description of socio-demographic variables of subjects in frequencies and percentage analysis.

### **SECTION II**

Assessment of the overall quality of life of schizophrenic patients

### **SECTION III**

Assessment of quality of life of schizophrenic patients in specific domains

### **SECTION IV**

Association between the quality of life and the socio-demographic variables.

## SECTION I

### DESCRIPTION OF SOCIO-DEMOGRAPHIC VARIABLES OF SUBJECTS

**Table and figure 4.1.1 distribution of subjects according to their age in years. (N=80)**

Sl no.	Age	No. (80)	Percentage (%)
1	20-30 yrs	16	20
2	31-40 yrs	36	45
3	41-50 yrs	25	31
4	>50 yrs	3	4
Total		80	100

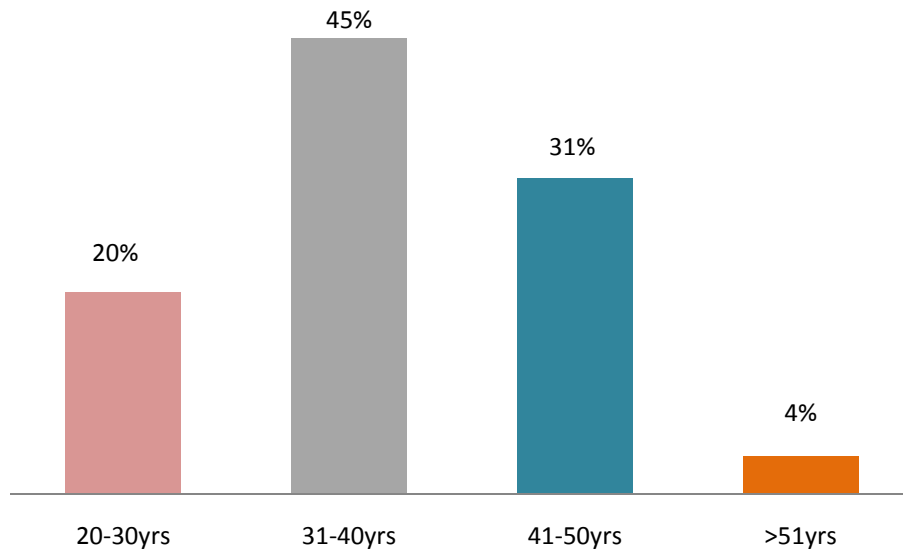


Table and figure 4.1.1 shows that the maximum number of subjects 36(45%) were in the age group of 31-40 yrs, 25(31%) were in the age group of 41-50 yrs, 16 (20%) were in the age group of 20-30 yrs, and 3(4%) were in the age group more than 50 yrs.

**Table and figure 4.1.2 Distribution of subjects according to their sex**

**(N=80)**

Sl no.	Sex	No. (80)	Percentage (%)
1	Female	30	37
2	Male	50	63
Total		80	100

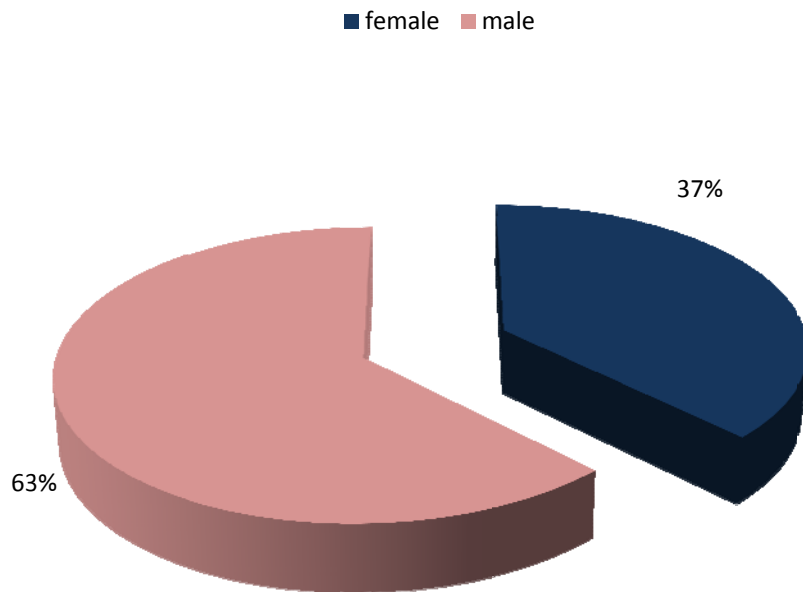


Table and figure 4.1.2 shows that the majority of the subjects, 50(63%) were males, and 30(37%) were females.

**Table and figure 4.1.3 Distribution of subjects according to their religion. (N=80)**

Sl no.	Religion	No.(80)	Percentage (%)
1	Hindu	33	41
2	Christian	39	49
3	Muslim	8	10
Total		80	100

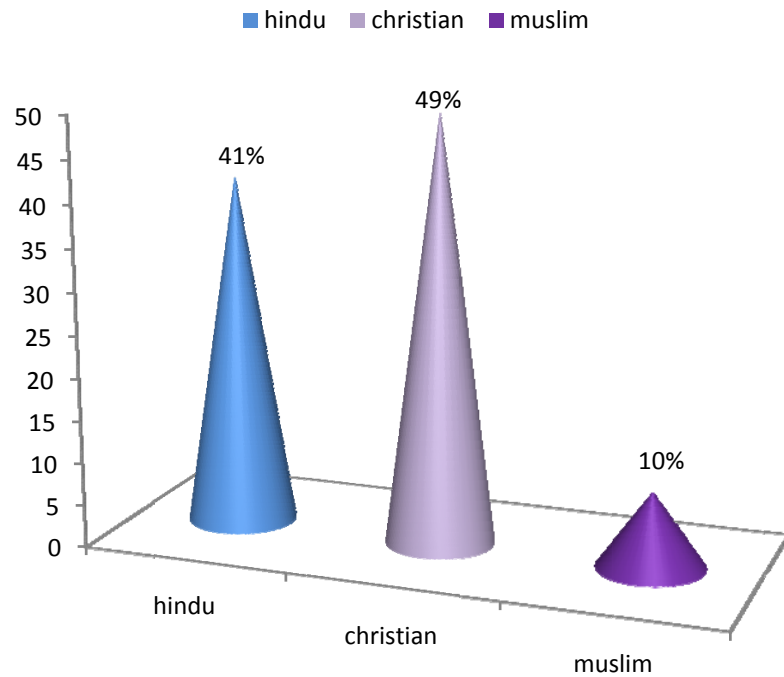


Table and figure 4.1.3 shows that the majority of the subjects 39(49%) were Christians, 33(41%) were Hindus, and 8(10%) were Muslims.

**Table and figure 4.1.4 Distribution of subjects according to their marital status. (N=80)**

Sl no.	Marital status	No.(80)	Percentage (%)
1	Married	14	17.5
2	Unmarried	52	65
3	Widow/divorced	14	17.5
Total		80	100

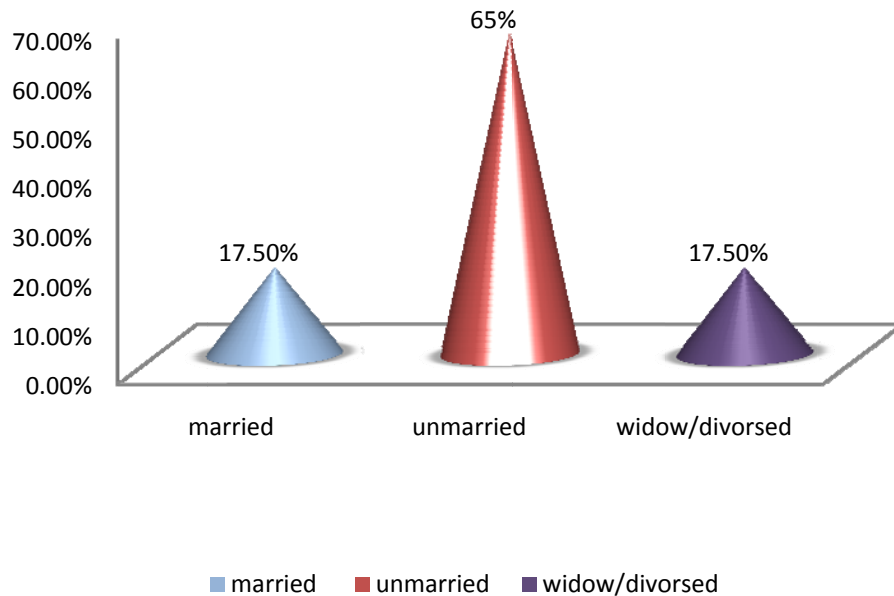


Table and figure 4.1.4 shows that the majority of the subjects 52(65%) were unmarried and 14(17.5%) were married, and 14(17.5%) were widow/divorced.

