The Islamic University – Gaza

Deanship of Graduate Studies

Faculty of Education

Community Mental Health Nursing

Quality of Life Among Schizophrenic Patients in Gaza Governorates

A Thesis Submitted in Partial Fulfillment of Requirements

For the degree of Master in community mental health

Prepared by

Mohammed Zohair Aish

Supervised by

Dr. Nabeel Dukkhan

Assistant Prof in Psychology

Faculty of Education

Islamic University- Gaza

Dr. Ashraf El-jedi

Assistant Prof in Public Health

Faculty of Nursing

Islamic University- Gaza

1434 هـ -2013 م

﴿ قُلْ هَلْ يَسْتَوِي الَّذِينَ يَعْلَمُونَ وَالَّذِينَ لَا يَعْلَمُونَ إِنَّمَا يَتَذَكَّرُ أُولُو الْأَلْبَابِ ﴾

صدق الله العظيم

سورة الزمر الآية (19)

Abstract

The aim of this study was to assess quality of life among schizophrenic patients in Gaza governorates. **Study design,** is a descriptive- analytical design to conduct this study. This study focused on the quality of life including its different domain among schizophrenic patient in Gaza governorates. **Study sample:** A stratified random sample of sample male and female between the ages of 20 to 45 years, who treatment in psychiatric primary care clinics in the Gaza strip 160 participants of schizophrenic patients is taken from population lists who attend 6 psychiatric primary care centers. 137 of the participant respond to the study tools. **Data collection:** The information was collected by questionnaire designed to measure the quality of life this questionnaire specially prepared for this purpose from the World Health Organization, as well as information collected through the files and medical reports. **Results:** With analyzing results and connect them with the QOL the percentage of the total scores of the QOL among the study sample 44%, Moreover, the highest domain was the environmental 51.5%, and the lowest domain was the social at 35.4%. There were statistical significant differences in QOL due to gender favor the female in psychological, social, and physical, at (p-value < 0.05). There were statistical significant differences in QOL due to address in all domain favor middle and Rafah at (p-value < 0.05). There were statistical significant differences in QOL due to state of housing favor owned in psychological and environmental domain at (p-value < 0.05). There were statistical significant differences in QOL due to level of education favor university in social and environmental domain at (p-value<0.05). There were statistical significant differences in QOL due to complication of illness favor pt not have complication of illness at (p-value<0.05). there were statistical significant differences in QOL due to side effect of medication favor patient not have side effect of medication at (p-value<0.05). In opposite there were no statistical significant differences related to these variable: Age, type of housing, social status, number of family, occupation, income, history of illness and time of admission. **Conclusion:** health care providers and decision makers should consider the result of this study to contribute in the promotion of health care services provided to schizophrenic patients to reduce their suffering, prevent and delay future complications as well as helping them to have and enjoy a better quality of life.

ملخص الدراسة باللغة العربية

جودة الحياة لدى مرضى الفصام في محافظات قطاع غزة

هدفت هذه الدراسة إلى تقييم جودة الحياة عند مرضى الفصام في محافظات قطاع غزة، حيث تم اختيار العينة بالطريقة الطبقية العشوائية من عيادات الصحة النفسية في محافظات قطاع غزة والبالغ عددها 6 عيادات نفسية للعام 2010-2011 حسب الملفات الموجودة في هذه العيادات والذين يتلقون خدمات صحية ونفسية داخل وزارة الصحة والموجودين داخل قطاع غزة أثناء فترة الدراسة ويستطيعون أن يعبروا عن أنفسهم، فكان العدد الذي تنطبق عليه الشروط 160 مريض (ذكرا" و أنثى)، الذين تتراوح أعمارهم ما بين (20-45 عاما") وتم تشخيصهم من قبل طبيب العيادة على أنهم مرضى فصام.

واستخدم الباحث استبانه عالمية مخصصة لقياس جودة الحياة حيث أن هذه الاستبانة معدة خصيصا لهذا الغرض من منظمة الصحة العالمية، كذلك جمعت المعلومات من خلال الملفات والتقارير الطبية الموجودة. ولقد استخدم الباحث المنهج الوصفي التحليلي لمناسبته لمثل هذه الدراسات واستخدم المتوسطات الحسابية والنسب المئوية والأوزان النسبية.

فقد أظهرت النتائج أن معدل جودة الحياة طبقا للمتغيرات (الجسمية- النفسية- والاجتماعية- والبيئية) بلغت 44 %، وبتحليل النتائج وربطها بمستوى جودة الحياة وتأثير المتغيرات عليها تبين أن البعد الاجتماعي من أبعاد جودة الحياة ادني النسب بين مجتمع الدراسة وبلغ 35.4% ، في المقابل سجل البعد البيئي أعلى مستوى وبلغ 51.5%. ووجدت الدراسة فروق ذات دلالة إحصائية عند مستوى اقل من 0.05 بين جودة الحياة والجنس لصالح الإناث في البعد الجسمي، النفسي والاجتماعي. كما وجدت الدراسة فروق ذات دلالة إحصائية عند مستوى اقل من 0.05 بين جودة الحياة و مكان السكن لصالح الوسطى ورفح. ووجدت الدراسة فروق ذات دلالة إحصائية عند مستوى اقل من 0.05 بين جودة الحياة وحالة السكن لصالح المرضى غير المستأجرين. كما وجدت الدراسة فروق ذات دلالة إحصائية عند مستوى اقل من 0.05 بين جودة الحياة والمستوى التعليمي لصالح المستوى الجامعي في البعد الاجتماعي والبيئي. كما وجدت الدراسة فروق ذات دلالة إحصائية عند مستوى أقل من 0.05 بين جودة الحياة ومضاعفات المرض لصالح المرضى الذين لا يعانون من مضاعفات المرض. كما وجدت الدراسة فروق ذات دلالة إحصائية عند مستوى أقل من 0.05 في جودة الحياة والأعراض الجانبية للأدوية لصالح المرضى الذين لا يعانون من أعراض جانبية. بالمقابل لم تجد الدراسة فروق ذات دلالة إحصائية في المتغيرات التالية (العمر – الحالة الاجتماعية – وعدد أفراد الأسرة – والمهنة- والدخل الشهري- التاريخ المرضي- وعدد أيام دخول المستشفى).

وقد فسرت تلك النتائج في ضوء الإطار النظري الخاص بالمرضى والأوضاع الخاصة بالمجتمع في قطاع غزة.وتوصي الدراسة مقدمي الخدمات النفسية أن يأخذو هذه النتائج بعين الاعتبار من اجل المساهمة في تطوير الخدمات النفسية للمرضى ومساعدتهم في التمتع بحياة ذات جودة أفضل.

Dedication

To those people who have never stopped believing in me …..

Those who are always supporting me ……..

I dedicate this work to .....

My Father

My Mother

My wife

My daughter

My Sisters

My brothers

For their support and encouragement…….

Mohammed Zohair Aish

Acknowledgment

I would like to express my deep gratitude to every one who contributed to the success of this work, unless their help and assistance it would not have been completed.

I would like to convey my sincere thanks and acknowledgment to Dr. Nabeel Dokhan for his continuous care, wise supervision, support and endless encouragement.

Moreover, I would like to express my great thanks and acknowledgment to Dr. Ashraf El Jedi for his guidance, support, and his valuable comments, Dr. Atef AL Agah for his support, encouragement to achieve in this work. I'm so grateful for those who helped and welcomed me in there clinics when I went to collect my data.

All my thanks to all doctors in faculty of nursing, and faculty of education.

I would like to express my grate thanks to the Islamic university. Finally, I am very grateful to my family and my Colleagues: Khader Dwama, Hassan Abu Rahma, and Mohammed AL Kahluot. for their continuous support and great encouragement.

Researcher

Mohammed zohair Aish

Table of Contents

List of Tables

List of Figure

List of Appendix

Abbreviations

ANOVA	Analysis of Variance
APA	American Psychiatric Association
B.C	Before Christ
BACS	Brief Assessment of Cognition in Schizophrenia
BPRS	Brief Psychiatric Rating Scale
CGI	Clinical Global Impression
CMHC	Community Mental Health Centers
CRT	Cognitive Remediation therapy
CT	Computed tomography
DF	Degree of Freedom
DM	Diabetus mellitus
DSM	Diagnostic and statistical Manual
ECT	Electric Compulsive Therapy
EPS	Extra Pyramidal Symptoms
ES	Effect Sizes
FDA	Food and Drug Administration
GAF	Global Assessment of Functioning
GH	General Health
HTN	Hypertension
HRQOL	Health Related Quality Of Life
ICD	International Classification of Disease
IPT	Integrated Psychological Therapy
IQOLA	International Quality of Life Assessment
JSQOLS	Japanese Version Quality of Life Scales
LSD	Lysergic acid Diethylamide
MH	Mental Health
MOH	Ministry Of Health
MRI	Magnetic Resonance Imaging
NGOS	Non governmental organizations

NIS	New Israeli Shakells
NO	Number
P	P- Value
PANSS	Positive and Negative Syndrome Scale
PET	Positron Emission Tomography
QOL	Quality Of Life
RCT	Randomized Controlled Trials
SPQ	Schizotypal Personality Questionnaire
SPSS	Statistical Package For Social Science
SQ KM	Square kilometers
SSI	Scale of Suicidal Ideation
SSQ	Social Support Questionnaire
UK	United Kingdom
WB	World Bank
WHO	World Health Organization
WHOQOL- BREF	World Health Organization Quality Of Life Questionnaire Short Version

Chapter one
Background

Introduction:

Health is the precious gift offered by God to people. Therefore, healthy people are essential resources of social and economic development, higher levels of human development means that people live longer and enjoy more healthy years of life. The disease affects health and may have negative impact on quality of life, in a way that may hinder the progress and development of people in terms of social and economic development.

Gaza Strip is characterized by good social and family support, leading to the Optimism and confidence among the population, The Palestinian people have social cooperation as one family, because there are a lot of habits, values and good manners that lead to improve mental status and social context, Palestinians are educated and have experiences in work and life events and are able to adapt and deal with changing events.

World Health Organization "WHO" (2001) defined mental health as a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (WHO 2004:12).

The challenges and constraints of the life in Gaza Strip are considered as of factors that affect mental health and developed the triggers to occurrence of mental illness such as Israel occupation, the siege, unemployment, political conflict, poverty and abuse.

The American Psychiatric Association "APA" (2000) defines a mental disorder as “a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom” (Videbeck, 2003:3)

Quality of life (QOL) is a common concept in the field of health in general as well as health literature. Having improved quality of life is seen as the desired out come of health care provision. Assessment of quality of life can reveal people in need for support and care (Raphael et al., 1996)

(QOL) defined as a person's sense of wellbeing and satisfaction with his/her life circumstances, as well as a person's health status and access to resources and opportunities (Lehman, 1997). Quality of life is a multi-level and amorphous concept, and is popular as an endpoint in the evaluation of public policy (e.g. outcomes of health and social care) (Brown, 2004: 6).

Unfortunately, factors influencing Quality of life in schizophrenia are not well known. Studies addressing Quality of life for patients with schizophrenia and other severe mental illnesses have identified a number of important influential factors, such as social support (Becker et al., 2005). Depressive symptoms are the strongest predictors of poor Quality of life in psychotic disorders (Saarni et al., 2010) The severity of

psychiatric symptoms are one of the elements influencing QOL, together with personal and social functioning that plays a relevant role (Galuppi et al., 2010).

Adewuya & Makanjuola (2009) Efforts to improve the QOL of patients with schizophrenia in this environment should encompass the identified variables. Larger, longitudinal and multi-centered studies are needed to adequately identify factors predicting QOL in this environment.

WHO has developed a quality of life assessment tool called world health organization quality of life questioners – short version (WHOQOL-BREF). This initiative has emerged from the need to a genuine international measure of quality of life and a commitment to the on going promotion of an approach to health and health care profession. The dramatic increase of death in average age has brought the attention that, longevity should be accompanied with improvement in health related quality of life (HRQOL). Some researchers indicated that, increasing life expectance will lead to an increase in the proportion of people living on poor health will the consequent burden on society and health care services (Manuel and Schultz, 2004)

Schizophrenia is a complex, chronic, and disabling illness that presents with heterogeneity in its clinical appearance, in patterns of psychopharmacological response and in long-term outcomes (Conley & Buchannan, 1997).

The onset of schizophrenia prior to age 13 is exceedingly rare, but an estimated 39% of males and 23% of females with schizophrenia develop the illness by the age of 19 (Rapoport et al., 1999).

The early stages of schizophrenia are often characterized by repeated exacerbation of symptoms such as hallucinations and delusions and disturbed behavior. While a high proportion respond to initial treatment with antipsychotic medication, around 80% will relapse within 5 years of a treated first episode, which is partly explained by discontinuation of medication (British Psychological Society, 2010: 18).
In almost all patients who suffer from schizophrenia, it is a lifelong disorder. After the resolution of an acute episode of psychotic symptoms, treatment must be continued to prevent such episodes in the future. Furthermore, negative symptoms and cognitive deficits often remain after the resolution of a psychotic episode, and become the focus of efforts at rehabilitation. Relapse prevention, the mitigation of negatives symptoms, and at least the recognition of cognitive deficits are all essential to improve the quality of life for patients with schizophrenia (casernansky, 2001).

The mean incidence of schizophrenia reported in epidemiological studies, when the diagnosis is limited to core criteria and corrected for age, is 0.11 per 1000 (range 0.07–0.17 per 1000); if broader criteria are used, this figure doubles to 0.24 per 1000 (range 0.07–0.52 per 1000). Average rates for men and women are similar, although the mean age of onset is about 5 years greater in women (hence a lower female rate in adolescence), with a second smaller peak after the menopause. The lifetime prevalence of schizophrenia is between 0.4 and 1.4%. The National Survey of Psychiatric Morbidity found a population prevalence of probable psychotic disorder of 5 per 1000 in the age group 16 to 74 years (Singleton et al., 2000).

A number of studies have suggested that female in general may have a later age of onset and an overall lower severity of illness, suggesting a protective effect of estrogens. Several negative predictors of outcome in schizophrenic patients have been identified, including male sex (Hafner et al., 1998).

Through working in the psychiatric hospital and community mental health clinics the researcher found that there are many cases were committed to community mental health services and non governmental organization they not admitted to psychiatric hospital because making follow up in out patient clinics, other cases they were not committed in community services, these cases had frequent admission in psychiatric hospital so I got the ideas for the work at this research.

The aim of the present study to assess quality of life among schizophrenic patients in gaza gavernorates, and effect of socio-demoghraphic in the study.

1.1 Aim of the study:

The purpose of the present study was to assess quality of life (QOL) in patients with schizophrenia and to determine influence of clinical factors and socio-demographic variables on QOL of schizophrenic patients.

1.3 problem statement:

Schizophrenic patients as chronic cases must get special care as he is exposed to some complications on both sides psychological and physically adding to that, He perceives life in a different way from healthy people. This study aims at investigating the being of schizophrenia on the quality of life among patient attending governmental clinics

Most of the researches examining factors affecting Quality of life have primarily focused on the impact of psychiatric symptoms. Some studies found from small to moderate relationships between psychiatric symptoms and Quality of life (Kao et al, 2010). QOL was related to the level of social functioning and had only a weak association with socio-demographic factors (Xiang et al., 2010-b).

1.4 Research questions:

This study Aimed to answer the following questions:

- What is the level of QOL among the study sample in the Gaza Strip?

Socio-demographic variable

- Is there a significant statistical difference in the QOL due to gender (male-female)?
- Is there a significant statistical difference in the QOL due to age (20-29 years) (30-39 years) (40-45 years)?
- Is there a significant statistical difference in the QOL due to residence (North- Gaza- Middle- Khanyounis- Rafah)?
- Is there a significant statistical difference in the QOL due to type of housing (Concrete- Aspest)?

- Is there a significant statistical difference in the QOL due to state of housing (Owned-Rent)?
- Is there a significant statistical difference in the QOL due to social status (Single-Married- Widow- Divorced)?
- Is there a significant statistical difference in the QOL due to family size(Less than 2 members_3-5 member_ More than 5 members)?
- Is there a significant statistical difference in the QOL due to education level (Primary-preparatory-secondary-university)?
- Is there a significant statistical difference in the QOL due to job (Work-not work)?
- Is there a significant statistical difference in the QOL due to income (Less than500 NIS_ 500-999 NIS_ 1000-1500 NIS_ more than 1500 NIS)?
- **Clinical Factors:**
- Is there a significant statistical difference in the QOL due to history of illness (2000 year or less_2001 year -2005 year_2006 years -2011 year?
- Is there a significant statistical difference in the QOL due to time of admission (0 time_1-5 time_6-10 time More than 10 time?
- Is there a significant statistical difference in the QOL due to complication of illness (yes_No)?
- Is there a significant statistical difference in the QOL due to side effect medication (Yes_No)?

1.5 Specific objectives:

- To assess the level of quality of life among schizophrenic patients in Gaza governorates.
- To determine influence of socio-demographic variable and clinical factors on QOL schizophrenic patients.

1.6 Justifications of the study:

Since the researcher is working in the psychiatric field and through his several visits to different community mental health clinics, he has noticed the size of the problem as well as the suffering of those patients psychologically. Besides, their day to day life, experience and management of their chronic disease is not fully information. As far as, to the researcher knowledge there were many study conducted in Palestinian concerning the issue of quality of life and medical health, In the different side absence studies conducted in Palestinian concerning the issue of quality of life and schizophrenia, bearing in mind that, the impact of schizophrenia on quality of life is not fully acknowledged and it should bring attention and consideration of health care providers and decision makers.

In Palestine, there is severe lack of studies covering the quality of life among mental patients and specialist schizophrenic patients and this study is considered the first one.

1.7 Operational definitions:

1.7.1 Quality of Life:

Quality of Life is defined as subjective well-being or overall assessment of the goodness of a life when both subjective well-being and objective characteristics such as able bodied, access to social activities, and standard of living are taken into account (Wasserman et al, 2005: 136).

Insight of The WHOQOL-BREF (WHO, 2004), researcher defines quality of life as a person's sense of wellbeing and satisfaction with life circumstances, as well as a person's, physical health, psychological health, social relationships, and environment

1.7.2 Schizophrenia Patients:

Schizophrenia is one of the terms used to describe a major psychiatric disorder (or cluster of disorders) that alters an individual's perception, thoughts, affect and behavior.

Individuals who develop schizophrenia will each have their own unique combination of symptoms and experiences, the precise pattern of which will be influenced by their particular circumstances (British Psychological Society, 2010: 16).

1.7.3 Governmental Community mental health out clinic:

In Gaza strip six Community mental health out clinics distributed in all governorates, they provide services for mentally ill patients such as drug therapy, psychotherapy, sessions, home visit, recreational activity and follow up for cases after discharge from hospital. The distributions of out clinic are as follows:

- Abu Shbak in north Gaza.
- Alsorany in Gaza.
- West Gaza.
- Alnusirat in middle strip Gaza strip.
- Khan Younis in south Gaza strip.
- Talelsoltan in south Gaza strip.

1.8 Context of the study:

1.8.1 Geographical distribution:

The report of the ministry of health (MOH) and world health organization WHO, Gaza strip is a narrow piece of land total area 360 sq. Km lying on the coast of the Mediterranean Sea. The area has a dense population mainly concentrated in the cities and small villages (MOH&WHO, 2003).

1.8.2 The population density:

MOH, (2006) In Gaza Strip, the population density is 3,808 inhabitants/km2, that comprises the following main five governorates: (EL-Buhaisi, 2010:10).

- **North of Gaza** constituted 17% of the total area of Gaza strip and 1.0% of total area of Palestinian territory area with area 61 sq. Km. The total number of population living in North Gaza is to be 265,932 individuals in 2005 with capita per sq Km 4,360.
- **Gaza City** constituted 20.3% of the total areas of Gaza strip and 1.2% of total area of Palestinian territory area with area 74 sq. Km. The total number of population living in Gaza City is 487,904 individuals in 2005 with capita per sq Km 6,593.
- **Mid-Zone** constituted about 15% of the total area of Gaza Strip and 1.0% of total area of Palestinian territory area with area 58 sq. Km The total number of population living in Mid-Zone is 201,112 individuals in 2005 with capita per sq Km 3,467.
- **Khan younis** constituted about 30.5% of the total area of Gaza strip and 1.8% of total area of Palestinian territory area with area 108 sq. Km. The total number of population in Khan younis is 269,601 individuals in 2005 with capita per sq Km 2,496.
- **Rafah** constituted about 16.2% of the total area of Gaza strip and 1.1% of total area of Palestinian territory area with area 64 sq. Km. The total number of population in Rafah is 165,240 individuals in 2005 with capita per sq Km 2,582.

1.8.3 Population Size and Structure:

The total number of Palestinian people according to the estimation 2010 was (4,048,403) of which (50.8%) are males, and (49.2%) are females, (MOH, 2010:23). Estimated population number in Palestine is 4,048,403. In Northern governorate (West Bank) 2,513,283, and in Southern governorate (Gaza Strip)1,535,120. (MOH, 2010:106).

1.8.4 Age and Sex Distribution:

Age distribution of the Population has important implications for the health status of the population, due to the different health needs, the differential patterns of health care utilization and the different health status among the various age groups. The age and sex distribution of population (41.1 %) is under 15 years old. The age group (0-4) years is (14.7%), while for the ages over 65 years constitutes only (2.9%) (MOH, 2010:23).

1.8.5 Schizophrenia in Gaza strip:

Schizophrenia Spreads at a rate of 1% of the general public, and schizophrenia occurs between fifteen And the age of forty, with an increased incidence in the late twenties, and prevalence of schizophrenia In males as females, and spread evenly among all races and frequent among unmarried and last Rebirth children in the family, and is widely spread in crowded big cities, and among the poorer classes, Increasingly it appears at the beginning of summer and in the fall, and half of September, and increasingly between the boat and the proportion and 50- 60% of the total patients admitted psychiatric hospital (Sammor, 2006:187).

1.8.6 The state of mental health care in Gaza strip:

Mental health care is provided by the government, and by the non-governmental sector. Government provision is offered through the Bethlehem Psychiatric Hospital in the West Bank, which has a bed capacity of 320 patients, of whom 30% are chronic epileptic patients. Gaza Hospital, established in 1979 and rehabilitated in 1994, has 40 beds. Both hospitals use a traditional biological approach, with conventional pharmacological therapies and, at Bethlehem, electroshock therapy. Non-governmental and non-profit organizations working in this field is the Gaza Community Mental Health Programmed (GCMHP). The GCMHP adopts a community-based approach to tackle mental health problems. It has centers across the whole Gaza Strip. The GCMHP offers community and clinical mental health services through its multidisciplinary teams, produces research studies, publishes articles in international journals, and gives training courses in community mental health. It has established a postgraduate diploma in community mental health and human rights that is unique in the Middle East (Afana et al, 2004).

Chapter Two

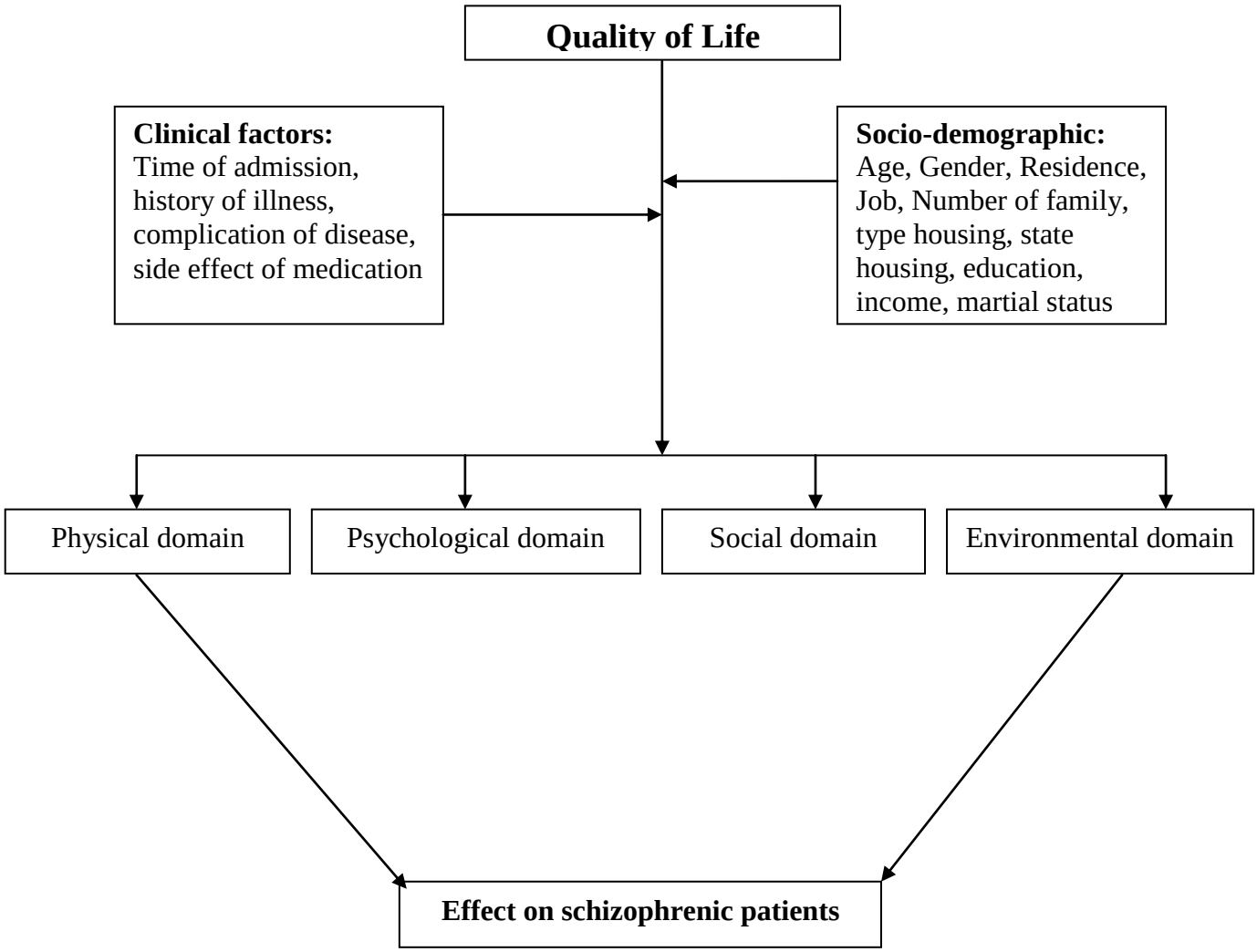
Theoretical Framework

2.1 Introduction:

In this chapter the researcher discussed of two main subjects the first subject Quality of life domain and clarified the effect of physical, psychological, social, and environmental domain. The second subject schizophrenia the researcher clarified all thing related to schizophrenia such as definition, signs and symptoms, diagnosis, complication, and management.

2.2 Model of quality of life*:

These self-model points to quality of life with schizophrenic patients. And they have many different domains that impact on quality of life such as physical, psychological, social relation and environmental domains. Moreover, the roles of age, gender, social and economic status are in increasing or decreasing quality of life.



Self- developed conceptual framework.

Figure (1)
Model of quality of life

2.3 Quality of life

2.3.1 Introduction of Quality of life:

Quality of life is a popular modern subject. The contexts where the term "quality of life" occurs are today frequent. We can observe the term in newspapers and in TV-commercials. It is then often used as an argument for buying a certain product. The commercial claims that the product will raise one's quality of life, a fact which is supposed to be the strongest motive to purchase the product. QOL as a concept is now also common in many serious discourses. To these belong the discourses of social care and medical care. QOL is then quite often described as the goal of the professional activities, a goal which is described as being equally as important as the more objective-sounding welfare and health (Brown & Brown, 2004:106).

But if QOL is used in these serious contexts, then the dimension of QOL must be able to be determined and even measured. Personnel from social care, medical care and their politicians need help to become oriented in this new world. They need to know what QOL in fact is and they need instruments to be able to describe and measure this new dimension. There is a need for specialists on quality of life. A new category of technicians and scientists is required. Theorists of QOL as well as technicians of QOL can enter the arena.

Concerns about QOL first surfaced in the public debate as a basis for limiting medical interventions. As physicians became capable of indefinitely sustaining the mere biological functioning of individuals who had lost (or appeared to have lost) all capacity for consciousness, a sharp controversy emerged in the 1970s over whether continued health intervention was an appropriate use of health care resources, especially when it went against the previously expressed wishes of the patient or the current wishes of the family. An emerging consensus that the patient herself should make that decision whenever possible was reflected in the development of standardized living wills, medical powers of attorney, and do-not-resuscitate orders. This consensus has not reached two controversial areas: physician assistance in bringing about death sought by competent individuals hoping to avoid a continued existence with chronic impairment or pain, and the withdrawal of life support sought “on behalf” of cognitively incapacitated patients who have left no written instructions(Brown et al.,2004:11).

Patients are not the only group to have become more concerned about the QOL that results from medical interventions. The interest of health researchers, policy makers, and administrators predates the publics by at least a decade. Beginning in the 1960s, a variety of medications were developed to increase patients’ functioning or to lessen their pain, discomfort, depression, or anxiety without curing their diseases or increasing their prospects for survival. In order to assess the benefits of these new medications, the pharmaceutical industry financed the design and use of some of the earliest quantitative measures of quality of life. That industry continues to play a major role in developing and utilizing increasingly sophisticated quality-of-life measures (Spilker, 1996).

In the past thirty years, quality-of-life measurement has been eagerly taken up by researchers, epidemiologists, public and private health administrators, health economists, and health policy makers. Together with estimates of survival and tests of physiological function, these measures have now become a standard part of the calculus employed to compare the "cost-effectiveness" of treatments for the same and different health conditions, a calculus that is used to justify tradeoffs among limited medical resources.

The roughly concurrent emergence of drugs, that improve the quality of living without extending life, and of medical interventions that extend life without improving or restoring its quality, raised issues about the very meaning of quality of life, and about its importance as a goal of health care practice and policy. While the growing use of treatments that appear to improve life quality without increasing longevity suggests a greater concern for patient welfare, the increasing scrutiny of life-preserving and other expensive medical technologies suggests a greater concern for resource allocation. The expense of many of these technologies has been a major stimulus for cost containment, as well as for a precise, objective assessment of the actual improvements that these technologies produce. The result has been the imposition of cost effectiveness analysis in professions where rationing had rarely been explicit. Interventions sought by desperate patients and families, as well as interventions opposed by patients or their families as undignified or pointless, are routinely challenged by health economists, administrators, and policy makers because they are not "cost-effective"*(*Bowling et al.,2003:269*)*

2.3.2 Concept of quality of life:

Leidl, R. (2009) emphasizes that the first articles on"quality of life" in Pub Med data base appeared 30 years ago. This author assumes that the growth of QOL research is probably a consequence related to increased prevalence of "chronic conditions, increasing life expectancy with consecutive growth of older population, and a focus on non survival benefits of medical technology". QOL has holistic concept that includes consideration of economic development, social vitality and environmental health.

Research of QOL includes not only economic factors. It contains many other factors such as:

- Social characteristics
- Physical and mental health
- Political stability and living environment of population in question (Loga-Zec & Loga, 2010:495).

Therefore, politicians and economics can measure livability of certain town, state or region by QOL research indicators. Researchers in the field of medicine tend to determine the impact of certain illness on particular segment of society. In spite of its' widespread use, QOL contains different meanings in different areas of sciences and practice. For most of the researches, QOL is an umbrella concept, which covers all aspects of life and includes physical and mental health, family relations, friendship, employment, leisure activities, medical treatment and quality of care, psychological and social benefit. Disparities are indicated within the measure modules. Some scientists are convinced that quality could be expressed in quantity, within the size of objective parameters (Leidl, 2009: 228).

2.3.3 Historical perspectives:

The use of the term quality of life has primarily been limited to outcomes associated with clinical research; the term has been around for a long time (King & hinds, 1996). Historically, quality of life appeared as a concept in Greek philosophy. Aristotle suggested that happiness was derived from virtuous activity of the soul and led to a good life (King, 1996). In contemporary times, members of the WHO (1947) implicitly introduced the concept of quality of life into health care when they defined health as "a state of physical, mental and social well-being and not merely the absence of disease or infirmity". It was not until 1978, however, that the WHO Explicitly stated that all individual have a right to psychosocial care and an adequate quality of life in addition to physiological care (King & hinds, 1996). In 1975, QOL term was introduced as a key term in medical indexes and its systematic study started in the early 80s mainly within oncology, since physicians were confronted with the problem that the cure could be too high a price to pay for the resulting increase life expectation. More recently, QOL has emerged as an important attribute of clinical investigation and patient care reflects a growing appreciation of the important of how patient feel and how satisfied they are with treatment, besides the traditional focus on disease outcomes (Berlim & Fleck, 2003).

2.3.4 Definition of quality of life:

There are numerous definitions for “Quality of life” (QOL) however, there is no satisfactory definition as yet using both subjective and objective aspects of quality. A number of existing definitions lack clarity and create confusion depending on whether the approach used is subjective or objective. Broadly speaking, the subjective approach centers on issues such as life satisfaction, satisfaction with defined needs, happiness, self-realization and growth. On the other hand the objective approach focus on living conditions, economic and social indicators.

Calman suggests that QOL measures the gap, at a particular point in time between the hopes and expectations of the individual and the individual’s present experiences. According to Maslow’s theory in order to reach self-actualization it is necessary to go through a hierarchical needs process. His theory uses the concept of human needs as a basis for development of happiness and true being. Besides such well-known needs as food, sex, and social relations, Maslow talks about a more abstract need to realize oneself. He defines five needs, organized hierarchically: physiological, safety, belonging, love, self-esteem & the need for self actualization (Ritsner & Awad, 2007:3).

The World Bank (2009) considers that poverty represents a ground to a bad QOL and considers that an aim is "working for a world free of poverty". The WB defines poverty as the lack of basic elementary human needs; such are food, water, living space, freedom, education, health protection and employment.

According to the WHO (1994) quality of life is defined as: "Individual perception about own position in life within the context of culture and system of values in which individual lives, as well about their aims, expectations, standards and interests. This is a wide concept that includes psychical health of an individual, psychological

status, financial independence, social relations, and their relations towards significant characteristics of exterior environment".

Coulter (1990) defines as "A sense of personal satisfaction with life that is more than just pleasure or happiness and yet something less than meaning or fulfillment".

In addition, Goode, D. (1997) defined QOL An emphasis on promoting general feelings or perceptions of well-being, opportunities to fulfill potential and feelings of positive social involvement.

But Lehman (1997:94) defined QOL as a person's sense of wellbeing and satisfaction with his/her life circumstances, as well as a person's health status and access to resources and opportunities.

2.3.5 Types of quality of life:

Some different 'types' of quality of life have been developed and used, not one of which is either right or wrong. Nor is one necessarily better than the others. Rather, each type has its own purposes and its own perspective on people's lives. Researcher will briefly describe three of the most commonly used types: quality of life of large populations; health-related quality of life; and quality of life in improving individuals' whole lives.

2.3.5.1 Quality of life of large populations:

The quality of life of large populations is described by attributes that are considered to be important to almost everyone and to society as a whole. These attributes are often called social indicators. Some commonly used social indicators are national security, housing, access to health care and social services, social equity, and levels of income, employment and education. This type of quality of life is very useful for describing and comparing two or more large populations on broad aspects that are thought to be important or valued by most people in various countries. It is also useful for describing a group of people over time, such as comparing a city's population today with its population 20 years ago. The information on which it is based is usually considered to be reliable, and it is almost always available from public sources (Brown & Brown, 2004:22).

Some have argued that subjective measures of social indicators, such as how happy or satisfied people feel about their lives and their environments, should be considered separately from objective measures. The rationale for this is that the value of objective measures is not always reflected in subjective measures, since human beings tend to 'make the best of things in many situations where they find themselves. In addition, getting what we want does not necessarily result in increased happiness or satisfaction. On the contrary, it can sometimes lead to increased dissatisfaction as people begin to realize what else might be possible (Brown, 1999:300).

Moreover, quality of life as a social indicator in an industrial country may have different parameters for people in less well-developed countries. Where there is greater poverty, nutrition becomes not just an issue of quality or choice, but falls into the area of necessity. Thus, to a degree, quality of life relates to a hierarchy of primary and secondary needs and drives, as in Maslow's well-known model.

2.3.5.2 Health-related quality of life:

Since many valued aspects of life, like income, freedom and quality of the environment, etc are not usually considered "health related", the term health-related QOL (HRQL) came to refer to the physical, psychological, and social domains of health. Those domains are seen as distinct areas that are influenced by the person's experiences, beliefs, expectations, and perceptions (Testa & Simonson: 1996:835). One common element across the various definitions of HRQL is the individual's subjective sense of well-being. It is often postulated that HRQL and subjective well-being are determined by various dimensions of physical, social, and role functioning. In other words, HRQL includes dimensions of physical and social functioning: mental health and general health perceptions including such important concepts as energy, fatigue, pain, and cognitive functioning (Wilson et al., 1995:60).

HRQL is multidimensional in the sense that the subjects may simultaneously evaluate several dimensions to arrive at an overall judgment. Two persons with the same mental health status may have different HRQL levels since elements such as differences in personality and illness related factors influence a person's perception of health and satisfaction with life. Perceptions of HRQL are based on a cognitive process, which involves identifying the relevant domains comprising QOL, determining which domains are self relevant to one and integrating separate domain assessments into an overall QOL assessment (Smith & Avis,1999: 447). Each domain of health has many components that need to be measured. Because of this multidimensionality, there is an almost infinite number of states of health, all with differing qualities.

HRQL is a heterogeneous concept, as reflected in the different perceptions of this construct by psychiatrists and their patients. Such differences are obviously dependant on whether observer rated or self-reporting instruments are used. HRQL differs somewhat from subjective well-being, in that the latter concerns it primarily with affective states, both positive and negative. A HRQL assessment is much broader and although affect-laden, represents the subjective evaluation of oneself in the context one's social and physical world (Orley et al., 1998:291). Self-reported and observer rated HRQL data provide distinct types of information, and appear to have different indicators for HRQL (Fitzgerald et al., 2001: 287).

The discrepancy between subjective and objective measures of HRQOL signifies a genuine difference rather than an anomaly related to the patient's psychiatric condition. Indeed, Kaiser et al. (1997:153) found that psychopathology was the only robust predictor of subjective HRQL but overall the impact seemed to be moderate and did not affect the patient's subjective HRQL ratings. Correlations between subjective and objective measures of HRQL among severely mentally ill patients ranged from very low to insignificant (Lobana et al., 2001:51). There are several limitations in the

interpretation of self reported measures of HRQL, namely, self-report bias, the lack of universally accepted measures, the lack of reliability and validity data for many of the scales, and difficulty in generalizing findings from the various instruments. Observer-rated instruments include mostly negative and deficit symptom items. There is a general consensus regarding the importance of using both self-reported and observer-rated measures of HRQL.

2.3.5.3 Quality of life in improving individuals' whole lives:

A third type of quality of life is the one, researcher believe it is most relevant to each person with a disability (i.e. it is specific to individuals rather than general to groups of people, and it relates to their whole lives). Here, quality of life is a term that is used to describe an individual's whole life. It looks at all aspects of life together, on the assumption that all are interconnected and also affected by and connected to all parts of the environment in which the person lives. It also looks at the processes – such as exercising individual choice – that act as the means of achieving quality in life (Orley et al., 1998:294).

This is the most personal and comprehensive type of quality of life. For this reason, it is the most complex to understand and explain, but it also has strong potential for being meaningful at the personal level and for being highly relevant and applicable to individual people's lives.

Quality of life is about having a life that is rich and meaningful to each individual. In fact, the main reason for focusing on, and using, a quality of life approach is to encourage improvement in people's lives so that they become enriched and more meaningful. In this section, we will describe the basics of quality of life that you will need to understand. A life is a complex process, and, because quality of life deals with all aspects of a person's life, it too is necessarily complex. A quality of life approach takes the complexity of life and simplifies it somewhat so that we can understand and use it more easily. There are dangers in simplifying a complex attribute, because this can give rise to shortcuts, assumptions, erroneous decisions and other errors. In practical terms, we recognize that we are not presenting a perfect or complete approach, but rather one that helps people discover how to function more effectively and enable them to grow. It also helps others support these processes (Brown & Brown, 2004:25).

One analogy that might be helpful here is to compare quality of life with the London Underground map. This map is far from perfect and cartographers could legitimately criticize it on several grounds (e.g. the distances between stations are not accurate, the indicators of direction are not precise). But the map helps people to move around effectively and enables others to help people get to their destinations (Smith & Avis, 1999: 447).

Some of the terms and ideas we use will be familiar to you, because quality of life work has borrowed them from other fields, then drawn them together and clustered them in new ways. Other terms and ideas will be new to you.

2.3.6 Measuring quality of life

Measurement, gathering information in a systematic way, has been an area of quality of life work that has been strongly emphasized over the past several years. There are several excellent examples of quality of life measurement available for use. Before we describe some of the measurement methods and measurement tools that have been developed, it is important to understand two aspects of measurement: objective and subjective measurement, and quantitative and qualitative data.

