Relationship between Positive, Negative Symptoms and Quality of Life among Schizophrenic Patients

Zeinab Ali Mohammed[1], Omaima Abo-Bakr Osman[2] and Mona Mohamed Barakat[3]

(1) Nursing Specialist at Benha Fevers Hospital, Egypt, (2) Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Ain-Shams University, Egypt and (3) Assistant Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Benha University, Egypt

Abstract

Background: Positive and negative symptoms of schizophrenia contribute substantially to poor functional outcomes and poor quality of life. **Aim of study:** Was to examine the relationship between positive, negative symptoms and quality of life among schizophrenic patients. **Research design:** A descriptive correlational design was utilized in this study. **Setting:** The study conducted at Psychiatric and Mental Health Hospital in Benha City in Qalyubia Governorate. **Subject:** A convenient sample consisted of 100 schizophrenic patients. **Tools of data collection:** Four tools were used for data collection, I: A structured Interview Questionnaire included socio demographic and clinical data of the studied patients. II: Scale for the Assessment of Positive Symptoms. III: Scale for the Assessment of Negative Symptoms and IV: Structured Interview Self-Report Quality of Life. **Results:** More than half of the studied patients had severe level of positive symptoms, more than half had severe level of negative symptoms and half of them had poor level of quality of life. Also, there were highly statistically significant negative correlations between total positive, negative symptoms and total quality of life among the studied patients. **Conclusion:** Patients had severe levels of positive and negative symptoms are more likely to have poor level of quality of life. **Recommendation:** Psycho-educational programs should be established for patients with schizophrenia to enhance their coping skills, social skills, problem solving skills and emotion focused coping strategies that hence their quality of life and alleviate positive and negative symptoms.

Key wards: Negative symptoms, Positive symptoms, Quality of life, Schizophrenia.

Introduction

Schizophrenia is a severe chronic disorder that affects the way someone thinks, feels and acts. Schizophrenia affects approximately 1% of the population and is among the most devastating and costly illnesses in the field of psychiatry medicine. With its onset in the late teenage years and early adulthood, schizophrenia's damaging effects begin during a period that should be the most exciting, vigorous and formative years of an adult's life. Schizophrenia is a highly heritable disorder and despite current treatments, most patients have a chronic course resulting in marked lifelong functional disability and poor quality of life (**Kalin, 2019**).

Clinical presentation encompasses symptoms of schizophrenia divided into three dimensions: positive, negative and cognitive symptoms. Positive symptoms involve delusions, hallucinations, thought disorder and disorganized behavior. Negative symptoms involve affective flattening or blunting, alogia or poverty of speech, avolition or apathy, asociality or anhedonia, and impaired attention. In addition to cognitive symptoms involve memory, attention, and executive functioning disorders (**Azaiez et al., 2018**).

Relationship between Positive, Negative Symptoms and Quality of Life among Schizophrenic Patients

Each patient with positive symptoms of schizophrenia may experience negative outcomes in the particular area of life that interacts with that patient's quality of life such as conflict in relationships, job loss, difficulty socializing or building relationships, self-imposed withdrawal or isolation from others, legal problems, hatred violent or cruelty against others, poor performance at work or school and self-inflicted injury. Clinically significant delusions are harmful, they create anxiety and stress and they impair good functioning in people who report them and contributing to social isolation. Also, hallucinations cause negative adverse effects including anxiety, depression, social withdrawal, distress, disability, reduced productivity and suicidal ideation which affect the quality of patients' life (**Harvey et al., 2019**).

Negative symptoms of schizophrenia represent a relative absence of feelings, cognition and goal directed behavior, which has a detrimental effect on psychosocial functioning and quality of life. Neurocognitive impairments that manifest in the domains of verbal memory, working memory, attention, social cognition and executive functions are associated with higher levels of negative symptoms and a lower level of social and vocational functioning. Negative symptoms are also associated with lower empathetic capacity, a negative global self-concept, lower self-esteem and other dysfunctional beliefs about the self, as well as decreased social cognition. Negative symptoms also serve as a maladaptive strategy, protecting the patient from expected pain and rejection in social situations. Targeting negative symptoms has the potential to reduce the psychosocial disability associated with schizophrenia (**Batinic, 2019).**

Quality of life is defined as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns by the World Health Organization. Quality of life scales which usually consist of physical health, psychological state, social relationships, level of independence and environmental domains, have widely been used as major outcome measures in the treatment of schizophrenia. Both demographic such as (gender, age and education) and clinical characteristics such as (psychopathology, use of psychotropic medications and side effects) have been found to influence quality of life in schizophrenia patients (**Dong et al., 2019).**