**Table and figure 4.1.5 Distribution of subjects according to education status. (N=80)**

Sl no.	Education status	No. (80)	Percentage (%)
1	illiterate	43	54
2	Primary school	20	25
3	High school	13	16
4	Graduate	4	5
Total		80	100

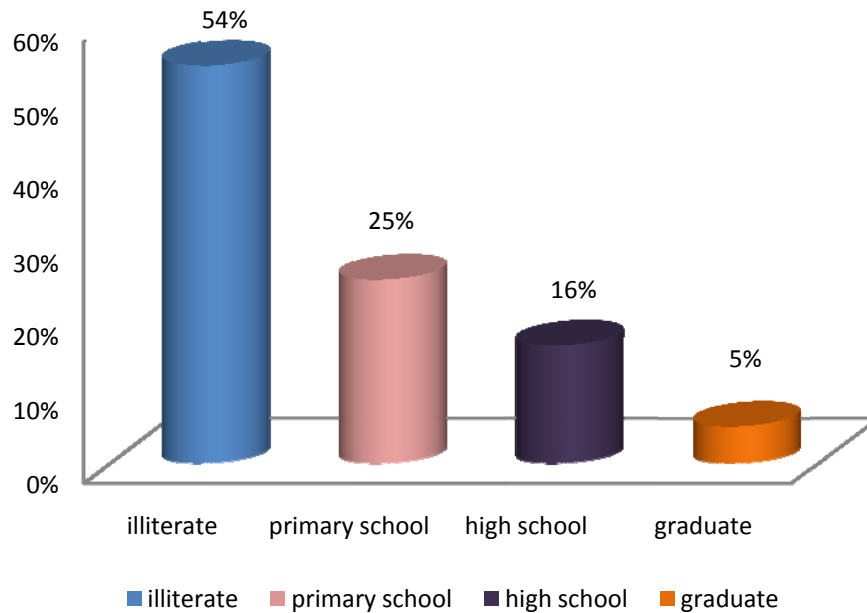


Table and figure 4.1.5 reveals that the majority of the subjects 43(54%) were illiterate, 20(25%) samples were having primary school education, 13(16%) samples were having high school education, 4 (5%) samples were graduate.

**Table and figure 4.1.6 Distribution of subjects according to occupation**

**(N=80)**

Sl no.	Occupation	No. (80)	Percentage (%)
1	Unemployed	42	52.5
2	Cooli	32	40
3	Private employee	6	7.5
Total		80	100

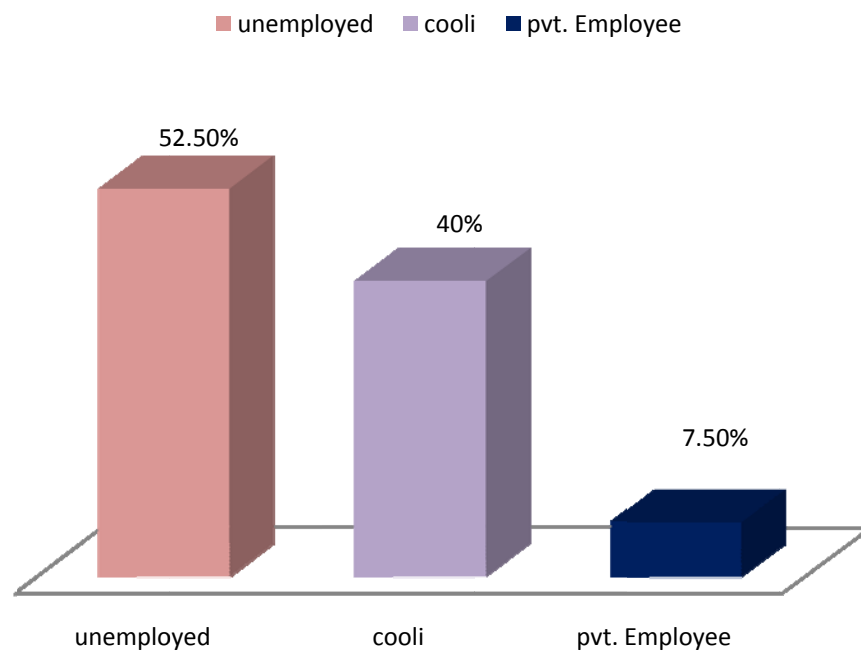


Table and figure 4.1.6 shows that majority of the subjects 42 (52.5%) were unemployed, 32(40%) samples were cooli workers, and 6(7.5%) samples were private employees.

**Table and figure 4.1.7 Distribution of subjects according to family type (N=80)**

Sl no.	Family type	No. (80)	Percentage (%)
1	Nuclear family	18	22
2	Joint family	39	49
3	Single parent	23	29
Total		80	100

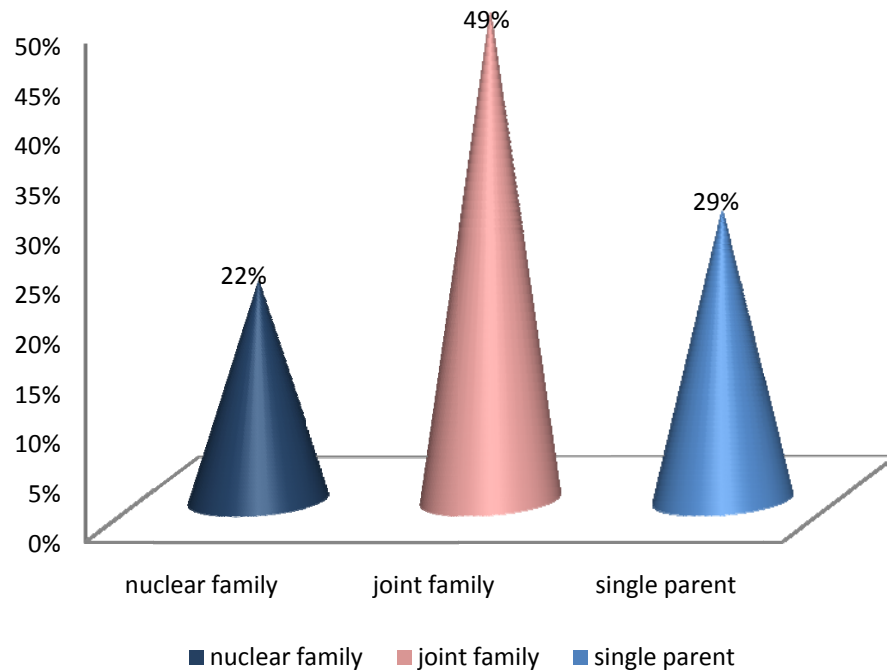


Table and figure 4.1.7 describes that the majority of the subjects 39 (49%) belongs to the joint family, 23(29%) subjects belongs to single parent family, 18(22%) subjects belongs to nuclear family.