2.3.6.1 Objective and Subjective measurement:

Objective measurement is a term used to describe measurement that has a 'truth' or external validity to it because it can be done the same way by different people at different times. The distance between two city centers using kilometers, for example, does not change no matter who is measuring it or when they measure it. Objective measurement makes use of a wide variety of types of measuring scales for such things as weight, height, population size, voting results, blood pressure, number of people who use wheelchairs, and literally thousands of other things in the broad spectrum of our lives and work (K.D., & Parmenter, 2002:453).

Objective measurement is also useful to verify whether or not a person understands the 'truth' of something; again, because all people viewing the same situation should be able to respond to the question the same way.

Subjective measurement, on the other hand, records a different kind of 'truth' or information. It is a term used to describe ways of recording people's perceptions of things, their thoughts, their feelings, their attitudes, and their values. Subjective measurement records information that is centered in them expressed thoughts and feelings of the person, but can be reliably collected using standardized methods by different people and often on different occasions (Leidl, 2009: 229).

Many attributes of humans and human life change can be measured subjectively, and these are attributes we need to measure. Subjective measurement may use scales (e.g. ratings on a scale of 1 to 10) or any other systematic way of recording information (e.g. daily journal entries or weekly files notes), but it may not be appropriate as evidence for some types of questions such as programmed evaluation (Cummins 2002).

2.3.6.2 Quantitative and Qualitative data:

Quantitative data is information that records the 'how much' of things using scales that we have developed. Often, it is used in objective measurement. For example: 'What mark did you receive on your exam?' 'How fast did the sprinter run?' 'What percentages of people in a population have cerebral palsy?' 'What is the probability that it will rain tomorrow?' But quantitative data are also used in subjective measurement. For example: 'How do you like your job?' (responses on a 5-point scale, with 1 meaning 'not at all' and 5 meaning 'a great deal') 'I think the Prime Minister is doing a

good job' (responses: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree). Numbers, most useful for objective measurement, and ordinal categories, most useful for subjective measurement, can be generated to provide quantitative data for these and countless questions like them (Kaiser et al., 1997:153).

Qualitative data also record the 'how much' of things, but in a very different way. Assessment based on qualitative data tries to get at the true nature of a person, a situation or a thing by describing its qualities, its characteristics, its context and aspects of its environment. Qualitative data are also interested in the 'how' of things, such as relationships between people, how working conditions affect job satisfaction, how religious rites are meaningful to a specific cultural group, or the ways people with psychiatric difficulties adjust to community living. In contrast to the quantitative approach, which reduces something that may be quite complex and tries to record it as clear and comprehensible data, the qualitative approach tries to describe the details of a situation by deliberately probing into its richness and trying to document its complexity. Such assessment measures in terms of ideas and concepts, rather than numbers. The systematic collection of qualitative data has credibility because it is authentic and thorough. Its truth lies in the breadth and depth of the description (K.D., & Parmenter, 2002:454).

2.3.7 Policy, Management and Quality-of-Life-Based Practice:

Policy makers and managers should not use quality of life only because it is becoming popular. The danger is that the term will become policy and management jargon, but without being fully understood. For this reason, it is necessary for management and policy personnel to have first-hand knowledge, and preferably experience, of its application. Paul, the director of a government disability services unit, observing the frontline interventions of personnel over a period of days, learned a great deal, and came to understand what duties and issues faced the personnel working in the disability field. Such action is critical because our promotion policies often place successful people in management and policy-making positions, and the danger is that quite soon they become out of touch with the practical application of theory to practice (Brown & Brown, 2004:239).

Both policy and management can have a strong effect on the way interventions are carried out, and even on how possible or impossible it is to implement them. Thus, they are very relevant to the work of all practitioners, but particularly to practitioners promoting personal values, satisfaction, personal choice, opportunities, and other ideas central to a quality of life approach.

Shift to a quality of life approach is one such change. For example, policy makers and managers frequently cite lack of funding as a reason not to meet the individual needs of many people who require services. However, using a quality of life approach, we often find the facts to be that many people have inexpensive needs that can be satisfied with creative, flexible supports. If policy and management could better fit the facts of the shift towards a quality of life approach, much better support could be offered to many more people (Fitzgerald et al., 2001: 289).

A quality of life approach does not suggest easy solutions to integrating policy, management and practice. This is an ongoing task. But effective service is more likely to occur when such integration occurs in an ongoing way using the main principles and ideas of the quality of life approach. A balanced and realistic outlook can go a long way to helping practitioners take the necessary steps required to carry out this work (K.D., & Parmenter, 2002:460).

2.3.8 Quality of Life, Disability and the Future:

Disability is a challenge of considerable magnitude throughout the world. Furthermore, in the future we may face increasing numbers of challenges. Genetic, medical and social advances are resulting in the detection of new disabilities. New health and social conditions A quality of life approach works to ensure that the level of well-being of people remains high despite the possibility of increasing numbers of people with disabilities or declining abilities. The main focus here is to maintain adequate levels of functioning and high enjoyment of life in areas that the individual thinks are important for as long as possible. This is, after all, the primary goal of quality of life for the population as a whole. Ability this is critical for our future development of services for individuals. It enables us to see the whole person more clearly and identify assets as well as challenges. It opens up new ways of looking at professional education, ethics, service design and evaluation. It is not that all the ideas are new. They are not. But there is a sensitizing focus that leads to an integration of ideas (Kaiser et al., 1997:153).

Throughout the research, we have advocated some of the specific advantages of a quality of life approach, but three aspects are particularly relevant to future development:

- The quality of life approach, by focusing on principles rather than on specific strategies, encourages us to adapt proven methods and develop new methods of intervention. Some of these will be relevant to new technologies that will develop in future years.
- The quality of life approach has the potential to redefine professional education and training. This will necessitate the development of new service professional and academic partnerships so that the student or patient can learn how to use theory and knowledge to apply a quality of life approach consistently to practice.
- The quality of life approach, when seriously considered, leads to a critical appraisal of disability. Here, we will need to respond to the individual needs of people with disabilities in creative and new ways, rather than addressing them only through current structures. There will have to be new policies to guide such changes, and many practices, such as assessment methods and interventions, will have to be modified to match. In the UK, as an example, young adults at university level who are perceived to be very able, but have educational challenges in writing, can receive grants to help them with the purchase of such items as computer aids. We know of individuals who proudly note their challenges and are delighted with the technical support they have received. The disability takes a secondary position – the emphasis is on the solution and its application. The individuals may not even regard themselves as disabled, although the services may still use diagnostic criteria. This is an approach that is too rare. Quality of life leads to knowing ways to see how people can be enabled, rather than be seen and kept disabled (Brown & Brown, 2004:251).

Quality of life is a relatively new approach to practice in the field of disability. It offers some exciting ideas that have been embraced enthusiastically in many quarters. As we stated from the outset, though, it is an overarching concept that is still evolving. Those who are promoting new quality of life ideas will face the ongoing challenge of making clear what their new ideas are and how they can be applied.

We need to continue to learn more about the overall effectiveness of a quality of life approach in practice. But they have not yet been tested fully in practice, and their overall effect on people's lives or on the way organizations and professional practice work has yet to be documented and reported. Such evaluation is an essential part of the development of any set of ideas, and future leaders of the quality of life approach will need to ensure that this is addressed. When it is addressed, the result will no doubt be a reshaping of some of the concepts and strategies. A challenge for the quality of life approach, at a practice level, comes from a misuse of the concepts involved. There are many possible misuses in practice. One is the way professionals and others determine whether an individual has a satisfactory quality of life when the person is quite capable of perceiving and stating this. Sometimes, others determine quality of life on behalf of people who cannot speak. This is also a misuse (Fitzgerald et al., 2001: 291).

There are many examples: euthanasia for a person who is very elderly and infirm; encouraging abortion, if a pregnancy involves a disabled embryo; or preventing pregnancy, or preventing fostering and adopting children, if other people decide that a young adult with intellectual disability cannot raise a child with adequate quality of life (K.D., & Parmenter, 2002:466).

2.3.9 Quality of life in families:

It is widely accepted today that children and adults with disabilities should be fully included in the home, school, work and community life that their siblings and peers experience. By basing our practice on the principles associated with such inclusion, we have a chance to move away from the serious problems associated with segregated care outside the family home, such as social isolation, exclusion from community activities, poor services, high cost and, most important, a perception that we support the view that disability is unwelcome in our communities. Principles of inclusion are increasingly accepted internationally, and now most children live with their families and attend schools in their own communities, and a large number of adults live in community settings either with their families or on their own *(*Park et al., 2002:152*)*

More inclusive community living has also meant that many family members now take the main responsibility for care of children and sometimes of adults with disabilities, especially adults with intellectual disabilities. Mothers, in particular, are most likely to feel the burden of additional responsibility. Families are almost always willing to accept the additional responsibility and often feel enriched by it, but many families need practical, emotional or financial support to meet their responsibility adequately. Services for families that include a member with a disability typically view their roles as providing support to families, rather than taking on the primary responsibility for care. This adds to the family's responsibility, for they have the added

task of dealing with the support organization and support personnel. For this reason, it is all the more important for services to provide the right kind of support. Thus, for children and for those adults with disabilities who are supported by their families, the family is increasingly becoming the critical environment that affects quality of life and within which quality of life is experienced. This makes it particularly important to examine and support quality of life within the family (Brown & Brown, 2004:175).

At the same time, having a member of the family who has a disability affects family life as a whole and the lives of individual family members in a variety of ways. There are many family stories, both in print and passed on informally, that illustrate this. It may seem surprising to readers, then, to learn that disability researchers and academics have only recently begun to turn their attention to studying family QoL.

Family quality of life is such a new area that this chapter represents only an introduction. Study of family quality of life is no doubt complex, but we believe it is becoming a critical area for research and practice. Unless we, as a society, can recognize the impact of disability on the family and how it functions and take supportive action, the current trend to support people with disabilities who wish to remain in their homes regardless of age and across a wide range of disabilities is likely to be less than successful. We need to understand what supports are required for families to experience high levels of well-being (Fitzgerald et al., 2001: 294).

Family quality of life can be thought of in two ways – as a meeting place of individual family members' quality of life, and as a meeting place of factors that affect the whole family. In our view, it is better thought of as a combination of the two. Thus, building upon research conducted at the Beach Center, we describe below each of the two ways separately, and then put them together *(*Park et al., 2002:158*)*

2.3.10 Models of quality of life:

In simple terms, an approach is the general way we go about doing something. A quality of life approach for practitioners refers to practitioners understanding and using quality of life principles and ideas as they carry out the work they do in their own practice.

A model is a more formal way of outlining the main principles and ideas of an approach. Often, models are set out as diagrams, charts or tables so that they are easy to see and understand. Two other features of models are frequently‹ but not always, included. First, models frequently show the relationships between its components. Most commonly, such relationships are shown by using arrows or lines that lead from one part to another. In other models‹ relationships are understood by the use of table headings. In yet others, the shape or structure of the model, when viewed, implies relationships. For example, readers may be familiar with Maslow's hierarchy of needs, which is in the shape of a pyramid, implying a hierarchical relationship among the items stacked on top of one another. Second, many models include an action component. Sometimes arrows or lines imply action, and at other times action words or phrases are written in to show key actions of the approach, or action that is expected to occur as an outcome. Thus, models differ in their construction‹ but each serves the same purpose –

to draw together the main components of an approach and show them in a way that most people can understand readily. A model is, by necessity, brief and general, but it serves as the overall blueprint for how to understand and use the approach (Diener et al., 2010:88).

Quality of life focuses on an individual's whole life, but life can have many aspects to it. Practitioners have often found that it is easier to concentrate on one or two specific aspects of a person's life at a time, rather than on his or her whole life. Although we must not ignore the holistic nature of people's lives, it is usually easier to identify objectives that people want to achieve, and to describe the ways they want to achieve them, when dealing with only the aspects of life that are considered to be most crucial (Brown & Brown,2004:104).

Suggested Domains of Quality of Life

About the individual	About what the individual does	About the environment
- Material wellbeing - Physical health - Psychological well-being - Spiritual well-being - Social well-being - Self-image - Self-determination	- Work - Leisure activities - Personal development - Interpersonal relations - Intimacy - Education	- Social inclusion - Rights - Safety - Societal well-being - Home life/housing - Community resources

Many researchers, too, have recognized that, although life must ultimately be considered as an interrelated whole, it is often more practical to address specific aspects, or domains, of life at any one time in isolation. Moreover, most researchers see quality of life as multidimensional because they consider it to comprise several domains that can be viewed separately or put together to form a whole. For these reasons, domains of life have been described that researchers and others, often after consultation with people with disabilities, consider most important to focus on for quality of life study. Although it should be stressed that there is not a set of domains that is firmly agreed upon, It should also be stressed that, in using domains, we are assuming that these are the most important parts of most people's lives, and that when we describe or measure these parts, we consider the quality of a person's whole life to be described well enough (Leidl, 2009: 230).

2.3.11 Quality of life among schizophrenic patients:

A specific interest regarding quality of life of patients with schizophrenia dates back to the de-institutionalisation process which took place in the 1960 s and 1970 s in several western countries. In fact, as a result of mental health reforms, the effects of the shift of care from asylum to community health centers became a necessity for clinicians, researchers and health policy makers It was apparent that capturing psychopathological symptoms alone was not sufficient to reflect relevant outcomes. In particular, information on the social functioning and quality of life are regarded as essential for evaluating long-term outcomes (Lehman, 1997:80) Unfortunately, factors influencing QOL in schizophrenia are not well known. Studies addressing QOL for patients with

schizophrenia and other severe mental illnesses have identified a number of important influential factors, such as social support, unmet needs, and medication side effects *(*Becker et al., 2005: 628*)*

However, most of the research examining factors affecting QOL has primarily focused on the impact of psychiatric symptoms. Some studies found from small to moderate relationships between psychiatric symptoms and QoL, while others presented findings suggesting that certain aspects of these concepts may be indistinguishable, particularly as far as negative symptoms and general psychopathology (e.g. anxiety, depression) are concerned. In recent years, several research groups have concluded that the so-called negative symptoms of schizophrenia are much more closely related to quality of life than positive symptoms (Lambert & Naber, 2004)

In a study of 128 patients, Norman et al.(2000:303) have examined the relationship of symptoms and level of functioning in schizophrenia to the quality of life: their results show that negative symptoms, level of functioning and positive symptoms all were related to the Quality of Life Scale.

On the contrary, in a study of 193 patients, Fitzgerald et al. (2001:387) showed that subjectively reported life satisfaction was not related to positive or negative symptoms of schizophrenia but did correlate with depressive symptoms. A study in five European centers (Becker et al., 2005:628) measuring QOL and other patient and illness characteristics in a group of 143 outpatients with schizophrenia, found that patient's QoL is predicted mainly by anxiety and depression and by global functioning. These variations among studies appear to be at least partially due to differences in the definition and measurement of QOL, given the complexity and heterogeneity of the concept of quality of life. Some definitions of QOL refer to it as a multidimensional set of components consisting of a person's satisfaction with his/her life as a whole, or general wellbeing; observable social and material wellbeing, or objective QOL; satisfaction with his/her social and material wellbeing, or subjective QOL; and health and functional status, or health-related QOL. Clarifying the relationship between psychiatric symptoms, global functioning and QOL represents an important step both in elucidating factors affecting QOL for individuals with schizophrenia and in understanding the utility of the concept of QOL for guiding future treatment development efforts (Eack & Newhill, 2007:1225)

Italy has implemented a decentralization of its mental health services since 1978 with a major function in psychiatric care being placed in the Community Mental Health Centers (CMHC) that provide psychiatric integrated interventions in different settings, including outpatients clinics, and patients' own homes. The aim of the present study was to assess the outcomes in all subjects with schizophrenic diagnosis attending a Community Mental Health Centre in Copparo (Ferrara-Italy) and to examine the relationships between quality of life, psychiatric symptoms and level of functioning(Garaci,2009:3)

2.4 schizophrenia:

2.4.1 Schizophrenia Disorder:

Schizophrenia has fascinated and confounded healers, scientists, and philosophers for centuries. It is one of the most severe mental illnesses and is present in all cultures, races, and socioeconomic groups. Its symptoms have been attributed to possession by demons, considered punishment by gods for evils done, or accepted as evidence of the inhumanity of its sufferers. These explanations have resulted in enduring stigma for people with diagnoses of the disorder. Today the stigma persists, although it has less to do with demonic possession than with society's unwillingness to shoulder the tremendous costs associated with housing, treating, and rehabilitating patients with schizophrenia.

In addition, Schizophrenia is often confused, by the layperson, with multiple personality disorder. The latter is an illness which is defined as two or more distinct personalities existing within the person. The personalities tend to be intact, and each is associated with its own style of perceiving the world and relating to others. Schizophrenia, in contrast, does not involve the existence of two or more personalities; rather, it is the presence of psychotic symptoms and characteristic deficits in social interaction that define schizophrenia(Piotrowski,2005:731). The disorder usually begins before age 25. Both patients and their families often suffer from poor care and social ostracism because of widespread ignorance about the disorder. Although schizophrenia is discussed as if it is a single disease, it probably comprises a group of disorders with heterogeneous etiologies, and it includes patients whose clinical presentations, treatment response, and courses of illness vary. Clinicians should appreciate that the diagnosis of schizophrenia is based entirely on the psychiatric history and mental status examination (Sadock, & Sadock, 2007:467).

This disease causes distorted and bizarre thoughts, perceptions, emotions, movements, and behavior. It cannot be defined as a single illness; rather, schizophrenia is thought of as a syndrome or disease process with many different varieties and symptoms, much like the varieties of cancer. For decades, the public vastly misunderstood schizophrenia, fearing it as dangerous and uncontrollable and causing wild disturbances and violent outbursts. Many people believed that those with schizophrenia needed to be locked away from society and institutionalized. Only recently has the mental health industry come to learn and educate the community at large that schizophrenia has many different symptoms and presentations and is an illness that medication can control (Videbeck, 2008:297).

The natural progression of schizophrenia is usually described as deteriorating with time, with an eventual plateau in the symptoms. Only for elderly patients with schizophrenia has it been suggested that improvement might occur. In reality, no one really knows what the course of schizophrenia would be if patients were able to adhere to a treatment regimen throughout their lives. Only recently have medications been relatively effective, with manageable side effects. The clinical picture of schizophrenia is complex; individuals differ from one another; and the experience for a single individual may be different from episode to episode (Bostrom & Boyd, 2008:266).

The onset of schizophrenia is in late adolescence or early adulthood with 90% of males and 70% of females becoming ill before the age of 30 years. Since the 1950's, the mainstay of treatment has been anti-psychotic medication, which brings variable relief of symptoms in around 70–80% of patients. However, a further 20–30% has an inadequate response to medication with 15–20% relapsing each year. Use of medication is also associated with an array of side effects. Contemporary approaches to the treatment of schizophrenia aim at incorporating multidisciplinary interventions. Because of this, it is possible to have an impact on a number of areas of life functioning and improve Health Related QOL (HRQOL) for these individuals. Consequently, it is vital to generate information from a patient perspective that indicates clearly what areas of life functioning impact on HRQOL (Gee et al, 2003: 2).

The researcher believes that the QOL in patients with schizophrenia vary from person to person depending on the severity of disease, age, gender, environment and way of life experienced by the patient, and needs a patient with schizophrenia special care because his outlook on life changed because of his illness, which leads to the inability to continue to live properly, so through this study we seek to determine the level of QOL for patients with schizophrenia, and make recommendations and suggestions to improve their lifestyle for the better.

2.4.2 History of Schizophrenia:

Schizophrenia is a complex, serious psychiatric illness that is characterized by disruptions in cognitive, affective, and social functioning. The term schizophrenia comes from the Greek words meaning "split mind" and many people mistakenly believe that this disorder refers to individuals who have multiple personalities. In fact, the term was intended to refer to the disconnection among thinking, feeling, and behavior (Gullotta & Adams, 2005:365).

Descriptions of illness consistent with schizophrenia date back 3400 years to 1400 BC and are found throughout history; they become frequent only after the social and industrial revolutions of the eighteenth century when physicians were given control of asylums. Emil Kraepelin, a German psychiatrist attempting to classify all subsequently described psychoses of the nineteenth century, introduced the term "dementia praecox" in 1896. He classified psychotic disorders "without known organic etiology" into three groups based on clinical presentation and course. Kraepelin used the term manic- depressive insanity for the group of disorders characterized primarily by exacerbations and remissions in disturbances of affect rather than cognition. He linked a second syndrome, paranoia, with this group because the psychosis was limited and did not produce severe deterioration of affect or function. Dementia praecox was the term Kraepelin used for his third group, which featured severe disturbances in functioning that began in adolescence and progressively worsened and in which "failure of volition" was a prominent feature. Kraepelin did note that there were variations in course, and he considered paraphrenia to be a less severe development of dementia praecox (Goldman & Maryland, 2000:233).

Written descriptions of symptoms commonly observed today in patients with schizophrenia are found throughout history. Early Greek physicians described delusions of grandeur, paranoia, and deterioration in cognitive functions and personality. It was not until the 19th century, however, that schizophrenia emerged as a medical condition worthy of study and treatment. Two major figures in psychiatry and neurology who studied the disorder were Emil Kraepelin (1856-1926) and Eugene Bleuler (1857-1939). Earlier, Benedict Morel (1809-1873), a French psychiatrist, had used the term dãcmence prãccoce to describe deteriorated patients whose illness began in adolescence (Sadock, & Sadock, 2007:467).

In 1911, Eugen Bleuler, a Swiss psychiatrist, classified the functional psychoses into just two groups by introducing the term schizophrenia. Schizophrenia, literally translated as "splitting of the mind," remained the dominant term worldwide for the psychoses described below. Bleuler believed that four psychological processes were central to the illness: autism (a turning inward, away from the world), ambivalence (the condition of having two strong but opposite feelings at the same time), and primary disturbances in affect and associations. Like Kraepelin, Bleuler assumed that the schizophrenia syndrome was separate from manic-depressive illness and that underlying biological determinants eventually would be discovered for each (Bleuler, 1911/1950). Modern studies of manic-depressive and schizophrenic psychoses actually began after 1911, when serology had provided a means of identifying patients with tertiary syphilis, who accounted for about one-third of those considered severely mentally ill, and later when public health measures had reduced the nutritional avitaminoses (Piotrowski, one hundred years. During this time, only modest progress has been made in research on its etiology. Some significant advances 2005:731).

Schizophrenia is an illness that has been recognized by medicine for more than have been achieved in treatment, however, and the prognosis for schizophrenia is better now than ever before. Moreover, there is reason to believe that the availability of new technologies for studying the central nervous system will speed the pace of further discovery.

In conclusion, the word "schizophrenia" is less than 100 years old. However the disease was first identified as a discrete mental illness by Dr. Emile Kraepelin in the 1887 and the illness itself is generally believed to have accompanied mankind through its history. Eugene Bleuler first introduced the term "schizophrenia" in 1911.In a layman's language; schizophrenia can be defined as a mental sickness, which affects the entire human personality (but without a reduction of the human intellectual potentials). The main root of schizophrenia is still unknown.

2.4.3 Definition of schizophrenia:

The controversy about the definition of "schizophrenia" has led to many different conclusions about its natural course and treatment outcome. The varied conclusions have, in turn, confused the researchers as much as have the varied symptomatic behaviors of patients with schizophrenia with whom they interact. No matter how narrow the initial diagnostic criteria there are marked variability's in both the final outcome and the clinical presentations seen at different times over any

individual patient's lifetime. Different observers, even within a single diagnostic system, seeing the patient at different times, attain contradictory impressions and gain a dissimilar perspective.

Schizophrenia is a severe and debilitating brain disorder affecting how one thinks, feels and acts. People with schizophrenia can have trouble distinguishing reality from fantasy, expressing and managing normal emotions and making decisions. Thought processes may also be disorganized and the motivation to engage in life's activities may be blunted. Those with the condition may hear imaginary voices and believe others are reading their minds, controlling their thoughts or plotting to harm them. (NARSAD's, 2009: 1).

In addition, schizophrenia is a chronic and severe mental disorder that is characterized by a disintegration of the process of thinking, of emotional responsiveness, and of contact with reality. Early in the twentieth century, schizophrenia was known as dementia praecox (premature dementia), because of the disintegration or fragmenting of mental functions typically observed in people with the disorder. The term schizophrenia itself means "fragmented mind," referring to the schisms between thought, emotion, and behavior that characterize the disease. It is not the same as "split personality, "which is an altogether different illness now known as dissociative identity disorder. People with schizophrenia do not alternate between "good" and "bad" personalities (Gur & Johnson, 2006:4).

The National Alliance on Mental Illness defined schizophrenia is "A mental illness that interferes with a person's ability to think clearly, manage emotions, make decisions, and relate to others. Most people living with schizophrenia have hallucinations and delusions, meaning they hear or, less commonly, see things that aren't there and believe things that are not real or true. Organizing one's thinking, performing complex memory tasks, and keeping several ideas in mind at one time may be difficult for people who live with the illness (NAMI, 2008:1).

But Goldman & Maryland (2000:233) defined this disease as a severe and prolonged mental disturbance manifested as a wide range of disturbed thought, speech, and behavior. Though discussed as one disease, schizophrenia may be more appropriately considered a group of disorders of uncertain cause with similar clinical presentations, invariably including thought disturbances in a clear sensorium, often with characteristic symptoms such as hallucinations, delusions, bizarre behavior, and deterioration in the general level of functioning.

Also, Schizophrenia is a clinical syndrome of variable, but profoundly disruptive, psychopathology that involves cognition, emotion, perception, and other aspects of behavior. The expression of these manifestations varies across patients and over time, but the effect of the illness is always severe and is usually long lasting. Persists throughout life, and affects persons of all social classes (Sadock, & Sadock, 2007:467).

In addition, Canadian Alliance on Mental Illness and Mental Health (CAMIMH, 2002:50) considered schizophrenia is a brain disease and one of the most serious mental illnesses. Common symptoms are mixed-up thoughts, delusions (false or irrational beliefs), hallucinations (seeing or hearing things that do not exist) and bizarre behavior.

In another definition by Gullotta & Adams (2005:318) As many aspects of A Spurger syndrome can be confused with psychotic behavior. An untreated AS child can present as a solitary individual, uninterested in social interaction and intensely preoccupied with internal thoughts. Poor language pragmatic skills can contribute to a child verbalizing tangential thoughts that are loosely related to ongoing.

Schizophrenia is an extremely complex mental disorder: in fact it is probably many illnesses masquerading as one. Symptoms are believed to be caused by a biochemical imbalance in the brain. Recent research reveals that schizophrenia may be a result of misaligned neuronal development in the fetal brain which develops into full-blown illness in late adolescence or early adulthood. the disorder is characterized by delusions, hallucinations, disturbances in thinking and communication, and withdrawal from social activity. Schizophrenia is a serious but treatable brain disorder which affects a person's ability to know what reality is and what is not. A simple explanation of how the brain works helps us to define schizophrenia discussions (Montgomery & Dawe, 2003:14).

From all definition of schizophrenia, researcher sum up define of schizophrenia is one of the terms used to describe a major psychiatric disorder (or cluster of disorders) that alters an individual's perception, thoughts, affect and behavior. Individuals who develop schizophrenia will each have their own unique combination of symptoms and experiences, the precise pattern of which will be influenced by their particular circumstances. Typically, the problems of schizophrenia are preceded by a 'prodromal' period. This is often characterized by some deterioration in personal functioning. Difficulties may include memory and concentration problems, social withdrawal, unusual and uncharacteristic behavior, disturbed communication and affect, bizarre ideas and perceptual experiences, poor personal hygiene, and reduced interest in and motivation for day-to-day activities. During this prodromal period, people with schizophrenia often feel that their world has changed, but their interpretation of this change may not be shared by others.

2.4.4 Onset of Schizophrenia:

One of the difficulties in reading the early warning signs of schizophrenia is the easy confusion with some typical adolescent behaviors. Schizophrenia can begin to affect an individual during the teen years, a time when many rapid physical, social, emotional, and behavioral changes normally occur. There is no easy method to tell the difference. It's a matter of degree. Family members tell of different experiences. Some sensed early on that their child, spouse, or sibling was not merely going through a phase, a moody period, or reaction to the abuse of drugs or alcohol. Others did not feel their relative's behavior had been extraordinary. If you have any concerns, the best course of action is to seek the advice of a trained mental health specialist (Montgomery & Dawe, 2003:23).

The end of the early illness phase or prodrome is usually defined by first treatment contact or first admission. But this event is also determined by the patient's help seeking behavior and the availability of care. A suitable illness-related event to mark the end of the early illness phase is the climax of the first psychotic episode, operationalized as the maximum level of positive symptoms (Häfner et al., 1995:45).

Although schizophrenia usually has its onset when the person is in the teens or early 20s, there clearly is a continuum of onset with cases occurring early (before puberty) and late (after age 45). Schizophrenia beginning in childhood often indicates a more severe disease process that is more difficult to treat. Autism and childhood schizophrenia are no longer considered to be the same disorder. Schizophrenia can begin later in life and is sometimes called late paraphrenia; clinically the typical patient is a suspicious person with delusions of persecution and hallucinations but with little formal thought disorder and affective flattening. The onset of adult schizophrenia is noted when family and friends observe that the person has changed and is no longer the same. The individual functions poorly in significant areas of routine daily living, such as work or school, and in social relations. There is often a notable lack of concern for self-care in an individual who has previously been capable of it (Goldman & Maryland, 2000:233).

In the majority of cases, the onset of schizophrenic symptoms occurs in late adolescence or early adulthood. The major risk period is between twenty and twenty-five years of age, but the period of risk extends well into adult life. For some patients, there are no readily apparent abnormalities prior to the development of illness. For others, however, the onset of schizophrenia is preceded by impairments in social, academic, or occupational functioning. Some are described by their families as having had adjustment problems in childhood. Childhood schizophrenia is relatively rare. It is estimated to occur in about one out of every ten thousand children. When schizophrenia is diagnosed in childhood, the same diagnostic criteria and treatments are applied (Piotrowski, 2005:736).

The onset of schizophrenia typically occurs between the late teens and mid-30s. Onset before adolescence is rare. Men and women are affected equally by schizophrenia, but men usually develop the illness earlier than women. If the illness develops after the age of 45, it tends to appear among women more than men, and they tend to display mood symptoms more prominently (Canadian Alliance on Mental Illness and Mental Health, 2002:51).

The fact that onset is early will affect functioning in different ways. At this age the person is not only adapting to the odd perceptions which generally accompany the onset of schizophrenia, but because acute episodes often mean spending time in hospital and away from family and friends, they also miss out on the widening of social roles. There will also be effects on cognition solely due to early onset, as the development of memory systems, social cognition and executive functioning can continue into late adolescence. The cognitive systemic therefore less of an expert system and the development of cognitive schemas is delayed or disrupted (Wykes & Reeder, 2005: 71).

The best way of assessing the onset of schizophrenia would be a prospective design, for example the study of how developmental delays and cognitive and social impairments are transformed into a prodromal phase of schizophrenia. A prospective population study is not practical because of the low incidence rate and the rather poor predictive power of developmental antecedents. In addition, the prodromal phase cannot be assessed prospectively because schizophrenia starts with nonspecific signs in about 75% of all schizophrenics. What can be investigated by a prospective design, until we are able to diagnose the disorder earlier, are risk factors for psychosis, without drawing a precise distinction between premorbid traits and mutable prodromal signs.

2.4.5 Prevalence of Schizophrenia:

The incidence of schizophrenia in industrialized countries is in the region of 10–70 new cases per 100000 populations per year1, and the lifetime risk is 0.5–1%. The geographical distribution of schizophrenia is not random: recent studies have shown that there is an increased first-onset rate in people born or brought up in inner cities. There is also a significant socioeconomic gradient, with an increased prevalence in the lower socioeconomic classes. 'Social drift', both in social class, and into deprived areas of the inner cities, may account for part of this, but specific environmental risk factors (e.g. overcrowding, drug abuse) may also be operating (Stefan et al., 2002:30).

The prevalence of schizophrenia is considerably higher in the unmarried of both sexes. There is a small excess of patients born during the late winter and early spring months in both northern and southern hemispheres (and a less well known decrement in late summer. People with schizophrenia have a twofold increase in age-standardized mortality rates, and are more likely to suffer from poor physical health. Much of the increased mortality occurs in the first few years after initial admission or diagnosis. Contributing factors early in the course include suicide, with later factors, such as cardiovascular disorders, due in part to the poor lifestyle of many patients, with heavy cigarette smoking and obesity being common(Videbeck.2008:307).

Schizophrenia occurs in all cultures and countries. The incidence and prevalence rates are similar across studies. It occurs in about 1.3% of the population, or more than 3 million people in the United States (Goldner et al, 2002:835). Its economic costs are enormous. Direct costs include treatment expenses, and indirect costs include lost wages, premature death, and incarceration. In addition, employment among people with schizophrenia is one of the lowest of any group with disabilities. The costs of schizophrenia in terms of individual and family suffering probably are inestimable (Bostrom & Boyd, 2008:267).

There are no differences in the prevalence of schizophrenia by race, ethnicity, culture, or religion. This suggests that these factors play little role in the development of the disease. Schizophrenia occurs at the same rate in males and females, though there are some sex differences in the expression of the disease. On average, males seem to be more severely disabled than females (Levitt et al. 2007:22).

While lifetime prevalence rates are equivalent for men and women, gender differences are seen in age of onset. In adult-onset and childhood-onset schizophrenia, men show higher prevalence rates at a ratio of 2:1. However, gender differences

decrease for incidence rates in adolescence. Early-onset patients often display a number of abnormalities before psychotic symptoms are noted. These difficulties include social withdrawal and isolation, speech and language problems, developmental delays, disruptive behaviors, and general academic difficulties (McClellan & McCurry, 1998: 322).

2.4.6 The risk factor model of schizophrenia:

It is often said that schizophrenia is a disease of unknown etiology. This is no longer true. Schizophrenia is like other complex disorders such as ischemic heart disease, which have no single cause but are subject to a number of factors that increase the risk of the disorder. Schizophrenia, however, differs from disorders such as ischemic heart disease in that we do not understand the pathogenic mechanisms linking the risk factors to the illness, i.e. we do not understand how the causes 'cause' schizophrenia.

Also add, risk factors for schizophrenia include stresses in the prenatal period (starvation, poor nutrition, and infections), obstetrical complications, and genetic and family susceptibility. There has been recent evidence that parental age may also be a risk factor (Byrne et al., 2003:678). Birth cohort studies suggest that the incidence may be higher among individuals born in urban settings than those born in rural ones and may be somewhat lower in later-born birth cohorts (Harrison et al., 2003). Infants affected by these maternal stressors may have conditions that create their own risk, such as low birth weight, short gestation, and early developmental difficulties. In childhood, stressors may include central nervous system infections.

2.4.6.1 Individual Factors:

How schizophrenia develops is uncertain but research suggests that brain abnormalities, birth complications, and neurotransmitter dysfunction may be important risk factors. Studies examining neurological anomalies in persons with schizophrenia indicate that ventricular enlargement, gross reduction of cerebral gray matter, and reduced metabolism in the frontal lobes may be related to the development of positive and negative symptoms (Schaeffer & Ross, 2002: 538). Prenatal stressors during the second trimester of pregnancy have also been implicated. These stressors may include exposure to a viral infection during a critical period of brain development, delivery complications, and poor maternal nutrition. In adults, inadequate levels of dopamine have been associated with the development of psychosis .Other neurotransmitters such as the serotonin, noradrenergic and glutamate systems are also being considered. However, few brain imaging or neurochemical studies have been done with children and adolescents so these theories must be considered conservatively (Gullotta & Adams, 2005: 351).

2.4.6.2 Family Factors:

Another aspect of the vulnerability-stress model is consideration of an inherited genetic predisposition to schizophrenia. Research studies examining the concordance rates of schizophrenia in families provide compelling evidence that genetics play an important role in the development of this disease. First-degree relatives of schizophrenic patients are ten times more likely to develop schizophrenia than the rate in the general population. Additionally, the risk of developing schizophrenic spectrum disorders including schizoaffective disorder, non affective psychoses, and schizotypal and paranoid personality disorder is much higher in families of persons with schizophrenia than in unaffected families (Kendler et al., 1993: 645).

Twin studies allow researchers to explore the roles of genetic and environmental factors in the development of schizophrenia. Monozygotic twins share 100% of their genetic material. If genetic factors are solely responsible for the development of schizophrenia, both twins should always develop the disease. However, studies have demonstrated that concordance rates for monozygotic twins vary from 33% to 78%. Furthermore, concordance rates for same-sex dizygotic twins range from 8% to 28%. These findings suggest that while vulnerability for schizophrenia is indeed inherited, environmental factors are also important; if not the controlling influence in some cases (Cancro & Lehman, 2000:1170).

2.4.6.3 Social and Community Factors:

Since environment seems significantly to influence the risk of developing schizophrenia, several studies have explored social and community factors that may be related with this disorder. Again, few studies of early-onset cases are available but some longitudinal research provides important data on the impact of environmental stress on schizophrenic expression. A recent prospective study by Ventura, Nuechterlein, Lukoff, and Hardesty (1989) tracked the occurrence of stressful life events of subjects who developed schizophrenia for one year after the onset of schizophrenic symptoms. Results revealed that 37% of the participants experienced a significant relapse following stressful life events (Gullotta & Adams, 2005: 353).

What constitutes life stress may vary considerably from person to person, but one area that seems to be important is the family environment. Early psychoanalytic theories presented the concept of the schizophrenogenic mother and suggested that maladaptive mother–child relationships caused the onset of schizophrenic symptoms. However, empirical studies have demonstrated that there is no support for these ideas and this theory is no longer accepted today.

Although no evidence exists that family environment directly leads to the development of schizophrenia, several studies have noted the correlation between conflicted home environments and relapse. One particular area of interest looks at a family communication style known as expressed emotion and how it might contribute to environmental stress. Expressed emotion is defined as a familial interaction style characterized by criticism, hostility, emotional over involvement, and controlling

behaviors. Ratings of high expressed emotion in families of schizophrenic patients are strongly correlated with higher rates of relapse and rehospitalization (Kavanaugh, 1992: 602); high expressed emotion ratings in adolescence were also associated with later development of schizophrenic spectrum disorders. Although these findings may be interpreted as supporting the hypothesis that communication deviance in families leads to relapse, we must also consider the possible impact an adolescent's schizophrenic symptoms may have on family functioning.

Concurrently, healthy family communication styles characterized by flexibility, acceptance, and support are associated with decreased risk of psychotic episodes (Mueser, et al., 1993). If the family system is adaptable, greater social support will be available for all family members. Although the presentation of schizophrenia is universal across cultures, rate of diagnosis varies considerably. Research in the United States and England has revealed that minority groups receive a diagnosis of schizophrenia significantly more often than majority ethic groups. In the United States, African Americans and Puerto Ricans are more likely to be diagnosed with schizophrenia than whites, suggesting that misdiagnosis may be a factor (Lewis, et al., 1990: 410).

2.4.7 Symptoms of Schizophrenia:

There are many myths and misconceptions about schizophrenia. Schizophrenia is not a multiple or split personality, nor are individuals who have this illness constantly incoherent or psychotic. Although the media often portray individuals with schizophrenia as violent, in reality, very few affected people are dangerous to others. In fact, individuals with schizophrenia are more likely to be victims of violence than violent themselves. The symptoms of schizophrenia fall into three broad categories: positive symptoms, negative symptoms, and cognitive symptoms.

2.4.7.1 Positive symptoms:

Positive symptoms are also known as "psychotic" symptoms, because the person has lost touch with reality in certain important ways. The term "positive" symptom refers to mental experiences that are added to the person by the illness. The most common positive symptoms include hallucinations and delusions. Hallucinations cause a person to hear voices or, less commonly, to see things that do not exist. People living with schizophrenia also commonly experience delusions, which means they believe ideas that to others are clearly false, such as that people are reading their thoughts or that they can control other people's minds. Medications are crucial to symptom control, and other psychological strategies are also gaining acceptance to augment their impact (Boulevard & Arlington, 2008:2).

Positive symptoms are psychotic behaviors not seen in healthy people, People with positive symptoms often "lose touch" with reality. These symptoms can come and go. Sometimes they are severe and at other times hardly noticeable, depending on whether the individual is receiving treatment. They include the following:

Delusions are strange and steadfast beliefs that are held only by the person suffering from the disorder. They are maintained despite obvious evidence to the contrary. For example, someone with schizophrenia may interpret red and green traffic signals as instructions from space aliens. Many people with schizophrenia who suffer from persecutory delusions are termed paranoid. They believe that they are being watched, spied upon, or plotted against. A common delusion is that one's thoughts are being broadcast over the radio or television, or that other people are controlling the ill person's thoughts. Delusions are resistant to reason. It is of no use to argue that the delusion is not real (Montgomery & Dawe, 2003:14). Delusions are erroneous fixed beliefs that usually involve a misinterpretation of experience. For example, the patient believes someone is reading his or her thoughts or plotting against him or her. Various types of delusions include the following:

- Grandiose: the belief that one has exceptional powers, wealth, skill, influence, or destiny.
- Nihilistic: the belief that one is dead or a calamity is impending
- Persecutory: the belief that one is being watched, ridiculed, harmed, or plotted against.
- Somatic: beliefs about abnormalities in bodily functions or structures (Bostrom & Boyd, 2008:267).