The goal of schizophrenia treatment has moved from remission of symptoms to recovery in life. In order to achieve recovery, it is necessary to identify the factors of functioning that lead to a good quality of life. Quality of life has been measured from two viewpoints. One is subjective quality of life, which is rated by patients themselves, and the other is objective quality of life, which is rated by observers. The concept of subjective quality of life comprises well-being and satisfaction with life and that of objective quality of life comprises daily life functioning and external resources. To achieve recovery in life must consider both subjective and objective viewpoints (**Takeda et al., 2019).**

Five main categories of nursing interventions nurses use it to support patient's quality of life such as empowering interventions, social interventions, activating interventions, security interventions and care planning interventions. Empowering interventions are actions where the nurses show interest, discuss, encourage, give information, maintain hope, and motivate.

Social interventions are actions nurses support patients' family members, give patients opportunities for social contacts or to continue studies. Activating interventions are actions where nurses do activities together with patients and give patients opportunities for participating in activities. Security interventions are actions where nurses take care of the basic needs of patients, take care of ward safety, and impose restrictions on patients. Care planning interventions are actions where nurses appraise patients' needs for care, collect information, and plan an individual patient's care **(El-Azzab & Abu-Salem, 2018).**

Significance of the Study

Schizophrenia is an overwhelming mental illness which characterized by positive and negative symptoms. These symptoms may have a negative impact on a patient's social, occupational, interpersonal functioning and quality of life. In the last decades, there has been increased interest in the field of quality of life in mental disorders in general, and particularly in schizophrenia **(Abd EL Aziz et al., 2017).** The study done by **(Desalegn et al., 2020)** found that positive and negative symptoms had a significant negative association with the overall quality of life. Knowledge of the factors that are determinants of quality of life in patients with schizophrenia assists in choosing the most appropriate and effective interventions for treatment. So, this study will be done to assess the relationship between positive, negative symptoms and quality of life among patients with schizophrenia.

Aim of the Study:

The aim of this study was to examine the relationship between positive, negative symptoms and quality of life among schizophrenic patients.

Research Questions:

1- What is the severity of positive and negative symptoms among schizophrenic patients?

2- What is the level of quality of life among schizophrenic patients?

3- What is the relation between positive, negative symptoms and quality of life among schizophrenic patients?

Subject and Methods

Research design:

A descriptive correlational design was utilized to fulfill the aim of this study.

Research setting:

The study was conducted at the Psychiatric and Mental Health Hospital in Benha City, Qalyubia Governorate, which is affiliated to General Secretariat of Mental Health in Egypt. It has 5 departments (4 males and 1 female); with capacity of 220 beds. The hospital provides care for patients diagnosed with acute and chronic mental illnesses who need institutional care, receiving new cases for treatment and providing follow up for patients after discharge.

Research subject:

Sample type: A convenient sample of schizophrenic patients.

Sample size: The sample was chosen as the number of available patients, were 100 patients who meet the following criteria:-

Inclusion criteria: Newly diagnosed with schizophrenia within six months, aware and able to interact and had willingness to participate in the study.

Exclusion Criteria: Patients are with mental retardation and patients with other psychotic disorders such as substance abuse and affective disorder.

Tools for data collection:

Tool (1): Structured Interview Questionnaire:

The questionnaire was developed by the researcher based on scientific review of literature to assess the following parts:

Part I: Socio-demographic Data: It consisted of 7 items to elicit data about studied patients such as (age, sex, marital status, educational level, occupation, family income and residence).

Part II: Clinical Data: It consisted of 6 items include (age at onset of the disease, frequency of hospital admissions, method of admission, by whom in case of involuntary admission, family history of mental illness and patient's relation to him).

Tool (2):- Scale for the Assessment of Positive Symptoms (SAPS):

This scale was originally developed by **Andreasen, (1984)** to assess positive symptoms of schizophrenia; it was translated into Arabic version by the researcher. The scale consists of 30 items divided into 4 subscale includes hallucinations (6 items), delusions (12 items), bizarre behavior (4 items) and positive formal thought disorder (8 items). The scoring options ranged from none (0), mild (1), moderate (2) and severe (3). The minimal score (0) and the maximum score (90).

Scoring system:
- None =   <25%.
- Mild =   25- <50%.
- Moderate =   50 - <75 %.
- Severe =   ≥ 75 %.