**Table and figure 4.1.8 Distribution of subjects according to the place**

**(N=80)**

Sl no.	Place	No. (80)	Percentage (%)
1	Urban	16	20
2	Rural	64	80
Total		80	100

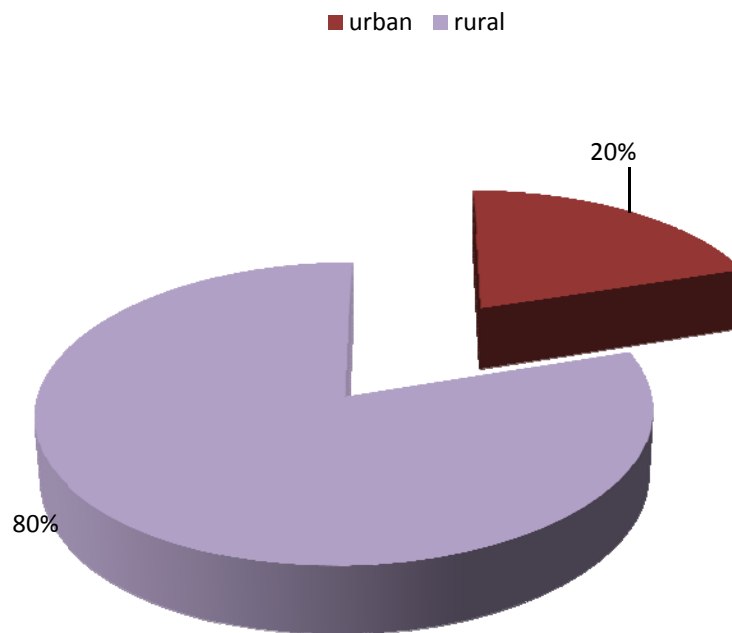


Table and figure 4.1.8 explains that the majority of the subjects 64 (80%) were from the rural area, and 16(20%) from the urban area.

**Table and figure 4.1.9 Distribution of subjects according to the duration of illness (N=80)**

Sl no.	Duration of illness	No. (80)	Percentage (%)
1	Less than 15 years	61	76
2	More than 15 years	19	24
Total		80	100

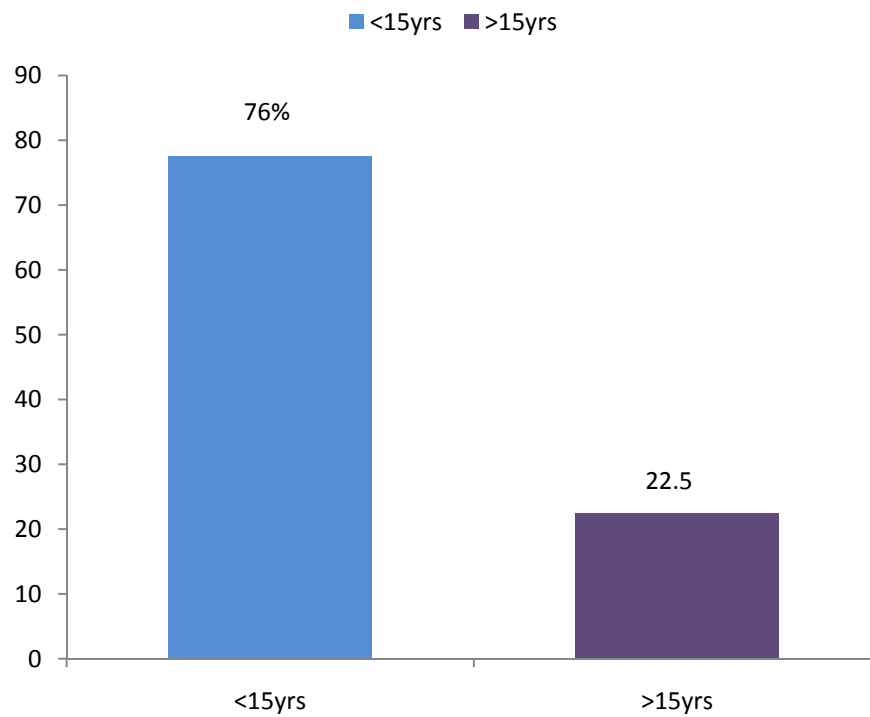


Table and figure 4.1.9 shows that the majority of the subjects 61(76%) were having illness for less than 15years, and 19(24%) of subjects were having illness for more than 15 years.

**Table and figure 4.1.10 Distribution of subjects according to the duration of treatment (N=80)**

Sl no.	Duration of treatment	No. (80)	Percentage (%)
1	Less than 15 years	69	86
2	More than 15 years	11	14
Total		80	100

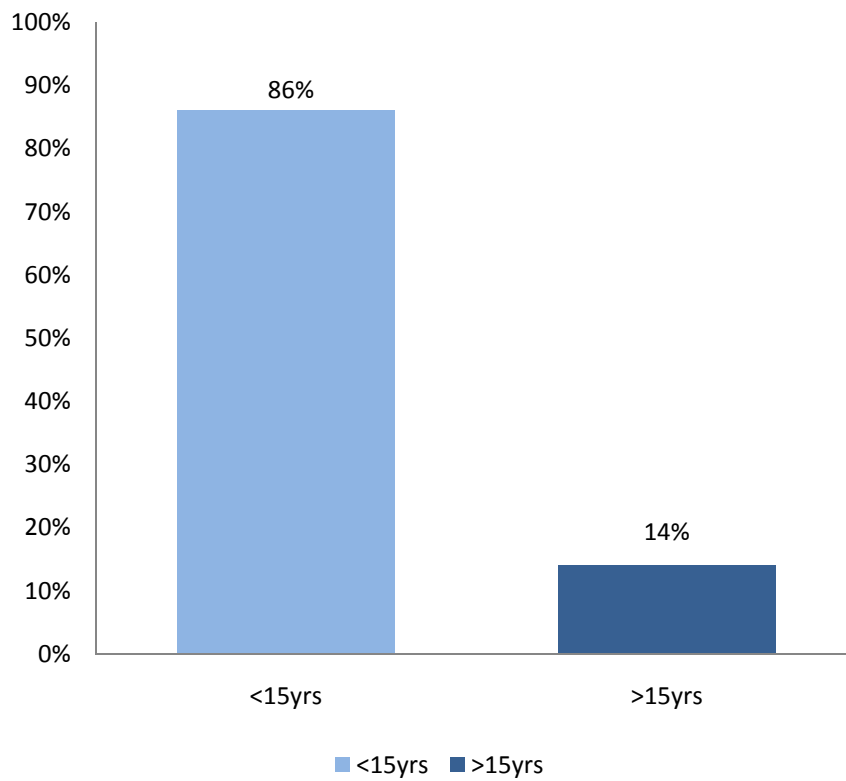


Table and figure 4.1.10 shows that the majority of the subjects 69 (86%) were taking treatment for less than 15 years, 11 (14%) were taking treatment for more than 15 years.

**Table and figure 4.1.11 Distribution of subjects according to correct follow up (N=80)**

Sl no.	Correct follow up	No. (80)	Percentage (%)
1	Yes	33	41
2	No	47	59
Total		80	100

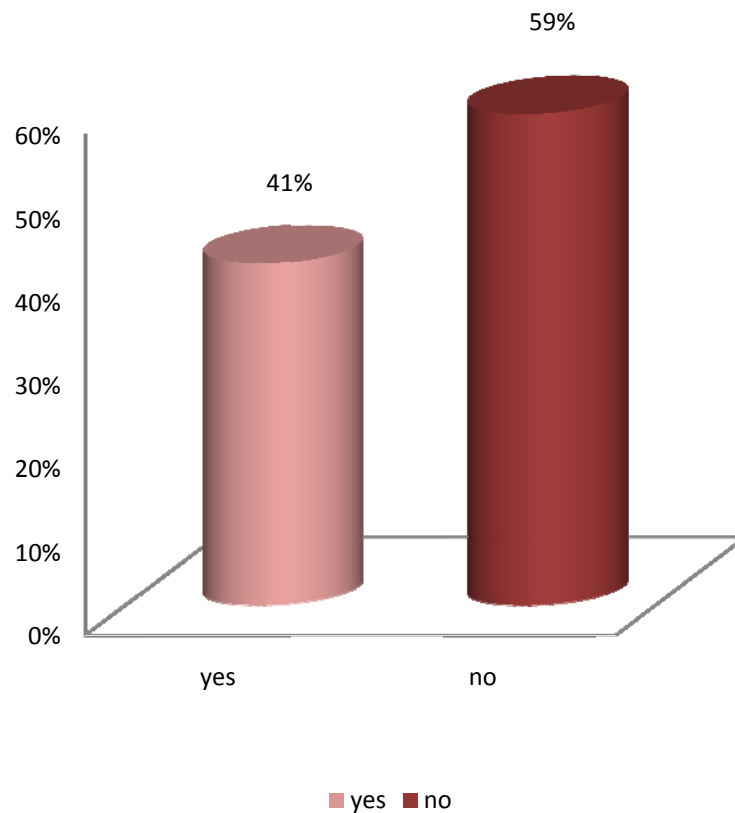


Table 4.1.10 and figure 4.1.10 shows that the majority of the subjects 47(59%) were not taking correct follow up, and 33 (41%) were taking correct follow up.