Hallucinations are thought to be a result of over-sharpening of the senses and of the brain's inability to interpret and respond appropriately to incoming messages. Persons with schizophrenia may hear voices or see visions that are not there, or experience unusual sensations on or in their bodies. Auditory hallucinations, the most common form, involve hearing voices that are perceived to be inside or outside of the person's body. Sometimes the voices are complimentary or reassuring. Sometimes they are threatening, punitive, frightening, and may command the individual to do things that may be harmful (Montgomery & Dawe, 2003:14). Hallucinations are things a person sees, hears, smells, or feels that no one else can see, hear, smell, or feel. "Voices" are the most common type of hallucination in schizophrenia. Many people with the disorder hear voices. The voices may talk to the person about his or her behavior, order the people to do things, or warn the person of danger. Sometimes the voices talk to each other. People with schizophrenia may hear voices for a long time before family and friends notice the problem. Other types of hallucinations include seeing people or objects that are not there, smelling odors that no one else detects, and feeling things like invisible fingers touching their bodies when no one is near (NIMH, 2009:2).

Perceptual changes: turn the world of the ill person topsy-turvy. The nerves carrying sensory messages to the brain from the eyes, ears, nose, skin and taste buds become confused and the person sees, hears, smells and feels sensations which are not real. These are called hallucinations. Frequently, persons with schizophrenia hear voices in their heads condemning them or giving orders such as .hang yourself. There is always the danger that the order will be obeyed. These people see things that others do not see: a door in a wall where no door exists; an imaginary tiger; or a long-dead relative suddenly entering the room; carpets may appear to be walking; colors shapes and faces may appear to change before the person's eyes. There may be hypersensitivity to sounds, tastes and smells. (Gordon, 2002:9)

Thought disorders are unusual or dysfunctional ways of thinking. One form of thought disorder is called "disorganized thinking." This is when a person has trouble organizing his or her thoughts or connecting them logically. They may talk in a garbled way that is hard to understand. Another form is called "thought blocking." This is when a person stops speaking abruptly in the middle of a thought. When asked why he or she stopped talking, the person may say that it felt as if the thought had been taken out of his or her head. Finally, a person with a thought disorder might make up meaningless words, or "neologisms."(NIMH, 2009:3)

One of the most profound changes is the barrier to clear thinking and normal reasonableness. Thoughts may be slow in forming, or come extra fast or not at all. The person may jump from topic to topic, seem confused or have difficulty reaching easy conclusions. Thinking may be colored by delusions and false beliefs that resist logical explanations. A person may express strong ideas of persecution, convinced that he/she is being spied on or plotted against. Others may experience grandiose delusions and feel like Superman, capable of anything and invulnerable to danger. Some may feel a strong religious drive or mission to right the wrongs of the world. (Gordon, 2002:9)

2.4.7.2 Negative symptoms:

Negative symptoms are not as dramatic as positive symptoms, but they can interfere greatly with the patient's ability to function day to day. Because expressing emotion is difficult for them, people with schizophrenia laugh, cry, and get angry less often. Their affect is flat, and they show little or no emotion when personal loss occurs. They also suffer from ambivalence, which is the concurrent experience of equally strong opposing feelings so that it is impossible to make a decision. The a volition may be so profound that simple activities of daily living, such as dressing or combing hair, may not get done. Anhedonia prevents the person with schizophrenia from enjoying activities. People with schizophrenia have limited speech and difficulty saying anything new or carrying on a conversation. These negative symptoms cause the person with schizophrenia to withdraw and suffer feelings of severe isolation (Bostrom & Boyd, 2008:268).

Negative symptoms are called "negative" not because of the person's attitude, but because these are symptoms that take away from the person's usual way of being in the world. Negative symptoms often include emotional flatness or lack of expressiveness, an inability to start and follow through with activities, speech that is brief and lacks content, and a lack of pleasure or interest in life. Difficulties with social cues and relationships are common. These symptoms challenge rehabilitation efforts, as work and school goals require motivation as well as cognitive and interpersonal capacity. Negative symptoms can also be confused with clinical depression (NAMI, 2008:3).

Include loss or reduction in the ability to initiate plans, speak, express emotion or find pleasure in life. They include emotional flatness or lack of expression, diminished ability to begin and sustain a planned activity, social withdrawal, and

apathy. These symptoms can be mistaken for laziness or depression.(NARSAD's, 2009:1)

Negative symptoms are associated with disruptions to normal emotions and behaviors. These symptoms are harder to recognize as part of the disorder and can be mistaken for depression or other conditions. These symptoms include the following:

- "Flat affect" (a person's face does not move or he or she talks in a dull or monotonous voice)
- Lack of pleasure in everyday life.
- Lack of ability to begin and sustain planned activities.
- Speaking little, even when forced to interact.

People with negative symptoms need help with everyday tasks. They often neglect basic personal hygiene. This may make them seem lazy or unwilling to help themselves, but the problems are symptoms caused by the schizophrenia. (National Institute of Mental Health, 2009:3)

According to the researcher by reviewing previous studies that are limited to negative symptoms include :(Poor eye contact, Anhedonia attitude, poor grooming and hygiene, flat or inappropriate affect, lack of expressive gestures, apathy, and inattentiveness).

2.4.7.3 Cognitive symptoms

Cognitive symptoms pertain to thinking processes. People living with schizophrenia often struggle with executive functioning (prioritizing tasks), memory, and organizing their thoughts. Other cognitive problems may also occur in the illness. These are quite challenging, as cognitive function is involved in many tasks of daily living, and especially in work or school settings. A common cognitive deficit associated with this condition can be a "lack of insight," or lack of awareness of having an illness. This difficulty in understanding is based in the brain, is not a choice, and adds many challenges to working with people coping with this problem (NAMI, 2008:3).

It becomes harder to concentrate probably patient can't (finish an article in the newspaper or watch a TV programmed to the end, keep up with your, studies at college, keep your mind on the job at work). The patient thoughts seem to wander. You drift from idea to idea without any obvious connection between them. After a minute or two, patient can't remember what you were originally trying to think about. Some people describe their thoughts as being "misty" or "hazy" when this is happening (Timms, et al, 2004:6)

Researcher view although there continues to be wide heterogeneity in cognitive functioning in individuals with schizophrenia, a number of recent studies from the West have suggested that cognitive deficits once established are relatively stable over time

2.4.8 Diagnosis of Schizophrenia:

The definitions and criteria used to establish the diagnosis of schizophrenia have undergone important and wide changes over the years despite the fact that the definition and descriptions of the symptoms themselves have remained rather stable. The different diagnostic concepts used over time have been influenced by various factors outside the specific symptoms of the disorder and have introduced a significant amount of variability in the way schizophrenia has been diagnosed. Some of these factors are:

1. The number and type of symptoms included in the diagnosis.
2. Short versus extended duration of symptoms.
3. Inclusion of cross-sectional versus longitudinal course aspects of the disorder.
4. Inclusion versus exclusion of negative symptoms (Lieberman et al., 2006:187).

Some of these changes in definition can be best understood in reviewing the historical perspective of the development of the diagnostic concept of schizophrenia. Traditionally, American nosology was based on Bleuler's four "A's": disturbance in Affect, Association, Autism, and Ambivalence. These criteria tended to result in a relatively broad concept of schizophrenia, which was elaborated in DSM-II (American Psychiatric Association 1968). Other examples of this extended boundary of schizophrenia were Kasanin's (1933) schizoaffective schizophrenia, Hoch and Polatin's (1949) pseudoneurotic schizophrenia and Valliant's (1964) good prognosis schizophrenia. DSM-III (American Psychiatric Association 1980) and DSM-III-R (American Psychiatric Association 1987) brought about a radical departure from this approach and introduced a much narrower concept with:

1. A clear limitation of the number and type of symptoms.
2. A requirement for a specific duration of symptoms.
3. The inclusion of a course criterion (Faraone et al., 1995: 1286).

This development was the result of critiques of the lack of reliability and validity of diagnosis and the important influence of the German phenomenological school with the introduction of Schneider's "first-rank symptoms" which focused on specific allegedly pathognomonic symptoms of schizophrenia. In addition, the work of the Washington University School introduced the requirement of duration of at least 6 months before the diagnosis could be established. The symptoms included in the definition of schizophrenia in DSM-III were largely based on Schneiderian first-rank symptoms, with the requirement of 6 months' duration, which included prodromal and residual periods of illness. This definition resulted in a much narrower concept of schizophrenia, somewhat closer to the British and European concept of the disorder (Clark & Wells, 1995:69).

There was a further narrowing with the introduction of DSM-IV (American Psychiatric Association 1994) and DSM-IV-TR (American Psychiatric Association 2000), which include specific negative symptoms. Criterion A in DSM-IV includes four positive symptoms and one negative symptom; at least two of these have to be present for this criterion to be fulfilled. The criterion for duration of acute phase symptoms was extended from 1 week to 1 month. If delusions (criterion A) are judged to be bizarre,

only this single symptom is required to satisfy criterion A for schizophrenia. Similarly, the diagnosis of schizophrenia can be made with only hallucinations within criterion A, if these consist of voices keeping up a running commentary on the person's behavior or thoughts or if two or three voices are conversing with each other. DSM-IV-TR uses the term disorganized speech instead of incoherence or marked loosening of associations for the schizophrenic thought disorder. Negative symptoms: such as affective flattening, alogia, and avolition, are now included in criterion A. For criterion B, the requirement for a decrease in social/occupational functioning is broadened. Criterion C requires continuous signs of the disorder for at least 6 months, whereas criterion D delineates schizophrenia from schizoaffective and mood disorders (Verdoux et al., 2003: 365).

The definition of schizophrenia remains somewhat different in the International Classification of Diseases, 10th Revision (ICD-10; World Health Organization 1992). ICD-10 takes a more cross-sectional approach without including the decline in social/occupational functions as required by DSM-IV-TR. The requirement for duration of symptoms is reduced to only 1 month, in contrast to 6 months in DSM-IV-TR. Among the positive symptoms, Schneiderian symptoms are well represented, and only one is required for the diagnosis of schizophrenia, reflecting the pathognomonic importance ICD-10 continues to give to the Schneiderian first-rank symptoms. Negative symptoms such as marked apathy, paucity of speech, and blunting or incongruity of emotional responses are given more prominence as well. The ICD-10 definition is narrower than the DSM-IV-TR definition regarding positive symptoms in that it requires predominantly Schneiderian first-rank symptoms (Lieberman et al., 2006:188).

Although ICD-10 includes a prodromal phase in schizophrenia, the criterion of greater than 1 month's duration of symptoms does not include the prodromal phase. Conversely, DSM-IV-TR acknowledges the prodromal phase, which may be prevalent during the 6-month diagnostic period and is part of the evolving disorder.

In terms of affective symptoms, DSM-IV-TR criteria for schizophrenia allow for the presence of affective symptoms if the symptoms are relatively brief, whereas ICD-10 specifies that they must follow the psychotic symptoms. The subtypes of ICD-10 and DSM-IV-TR are undifferentiated, residual, disorganized (hebephrenic in ICD-10), catatonic, and paranoid schizophrenia. In addition, ICD-10 contains simple and post schizophrenic depression as subtypes.

2.4.8.1 DSM-IV-TR (APA2000) (Appendix I):

The Diagnostic and Statistical Manual of Mental Disorders-Text Revision (DSM-IV-TR), now in its fourth edition, is a taxonomy published by the APA. The DSM-IV-TR describes all mental disorders, outlining specific diagnostic criteria for each based on clinical experience and research. All mental health clinicians who diagnose psychiatric disorders use the DSM-IV-TR (Videbeck.2008:4).

The DSM-IV-TR has three purposes:

- To provide a standardized nomenclature and language for all mental health professionals.
- To present defining characteristics or symptoms those differentiate specific diagnoses.
- To assist in identifying the underlying causes of disorders.

A multi-axial classification system that involves assessment on several axes, or domains of information, allows the practitioner to identify all the factors that relate to a person's condition:

- Axis I is for identifying all major psychiatric disorders except mental retardation and personality disorders. Examples include depression, schizophrenia, anxiety, and substance-related disorders.
- Axis II is for reporting mental retardation and personality disorders as well as prominent maladaptive personality features and defense mechanisms.
- Axis III is for reporting current medical conditions that are potentially relevant to understanding or managing the person's mental disorder as well as medical conditions that might contribute to understanding the person.
- Axis IV is for reporting psychosocial and environmental problems that may affect the diagnosis, treatment, and prognosis of mental disorders. Included are problems with primary support group, social environment, education, occupation, housing, economics, and access to health care and legal system.
- Axis V presents a Global Assessment of Functioning (GAF), which rates the person's overall psychological functioning on a scale of 0 to 100. This represents the clinician's assessment of the person's current level of functioning; the clinician also may give a score for prior functioning (for instance, highest GAF in past year or GAF 6 months ago) (Montgomery & Dawe, 2003:36).

All patients admitted to a hospital for psychiatric treatment will have a multi-axis diagnosis from the DSM-IV-TR. Although student nurses do not use the DSM-IV-TR to diagnose patients, they will find it a helpful resource to understand the reason for the admission and to begin building knowledge about the nature of psychiatric illnesses (Bostrom & Boyd, 2008:267).

The DSM-IV-TR contains the following symptoms for diagnosing schizophrenia: delusions, hallucinations, disorganized thought, speech, or behavior, and flattened (less responsive) affect; symptoms must have been present for at least six months, and the individual must show marked impairment in a major area of functioning such as work or interpersonal relations. Further, the presence of other disorders, such as drug reactions or organic brain disorders associated with aging must be ruled out. Thus, the diagnosis of schizophrenia typically involves a thorough physical and mental assessment. While no single individual symptom is necessary for a person to receive a diagnosis of schizophrenia, according to the DSM-IV-TR, the persistent and debilitating presence of bizarre hallucinations, which can include a hallucinated voice commenting on the individual or hallucinated conversations between two voices, is a strong indication of schizophrenia. The presence of delusions or

hallucinations and loss of contact with reality is referred to as psychosis and is often present in schizophrenia, but psychotic symptoms can be seen in other mental disorders (for example, bipolar disorder or substance-induced psychotic disorder), so the term "psychosis" is not synonymous with the diagnosis of schizophrenia (Gur & Johnson, 2006:17).

2.4.8.2 ICD-10 (WHO 1992) (Appendix II):

The International Classification of Diseases and Related Health Problems or ICD-10, the diagnosis of schizophrenia depends upon the presence of characteristic symptoms, a minimum duration of those symptoms, and a differentiation from affective, other psychotic, organic or substance-induced disorders (WHO, 2004: 3).

The ICD-10 recognizes that no strictly pathognomonic symptoms can be identified. Characteristic symptoms are divided into eight groups that have special importance for the diagnosis and often occur together. The first four groups are comprised of typical delusions and hallucinations; the last four groups are comprised of less typical delusions and hallucinations, as well as neologisms, breaks or interpolations in the train of thought, catatonic behavior, and negative symptoms such as marked apathy, paucity of speech, and blunting or incongruity of emotional responses (Maj & Sartorius,2002:18).

The delusions and hallucinations described in the first three groups are all Schneiderian first-rank symptoms, while the delusions listed in the fourth group are defined as culturally inappropriate and completely impossible (they probably correspond to the definition of bizarre delusions in other classifications).The requirement for a diagnosis of schizophrenia is that a minimum of one symptom belonging to any one of the first four groups, or symptoms from at least two of the last four groups, should have been clearly present for most of the time during a period of one month or more (Lieberman et al.,2006:190)..

While adopting one-month duration of typical psychotic symptoms, the ICD-10 rejects the assumption that schizophrenia must be of comparatively long duration. According to the authors of the ICD-10, a substantial proportion of patients who have clear and typical schizophrenic symptoms lasting for more than one month but less than 6 months, have been shown to make good, if not complete, recoveries from the disorder. According to the authors of the ICD-10, in the present state of ignorance, there appear to be no advantages in restricting the diagnosis of schizophrenia by specifying a longer overall duration of the disorder and it seems best to avoid any assumptions about necessary chronicity (Ziedonis & Nickou, 2001:188).

The authors of the ICD-10 recognize that before the appearance of typical schizophrenic symptoms, there may be a period of weeks or months characterized by the appearance of a prodrome of non-specific symptoms. If a prodrome typical of and specific to schizophrenia could be identified, described reliably, and shown to be uncommon in patients with other psychiatric disorders and in subjects with no disorder at all, it would be justifiable to include such a prodrome among the optional criteria for schizophrenia. It was considered that insufficient information was available on this

issue at present to justify the inclusion of a prodromal state as a contributor to the diagnosis in ICD-10 (WHO, 2004: 6).

As a general rule, interference with the performance of social roles has not been used as a diagnostic criterion in ICD-10. This decision has been retained for the diagnosis of schizophrenia, with the exception of simple schizophrenia, in which marked decline in social, scholastic or occupational performance is part of the concept.

According to ICD-10, the course of schizophrenia is variable. The course may be specified after at least one year has elapsed since onset of the disorder. The following patterns are listed: continuous; episodic with progressive deficit; episodic with stable deficit; episodic remittent; incomplete remission; complete remission; other.

Concerning differential diagnosis, the ICD-10 provides clear guidelines on how to differentiate schizophrenia from affective and schizoaffective disorders, other transient or persistent psychotic disorders, as well as any organic or substance-induced mental disorder. The diagnosis of schizophrenia should not be made in the presence of extensive depressive or manic symptoms unless it is clear that schizophrenic symptoms antedated the affective disturbance. If both schizophrenic and affective symptoms develop together and are evenly balanced, the diagnosis of schizoaffective disorder should be made, even if the schizophrenic symptoms by themselves would have justified the diagnosis of schizophrenia (Lieberman et al., 2006:188).

The separation of acute and transient psychotic disorders and schizophrenia rests upon the presence and duration of symptoms of the schizophrenic type. If such symptoms are present and persist for more than one month, the diagnosis should be changed to schizophrenia. In persistent delusional disorders, delusions must be present for at least 3 months and the general criteria for schizophrenia are not fulfilled (Ziedonis & Nickou, 2001:188).

2.4.9 Subtypes of schizophrenia:

The classical subtypes of schizophrenia relate back to Kraepelin and Bleuler. They are defined by the predominant symptomatology at the time of evaluation. The first three classical subtypes of schizophrenia (dementia paranoids, hebephrenic and catatonia) were described as separate illnesses until Kraepelin brought them together under the name dementia praecox. Together with schizophrenia simplex or simple schizophrenia, which was introduced by Bleuler, Kraepelin’s paranoid, hebephrenic and catatonic subtypes formed Bleuler’s group of schizophrenias. Over the years, additional subtypes, such as latent, undifferentiated, or residual schizophrenia, have been added to the four main types included in Bleuler’s original description; some of the subtypes have been renamed, and others have been redefined using slightly different criteria (Maj & Sartorius, 2002:15).

In (1974:47), Tsuang and Winokur suggested that patients with paranoid schizophrenia had fewer psychomotor symptoms and that they were characterized by later onset of illness, less exclusiveness', less distractibility, fewer psychomotor symptoms, a higher incidence of marriage, more children, and less disruption of social

and familial relationships. In a review of 32 studies related to intellectual functioning, attention, memory, language, visuospatial, and motor functioning, Zalewski et al (1998:128) did not find, however any consistent differences between patients with paranoid and patients with non-paranoid schizophrenia.

In an extensive recent review concerning the classical subtypes of schizophrenia, McGlashan and Fenton (1994) have examined the validity of the paranoid, hebephrenic (disorganized), catatonic, simple and undifferentiated subtypes of schizophrenia. The authors review data from familial and genetic studies, subtype stability studies, outcome studies, and neurological and neuropsychological investigations. They conclude that the studies of the last decade lend overall support for the validity of the paranoid, and, albeit with less force, for the validity of the disorganized and undifferentiated subtypes. According to the same review, catatonia is not specific to schizophrenia, but can still characterize a subtype of this disorder. Finally, there is evidence to support the validity of simple schizophrenia (McGlashan and Fenton, 1994:420).

In (1989), Black and Boffeli provided a historical overview of simple schizophrenia, reviewed its modern successors, and provided recommendations and diagnostic criteria for its inclusion in DSM-IV. The category has been included in DSM-IV, although with different criteria and only in an appendix listing diagnostic categories which need further study (Black and Boffeli, 1989:1267).

New approaches to the sub typing of schizophrenia include the type I– type II or positive–negative dichotomy and the proposition of a dimensional model. Crow proposed a typology for schizophrenia which is based on the positive–negative symptom dichotomy. According to this author, the two types may reflect two a etiologically and prognostically distinct pathological processes. The main symptoms of the positive syndrome (or type I) are hallucinations and delusions. This type may be associated with biochemical imbalance involving dopaminergic over activity. The main symptoms of the negative syndrome (or type II) are affective flattening and poverty of speech. This type may be associated with structural or anatomical abnormality reflected in ventricular enlargement and cortical atrophy (Maj & Sartorius, 2002:16).

2.4.9.1 Subtypes of schizophrenia according DSM-IV-TR:

The DSM-IV-TR introduces a dimensional alternative to the classical subtypes of schizophrenia. This alternative is based upon a three-factor dimensional model. The three factors included in the model are a psychotic, a disorganized and a negative one. The psychotic factor includes delusions and hallucinations; the disorganized factor includes disorganized speech, disorganized behavior, and inappropriate affect; and the negative factor comprises affective flattening, alogia and avolition. According to the authors of DSM-IV-TR, there are studies which suggest that the severity of symptoms within each of the three factors tends to vary together, both cross-sectionally and over time, whereas this is less true for symptoms across factors(Videbeck.2008:13).

Paranoid Type:

Is defined as "preoccupation with one or more delusions or frequent auditory hallucinations" and the absence of "disorganized speech, disorganized or catatonic behavior, or flat or inappropriate affect. The classic auditory hallucinations are of voices. The delusions are "bizarre" and do not seem to be based on a faulty logical premise, as is the case in delusional disorder. Delusions of persecution and grandiosity are common (Levitt et al. 2007:24).

The current paranoid type of schizophrenia is a descendant of the syndrome named and described by Emil Kraepelin in the 1893 fourth edition of his textbook, psychiatry. in that edition, Kraepelin introduced dementia praecox for the first time (which was essentially the same syndrome as hebephrenia, identified in 1871 by Ewald Hecker), and placed it alongside cataonia and dementia paranoides as forms of "psychic degenerative processes." dementia paranoides differed from an earlier description of paranoia by Karl Kahlbaum in terms of its sudden onset and its deteriorating course, resulting in "feeble-minded confusion" in 1899 dementia praecox became a comprehensive category of degenerative psychoses, and the "paranoid form" was subsumed under it along with catatonic and hebephrenia. In 1911 eugen bleuler kept the paranoid type as one of his forms of schizophrenia. This subtype has remained relatively unchanged up to the current time. However, although subtypes of schizophrenia have been a part of clinical lore, at present there is no hard scientific evidence from biological, genetic, or longitudinal studies that the various subtypes of schizophrenia are independent disorders. In the course of the life of a person with schizophrenia it is not unusual for them to have symptoms from one or more of the classic subtypes, thus blurring the vision we have of the variants of this tragic disorder (Noll & George, 2007:304).

Disorganized Type:

This form of schizophrenia is still known as the "hebephrenic type." this syndrome is marked by incoherence (disorganized speech), disorganized behavior, an obvious loosening of associations', and flat affect. affect is also often inappropriate. Sometimes there can be"silliness" to it, including giggling, strange mannerisms, frequent somatic (hypochondriacal) complaints, and unusual facial grimaces or other odd behavior. There may be auditory hallucinations of voices or delusions, but the delusions are unsystematic and grossly illogical (Videbeck.2008:297).

Hebephrenia was Emil Kraepelin’s model for dementia praecox in the 1893 and 1896 editions of his textbook, psychiatrie. In those editions, dementia praecox (hebephrenia), dementia paranoides, and catatonia were grouped together as three separate but related psychotic disorders. it was only in the 1899 edition that hebephrenia becomes only one of three forms of dementia praecox, along with catatonia and the paranoid form. The hebephrenic (disorganized), catatonic, and paranoid forms of schizophrenia are still recognized in current diagnostic manuals. The disorganized type (hebephrenia) is still regarded as the most chronic. Negative symptoms (constricted emotional range and intellectual abilities, alogia, avolition, and so on) seem to predominate over positive symptoms (hallucinations and delusions). In clinical lore it is

also associated with earlier age of onset and afflicts males far more than females. However, the scientific basis of dividing schizophrenia into these subtypes is currently questionable. Clinical experience and research studies indicate that most persons with schizophrenia have symptoms of one or more of the subtypes during their lives (hence the category undifferentiated type for these persons), and there is no current biological or genetic basis for discriminating schizophrenia into various types. The disorganized type, however, is "classical" schizophrenia (Bostrom & Boyd, 2008:270).

Catatonic type:

Catatonia is a syndrome of abnormal movement. It can be associated with mood disorders (such as major depression) or with disorders of cognitive deterioration or deficit (schizophrenia). catatonic behavior can take many forms (see the entries below), from stupor (the classic picture of catatonia that we all have), to excitement, catalepsy (catatonic waxy flexibility), negativism, mutism, apparently voluntary assumption of inappropriate or bizarre posturing, stereotyped movements, off mannerisms, prominent grimacing, echolalia, or echopraxia (Gur & Johnson,2006:20).

The catatonic type of schizophrenia, which was common several decades ago, has become rare in Europe and North America. The classic feature of the catatonic type is a marked disturbance in motor function; this disturbance may involve stupor, negativism, rigidity, excitement, or posturing. Sometimes, the patient shows rapid alteration between extremes of excitement and stupor. Associated features include stereotypes, mannerisms, and waxy flexibility. Mutism is particularly common. During catatonic excitement, patients need careful supervision to prevent them from hurting themselves or others. Medical care may be needed because of malnutrition, exhaustion, hyperpyrexia, or self-inflicted injury (Sadock, & Sadock, 2007:477).

Undifferentiated Type:

It is probably the most common diagnosis given to people with schizophrenia (with the paranoid subtype close behind). The essential features of this subtype are prominent psychotic features such as delusions, hallucinations, formal thought disorder, incoherence, or grossly disorganized behavior, but it may combine features of two or more of the other subtypes, or features that simply cannot fit into the diagnostic descriptions of the other subtypes. Hence, "undifferentiated type" is a garbage pail diagnosis (Noll & George, 2007:365).

Residual Type:

A chronic stage in the development of a schizophrenic disorder in which there has been a clear progression from an early stage (comprising one or more episodes with psychotic symptoms meeting the general criteria for schizophrenia described above) to a later stage characterized by long-term, though not necessarily irreversible, "negative" symptoms(Lieberman et al.,2006:190).

Features include current lack of active-phase symptoms but definite experience of at least one schizophrenic episode in the past, with the continued presence of either negative symptoms or attenuated forms of two or more of the active-phase symptoms, e.g., odd beliefs, unusual behavior, or marked eccentricity. The person is "burned out" and is not immersed in the fresh turmoil of the florid, active phase. These people often function as long-term outpatients, but find it very difficult to maintain gainful employment in settings without special support services or accommodations (e.g., flexible hours) (Goldman & Maryland, 2000:237).

2.4.9.2 Subtypes of schizophrenia according ICD-10:

The ICD-10 describes seven subtypes of schizophrenia: paranoid, hebephrenic, catatonic, post-schizophrenic depression, undifferentiated, residual and simple.

Paranoid Schizophrenia:

(Discussed above in subtypes of schizophrenia according DSM-IV-TR)

Hebephrenic Schizophrenia:

A form of schizophrenia in which affective changes are prominent, delusions and hallucinations fleeting and fragmentary, behavior irresponsible and unpredictable, and mannerisms common. The mood is shallow and inappropriate and often accompanied by giggling or self-satisfied, self-absorbed smiling, or by a lofty manner, grimaces, mannerisms, pranks, hypochondriacal complaints, and reiterated phrases. Thought is disorganized and speech rambling and incoherent. There is a tendency to remain solitary, and behavior seems empty of purpose and feeling. This form of schizophrenia usually starts between the ages of 15 and 25 years and tends to have a poor prognosis because of the rapid development of "negative" symptoms, particularly flattening of affect and loss of volition. In addition, disturbances of affect and volition, and thought disorder are usually prominent. Hallucinations and delusions may be present but are not usually prominent. Drive and determination are lost and goals abandoned, so that the patient’s behavior becomes characteristically aimless and empty of purpose. A superficial and manneristic preoccupation with religion, philosophy, and other abstract themes may add to the listener’s difficulty in following the train of thought (McGlashan and Fenton, 1994:423).

Catatonic Schizophrenia:

(Discussed above in subtypes of schizophrenia according DSM-IV-TR)

Undifferentiated schizophrenia:

(Discussed above in subtypes of schizophrenia according DSM-IV-TR)

Post-schizophrenic depression:

A depressive episode, which may be prolonged, arises in the aftermath of a schizophrenic illness. Some schizophrenic symptoms must still be present but no longer dominate the clinical picture. These persisting schizophrenic symptoms may be "positive" or "negative," though the latter are more common. It is uncertain, and immaterial to the diagnosis, to what extent the depressive symptoms have merely been uncovered by the resolution of earlier psychotic symptoms (rather than being a new development) or are an intrinsic part of schizophrenia rather than a psychological reaction to it. They are rarely sufficiently severe or extensive to meet criteria for a severe depressive episode, and it is often difficult to decide which of the patient's symptoms are due to depression and which to neuroleptic medication or to the impaired volition and affective flattening of schizophrenia itself. This depressive disorder is associated with an increased risk of suicide (Fenton et al., 1997:201).

Residual Schizophrenia:

(Discussed above in subtypes of schizophrenia according DSM-IV-TR)

Simple Schizophrenia:

An uncommon disorder in which there is an insidious but progressive development of oddities of conduct, inability to meet the demands of society, and decline in total performance. Delusions and hallucinations are not evident, and the disorder is less obviously psychotic than the hebephrenic, paranoid, and catatonic subtypes of schizophrenia. The characteristic "negative" features of residual schizophrenia (e.g. blunting of affect, loss of volition) develop without being preceded by any overt psychotic symptoms. With increasing social impoverishment, vagrancy may ensue and the individual may then become self-absorbed, idle, and aimless (Ziedonis & Nickou, 2001:205).

2.4.10 Theoretical explanations of schizophrenia:

Schizophrenia, an illness that strikes one percent of adults, involves changes in all aspects of psychological functioning. Thinking disorders, perceptual distortions and hallucinations, delusions, and emotional changes are the most prominent of such changes. Although some people recover completely, in many others the illness is chronic and deteriorative. For many years, because the causes of schizophrenia were poorly understood, a wide range of theories were proposed to account for the development of schizophrenia. These early theories about schizophrenia can be classified into four types: psychodynamic, family interaction, learning/attention, and biologic. Current theories of schizophrenia focus primarily on genetic factors and their interaction with environmental conditions, particularly the environment experienced before birth and during early development (Piotrowski, 2005:741).

2.4.10.1 Psychodynamic Theories:

Psychodynamic theories originated with Sigmund Freud, who believed that schizophrenia results when a child fails to develop an attachment to his or her parent of the opposite sex. This causes a powerful conflict (called an oedipal conflict in males) in which unconscious homosexual desires threaten to overwhelm the conscious self. To prevent these desires from generating thoughts and feelings that cause painful guilt or behaviors that would be punished, the ego defends itself by regressing to a state in which awareness of the self as a distinct entity is lost. Thus, the person's behavior becomes socially inappropriate; the person mistakes fantasies for reality and experiences hallucinations and delusions (Noll & George, 2007:102).

Harry Stack Sullivan, a follower of Freud, believed that failure of maternal attachment creates excessive anxiety and sets the pattern for all future relationships. Unable to cope in a world seen as socially dangerous, the individual retreats into fantasy. Having done so, the individual cannot grow socially or develop a sense of trust in or belonging with others. By late adolescence or early adulthood, the person's situation has become so hopeless that all pretense of normality collapses, and he or she withdraws totally into a world of fantasy and delusion (Piotrowski, 2005:739).

2.4.10.2 Family and Learning Theories:

Family interaction theories dwell even more intensely on parent-child, especially mother-child, relationships. Theodore Lidz and coworkers, after conducting studies on families with a schizophrenic member, concluded that one or both parents of a future schizophrenic are likely to be nearly, if not overtly, psychotic. They proposed that the psychotogenic influence of these parents on a psychologically vulnerable child is most likely the cause of schizophrenia (Bostrom & Boyd, 2008:278).

Gregory Bateson and colleagues proposed a family interaction theory called the double-bind theory. Bateson suggested that schizophrenia results when parents expose a child to a family atmosphere in which they never effectively communicate their expectations, and therefore the child is unable to discover which behaviors will win approval. Scolded for disobeying, for example, the child changes his or her behavior only to be scolded for being "too obedient." Subjected to such no-win situations constantly, the child cannot develop an attachment to the family, and this failure generalizes to all subsequent relationships (Gur & Johnson, 2006:50).

Learning theories propose that failure of operant conditioning causes the bizarre behavior of schizophrenia. In one version, conditioning fails because mechanisms in the brain that support operant learning, such as reinforcement and attention, are faulty, thus preventing the learning of appropriate, adaptive behaviors (Lieberman et al.,2006:264).

For example, a person who is unable to focus attention on relevant stimuli would be unable to learn the stimulus associations and discriminations necessary for successful day-to-day behavior. Such an individual's behavior would eventually become chaotic. This learning/attention theory proposes a defect in perceptual filtering, a function of the brain's reticular formation. This system filters out the innumerable stimuli that impinge

upon one's senses every moment but are unimportant. In schizophrenia, the theory proposes, this filtering system fails, and the individual is overwhelmed by a welter of trivial stimuli. Unable to cope with this confusing overstimulation, the person withdraws, becomes preoccupied with sorting out his or her thoughts, and becomes unable ton distinguish internally generated stimuli from external ones (Piotrowski, 2005:742).

2.4.10.3 Biologic Theories

Biologic theories of schizophrenia are influenced by the knowledge that conditions known to have organic causes (that is, causes stemming from biological abnormalities) often produce psychological symptoms that mimic the psychotic symptoms of schizophrenia. Among these are viral encephalitis, vitamin-deficiency diseases, temporal-lobe epilepsy, and neurodegenerative disease such as Huntington's disease and Wilson's disease. In contradistinction to historical theories of schizophrenia that have little empirical support, considerable research supports the operation of genetic factors in schizophrenia. Such factors are most often assumed to influence the development of the brain and its resilience to a variety of physiological and psychological stressors. In the diathesis-stress model, such a genetic defect is necessary for the development of chronic schizophrenia but is not sufficient to produce it; stressful life events must also be present. The genetic abnormality then leaves the person unable to cope with life stresses, the result being psychosis. Research demonstrating the operation of genetic factors in schizophrenia in no way implies the absence of environmental factors which operate to influence the course of the disorder (McDonald et al., 2004:135).

Many brain abnormalities have been proposed as causes of schizophrenia. One suggestion is that schizophrenia results from generalized brain pathology. For example, some researchers suggest that widespread brain deterioration caused by either environmental poisoning or infection by virus causes schizophrenia.

Alternatively, some biochemical abnormality may be at fault. The endogenous psychotogen theory proposes that abnormal production of a chemical substance either inside or outside the brain produces psychotic symptoms by affecting the brain in a drug like fashion. Substances similar to the hallucinogenic drugs lysergic acid diethylamide (LSD) and mescaline are popular candidates for the endogenous psychotogen. The dopamine theory, however, proposes that schizophrenia results when a chemical neurotransmitter system in the brain called the dopamine system becomes abnormally overactive or when dopamine receptors in the brain become abnormally sensitive to normal amounts of dopamine. In addition to dopamine, other neurotransmitters have been proposed as important in the development and maintenance of schizophrenia (Piotrowski, 2005:740).

2.4.10.4 Genetic studies:

Most genetic studies have focused on immediate families (i.e., parents, siblings, offspring) to examine whether schizophrenia is genetically transmitted or inherited. Few have focused on more distant relatives. The most important studies have centered on twins; these findings have demonstrated that identical twins have a 50% risk for schizophrenia, whereas fraternal twins have only a 15% risk. This finding indicates that schizophrenia is at least partially inherited (Videbeck.2008:300).

Other important studies have shown that children with one biologic parent with schizophrenia have a 15% risk; the risk rises to 35% if both biologic parents have schizophrenia. Children adopted at birth into a family with no history of schizophrenia but whose biologic parents have a history of schizophrenia still reflect the genetic risk of their biologic parents. All these studies have indicated a genetic risk or tendency for schizophrenia, but genetics cannot be the only factor: identical twins have only a 50% risk even though their genes are 100% identical (Cancro & Lehman, 2000:1175).

2.4.10.5 Neuroanatomic and neurochemical studies:

With the development of noninvasive imaging techniques such as CT scans, magnetic resonance imaging (MRI), and positron emission tomography (PET) in the past 25 years, scientists have been able to study the brain structure (neuroanatomy) and activity (neurochemical) of people with schizophrenia. Findings have demonstrated that people with schizophrenia have relatively less brain tissue and cerebrospinal fluid than people who do not have schizophrenia (Flashman et al., 2000: 1167); this could represent a failure in development or a subsequent loss of tissue. CT scans have shown enlarged ventricles in the brain and cortical atrophy. PET studies suggest that glucose metabolism and oxygen are diminished in the frontal cortical structures of the brain. The research consistently shows decreased brain volume and abnormal brain function in the frontal and temporal areas of persons with schizophrenia. This pathology correlates with the positive signs of schizophrenia (temporal lobe) such as psychosis and the negative signs (frontal lobe) such as lack of volition or motivation and anhedonia. It is unknown if these changes in the frontal and temporal lobes are the result of a failure of these areas to develop properly or if a virus, trauma, or immune response has damaged them. Intrauterine influences such as poor nutrition, tobacco, alcohol and other drugs, and stress also are being studied as possible causes of the brain pathology found in people with schizophrenia.

Neurochemical studies have consistently demonstrated alterations in the neurotransmitter systems of the brain in people with schizophrenia. The neuronal networks that transmit information by electrical signals from a nerve cell through its axon and across synapses to postsynaptic receptors on other nerve cells seem to malfunction. The transmission of the signal across the synapse requires a complex series of biochemical events. Studies have implicated the actions of dopamine, serotonin, nor epinephrine, acetylcholine, glutamate, and several neuromodulary peptides (Videbeck.2008:297).

Currently the most prominent neurochemical theories involve dopamine and serotonin. One prominent theory suggests excess dopamine as a cause. This theory was developed based on two observations. First, drugs that increase activity in the dopaminergic system, such as amphetamine and levodopa, sometimes induce a paranoid psychotic reaction similar to schizophrenia (Egan & Hyde, 2000:1129). Second, drugs blocking postsynaptic dopamine receptors reduce psychotic symptoms; in fact, the greater the ability of the drug to block dopamine receptors, the more effective it is in decreasing symptoms of schizophrenia (O'Connor, 1998:41).

More recently, serotonin has been included among the leading neurochemical factors affecting schizophrenia. The theory regarding serotonin suggests that serotonin modulates and helps to control excess dopamine. Some believe that excess serotonin itself contributes to the development of schizophrenia. Newer atypical antipsychotics such as clozapine (Clozaril) are both dopamine and serotonin antagonists. Drug studies have shown that clozapine can dramatically reduce psychotic symptoms and ameliorate the negative signs of schizophrenia (Marder, 2000: 1200).

Researchers also are exploring the possibility that schizophrenia may have three separate symptom complexes or syndromes: hallucinations/delusions; disorganization of thought and behavior; and negative symptoms (Arango, 2000:560). Investigations show that the three syndromes relate to neurobiological differences in the brain. It is postulated that schizophrenia has [these three] subgroups, which may be homogeneous relative to course, pathophysiology, and, therefore, treatment.

2.4.10.6 Immunovirologic studies

Popular theories have emerged that exposure to a virus or the body's immune response to a virus could alter the brain physiology of people with schizophrenia. Although scientists continue to study these possibilities, few findings have validated them. Cytokines are chemical messengers between immune cells, mediating inflammatory and immune responses. Specific cytokines also play a role in signaling the brain to produce behavioral and neurochemical changes needed in the face of physical or psychological stress to maintain homeostasis. It is believed that cytokines may have a role in the development of major psychiatric disorders such as schizophrenia (Kronfol & Remick, 2000:684).

Recently researchers have been focusing on infections in pregnant women as a possible origin for schizophrenia. Waves of schizophrenia in England, Wales, Denmark, Finland, and other countries have occurred a generation after influenza epidemics. A study published in the New England Journal of Medicine reported higher rates of schizophrenia among children born in crowded areas in cold weather, conditions that are hospitable to respiratory ailments (Mortensen et al., 1999:604).

2.4.11 Mental State Examination:

Schizophrenia affects thought processes and content, perception, emotion, behavior, and social functioning; however, it affects each individual differently. The degree of impairment in both the acute or psychotic phase and the chronic or long-term

phase varies greatly; thus, so do the needs of and the nursing interventions for each affected patient. The nurse must not make assumptions about the patient's abilities or limitations based solely on the medical diagnosis of schizophrenia.

The purpose of mental state examination is to reach attentive diagnosis and to detect abnormal Function, in mental state examination I will to discuss about (General appearance, behavior, mood and affect, perception, thought disturbance, cognitive, judgment and insight).