Tool (3): Scale for the Assessment of Negative Symptoms (SANS):

This scale was originally developed by **Andreasen, (1984)** to assess negative symptoms in schizophrenia; it was translated into Arabic version by the researcher. The scale consists of 20 items divided into 5 subscales includes affective flattening or blunting (7 items), alogia (4 items), avolition or apathy (3 items), anhedonia or asociality (4 items) and attention (2 items). The scoring options ranged from none (0), mild (1), moderate (2) and severe (3). The minimal score (0) and the maximum score (60).

Scoring system:-
- Mild =   < 33%.
- Moderate =   33% - < 67%.
- Severe =   ≥ 67%.

Tool (4): Structured Interview "Self-Report Quality of Life: the SQLS" :

Self-report quality of life measure for people with schizophrenia developed by **Wilkinson et al., (2000);** it was translated into Arabic version by the researcher. It is practical acceptable method designed to measure quality of life for people with schizophrenia. This scale consists of 30 items which divided into 3 subscales psychosocial (15items), motivation/energy (7 items) and symptoms/side effects (8 items). The scoring options ranged from never (0), rarely (1), sometimes (2), often (3), always (4). The minimal score (0) and the maximum score (120).

Scoring system:
- Very high =   < 25%.
- High =   25-<50%.
- Average =   50 -<75 %.
- Poor =   ≥75 %.

Validity of the tools:

Arabic translation done by researcher for Scale for the Assessment of Positive Symptoms (SAPS), Scale for the Assessment of Negative Symptoms (SANS) and Self-Report Quality of Life Scale (SQLS) and tested for their translation. Content validity of tools was done by jury of five experts in Psychiatric Nursing Field from Benha University who checked the relevancy, clarity, comprehensiveness and applicability of the questions. According to their opinions,

modifications were done and final form was developed.

Modifications were done in the items of Scale for Assessment of Positive Symptoms (SAPS) to be (30) items instead of (34) items and Scale Assessment of Negative Symptoms (SANS) to be (20) items instead of (25) items.

Modifications were done in the scoring system of Scale for Assessment of Positive Symptoms (SAPS) and Scale Assessment of Negative Symptoms (SANS) to be four items instead of six items. The scoring system modified to none (0), mild (1), moderate (2) and severe (3) instead of six degrees that were none (0), questionable (1), mild (2), moderate (3), marked (4) and severe (5).

Reliability of the tools:

The internal consistency of the tools was checked by Alpha Cronbach reliability analysis. Alpha Cronbach reliability analysis for Scale for the Assessment of Positive Symptoms (SAPS) is **0.813**, Scale for the Assessment of Negative Symptoms (SANS) is **0.826** and Self-Report Quality of Life Scale (SQLS) is **0.841.**

Ethical considerations:

The objectives and aim of the study were clarified by the researcher to hospital authorities to take study approval, oral consent obtained from each patient before conducting the interview and they were assured for maintaining confidentiality and anonymity. The patients were informed that they have the right to participate in the study and the right to withdraw from the interview at any time.

Pilot study:

After the tools were designed, they were tested through a pilot study, which was done before its application in the field work to check feasibility and clarity of the designed tools to be sure that it was understood, estimate the time needed to complete the

study and it was carried on sample of 10% (10 patients).

Field work (actual study):

- The researcher started data collection by introducing herself to the patients.

- The researcher followed the specific precautions such as (wearing facemask and using alcohol spray) due to corona virus circumstances after explanation and reassurance of patients.

- The sample was selected by interviewing 100 schizophrenic patients; data collection was done by interviewing each patient individually in the morning shift in the recreational room in inpatient wards. Explaining the purpose of the study was done for everyone. Oral consent was taken from every patient before data collection.

- Brief description about the aim of the study and the type of questionnaire required to fill was given to each patient of the sample.

- All patients were newly diagnosed with the disease of schizophrenia within six months (in acute phase) aware, able to interact and had the willingness to participate in the study.

- The researcher started to collect data from patients, 2 patients/ day each patient's interview lasted for 1 hour. Data collected from some patients on more than one day which depending on patient condition and response.

- The process of data collection took a period of six months from the first of March 2021 to the end of August 2021, 2 days/ week (Saturday and Thursday). From 10:00 am to 12:00 pm, 2 hours/ day, 2 days/ week, 2 patients/ day, 1 patient/ hour, 8 day/ month and 16- 17 patients/ month.