## SECTION II

### DISTRIBUTION OF SUBJECTS ACCORDING TO THE OVERALL QUALITY OF LIFE

**Table and figure 4.2.1 Distribution of subjects according to the overall quality of life (N=80)**

Sl no.	Level of quality of life	No.(80)	Percentage (%)
1	Fair (Less than 65%)	67	84
2	Satisfactory (65-85%)	10	12
3	Good (More than 85%)	3	4
Total		80	100

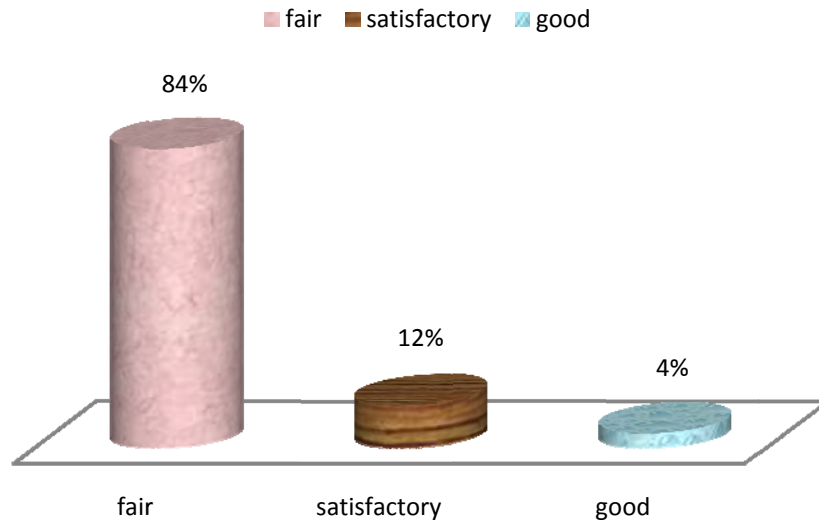


Table and figure 4.2.1 shows that the majority subjects 67(84%) were having fair level of quality of life, 10 (12%) of the subjects were having satisfactory level of quality of life, and 3(4%) of the subjects were having good quality of life.

**Table 4.2.2 quality of life score on overall quality of life of schizophrenic patients (N=80)**

Sl no.	Aspects	Maximum score	Range score	Quality of life		
				Mean	Mean %	SD
1	Overall quality of life	160	36-151	63.34	39.58	32.24

Table 4.2.2 shows that the overall quality of life scores of schizophrenic patients were 39.58%, with the standard deviation of 32.24 which implies that the patients were having fair level of quality of life.

### SECTION III

#### QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS OVER DIFFERENT DOMAINS.

**Table 4.3.1**

**(N=80)**

Sl no.	Domains	Quality of life					
		Fair		Satisfactory		Good	
		No.	%	No.	%	No.	%
1	Physical domain	64	80	11	13.75	5	6.25
2	Psychological domain	65	81.25	12	15	3	3.75
3	Social domain	73	91.25	6	7.5	1	1.25
4	Environment/ Occupational domain	65	81.25	11	13.75	4	5

Table 4.3.1 shows that, in physical domain 64(80%) patients had fair level of quality of life, 11(13.75%) patients had satisfactory level of quality of life, 5(6.25%) patients had good quality of life. In psychological domain 65(81.25%) patients had fair level of quality of life, 12(15%) patients had satisfactory level of quality of life and 3(3.75%) patients had good quality of life. In social domain 73(91.25%) patients had fair level of quality of life, 6(7.5%) patients had satisfactory level of quality of life, 1 (1.25%) patient had good quality of life. In environment/ occupational domain 65(81.25%) patients had fair level of quality of life, 11(13.75%) patients had satisfactory level of quality of life, 4 (5%) patients had good quality of life.

**Table 4.3.2 Quality of life score of schizophrenic patients over quality of life over different domains (N=80)**

Sl no.	Domains	Maximum Score	Range Score	Quality of life		
				Mean	Mean %	SD
1	Physical domain	40	8-38	16.91	42.27	8.7
2	Psychological Domain	40	5-38	15.68	39.2	8.74
3	Social domain	40	8-38	15.2	38	7.01
4	Environmental/ Occupational domain	40	6-39	15.4	38.5	9.29

Table 4.3.2 shows quality of life score in physical domain was 42.27% with the standard deviation of 8.7, in psychological domain the quality of life score was 39.2% with the standard deviation of 8.74, in social domain the quality of life score was 38% with the standard deviation of 7.01, and in environmental/occupational domain the quality of life score was 38.5% with the standard deviation of 9.29.



## SECTION IV

### ASSOCIATION BETWEEN THE QUALITY OF LIFE AND THE SOCIO-DEMOGRAPHIC VARIABLES.

**Table 4.4.1 Association between the quality of life and the socio-demographic variables. (N=80)**

SI no.	Variables	Category	Quality of life						$\chi^2$
			Fair		Satisfactory		Good		
			No.	%	No.	%	No.	%	
1	Age	Less than 40 yrs	45	67	5	50	2	70	1.13 <sup>NS</sup>
		More than 40 yrs	22	33	5	50	1	30	
2	Sex	Female	27	40	2	20	0	0	3.01 <sup>NS</sup>
		Male	40	60	8	80	3	100	
3	Religion	Hindu	26	39	5	50	2	66	1.42 <sup>NS</sup>
		Christian	34	51	4	40	1	34	
		Muslim	7	10	1	10	0	0	
4	Marital status	Married	4	6	8	80	2	66	38.57*
		Unmarried	49	73	1	10	1	34	
		Widow/divorced	14	21	1	10	0	0	
5	Education	Illiterate	41	61	1	10	1	34	10.38*
		Literate	26	39	9	90	2	66	
6	Occupation	Unemployed	40	59	2	20	1	34	6.03*
		Employee	27	41	8	80	2	66	
7	Family type	Nuclear	9	13	7	70	2	66	20.8*
		Joint	38	57	1	10	0	0	
		Single parent	20	30	2	20	1	34	
8	Place	Rural	6	9	8	80	2	66	31.61*
		Urban	61	91	2	20	1	34	

9	Duration of illness	<15 yrs	51	76	8	80	2	66	0.23 <sup>NS</sup>
		>15 yrs	16	24	2	20	1	34	
10	Duration of treatment	<15 yrs	59	88	8	80	2	66	1.48 <sup>NS</sup>
		>15 yrs	8	12	2	20	1	34	
11	Correct follow up	Yes	21	31	9	90	3	100	16.77*
		No	46	69	1	10	0	0	

NOTE- \* Significant at 5% level,  $\chi^2$  (2 df) = 5.99

\* Significant at 5% level,  $\chi^2$  (4df)= 6.26

NS – Not significant at 5% level,  $\chi^2$  (2 df) = 5.99

Not significant at 5% level,  $\chi^2$  (4df) = 6.26

In view of the objective of the study to find out the association between the quality of life and the demographic variables, chi-square test carried out and the result was shown in the table 4.4.1. it shows that marital status, education, occupation, family type, place and the correct follow up were significantly associated with the quality of life of the schizophrenic patients at 5% level ( $p < 0.05$ )

The remaining variables such as age, sex, religion, duration of illness and treatment were not significantly associated with the quality of life.

So it is evident that the quality of life of schizophrenic patients was significantly influenced by marital status, education, occupation, family type, place and the correct follow up.

## **DISCUSSION**

The study was focused on assessing the quality of life of schizophrenic patients.

The discussion is explained under the following headlines:

- A) Socio demographic variables of schizophrenic patients.
- B) Quality of life of schizophrenic patients.
- C) Quality of life of schizophrenic patients in different domains.
- D) Association between the quality of life and the demographic variables.