2.4.11.1 General Appearance:

Appearance may vary widely among different patients with schizophrenia. Some appear normal in terms of being dressed appropriately, sitting in a chair conversing with the nurse, and exhibiting no strange or unusual postures or gestures. Others exhibit odd or bizarre behavior. They may appear disheveled and unkempt with no obvious concern for their hygiene, or they may wear strange or inappropriate clothing (for instance, a heavy wool coat and stocking cap in hot weather) (Cancro& Lehman, 2000: 1171).

Some patients with acute schizophrenia are entirely normal. Other seem change and different, although not always in away that would immediately point to psychosis. They may be preoccupied with their health, their appearance religion, or other intense interests. Social withdrawal my occur, some patient smile or laugh without obvious reason. Some are restless and noisy, or show sudden and un expected change of behavior (Gelder et al, 1996:248).

The patients become more withdrawal, doing less and losing their derived. This is reflected in reduce achievement at school or collage, not holding down a job and making fewer with the out side world (Alawamleh, 2008:112).

Addington said the prodromal symptom may appear a month to a year before the first psychotic break and represent a clear deterioration in previous functioning. Essential the symptom include perceptual difficulties, increase stress, depression, anxiety, sleep disturbance and decline inability to function (Varcarolis & Halter, 2009:278).

2.4.11.2 Motor Behavior:

Overall motor behavior may appear odd. The patient may be restless and unable to sit still, exhibit agitation and pacing, or appear unmoving (catatonia). He or she also may demonstrate seemingly purposeless gestures (stereotypic behavior) and odd facial expressions such as grimacing. The patient may imitate the movements and gestures of someone whom he or she is observing (echopraxia). Rambling speech that may or ay not make sense to the listener is likely to accompany these behaviors. Conversely the patient may exhibit psychomotor retardation (a general slowing of all movements). Sometimes the patient may be almost immobile, curled into a ball (fetal position). Patients with the catatonic type of schizophrenia can exhibit waxy flexibility: they

maintain any position in which they are placed, even if the position is awkward or uncomfortable (Videbeck.2008:307).

Behavior during the acute phase is vary varied and depend on the psychopathology of the person affected. Some become mute and withdrawal, and are entirely wrap up in their abnormal experiences. Other may take action, some time violent, against those who they believe are persecuting them (Alawamleh, 2008:112).

The behavior disturbance includes:

- Stereotyped behavior: Are motor pattern that originally had meaning to the person (e.g., sweeping the floor, washing windows) but are now mechanical and lack purpose.
- Extreme motor agitation: Excited physical behavior, such as running about, in response to inner and outer stimuli, which can be harmful to self as well as to other.
- Automatic obedience: Is the performance by catatonic patient of all simple commands in a robot-like fashion (Varcarolis & Halter, 2009:282).
- Stupor and excitement: Are the most striking catatonic symptom. A patient in stupor immobile, mute, and unresponsive although fully conscious. Stupor may change (sometimes quickly) to a state of uncontrolled motor activity and excitement.
- Waxy flexibility: schizophrenia patient show a disorder of muscle tone. The patient allows himself to be placed in an a awkward posture which he then maintain apparently without distress for much longer than most people could achieve without sever discomfort (Gelder et al,1996:249-250).

American Psychiatric Association (APA,2004) said the behavior disturbance of greatest concern in schizophrenia is the possibility of violence increased if the patient also has coexisting alcohol abuse, substance abuse, antisocial personality, or neuralgic impairment (Fortinash & Worret ,2008:267).

2.4.11.3 Mood and Affect:

Patients with schizophrenia report and demonstrate wide variances in mood and affect. They often are described as having flat affect (no facial expression) or blunted affect (few observable facial expressions). The typical facial expression often is described as mask-like. The affect also may be described as silly, characterized by giddy laughter for no apparent reason. The patient may exhibit an inappropriate expression or emotions incongruent with the context of the situation. This incongruence ranges from mild or subtle to grossly inappropriate. For example, the patient may laugh and grin while describing the death of a family member or weep while talking about the weather (Videbeck.2008:308). Affect is abnormal it may show:

- Restricted affective response: The patient shows vary little effect; his face may show little change when talking about different topics. Blunting and flat of effect means absence of any effect response in the facial expression, tone of voice or movement.
- In appropriate affect: In the patient affective response is not going with his experience.

- Ambivalence: Some patient show contraindicating affect to the same experience, like feeling love and hate to the same person at the same time (Alhajjar, 2003:15).

Emotional blunting and lack of displaying emotion are example of negative symptoms in schizophrenia. Some people show few emotions while others show a total lack of facial expression. Some patients also avoid eye contact and have reduced verbal and nonverbal contact with other. The person speech also lacks inflection so the person speaks in a monotone. Some have a lack of gestures (Lieberman, 2006).

2.4.11.4 Perception:

One hallmark symptom of schizophrenic psychosis is hallucinations (false sensory perceptions, or perceptual experiences that do not exist in reality). Hallucinations can involve the five senses and bodily sensations. They can be threatening and frightening for the patient, although patients less frequently report hallucinations as pleasant. Initially the patient perceives

Hallucinations as real, but later in the illness he or she may recognize them as hallucinations (Videbeck.2008:310).

Hallucinations are distinguished from illusions, which are misperceptions of actual environmental stimuli. For example, while walking through the woods, a person thinks he sees a snake at the side of the path. On closer examination, however, he discovers it is only a curved stick. Reality or factual information corrected this illusion. Hallucinations, however, have no such basis in reality (Varcarolis & Halter, 2009:281) . The following are the various types of hallucinations (Cancro & Lehman, 2000:1175):

- Auditory hallucinations, the most common type, involve hearing sounds, most often voices, talking to or about the patient. There may be one or multiple voices; a familiar or unfamiliar person's voice may be speaking. Command hallucinations are voices demanding that the patient take action, often to harm self or others, and are considered dangerous.
- Visual hallucinations involve seeing images that do not exist at all, such as lights or a dead person, or distortions such as seeing a frightening monster instead of the nurse. They are the second most common type of hallucination.
- Olfactory hallucinations involve smells or odors. They may be a specific scent, such as urine or feces, or more general such as a rotten or rancid odor. In addition to patients with schizophrenia, this type of hallucination often occurs with dementia, seizures, or cerebrovascular accidents.
- Tactile hallucinations refer to sensations such as electricity running through the body or bugs crawling on the skin. Tactile hallucinations are found most often in patients undergoing alcohol withdrawal; they rarely occur in patients with schizophrenia.
- Gustatory hallucinations involve a taste lingering in the mouth or the sense that food tastes like something else. The taste may be metallic or bitter or may be represented as a specific taste.
- Cenesthetic hallucinations involve the patient's report that he or she feels bodily functions that are usually undetectable. Examples would be the sensation of urine forming or impulses being transmitted through the brain. Kinesthetic hallucinations

occur when the patient is motionless but reports the sensation of bodily movement. Occasionally the bodily movement is something unusual such as floating above the ground.

Researchers believe that a left hemisphere brain abnormality causes hallucination because the left hemisphere contains broc's area, the language pressing center. From assessment procedure, researcher determined that the lift hemisphere responded to hallucination as if it were hearing real voicing which may be an indicated that the hallucination are a reflection of the actual delusion thinking of the person with schizophrenia (Fortinash & Worret ,2008:267).

2.4.11.5 Thought Process and Content:

Schizophrenia often is referred to as a thought disorder because that is the primary feature of the disease: thought processes become disordered, and the continuity of thoughts and information processing is disrupted (Cancro & Lehman, 2000: 1173). The nurse can assess thought process by inferring from what the patient says. He or she can assess thought content by evaluating what the patient actually says. For example, patients may suddenly stop talking in the middle of a sentence and remain silent for several seconds to minute (thought blocking). They also may state that they believe others can hear their thoughts)thought broadcasting); that others are taking their thoughts (thought withdrawal); or that others are placing thoughts in their mind against their will (thought insertion) (Videbeck.2008:308).

Delusions, Alteration in thinking can take many from. Delusions are most often defined ad false fixed beliefs that cannot be corrected by reasoning. They may be simple beliefs or part of complex delusion system. In schizophrenia, delusions are often loosely organized and may be bizarre most commonly delusion thinking involves the following themes: idea of reference, persecute, grandiosity, somatic sensation. (Varcarolis & Halter, 2009:271).

Persecutory/paranoid delusions involve the patient's belief that "others" are planning to harm the patient or are spying, following, ridiculing, or belittling the patient in some way. Sometimes the patient cannot define who these "others" are. Grandiose delusions are characterized by the patient's claim to association with famous people or celebrities, or the patient's belief that he or she is famous or capable of great feats. Religious delusions often center on the second coming of Christ or another significant religious figure or prophet. These religious delusions appear suddenly as part of the patient's psychosis and are not part of his or her religious faith or that of others. Somatic delusions are generally vague and unrealistic beliefs about the patient's health or bodily functions. Factual information or diagnostic testing does not change these beliefs. Referential delusions or ideas of reference involve the patient's belief that television broadcasts, music, or newspaper articles have special meaning for him or her. (Videbeck.2008:309). When the disturbance is more severe, two characteristic kinds of abnormality may occur.

- Disorder of the stream of thought: include pressure of thought, poverty of thought, and thought blocking, thought blocking, thought withdrawal.
- Loosening of association denotes alack of connection between ideas. This may be detected in illogical thinking (Knights move) or talking past the point (Voreiveden) some patients use ordinary words in unusual ways (paraphrases or metonyms) , and few coin new words (Neologisms) (Gilder et al,1996:248).

Shaddock et al, (2004) said the thought processing schizophrenia change with the individual's clinical status. As clinical status worsens, sometimes thoughts evolve into a worked of fantasy or are expressed as autistic thinking (internally stimulated thoughts not based in reality), perseveration (persistent repetition of the some idea in response to different question), poverty of thought (lack of ability to produce thoughts), and loosening of association (fragmented, incoherent thoughts) (Fortinash & Worret, 2008:266).

The patient may exhibit an unusual speech pattern. Two typical patterns are word salad (jumbled words and phrases that are disconnected or incoherent and make no sense to the listener) and echolalia (repetition or imitation of what someone else says). Speech may be slowed or accelerated in rate and volume: the patient may speak in whispers or hushed tones or may talk loudly or yell. Latency of response refers to hesitation before the patient responds to questions. This latency or hesitation may last 30 or 45 seconds (Cancro & Lehman, 2000:1175) and usually indicates the patient's difficulty with cognition or thought processes. Unusual speech patterns of patients with schizophrenia as following:

- Clang associations are ideas that are related to one another based on sound or rhyming rather than meaning.
- Neologisms are words invented by the patient.
- Verbigeration is the stereotyped repetition of words or phrases that may or may not have meaning to the listener.
- Echolalia is the patient's imitation or repetition of what the nurse says.
- Stilted language is use of words or phrases that are flowery, excessive, and pompous.
- Perseveration is the persistent adherence to a single idea or topic and verbal repetition of a sentence, phrase, or word, even when another person attempts to change the topic.
- Word salad is a combination of jumbled words and phrases that are disconnected or incoherent and make no sense to the listener (Videbeck.2008:308).

2.4.11.6 Cognitive:

In acute schizophrenia orientation is normal impairment of attention and concentration is common and may result in memory impairment (Gelder et al, 1996:248).

Lieberman.(2006) said cognitive disturbance in people with schizophrenia affect everyday functioning. One area that is affected is vigilance. Vigilance is the ability to maintain attention over time. People who are unable maintain this attention have difficulty following instruction critical to their care.

Not being able to maintain attention along with having difficulty with verbal fluency also has negative impact on social and work related interactions. Other cognitive defect areas include learning, reasoning, and problem solving. (Fortinash & Worret, 2008:267).

2.4.11.7 Memory:

A general impression of the patient's memory can be gained from the way in which he or she presents the history. Is there internal consistency, or are there gaps and contradictions? Does the patient remember the physician's name from a past encounter, or does the patient confabulate, claiming to have met an individual whom he or she has never seen before? Is there a period for which the patient has poor recall? If so, is the patient unable to recall either personal or general information from that period (organic amnesia), or is there selective inability to recall personally relevant information (psychogenic amnesia)?

It is usually normal , but can be distorted by delusional thinking e.g. The pt remember clearly that he was dispelled from school, but may attribute tat to the teachers being against him. (Alhajjar, 2003:17).

2.4.11.8 Judgment and Insight

Judgment is frequently impaired in the patient with schizophrenia. Because judgment is based on the ability to interpret the environment correctly, it follows that the patient with disordered thought processes and environmental misinterpretations will have great difficulty with judgment. At times, lack of judgment is so severe that patients cannot meet their needs for safety and protection and place themselves in harm's way.

This difficulty may range from failing to wear warm clothing in cold weather to failing to seek medical care even when desperately ill. The patient also may fail to recognize needs for sleep or food. Insight also can be severely impaired, especially early in the illness, when the patient, family, and friends do not understand what is happening. Over time, some patients can learn about the illness, anticipate problems, and seek appropriate assistance as needed. However chronic difficulties result in patients who fail to understand schizophrenia as a long-term health problem requiring consistent management (Videbeck.2008:311).

Insights are usually impaired. Most patient do not accept that their experience result from illness, but usually ascribe them to the malevolent action of other people. This lack of insight is often accompanied by unwillingness to accept treatment (Gelder et al, 1996:249). Lack of judgment: Unable to assess or evaluate situations or make rational choices. Lack of insight: unable to perceive and understal cause and nature of own and other situation (e.g.,. own illness).

2.4.12 Management of Schizophrenia:

The consequences of schizophrenia are painful and unacceptable both to the patient and to the surrounding community. The magnitude of these consequences has led to a wide range of treatments and protective strategies. Even before the development of a conceptual framework to explain schizophrenia, physical methods were used to protect society and to help families and caretakers minimize the disruption caused by schizophrenia. Treatments in the nineteenth and early twentieth centuries involved sedation, restraint, and confinement. Hospital treatment often resulted in continuous institutionalization until death, usually hastened by nutritional and infectious diseases. Occasionally, a combination of psychological, social, and biological treatments was followed by remission sufficient for discharge. These cases served as the bases of both hope and clinical reports throughout much of this century (Goldman & Maryland, 2000:244).

The probability of eventual discharge from hospitals for patients who have developed schizophrenia for the first time has increased over each decade of this century. The psychosocial therapies developed since the 1920s have played a major role in this process. Until the 1950s patients were removed from society to an institution; there they could be observed and treated, and society could avoid contact with people they considered to be frightening and disturbed. The dramatic increase in release rates since the late 1950s could not have occurred without the introduction of neuroleptic earlier in the decade. Neuroleptic treatment controls acute symptoms, allows the reduction of hospitalization from years to days, prolongs remission, and helps make the current outcome for patients treated for schizophrenia much better than the untreated natural course (Gur & Johnson, 2006:87).

Until the 1930s the only somatic treatments that were actually beneficial involved either the induction of prolonged coma/sleep by chemical means or forced, very prolonged immobilization using restraints, jackets, and sheet packs. Convulsive treatments, originally induced by chemicals but electrically induced (electroconvulsive treatment or ECT) since the 1940s, became the treatment of choice for acute schizophrenia until being displaced by the neuroleptic in the 1960s. At present, the use of ECT in the treatment of schizophrenia is limited to the occasional patient. It is typically used after pharmacotherapy has failed to treat a patient's severe psychosis or if there is severe suicidality or presentation of life-threatening catatonia. The response to ECT is often rapid and dramatic. It should be noted that ECT was supplanted by pharmacotherapy not because ECT is inferior or involves risks but for a variety of other factors including ease of administration of drugs and stigma attached to ECT. In recent years, there has been renewed interest in ECT as a treatment for schizophrenia based on the concern that prolonged psychosis might be neurotoxin and the belief that aggressive treatment could prevent deterioration (Fink & Sackeim, 1996:23).

Contemporary treatment of schizophrenia always involves a combination of biological, psychological, and social methods called combined treatment. The psychiatrist usually works as part of a treatment team, and in many cases the family is actively incorporated into the treatment plan.

The course of schizophrenia varies, but in most cases it involves recurrent episodes of symptoms. Although available pharmacological treatments can relieve many of the symptoms, most people with schizophrenia continue to suffer some symptoms throughout their lives. Appropriate treatment early in the course of the disease and adherence to continued and adequate treatment are essential to avoiding relapses and preventing hospitalization. During periods of remission, whether spontaneous or due to treatment, the individual may function well. Newer medications (and improved dosage guidelines for older medications) have substantially reduced the prevalence of severe neurological side effects that were once commonly associated with long-term pharmacological treatment of schizophrenia. Optimizing the functional status and wellbeing of individuals with schizophrenia requires a supportive family and wide range of services, including institutional, community, social, employment and housing services. Ideally, multidisciplinary community treatment teams provide these services. Social skills training strives to improve social functioning by working with individuals to resolve problems with employment, leisure, relationships and activities of daily life. Occasionally, however, timely admission to hospital to control symptoms may prevent the development of more severe problems (CAMIMH, 2002:54).

2.4.12.1 Psychosocial Treatment:

It is useful conceptually to divide the treatment of schizophrenia into three phases since their respective goals and treatment strategies vary: an acute phase, a stabilization phase, and a stable phase.

In the acute phase, the aim is to reduce acute symptoms, prevent harm, and improve role function. This is the beginning of an attempt to engage patients and develop a treatment alliance with them. Consideration needs to be given to the appropriate (i.e., least restrictive) setting in which patients can be treated in a way that is safe for both them and for their environment. This can range from supervision by a family member at home to a day hospital admission to involuntary commitment to a state facility. The acute phase is often the easiest phase in which to engage family members because their motivation is high. During the stabilization phase it is important to continue to minimize stress, to enhance patients' adaptation to life, and to educate patients and their families about early signs of relapse (Goldman & Maryland, 2000:245).

During the stable phase treatment is designed to minimize risk of relapse on the one hand and to optimize functioning on the other. Knowledge about patients' neurocognitive status becomes important now as it will guide cognitive and vocational rehabilitation efforts. Training in social skills that uses behavioral techniques to teach skills useful in everyday life can be very helpful to patients with negative symptoms. Since the patient's long-term course will be affected by the family's understanding of the illness, psycho educational work with the family is very important in this phase of treatment. Some patients with no social support and difficulties accessing different community agencies might benefit from so-called case management, in which a designated person helps them steer through the bureaucracies. A successful but very intensive case management model with active treatment interventions has been developed (assertive community treatment); it enables marginally functioning individuals to live in the community. Key principles are support, emphasis on

compliance, and assertive outreach if indicated to keep the patient in treatment (Sadock, & Sadock, 2007:489).

Two points in the treatment of a patient with schizophrenia need to be emphasized: the sine qua non for successful treatment is a good therapeutic alliance with the patient and a good working alliance with the family. Many patients lack insight into the nature of their illness, attribute their symptoms to anything but a mental illness, and often do not acknowledge the need for treatment (David and Kemp, 1997:63). Often patients are noncompliant with treatment. Awareness of this allows the doctor to determine what made the patient decide not to follow treatment recommendations: was it side effects that were not explained, lack of understanding because of cognitive deficits, or the uninformed advice of a family member (Weiden & Zygmunt, 1997:18)? A good alliance with the patient, in which the patient trusts the physician, will allow the physician to treat the patient successfully. A good alliance with the family can prevent hospitalizations if family members help with medication or recognition of prodromal symptoms.

Individual and group therapy, family therapy, family education, and social skills training can be instituted for patients in both inpatient and community settings. Individual and group therapy sessions are often supportive in nature, giving the patient an opportunity for social contact and meaningful relationships with other people. Groups that focus on topics of concern such as medication management, use of community supports, and family concerns also have been beneficial to patients with schizophrenia (Adams et al., 2000:329).

Patients with schizophrenia can improve their social competence with social skills training, which translate into more effective functioning in the community. Bustillo et al. (2001:165) describe three forms of social skills training: the basic model; the social problem-solving model; and the cognitive remediation model. The basic model involves breaking complex social behavior into simpler steps, practicing through role-playing, and applying the concepts in the community or real-world setting. The social problem-solving model focuses on improving impairments in information processing that are assumed to cause deficits in social skills. This includes medication and symptom management, recreation, basic conversation, and self-care. The cognitive remediation model focuses on improving underlying cognitive impairments by emphasizing such things as paying attention and planning. Improvements in these basic cognitive functions enhance learning in the other two models as well.

Family education and therapy are known to diminish the negative effects of schizophrenia and reduce the relapse rate (Dyck et al., 2000:514). While inclusion of the family is a factor that improves outcomes for the patient, family involvement often is neglected by health care professionals (Aquila & Korn, 2001) Families often have a difficult time coping with the complexities and ramifications of the patient's illness. This creates stress among family members that is not beneficial for the patient or family members. Family education helps to make family members part of the treatment team. Family to Family Education Programs.

In addition, family members can benefit from a supportive environment that helps them cope with the many difficulties presented when a loved one has schizophrenia (Teschinsky, 2000:387). These concerns include continuing as a caregiver for the child who is now an adult; worrying about who will care for the patient when the parents are gone; dealing with the social stigma of mental illness; and possibly facing financial problems, marital discord, and social isolation.

2.4.12.2 Pharmacological Treatment:

Pharmacological treatments are an essential component of a comprehensive approach to the treatment of schizophrenia. Rational pharmacotherapy's can contribute greatly to symptom relief and to a broader psychosocial recovery for affected individuals. However, antipsychotic drugs do not cure schizophrenia. Moreover, if not used judiciously, drug therapies can create significant financial, side-effect, and medical morbidity burdens that may hinder progress toward personal and treatment goals. Importantly, evidence based plans of care should be individualized and should integrate both appropriate pharmacotherapy's and psychosocial interventions (Lehman et al. 2004:193).

The goal of pharmacological treatment of schizophrenia is to minimize symptoms and functional impairments to allow individuals to pursue personal goals as best as possible. Antipsychotic drugs are commonly used to treat positive symptoms, such as hallucinations, delusions, and disorganized speech and behavior, and negative symptoms, including anhedonia, avolition, alogia, affective flattening, and social withdrawal. Antipsychotic drugs are also used to treat behavioral disturbances such as aggression and hostility and to reduce anxiety and suicidal behaviors. Anxiolytics, antidepressants, and mood-stabilizing drugs are often used as adjunctive treatments for mood symptoms. Because cognitive impairments are common in schizophrenia and are related to functional outcomes, cognitive functioning is now an important focus of research and a possible target of pharmacotherapy's, however, there are neither U.S. Food and Drug Administration (FDA)–approved nor commonly used drugs available for this purpose in schizophrenia(Lieberman et al.,2006:303).

The introduction of chlorpromazine (Thorazine) in 1952 may be the most important single contribution to the treatment of a psychiatric illness. Henri Laborit, a surgeon in Paris, noticed that administering chlorpromazine to patients before surgery resulted in an unusual state in which they seemed less anxious regarding the procedure. Chlorpromazine was subsequently shown to be effective at reducing hallucinations and delusions, as well as excitement. It was also noted that it caused side effects that appeared similar to Parkinsonism. Antipsychotics diminish psychotic symptom expression and reduce relapse rates. Approximately 70 percent of patients treated with any antipsychotic achieve remission (Sadock, & Sadock, 2007:488).

The drugs used to treat schizophrenia have a wide variety of pharmacological properties, but all share the capacity to antagonize postsynaptic dopamine receptors in the brain. Antipsychotics can be categorized into two main groups: the older conventional antipsychotics, which have also been called first-generation antipsychotics or dopamine receptor antagonists, and the newer drugs, which have been called second-generation antipsychotics or serotonin dopamine antagonists (SDAs) (Fink & Sackeim, 1996:26).

Clozapine (Clozaril), the first effective antipsychotic with negligible extra pyramidal side effects, was discovered in 1958 and first studied during the 1960s. However, in 1976, it was noted that clozapine was associated with a substantial risk of agranulocytosis. This property resulted in delays in the introduction of clozapine. In 1990, clozapine finally became available in the United States, but its use was restricted to patients who responded poorly to other agents (Lehman et al. 2004:194).

All typical neuroleptic have been found to be equally effective among large groups of patients. Among typical neuroleptic the effective therapeutic dose required to treat a patient varies in relation to that drug's ability to block the dopamine receptor and the relative potencies reflect the drug's ability to block the various dopamine receptors; similarly, the side effects reflect the relative binding at other known neurotransmitter receptors. Individual patients may respond to one drug better than another, and a history of a favorable response to treatment with a given drug in either the patient or a family member should lead to use of that particular drug as the drug of first choice. If the initial choice is not effective in 2–4 weeks, it is reasonable to try another neuroleptic drug with a different chemical spectrum of neurotransmitter interactions. Today, most clinicians consider using an atypical neuroleptic such as risperidone or olanzapine initially in the treatment algorithm. Aside from milligram potencies, the primary differences among the neuroleptic agents involve side effects, which may affect compliance by conferring an advantage to the patient, eg, producing nighttime sedation with chlorpromazine or avoiding appetite stimulation with molindone. Clinically, risperidone, olanza-pine, and quetiapine are often well tolerated because of fewer extra pyramidal symptoms (EPS), which can be a major factor for compliance with treatment; unfortunately, they often produce weight gain. Clozapine requires weekly monitoring of blood to detect developing agranulocytosis, increases the risk of seizure, and has many side effects that limit its use (Goldman & Maryland, 2000:246).

2.4.12.3 Cognitive Therapy of Schizophrenia:

Antipsychotic medications, while efficacious, have important limitations: Many patients continue to experience distressing residual symptoms despite taking appropriate doses, and, as we have seen, several of the most disabling features of schizophrenia are relatively unaffected by the medications (negative symptoms, functional impairment, and poor neurocognitive performance). These limitations, combined with the poor QOL of most individuals with schizophrenia, led to the development of cognitive therapy as an adjunctive treatment for individuals diagnosed with schizophrenia (Chadwick et al., 1996)

Cognitive therapy is a short-term structured therapy that focuses on very specific problems and seeks to resolve them through collaborative efforts between patient and therapist to improve the patient's "thinking skills." This form of therapy is chiefly used to treat depression, with the goal of helping patients change the negative ways they think about themselves. This therapy is not widely used to treat schizophrenia, although some researchers have begun to investigate the use of cognitive remediation therapy (CRT) to enhance therapeutic outcomes in adults with psychotic illnesses. Based on the extensive literature demonstrating the difficulties in attention, learning, and memory that those with the illness tend to experience, CRT training programs have focused on strengthening these cognitive abilities in patients, who in turn have shown improved

performance as a result. Such efforts are promising avenues for intervention and apply principles that are used in remediation of other brain disorders (Gur & Johnson, 2006:57).

Also, a combined form of cognitive and behavioral therapeutic techniques, cognitive-behavioral therapy, is increasingly used as part of a comprehensive therapy for schizophrenia that emphasizes social skills training. This mode of intervention is gaining interest among professionals and has been applied successfully in England in treating hallucinations and delusions.

2.412.4 Group Therapy

Group therapy, in which groups of people address interpersonal and life issues together under the guidance of a psychotherapist, is a natural setting for adolescents, who are usually more comfortable with, and more likely to be able to hear criticism from, their peers than they are from adults. However, group therapy can be damaging for fragile adolescents and for those with obvious symptoms or character traits likely to provoke ridicule from their peers. Some adolescents with schizophrenia might do well in group therapy, while others would not.

2.4.12.5 Family Therapy

Family therapy, in which entire families meet together with a psychotherapist, is the treatment of choice for adolescents whose problems are clearly the reflection of a dysfunctional family, such as teenagers who run away or avoid going to school. It may also be useful for families in which a teenage member has stirred up conflict within the family by trying to be independent. All family therapies seek to improve family conflicts through "psycho education", a procedure whereby families are taught better ways to interact with one another. Family therapy might be helpful for some families with a member who has schizophrenia, particularly if psycho education is at its core.

2.4.13 Phases of Treatment in Schizophrenia:

2.4.13.1 Treatment of Acute Psychosis:

Acute psychotic symptoms require immediate attention. Treatment during the acute phase focuses on alleviating the most severe psychotic symptoms. This phase usually lasts from 4 to 8 weeks. Acute schizophrenia is typically associated with severe agitation, which can result from such symptoms as frightening delusions, hallucinations, or suspiciousness, or from other causes, including stimulant abuse. Patients with akathisia can appear agitated when they experience a subjective feeling of motor restlessness. Differentiating akathisia from psychotic agitation can be difficult, particularly when patients are incapable of describing their internal experience. If patients are receiving an agent associated with extra pyramidal side effects, usually a first-generation antipsychotic, a trial with an ant cholinergic anti-Parkinson medication, benzodiazepine, or propranolol (Inderal) may be helpful in making the discrimination (Sadock, & Sadock, 2007:489).

Clinicians have a number of options for managing agitation that results from psychosis. Antipsychotics and benzodiazepines can result in relatively rapid calming of patients. With highly agitated patients, intramuscular administration of antipsychotics produces a more rapid effect. An advantage of an antipsychotic is that a single intramuscular injection of haloperidol (Haldol), fluphenazine (Prolixin, Permitil), olanzapine (Zyprexa), or ziprasidone (Geodon) will often result in calming without an excess of sedation. Low-potency antipsychotics are often associated with sedation and postural hypotension, particularly when they are administered intramuscularly. Intramuscular ziprasidone and olanzapine are similar to their oral counterparts in not causing substantial extra pyramidal side effects during acute treatment. This can be an important advantage over haloperidol or fluphenazine, which can cause frightening dystonias or akathisia in some patients. A rapidly dissolving oral formulation of olanzapine (Zydis) may also be helpful as an alternative to an intramuscular injection (Videbeck.2008:303).

Benzodiazepines are also effective for agitation during acute psychosis. Lorazepam (Ativan) has the advantage of reliable absorption when it is administered either orally or intramuscularly. The use of benzodiazepines may also reduce the amount of antipsychotic that is needed to control psychotic patients.

Some studies suggest that a longer time between the first onset of psychosis and the initiation of treatment is related to a worse outcome. As a result, clinicians must consider the possibility that delayed treatment may worsen the patient's prognosis. However, these data do not mean that all patients need to be treated immediately. A brief delay may permit clinicians to develop a more thorough diagnostic evaluation and rule out causes of abnormal behavior, such as substance abuse, extreme stress, medical illnesses, and other psychiatric illnesses.

2.4.13.2 Treatment during Stabilization and Maintenance Phase

In the stable or maintenance phase, the illness is in a relative stage of remission. The goals during this phase are to prevent psychotic relapse and to assist patients in improving their level of functioning. As newer medications have been introduced with a substantively reduced risk of tardive dyskinesia, one of the major concerns about long-term treatment has been diminished. During this phase, patients are usually in a relative state of remission with only minimal psychotic symptoms. Stable patients who are maintained on an antipsychotic have a much lower relapse rate than patients who have their medications discontinued. Data suggest that 16 to 23 percent of patients receiving treatment will experience a relapse within a year and 53 to 72 percent will relapse without medications. Even patients who have had only one episode have a four in five chance of relapsing at least once over the following 5 years. Stopping medication increases this risk fivefold. Although published guidelines do not make definitive recommendations about the duration of maintenance treatment after the first episode, recent data suggest that 1 or 2 years might not be adequate. This is a particular concern when patients have achieved good employment status or are involved in educational programs because they have a lot to lose if they experience another psychotic decomposition. It is generally recommended that multiepisode patients receive maintenance treatment for at least 5 years, and many experts recommend pharmacotherapy on an indefinite basis (Sadock, & Sadock, 2007:490).

Chapter Three

Literature Review

Chapter Three

Literature Review

3.1 Introduction

In this chapter the researcher well show the literature reviews in two main themes .In this section the researcher exposed the literature of Quality of life among schizophrenic patients, which viewed in two axis, the first axis about schizophrenia and another independent change, the second about schizophrenia and quality of life, and was exposures of discussion and comments around the researches, and in the end I list the Hypotheses of the study.

3.2 Studies of schizophrenia and another independent changing:

The study of Gold R et al,. (2012) Evaluated performance in schizophrenia on a novel voice emotion recognition battery with well-characterized physical features, relative to impairments in more general emotional and cognitive functioning. Schizophrenia is associated with deficits in the ability to perceive emotion based on tone of voice. The basis for this deficit remains unclear, however, and relevant assessment batteries remain limited. The authors studied a primary sample of 92 patients and 73 comparison subjects. Stimuli were characterized according to both intended emotion and acoustic features (e.g., pitch, intensity) that contributed to the emotional percept. Parallel measures of visual emotion recognition, pitch perception, general cognition, and overall outcome were obtained. More limited measures were obtained in an independent replication sample of 36 patients, 31 age-matched comparison subjects, and 188 general comparison subjects. Patients showed statistically significant large-effect-size deficits in voice emotion recognition and were preferentially impaired in recognition of emotion based on pitch features but not intensity features. Emotion recognition deficits were significantly correlated with pitch perception impairments both across and within groups. Path analysis showed both sensory-specific and general cognitive contributions to auditory emotion recognition deficits in schizophrenia. Similar patterns of results were observed in the replication sample. The results demonstrate that patients with schizophrenia show a significant deficit in the ability to recognize emotion based on tone of voice and that this deficit is related to impairment in detecting the underlying acoustic features, such as change in pitch, required for auditory emotion recognition. This study provides tools for, and highlights the need for, greater attention to physical features of stimuli used in studying.

Another research by Purgato M et al (2012) Well-designed and properly executed randomized controlled trials (RCTs) provide the best evidence on the efficacy of healthcare interventions. Mental health has a strong tradition of using trial to evaluate treatments, but the translation of research to clinical practice is not always easy. Even well-conducted trials do not necessarily address the needs of every day care and trials can reflect local needs and the specific culture in which they are undertaken. Generalizing results to other contexts can become problematic but these trials may, nevertheless, be very helpful within their own context. Moreover, pathways for drug approval can be different depending on local regulatory agencies. Local trials are helpful for decision-making in the region from which they come, but should not be viewed in isolation. National quantity and quality of trials may vary across nations. The aim of this study is to quantify trialing activity in Italy from 1948 until 2009 and to

describe characteristics of these trials. In addition, we evaluated change over time in three keys aspects: sample size, follow-up duration, and number of outcomes. We used the Cochrane Schizophrenia Group's register that contains 16,000 citations to 13,000 studies relating only to people with schizophrenia or schizophrenia-like illness. Randomized controlled trials and controlled clinical trials undertaken in Italy and involving pharmacological interventions were included. The original search identified 155 records of potentially eligible studies, 74 of which were excluded because do not meet inclusion criteria. A total of 81 studies were included in the analysis. The majority of trials were conducted in north Italy, and published in international journals between 1981 and 1995. The majority of studies (52 out of 81) used standardized diagnostic criteria for schizophrenia disorder. They were defined as randomized and used blind methods to administer treatment. However, most failed to report detail regarding methodological procedures and it is difficult to ascertain which studies are associated with a low risk of bias. Trials should be designed to address the needs of everyday care with the aim of following large samples of typical patients in the long term. The Italian tradition in the area of trialing treatments for people with schizophrenia is not as strong as in many other similar countries and Italy should be producing more, better, independent, and clinically relevant trials.

In addition, Morimoto T et al. (2012) examined whether the self-efficacy of interpersonal behavior influenced the interpersonal behavior of schizophrenia patients using psychiatric day-care Thirty-nine patients with services. schizophrenia were examined with the Interpersonal Relations subscale of the Life Assessment Scale for Mentally Ill, the Self-efficacy Scale of Interpersonal Behavior, the Brief Assessment of Cognition in Schizophrenia-Japanese version, and the Positive The Life Assessment Scale for Mentally and Negative Syndrome Scale. Ill score was significantly correlated with the self-efficacy of interpersonal behavior, and was also significantly correlated with neurocognitive functions and negative symptoms. However, the Self-efficacy Scale of Interpersonal Behavior score was not correlated with neurocognitive functions and negative symptoms. To examine the causal correlations between the above social, psychological and clinical factors, multiple regression analysis was performed with the self-efficacy of interpersonal behavior, neurocognitive functions, and negative symptoms as the independent variables and interpersonal behavior as the dependent variable. The self-efficacy of interpersonal behavior was found to contribute to interpersonal behavior as well the self-efficacy of interpersonal as neurocognitive functions. Conclusion: behavior contributed to the interpersonal behavior as well as the neurocognitive functions in the case of schizophrenia patients in the community. This suggested that interventions targeting the self-efficacy of interpersonal behavior, as well as those targeting neurocognitive functions, were important to improve the interpersonal behavior of schizophrenia patients undergoing psychiatric rehabilitation in the community. These results support evidence for the efficacy of IPT independent of age. Results further indicate the need of goal-oriented specific psychological interventions for middle-aged and older patients with schizophrenia.

The study of Kirkbride JB et al (2012) Conducted a systematic review of incidence rates in England over a sixty-year period to determine the extent to which rates varied along accepted (age, sex) and less-accepted epidemiological gradients (ethnicity, migration and place of birth and upbringing, time). To determine variation in incidence of several psychotic disorders as above, Published and grey literature searches (Medline, Psycinfo, Embase, Cinahl, Assia, Hmic), and identification of unpublished

data through bibliographic searches and author communication. Published 1950-2009; conducted wholly or partially in England; original data on incidence of non-organic adult-onset psychosis or one or more factor(s) pertaining to incidence. People 16-64 years, with first -onset psychosis, including non-affective psychoses. schizophrenia, bipolar disorder, psychotic depression and substance-induced psychosis. abstract and full-text review by two independent raters to identify suitable citations. Data were extracted to a standardized extraction form. Descriptive appraisals of variation in rates, including tables and forest plots, and where suitable, random-effects meta-analyses and meta-regressions to test specific hypotheses; rate heterogeneity was assessed by the I(2)-statistic. 83 citations met inclusion. Pooled incidence of all psychoses (N=9) was 31.7 per 100,000 person-years for non-affective psychoses for schizophrenia (N=15) and 12.4 for affective psychoses (N=7). This masked rate heterogeneity, possibly explained by socio-environmental factors; our review confirmed (via meta-regression) the typical age-sex interaction in psychosis risk, including secondary peak onset in women after 45 years. Rates of most disorders were elevated in several ethnic minority groups compared with the white (British) population. For example, for schizophrenia: black Caribbean, black African and South Asian groups in England. We found no evidence to support an overall change in the incidence of psychotic disorder over time, though diagnostic shifts (away from schizophrenia) were reported.

However, the study of Liemburg EJ et al,.(2012) investigated resting state network connectivity of auditory, language and attention networks of patients with schizophrenia and hypothesized that patients would show reduced connectivity. Brain circuits involved in language processing have been suggested to be compromised in patients with schizophrenia. This does not only include regions sub serving language production and perception, but also auditory processing and attention. Patients with schizophrenia (n = 45) and healthy controls (n = 30) underwent a resting state fMRI scan. Independent components analysis was used to identify networks of the auditory cortex, left inferior frontal language regions and the anterior cingulate region, associated with attention. The time courses of the components where correlated with each other, the correlations were transformed by a Fisher's Z transformation, and compared between groups. In patients with schizophrenia, we observed decreased connectivity between the auditory and language networks. Conversely, patients showed increased connectivity between the attention and language network compared to controls. There was no relationship with severity of symptoms such as auditory hallucinations. The decreased connectivity between auditory and language processing areas observed in schizophrenia patients is consistent with earlier research and may underlie language processing difficulties. Altered anterior cingulate connectivity in patients may be a correlate of habitual suppression of unintended speech, or of excessive attention to internally generated speech. This altered connectivity pattern appears to be present independent of symptom severity, and may be suggestive of a trait, rather than a state characteristic.

In addition, the study of Mueller DR et al, (2012) The aimed of this study was to evaluate whether IPT is effective in younger patients (age < 40 years) and middle-aged patients (age ≥ 40 years) and whether control conditions (treatment as usual or unspecific group activities) reveal some change in outcome depending on age. Elderly people with schizophrenia often suffer from cognitive impairments, which affect their social functioning. Today, only a few therapy approaches for middle-aged and older patients are available. The Integrated Psychological Therapy (IPT) combines

neurocognitive and social cognitive interventions with social skills approaches. A total of 15 controlled IPT studies with 632 inpatients with schizophrenia were included into a standard meta-analytic procedure. Studies were categorized into two age categories. Significant medium to high effect sizes (ES) were evident for IPT independent of age on the global cognitive score (mean score of all cognitive variables), on neurocognition, social cognition, social functioning, psychopathology, and the global therapy effect (mean of all variables). The IPT effects in middle-aged patients were significantly higher on the global cognitive score, on neurocognition, and on social cognition compared with younger patients. Opposite results could be observed in control conditions. Only younger patients participating in the control conditions showed small but significant ES on these variables, but almost middle-aged control patients did not. However, none of the differences in control conditions were significant between the two age categories. A moderator analysis obtained no evidence for a strong impact of IPT variations, therapy setting, patient characteristics, and methodological rigor of the research design.