Statistical analysis:

All data collected were organized, revised, coded, computerized, tabulated, and analyzed by using The Statistical Packages for Social Science program (SPSS) (version 20), which used frequencies and percentages for

Relationship between Positive, Negative Symptoms and Quality of Life among Schizophrenic Patients

qualitative descriptive data, Chi-square was used for relation tests, mean and standard deviation was used for quantitative data and person correlation coefficient (r) was used for correlation analysis and degree of significance was identified. A highly statistical significant difference was considered if (p-value < 0.01), statistical significant difference was considered if (p-value < 0.05) and non-statistical significant difference was considered if (p-value > 0.05).

Results

Table (1) shows that, less than half (46%) of the studied patients their age ≥ 40 years with mean age 38.7± 12.63 years. As regard to sex and marital status, three fifth (60%) of the patients were male and less than three quarters (71%) of them were single. In addition, half (50%) were read and write. Moreover, the vast majority (95%) were not working and (95%) residing at rural areas. Also, more than half (54%) of them had insufficient income.

Table (2) illustrates that, more than half (58%) of patients their age at the onset of disease ≥ 30 years, with mean age 28.6±10.4 years. Also, the vast majority (94%) of them were hospitalized 1 time. Moreover, less than two-thirds (61%) were involuntary admission and the majority (82%) were hospitalized by the family. Furthermore, more than one-third (39%) of patients had family history of a mental illness and two-thirds (66.7%) were father / mother had actual illness.

Figure (1) shows that, the vast majority (97%) of patients had positive symptoms of schizophrenia.

Figure (2) shows that, more than half (53%) of the studied patients had severe level of positive symptoms. Also, more than one-quarter (30%) of them had moderate level of positive symptoms of schizophrenia.

Figure (3) shows that, more than half (52%) of the studied patients had severe level of negative symptoms. Also, more than one-third (36%) of them had moderate level.

Figure (4) shows that half of the studied patients (50%) had poor level of total quality of life. Also, more than one third (36%) of them had average level.

Table (3) reveals that, there were highly statistically significant negative correlations between total positive symptoms, total negative symptoms and total quality of life among the studied patients at (P= <0.01**). While, there was a highly statistically significant positive correlation between total positive symptoms and negative symptoms among the studied patients at (P= < 0.01**).

Zeinab Ali Mohammed, Omaima Abo-Bakr Osman and Mona Mohamed Barakat

Table (1) Distribution of the studied patients according to their socio-demographic data.

Socio-demographic data	Sample size (n = 100)	
	N	**%**
Age (years)		
< 20 yrs.	2	2
20-<30 yrs.	26	26
30-<40 yrs.	26	26
≥ 40 yrs.	46	**46**
Mean±SD **38.7± 12.63**		
Sex		
Male	60	**60**
Female	40	40
Marital status		
Single	71	**71**
Married	2	2
Divorced	25	25
Widowed	2	2
Educational level		
Illiterate	45	45
Read and write	50	**50**
Primary education	2	2
Secondary education	2	2
High education	1	1
Occupation		
Work	5	5
Not work	95	**95**
Family income		
Sufficient	42	42
Sufficient and can be saved	4	4
Insufficient	54	**54**
Residence		
Rural area	95	**95**
Urban area	5	5

Relationship between Positive, Negative Symptoms and Quality of Life among Schizophrenic Patients

Table (2) Distribution of the studied patients according to their clinical data.