### **SOCIO DEMOGRAPHIC VARIABLES OF SCHIZOPHRENIC PATIENTS**

- Among 80 subjects 36 (45%) were in the age group of 31-40 yrs, 25 (31.25%) were in the age group of 41-50 yrs, 16 (20%) were in the age group of 20-30 yrs, and 3 (3.75%) were in the age group more than 50 yrs.
- Among 80 subjects, 50 (63%) were males, and 30 (37%) were females.
- Among 80 subjects 39 (49%) were Christians, 33 (41%) were Hindus, and 8 (10%) were Muslims.
- Among 80 subjects 52 (65%) were unmarried and 14 (17.5%) were married, and 14 (17.5%) were widow/divorced.

- Among 80 subjects 43 (54%) were illiterate, 20 (25%) of them had primary school education, 13 (16%) were having high school education, 4 (5%) were graduate, none of the samples are post graduate.
- Among 80 subjects 42 (52.5%) were unemployed, 32 (40%) of the samples were cooli workers, and 6 (7.5%) of the samples were private employees, none of the samples were government employees.
- Among 80 the subjects 39 (49%) belongs to the joint family, 23 (29%) were belongs to single parent family, 18 (22%) were belongs to nuclear family.
- In this study subjects 64 (80%) were form the rural area, and 16 (20%) from the urban area.
- In this study subjects 61(76%) were having illness for less than 15years, and 19 (24%) of subjects were having illness for more than 15 years.
- Among the 80 subjects 69 (86%) were taking treatment for less than 15 years, 11 (14%) of them were taking treatment for more than 15 years
- Among 80 subjects 47 (59%) were not taking correct follow up, and 33 (41%) of them were taking correct follow up.

## **QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS.**

- In this study the data shows that subjects 67(84%) were having fair quality of life, 10 (12%) of the subjects were having satisfactory quality of life, and 3(4%) of them had good quality of life.
- The overall quality of life score of schizophrenic patients were 39.58%, with the standard deviation of 32.24 which implies that the patients were having fair level of quality of life.

## **QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS IN DIFFERENT DOMAINS**

- The data shows that in physical domain 64(80%) of them were having fair level of quality of life, 11(13.75%) of the patients were having satisfactory level of quality of life, 5(6.25%) of them were having good quality of life.
- The data shows that in psychological domain 65 (81.25%) of them were having fair level of quality of life, 12(15%) of them were having satisfactory level of quality of life, 3(3.75%) of them were having good quality of life.
- The data shows that in social domain 73(91.25%) of them were having fair level of quality of life, 6(7.5%) of them were having satisfactory

level of quality of life, 1(1.25%) of them was having good quality of life.

- The data shows that in environmental/occupational domain 65(81.25%) of them were having fair level of quality of life, 11(13.75%) of them were having satisfactory level of quality of life, 4 (5%) of them were having good quality of life.

### **ASSOCIATION BETWEEN THE QUALITY OF LIFE AND THE DEMOGRAPHIC VARIABLES.**

- This study shows that the quality of life is associated with the marital status, education, occupation, family type, place and correct follow up.
- The data shows that there is no association with the age, sex, religion and the duration of the illness and the treatment.

### **SUMMARY**

This chapter deals with the analysis and interpretation of the data collected from the schizophrenic patients attended outpatient department at mental health centre Trivandrum, Kerala.

## **CHAPTER V**

### **SUMMARY, FINDINGS, CONCLUSION, IMPLICATION AND RECOMMENDATIONS.**

*"You have to expect things of yourself before you can do them."*

**- Michael Jordan**

This chapter presents briefly about the summary, findings, conclusion, implication, and recommendations

#### **SUMMARY OF THE STUDY**

The primary aim of the study is to assess the quality of life of the schizophrenia patients who were attending the outpatient department of mental health centre, Trivandrum, Kerala.

The objectives of the study were

- To assess the quality of life of schizophrenic patients.
- To determine the relationship between quality of life with the socio demographic variables such as age, sex, marital status, education, occupation, type of family, place of residence, duration of illness and treatment.
- To prepare a health education module for the schizophrenic patients.

Based on the reviewed literature and with the guidance from the subject experts researcher developed conceptual framework and methodology and research analysis plan in the most effective manner. The conceptual framework adopted for the study was based on Roy's Adaptation model.

The research design adopted was descriptive in nature. The sample consists of 80schizophrenic patients who were attending the outpatient department of mental health centre, Trivandrum, Kerala. The researcher developed the quality of life inventory by modifying WHO-QOL questionnaire and the inventory by Gloria Noriega Gayol.

The quality of life inventory was administered to 10 patients in the Ammachi Veedu Temple Trust Hospital, Kollam, Kerala for the reliability test. The reliability of the tool was established with the split half method. The instrument was found reliable and feasible.

## **MAJOR FINDINGS OF THE SYUDY**

### **FINDINGS RELATED TO DEMOGRAPHIC VARIABLES**

- Among 80 subjects 36 (45%) were in the age group of 31-40 yrs, 25 (31.25%) were in the age group of 41-50 yrs, 16 (20%) were in the age



group of 20-30 yrs, and 3 (3.75%) were in the age group more than 50 yrs.

- Among 80 subjects, 50 (63%) were males, and 30 (37%) were females.
- Among 80 subjects 39 (49%) were Christians, 33 (41%) were Hindus, and 8 (10%) were Muslims.
- Among 80 subjects 52 (65%) were unmarried and 14 (17.5%) were married, and 14 (17.5%) were widow/divorced.
- Among 80 subjects 43 (54%) were illiterate, 20 (25%) were having primary school education, 13 (16%) were having high school education, 4 (5%) of them were graduate.
- Among 80 subjects 42 (52.5%) were unemployed, 32 (40%) of the samples were cooli workers, and 6 (7.5%) of the samples were private employees.
- Among 80 the subjects 39 (49%) belongs to the joint family, 23 (29%) belongs to single parent family, 18 (22%) belongs to nuclear family.
- In this study subjects 64 (80%) were form the rural area, and 16 (20%) from the urban area.
- In this study subjects 61(76%) were having illness for less than 15years, and 19 (24%) of subjects were having illness for more than 15 years.

- Among the 80 subjects 69 (86%) were taking treatment for less than 15 years, 11 (14%) of them were taking treatment for more than 15 years
- Among 80 subjects 47 (59%) were not taking correct follow up, and 33 (41%) were taking correct follow up.

## **FINDINGS RELATED TO QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS.**

The overall quality of life was divided into three categories for easy interpretation as, if the score was less than 65% it was rated as fair quality of life, if the score was between 65-85% it was rated as satisfactory quality of life, and if the score is more than 85% it was rated as good quality of life.

- In this study the data shows that subjects 67(84%) were having fair level of quality of life, 10 (12%) of the subjects were having satisfactory level of quality of life, and 3(4%) of them were having good quality of life.
- The overall quality of life score of schizophrenic patients were 39.58%, with the standard deviation of 32.24 which implies that the patients were having fair level of quality of life.

## **FINDINGS RELATED TO QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS IN DIFFERENT DOMAINS**

- The data shows that in physical domain 64(80%) of them were having fair level of quality of life, 11(13.75%) of the subjects were having satisfactory level of quality of life, 5(6.25%) of the subjects were having good quality of life.
- The data shows that in psychological domain 65 (81.25%) of the subjects were having fair level of quality of life, 12(15%) of the subjects were having satisfactory level of quality of life, 3(3.75%) of the subjects were having good quality of life.
- The data shows that in social domain 73(91.25%) of the subjects were having fair level of quality of life, 6(7.5%) of the subjects were having satisfactory level of quality of life, 1(1.25%) subject had good quality of life.
- The data shows that in environmental/occupational domain 65(81.25%) of the subjects were having fair level of quality of life, 11(13.75%) of the subjects were having satisfactory level of quality of life, 4 (5%) of the subjects were having good quality of life.

## **FINDINGS RELATED TO ASSOCIATION BETWEEN THE QUALITY OF LIFE AND THE DEMOGRAPHIC VARIABLES.**

- This study shows that the quality of life is associated with the marital status, education, occupation, family type, place and correct follow up.
- The data shows that there is no association with the age, sex, religion and the duration of the illness and the treatment.