The study of Cochrane M et al., (2012) This research consisted of two studies, the fundamental aim of which was to delineate the pattern of relationships between measures of cognitive task performance and both symptom subtypes in schizophrenia and their corresponding schizotypal personality traits in healthy individuals. Study 1 compared these relationships in healthy individuals using the Schizotypal Personality Questionnaire (SPQ) and Study 2 assessed the relationships between symptomatology assessed using the Scale for the Assessment of Positive Symptoms and Scale for the Assessment of Negative Symptoms (SAPS/SANS) and cognitive task performance in a group of patients with schizophrenia. The contribution of fluid intelligence to task performance was also examined. In Study 1 high levels of negative schizotypy were associated with reduced verbal fluency, and high levels of disorganized schizotypy were associated with reduced negative priming in the healthy participants. In Study 2, closely corresponding relationships between symptom measures and these tasks were found in the patients with schizophrenia. The associations between the symptom and cognitive measures were independent of the effects of fluid IQ on performance.

Study by Dan et al., (2011) aimed to investigate that depression in schizophrenia has been recognized as one of the important factors influencing the Quality of Life (QOL). For this study 60 patients with a clinical diagnosis of schizophrenia as per ICD-10 (DCR version) were divided into two groups (with and without depression) on the basis of their score on Calgary Depression Rating Scale for Schizophrenia (CDSS). Thereafter, all patients were assessed on Positive and Negative Syndrome Scale for Schizophrenia (PANSS) for psychopathology, on Lehman Quality of Life Interview (QOLI)-brief version for QOL, on World Health Organization Disability Assessment Schedule-II (WHODAS-II) for disability, on UKU Side Effect Rating Scale for side effects of drugs and on Social Support Questionnaire (SSQ) for perceived social support. The two (depressed and non-depressed schizophrenia) groups differed significantly on symptoms of general psychopathology of PANSS and disability as per WHODAS-II, with the depressed group scoring higher. In the total sample, positive symptoms and the symptoms of general psychopathology of PANSS had a strong negative correlation with all three (subjective, objective and combined) domains of QOL, whereas, disability and medication side effects had a negative correlation with subjective and combined domains of QOL. CDSS total score did not significantly correlate with QOL. General psychopathology symptoms of PANSS

emerged as the sole significant predictor of subjective and combined QOL, while positive symptoms of PANSS emerged as the sole predictor of objective QOL. Hence, it can be concluded that general psychopathology on PANSS had significant effect whereas depression as rated on CDSS had no significant effect on QOL in patients with schizophrenia. Treatments to improve QOL in schizophrenia should focus on symptoms of general psychopathology of Positive and Negative Syndrome Scale for Schizophrenia.

In addition, Kao YC and Liu YP, (2010) aimed to assess differences in demographic and clinical characteristics correlated with age of illness onset in schizophrenia spectrum disorders. Over the last few decades, research regarding the age of onset of schizophrenia and its relationship with other clinical variables has been incorporated into clinical practices. However, reports of potential differences in demographic and clinical characteristics between early- and adult-onset schizophrenia spectrum disorders have been controversial. Thus, this study Data were collected from 104 patients with schizophrenia and schizoaffective disorder. Diagnosis was made via structured clinical interviews. Assessments of psychiatric symptoms and social and global functioning were completed. The effect of age of onset on demographic and clinical variables was examined using correlation analyses and binary logistic regression models. We chose 17 years of age as the cut-off for early-onset schizophrenia spectrum disorders based on a recent clinical consensus. We further investigated differences in the severity of psychopathology and other clinical variables between the early- and adult-onset groups. The binary logistic regression analysis showed that age of onset was significantly related to the cognitive component of the Positive and Negative Syndrome Scale (PANSS) and Barratt Impulsiveness Scale (BIS) score. Patients with early onset of schizophrenia spectrum disorders had significantly greater levels of cognitive impairment and higher impulsivity. There were significant differences between several demographic and clinical variables, including the negative symptom component of the PANSS, cognitive component of the PANSS, BIS score, and psychological domain of quality of life (QOL), between patients with early- and adult-onset schizophrenia spectrum disorders, having controlled for the effect of the current age and duration of illness. Our findings support the hypothesis of an influence of age of onset on illness course in patients with schizophrenia spectrum disorders. This finding may in fact be part of a separate domain worthy of investigation for the development of interventions for early symptoms of schizophrenia.

Another research, Carla M. Canuso, and Gahan Pandina (2007) what are the important gender differences seen in men and women with schizophrenia? Although schizophrenia affects men and women with equal frequency, the illness is expressed differently between the sexes .Women with schizophrenia tend to have better premorbid functioning, a later age at onset, a distinct symptom profile and better course of illness, and different structural brain abnormalities and cognitive deficits. Additionally, premenopausal women appear to have a superior response to typical antipsychotics compared to men and postmenopausal women. These gender differences are thought to arise from the interplay between hormonal and psychosocial factors. It has been hypothesized that estrogen, with effects on both neurodevelopment and neurotransmission, may play a protective role in women with schizophrenia and account for some of the gender differences observed in the disorder. Despite the potential benefit of estrogen in this population, women with schizophrenia appear to be at risk for hypoestrogenism, either as a consequence of antipsychotic-induced hyperprolactinemia

or, possibly, as a manifestation of the illness itself. The mechanism and consequences of hypoestrogenism in women with schizophrenia, as well as the role for hormonal therapies in this population, require further study, Psychopharmacological Bulletin.

Study by Zheng Li and David Arthur (2005) Background Much of China lacks well-developed services for people with schizophrenia and their families, and most of the existing services focus on hospitals. There is a need for culturally sensitive family treatments offered by nurses. Aims To conduct a longitudinal experimental study examining the effect of patient and family education in a sample of Chinese people with schizophrenia, Randomized controlled trial was conducted in a large hospital with a sample of 101 patients with schizophrenia and their families. Data were collected at admission and at discharge, and then at 3 and 9 months after discharge. The intervention group received family education, and data on the acknowledge about schizophrenia, symptoms, functioning, psychosocial behavior, relapse and medication adherence were collected and compared with the control group. Results There were a significant improvement in knowledge about schizophrenia in the experimental group and a significant difference in symptom scores and functioning at 9 months after discharge. Patients who were non adherent tom education regimens were more likely to relapse. Conclusions Family education on schizophrenia by nurses in China was effective in improving knowledge and promoting improvement inpatients' symptoms.

Discussion of the studies on first axis:

The researcher will discuss previous studies of schizophrenia and another independent changing; the first one is tools were used in these studies; the second is samples of the studies, and the third about the results of the previous studies, as the following:

Tools of the previous studies:

Some of research used compared between groups and subject such as (Gold R et al, 2012), (Liemburg EJ et al, 2012), and (Mueller DR et al, 2012). But another study used Interpersonal Relations subscale of the Life Assessment Scale for Mentally Ill as (Morimoto T et al, 2012).

The study of Cochrane M et al, (2012) Study 1 compared these relationships in healthy individuals using the Schizotypal Personality Questionnaire (SPQ) and Study 2 assessed the relationships between symptomatology assessed using the Scale for the Assessment of Positive Symptoms and Scale for the Assessment of Negative Symptoms

The study of (Kirkbride JB et al, 2012) Data were extracted to a standardized extraction form. Descriptive appraisals of variation in rates, Study by (Dan et al., 2011) all patients were assessed on Positive and Negative Syndrome Scale for Schizophrenia for psychopathology. (Kao YC & Liu YP, 2010) Assessments of psychiatric symptoms and social and global functioning were completed. The effect of age of onset on demographic and clinical variables was examined using correlation analyses and binary logistic regression models.

Samples of the previous studies:

In the field of samples of the previous studies, the study samples were ranged between small samples as the study of (Gold R et al,2012) The authors studied a primary sample of 92 patients and 73 comparison subjects. (Morimoto T et al, 2012) using psychiatric day-care Thirty-nine patients with services.

However the medium samples in the studies (Zheng Li & David Arthur, 2005) large hospital with a sample of 101 patients with schizophrenia and their families. (Mueller DR et al, 2012) A total of 15 controlled IPT studies with 632 inpatients While; some studies have large samples as studies of (Purgato M et al, 2012) used the Group's register that contains 16,000 citations to 13,000 studies relating only to people with schizophrenia or schizophrenia-like illness.

Results of the previous studies:

In the previous studies of (Gold R et al,2012) and (Purgato M et al,2012), founded patients with schizophrenia show a significant deficit in the ability to recognize emotion based on tone of voice and that this deficit is related to impairment in detecting the underlying acoustic features.

In addition, (Kao YC & Liu YP, 2010) and (Kirkbride JB et al, 2012) our findings support the hypothesis of an influence of age of onset on illness course in patients with schizophrenia spectrum disorders.

(Morimoto T et al, 2012) and (Mueller DR et al, 2012) these results support evidence for the efficacy of IPT independent of age. (Zheng Li and David Arthur, 2005) There was a significant improvement in knowledge about schizophrenia in the experimental group and a significant difference in symptom scores.

3.3 Studies of schizophrenia and quality of life:

The study of Péntek M et al, (2012) our aimed to assess the quality of life and costs of patients with schizophrenia in Hungary, According to the international literature disease burden of schizophrenia is substantial, however data from Eastern Central Europe is scarce. A cross sectional questionnaire survey was performed in 3 hospital based psychiatry centers involving patients with schizophrenia. Demographics, disease severity (Clinical Global Impression, CGI), functional ability (Global Assessment of Functioning, GAF) and general health status (EQ-5D) was assessed. Health care utilizations and aids were surveyed for the past 12 months. Costing was performed from the societal perspective and human capital approach was applied. Results: Altogether 78 patients (female 43.6%) were involved with a mean age of 44.2 (SD=13.1) years, disease duration was >10 years at 49 (62.8%) cases, 66 (84.6%) patients were disability pensioners. Distribution between CGI 3-4-5-6 levels were 12 (16%), 33 (43%), 21 (28%), 10 (13%) patients, respectively, mean GAF was 52.6 (SD=13.9). The average EQ-5D score was 0.64 (SD=0.3) and it was significantly worse than the age-matched general population's score in Hungary ($p < 0.01$). Mean yearly cost was 13 878 Euros/patient (conversion 1 Euro=280.6 HUF), the rate of direct medical, direct non-medical and indirect costs was 28.5%, 5.4% and 66.1%, respectively. Among direct costs hospitalizations and drug costs were dominant. Total cost correlates with disease severity (CGI). Conclusion: Schizophrenia leads to notable deterioration in health related quality of life and induce high costs to society, mainly due to the productivity loss of the patients. Nevertheless disease related costs in Hungary are lower than in economically more developed European countries. Our study offers basic data about disease burden of schizophrenia in Hungary to support clinical and health policy decision making.

In additional, Zouari L et al, (2012) , Evaluated the quality of life (QOL) in outpatients with schizophrenia, and to identify factors correlated to an impaired QOL among them. A transversal study, in the form of an inquiry, was conducted in 100 outpatients, during seven months, in the psychiatric department of the Hedi Chaker teaching hospital in Sfax - Tunisia. We used the "36 item Short-Form Health Survey" (SF-36) to assess the QOL; this has been considered as impaired when the global medium score was inferior to 66.7. For the global assessment of functioning and the global assessment of the interference by existing side effects with the patient's daily performance, we have used respectively the Global Assessment of Functioning scale (GAF) and the Udvalg of Kliniske Undersogelser (UKU) side effect rating scale. The positive and negative symptoms added to the general psychopathology were assessed using the Positive and Negative syndrome scale (PANSS). The QOL was impaired in 34% of the cases. The analysis of the scores of the eight dimensions by the scale SF-36 has shown that the most affected dimensions were, in decreasing order: mental health (MH), general health perceptions (GH), vitality (VT), role limitations due to physical health problems (RP) and role limitations due to emotional problems (RE). The standardization revealed that six dimensions were impaired; these were, in decreasing order: mental health (MH), social functioning (SF), role limitations due to emotional problems (RE), role limitations due to physical health problems (RP), general health perceptions (GH) and physical functioning (PF). The standardization has also revealed an impairment of the psychological component, while the physical component has been conserved. After analysis by multiple linear regressions, four factors appeared strongly correlated with the impaired QOL: the professional inactivity, the episodic course with

inter episode residual symptoms, and the presence of side effects moderately influencing the daily performance, and a general psychopathology score for 26 at least. These four factors affected, in decreasing order of importance, social functioning (SF) (related to two factors), general health perceptions (GH) and role limitations due to emotional problems (RE) (each related to one factor). None of the factors appeared to affect the other dimensions: physical functioning (PF), role limitations due to the physical health problems (RP), bodily pain (BP), mental health (MH) and vitality (VT). The bivariate analysis revealed three other factors correlated, to a lesser degree, to the impairment of the QOL: the disorganized sub-type, a score of (GAF) inferior or equal to 30 and the negative type of schizophrenia.

But, Fujimaki K et al, (2012), designed to investigate the relationship between quality of life (QOL) and key indicators for long-term hospital stays among schizophrenia inpatients. A further aim was to elucidate the clinical determinants of QOL among long-stay inpatients. Shortening hospital stays has become a key focus in psychiatric care in recent years. However, patients with schizophrenia account for about 60% of inpatients in psychiatry departments in Japan. The study sample consisted of 217 inpatients with schizophrenia. Age, duration of illness, duration of hospitalization, years of education, body mass index, neurocognitive function, drug-induced extra pyramidal symptoms, involuntary movements, psychiatric symptoms, and dose equivalents of antipsychotics and ant cholinergic agents were used as index factors. Pearson linear correlation and regression analyses were performed to examine the associations between QOL and the above-mentioned factors. Negative symptoms, psychological discomfort, and resistance as rated on the Brief Psychiatric Rating Scale (BPRS) were correlated with all subscale scores of the Japanese version of the Schizophrenia Quality of Life Scale (JSQLS). Stepwise regression showed that negative symptoms, psychological discomfort, and resistance predicted the dysfunction of psycho-social activity score and the dysfunction of motivation and energy score on the JSQLS. This study shows that active treatment for negative symptoms, psychological discomfort, and resistance is recommended to improve QOL among inpatients with schizophrenia.

Where Tang IC & Wu HC (2012), our study explores the influence of self-stigma on the quality of life of mentally disabled people, recent mental illness stigma research has almost exclusively studied community and family responses to the stigmas of mental illness. Too little has been done to understand the current subjective experience of psychiatric patients. Participating in the survey were 100 people diagnosed with schizophrenia. Using Ritsher's Internalized Stigma of Mental Illness Scale, which incorporates alienation, stereotype endorsement, discrimination experience, social withdrawal, and social resistance subscales, along with the standard SF-12, helped us evaluate the subjective experience of mental illness stigma. According to our survey data, self-stigma correlates negatively with all of the quality of life measures except the Internalized Stigma of Mental Illness subscale's 'stigma resistance', which did not correlate significantly. Improved stigma resistance requires an understanding of one's sociocultural background and a strong social network to provide the sense of comfort and security that enables a fulfilling life.

The study by Maat A et al, (2012) this study investigated the influence of social cognition on QOL in schizophrenia. Schizophrenia is associated with poor quality of life (QOL). Whereas the effects of neurocognitive deficits and psychopathology on QOL of schizophrenia patients have recently been elucidated, little is known about social cognitive deficits in this regard. A sample of 1032 patients, 1011 of their siblings, and 552 healthy controls was recruited from the Dutch Genetic Risk and Outcome in Psychosis (GROUP) study. Participants completed a battery of cognitive tests, including social cognitive tests on theory of mind and emotion perception. To assess QOL the World Health Organization QOL Assessment-BREF (WHOQOL-BREF) was used. Schizophrenia symptoms were assessed with the Positive and Negative Syndrome Scale (PANSS). Social cognitive performance was significantly worse in patients compared to siblings and healthy controls. Patients had the poorest QOL, while QOL in healthy controls was better than in siblings. Theory of mind but not emotion perception or neurocognition was associated with QOL in patients, whereas neurocognition was the only significant predictor of QOL in siblings and healthy controls. There was a significant interaction between theory of mind and symptom severity with respect to QOL. Our study indicates that social cognition is associated with QOL in schizophrenia. Theory of mind rather than emotion perception is associated with QOL, and this association is moderated by schizophrenia symptoms. In particular, patients with relatively unimpaired theory of mind and more severe schizophrenia symptoms have poor QOL and could therefore benefit from therapeutic intervention.

In the same field, Brissos et al., (2011) aimed to investigate the relationship between Subjective quality of life (QOL) and psychosocial functioning constitutes important treatment outcomes in schizophrenia patients living in the community. Symptom severity and insight were assessed with the Positive and Negative Syndrome Scale (PANSS) in 76 community schizophrenia patients. Social functioning was measured with the Portuguese version of Personal and Social Performance (PSP) scale, and subjective QOL was measured with the Portuguese version of the WHO Quality of Life Measure-Abbreviated Version (WHOQOL-Brief). The majority of patients were single (78%) and unemployed/inactive (74%). Mean PSP total score was 55.5, and mean scores on WHOQOL-BREF domains ranged from 54.1 to 63.0. Greater symptom severity and worse insight were significantly associated with worse functioning in all PSP domains. Symptoms were more moderately correlated with QOL, with no significant correlations between QOL and positive symptoms and insight levels. Partial correlations controlling for symptom severity revealed no significant associations between social functioning and subjective QOL. Symptom severity may exert a greater influence on social functioning than on subjective QOL; however, social functioning was not associated with subjective QOL. The results suggest these constructs might be independent and should be assessed separately. A broader research approach, with increased attention to social and psychological factors, may help identify treatment targets to improve schizophrenia patients' social functioning and QOL.

Kao et al. (2011) this study tested the Taiwanese version of the World Health Organization Quality of Life-Brief (WHOQOL-BREF) assessment in schizophrenia patients. The WHOQOL-BREF is a cross-cultural and widely used measure for assessing health-related QOL. This brief version of the questionnaire derived from the concepts included in the 100-item WHOQOL questionnaire was adapted for use in Taiwan. Cross-sectional study, 104 patients who met Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition criteria for schizophrenia or schizoaffective

disorder according to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition criteria were recruited and independently interviewed using the Taiwanese version of the WHOQOL-BREF. Patients were also examined using various other scales assessing insight, symptom severity, general psychopathology, and antipsychotic-induced side effects. In addition, we analyzed demographic data, clinical variables, and several self-rating scales as correlates of the Taiwanese version of the WHOQOL-BREF. Results showed that, age, onset of illness, insight measures, symptom severity, general psychopathology, and antipsychotic-induced side effects were all significantly related to the QOL scores. Multiple regression analyses revealed that depressive symptoms, antipsychotic-induced Parkinsonism side effects, hopelessness, and age at illness onset were the 4 strongest predictors of subjective QOL in schizophrenia patients. These variables accounted for 39.2% of the total variance of this QOL model.

The study by Sibitz et al (2011) aimed to test the hypothesis that the social network, stigma and empowerment directly and indirectly by contributing to depression influence the QOL in patients with schizophrenia and schizoaffective disorders. Data were collected on demographic and clinical variables, internalized stigma, perceived devaluation and discrimination, empowerment, control convictions, depression and QOL. Structural equation modeling was applied to examine the impact of the above-mentioned constructs on QOL. The results showed that the influences of the social network, stigma, empowerment and depression on QOL were supported by the structural equation modeling. A poor social network contributed to a lack of empowerment and stigma, which resulted in depression and, in turn, in poor QOL. Interestingly, however, the social network and stigma did not show a direct effect on QOL.

Zahid et al (2010) first to assess the reliability and validity of the questionnaire. Second to highlight the patients' QOL profile in comparison with the results of the European five-nation study, Third, to examine the association of perceived needs for care, caregiver burden, service satisfaction, self-esteem and psychopathology, with three indices of global QOL: total life satisfaction or perceived QOL (PQOL) score; general wellbeing and Cantril's ladder in a Kuwaiti schizophrenia sample. Consecutive outpatients in stable condition and their family caregivers were interviewed with the Lancashire quality of life profile, European version (LQOLP), and measures of needs for care, service satisfaction, caregiver burden and psychopathology. There were 130 patients (66.1% male, mean age 36.8). Majority of the patients (56%) felt satisfied with the nine domains of life investigated, and 44.6% felt "averagely" happy. Their clinical severity was moderate (BPRS-18 = 44.4). In exploratory factor analysis, the original domains were mostly replicated. Reliability indices were significant (>0.7). In stepwise regression analyses, the associations of PQOL were more in number and mostly different from those of general wellbeing and Cantril's ladder. The correlates of PQOL included, social unmet need (8.1% of variance), staff perception of unmet need (10.3%), general satisfaction with services (11.3%), burden of caregiver supervision (3.7%), self-esteem (2.9%) and positive symptoms (2.6%). Of the nine life domains, health was the most important correlate of general wellbeing and Cantril's ladder, indicating the centrality of health status in judgments of subjective QOL. In secondary factor analysis, general wellbeing and Cantril's ladder loaded together, but separately from life domains, implying that these are separable parts of the subjective wellbeing construct.

In addition; Kao & Liu (2010) aims to assess differences in demographic and clinical characteristics correlated with age of illness onset in schizophrenia spectrum disorders. Data were collected from 104 patients with schizophrenia and schizoaffective disorder. Diagnosis was made via structured clinical interviews. Assessments of psychiatric symptoms and social and global functioning were completed. The effect of age of onset on demographic and clinical variables was examined using correlation analyses and binary logistic regression models. We chose 17 years of age as the cut-off for early-onset schizophrenia spectrum disorders based on a recent clinical consensus. We further investigated differences in the severity of psychopathology and other clinical variables between the early- and adult-onset groups. The binary logistic regression analysis showed that age of onset was significantly related to the cognitive component of the Positive and Negative Syndrome Scale (PANSS) and Barratt Impulsiveness Scale (BIS) score. Patients with early onset of schizophrenia spectrum disorders had significantly greater levels of cognitive impairment and higher impulsivity. There were significant differences between several demographic and clinical variables, including the negative symptom component of the PANSS, cognitive component of the PANSS, BIS score, and psychological domain of quality of life (QOL), between patients with early- and adult-onset schizophrenia spectrum disorders, having controlled for the effect of the current age and duration of illness.

Xiang et al., (2010-a) aim to determine the socio-demographic and clinical correlates of the gender of Chinese schizophrenia outpatients and their impact on patients quality of life (QOL), There were 255 clinically stable schizophrenia outpatients were randomly selected in Hong Kong. Counterparts matched according to gender, age, age at onset, and length of illness were recruited in Beijing, China. All of the subjects at both sites were interviewed by the same investigator using standardized assessment instruments. The combined Beijing-Hong Kong sample contained 251 male and 254 female patients. On unvaried analysis more male patients were employed, they had a significantly higher monthly income, and took higher doses of antipsychotic drugs. No difference was found, however, in any of the QOL domains between the genders. On multivariate analysis being employed, taking a higher dose of antipsychotic drugs, having more severe extra pyramidal side-effects, and a higher score on the physical domain of QOL were independently associated with male gender.

Chou et al., (2010) evaluated the score distributions of the translated S-QOL in terms of ceiling/floor effect, internal consistency, test-retest reliability, and convergent and discriminate validity. To ensure conceptual and semantic equivalence of the S-QOL, the researchers performed both forward translation and back translation, consulted professionals, and completed a pilot trial on college students. Forty-one patients with schizophrenia were recruited. No significant ceiling/floor effects (<20%) were found in subscales of the translated S-QOL. The internal consistency reliabilities were acceptable to good for the whole scale and 7 of the subscales (Cronbach's alpha = 0.71-0.93), but not for the sentimental life subscale (Cronbach's alpha = 0.44). The test-retest reliabilities were moderate to high. The convergent validities were supported by satisfactory correlations among subscales measuring related constructs of the translated S-QOL and those of the SQLS-R4, WHOQOL-BREF, and RESE. Discriminates validity was demonstrated between groups with different numbers of episodes and hospitalization. The S-QOL Chinese (Taiwan) version was found to have good psychometrics and is suggested as a feasible choice of disease-specific measure for capturing HRQOL in patients with schizophrenia.

Ueoka et al (2010) examine the relationship between quality of life (QOL) and cognitive dysfunction in schizophrenia. Subjects were 61 stabilized outpatients. Quality of life and cognitive function were assessed using the Quality of Life Scale (QLS) and the Brief Assessment of Cognition in Schizophrenia (BACS), respectively. Clinical symptoms were evaluated with the Positive and Negative Syndrome Scale (PANSS) and the Calgary Depression Scale for Schizophrenia (CDSS). The BACS composite score and the BACS Verbal memory score were positively correlated with the QLS total score and two subscales. The BACS Attention and speed of information processing score had positive correlation with the QLS total and all the subscales scores. The PANSS Positive and Negative syndrome scores also had significant correlations with the QLS total score and all of the subscales. In addition, the CDSS score was negatively correlated with the QLS total score and some of the subscales. Stepwise regression analysis showed that the BACS Attention and speed of information processing score was an independent predictor of the QLS total score but it was less associated with the QLS than the PANSS Negative syndrome score and the CDSS score. The results suggest that negative and depressive symptoms are important factors on patients' QOL and also support the view that cognitive performance provides a determinant of QOL in patients with schizophrenia.

Saarni et al (2010) aimed to compare the loss of subjective QOL and utility-based health-related quality of life (HRQOL) associated with psychotic disorders. A representative sample of 8028 Finns was screened for psychotic disorders and bipolar I disorder. Lifetime psychotic disorders were diagnosed using the Structured Clinical Interview for DSM-IV and/or case records. Health-related quality of life was measured with EQ-5D and 15D, and QOL was measured with a 10-point scale. The results found that schizoaffective disorder was associated with the largest losses of QOL and HRQOL, with bipolar I disorder associated with similar or smaller losses than schizophrenia. Current depressive symptoms explained most of the losses.

Zahid & Ohaeri (2010) explored the following research question: How does the relationship between domains of care giving (as in the Involvement Evaluation Questionnaire--IEQ-EU) and caregiver psychic distress on the one hand, and caregiver's/patient's socio-demographics, clinical features and indices of quality of care, on the other hand, compare with the pattern in the literature?., Consecutive family caregivers of outpatients with schizophrenia were interviewed with the IEQ-EU. Patients were interviewed with measures of needs for care, service satisfaction, quality of life (QOL) and psychopathology. The results found that there were 121 caregivers (66.1% men, aged 39.8). The IEQ domain scores (total: 46.9; tension: 13.4; supervision: 7.9; worrying: 12.9; and urging: 16.4) were in the middle of the range for the EU data. In regression analyses, higher burden subscale scores were variously associated with caregiver lower level of education, patient's female gender and younger age, as well as patient's lower subjective QOL and needs for hospital care, and not involving the patient in outdoor activities. Disruptive behavior was the greatest determinant of global rating of burden.

Rocca et al (2010) aimed to examine the relative contributions of psychotic symptomatology such as delusions and hallucinations, and insight to quality of life (QOL) in a sample of outpatients with stable schizophrenia. Eighty-three consecutive outpatients with stable schizophrenia were enrolled in a cross-sectional study. We

performed a path analysis using a multiple regression technique to assess the specific effect of psychotic symptomatology on QOL and the possible mediating role of insight. Findings suggested that (i) psychotic symptomatology was negatively correlated to both QOL and the two dimensions of insight we considered (awareness of symptoms and attribution of symptoms); (ii) the impact of insight on QOL was not uniform as attribution of symptoms positively predicted QOL, while the effect of symptom awareness was negative; (iii) when the mediation effect of insight was taken into account, psychotic symptomatology was no longer a significant predictor of QOL on its own.

Galuppi et al., (2010) aimed to assess the relationship between Quality of life (QOL) and global functioning and symptoms in outpatients with Schizophrenia. The study was carried out on the outpatients with schizophrenia attending a Community Mental Health Centre in 2008. Each patient completed the WHO QOL Instrument - Brief and was administered the Brief Psychiatric Rating Scale-24 to assess psychiatric symptoms and the VADO Personal and social Functioning Scale to assess the level of functioning. Results showed an intermediate satisfaction on the overall QOL and health; these data can be juxtaposed to the national standard sample rates. QOL resulted positively associated to personal and social functioning, while it was negatively related to psychiatric symptoms.

Xiang et al. (2010-b) the aim of the study was to assess the changes in the quality of life (QOL) of Chinese schizophrenia patients and to identify their predictors over a 1-year follow-up. A cohort of 116 schizophrenia patients was recruited, and their socio-demographic and clinical characteristics including psychotic and depressive symptoms, drug-induced side effects, social functioning, and QOL were assessed with standardized rating instruments. The patients received standard psychiatric care and were followed up for 1 year. The study found that the psychotic and depressive symptoms, extra pyramidal side effects, and QOL domains of physical are functioning, role limitations due to physical problems, social functioning, and role limitations due to emotional problems all improved significantly. Social functioning was a predictor of baseline QOL and change at 1-year follow-up.

Kao et al. (2010) Research of suicidal behavior in individuals with schizophrenia has often suggested that clinical characteristics and symptoms likely influence a patient's suicidal risk. However, there is a lack of research describing the link between patients' subjective quality of life (SQOL) and suicidal behavior in non-Western countries. Therefore, the current study attempts to explore how schizophrenia patients' SQOL and their suicidal behavior are related in a Taiwanese sample. In this study, 102 schizophrenia outpatients were investigated using the Taiwanese World Health Organization Quality of Life Schedule-Brief Version (WHO-QOL-BREF-TW), several Beck-Related symptom rating scales, and the Positive and Negative Syndrome Scale (PANSS) for psychopathology. These patients were also evaluated for suicidal risk using the critical items of the Scale for Suicide Ideation (SSI) and lifetime suicide attempts.

Statistical analyses, including independent sample t tests, analysis of covariance (ANCOVA) and logistic stepwise regression models were completed. Compared with the non-suicidal group, suicidal patients had significantly lower scores in SQOL

domains. The differences in social domain remained significant after adjusting for depressive symptoms. In multiple logistic regression analyses, level of depressive and psychotic symptoms increased and poor social and psychological SQOL were significant contributors to suicidal behavior. Having removed depressive symptoms from the model, only dissatisfaction with social SQOL was associated with heightened suicidal risk.

Adewuya & Makanjuola (2009) aimed to examine the subjective QOL of Nigerian out-patients with schizophrenia and its correlates. 99 Out-patients with Schizophrenia completed the WHOQOL-BREF as a measure of their subjective QOL. Sociodemographic, illness related and medication related details were also obtained. The result found Overall, 21 patients (21.2%) were categorized as having 'good' and 36 (36.4%) as having 'poor' subjective QOL. 'Poor' subjective QOL correlated with anxiety/ depression symptoms, co morbid medical problems, unemployment and poor social support.

The objectives of the study by Ohaeri et al (2009) were to highlight the pattern of satisfaction with aspects of life circumstances among a nationwide sample of Kuwaiti subjects, using the 26-item WHOQOL Instrument (WHOQOL-Brief); and to establish the QOL domain normative values; and to highlight the relationship of QOL with socio-demographic variables and scores on scales for anxiety and depression; and to assess the relationship between domains of QOL. A one-in-three systematic random proportionate sample of consenting Kuwaiti nationals attending the large cooperative stores and municipal government offices in the six governorates, were requested to complete the questionnaires anonymously. The results found that there were 3,303 participants (44.8% m, 55.2% f, mean age 35.4, SD 11.9; range, 16-87). As a group, they were only moderately satisfied with their life circumstances. The domain scores for physical health (14.6 or 66.2%) and psychological health (14.2 or 63.9%) were at the middle of the range for the WHO 23-country report, while the social relations (15.0 or 68.8%) and environment (14.5 or 65.4%) domains were at the upper end of the WHO range. The general facet (GF) score (15.5 or 71.6%) was significantly higher than all domains. Diminished QOL was significantly associated with female gender, older age, social disadvantage, and high scores on anxiety/depression. Depression was the most important predictor of QOL, accounting for over 77% of total variance.

Study by Ohaeri & Awadalla (2009) aimed to assess in a nationwide sample of Kuwaiti subjects the reliability and validity of the World Health Organization Quality of Life (WHOQOL-BREF), a shorter version of the widely used QOL assessment instrument that comprises 26 items in the domains of physical health, psychological health, social relationships, and the environment. A one-in-three systematic random proportionate sample of consenting Kuwaiti nationals attending large cooperative stores and municipal government offices in the six governorates completed the Arabic translation of the questionnaire. The indices assessed included test-retest reliability, internal consistency, item internal consistency (IIC), item discriminate validity (IDV), known-groups and construct validity. The results found that there were 3303 participants (44.8% males, 55.2% females, mean age 35.4 years, range 16 to 87 years). The intra-class correlation for the test-retest statistic and the internal consistency values for the full questionnaire and the domains had a Cronbach's alpha =0.7. Of the 24 items that constitute the domains, 21 met the IIC requirement of correlation =0.4 with the

corresponding domain, while 16 met the IDV criterion of having a higher correlation with their corresponding domain than other domains. Domain scores discriminated significantly between well and sick groups. In the factor analysis, four strong factors emerged with the same construct as in the WHO report.

Discussion of the studies on second axis:

The researcher will discuss previous studies of schizophrenia and quality of life; the first one is objective previous studies, second, tools were used in these studies, the third is samples of the studies, and the fourth is about the results of the previous studies, as the following:

Objective of the previous studies:

Some of the researches assessed the changes in the quality of life (QOL) of schizophrenic patients such as (Péntek M et al, 2012), (Galuppi et al., 2010), (Xiang et al. 2010-b), (Kao & Liu 2010).

But in (Zouari L et al, 2012) , (Chou et al., 2010), and (Ohaeri & Awadalla 2009), Evaluated the quality of life (QOL) in outpatients with schizophrenia, and to identify factors correlated to an impaired QOL among them.

In addition, (Maat A et al, 2012), (Fujimaki K et al, 2012) and (Brissos et al., 2011) investigated the influence of social cognition on QOL in schizophrenia. Schizophrenia is associated with poor quality of life (QOL).

(Xiang et al., 2010-a), (Kao et al., 2011), and Ueoka et al (2010), aim to determine and examined the socio-demographic among schizophrenia patients and their impact on patients quality of life.

Tools of the previous studies:

Some researches used questionnaire to collected data and information (Demographics, disease severity, functional ability, general health status) as (Péntek M et al,2012), (Kao et al. ,2011), (Ueoka et al ,2010) , (Zahid & Ohaeri ,2010) and (Ohaeri & Awadalla 2009).

Another researches use multi scale in schizophrenia and QOL, (Zouari L et al, 2012), (Tang IC & Wu HC, 2012), (Maat A et al, 2012), (Brissos et al., 2011), (Sibitz et al,2011) and (Zahid et al, 2010).

In (Fujimaki K et al, 2012) and (Xiang et al.,2010-b) assess variable such as Age, duration of illness, duration of hospitalization, years of education, body mass index, neurocognitive function, drug-induced extra pyramidal symptoms, involuntary movements, psychiatric symptoms, and dose equivalents of antipsychotics and ant cholinergic agents were used as index factors between QOL .

Samples of the previous studies:

In the field of samples of the previous studies, the study samples were ranged between small samples as the study of (Zouari L et al, (2012), (Tang IC & Wu HC,2012), (Zahid et al,2010), (Kao & Liu 2010), (Ueoka et al, 2010)and (Rocca et al,2010), Participating in the survey were about 100 people diagnosed with schizophrenia

However the medium samples in the studies (Fujimaki K et al, 2012), (Galuppi et al., 2010), (Xiang et al., 2010-a), the study sample consisted of about 200 patients with schizophrenia.

While; some studies had large samples as studies of by (Maat A et al, 2012), (Xiang et al., 2010-a), (Saarni et al, 2010) and (Ohaeri et al, 2009) consist sample between more than 500 participation.

Results of the previous studies:

In the previous studies of (Péntek M et al, 2012) and (Maat A et al, 2012), founded Schizophrenia leads to notable deterioration in health related to quality of life and induce high costs to society, mainly due to the productivity loss of the patients.

While; (Saarni et al, 2010) and (Zahid & Ohaeri, 2010) found that schizoaffective disorder was associated with the largest losses of QOL and HRQOL, with bipolar I disorder associated with similar or smaller losses than schizophrenia. Current depressive symptoms explained most of the losses.

But, (Fujimaki K et al, 2012) and (Brissos et al., 2011) showed that active treatment for negative symptoms, psychological discomfort, and resistance is recommended to improve QOL among inpatients with schizophrenia.

3.4 Hypotheses of the study:

1. There are no significant statistical differences in the QOL due to age (20-29 years) (30-39 years) (40-45 years).

2. There are no significant statistical differences in the QOL due to gender (male-female)?

3. There are no significant statistical differences in the QOL due to residence (North- Gaza- Middle- Khanyounis- Rafah).

4. There are no significant statistical differences in the QOL due to type of housing (Concrete- Aspest).

5. There are no significant statistical differences in the QOL due to state of housing (Owned- Rent).

6. There are no significant statistical differences in the QOL due to marital status (Single- Married- Widow- Divorced).

7. There are no significant statistical differences in the QOL due to family size (Less than 2 members_3-5 member_ More than 5 members).

8. There are no significant statistical differences in the QOL due to education level (Primary-preparatory-secondary-university).

9. There are no significant statistical differences in the QOL due to job (Work-not work) .

10. There are no significant statistical differences in the QOL due to income (Less than500 NIS_ 500-999 NIS_ 1000-1500 NIS_ more than 1500 NIS).

11. There are no significant statistical differences in the QOL due to history of illness (2000 year or less_2001 year -2005 year_2006 year -2011 year).

12. There are no significant statistical differences in the QOL due to time of admission (0 time_1-5 time_6-10 time More than 10 time).

13. There are no significant statistical differences in the QOL due to complication of illness (yes _ No).

14. There are no significant statistical differences in the QOL due to side effect medication (yes _ No).

Chapter Four

Methodology

Chapter Four

Methodology

4.1 Introduction:

This chapter describes the methodology that was used in this research. The adopted methodology to accomplish this study uses the following techniques: information about the study design, study population, study sample, Eligibility of the study, Personal data, ethical consideration and the instrument that was used in data collection, pilot study.

4.2 Research flowchart:

- **The first phase** of the research thesis proposal included identifying and defining the problems and establishment objective of the study and development research plan.
- **The second phase** of the research included a summary of the comprehensive literature review. Literatures on claim management were reviewed.
- **The third phase** of the research included a field survey which was conducted with the **quality of life among schizophrenic patients in Gaza governorates**
- **The fourth phase** of the research focused on the modification of the questionnaire design, through distributing the questionnaire of pilot study, the purpose of the pilot study was to test and prove that the questionnaire questions are clear to be answered in a way that helps to achieve the target of the study. The questionnaire was modified based on the results of the pilot study.
- The **fifth phase** of the research focused on distributing questionnaire. This questionnaire was used to collect the required data in order to achieve the research objective, and discussion.
- **The sixth phase** of the research was data analysis and. Statistical Package for the Social Sciences; (SPSS) was used to perform the required analysis. The final phase includes the conclusions and recommendations.
- **160** questionnaires were distributed to the research population and **137 questionnaires** are received.

4.3 Research design:

Is a descriptive- analytical design to conduct this study. This study focused on the quality of life including its different domain (physical- psychological- social- environmental) among schizophrenic patient in Gaza governorates, in six different setting.

Shows the methodology flowchart, which leads to achieve the research objective.

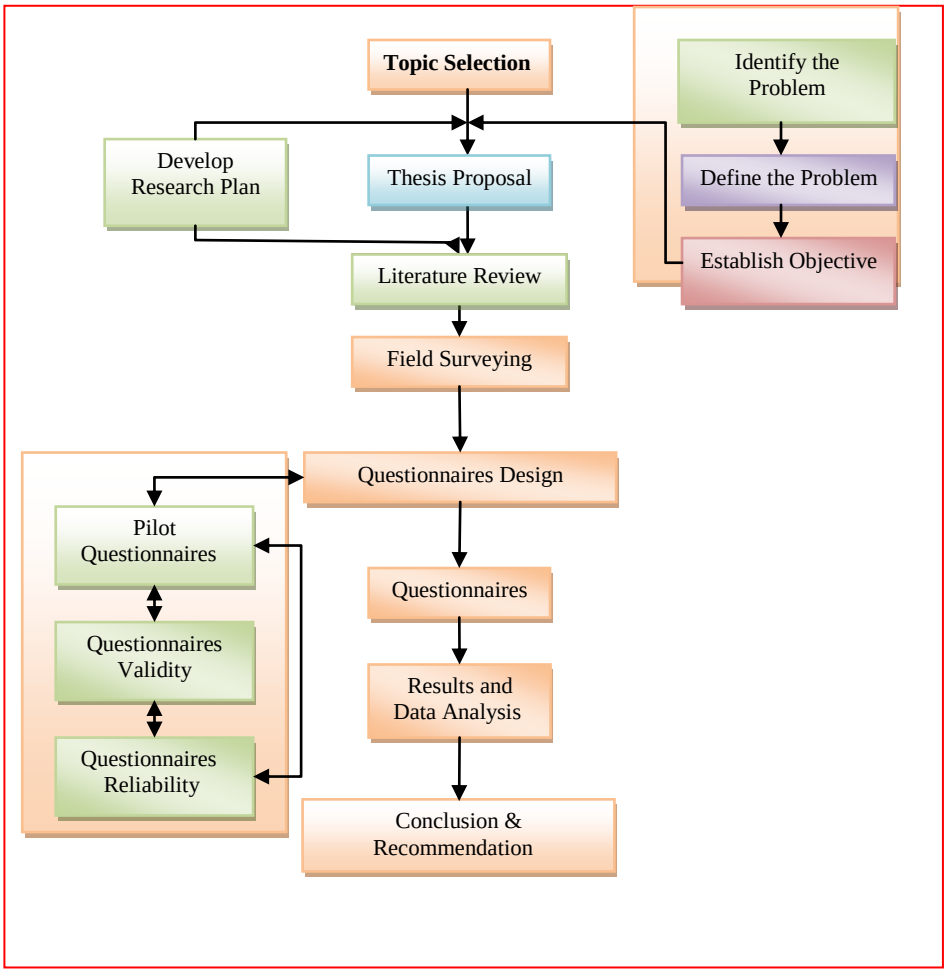


Figure (2) illustrates the methodology flow chart.