| Clinical data	Sample size (n = 100)	
	N	%
Age at the onset of disease (years)		
15-<20 yrs.	7	7
20-<25 yrs.	22	22
25-<30 yrs.	13	13
≥ 30 yrs.	58	**58**
Mean±SD 28.6±10.4		
Frequency of hospital admissions		
1 time	94	**94**
2 times	6	6
Method of admission		
Voluntary	39	39
Involuntary	61	**61**
In case of involuntary admission, is it through (n=61)		
The family	50	**82**
Transferred from another hospital	11	18
Is there anyone in the family suffers from a mental illness?		
Yes	39	39
No	61	**61**
If yes, what is the relationship of kinship? (n=39)		
Father / Mother	26	**66.7**
Brother / Sister	2	5.1
Uncle / Aunt	9	23
Maternal uncle / aunt	1	2.6
Grandfather / mother	1	2.6
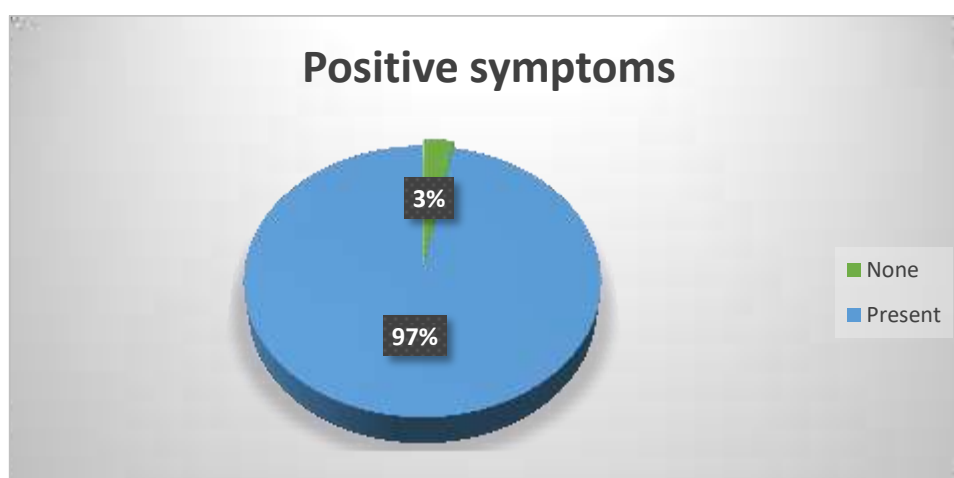
Figure (1) Distribution of the studied patients according to presence of positive symptoms of schizophrenia (n=100).
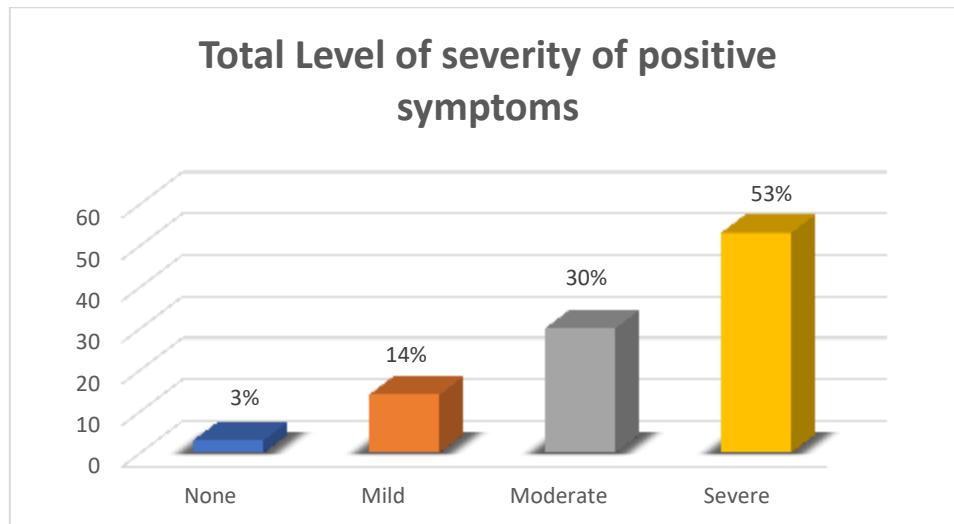
Figure (2) Distribution of the studied patients according to severity of positive symptoms of schizophrenia (n=100).
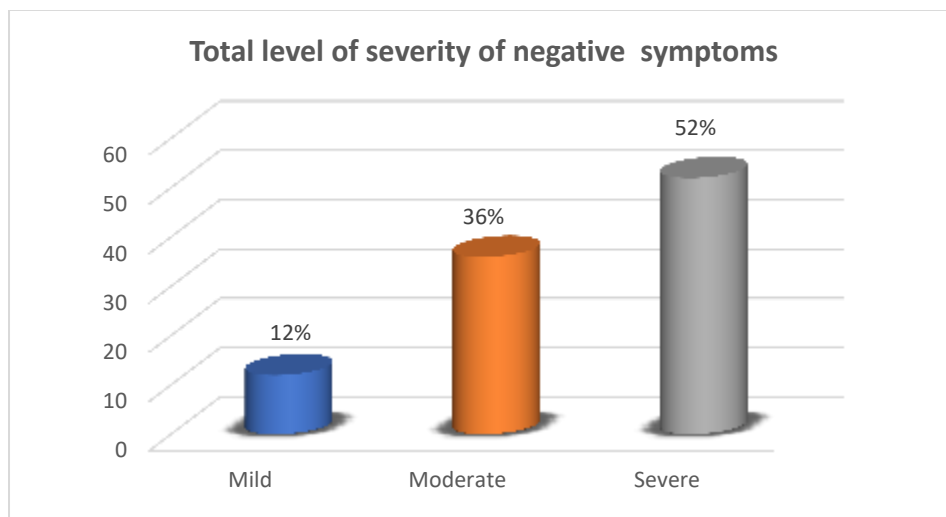