## **CONCLUSION**

- Among 80 subjects 67(84%) were having fair level of quality of life
- Among 80 subjects 3(4%) were having good quality of life.
- The study revealed that the quality of life of schizophrenic patients are associated with the marital status, education status, the occupation, family type, place of residence and correct follow up. Continuation of the prescribed medicine is also important to improve the quality of life. Family members and the patients should get education about all the influencing factors to improve their quality of life.

## **IMPLICATIONS OF THE STUDY**

The findings of the study has implications in different branches of nursing profession, i.e. nursing education, nursing practice, nursing research, nursing administration.

### **NURSING EDUCATION**

The nursing education is a means in which the nurses are practiced to work in different settings. The nursing curriculum includes the psychiatric nursing as a subject. It will be an encouragement for the students to learn mental disorders. The students should get adequate knowledge regarding the major psychiatry disorders and how it can be managed and cared; also the students should understand how to improve the quality of life with common mental disorders which produce disability in men. If the study finding channelized to nursing education properly the students can understand which are the factors associated with the quality of life of schizophrenic patients.

The nursing institutions should play an active role in conducting in-service education, workshop, and continuing education programme to educate the future nurses regarding the quality of life of patients with the

mental disorders. Mental health week can be celebrated and programs can be arranged for the patients by the nursing students.

## **NURSING PRACTICE**

Nurses play a vital role in improving the quality of life of patients with mental disorders as an educator and care giver. The nurse has the opportunity to identify the needs and problems of the patient so that to improve the quality of life. Most of the nursing staffs are not interested to work in the field of psychiatry, because of risks. The nurses and the health team members should teach the caregivers of the patients about the proper techniques of care, and about the disorder and its management. The nurses should have the skill to manage the situation accordingly. To improve the knowledge and skill to provide care to the schizophrenic patients in-service education programs can be conducted among staff nurses. Continuing education program will also be a good opportunity for the nurses to improve the knowledge and skill. Mental health day celebration can be arranged by the staffs for the patients.

## **NURSING RESEARCH**

Research have been done about the mental disorders and its quality of life mainly schizophrenia. In most of the studies the results shows that

quality of life is average. The quality of life can be increased by improving the knowledge of the patient and family members about the disorder. Good results can be obtained when the patients will get good rehabilitation. So the quality of life of the psychiatric patients is a good topic for the future research. Nurse researchers should come forward to develop new strategies to improve the quality of life of the patients, and researchers can educate the community about the stigma related to mental disorders. The study findings can be utilized further to conduct descriptive study on quality of life of schizophrenic patients.

## **NURSING ADMINISTRATION**

The nurse administrator should play a vital role in arranging the continuing education programs. The nurse administrator should be a good motivator for the staffs to organize and conduct week end programs and other functions for the patients. Organizing and conducting such programs need a good team work, so the administrator should lead the team to conduct well planned programs. Administrators also can participate for the well functioning of the programs. Administrator should improve own knowledge.

## **RECOMMENDATIONS**

- ♣ The study can be replicated with a large sample there by findings can be generalized to a large population.
- ♣ The study can be conducted with some interventions to improve quality of life of schizophrenia patients in a long duration.
- ♣ A comparative study can be conducted with the quality of life of other mental disorder patients and schizophrenia patients.
- ♣ A comparative study can be done on quality of life of the schizophrenia patients residing in rural and urban area.
- ♣ The study can be done on the caregiver's attitude to improve the quality of life of schizophrenia patients.
- ♣ A comparative study can be done on quality of life among female and male schizophrenia patients.
- ♣ A comparative study can be done on quality of life among schizophrenia patients who were employed and unemployed.

## **SUMMARY**

This chapter includes the summary, major findings, implications and recommendations.



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## APPENDIX-A

### LETTER SEEKING PERMISSION TO CONDUCT THE STUDY

FROM,

Mrs. Priya Rajan. C

Ilyear MSc Nursing

Vivekanandha College of Nursing,

Elayampalayam, Thiruchengodu,

Namakkal.

TO,

The Superintendent

Mental Health Centre,

Trivandrum,

Kerala.

***Sub: letter seeking permission to conduct the study***

Respected Sir,

I Mrs. Priya Rajan. C MSc.,(N) II year student psychiatric nursing, Vivekanandha College of Nursing, Elayampalayam, Namakkal, have undertaken thesis on the topic ***“A STUDY TO ASSESS THE QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS ATTENDING OUTPATIENT DEPARTMENT OF MENTAL HEALTH CENTRE, TRIVANDRUM, KERALA.”***

## **OBJECTIVES**

- To assess the quality of life of schizophrenic patients
- To determine the relationship between quality of life with the demographic and clinical details
- To prepare a health education module for the schizophrenic patients

I kindly request you to grant me permission to conduct the study in Mental Health Centre, Trivandrum, Kerala, and for collecting necessary information for the study.

Thanking you

Yours faithfully

[PRIYA RAJAN.C]

Place: Thiruchengodu

Date:

## **APPENDIX-B**

### **LETTER GRANTING PERMISSION TO CONDUCT STUDY**

FROM,

The superintendant  
Mental Health Centre  
Trivandrum, Kerala.

TO,

Mrs. Priya Rajan. C  
II year MSc nursing  
Vivekanandha College of Nursing  
Thiruchengodu, Namakkal.

Dear student,

Sub: Mental Health Centre, Trivandrum – permission granted to conduct  
project work-Reg

Ref: your requisition letter

According to the letter cited in the reference, it has been informed that Mrs, Priya Rajan. C who is II year MSc Nursing student of Vivekanandha College of Nursing, Elayampalayam, is permitted to conduct the study; also she has been informed that, she will not disturb the regular routine works of the hospital and ward.

I wish her all success.

The Superintendent  
Mental Health Centre,

Trivandrum.



**APPENDIX-C**  
**LETTER SEEKING CONSENT FROM THE**  
**PARTICIPANTS**

Dear participant,

I am Mrs. Priya Rajan. C MSc Nursing student of Vivekanadha College of Nursing, Elayampalayam is interested to know about your quality of life. The information you are providing will be kept confidential and will be used only for the study. Please participate in the study and state your willingness to participate in this study.

Thanking you,

Yours faithfully

[Priya Rajan.C]

**CONSENT FROM THE PARTICIPANT**

I understood the purpose of this study, and I state my willingness to participate in this study.

Signature

## **APPENDIX-D**

### **LETTER REQUISTING THE EXPERTS FOR THE CONTENT VALIDATION OF THE TOOL**

From,

**MRS. PRIYA RAJAN. C**

II year MSc Nursing,

Vivekananda College of Nursing,

Elayampalayam.

To,

Through,

**THE PRINCIPAL,**

Vivekananda College of Nursing,

Elayampalayam.

***Sub : Request for the content validation of the tool***

Sir/Madam,

I Mrs. Priya Rajan.C MSc (N) II year student of Vivekananda College of Nursing, Elayampalayam, Thiruchengodu, have taken the project of “***A STUDY TO ASSESS THE QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS ATTENDING OUTPATIENT DEPARTMENT OF MENTAL HEALTH CENTRE, TRIVANDRUM, KERALA***” to be submitted to Dr. MGR University as partial fulfillment for Master of Nursing Degree.

## **OBJECTIVES**

- To assess the quality of life of schizophrenic patients.
- To determine the relationship between quality of life with the demographic and clinical details.
- To prepare a health education module for the schizophrenic patients.

To achieve the above mentioned objectives I have prepared a quality of life inventory by modifying WHO-QOL scale and inventory by Gloria Noriega Gayol. I request you to kindly give your valuable opinion and suggestion. Kindly validate and certify the tool.