4.4 Data Collection Methodology:

In order to collect the needed data for this research , I used the secondary resources in collecting data such as books, journals, statistics and web pages , in addition to preliminary resources that were not available in secondary resources through distributing questionnaires on study population in order to get their opinions about the quality of life among schizophrenic patients in Gaza governorates Research methodology depend on the analysis of data on the use of descriptive analysis, and use the main program (SPSS).

4.5 Population and sample

4.5.1 Study population:

All schizophrenic patient males and females in age (20-45) years attending psychiatric primary care centers in the Gaza governorates' the study population include 955 schizophrenic patients attending in 6 psychiatric primary care centers in 2010-2011, this include patient seeking treatment and visit the clinic frequently , in psychiatric primary care centers in Gaza strip.

4.5.2 Study sample:

A stratified random sample of 160 participants (schizophrenic patient) were to be drawn from population lists who were attending to 6 psychiatric primary care centers 137 of the participant were respondent on the study tools. And 23 of participants were refused complete of questioner so response rate 85.6%.

4.5.3 Setting of the study:

The study was conducted in community mental health clinics in Gaza strip in six community mental health clinics include:

- Abu Shbak in north Gaza strip.
- Alsorany in Gaza.
- West Gaza.
- Al Nusirat in middle Gaza strip.
- Khan Younis in south Gaza strip.
- Rafah in south Gaza strip

4.6 Instrument:

4.6.1 Demographic information sheet:

A questionnaire was administered for the entire study subject, saving time and analysis of data was difficult. Questionnaire was administered by the interviewer, to ensure the professionality, accuracy, and seriousness of the data collection process. Data was collected from files and records.

The sheet was developed after extensive review of the available literature on schizophrenia and QOL. This demographic information sheet has covered the following areas of interest, the questionnaire divided of three parts:

- **sociodemographic data**: age, sex, residence, type of housing, state of housing marital status, number of family, level of education, job, and income,
- **Clinical factors:** history of illness, time of admission, complication of illness, and side effect of medication.
- **WHOQOL questionnaire**: physical domain, social domain, psychological domain, environmental domain.

4.6.2 Questionnaire content:

The questionnaire was provided with a covering letter explaining the purpose of the study, the way of responding, the aim of the research and the security of the information in order to encourage a high response. The questionnaire included multiple choice questions: which were widely used in the questionnaire, the variety in these questions aims first to meet the research objectives, and to collect all the necessary data that can support the discussion, results and recommendations in the research.
The section in the questionnaire was verifying the objectives in this research related to quality of life among schizophrenic patients in Gaza governorates**.** And all questions follow lekart scale as the following:

Table No. (4.1)
Lekart Scale

Level	Vary bad	Bad	No bad ,No good	good	Vary good
Level	Very dissatisfied	Dissatisfied	Intermediate	Satisfied	Very satisfied
Level	Vary few	Few	Intermediate	much	Too much
Level	Does not have	Little	Intermediate	much	Vary much
Level	Never	Rarely	Often	Vary often	always
Scale	1	2	3	4	5

4.6.3 Quality of life questionnaire:

According to The World Health Organization Quality of Life (WHOQOL) project was initiated in 1991. The aim was to develop an international cross-culturally comparable quality of life assessment instrument. It assesses the individual's perceptions in the context of their culture and value systems, and their personal goals, standards and concerns. The WHOQOL instruments were developed collaboratively in a number of centers worldwide, and have been widely field-tested. The WHOQOL-BREF instrument comprises 26 items, which measure the following broad domains: physical health, psychological health, social relationships, and environment. The WHOQOL-BREF is a shorter version of the original instrument that may be more convenient for use in large research studies or clinical trials (WHO, 2004).

Mas-Expósito et al. (2011) this study shows that the WHOQOL-BREF has good reliability and validity, and suggests that it is suitable for the assessment of QOL in patients with schizophrenia.

WHOQOL-BREF questionnaire will be cited from WHO website for measurement of quality of life which was designed for this purpose, questions were arranged a logical sequence to facilitate the interview. The average of interview was about 15-20 minutes, the question answers were ranked from 1-5 scores. The researcher filled the questioner according to patients answer.

Quality of life questionnaire-short version (WHOQOL-BREF) the WHOQOL-BREF is an abbreviated version of the WHOQOL-100 quality of life assessment. It produces scores for four domain (physical health, psychological, social relationship and environmental) related to quality of life. It also contains another tow questions are examined separately: question No. 1 asked about individuals overall perception of quality of life, and question No. 2 asked about individuals overall perception of their health. The four domain scores denote an individual's perception of quality of life each particular domain. Domain scores are scaled in a positive direction (i.e. higher scores denote higher quality of life). The mean score of items within each domain is used to calculate the domain score. Mean scores are then multiplied by 4 in order to make domain scores comparable with the scores used in the WHOQOL-100 (WHO, 1996)

Table No. (4.2)
Domain of quality of life

Domains	Facets incorporated within domain
Physical health	Activities of daily living Dependence on medicinal substance and medical aids Energy and fatigue Mobility Pain and discomfort Sleep and rest Work capacity
Psychological	Bodily image and appearance Negative feeling Positive feeling Self-esteem Spiritual / religion / personal beliefs Thinking, learning, memory and concentration

Social Relationship	Personal relationship Social support Sexual activity
Environmental	Financial resources Freedom, physical safety and security Health and social care: accessibility and quality Home environment Opportunities for acquiring new information and skills Participation in and opportunities for recreation Physical environment (pollution / noise / traffic / climate) Transport

4.6.4 Strength of the WHOQOL instruments:

- WHOQOL instruments were developed internationally and cross-culturally: the WHOQOL was developed simultaneously in 15 field centers around the world. The important aspect of quality of life and ways of asking about quality of life were drafted on the basis of 90 statements made by patient with a range of diseases, by well people and by health professionals in a variety of culture. The instrument was rigorously tested to assess its validity and reliability in each of the field centers and is currently being tested to assess responsiveness to change. The WHOQOL-BREF, an abbreviated 26 items version of the WHOQOL-100, was developed using data from the field-trial version of the WHOQOL-100. The WHOQOL instrument can be used in different culture setting, at the same time results are comparable across culture.
- The WHOQOL instrument place primary importance on the perception of the individual: most assessment in medicine was obtained by examinations by health workers and laboratory tests. The WHOQOL instrument, by focusing on individuals own views of their well being, provide a new perspective on disease. For example, that Diabetes involves poor body regulation of blood glucose is well understood, but the effect of the illness on the perception that individuals have of their social relationship, working capacity, and financial status has received little systematic attention. The WHOQOL instruments were tools that will enable this type of research to be carried out. They did not only inquire about the functioning of people with diabetes across a range of area but also how satisfied the patients were with their functioning and with effects of treatment (WHO,1996)

4.6.5 Translation of the WHOQOL-BREF questioner to Arabic:

The international Quality of life assessment project (IQOLA) most recently has established a set of procedure for the translation and psychometric testing of the quality of QOL tools. This process aims to forward translations of the original instrument into the new language, where the two independent translators were met to agree on a common version, which then is translated back into English by two other translators who also were met to agree on their version.
Finally, those agreed upon versions that were compared with the original version, and quality of translation has been related by two or more expert to assure (conceptual equivalence) (colloquial language use) and (clarity) of the translations so that, the quality of the translation is explicitly assessed. A second step involved a piloting phase by applying the translated instrument to a convenient sample of people from the target nation who was then interviewed about the comprehensibility, feasibility and acceptance of the instrument (Shumaker & Berson, 1995).

4.6.6 Rational for using the WHOQOL-BREEF Questionnaire:

- It included health as a major component and it had many dimensions such as physical activity, sexual, sensory, energy, mental health, social activity, spiritual and role function and environmental.
- It was designed to be universal instrument to measure the quality of life and it was used successfully all over the world in order to facilitate the translation and adaptation procedures.
- It has been used successfully by a number of local researchers in their research studies.

4.7 Ethical consideration:

- An approval letter was obtained from the ministry of health, to facilitate data collection procedures. Before starting with the data collection the researcher guaranteed protecting the informants rights considered, and insure confidentiality.
  Every patient in the study will receive a complete explanation about the research purpose and confidentiality.
  The researcher takes the acceptance of patient and consent form by talking and interview of patient.

4.8 Eligibility of the study:

The eligibility of the study consists of inclusion and exclusion criteria.

4.8.1 Inclusion Criteria:

- The researcher was included in this study all schizophrenic patients registered in community mental health clinics with confirm diagnosis of schizophrenia according the DSM IV.
- And the patient follows up and come to community mental health continuous.
- Patients between 20-45 age (males and females).

4.8.2 Exclusion criteria:

- The researcher was exclude all schizophrenic patient treated in non governmental organization
- The researcher was excluding all schizophrenic patient males and females who are less than 20 years.

The researcher was excluding all schizophrenic patients who have chronic co morbid medical condition such as (DM_ HTN _ Asthma….) according to the multi-axial system DSM IV diagnosis

4.9 Pilot Study

Pilot study for the questionnaire was conducted before collecting the results of the sample. It provides a trial run for the questionnaire, which involves testing the wordings of question, identifying ambiguous questions, testing the techniques that used to collected data, and measuring the effectiveness of standard invitation to respondents.

4.9.1 Validity of questioner

The researcher can define the validity of an instrument as a determination of the extent to which the instrument actually reflects the abstract construct being examined. "Validity refers to the degree in which an instrument measures, what it is supposed to be measured". High validity is the absence of systematic errors in the measuring instrument. When an instrument is valid; it truly reflects the concept it is supposed to measure. Achieving good validity required the care in the research design and sample selection. The amended questionnaire was planned by the supervisor and three expertise's in tendering and bidding environments to evaluate the procedure of questions and the method of analyzing the results. The expertise agreed that the questionnaire was valid and suitable enough to measure the purpose that the questionnaire designed for.

4.9.2 Content Validity of the Questionnaire:

Content validity test was conducted by consulting two groups of experts. The first was requested to evaluate and identify whether the questions were agreed with the scope of the items and the extent to which these items reflect the concept of the research problem. The other was requested to evaluate that the instrument used is valid statistically and that the questionnaire was designed well enough to provide relations and tests between variables. The two groups of experts did agree that the questionnaire was valid and suitable enough to measure the concept of interest with some amendments.

4.9.3 Statistical Validity of the Questionnaire:

To insure the validity of the questionnaire, two statistical tests were be applied. The first test is Criterion-related validity tests (Pearson test) which measure the correlation coefficient between each item in the field and the whole field. The second test is structure validity test (Pearson test) that is used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one filed and all the fields of the questionnaire that have the same level of similar scale.

4.9.4 Construct validity:

1) Internal consistency:

Internal consistency of the questionnaire was measured by a scouting sample, which consisted of thirty questionnaires, through measuring the correlation coefficients between each paragraph in one field and the whole filed, Tables No. (4-3) below shows the correlation coefficient and p-value for each field items. As show in the table the p-Values are less than 0.05 or 0.01,so the correlation coefficients of this field are significant at $\alpha = 0.01$ or $\alpha = 0.05$, so it can be said that the paragraphs of this field are consistent and valid to be measure what it was set for.

Table (4.3)
The correlation coefficient between each paragraph in the field and the whole field Factors causes variation orders in Gaza Strip

No.	Question	Pearson Coefficient	p-value
1	How would you rate your quality of life?	0.000	0.782
2	How satisfied are you with your health?	0.001	0.566
3	To what extent do you feel that physical pain prevents you from doing what you need to do?	0.000	0.714
4	How much do you need any medical treatment to function in your daily life?	0.000	0.604
5	How much do you enjoy life?	0.000	0.707
6	To what extent do you feel your life to be meaningful?	0.000	0.786
7	How well are you able to concentrate?	0.000	0.722
8	How safe do you feel in your daily life?	0.001	0.588
9	How healthy is your physical environment?	0.000	0.679
10	Do you have enough energy for everyday life?	0.000	0.660
11	Are you able to accept your bodily appearance?	0.000	0.726
12	Have you enough money to meet your needs?	0.001	0.557
13	How available to you is the information that you need in your day-to-day life?	0.024	0.412
14	To what extent do you have the opportunity for leisure activities?	0.000	0.707
15	How well are you able to get around?	0.001	0.584

16	How satisfied are you with your sleep?	0.001	0.571
17	How satisfied are you with your ability to perform your daily living activities?	0.000	0.629
18	How satisfied are you with your capacity for work?	0.012	0.452
19	How satisfied are you with yourself?	0.000	0.748
20	How satisfied are you with your personal relationships?	0.007	0.479
21	How satisfied are you with your sex life?	0.000	0.730
22	How satisfied are you with the support you get from your friends?	0.003	0.528
23	How satisfied are you with the conditions of your living place?	0.000	0.744
24	How satisfied are you with your access to health services?	0.000	0.712
25	How satisfied are you with your transport?	0.000	0.744
26	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	0.000	0.721

4.9.5 Discriminate validity:

The researcher was selected the higher 25% of scores with size equal 8 persons and I selected the lowest 25% of scores with size equal 8 persons , and I used the t test to test if there is difference between the lowest and highest groups of scores, and table no.(4-4)showed that the significance level equal 0.000 which was less than 0.05, and the value of t test equal 7.540 which was greater than 2.14, that means there is a difference between the lowest and highest groups of scores which means that's scale are consistent and valid to be measured what was it set for.

Table No. (4.4)
Independent Samples Test for a difference between
The lowest and highest groups of scores

Research problem	Group	N	Mean	Std. Deviation	T	P-value
Quality of life among schizophrenic patients in Gaza governorates	Highest	8	3.072	0.394	7.540	0.000
	Lowest	8	1.928	0.170		

Critical value of t at df "14" and significance level 0.05 equal 2.14

4.9.6 Reliability of the questioner:

Reliability of an instrument is the degree of consistency with which it measures the attribute in which it is supposed to be measured. The test is repeated to the same sample of people on two occasions and then compares the scores obtained by computing a reliability coefficient. For the most purposes, reliability coefficient above 0.7 was considered satisfactory. Period of two weeks to a month was recommended between two tests Due to complicated conditions that the contractors was facing at the time being, it was too difficult to ask them to responds to our questionnaire twice within short period. The statistician's explained that, overcoming the distribution of the questionnaire twice to measure the reliability can be achieved by using Kronpakh Alpha coefficient and Half Split Method through the SPSS software.

4.9.7 Half Split Method:

This method depends on finding Pearson correlation coefficient between the means of odd rank questions and even rank questions of each field of the questionnaire. Then, correcting the Pearson correlation coefficients can be done by using Spearman Brown correlation coefficient of correction. The corrected correlation coefficient (consistency coefficient) is computed according to the following question.
Consistency coefficient = 2r/(r+1), where r is the Pearson correlation coefficient. The normal range of corrected correlation coefficient 2r/(r+1) is between 0.0 and + 1.0 As shown in Table No.(4-5) the general reliability for all items equal 0.9128, and the significant (α) is less than 0.05 so all the corrected correlation coefficients are significance at α = 0.05. It can be said that according to the Half Split method, the dispute causes group are reliable.

Table (4.5)
Split-Half Coefficient method

Section	No. of items	Pearson correlation coefficient	p-value
Quality of life among schizophrenic patients in Gaza governorates	26	0.8395	0.9128

4.9.8 Cronbach's Coefficient Alpha

This method was used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient alpha value between 0.0 and + 1.0, and the higher values reflects a higher degree of internal consistency. As shown in Table No. (4-6)The Cronbach's coefficient alpha for all items equal 0.8972 this range is considered high; the result ensures the reliability of the questionnaire.

Table (4.6)
Cronbach's Alpha for Reliability

Section	No. of items	Reliability Coefficients
Quality of life among schizophrenic patients in Gaza governorates	26	0.8972

Statistical Manipulation:

To achieve the research goal, researcher used the statistical package for the Social Science (SPSS) for Manipulating and analyzing the data.

Statistical methods are as follows:
- Frequencies and Percentile
- Alpha- Cronbach Test for measuring reliability of the items of the questionnaires
- Person correlation coefficients for measuring validity of the items of the questionnaires.
- Spearman –Brown Coefficient
- Relative importance Index formula
- One sample t test
- Independent samples t test
- One way ANOVA test

4.10 Personal data:

4.10.1 Table No. (4.7)Distribution of the sample according to the age:

Showed that 29.9% from the sample ware aged "20-29 years", and 44.5% from the sample ware aged "30-39 years", and 25.5% from the sample ware aged "40-45 years".

Table No. (4.7)
Distribution of Age

Age	Frequency	Percentages
20-29 years	41	29.9
30-39 years	61	44.5
40-45 years	35	25.5
Total	137	100

4.10.2 Table No. (4.8)Distribution of the sample according to the Gender:

Showed that 72.3% from the sample of "male", and 27.7% from the sample of "Female".

Table No. (4.8)
Distribution of Gender

Gender	Frequency	Percentages
Male	99	72.3
Female	38	27.7
Total	137	100

4.10.3 Table No. (4.9)Distribution of the sample according to the Address:

Showed that 21.9% from the sample live in " North " , and 32.8% from the sample live in " Gaza " , and 16.8% from the sample live in " Middle " , and 10.9% from the sample live in " Khanyounis " , and 17.5% from the sample live in " Rafah " .

Table No.(4.9)
Distribution of residence

Residence	Frequency	Percentages
North	30	21.9
Gaza	45	32.8
Middle	23	16.8
Khanyounis	15	10.9
Rafah	24	17.5
Total	137	100

4.10.4 Table No. (4.10) distribution the sample according to the Type of housing:

Showed that 62.8% from the sample the type of their housing "Concrete", and 37.2% from the sample the type of their housing "Aspest ".

Table No.(4.10)
Distribution of Type of housing

Type of housing	Frequency	Percentages
Concrete	86	62.8
Aspest	51	37.2
Total	137	100

4.10.5 Table No. (4.11) distribution of sample according to the State of housing:

Showed that 76.6% from the sample of their home are"owned" and 23.4% from the sample of their home are "Rent"

Table No.(4.11)
Distribution of State of housing

State of housing	Frequency	Percentages
Owned	105	76.6
Rent	32	23.4
Total	137	100

4.10.6 Table No. (4.12) distribution of the sample according to the Marital status:

Showed that 33.6% from the sample were " Single " , and 41.6% from the sample were" Married " , and 3.6% from the sample were" Widow " , and 21.2% from the sample were " Divorced " .

Table No.(4.12)
Distribution of Marital status

Social status	Frequency	Percentages
Single	46	33.6
Married	57	41.6
Widow	5	3.6
Divorced	29	21.2
Total	137	100

4.10.7 Table No. (4.13) distribution of the sample according to the Number of family member:

Show that 9.5 % from the sample ranges number of its members "Less than 2 members" and 43.8% from the sample ranges number of its members "3-5 members", and 46.7% from the sample ranges number of its members "More than 5 members

Table No. (4.13)
Distribution of Number of family member

Number of family member	Frequency	Percentages
Less than 2 members	13	9.5
3-5 members	60	43.8
More than 5 members	64	46.7
Total	137	100

4.10.8 Table No.(4.14)distribution of the sample according to the Level of education:

It Showed that 28.5% from the sample of the Level of education " Primary " , and 37.2% from the sample of the Level of education " preparatory " , and 25.5% from the sample of the Level of education " secondary " , and 8.7% from the sample of the Level of education " university " .

Table No. (4.14)
Distribution of Level of education

Level of education	Frequency	Percentages
Primary	39	28.5
Preparatory	51	37.2
Secondary	35	25.5
University	12	8.7
Total	137	100

4.10.9 Table No. (4.15) distribution of the sample according to the job:

It showed that 28.5% from the sample "Works", and 71.5% from the sample "does not work ".

Table No. (4.15)
Distribution of job

Job	Frequency	Percentages
Works	39	28.5
does not work	98	71.5
Total	137	100

4.10.10 Table No. (4.16)Distribution of the sample according to the Income:

It Showed that 45.3% from the sample of monthly income " Less than500 NIS " , and 35.8% from the sample of monthly income " from500-999 NIS " , and 13.9% from the sample of monthly income " from1000-1500 NIS " , and 5.1% from the sample of monthly income " more than 1500 NIS " .

Table No. (4.16)
Distribution of Income

Income	Frequency	Percentages
Less than500 NIS	62	45.3
From500-999 NIS	49	35.8
From1000-1500 NIS	19	13.9
More than 1500 NIS	7	5.1
Total	137	100

4.10.11 Table No. (4.17)Distribution of the sample according to the History of illness

It Showed that 20.4% from the sample the History of illness from "2000 year or less " , and 29.9% from the sample the History of illness from "2001 year -2005 year " , and 49.6% from the sample the History of illness from " 2006 year -2011 year " .

Table No. (4.17)
Distribution of History of illness

History of illness	Frequency	Percentages
2000 year or less	28	20.4
2001 year -2005 year	41	29.9
2006 year -2011 year	68	49.6
Total	137	100

4.10.12 Table No. (4.18)Distribution of the sample according to the Times of admission

Table No.(4.18)showed 43.8% from the sample ranges number entering the hospital "0 time " , and 36.5% from the sample ranges number entering the hospital "1-5 times " , and 14.6% from the sample ranges number entering the hospital " 6-10 times " , and 5.1% from the sample ranges number entering the hospital " More than 10 times ".

Table No. (4.18)
Distribution of Times of admission

Times of admission	Frequency	Percentages
0 time	60	43.8
1-5 time	50	36.5
6-10 time	20	14.6
More than 10 time	7	5.1
Total	137	100

4.10.13 Table No. (4.19) Distribution of the sample according to the complication results from illness:

It showed that 85.4% from the sample agree that there were complication results from illness, but 14.6% from the sample agree that there are no complication results from illness

Table No. (4.19)
Is there are any complication result from illness

Is there are any complication result from illness	Frequency	Percentages
Yes	117	85.4
No	20	14.6
Total	137	100

4.10.14 Table No. (4.20) distribution of the sample according to the side effects of medication:

Table No. (4.20) showed 82.5% from the sample had side effects of medication, but 17.5% from the sample did not have side effects of medication

Table No. (4.20)
Are there any side effects of medication?

Are there any side effects of medication	Frequency	Percentages
Yes	113	82.5
No	24	17.5
Total	137	100

Chapter Five

Results & Discussions

Chapter Five

Results & Discussion

5.1 Introduction

In this chapter, the researcher was seeking to achieve the objectives of the study, the necessary data has been collected through the application of the measure; which was detailed in separate methods and procedures, on a sample of schizophrenic patients, and was unloading the data, filter and the data was analyzed statistically to test the hypothesis.

The researcher used the statistical Software packages for the Social Sciences (SPSS) to analyze the data, and to reach the results by testing the hypotheses, the researcher used a number of statistical techniques in the analysis.

5.2 Normality of Data Testing (One Sample K-S Test):

One Sample K-S test was used to identify if the data follows the normal distribution or not, this test is applied necessary in case of testing hypotheses using the parametric methods that suits the data if it said to be normally distributed, moreover, this test is used when the size of the sample is greater than 50.
Results of the test table (5.1), clarifies that the calculated p-value is greater than the significant level which is 0.05 (p-value>0.05), this implies that the data follows the normal distribution, and so the parametric Tests must be used in testing the hypotheses of the study.

Table (5.1)
Testing normality using One Sample K-S test

Section	Items No.	Statistic	P-value
Physical	7	1.060	0.211
Psychology	6		
Social	3		
Environment	8		
Total	24		

5.3 WHOQOL analysis:

The results of analysis of WHOQOL questionnaire was divided into six items, general quality of life scores, satisfaction with health, physical domain, psychological domain, social domain, and environmental domain.

5.3.1 General quality of life scores and satisfaction with health

It is a clear in table (5.2) when the researcher asked the subject to rate their Quality of life and the satisfaction about health, among schizophrenic patients in Gaza governorates, the researcher had computed the followings: the percentages, the percentage weights, means and STD dev for the following two questions, for the entire sample that contains the schizophrenic patients in Gaza governorates. Related results are shown at the table (5.2).

41.6% of the total sample rate their quality of life bad, and 27.0% rate it as very bad, the mean was 2.12, This indicates that the sample have negative expectation about their quality of life.

54.0% of the total samples are dissatisfied with their health, and 22.6% rates are very dissatisfied with their health, the mean was 2.09, this indicates that the samples are dissatisfied with their health.

The result of my study were different from (Chou et al, 2010),) (Rocca et al, 2010), (Galuppi et al, 2010) and (Zahid et al, 2010) studies were previous studies showed an elevation in quality of life among schizophrenic patients. This showed the interest of community institutions various types in this type of patients. Results showed an intermediate satisfaction on the overall QOL and health; these data can be juxtaposed to the national standard sample rates. QOL resulted positively associated to personal and social functioning, while it was negatively related to psychiatric symptoms. And in the same time the study of (Kao et al, 2011), (Sibitz et al, 2011) and (Saari et al, 2010) agree with my study these studies stated that quality of life did not get into the degree we wished if we compared it with other studies. The researcher imagines that the economic status is the main cause of this difference. The financial status of those countries is generally reflected upon members of society either they were patients, handicapped or other. Vice versa Palestine in considered one of the growing countries. Its economic state is bad. This condition is passively reflected on healthy people, How about schizophrenics.

Table (5.2)
General quality of life scores and satisfaction with health

	Before two months	Very bad	bad	Not bad Not good	good	Very good	mean	Std. Dev	Percentage weight
1-	How would you rate Your quality of life?	27.0	41.6	24.1	7.3	0.0	2.12	0.892	42.4
	Before two months	Very dissatisfied	Dissatisfied	ntermediate	Satisfied	Very satisfied	mean	Std. Dev	Percentage weight
2-	How satisfied are your health?	22.6	54.0	15.3	8.0	0.0	2.09	0.836	41.8

5.3.2 The effect of schizophrenia on the quality of life domain

Quality of life consist of four main domain (physical, psychological, social, and environmental), it is clear from table (5.3) that all domain scores ranging from 35.4% to 51.5%.

5.3.2.1 Physical domain

The results showed that the physical domain was 42.3, and the (mean = 14.8, SD=4.0). The researcher founded that physical health mainly affect schizophrenic patient, and considered that main cause of lowering quality of life, When pain affects quality of life. And urges them to take medicines to continue their daily life, the study of, (Péntek Mal, 2012), (Zouari Let al, 2012) and (Kao et al, 2011), agreed with my study, Those studies showed that schizophrenia leads of noticeable deterioration in quality of life connected with physical health and cost high costs of society that is related to helplessness of patients.

In (Zouari L et al, 2012) finding the professional inactivity, the episodic course with inters episode residual symptoms, the presence of side effects moderately influencing the daily performance, and a general psychopathology. These four factors affected, in decreasing order of importance, social functioning (related to two factors), general health perceptions and role limitations due to emotional problems (each related to one factor). None of the factors appeared to affect the other dimensions: physical functioning, role limitations due to the physical health problems, bodily pain, mental health and vitality**.**

5.3.2.2 Psychological domain

The results showed that the psychological domain was 40.8, and the (mean = 12.2, SD=3.7). The researcher believes that psychological health in patients with schizophrenia is the problem of its high importance as it may reach the patient to stop the continuation of life on the one hand and negatively affect his physical on the other hand and this was confirmed by the theoretical framework which shows psychological problems in the form of symptoms which are used in the diagnosis of schizophrenia the positive symptoms**.** The most common positive symptoms include hallucinations and delusions. Hallucinations cause a person to hear voices or, less commonly, to see things that do not exist. People living with schizophrenia also commonly experience delusions, which means they believe ideas that to others are clearly false, such as that people are reading their thoughts or that they can control other people's minds. Medications are crucial to symptom control, and other psychological strategies are also gaining acceptance to augment their impact (Boulevard & Arlington, 2008:2).

The study of (Fujimaki K et al,2012), (Zahid et al, 2010), and (Kao& Liu,2010) agree with my study, This studies shows that active treatment for positive symptoms, psychological discomfort, and resistance is recommended to improve QOL among inpatients with schizophrenia**.**

5.3.2.3 Social domain

The results showed that the psychological domain was 35.4, and the (mean = 5.3, SD=2.2). The study of (Brissos et al, 2011) ،(Xiang et al., 2010-b) and (Ohaeri et al, 2009) Agree with my results suggested these constructs might be independent and should be assessed separately. A broader research approach, with increased attention to social and psychological factors, may help identify treatment targets to improve schizophrenia patients' social functioning and QOL. Several studies have explored social and community factors that may be related with this disorder. Again, few studies of early-onset cases are available but some longitudinal research provides important data on the impact of environmental stress on schizophrenic expression.

Researchers see that healthy family communication styles characterized by flexibility, acceptance, and support are associated with decreased risk of psychotic episodes. If the family system is adaptable, greater social support will be available for all family members. Although the presentation of schizophrenia is universal across cultures, rate of diagnosis varies considerably. Research in the United States and England has revealed that minority groups receive a diagnosis of schizophrenia significantly more often than majority ethic groups. In the United States, African Americans and Puerto Ricans are more likely to be diagnosed with schizophrenia than whites, suggesting that misdiagnosis may be a factor.

5.3.2.4 Environmental domain

The results showed that the environmental domain get heights score (mean = 20.6; SD=4.2) with Weighted Rate equals 51.5%. The study of (Xing et al, 2010-b) agree with my study where it reported that the more the environmental domain was better, the best health condition was also better. And this was confirmed by (Ohaeri et al, 2099) were results stressed that 65% of the sample was satisfied with their personal life condition this justified that those patient were cared about and creating better environment for their life's, and (Kirkbride JB et al, 2012) added that social and environmental factor played an important role toured progress of schizophrenia so, if surround factors was improved control of many problems might be solved

Table (5.3)
Quality of life in all domain

Domains	No. of Item	Total Score	Mean	Std. Deviation	Weighted Rate %	Order
Physical	7	35	14.8	4.0	42.3	2
Psychological	6	30	12.2	3.7	40.9	3
Social	3	15	5.3	2.2	35.4	4
Environmental	8	40	20.6	4.2	51.5	1
Quality of life	26	130	57.1	12.8	44	-

5.4 Testing Hypotheses and Discussions:

The main Hypothesis of the study is:

There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life scale among schizophrenic patients in Gaza governorates due to the demographic variables: (age ,Gender, Address, Type of housing, State of housing ,Social status, Income, Times of admission, Occupation, Number of family member , History of illness, Level of education).

5.4.1 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life scale among schizophrenic patients in Gaza governorates due to the Gender (male, female).

In table (5.4), the researcher used two independent samples T-Test to differences between the degrees of quality of life towards male and females. There were no statistical significant differences (P-value>0.05) between the means of the following Quality of life Domains (Environmental, Total Quality of life) for schizophrenic patients in Gaza governorates due to the Gender, Which means that the males and females schizophrenic patients have the same degrees Quality of life domains that are mentioned before.

For the Physical domain, There were statistical significant differences between the males and females schizophrenic patients (t-value=-2.13, P-value<0.05) in Gaza Governorates, the differences were toward the females, which means that the females schizophrenic patients have higher degrees in the Physical domain than the males schizophrenic patients. The mean of males was 14.3 while for the female was 15.9.

For the Psychological domain, There were statistical significant differences between the males and females (t-value=-2.33, P-value<0.05) schizophrenic patients in Gaza Governorates, the differences were toward the females, which means that the females schizophrenic patients have higher degrees in the Psychological domain than the males schizophrenic patients. The mean of males was 11.8 while for the female was 13.4.

For the Social domain, There were statistical significant differences between the males and females (t-value=-2.08, P-value<0.05) schizophrenic patients in Gaza Governorates, the differences were toward the females, which means that the females schizophrenic patients have higher degrees in the Social domain than the males schizophrenic patients. The mean of males was 5.1 while for the female was 5.9.

Researcher thinks that Palestinians' culture support the ones who suffers from physical or mental disease either they men or women because they think that disease is something from God, also there is social support for the patients we they are male or female (Zouari L et al, 2012) and (Xiang et al, 2010-a) assert that there is no difference between the tow sexes in schizophrenics patient in the quality of life. That’s asset that all nations have the same took to the disease regardless of sex or race.

Table (5.4)
Independent Samples Test for showing the difference in the quality of life domains among males and females schizophrenic patients in Gaza governorates

Domain	Gender	N	Mean	Std. Deviation	T-test	P-value
Physical	Male	99	14.3	3.7	-2.13	0.04*
	Female	38	15.9	4.5		
Psychological	Male	99	11.8	3.5	-2.33	0.02*
	Female	38	13.4	3.9		
Social	Male	99	5.1	1.7	-2.08	0.04*
	Female	38	5.9	3.0		
Environmental	Male	99	20.7	4.0	0.38	0.71//
	Female	38	20.4	4.6		
Quality of life	Male	99	55.8	11.6	-1.93	0.06//
	Female	38	60.5	15.0		

** P-value <0.01 *P-value<0.05 // P-value>0.05 T- table =0.224

5.4.2 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life scale among schizophrenic patients in Gaza governorates due to the age.

To test the hypothesis I used the One-way ANOVA test to figure out the differences between the degrees of Quality of life domains of schizophrenic patients towards the age Categories. and the result illustrated in table no. (5.5)

The table (5.5) showed that there were no significant differences between the degrees of all of Quality of life domains of schizophrenic patients towards the age Categories (P-value>0.05), which means that schizophrenic patients with all ages levels have the same degrees of the Quality of life domains that are mentioned.

The researcher sees that the age effects on the quality of life of any patient, in Palestinian society, when a child becomes sick, he gets special care more than adults more than ages. This study proves that there are no differences between age and quality of life. The result of this study does not agree with the researchers expectations. While this study agree with (Xiang et al, 2010-a), where this study does not find any differences in age effect on the quality of life of schizophrenic patients.

(Kao et al.,2011) and (Zahid & Ohaeri ,2010) found that age effects quality of life of schizophrenia especially on the quality of life of the youngest ones they are more popular on the life because they are influenced by everything whether positively or negatively.

Table (5.5)
One way ANOVA test for differences in the quality of life domains among schizophrenic patients in Gaza governorates toward the age

Domain	Source	Sum of Squares	d. f.	Mean Square	F-value	Sig.
Physical	Between Groups	4.0	2	2.0	0.1	0.9//
	Within Groups	2172.9	134	16.2		
	Total	2176.9	136			
Psychological	Between Groups	10.6	2	5.3	0.4	0.7//
	Within Groups	1851.4	134	13.8		
	Total	1862.0	136			
Social	Between Groups	4.4	2	2.2	0.5	0.6//
	Within Groups	632.7	134	4.7		
	Total	637.1	136			
Environmental	Between Groups	20.3	2	10.2	0.6	0.6//
	Within Groups	2350.2	134	17.5		
	Total	2370.5	136			
Quality of life	Between Groups	0.6	2	0.3	0.01	1.0//
	Within Groups	22187.7	134	165.6		
	Total	22188.4	136			

** P-value <0.01 *P-value<0.05 // P-value>0.05 f-table= 3.35

5.4.3 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the residence.

To test this hypothesis, the researcher used One-way ANOVA test to figure out the differences between the degrees of Quality of life domains of schizophrenic patients towards the address Categories (North, Gaza, Middle, Khanyounis, Rafah), as shown at the following table (5.6) showed that the p-value equal 0.000 which is less than 0.05 and the value of F test equal 8.0 which is greater than the value of critical value which is equal 3.35, that's means There are statistical differences about the quality of life among schizophrenic patients in Gaza governorates due to Address at significant level $\alpha = 0.05$. And from Scheffe Multiple Comparisons table no.(5.7) show that there is difference between " Khanyounis " , and " Middle " and the difference in favor of " Middle " and there is a difference between " North " , and " Rafah " and the difference in favor of " Rafah " . and there is a difference between " North " , and " Middle " and the difference in favor of " Middle " .

The Researcher sees that the place of residence affects on the quality of life in patient with schizophrenia, people who live in cities different from those who live in villages and the population of grouted area more than the population of remote area where the results of the population of khanyounis and the middle for the middle, where the number of population of middle is greeter than the number of khanyounis. Psychological and social support with the population of khanyounis is greeter than the population of middle. The comparison between north and south (Rafah) proves the preference to Rafah where its Rafah residential area and extended area remote somewhat from the boarder with Israeli which reflect the area north vary close, either when the comparison was between the north and middle, the preference was the middle reign because the middle area more populated area of north.

Table No. (5.6)

One way ANOVA test for difference in point of view up to the quality of life among schizophrenic patients in Gaza governorates due to residence

Field	Source	Sum of Squares	Df	Mean Square	F value	Sig. (P-Value)
Physical domain	Between Groups	1.650797	4	0.413	2.839	0.027
	Within Groups	19.19175	132	0.145		
	Total	20.84254	136			
psychology domain	Between Groups	3.242247	4	0.811	4.097	0.004
	Within Groups	26.11379	132	0.198		
	Total	29.35604	136			
Social domain	Between Groups	2.050395	4	0.513	0.984	0.418
	Within Groups	68.74117	132	0.521		
	Total	70.79157	136			
Environment domain	Between Groups	11.07362	4	2.768	13.928	0.000
	Within Groups	26.23615	132	0.199		
	Total	37.30977	136			
All domain	Between Groups	3.811014	4	0.953	8.006	0.000
	Within Groups	15.70816	132	0.119		
	Total	19.51917	136			

** P-value <0.01 *P-value<0.05 // P-value>0.05 f-table= 3.35

Table No.(5.7)
Scheffe Multiple Comparisons due to residence

Difference	North	Gaza	Middle	Khanyounis	Rafah
North		-0.128	-0.440*	-0.024	-0.362*
Gaza	0.128		-0.313	0.104	-0.234
Middle	0.440*	0.313		0.416*	0.078
Khanyounis	0.024	-0.104	-0.416*		-0.338
Rafah	0.362*	0.234	-0.078	0.338	

5.4.4 There are no statistical significant differences at (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the Type of housing.

To test this hypothesis, the researcher used two-independent sample T-test to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the type of housing (Concrete, Aspest) at significant level a=0.05 , as shown at the following table (5.8).

There were no statistical significant differences (P-value>0.05) between the means of all Quality of life Domains (Physical, Psychological, Social, Environmental, Total Quality of life) for schizophrenic patients in Gaza governorates due to the type of housing, Which means that the schizophrenic patients that either lives in Concrete or Aspest houses have the same degrees Quality of life.

The researcher thinks that the type of housing affects quality of life of the individuals, the quality of life of people who live in aspest house different from the quality of life of those who live in asbestos house or concrete house. That's for people who do not suffer from any disease but this study proves that patients with schizophrenia do not influence by the quality of housing and that's do not effect on there quality of life.

Table (5.8)

Independent Samples Test for difference in point of view up the quality of life among schizophrenic patients in Gaza governorates due to Type of housing

Domain	Type of house	N	Mean	Std. Deviation	t-value	Sig. (2-tailed)
Physical	Concrete	86	15.0	4.2	0.85	0.40\\
	Aspest	51	14.4	3.7		
Psychological	Concrete	86	12.5	4.0	0.93	0.35\\
	Aspest	51	11.8	3.1		
Social	Concrete	86	5.4	2.2	0.46	0.65\\
	Aspest	51	5.2	2.2		
Environmental	Concrete	86	20.6	4.3	-0.12	0.91\\
	Aspest	51	20.7	3.9		
Quality of life	Concrete	86	57.7	13.7	0.62	0.53\\
	Aspest	51	56.3	11.2		

** P-value <0.01 *P-value<0.05 // P-value>0.05 T- table =0.224

5.4.5 There are no statistical significant differences at (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the State of housing.

To test this hypothesis, the researcher used two-independent sample T-test to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the state of housing (hire, rented) at significant level a = 0.05, as shown at the following table (5.9)

There were no statistical significant differences (P-value>0.05) between the means all of Quality of life Domains (Physical, Social, Total Quality of life) for schizophrenic patients in Gaza governorates due to the type of housing. This means that schizophrenic patients that either live in Owned or Rented houses have the same degrees Quality of life domains that are mentioned.

For the Psychological domain, There were statistical significant differences between the schizophrenic patients (t-value=-2.0, P-value<0.05) in Gaza Governorates due to state of housing, the differences were toward the schizophrenic patients that live in Owned houses, which means that these patients have higher degrees in the Psychological domain than the patients that live in rented houses. The mean of patients that live in Owned houses was 12.6 while for the rented houses was 11.2.

For the Environmental domain, There were statistical significant differences between the schizophrenic patients (t-value=-2.09, P-value<0.05) in Gaza Governorates due to state of housing, the differences were toward the schizophrenic patients that live in Owned houses, which means that these patients have higher degrees in the Environmental domain than the patients that live in rented houses. The mean of patients that live in Owned houses was 21.9 while for the mean for rented houses was 19.3

The researcher thinks that the state of housing effects on quality of life of the patients, the quality of life of patient who live in rent house differs from the quality of life of those who live in owned house, because the patients who live in rent house spend amount of his money to continue living in that house and that's effect badly on his psychological health.