Thanking you

Yours faithfully,

Mrs. Priya Rajan.C

## APPENDIX-E

### QUALITY OF LIFE INVENTORY

#### SECTION I

##### DEMOGRAPHIC AND CLINICAL DETAILS

1. Code no. \_\_\_\_\_
2. Age
  - 2.1 20-30yrs [ ]
  - 2.2 31-40yrs [ ]
  - 2.3 41-50yrs [ ]
  - 2.4 More than 51yrs [ ]
3. Sex
  - 3.1 Male [ ]
  - 3.2 Female [ ]
4. Marital status
  - 4.1 Married [ ]
  - 4.2 Unmarried [ ]
  - 4.3 Divorsed/widow [ ]
5. Religion
  - 5.1 Hindu [ ]

5.2 Christian [ ]

5.3 Muslim [ ]

5.4 Others [ ]

## 6. Education

6.1 Illiterate [ ]

6.2 Primary school [ ]

6.3 High school [ ]

6.4 Graduate [ ]

6.5 Post graduate [ ]

## 7. Occupation

7.1 Unemployee [ ]

7.2 Laborer [ ]

7.3 Private employee [ ]

7.4 Government employee [ ]

## 8. Family income

8.1 Less than rs.3000/month [ ]

8.2 Rs.3001-5000/month [ ]

8.3 Rs.5001-7000/month [ ]

8.4 Above 7001/month [ ]

9. Type of family

9.1 Nuclear [ ]

9.2 Joint [ ]

9.3 Single parent [ ]

10. Place of residence

10.1 Urban [ ]

10.2 Rural [ ]

11. Since how long you have the illness

11.1 3 months [ ]

11.2 6 months [ ]

11.3 8 months [ ]

11.4 more than 1 year [ ]

12. Since how long you are taking treatment

12.1 3 months [ ]

12.2 6 months [ ]

12.3 8 months [ ]

12.4 more than 1 year [ ]

13. Whether you are taking treatment in correct follow up

13.1 Yes [ ]

13.2 No [ ]

**SECTION II**  
**MODIFIED INVENTORY TO ASSESS QUALITY OF LIFE OF**  
**SCHIZOPHRENIC PATIENTS**

(WHO-QOL BREF AND QUALITY OF LIFE, INVENTORY BY GLORIA  
 NORIEGA GAYOL)

<b>PHYSICAL DOMAIN</b>	NEVER	SOMETIMES	OFTEN	ALWAYS
1. I had a good quality of life.				
2. I feel healthy.				
3. I enjoy my present life.				
4. I feel happy with my family.				
5. I am able to sleep well.				
6. I am able to work.				
7. I like me.				
8. I feel, i am an intelligent person.				
9. I am able to think.				
10. I feel secure in my home.				
<b>PSYCHOLOGICAL DOMAIN</b>				
11. I am satisfied with my personal relationship.				
12. I have good family support.				
13. I am able to concentrate on my work.				
14. I have no fear.				
15. I have no false believes.				
16. I am able to talk without any disturbance.				

17. I am satisfied with my partner.				
18. I am not disturbed with unnecessary voices.				
19. I am able to enjoy with my friends.				
20. I am able to get around alone.				
<b>SOCIAL DOMAIN</b>				
21. I have good social support.				
22. I have good opportunity for leisure.				
23. I like to participate in social activities.				
24. I feel secure in society.				
25. I like travelling.				
26. I feel others are considering me.				
27. I feel happy with others.				
28. I feel am not alone.				
29. I am satisfied with the health care facilities.				
30. I am getting day to day information.				
<b>ENVIRONMENTAL/OCCUPATIONAL DOMAIN</b>				
31. I feel happy with my job/environment				



32. I feel my job/environment is good.				
33. I am able to understand others feeling.				
34. I like to work.				
35. I can adjust with others.				
36. I have no inferiority complex.				
37. I am able to control my anger.				
38. I am able to adjust with climate change.				
39. I am happy with my home environment.				
40. I am satisfied with my working environment.				
TOTAL SCORE				

## APPENDIX-F

### EVALUATION CRITERIA CHECKLIST FOR VALIDATION OF THE TOOL

#### Instructions

The expert is requested to go through the following evaluation criteria check list prepared for validating the tool for assessing the quality of life of schizophrenic patients

Sl. no.	Criteria	Yes	No	Remarks
1	Baseline data  * The items on the baseline covers all the aspects for the study			
2	Quality of life inventory  * Relevant to the study * Content organization * Simple & easy language * Any other suggestions			

**APPENDIX- G**  
**CERTIFICATE OF VALIDATION**

This is to certify that,

Tool: quality of life inventory consists of two sections

Section I: socio demographic details

Section II: quality of life inventory

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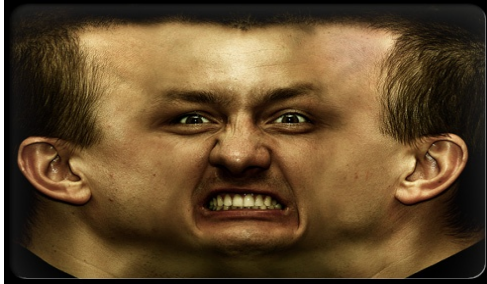
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**APPENDIX-H**  
**HEALTH EDUCATION**  
**MODULE FOR**  
**SCHIZOPHRENIA**  
**PATIENTS**



Schizophrenia is a psychotic disorder which affects the brain and leads to difficulties with thoughts, feelings and behaviors. It affects approximately one out of every 100 people.

For 75% of people diagnosed with Schizophrenia it starts in adolescence or early adulthood.

**Facts about Schizophrenia**

➤ Schizophrenia is not caused by bad parenting, childhood trauma, poverty or alcohol

➤ Schizophrenia is not contagious

➤ Although people with schizophrenia sometimes hear “voices” that others can’t hear, this illness does not mean that you have “split” or “multiple” personalities

Schizophrenia is not a person’s fault; it is a chemical brain disorder caused by a combination of biological and genetic factors, and often triggered by environmental stressors

➤ Schizophrenia is not a developmental disability or intellectual disability

➤ Those with a diagnosis of schizophrenia who are undergoing treatment are not more violent or aggressive than those who do not have schizophrenia.



## **Causes of Schizophrenia**

There are many theories explaining the cause of schizophrenia, but the exact cause remains unknown. The main theories look at the role of genetics, biochemical factors, drug use and environmental factors.

### **Family/Genetic Factors**

- There is evidence that genetics play some role in the development of schizophrenia although this role is still not clear.
- When one parent has schizophrenia their child has at least a 1 in 10 chance of developing schizophrenia.
- When both parents have schizophrenia then the risk of their children developing.
- schizophrenia increases up to almost 40%.



- In the case of identical twins, if one twin has schizophrenia, the second twin has at least a 50% chance of also developing schizophrenia.
- It is important to note that genetics are only part of the puzzle, because most people who develop schizophrenia have no relatives with the illness.

### **Biochemical Factors**

Certain substances in the brain may cause a chemical imbalance. For example, the neurotransmitters “dopamine” and “serotonin” have both been linked to schizophrenia.

### **Brain Abnormalities**

Researches has found that there can be differences in the structure of people's brains with particular forms of schizophrenia, such as having enlarged ventricles (Ventricles are the spaces which carry fluid through the brain). However, the relevance of brain abnormalities is still unclear as many people with schizophrenia don't have enlarged ventricles and their brain structure looks normal

### **Viral Theories**

Another theory is that babies whose mother had a virus in the latter stages of pregnancy are at higher risk of developing schizophrenia. There is no strong evidence to support this theory however.



### **Use of certain drugs**

All sorts of recreational drugs can make the illness worse by increasing symptoms. Marijuana, Amphetamines ('Speed', 'Ecstasy') and Hallucinogens ('Acid', 'LSD', and 'Magic Mushrooms') are particularly likely to cause an increase in symptoms.

These drugs can also play a part in the onset of a first episode of schizophrenia.

### **Environment**

Stressful events, although not really a cause of schizophrenia, can lead to a decline of mental health and trigger symptoms. Again, as triggers are not always identified before symptoms present, stress alone cannot be seen as a sole cause of schizophrenia.

### **Symptoms of Schizophrenia**

Symptoms of schizophrenia may come and go at different times. People experience symptoms

like hallucinations, delusions and confusing thoughts. These symptoms are called “positive symptoms” although they are not positive in terms of being wanted. These symptoms improve with decreased stimuli, calm interactions and antipsychotic medication.