Table (5.9)
Independent Samples Test for difference in point of view up the quality of life among schizophrenic patients in Gaza governorates due to State of housing

Domain	State of house	N	Mean	Std. Deviation	t-value	Sig. (2-tailed)
Physical	Owned	105	14.9	4.1	0.46	0.64//
	Rented	32	14.5	3.6		
Psychological	Owned	105	12.6	3.8	2.00	0.05*
	Rented	32	11.2	3.4		
Social	Owned	105	5.3	2.3	0.26	0.79//
	Rented	32	5.2	1.8		
Environmental	Owned	105	21.0	3.9	2.09	0.04*
	Rented	32	19.3	4.7		
Quality of life	Owned	105	58.1	12.7	1.56	0.12//
	Rented	32	54.1	12.8		

** P-value <0.01 *P-value<0.05 // P-value>0.05 T- table =1.981

5.4.6 There are no significant statistical differences at (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the marital status.

To test this hypothesis, the researcher used one way ANOVA to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the Social status (Single, Married, Widow, Divorced) at significant level a =0.05 as shown at the following table (5.10)

The below table showed that there were no significant differences (P-value>0.05) between the means of all the quality of life domains: (Physical, Psychological, Social, Environmental, total Quality of life), of schizophrenic patients in Gaza governorates towards the Social status Categories, which means that schizophrenic patients with all social statuses have the same degrees of the Quality of life.

The study proves that there are no statistical differences between social state and quality of life among schizophrenic patient. These studies agree with (Rocca et al, 2010) that social state does not effect on the quality of life of schizophrenic patient, but in another

point of view (Ohaeri et al, 2009) finds that the social state effect on the quality of life of schizophrenic patient where the quality of life of the married patients is higher than of others.

Table (5.10)
One way ANOVA test for difference in the quality of life domains among schizophrenic patients in Gaza governorates due to Marital status

Domain	Source	Sum of Squares	df	Mean Square	F	Sig.
Physical	Between Groups	53.7	3	17.90	1.12	0.34//
	Within Groups	2123.2	133	15.96		
	Total	2176.9	136			
Psychological	Between Groups	33.4	3	11.12	0.81	0.49//
	Within Groups	1828.6	133	13.75		
	Total	1862.0	136			
Social	Between Groups	9.9	3	3.30	0.70	0.55//
	Within Groups	627.2	133	4.72		
	Total	637.1	136			
Environmental	Between Groups	4.5	3	1.50	0.08	0.97//
	Within Groups	2366.0	133	17.79		
	Total	2370.5	136			
Quality of life	Between Groups	225.0	3	74.99	0.45	0.71//
	Within Groups	21963.4	133	165.14		
	Total	22188.4	136			

** P-value <0.01 *P-value<0.05 // P-value>0.05 f-table=2.67

5.4.7 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the Number of family member.

To test this hypothesis, the researcher used one way ANOVA to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the number of family members at significant level a =0.05, as shown at the following table (5.11)

The below table showed that there were no significant differences (P-value>0.05) between the means of all the quality of life domains: (Physical, Psychological, Social, Environmental, total Quality of life), of schizophrenic patients in Gaza governorates towards the number of family members, which means that the degrees of the Quality of life domains don't affected by the varieties of the number of family members for the schizophrenic patients in Gaza governorates.

The researcher thinks that there is a grate relationship between the quality of life of people in the family where whenever the number of people in the family increase care of the patient people in that family increase. In anther point of view reports, the number of people in the family does not affect will quality of life because the health care that presented to the patients is for free. But the number of people in the family effect negatively on the quality of life if the patient is considered as heavy load.

Table (5.11)
One way ANOVA test for difference in the quality of life domains among schizophrenic patients in Gaza governorates due to the Number of family member

Domain	Source	Sum of Squares	df	Mean Square	F-value	Sig.
Physical	Between Groups	0.19	2	0.10	0.01	0.99//
	Within Groups	2176.67	134	16.24		
	Total	2176.86	136			
Psychological	Between Groups	2.80	2	1.40	0.10	0.90//
	Within Groups	1859.18	134	13.87		
	Total	1861.99	136			
Social	Between Groups	6.89	2	3.44	0.73	0.48//
	Within Groups	630.24	134	4.70		
	Total	637.12	136			
Environmental	Between Groups	50.58	2	25.29	1.46	0.24//
	Within Groups	2319.91	134	17.31		
	Total	2370.50	136			
Quality of life	Between Groups	19.02	2	9.51	0.06	0.94//
	Within Groups	22169.34	134	165.44		
	Total	22188.36	136			

** P-value <0.01 *P-value<0.05 // P-value>0.05 f-table=3.06

5.4.8 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the level of education.

To test this hypothesis, the researcher used one way ANOVA to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the education level categories: (Primary, preparatory, secondary, university), at significant level a = 0.05, as shown at the following table (5.12)

The below table showed that there were no significant differences (P-value>0.05) between the means of all the quality of life domains: (Physical, Psychological, total Quality of life), of schizophrenic patients in Gaza governorates towards the educational level Categories, which means that schizophrenic patients with all qualifications have the same degrees of the Quality of life domains that are mentioned

For the social domain, there were statistical significant differences between the degrees of social domain (F-test=2.8, P-value<0.05) of schizophrenic patients towards the educational level, Scheff'e test in table (5.12) was used to figure out the differences in between the categories of qualification. The test showed that the significant differences were toward those schizophrenic patients that are university educated; this means that they have the highest degrees of the social domain than the schizophrenic patients that have any other qualification.

For the Environmental domain, there were statistical significant differences between the degrees of Environmental domain (F-test=2.8, P-value<0.05) of schizophrenic patients towards the educational level, Scheff'e test in table (5.13) showed that the significant differences were toward those schizophrenic patients that are university educated; this means that they have the highest degrees of the Environmental domain than the schizophrenic patients that have any other qualification.

The study had statistical differences in social domain and environmental domain for the benefit of social change where the relation for the benefit of highly educated people while this study doesn't find any relationship between the variable as a whole. The reason is that the educated person is more integrated into society and has more understanding of his illnesses than other quality of life is in increasingly noticed. This was confirmed by the study (Fujimaki K et al, 2012) where they found that the number of years of education affect the quality of life of schizophrenic patients

Table (5.12)
One way ANOVA test for difference in the quality of life domains among schizophrenic patients in Gaza governorates due to Level of education

Domain	Source	Sum of Squares	Df	Mean Square	F-value	Sig.
Physical	Between Groups	28.5	3	9.50	0.59	0.62//
	Within Groups	2148.4	133	16.15		
	Total	2176.9	136			
Psychological	Between Groups	50.3	3	16.77	1.23	0.30//
	Within Groups	1811.7	133	13.62		
	Total	1862.0	136			
Social	Between Groups	38.8	3	12.93	2.87	0.04*
	Within Groups	598.3	133	4.50		
	Total	637.1	136			
Environmental	Between Groups	181.2	3	60.39	3.67	0.01**
	Within Groups	2189.3	133	16.46		
	Total	2370.5	136			
Quality of life	Between Groups	1036.4	3	345.48	2.17	0.09//
	Within Groups	21151.9	133	159.04		
	Total	22188.4	136			

** P-value <0.01 *P-value<0.05 // P-value>0.05 f-table=2.67

Table (5.13)
Shows the results of Scheff'e multiple comparisons for the differences of quality of life in terms of the qualification categories

Domain	Educational level	N	mean	Primary	Preparatory	Secondary	University
Social	Primary	39	5.13	1	1.00\\	0.99\\	0.07\\
	preparatory	51	5.06		1	0.97\\	0.05*
	secondary	35	5.29			1	0.13\\
	university	12	7.00				1
Environmental	Primary	39	19.87	1	0.99\\	0.41\\	0.06\\
	preparatory	51	19.88		1	0.36\\	0.05*
	secondary	35	21.49			1	0.50*
	university	12	23.58				1

** P-value <0.01 *P-value<0.05 // P-value>0.05

5.4.9 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the job.

To test this hypothesis, the researcher used two Independent Samples T-test to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the occupation categories: (working, not working), at significant level **α=0.05** , as shown at the following table (5.14)

The below table showed that there were no statistical significant differences (P-value>0.05) between the means of all Quality of life Domains (Physical, Psychological, Social, Environmental, Total Quality of life) for schizophrenic patients in Gaza governorates due to the occupation. Which means that the schizophrenic patients that either working or not working have the same degrees Quality of life.

The researcher found this result not acceptance because the economic status depends on occupation in improvement QOL. These results disagree with (Péntek M et al, 2012) study said the patients with schizophrenia are high cost and productivity

Table (5.14)
Independent Samples Test for difference in the quality of life domains among schizophrenic patients in Gaza governorates due to job

Domain	Occupation	N	Mean	Std. Deviation	t-value	Sig. (2-tailed)
Physical	Working	39	15.2	3.6	0.82	0.42//
	Not working	98	14.6	4.1		
Psychological	Working	39	12.9	3.9	1.29	0.20//
	Not working	98	12.0	3.6		
Social	Working	39	5.5	1.9	0.70	0.48//
	Not working	98	5.2	2.2		
Environmental	Working	39	21.7	4.5	1.93	0.06//
	Not working	98	20.2	4.0		
Quality of life	Working	39	59.8	12.8	1.54	0.13//
	Not working	98	56.1	12.7		

** P-value <0.01 *P-value<0.05 // P-value>0.05 T- table =1.99

5.4.10 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the Income.

To test this hypothesis, the researcher used one way ANOVA to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the income (NIS) categories: (Less than500, from500-999, from1000-1500, more than 1500), at significant level **α=0.05** , as shown at the following table (5.15)

The below table showed that there were no statistical significant differences (P-value>0.05) between the means of all Quality of life Domains (Physical, Psychological, Social, Environmental, Total Quality of life) for schizophrenic patients in Gaza governorates due to the income. Which means that the schizophrenic patients with any income, have the same degrees Quality of life

Because the family and social support of patient who have the disease by support money and socioeconomic support present and the NGOS support this patients, The study of (Xiang et al., (2010-a) disagree with my study they showed conduct by the monthly income significant effect on QOL.

Table (5.15)
One way ANOVA test for difference in the quality of life domains among schizophrenic patients in Gaza governorates due to the Income (NIS)

Domain	Source	Sum of Squares	Df	Mean Square	F-value	Sig.
Physical	Between Groups	11.1	3	3.69	0.23	0.88//
	Within Groups	2165.8	133	16.28		
	Total	2176.9	136			
Psychological	Between Groups	69.1	3	23.03	1.71	0.17//
	Within Groups	1792.9	133	13.48		
	Total	1862.0	136			
Social	Between Groups	17.7	3	5.91	1.27	0.29//
	Within Groups	619.4	133	4.66		
	Total	637.1	136			
Environmental	Between Groups	101.8	3	33.93	1.99	0.12//
	Within Groups	2268.7	133	17.06		
	Total	2370.5	136			
Quality of life	Between Groups	718.5	3	239.50	1.48	0.22//
	Within Groups	21469.9	133	161.43		
	Total	22188.4	136			

** P-value <0.01 *P-value<0.05 // P-value>0.05 f-table=2.67

5.4.11 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the History of illness.

To test this hypothesis, the researcher used one way ANOVA to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the history of illness categories, at significant level α=0.05 , as shown at the following table (5.16).

The below table showed that there were no statistical significant differences (P-value>0.05) between the means of all Quality of life Domains (Physical, Psychological, Social, Environmental, Total Quality of life) for schizophrenic patients in Gaza governorates due to the history of illness. This means that the schizophrenic patients with illness histories have the same degrees of Quality of life.

The researcher expected this result because schizophrenic patients suffer from same signs and symptoms concerning those who are newly diagnosis and those diagnoses since years. Schizophrenia patient suffer from same signs and symptoms such as negative symptoms (withdrawal, Apathy,) and positive symptoms (hallucination, delusion). This study disagree with study conduct by (Kao & liu (2010) showed that age of onset was significantly effect on QOL.

Table (5.16)
One way ANOVA test for differences in the quality of life domains among schizophrenic patients in Gaza governorates due to History of illness

Domain	Source	Sum of Squares	df	Mean Square	F-value	Sig.
Physical	Between Groups	11.8	2	5.88	0.36	0.70\\
	Within Groups	2165.1	134	16.16		
	Total	2176.9	136			
Psychological	Between Groups	21.5	2	10.76	0.78	0.46\\
	Within Groups	1840.5	134	13.73		
	Total	1862.0	136			
Social	Between Groups	7.5	2	3.76	0.80	0.45\\
	Within Groups	629.6	134	4.70		
	Total	637.1	136			
Environmental	Between Groups	29.9	2	14.94	0.86	0.43\\
	Within Groups	2340.6	134	17.47		
	Total	2370.5	136			
Quality of life	Between Groups	256.4	2	128.19	0.78	0.46\\
	Within Groups	21932.0	134	163.67		
	Total	22188.4	136			

** P-value <0.01 *P-value<0.05 \\ P-value>0.05 f-table=3.16

5.4.12 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the Times of admission.

To test this hypothesis, the researcher calculated Pearson's Correlation Coefficients to figure out the relation between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates and the number of admissions, at significant level α=0.05 , as shown at the following table (5.17)

The below table showed that there were no statistical significant relation between all of Quality of life Domains (P-value>0.05) for schizophrenic patients in Gaza governorates and the number of admissions. This means that the schizophrenic patients with all admissions have the same degrees of Quality of life.

The researcher support this result cause of stigma for family and society and that's why some patients stay at home for long time, and finally broad to hospital when there condition highly deterioration. A lot of patients do not come to the hospital by there family because is negative symptoms and because they do not make problem to other such as aggressive, violence.

Table (5.17)

Pearson's Correlations Coefficient to test for the relation between the quality of life domains among schizophrenic patients in Gaza governorates and Times of admission

Domain	R	Sig
Physical	-0.09	0.31//
Psychological	-0.02	0.77//
Social	-0.08	0.38//
Environmental	0.04	0.66//
Quality of life	-0.04	0.67//

** P-value <0.01 *P-value<0.05 // P-value>0.05

5.4.13 There are no statistical significant differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the complication results from illness.

To test this hypothesis, the researcher used two Independent Samples T-test to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the complication result from illness categories: (Yes, No), at significant level α=0.05, as shown at the following table(5.18)

For the Physical domain, There were statistical significant differences between the schizophrenic patients (t-value=-4.7, P-value<0.01) in Gaza Governorates due to having Complication result from illness, the differences were toward the schizophrenic patients that don't have Complication result from illness, which means that these patients have higher degrees in the Physical domain than the patients that have Complication result from illness. The mean of patients that have Complication result from illness was 12.6 while for these who don't have 18.8. For the Psychological domain, There were statistical significant differences between the schizophrenic patients (t-value=-4.7, P-value<0.01) in Gaza Governorates due to having Complication result from illness, the differences were toward the

schizophrenic patients that don't have Complication result from illness, which means that these patients have higher degrees in the Psychological domain than the patients that have Complication result from illness. The mean of patients that have Complication result from illness was 11.6 while for these who don't have 15.6.

- For the Social domain, There were statistical significant differences between the schizophrenic patients (t-value=-4.3, P-value<0.01) in Gaza Governorates due to having Complication result from illness, the differences were toward the schizophrenic patients that don't have Complication result from illness, which means that these patients have higher degrees in the Social domain than the patients that have Complication result from illness. The mean of patients that have Complication result from illness was 5.0 while for these who don't have 7.1.

- For the Environmental domain, There were statistical significant differences between the schizophrenic patients (t-value=-4.3, P-value<0.01) in Gaza Governorates due to having Complication result from illness, the differences were toward the schizophrenic patients that don't have Complication result from illness, which means that these patients have higher degrees in the Environmental domain than the patients that have Complication result from illness. The mean of patients that have Complication result from illness was 20.1 while for these who don't have 23.6.

For the total Quality of life, There were statistical significant differences between the schizophrenic patients (t-value=-5.5, P-value<0.01) in Gaza Governorates due to having Complication result from illness, the differences were toward the schizophrenic patients that don't have Complication result from illness, which means that these patients have higher degrees in the Quality of life than the patients that have Complication result from illness. The mean of patients that have Complication result from illness was 59.9 while for these who don't have 70.3.

This study agrees with a study conducted by (Ueoka et al (2010) the result showed that negative and depressive symptoms were important factors effect on QOL.
This study agrees with study conducted by (Maat A et al, 2012) showed sever schizophrenia symptoms have poor QOL. The researcher agrees this result because negatively complication of disease affects of patient and the patient is not able to do daily activity this affect QOL.

Table (5.18)

Independent Samples Test for difference in the quality of life domains among schizophrenic patients in Gaza governorates due to complication results from illness

Domain	Complication result from illness	N	Mean	Std. Deviation	t-value	Sig. (2-tailed)
Physical	Yes	117	14.2	3.5	-4.7	0.001**
	No	20	18.4	4.8		
Psychological	Yes	117	11.6	3.3	-4.7	0.001**
	No	20	15.6	4.4		
Social	Yes	117	5.0	1.9	-4.3	0.001**
	No	20	7.1	2.9		
Environmental	Yes	117	20.1	4.1	-3.6	0.001**
	No	20	23.6	3.6		
Quality of life	Yes	117	54.9	11.1	-5.5	0.001**
	No	20	70.3	14.2		

** P-value <0.01 *P-value<0.05 // P-value>0.05 t-table=1.98

5.4.14 There are no significant statistical differences (significant level α=0.05) in the degrees of the quality of life domains among schizophrenic patients in Gaza governorates due to the side effects of medication.

To test this hypothesis, the researcher used two Independent Samples T-test to figure out the differences between the degrees of Quality of life domains of schizophrenic patients in Gaza governorates towards the side effects of medication categories: (Yes, No), at significant level α=0.05 , as shown at the following table (5.19)

The below table showed that there were no statistical significant differences (P-value>0.05) between the means of the Physical Domain for schizophrenic patients in Gaza governorates due to having side effects of medication. This means that the schizophrenic patients who have side effects of medication and who don't have, both of them the same degrees of Physical Domain.

- For the Psychological domain, There were statistical significant differences between the schizophrenic patients (t-value=-2.8, P-value<0.01) in Gaza Governorates due to having side effects of medication, the differences were toward the schizophrenic patients that don't have side effects of medication, which means that these patients have higher degrees quality of life in the Psychological domain than the patients that have side effects of medication. The mean of patients that have side effects of medication was 11.8 while for these who don't have 14.1.

- For the Social domain, There were statistical significant differences between the schizophrenic patients (t-value=-2.0, P-value<0.05) in Gaza Governorates due to having side effects of medication, the differences were toward the schizophrenic patients that don't have side effects of medication, which means that these patients have higher degrees quality of life in the Social domain than the patients that have side effects of medication. The mean of patients that have side effects of medication was 5.1 while for these who don't have 6.1.

- For the Environmental domain, There were statistical significant differences between the schizophrenic patients (t-value=-3.1, P-value<0.01) in Gaza Governorates due to having side effects of medication, the differences were toward the schizophrenic patients that don't have side effects of medication, which means that these patients have higher degrees in the Environmental domain than the patients that have side effects of medication. The mean of patients that have side effects of medication was 20.1 while for these who don't have 23.0.

- For the total Quality of life, There were statistical significant differences between the schizophrenic patients (t-value=-3.1, P-value<0.01) in Gaza Governorates due to side effects of medication, the differences were toward the schizophrenic patients that don't have side effects of medication, which means that these patients have higher degrees in the Quality of life than the patients that have side effects of medication. The mean of patients that have side effects of medication was 55.6 while for these who don't have 64.2.

This study agrees with study conduct by (Zouari L et al, 2012) it showed that side effect influence daily performance. And agree with study conducted by (Kao et al. 2011) which showed antipsychotic induce side effect of medication and effect negatively on quality of life.

The researcher agrees with this result because during working in community mental health and psychiatric hospital the patient complain of the side effect of medication such as sever headache, sedation, over sleep, poor concentration, this symptoms negatively affect on QOL.

Table No. (5.19)
Independent Samples Test for difference in point of view up the quality of life among schizophrenic patients in Gaza governorates due to side effects of medication

Field	side effects of medication	N	Mean	Std. Deviation	t-test	p-value
Physical	1	113	14.5	3.9	-1.6	0.12//
	2	24	16.0	4.2		
Psychological	1	113	11.8	3.6	-2.8	0.01**
	2	24	14.1	3.9		
Social	1	113	5.1	2.0	-2.0	0.05*
	2	24	6.1	2.7		
Environmental	1	113	20.1	4.1	-3.2	0.001**
	2	24	23.0	3.6		
Quality of life	1	113	55.6	12.3	-3.1	0.001**
	2	24	64.2	12.8		

** P-value <0.01 *P-value<0.05 // P-value>0.05

Chapter Six

Conclusion & Recommendations

Conclusion and recommendations

6.1 Introduction:

Schizophrenia is representing in a many places around the world, and it has been a special concern in most countries. Now Schizophrenia is a leading a cause of disability and a high health cost, for health providers, and that authorities have to cope with his challenges.

Schizophrenia was requires changes of structure of mental health care delivery, well resourced interventions, effective coordination between all levels of health organizations, health care agencies, multidisciplinary health care teams as well as patient's advocacy group.

Although, schizophrenia cannot be cured, could be controlled. Its affects QoL and could be minimized and proper management can prevents or delay its long term complications.

It is worth mentioning that, schizophrenia management of need more psychological burden, particularly when behaviors, attitudes, and circumstances of the patient are the key of determinants for achieving medical control which leads to improvement of the quality of their lives.

6.2 Conclusion:

This study is descriptive and analytical study, used to assess QoL among schizophrenic patients in Gaza governorates, the characteristics of the study population were studied, the relationship between socio-demographics and economic status of the subject investigated in correlation with the domains of QoL.

The sample of the study 160 subjects aged between 20-45 years old, the distribution of the sample was according to sex 72.3% male and 27.7% female. 32.8% of the sample living in Gaza. Data was collected by us demographic information sheet and the WHOQOL-BREEF questionnaire.

According to duration of disease 49.6% of the sample had been suffering from 2006-2011, married subject were the majority among the sample 41.6%, distributions of the sample by education attainment showed that, 37.2% finish preparatory, the fast majority 45.3% of the sample had vary low income less than 500NIS, the percentage of not work was the greatest among the sample 71.5%, subject with extended families 5 children and above were the majority among the study sample 46.7%.

The findings of this study also revealed that, total scores of QoL among schizophrenic patient as 44 % that means that the study sample not accepting their quality of life and satisfied a bout their health and the QoL bad, and the highest domain was the environmental at 51.5% while the lowest score was the social 35.3%.

It is noticed that social domain has the lowest score because psychiatric patient is burden on family and stigma exist in psychiatric patients' society.

there were statistical significant differences in QoL due to gender favor the female in psychological, social, and physical, at (p-value < 0.05), because the male is responsible for requirements' of life and its burden, while females responsibilities are less.

There were statistical significant differences in QoL due to address in all domain favor middle and Rafah at (p-value < 0.05).

there were statistical significant differences in QoL due to state of housing favor owned in psychological and environmental domain at (p-value < 0.05), because those patients reserves helps from agencies because of being helpless. The situation well be worse in case of being rented.

There were statistical significant differences in QoL due to level of education favor university in social and environmental domain at (p-value<0.05),

There are statistical differences about quality of life among schizophrenic patients in Gaza governorates due to complication result from illness at significant level 0.05 and the difference in favor of " no complication result from illness " patient does not have complication of illness the QOL is high.

There are statistical differences about the quality of life among schizophrenic patients in Gaza governorates due to side effects of medication at significant level 0.05 and the difference in favor of " no effects of medication " patient does not have side effect of medication the QoL is high. Because the side effect of medication such as drowse over sleep not concentrate.

There was no statistical significant association between QoL domain from age, social status, family member, occupation, income, history of illness, time of admission.

However, within this overall study a picture of relatively negative of QoL, which must highlight the need for some reforms concerning the areas where QoL has shown impairment among the study sample, except for some domains were relatively positive.

6.3 Recommendation:

As a matter of fact, mental health services provided in mental health clinics should respond to patients' needs and perspectives. In order to enhance patients' involvement in the treatment process as well to prevent or at least to minimize suffering of complication. Furthermore, study results that helping developing in depth understanding the issue that may influence subjects overall health as well as their QoL, therefore, here are recommendations that should be considered:

- To focus the strategy of prevention rather than treatment in order to save health complication as well as social burdens.
- To encourage people to introduce life style modification in term of physical activity, recreation.
- To enhance public awareness about mental health issues through media, publications, educational secession and lectures.
- Ongoing evaluation of the quality and effectiveness of patients care and management.

6.4 Recommendation for future research studies:

- The quality of life among the type of schizophrenia.
- Quality of life among schizophrenic patients with another disease.
- Assessing incidence rate and prevalence rate of schizophrenic patients.
- The impact of psychiatric medication on the quality of life among schizophrenic patients.
- Assess Quality of life among schizophrenic patients above 45 years of age.

The effect of spiritual support on quality of life among schizophrenic patients

References

References

Adams, P. (2000). **Insight: A mental health prevention intervention**. Nursing Clinics of North America, 35(2).

Adewuya, A. O. & Makanjuola, R. O. (2009). **Subjective quality of life of Nigerian schizophrenia patients: sociodemographic and clinical correlates**., Acta Psychiatr Scand. 2009 Aug;120(2).

Afana A, Qouta S & SARRAJ E, (2004). Mental health needs in Palestine, **humanitarian exchange magazine**, Issue 28.

AL-Awamleh R,(2008) **Psychiatric Mental Health Nursing**, (first edition) .

Aleman, A.; Kahn, R.S.. & Selten, J.P. (2003). **Sex differences in the risk of schizophrenia: evidence from meta-analysis**. Arch Gen Psychiatry, 60(6).

American Psychiatric Association. (2000). **Diagnostic and statistical manual of mental disorders** (4th ed.) Text revision. Washington, DC: American Psychiatric Association.

Aquila, R., & Korn, M. L. (2001). **Promoting reintegration in chronic schizophrenia**. http://www.medscape.com.

Arango, C., Kirkpatrick, B., & Buchanan, R. W. (2000). **Neurological signs and the heterogeneity of schizophrenia**. American Journal of Psychiatry, 157(4).

Becker T, Leese M, Krumm S, Ruggeri M, Vazquez-Barquero JL (2005). **Needs and quality of life among patients with schizophrenia in five European centres: what is the impact of global functioning scores**. Soc Psychiatry Psychiatr Epidemiol 1 (40).

Berlim, M.T. & Fleck, M.P.(2003). **"Quality of life": a brand new concept for research and practice in psychiatry.** Rev Bras Psiquiatr.

Black D., Boffeli T. (1989). **Simple schizophrenia: past, present, future**. Am. J. Psychiatry, 146.

Bostrom, AC. and Boyd, MA. (2008): **psychiatric nursing contemporary practice**, (4th ed), Philadelphia: Lippincott, Williams and wilkins.

Bowling, A., Gabriel, Z. , Dykes, J. Marriott-Dowding, L. , Fleissig, A., Evans, O., Banister, D, Sutton, S. (2003**). Let.s ask them: a national survey of definitions of quality of life and its enhancement among people aged 65 and over**. International Journal of Aging and Human Development, 56.

Brissos, S.; Balanzá-Martinez, V.; Dias, V.V.; Carita, A.I. & Figueira, M.L. (2011). **Is personal and social functioning associated with subjective quality of life in schizophrenia patients living in the community**?, Eur Arch Psychiatry Clin Neurosci. [PubMed., 21384166].

British Psychological Society (2010). **The nice guideline on core interventions in the treatment and management of schizophrenia in adults in primary and secondary care (updated edition)**., The British Psychological Society and

The Royal College of Psychiatrists. The British Psychological Society, St Andrews House, 48 Princess Road East, Leicester

Brown, I. and Brown, RI. (2004). **Quality of life and disability an approach for community practitioners,** jessia kinglsley publishers, London and New York.

Brown, I. (1999). **Embracing quality of life in times of spending restraint**. Journal of Intellectual and Developmental Disability 24, 4, 299–308.

Brown, Jackie: Bowling, Ann & Flynn, Terry (2004). **Models of Quality of Life: A Taxonomy, Overview and Systematic Review of the Literature**., May, Review, European Forum on Population Ageing Research.

Bustillo, J. R., Lauriello, J., Horan, W. P., & Keith, S. J. (2001). **The psychosocial treatment of schizophrenia**: An update. American Journal of Psychiatry, 158(2).

Byrne, M., Agerbo, E., Ewald, H., Eaton, W. W., & Mortensen, P. B. (2003). **Parental age and risk of schizophrenia: A case-control study**. Archives of General Psychiatry, 60(7).

Cancro, R., & Lehman, H. E. (2000). **Schizophrenia: Clinical features**. In B. J. Sadock & V. A. Sadock (Eds.), Comprehensive textbook of psychiatry, Vol. 1 (7th ed). Philadelphia: Lippincott Williams & Wilkins.

Casernansky, J G.(2001) **Schizophrenia A New Guide for Clinicians**. Marcel Dekker, Inc. New York.

Chadwick, P., Birchwood, M. J., & Trower, P. (1996). **Cognitive therapy for delusions,** voices, and paranoia. New York: Wiley.

Chou, C.Y.; Ma MC, Yang TT, Chen-Sea MJ. (2010). **Psychometric validation of the S-QOL Chinese (Taiwan) version for patients with schizophrenia**., Quality of Life Research. [PubMed., 21153057].

Clark, D. M., & Wells, A. (1995). A **Cognitive model of social phobia**. In R. G. Heimberg, M. R. Liebowitz, D. A. Hope, & F. R. Schneier (Eds.), Social phobia: Diagnosis, assessment, and treatment. New York: Guilford Press.

Cochrane, M. Petch, I. Pickering, AD. (2012). **Aspect of cognitive functioning is schizotypy and schizophrenia**: evidence for a continuum model, psychiatry Res:2012 Mar, London, united kingdom.

Conley, R.R., Buchannan, R.W. (1997). Evaluation **of treatment-resistant of schizophrenia**. Schizophrenia Bull.

Cummins, R. (1997). **Assessing quality of life.** In R.I. Brown (ed) Quality of Life for People with Disabilities: Models, Research and Practice, 2nd edition. Cheltenham, UK: Stanley Thornes.

Dan, A.; Kumar, S.; Avasthi, A. & Grover, S. (2011). **A Comparative study on quality of life of patients of schizophrenia with and without depression**., Psychiatry Research. [PubMed, 21453977].

David, A. Kemp, R. (1997). **Five perspectives on the phenomenon of insight in psychosis**. Psychiatric Annals.

Dawe, F. and Montgmery, J. (2003). **learning about schizophrenia**, Rays of Hope, Pfizer Canada Inc.

Dyck, D. G., Short, R. A., Hendryx, M. S., Norell, D., Myers, M., Patterson, T., McDonell, M. G., Voss, W. D., & McFarlane, W. R. (2000). **Management of negative symptoms among patients with schizophrenia attending multiple-family groups**. Psychiatric Services, 51(4).

Eack SM, Newhill CE: (2007). **Psychiatric Symptoms and Quality of Life in Schizophrenia**: A Meta-Analysis. Schizophrenia Bullettin, 33(5).

Egan, M. F., & Hyde, T. M. (2000). **Schizophrenia: Neurobiology**. In B. J. Sadock & V. A. Sadock (Eds.), Comprehensive textbook of psychiatry, Vol. 1. (7th ed.). Philadelphia: Lippincott Williams & Wilkins.

EL-Buhaisi O H, (2010). **The psychological impact of Political Violence on Palestinian Adolescents and Coping Strategies in Gaza Strip**, Al-Quds University, Gaza.

Faraone SV, Kremen WS, Lyons MJ, Pepple JR, Seidman LJ, Tsuang MT (1995). **Diagnostic accuracy and linkage analysis: how useful are schizophrenia spectrum phenotypes?** Am J Psychiatry152(9).

Fenton WS, McGlashan TH, Victor BJ, et al. (1997). **Symptoms, subtype, and suicidality in patients with schizophrenia spectrum disorders**. Am J Psychiatry.

Ferriss AL, (2010). **Approaches to improving the quality of life springer science and business media**, landon Newyork.

Fink M, Sackeim HA (1996). **Convulsive therapy in schizophrenia?** Schizophr Bull; 22:27.

Fitzgerald PB, Williams CL, Corteling N, et al. (2001). **Subject and observer-rated quality of life in schizophrenia**. Acta Psychiatrica Scandinavica.

Flashman, L. A., McAllister, T. W., Andreasen, N. C., & Saykin, A. J. (2000). **Smaller brain size associated with unawareness of illness in patients with schizophrenia**. American Journal of Psychiatry, 175(7).

Fortinash k and Wrret HP (2008). **Psychiatric mental health nursing**, fourth edition, ISBN 978-0-323-04675..

Fujimaki K, Morinobu S, Yamashita H, Takahashi T, Yamawaki S.(2012). **Predictors of quality of life in inpatients with schizophrenia**,Psychiatry Res.

Galuppi, A.; Turola, M.C, Nanni MG, Mazzoni P, Grassi L. (2010). **Schizophrenia and quality of life: how important are symptoms and functioning**?., Int J Ment Health Syst. 2010 Dec 8;4:31.

Garaci E (2009). **Thirty years after the reform of the Italian Law on mental health**: time for celebrating, evaluating, moving forward. Ann Ist Super Sanita, 45(1).

Gee L, Pearce E, Jackson M, (2003). **Health and quality of life outcomes: quality of life in schizophrenia: agrounded theory approach**, by biomed central.

Gelder M, Gath D, Mayou R, Cowen P(1996). **Oxford Textbook of Psychiatric**, third edition, by oxford university press.

Gold R, Butter P, Revheim N, Leitman DI, Hansen JA, Gur RC, Kantrowitz JT, Laukka P, Jesline PN, Silipogs, Javitt DC, (2012). **Auditory emotion recognition impirments iin schizophrenia: relationship to acoustic features and cognition**, 169(4) : 424-32.

Goldman, H. H. (2000). **Review of the general psychiatry**, 5th Edition, Baltimore, Maryland, New York.

Goldner, E. M., Hsu, L., Waraich, P., & Somers, J. M. (2002). **Prevalence and incidence studies of schizophrenia disorders**: A systematic review of the literature. The Canadian Journal of Psychiatry,47(9).

Goode, D.A. (1997). **Assessing the quality of life of adults with profound disabilities**. "In R.I. Brown (ed) Quality of Life for People with Disabilities: Models, Research and Practice, 2nd edition. Cheltenham, UK: Stanley Thornes.

Gullotta TP, Adams GR, (2005). **Handbook of adolescent behavioral problem** : evidence –based approaches to prevention and treatment.

Gur RE and Johnson AB (2006). **If your adolescent has schizophrenia**, the Annenberg public policy center of the university of Pennsylvania, pp: 1-138.

Hafner, H.; Hambrecht, M.; Loffler, W.; Munk-Jorgensen, P.; Riecker-Rossler A. (1998). **Is schizophrenia a disorder of all age**? A comparison of first episode and early course across the life-cycle. Psychol Med. 1998;28(2).

Harrison, G., Fouskakis, D., Rasmussen, F., Tynelius, P., Sipos, A., & Gunnell, D. (2003). Association **between psychotic disorder and urban place of birth is not mediated by obstetric complications or childhood socioeconomic position**: A cohort study. Psychological Medicine, 33(4).

Hofner H, Maurer K, Lofler W et al. (1995). **Onset and early course of schizophrenia. In: Search for the Causes of Schizophrenia**, Vol. III., Gattaz WF, Hөfner H, eds. Berlin: Springer-Verlag.

K.D., and Parmenter (2002). **Conceptualization, Measurement, and Application of Quality of Life for Persons with Intellectual Disabilities**: Report of an International Panel of Experts.' Mental Retardation .

Kaiser W, Priebe S, Barr W, Hoffmann K, Isermann M, Roder-Wanner UU, Huxley P. (1997). **Profiles of subjective quality of life in schizophrenic in- and out-patient samples**. Psychiatry Research.

Kao, Y.C.; Liu, Y.P. Chou, M.K. & Cheng, T.H. (2011). **Subjective quality of life in patients with chronic schizophrenia: relationships between psychosocial and clinical characteristics**, Compr Psychiatry. Mar-Apr;52(2).

Kavanaugh, D., (1992). **Recent developments in expressed emotion and schizophrenia**. British Journal of Psychiatry.

Kendler, K., McGuire, M., Gruenberg, A., Spellman, M., O'Hare, A., & Walsh, D. (1993)**. The Roscommon family study: II. The risk of non-schizophrenic non affective psychoses in relatives**. Archives of General Psychiatry.

King,C.,&Hinds,P.(1996). **Quality Of Life From Nursing and Patients Prospective** , Jones and Bartlett Publishers, Canada.

Kirkbride JB, Errazuiz A, Croudace TJ, Morgan C, Jackson D, Boydell J, Marray RM, Jones PB, (2012). **incidence of schizophrenia and other psychoses in England**, 1950-2009: a systematic revied and meta-analyses, Plos one Mar22: 7(3), university of Cambridge, united kingdom.

Kronful, Z., & Remick, D. G. (2000). **Cytokines and the brain: Implications for clinical psychiatry**. American Journal of Psychiatry, 157(5), 683–694.

Lambert M, Naber D (2004). **Current issues in schizophrenia**: overview of patient acceptability, functioning capacity and quality of life. CNS Drugs.

Lehman AF, Kreynbuhl J, Buchanan RW, et al (2004). **The Schizophrenia Patient Outcomes Research Team (PORT): updated treatment recommendations**. Schizophr Bull .

Lehman AF: Instruments for measuring quality of life in mental illnesses.(1997). **In Quality of Life in Mental Disorders**. Edited by: Katschnig H, Freeman H, Sartorius N. New York, NY: Wiley.

Leidl R (2009). **Preferences, quality of life and public health**, The European Journal of Public Health.

Levitt P, Collins C, Veague HB, (2007). **Psychological disorder**: schizophrenia, by Chelsea house books, united state of American.

Lewis, G., Croft-Jeffreys, C., & Anthony, D. (1990). **Are British psychiatrists racist**? British Journal of Psychiatry.

Lieberman JA, Stroup TS, Perekins DO, (2006). **Textbook of Schizophrenia**, first edition, American psychiatric publishing.

Liembyrg EJ, Vercammen A, Terhorst GJ, Curcic B, Keneqterina H, Aleman A, (2012) abnormal connectivity between attentional language and Auditory network in schizophrenia Res. 2012 Mari 135 (1-3) : 15-22.

Lobana A, Mattoo SK, Basu D, Gupta N.(2001). **Quality of life in schizophrenia in India**: comparison of three approaches. Acta Psychiatrica Scandinavica.

Loga-zec S and Loga S, (2010). **Antipsychotic and the quality of life of schizophrenia patients**, 22(4).

Maat A, Fett AK, Derks E; GROUP Investigators, (2012). **Social cognition and quality of life in schizophrenia**, Schizophr Res.

Macdonald C, Schuize K, Murray R M, Wright P, (2004). **Schizophrenia: challenging the orthodox**, by Toylor and Francis, London.

Maj M, Sartorious N, (2002). **Schizophrenia**, second edition, volume 2, johns wiely and sons ltd, england,

Manual G & Schultz S, (2004). **Health-Related Quality of life and Health-Adjusted life Expectancy of people with Diabetes in Ontario**, Canada, 1996-1997. Diabetes Care.

Marder, S. E. (2000). **Schizophrenia: Somatic treatment**. In B. J. Sadock & V. A. Sadock (Eds.), Comprehensive textbook of psychiatry, Vol. 1 (7th ed).

Mas-Expósito, L.; Amador-Campos, J.A.; Gómez-Benito, J. & Lalucat-Jo, L. (2011). **The World Health Organization Quality of Life Scale Brief Version: a validation study in patients with schizophrenia**., Qual Life Res. 2011 Feb 3. [PubMed., 21290191].

McClellan, J., & McCurry, C. (1998). **Neurocognitive pathways in the development of schizophrenia**. Seminar in Clinical Neuropsychiatry

McGlashan T.H., Fenton W.S. (1994). **Classical subtypes for schizophrenia**. In DSM-IV Sourcebook, vol. 1 (Eds T.A. Widiger, A.J. Frances. H.A. Pincus, M.B. First, R. Ross, W. Davis), American Psychiatric Association, Washington, DC.

Meyer JM, Nasralh HA, (2009). **Medical illness and schizophrenia**, Second edition, American psychiatric publishing, INC.

Ministry of Health (2003). **The status of health in Palestine**, Annual Report. Ministry of Health, Gaza.

Ministry of health MOH, (2010). **Annual Report of Ministry Of Health In Palestine,** Gaza.

MOH&WHO, (2003). **Plan on the organization of mental health services in Palestine draft repor**t , gaza.

Morimoto T, Matsuyama K, Ichihara ST, Murkami R, Ikeda N, (2012). **influence of self-efficacy on the interpersonal behavioral of schizophrenia patients** undergoing rehabilitation in psychiatric day-care services, psychiatry clin Neurosci Apr: 66(3): 203-9, Japan.

Mortensen, P. B., Pedersen, C. B., Westergaard, T., Wohlfahrt, J., Ewald, H., Mors, O., Andersen, P. K., & Melbye, M. (1999). **Effects of family history and place and season of birth on the risk of schizophrenia**. New England Journal of Medicine, 340(8), 603–608.

Mueller DR, Schmidt SJ, Roder V, (2012) **Integrated psychological therapy: Effectiveness in schizophrenia n patient setting Related to patients Age**, Am J Geriatric psychiatry, Mar 15, Bern, Switzerland.

Mueser, K., Bellack, A., Wade, J., Sayers, S., Tierney, A., & Haas, G. (1993). **Expressed emotion, social skill, and response to negative affect in schizophrenia**. Journal of Abnormal Psychology.

NAMI (2008). **Understanding schizophrenia and recovery**, Wilson boulevard, www.nami.org.

NARSAD (2009). **Schizophrenia**, by the brain and behavior research, www.narsad.org.

National institute of mental health (2009). **Schizophrenia, by U.S. department of health and human services**, NIH publication No:09-3517.

Noll R and George L, (2007). **Schizophrenia and other psychiatric disorder**, (third edition), New York.

Norman RM, Malla AK, McLean T, Voruganti LP, Cortese L, McIntosh E, Cheng S, Rickwood A (2000). **The relationship of symptoms and level of functioning in schizophrenia to general wellbeing and the Quality of Life Scale.** Acta Psychiatr Scand.

O'Connor, F. L. (1998). **The role of serotonin and dopamine in schizophrenia**. Journal of the American Psychiatric Nurses Association, Philadelphia: Lippincott Williams & Wilkins. 4(4).

Ohaeri, J. U. & Awadalla AW. (2009). **The reliability and validity of the short version of the WHO Quality of Life Instrument in an Arab general population Department of Psychiatry**, Psychological Medicine Hospital, Safat, Kuwait. Ann Saudi Med., Mar-Apr; 29(2).

Ohaeri, J. U.; Awadalla, A.W. & Gado, O. M. (2009). **Subjective quality of life in a nationwide sample of Kuwaiti subjects using the short version of the WHO quality of life instrument**., Soc Psychiatry Psychiatr Epidemiol. Aug; 44(8).

Orley J, Saxena S, Herrman H. (1998). **Quality of life and mental illness. Reflections from the perspective of the WHOQOL. Br J Psychiatry**, 172:291–293.

Park, J.Y., Turnbull, A.P. and Turnbull III, H.R. (2002**). Impacts of poverty on quality of life in families of children with disabilities**.' Exceptional Children 68, 2, 151–170.

Péntek M, Harangozó J, Egerházi A, Kelemen O, Gulácsi L, Baji P, Máttyássy A, Erdélyi R, Lehoczky S, Orlewska E, Vártokné Hevér N, Ferencz A, Brodszky V.(2012). **Health related quality of life and disease burden of patients with schizophrenia in Hungary**, Psychiatr Hung. 2012;27(1):4-17.

Piotrowski NA, (2005) **psychology basics, abnormality psychological model, learning disorder,** California, vol 1, pp:1-1031.

Purqato M, Adams C, Barbui C,(2012). **Forty- five years of schizophrenia trials in Italy**: a survey, 2012: Trials Apr 12:13 (1) : 35.

Raphael D, Renwick R, and Rootman I,(1996). **Quality of life indicators and health**: current status and emerging conceptions. Center of health promotion, University of Toronto, Toronto, Canada.

Rapoport, J.L; Giedd, J.N. & Blumenthai J. (1999). **Progressive cortical change during adolescence in childhood-onset schizophrenia**: a longitudinal magnetic resonance imaging study. Arch Gen Psychiatry. ;56:649–654.

Ritsner MS, Awad AG, (2007). **quality of life impairment in schizophrenia, mood and anxiety disorder,** by springer P.O(3:389).

Rocca P, Castagna F, Mongini T, Montemagni C, Bogetto F. (2010). **Relative contributions of psychotic symptoms and insight to quality of life in stable schizophrenia**, Psychiatry Res. 2010 May 15;177(1-2):71-6.

Saarni SI, Viertiö S, Perälä J, Koskinen S, Lönnqvist J, Suvisaari J. (2010). **Quality of life of people with schizophrenia, bipolar disorder and other psychotic disorders**., Br J Psychiatry. 2010 Nov;197:348-9.

Sadock JB and Sadock VA,: (2007). **synopsis of psychiatry behavioral sciences clinical psychiatry** (10th ed) Lippincott williams and wilkins.

Schaeffer, J., & Ross, R.: (2002). **Childhood-onset schizophrenia: Premorbid and prodromal diagnostic and treatment histories**. Journal of the American Academy of Child and Adolescent Psychiatry, 41(5), 538–545.

Shumaker S, and Berzon R,: (1995). **The international assessment health related quality of life: theory, translation, measurement and analysis**, published by rapid communications of oxford Ltd, New York.

Sibitz, I.; Amering, M.; Unger, A.; Seyringer ME, Bachmann A, Schrank B, Benesch T, Schulze B, Woppmann A. (2011). **The impact of the social network, stigma and empowerment on the quality of life in patients with schizophrenia.**, Eur Psychiatry. Jan; 26(1):28-33.

Singleton, N.; Bumpstead, R.; O'Brien, M., et al. (2000). **Psychiatric Morbidity Among Adults Living in Private Households, 2000**. Report of a survey carried out by the Social Survey Division of the Office for National Statistics on behalf of the Department of Health, the Scottish Executive and the National Assembly for Wales. London: HMSO.

Smith KW, Avis NE, Assmann SF. (1999)**. Distinguishing between quality of life and health status in quality of life research**: A meta-analysis. Quality of Life Research, 1999; 8: 447–459.

Solanki RK, Singh P, Midha A, Chugh K. (2008) **Schizophrenia: Impact on quality of life.** Indian J Psychiatry;50:181-(6).

Spilker, B. (ed). (1996) **Quality of Life and Pharmacoeconomics in Clinical Trials**, 2nd ed. Philadelphia: Lippincott-Raven.

Stefan M, Travis M, Murray R M, (2002). **the encyclopedia of visual medicine series an atlas of schizophrenia**, by Parthenon publishing group, London and new York, pp(1-91).

Stewart p, (2002). **A report on mental illness in Canada, central chronic disease prevention and control**, pp: 1-108.

Tang IC, Wu HC.(2012). **Quality of Life and Self-Stigma in Individuals with Schizophrenia**, Psychiatr Q.

Teschinsky, U. (2000). **Living with schizophrenia: The family illness experience**. Issues in Mental Health Nursing, 21, 387–396.

Testa MA, Simonson DC. (1996). **Assessment of quality-of-life outcomes**. N Engl J Med, 334:835–840.

Timms P, Barnes T, Ramsay R, Briscoe M, Hart D, (2004). **schizophrenia, by the royal college of psychotic public education editorial sub-committee**, pp(1-36).

Tsuang M.T., Winokur G. (1974). **Criteria for subtyping schizophrenia: clinical differentiation of hebephrenic and paranoid schizophrenia**. Arch. Gen. Psychiatry, 81: 43–47.

Ueoka Y, Tomotake M, Tanaka T, Kaneda Y, Taniguchi K, Nakataki M, Numata S, Tayoshi S, Yamauchi K, Sumitani S, Ohmori T, Ueno S, Ohmori T. (2010) **Quality of life and cognitive dysfunction in people with schizophrenia.**, Prog Neuropsychopharmacol Biol Psychiatry. Jan 15;35(1):53-59.

Van Os, J., & Verdoux, H. (2003). **Diagnosis and classification of schizophrenia: Categories versus dimensions, distributions versus disease**. In R. M. Murray, P. B. Jones, E. Susser, J. van Os, & M. Cannon (Eds.), The epidemiology of schizophrenia (pp. 364–410). Cambridge, UK: Cambridge University Press.

Videbeck S L,(2003). **Psychiatric Mental Health Nursing**, third edition, wolter kluwer \ lippincott &wilikins .

Videbeck, S L, (2008). **Psychiatric Mental Health Nursing**, Lippincott Williams & Wilkins, library of congress cataloging in publication data.

Wasserman, David; Bickenbach, Jerome & Wachbroit, Robert (2005). **Quality of Life and Human Difference Genetic Testing, Health Care, and Disability**., Cambridge University Press., UK.

Weiden PJ, Zygmunt A, (1997**). Medication noncompliance in schizophrenia**: Part I. Assessment. J Pract Psychiatry Behav Health 1997;3:106.

WHO (2004) **The World Health Organization Quality of Life (WHOQOL)-BREF**., World Health Organization 20 Avenue Appia, 1211 Geneva 27, Switzerland.

WHO, (2004). **The world health organization quality of life (WHOQOL)- bref,** by world health organization, pp(1-5).

Wilson IB, Cleary PD. (1995). **Linking clinical variables with health-related quality of life**. A conceptual model of patient outcomes. JAMA, 273: 59–65.

World Health Organization (2004). **The ICD-10 Classification of Mental and Behavioral Disorders**. tenth revision. — 2nd ed. 3 v. Library Cataloguing-in-Publication Data.

World Health Organization, WHO (2001). **Geneva, No communicable Diseases tomorrows pandemic.** Bulletin of the world health organization.

World Health Organization, WHO. (1996). **WHOQOL-BREF, Introduction administration, scoring and generic version of the assessment**. Field trial version programmed mental health, WHO, Geneva, Switzerland.

Wykes T, Reeder C, (2005). **cognitive remediation therapy for schizophrenia, theory and practice**, by taylor and francis INC, USA and Canada, PP (5-328).

Xiang, Y.T.; Wang, C.Y.; Wang, Y.; Chiu, H.F.; Zhao, J.P.; Chen, Q.; Chan, S.S.; Lee, E.H. & Ungvari, G.S. (2010-b). **Socio-demographic and clinical determinants of quality of life in Chinese patients with schizophrenia**: a prospective study. Qual Life Res. 2010 Apr;19(3): 317-22.

Xiang, Y.T.; Wang, Y. Z.; Leung, C.M.; Tang, W.K.; Chan, S.S.; Wang, C.Y.; Han, B. & Ungvari, G.S. (2010-a). **Gender differences in socio-demographic and clinical characteristic and the quality of life of Chinese schizophrenia patients**. Aust N Z J Psychiatry.; 44(5):450-5.

Zahid, M. A.; Ohaeri, J.U.; Elshazly, A.S.; Basiouny, M.A.; Hamoda, H.M. & Varghese, R. (2010). **Correlates of quality of life in an Arab schizophrenia sample.** Soc Psychiatry Psychiatr Epidemiol. Sep;45(9):875- 887.

Zahid, M.A.; Ohaeri, J. U. (2010). **Relationship of family caregiver burden with quality of care and psychopathology in a sample of Arab subjects with schizophrenia**., BMC Psychiatry. 2010 Sep 10;10:71.

Zalewski C., Johnson-Selfridge M.T., Ohriner S., Zarrella K., Seltzer J.C. (1998). **A review of neuropsychological differences between paranoid and non paranoid schizophrenia patients**. Schizophr. Bull., 24: 127–145.

Ziedonis D, Nickou C (2001). **Substance abuse in patients with schizophrenia, in Schizophrenia and Comorbid Conditions Diagnosis and Treatment**. Edited by Hwang MY, Bermanzohn PC. Washington, DC, American Psychiatric Publishing, pp 187–221.

Zouari L, Thabet JB, Elloumi Z, Elleuch M, Zouari N, Maâlej M.(2012). **Quality of life in patients with schizophrenia**, Encephale. (2012). pp:111-7.

Appendix

Appendix I

NORTH AMERICAN DIAGNOSTIC CRITERIA FOR SCHIZOPHRENIA *DSM-IV-TR* (2000)

Source: American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Text* Revision. Washington, D.C.: American Psychiatric Press, 2000.

DIAGNOSTIC CRITERIA

A. *Characteristic symptoms:* Two (or more) of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated):

1. Delusions
2. Hallucinations
3. disorganized speech (e.g., frequent derailment or incoherence)
4. Grossly disorganized or catatonic behavior
5. Negative symptoms, i.e., affective flattening, alogia, or avolition

Note: Only one Criterion A symptom is required if delusions are bizarre or hallucinations consist of a voice keeping up a running commentary on the person's behavior or thoughts, or two or more voices conversing with each other.

B. *Social/occupational dysfunction:* For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning such as work, interpersonal relations, or self-care are markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, failure to achieve expected level of interpersonal, academic, or occupational achievement).

C. *Duration:* Continuous signs of the disturbance persist for at least 6 months. This 6-month period must include at least 1 month of symptoms (or less if successfully treated) that meet Criterion A (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms. During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or two or more symptoms listed in Criterion A present in an attenuated form (e.g., odd beliefs, unusual Perceptual experiences).

D. *Schizoaffective and mood disorder exclusion:* Schizoaffective Disorder and Mood Disorder With Psychotic Features have been ruled out because either (1) no Major Depressive, Manic, or Mixed Episodes have occurred concurrently with the active-phase symptoms; or (2) if mood episodes have occurred during active-phase symptoms, their total duration has been brief relative to the duration of the active and residual periods.

E. *Substance/general medical condition exclusion:* The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

F. *Relationship to a pervasive developmental disorder:* If there is a history of Autistic Disorder or another Pervasive Developmental Disorder, the additional diagnosis of Schizophrenia is made only if prominent delusions or hallucinations are also present for at least a month (or less if successfully treated).

PARANOID TYPE
A type of Schizophrenia in which the following criteria are met:
A. Preoccupation with one or more delusions or frequent auditory hallucinations.
B. None of the following is prominent: disorganized speech, disorganized or catatonic behavior, or flat or inappropriate affect.

CATATONIC TYPE
A type of Schizophrenia in which the clinical picture is dominated by at least two of the following:
1. motoric immobility as evidenced by catalepsy (including waxy flexibility) or stupor.
2. Excessive motor activity (that is apparently purposeless and not influenced by external stimuli)
3. Extreme negativism (an apparently motiveless resistance to all instructions or maintenance of a rigid posture against attempts to be moved) or mutism
4. Peculiarities of voluntary movement as evidenced by posturing (voluntary assumption of inappropriate or bizarre postures), stereotyped movements, prominent mannerisms, or prominent grimacing 5. Echolalia or echopraxia

DISORGANIZED TYPE
A type of Schizophrenia in which the following criteria are met:
A. All of the following are prominent:
1. Disorganized speech
2. Disorganized behavior
3. Flat or inappropriate affect
B. The criteria are not met for Catatonic Type.

UNDIFFERENTIATED TYPE
A type of Schizophrenia in which symptoms that meet Criterion A are present, but the criteria are not met for the Paranoid, Disorganized, or Catatonic Type.

RESIDUAL TYPE
A type of Schizophrenia in which the following criteria are met:
A. Absence of prominent delusions, hallucinations, disorganized speech, and grossly disorganized or catatonic behavior.
B. There is continuing evidence of the disturbance, as indicated by the presence of negative symptoms or two or more symptoms listed in criterion A for Schizophrenia, present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

Appendix II
EUROPEAN DIAGNOSTIC CRITERIA FOR SCHIZOPHRENIA
ICD-10

Source: World Health Organization. *International Classification of Diseases, Tenth Edition (ICD-10).* Geneva: WHO, 1992.

F20 SCHIZOPHRENIA

The schizophrenic disorders are characterized in general by fundamental and characteristic distortions of thinking and perception, and by inappropriate or blunted affect. Clear consciousness and intellectual capacity are usually maintained, although certain cognitive deficits may evolve in the course of time. The disturbance involves the Most basic functions that give the normal person a feeling of individuality, uniqueness, and self direction.

The most intimate thoughts, feelings, and acts are often felt to be known to or shared by others, and explanatory delusions may develop, to the effect that natural or supernatural forces are at work to influence the afflicted individual's thoughts and actions in ways that are often bizarre.

The individual may see himself or herself as the pivot of all that happens. Hallucinations, especially auditory, are common and may comment on the individual's behaviors or thoughts. Perception is frequently disturbed in other ways: colors or sounds may seem unduly vivid or altered in quality, and irrelevant features of ordinary things may appear more important than the whole object or situation. Perplexity is also common early on and frequently leads to a belief that every day situations possess a special, usually sinister, meaning intended uniquely for the individual. In the characteristic schizophrenic disturbance of thinking, peripheral and irrelevant features of a total concept, which are inhibited in normal directed mental activity, are brought to the fore and utilized in place of those that are relevant and appropriate to the situation.

Thus thinking becomes vague, elliptical, and obscure, and its expression in speech sometimes incomprehensible. Breaks and interpolations in the train of thought are frequent, and thoughts may seem to be withdrawn by some outside agency. Mood is characteristically shallow, capricious, or incongruous. Ambivalence and disturbance of volition may appear as inertia, negativism, or stupor. Catatonia may be present.

The onset may be acute, with seriously disturbed behavior, or insidious, with a gradual development of odd ideas and conduct. The course of the disorder shows equally great variation and is by no means inevitably chronic or deteriorating (the course is specified by five-character categories). In a proportion of cases, which may vary in different cultures and populations, the outcome is complete, or nearly complete, recovery. The sexes are approximately equally affected but the onset tends to be later in women.

Although no strictly pathognomonic symptoms can be identified, for practical purposes it is useful to divide the above symptoms into groups that have special importance for the diagnosis and often occur together, such as:

(a) Thought echo, thought insertion or withdrawal, and thought broadcasting.

(b) Delusions of control, influence, or passivity, clearly referred to body or limb movements or specific thoughts, actions, or sensations; delusional perception.

(c) Hallucinatory voices giving a running commentary on the patient's behaviour, or discussing the patient among them, or other types of hallucinatory voices coming from some part of the body;
(d) persistent delusions of other kinds that are culturally inappropriate and completely impossible, such as religious or political identity, or superhuman powers and abilities (e.g. being able to control the weather, or being in communication with aliens from another world);
(e) Persistent hallucinations in any modality, when accompanied either by fleeting or half-formed delusions without clear affective content, or by persistent over-valued ideas, or when occurring every day for weeks or months on end;
(f) Breaks or interpolations in the train of thought, resulting in incoherence or irrelevant speech, or neologisms;
(g) Catatonic behavior, such as excitement, posturing, or waxy flexibility, negativism, mutism, and stupor;
(h) "negative" symptoms such as marked apathy, paucity of speech, and blunting or incongruity of emotional responses, usually resulting in social withdrawal and lowering of social performance; it must be clear that these are not due to depression or to neuroleptic medication;
(i) a significant and consistent change in the overall quality of some aspects of personal behavior, manifest as loss of interest, aimlessness, idleness, a self-absorbed attitude, and social withdrawal.

DIAGNOSTIC GUIDELINES
The normal requirement for a diagnosis of schizophrenia is that a minimum of one very clear symptom (and usually two or more if less clear cut) belonging to any one of the groups listed as (a) to (d) above, or symptoms from at least two of the groups referred to as (e) to (h), should have been clearly present for most of the time during a period of 1 month or more. Conditions meeting such symptomatic requirements but of duration less than 1 month (whether treated or not) should be diagnosed in the first instance as acute schizophrenia- like psychotic disorder and are classified as schizophrenia if the symptoms persist for longer periods.

Viewed retrospectively, it may be clear that a prodromal phase in which symptoms and behaviors, such as loss of interest in work, social activities, and personal appearance and hygiene, together with generalized anxiety and mild degrees of depression and preoccupation, preceded the onset of psychotic symptoms by weeks or even months. Because of the difficulty in timing onset, the 1-month duration criterion applies only to the specific symptoms listed above and not to any prodromal no psychotic phase.

The diagnosis of schizophrenia should not be made in the presence of extensive depressive or manic symptoms unless it is clear that schizophrenic symptoms antedated the affective disturbance. If both schizophrenic and affective symptoms develop together and are evenly balanced, the diagnosis of schizoaffective disorder should be made, even if the schizophrenic symptoms by themselves would have justified the diagnosis of schizophrenia. Schizophrenia should not be diagnosed in the presence of overt brain disease or during states of drug intoxication or withdrawal.

F20.0 PARANOID SCHIZOPHRENIA

This is the commonest type of schizophrenia in most parts of the world. The clinical picture is dominated by relatively stable, often paranoid, delusions, usually accompanied by hallucinations, particularly of the auditory variety, and perceptual disturbances. Disturbances of affect, volition, and speech, and catatonic symptoms, are not prominent. Examples of the most common paranoid symptoms are:

(a) Delusions of persecution, reference, exalted birth, special mission, bodily change, or jealousy;

(b) Hallucinatory voices that threaten the patient or give commands, or auditory hallucinations without verbal form, such as whistling, humming, or laughing;

(c) Hallucinations of smell or taste, or of sexual or other bodily sensations; visual hallucinations may occur but are rarely predominant.

Thought disorder may be obvious in acute states, but if so it does not prevent the typical Delusions or hallucinations from being described clearly, Affect is usually less blunted than in other varieties of schizophrenia, but a minor degree of incongruity is common, as are mood disturbances such as irritability, sudden anger, fearfulness, and suspicion. "Negative" symptoms such as blunting of affect and impaired volition are often present but do not dominate the clinical picture.

The course of paranoid schizophrenia may be episodic, with partial or complete remissions, or chronic. In chronic cases, the florid symptoms persist over years and it is difficult to distinguish discrete episodes. The onset tends to be later than in the hebephrenic and catatonic forms.

DIAGNOSTIC GUIDELINES

The general criteria for a diagnosis of schizophrenia (see introduction to F20 above) must be satisfied. In addition, hallucinations and/or delusions must be prominent, and disturbances of affect, volition and speech, and catatonic symptoms must be relatively inconspicuous. The hallucinations will usually be of the kind described in (b) and (c) above. Delusions can be of almost any kind of delusions of control, influence, or passivity, and persecutory beliefs of various kinds are the most characteristic. Includes:

• Paraphrenic schizophrenia

Differential diagnosis It is important to exclude epileptic and drug-induced psychoses, and to remember that persecutory delusions might carry little diagnostic weight in people from certain countries or cultures. Excludes:

• Involutional paranoid state (F22.8)

• Paranoia (F22.0)

F20.1 HEBEPHRENIC SCHIZOPHRENIA

A form of schizophrenia in which affective changes are prominent, delusions and hallucinations fleeting and fragmentary, behavior irresponsible and unpredictable, and mannerisms common. The mood is shallow and inappropriate and often accompanied by giggling or self-satisfied, self-absorbed smiling, or by a lofty manner, grimaces, mannerisms, pranks, hypochondriacal complaints, and reiterated phrases. Thought is disorganized and speech rambling and incoherent. There is a tendency to remain solitary, and behavior seems empty of purpose and feeling. This form of schizophrenia usually starts between the ages of 15 and 25 years and tends to have a poor prognosis because of the rapid development of "negative" symptoms, particularly flattening

Of affect and loss of volition.
In addition, disturbances of affect and volition, and thought disorder are usually prominent. Hallucinations and delusions may be present but are not usually prominent. Drive and determination are lost and goals abandoned, so that the patient's behavior becomes characteristically aimless and empty of purpose. A superficial and manneristic Preoccupation with religion, philosophy, and other abstract themes may add to the listener's difficulty in following the train of thought.

DIAGNOSTIC GUIDELINES
The general criteria for a diagnosis of schizophrenia (see introduction to F20 above) must be satisfied. Hebephrenia should normally be diagnosed for the first time only in adolescents or young adults. The premorbid personality is characteristically, but not necessarily, rather shy and solitary. For a confident diagnosis of hebephrenia, a period of 2 or 3 months of continuous observation is usually necessary, in order to ensure that the characteristic behaviors described above are sustained. Includes:
• disorganized schizophrenia
• Hebephrenia

F20.2 CATATONIC SCHIZOPHRENIA
Prominent psychomotor disturbances are essential and dominant features and may alternate between extremes such as hyper kinesis and stupor, or automatic obedience and negativism. Constrained attitudes and postures may be maintained for long periods. Episodes of violent excitement may be a striking feature of the condition. For reasons that are poorly understood, catatonic schizophrenia is now rarely seen in industrial countries though it remains common elsewhere. These catatonic phenomena may be combined with a dream-like (oneiroid) state with vivid scenic hallucinations.

DIAGNOSTIC GUIDELINES
The general criteria for a diagnosis of schizophrenia (see introduction to F20 above) must be satisfied. Transitory and isolated catatonic symptoms may occur in the context of any other subtype of schizophrenia, but for a diagnosis of catatonic schizophrenia one or more of the following behaviors should dominate the clinical picture:
(a) Stupor (marked decrease in reactivity to the environment and in spontaneous movements and activity) or mutism;
(b) Excitement (apparently purposeless motor activity, not influenced by external stimuli);
(c) Posturing (voluntary assumption and maintenance of inappropriate or bizarre postures);
(d) Negativism (an apparently motiveless resistance to all instructions or attempts to be moved, or movement in opposite direction);
(e) Rigidity (maintenance of a rigid posture against efforts to be moved);
(f) Waxy flexibility (maintenance of limbs and body in externally imposed positions); and
(g) Other symptoms such as command automatism (automatic compliance with instructions), and perseveration of words and phrases.

In uncommunicative patients with behavioural manifestations of catatonic disorder, the diagnosis of schizophrenia may have to be provisional until adequate evidence of the presence of other symptoms is obtained. It is also vital to appreciate that catatonic

symptoms are not diagnostic of schizophrenia. A catatonic symptom or symptoms may also be provoked by brain disease, metabolic disturbances, or alcohol and drugs, and may also occur in mood disorders. Includes:
1. Catatonic stupor
2. Schizophrenic catalepsy
3. Schizophrenic catatonia
4. Schizophrenic flexibilities criteria

F20.3 UNDIFFERENTIATED SCHIZOPHRENIA

Conditions meeting the general diagnostic criteria for schizophrenia (see introduction to F20 above) but not conforming to any of the above subtypes, or exhibiting the features of more than one of them without a clear predominance of a particular set of diagnostic characteristics. This rubric should be used only for psychotic conditions (i.e. residual schizophrenia and post-schizophrenic depression are excluded) and after an attempt has been made to classify the condition into one of the three preceding categories.

DIAGNOSTIC GUIDELINES

This category should be reserved for disorders that:
(a) Meet the diagnostic criteria for schizophrenia;
(b) Do not satisfy the criteria for the paranoid, hebephrenic, or catatonic subtypes;
(c) Do not satisfy the criteria for residual schizophrenia or post-schizophrenic depression. Includes:
• Atypical schizophrenia

F20.4 POST-SCHIZOPHRENIC DEPRESSION

A depressive episode, which may be prolonged, was arising in the aftermath of a schizophrenic illness. Some schizophrenic symptoms must still be present but no Longer dominate the clinical picture. These persisting schizophrenic symptoms may be "positive" or "negative," though the latter are more common. It is uncertain, and immaterial to the diagnosis, to what extent the depressive symptoms have merely been Uncovered by the resolution of earlier psychotic symptoms (rather than being a new development) or are an intrinsic part of schizophrenia rather than a psychological reaction to it. They are rarely sufficiently severe or extensive to meet criteria for a Severe depressive episode and it is often difficult to decide which of the patient's symptoms are due to depression and which to neuroleptic medication or to the impaired volition and affective flattening of schizophrenia itself. This depressive disorder is associated with an increased risk of suicide.

DIAGNOSTIC GUIDELINES

The diagnosis should be made only if:
(a) The patient has had a schizophrenic illness meeting the general criteria for schizophrenia (see introduction to F20 above) within the past 12 months;
(b) Some schizophrenic symptoms are still present; and
(c) The depressive symptoms are prominent and distressing, fulfilling at least the criteria for a depressive episode, and have been present for at least 2 weeks.
If the patient no longer has any schizophrenic symptoms, a depressive episode should be diagnosed. If schizophrenic symptoms are still florid and prominent, the diagnosis should remain that of the appropriate schizophrenic subtype.

F20.5 RESIDUAL SCHIZOPHRENIA

A chronic stage in the development of a schizophrenic disorder in which there has been a clear progression from an early stage (comprising one or more episodes with psychotic symptoms meeting the general criteria for schizophrenia described above) to a later stage characterized by long-term, though not necessarily irreversible, "negative" symptoms.

DIAGNOSTIC GUIDELINES

For a confident diagnosis, the following requirements should be met:
(a) prominent "negative" schizophrenic symptoms, i.e. psychomotor slowing, under activity, blunting of affect, passivity and lack of initiative, poverty of quantity or content of speech, poor nonverbal communication by facial expression, eye contact, voice modulation, and posture, poor self-care and social performance;
(b) Evidence in the past of at least one clear-cut psychotic episode meeting the diagnostic criteria for schizophrenia;
(c) a period of at least 1 year during which the intensity and frequency of florid symptoms such as delusions and hallucinations have been minimal or substantially reduced and the "negative" schizophrenic syndrome has been present;
(d) Absence of dementia or other organic brain disease or disorder, and of chronic depression or institutionalism sufficient to explain the negative impairments. If adequate information about the patient's previous history cannot be obtained, and it therefore cannot be established that criteria for schizophrenia have been met at some time in the past, it may be necessary to make a provisional diagnosis of residual schizophrenia.
Includes:
• Chronic undifferentiated schizophrenia
• "Restzustand"
• Schizophrenic residual state

F20.6 SIMPLE SCHIZOPHRENIA

An uncommon disorder in which there is an insidious but progressive development of oddities of conduct, inability to meet the demands of society, and decline in total performance. Delusions and hallucinations are not evident, and the disorder is less obviously psychotic than the hebephrenic, paranoid, and catatonic subtypes of schizophrenia.
The characteristic "negative" features of residual schizophrenia (e.g. blunting of affect, loss of volition) develop without being preceded by any overt psychotic symptoms. With increasing social impoverishment, vagrancy may ensue and the individual may then become self-absorbed, idle, and aimless.

DIAGNOSTIC GUIDELINES

Simple schizophrenia is a difficult diagnosis to make with any confidence because it depends on establishing the slowly progressive development of the characteristic "negative" symptoms of residual schizophrenia without any history of hallucinations, delusions, or other manifestations of an earlier psychotic episode, and with significant changes in personal behaviors, manifest as a marked loss of interest, idleness, and social withdrawal.
Includes:
• Schizophrenia simplex

Appendix IV
Ministry of Health Agreement

Palestinian National Authority
Ministry of Health
Mental Health General Administration

السلطة الوطنية الفلسطينية
وزارة الصحة
الإدارة العامة للصحة النفسية

Date: 15/01/2012

رقم:

السادة / المدراء الطبيين للمراكز حفظهم الله،،،
السادة / المدراء الإداريين للمراكز حفظهم الله،،،

السلام عليكم ورحمة الله وبركاته،،

الموضوع / تسهيل مهمة الباحث

بخصوص الموضوع أعلاه يرجي تسهيل مهمة الباحث الحكيم/ محمد زهير عايش رقم وظيفي 207549 الملتحق ببرنامج ماجستير الصحة النفسية بالجامعة الإسلامية و عنوان البحث:

quality of life among schizophrenic patient in Gaza "gavernorates"

. حيث سيقوم الباحث بالاطلاع على ملفات المرضي والاستعانة بالطواقم الفنية في عيادات الصحة النفسية المجتمعية وأخذ نتائج التحاليل اللازمة لبحثه، كما سيقوم بتعبئة الاستبيانات لعينة من المرضي وذلك حيث لا يكون يتعارض مع مصلحة العمل في المراكز ويكون ضمن أخلاقيات البحث العلمي دون تحمل المراكز والمرضي بالمراكز أي أعباء من إجراء هذا البحث.

وتفضلوا بقبول فائق الاحترام والتقدير،،،

د. عايش سمور

مدير عام الصحة النفسية

القرار لسيادتكم: 1).....

الإجراء: 1).....

فلسطين – غزة – شارع العيون – مستشفي الطب النفسي تلفاكس: 08.2879845

Email : g.d.o.mental_health_gaza@hotmail.com

Appendix IV
Personal Conditions List

Before we start we would like you to answer some question about yourself through putting (X) mark in suitable squire.

1- Age ☐

2. **Gender:** male ☐ Female ☐

3. Residence:

North ☐ Gaza ☐ Middle ☐ Khanyounis ☐ Rafh ☐

4. Type of housing: Concrete ☐ Aspest ☐ Other ☐

5. State of housing: owned ☐ Rent ☐

6. Marital status:

Single ☐ Married ☐ Widow ☐ Divorced ☐

7. Number of family member :…….

8. Level of education:
Primary ☐ preparatory ☐ secondary ☐ university ☐ other ☐

9. Job:

Works ☐ does not work ☐

10. Income:
Less than500SH ☐ from500-999 ☐ from1000-1500 ☐ more than 1500 ☐

Health profile including:

11. History of illness……

12. Times of admission ……

13. If there are any complication result from illness: Yes ☐ No ☐

14. Are there any side effects of medication: Yes ☐ No ☐

Appendix V

Questionnaire of Quality of life among schizophrenic Patients in Gaza governorates

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the tow months.**

No.	Before two months	Vary bad	bad	No bad No good	Good	Vary good
1-	How would you rate your quality of life?					

No.	Before two months	Very dissatisfied	Dissatisfied	Intermediate	Satisfied	Very satisfied
2-	How satisfied are you with your health?					

The following questions ask about **how much** you have experienced certain things at last two months.

No.	Before two months	Vary few	Few	intermediate	Much	Too much
3-	To what extent do you feel that physical pain prevents you from doing what you need to do?					
4-	How much do you need any medical treatment to function in your daily life?					
5-	How much do you enjoy life?					
6-	To what extent do you feel your life to be meaningful?					
7-	How well are you able to concentrate?					
8-	How safe do you feel in your daily life?					
9-	How healthy is your physical environment?					

The following questions ask about how completely you experience or were able to do certain things in the last two months

No.	Before two months	Does not have	Little	intermediate	much	Vary much
10-	Do you have enough energy for everyday life?					
11-	Are you able to accept your bodily appearance?					
12-	Have you enough money to meet your needs?					
13-	How available to you is the information that you need in your day-to-day life?					
14-	To what extent do you have the opportunity for leisure activities?					

No.	Before two months	Vary bad	Bad	No bad No good	Good	Vary good
15-	How well are you able to get around?					

The following questions ask about happiness and satisfy able to do certain things in the last two months:

No.	Before two months	Very dissatisfied	Dissatisfied	Intermediate	Satisfied	Very satisfied
16-	How satisfied are you with your sleep?					
17-	How satisfied are you with your ability to perform your daily living activities?					
18-	How satisfied are you with your capacity for work?					
19-	How satisfied are you with yourself?					

20-	How satisfied are you with your personal relationships?					
21-	How satisfied are you with your sex life?					
22-	How satisfied are you with the support you get from your friends?					
23-	How satisfied are you with the conditions of your living place?					
24-	How satisfied are you with your access to health services?					
25-	How satisfied are you with your transport?					

The next and the last question is how much did you have negative feeling in the last tow months:

No.	**Before two months**	**Never**	**Rarely**	**Often**	**Vary often**	**Always**
26-	How often do you have negative feelings such as blue mood, despair, anxiety, depression?					

Appendix VI

Patient Agreement

موافقة المرضى

الأخ الفاضل.... الأخت الفاضلة.....

السلام عليكم ورحمة الله وبركاته،،،

أضع بين أيديكم هذه الاستبانة التي تهدف إلى التعرف على مستوى جودة الحياة لدى المرضى المصابين بالفصام من الأبعاد الاجتماعية والاقتصادية والنفسية وغيرها.

وحيث إنني أومن بأنكم خير مصدر للمعلومات المطلوبة ، واعهد بكم الاهتمام والمساعدة في انجاز ودعم الأبحاث العلمية التي تهتم بخدمة مجتمعنا وتطويره ، لذا توجهت إليكم وكلي أمل في أن أجد التعاون من قبلكم وذلك من خلال الإجابة على الأسئلة في هذه الاستبانة ، علما بان الإجابة ستعامل بسرية تامة وسوف تستخدم لأغراض البحث العلمي فقط.

شاكرين لكم حسن تعاونكم معنا

وتفضلوا بقبول فائق الاحترام والتقدير

الباحث

محمد زهير عايش

Appendix VII

Arabic Personal Conditions List

أحوالك الشخصية

قبل أن نبدأ نود منك للإجابة على بعض الأسئلة العامة عن نفسك وذلك بوضع علامة (×) في المربع المناسب لك .

1-العمر. ☐

2-الجنس: ☐ **ذكر** ☐ **أنثى.**

3-العنوان :

☐ **الشمال** ☐ **غزة** ☐ **الوسطى** ☐ **خان يونس** ☐ **رفح.**

نوع السكن : ☐ **باطون** ☐ **اسبست** ☐ **غير ذلك**

حالة السكن: ☐ **ملك** ☐ **إيجار**

4-الحالة الاجتماعية:

☐ **أعزب/ آنسة** ☐ **متزوج/ ة** ☐ **أرمل/ ة** ☐ **مطلق/ ة.**

5-عدد أفراد الأسرة :.....

6- المستوى التعليمي:

☐ **ابتدائي** ☐ **إعدادي** ☐ **ثانوي** ☐ **جامعي**

7- المهنة : ☐ **يعمل /ت** ☐ **لا يعمل/ت**

8. قيمة الدخل الشهري:

☐ **اقل من 500 شيقل** ☐ **من 500-999 شيقل** ☐ **من 1000-1500شيقل** ☐ **أكثر من 1500**

معلومات خاصة بالمرض:

تاريخ المرض .....

عدد مرات دخول المستشفى.....

هل يوجد مضاعفات بسبب المرض ☐ **نعم** ☐ **لا**

هل يوجد أعراض جانبية للأدوية ☐ **نعم** ☐ **لا**

Appendix VIII

Arabic Questionnaire

مقياس جودة الحياة لدى مرضى الفصام في محافظات قطاع غزة

في هذه الورقة يتم تقييم مستوى معيشتك "جودة حياتك" وصحتك ومجالات أخرى في حياتك

اقرأ كل سؤال بتمعن وتذكر كيف شعرت خلال الشهرين الماضيين ثم ضع علامة X على المربع الذي يناسبك:

م	قبل شهرين من الآن	سيئ جداً	سيئ	متوسط	جيد	جيد جداً
1	كيف تقيم جودة حياتك؟					

م	قبل شهرين	غير راض جداً	غير راض	ليس لي رأي	راض	راض جداً
2	هل أنت راض عن حالتك الصحية؟					

والأسئلة التالية تقوم بالاستفسار عن مدى تعرضك لأشياء معينة خلال الشهرين الماضيين

م	قبل شهرين	بدرجة قليلة جدا	بدرجة قليلة	بدرجة متوسطة	بدرجة كثيرة	بدرجة كثيرة جدا
3	إلى أي حد تشعر بان الوجع يمنعك من القيام بالأعمال اليومية؟					
4	هل احتجت إلى علاج طبي حتى تمارس حياتك اليومية ؟					
5	إلى أي مدى تستمتع بالحياة؟					
6	إلى أي مدى تشعر بان حياتك ذات معنى؟					
7	هل كنت قادراً على العمل بتركيز ؟					
8	كم تشعر بالأمان في حياتك اليومية؟					
9	إلى أي حد تعتبر البيئة المحيطة بك صحية؟					

الأسئلة التالية تقوم على أشياء محددة عايشتها قادراً على أدائها في خلال الشهرين الماضيين

م	خلال الشهرين الماضيين	لا يوجد	قليلاً	بدرجة متوسطة	كثيرا	كثير جدا
10	هل لديك طاقة كافية لمواصلة الحياة اليومية؟					
11	هل أنت قادر على قبول مظهرك الخارجي؟					
12	هل لديك من المال ما يكفي لتلبية احتياجاتك؟					
13	كم تتوفر لك المعلومات التي تحتاجها في حياتك اليومية؟					
14	إلى أي مدى لديك الفرصة للأنشطة الترفيهية؟					

م	خلال الشهرين الماضيين	سيئ جداً	سيئ	متوسط	جيد	جيد جداً
15	كم أنت قادر على التجول بسهولة؟					

والأسئلة التالية تقوم على مدى السعادة والرضا بالنسبة لأشياء قمت بها في خلال الشهرين الماضين

م	قبل شهرين من الآن	غير راض مطلقا	غير راض	لا راض ولا غير راض	راض	راض جداً
16	هل كنت راضي عن نومك؟					
17	إلى أي مدى أنت راض عن قدرتك على القيام بنشاطاتك اليومية؟					
18	هل أنت راض عن قدراتك على العمل؟					
19	هل أنت راض عن نفسك؟					
20	هل أنت راض عن علاقتك الشخصية؟					
21	هل أنت راض عن حياتك الجنسية؟					
22	هل أنت راض عن مساندة الأصدقاء لك؟					
23	هل أنت راض عن أحوالك السكنية؟					
24	هل أنت راض عن الخدمات الصحية التي تتلقاها؟					
25	هل أنت راض عن وسائل النقل المتاحة لك؟					

والسؤال التالي والأخير يقوم على كم كان لديك مشاعر سلبية في الشهرين الماضيين

م	قبل شهرين من الآن	أبداً	نادراً	غالبا	غالباً جدا	دائماً
26	هل كان لديك مشاعر سلبية مثل الحزن أو اليأس أو القلق أو الاكتئاب؟					