Other types of symptoms present such as a loss of interest, loss of energy, loss of emotional warmth or loss of humour. These are called “negative symptoms”. Some of the newer medications and some non-medical strategies can help with these symptoms.



### **Positive symptoms**

- Thoughts and therefore conversation may become jumbled, disjointed, slow or fast.
- You may feel as though your thoughts have an impact on other people or events.
- You may feel as if thoughts are being
  - “Put into” or “taken out of” your head.
- You may feel as though others know what you are thinking
- You may find your thoughts suddenly blocked.



One particular thought may become “fixed” in your mind, and you can’t shake it off (this can be a delusional thought, but not necessarily so).

## Delusions

A delusion is a fixed false belief held by a person, that remains even though there is obvious evidence to the contrary.



There are many different types of delusions. Some examples are:

- Thinking that other people want to hurt you or are out to get you.
- Thinking that you are related to someone of great importance (e.g. royalty), are a special person or religious figure (such as God).
- Thinking you have special abilities or powers.
- Thinking that the TV, radio or newspaper has a special

message for you or is specifically aimed at you

- Thinking that you are being controlled by someone else
- Thinking that other people can read your mind, or that you can read other people's mind.

## Hallucinations

Hallucinations are false perceptions or sensations. These can be:

- Hearing
- Seeing
- Tasting
- Smelling or
- Feeling .....something that is not really there.

The most common type of hallucinations are auditory, or hearing something that others can't hear. For many people this means hearing voices which seem to come from inside their head or from their environment.



These can seem very real, as though there is someone beside you or in the next room talking.

For most people, hallucinations are quite distressing, but in some cases they can be pleasant. They can also be very distracting and make it difficult to concentrate.



There are different types of voices. They can:

Talk about you –

“He is going to the shop” or  
“She is nasty”

Talk to you and tell you what to do

e.g. “Wear the blue shirt” or  
“Hurt him now”

Be pleasant

e.g. “You’ve done well” or “You can do it”

Be unpleasant

e.g. “You are worthless” or  
“He’s horrible”

### **Negative Symptoms**

Being unmotivated, losing interest in life and general activities. This is often confused with laziness but this is not the case.



Having a loss of enjoyment in usually pleasurable activities like eating, socializing and sexual activities.

Having blunted feelings– this means that your emotions feel ‘flattened’.

Wanting to be alone. This can occur as a result of depression, of feeling safer when alone or because you worry that you

cannot manage in the company of others.



Feeling depressed, helpless or hopeless – this might be part of the process of learning to come to terms with some of the difficulties of your illness, or this might be a sign of clinical depression. It is very important to discuss these feelings with your professional and personal supports.

## **RECOVERY**

Recovery, or cure, whether it is possible that may be the question asked by the majority of the patients and the family.



## **Factors facilitating recovery**

- Being informed and having knowledge of your illness and its treatment
- Working in collaboration with your local mental health service
- Having a regular GP



- Feeling comfortable in talking to your GP and other mental health professionals about your recovery
- Following a prescribed medication regime
- Learning and practicing coping strategies
- Having plans, goals and a sense of direction

- Keeping in contact with social supports and having pleasant events scheduled into your life.
- Knowing your choices and exercising your rights to make your own choices
- Knowing your early warning signs, triggers and coping strategies for these
- Having an action plan in case of crisis
- Maintaining a healthy lifestyle, including managing any medical conditions, eating a healthy, balanced diet, maintaining an exercise regime, getting regular check-ups
- Monitoring your progress with “Outcomes” measures (there is more information on

“Outcomes” measures included in this workbook).

### **Factors hindering recovery**

- **Not taking medication** – This can be a problem for many



individuals, as often when you are well, it can feel like you don't need your medication and there will be a temptation to stop taking it. This temptation can be greater if your medication gives you side effects that bother you. The problem is that once the medication is stopped, you can be at greater risk of relapse.

## CHECKLIST

<b><u>How many of these symptoms do you recognize in yourself?</u></b>			
	Yes	No	In Past
1. I lose concentration easily			
2. My thoughts become jumbled, jump around or become blocked			
3. My thoughts get fixed in my mind and I can't get my mind off them			
4. I feel like my thoughts can have a definite impact on others (As though I can control things or 'do things' with my thoughts)			
5. I feel my thoughts, feelings and actions are being controlled			
6. I hear voices other people don't hear			
7. I see, smell, feel, taste things other people don't			
8. I hold beliefs other people don't share			
9. I believe other people can read my mind, or I can read others' minds			
10. I find it difficult to relate to other people and trust them			
11. I find it difficult to make decisions and get myself moving to do anything			

Sometimes you might have more difficulty recognizing these symptoms yourself, particularly if you are experiencing them with a great intensity. Once you begin to feel better, this can become easier, and sometimes you can also get others you trust to help you to complete this checklist.

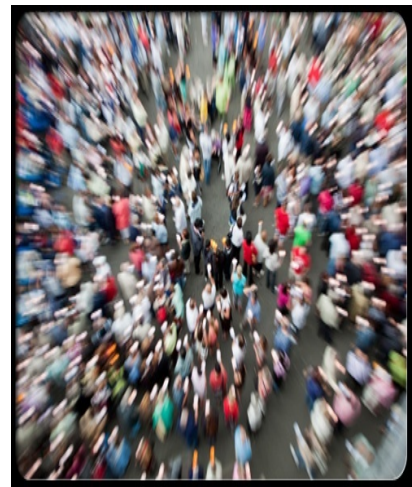
You do not need to have all of the symptoms to have a diagnosis of schizophrenia. It is important to know that for a diagnosis of schizophrenia to be made, medical confirmation is required.

It is important to identify how you experience your illness, as it is different for everyone. Once you recognize your symptoms, you can use this knowledge to tailor some strategies to help you cope with each symptom.

**Illicit Drug Use** – There is clear evidence that using illicit substances and alcohol (beyond safe drinking guidelines) can have a detrimental impact on recovery, and that using illicit drugs can also trigger a relapse of schizophrenia. If you have a history of drug or alcohol abuse, it is important to seek help to reduce your use, with the view to being abstinent, as this will greatly enhance your ability to sustain your recovery.

- **Access to resources** – sometimes it can feel difficult to find help and resources. Having a regular GP and knowing your local mental health services and resources can alleviate these difficulties.
- **Other factors** are more related to society, such as people misunderstanding the illness and having prejudice against those with a diagnosis

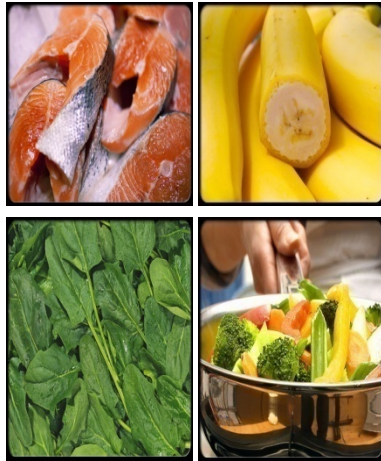
of Schizophrenia. Learning to come to terms with the stigma of mental illness can be an important part of recovery but the distress it can cause without support can hinder recovery.



### **Tips on Getting into a Healthy Lifestyle...**

- ❖ Follow a sensible diet (Balanced with a good mixture of protein {meat, beans, nuts, eggs}, fruit and vegetables, grains and cereals, dairy products and only a little fat, oil and processed sugars). Also try to avoid excess salt in your diet.

❖ Drink 6-8 glasses of water a day (1.5-2L)



❖ Participate in regular exercise.

❖ Avoid all illicit drugs as they may have a strong negative impact on recovery.

❖ Avoid smoking tobacco, as it acts on the liver and may mean higher doses of medication would be required.

❖ Only use alcohol and caffeine within recommended limits (talk to your doctor about recommended limits).



❖ Develop good sleeping habits (talk to your health care professionals about good ‘sleep hygiene’).

❖ Learn and use stress management techniques.



❖ Have regular physical check-ups with your GP or at a Community Health Centre (e.g., blood pressure, weight, blood sugar and if you are a woman,

regular pap smears and breast examinations).

- ❖ Try and have a good balance of work and leisure.

- ❖ If you have a physical illness like asthma or diabetes, try to do the things you need to do to keep physically well.