Figure (3) Distribution of the studied patients according severity of negative symptoms of schizophrenia (n=100).
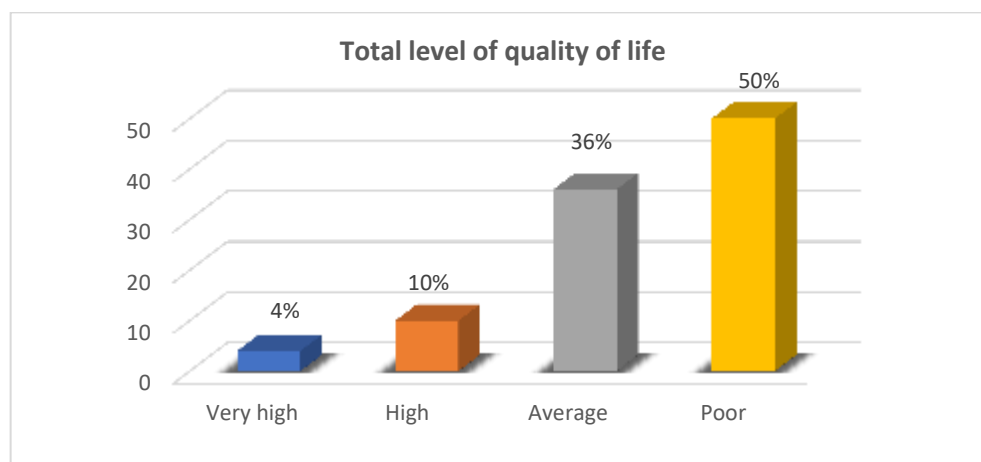

Figure (4) Distribution of the studied patients according to their total level of quality of life (n=100).

Relationship between Positive, Negative Symptoms and Quality of Life among Schizophrenic Patients

Table (3) Correlation between patients' total positive, total negative symptoms and total quality of life (n=100).

Variables	Total Positive Symptoms	Total Negative Symptoms
Total Quality of Life	r = -.308 p = .000**	r = -.317 p = .000**
Total Negative Symptoms	r = .397 p = .000**	

**highly significant at p ‹ 0.01. r= correlation coefficient. P= p-value

Discussion

Schizophrenia is overwhelming clinical psychiatric disorder that includes positive, negative and cognitive symptoms, characterized by disturbances in thought process, reality testing, perception, attention, affect, behavior and motivation. Despite the low prevalence rate, schizophrenia has detrimental effects on patients' lives, and it places tremendous health, social, and economic burdens on patients, families, caregivers, and society. For instance, patients with schizophrenia have low quality of life, can be involved in violence, impeded employment and have a high risk of acquiring physical diseases **Jo et al., (2020).** The current study aimed to examine the relationship between positive, negative symptoms and quality of life among schizophrenic patients, by assessing the severity of positive, negative symptoms and the level of quality of life, by recruiting 100 schizophrenic patients from Psychiatric and Mental Health Hospital in Benha city, Qalyubia Governorate.   Data emerging from the study showed that, regarding to socio-demographic data of the studied patients, less than half of the studied patients their age ≥ 40 years with mean age

38.7± 12.63 years. As regard to sex and marital status, three fifth of the patients were male and less than three quarters of them were single. In addition, half of them were read and write. Moreover, the vast majority were not working and residing at rural areas. Also, more than half of them had insufficient income.

Concerning to clinical data of the studied patients, more than half of the studied patients their age at the onset of disease ≥ 30 years, with mean age 28.6±10.4 years. Also, the vast majority of them were hospitalized 1 time. Moreover, less than two-thirds were involuntary admission and the majority hospitalized by the family. Furthermore, more than one-third of patients had family history of a mental illness and two-thirds were father /mother had actual illness.

Regarding the distribution of the studied patients according to presence of positive symptoms of schizophrenia the present study revealed that, the majority of the studied patients had positive symptoms of schizophrenia. This may be due to that, the schizophrenic patients were in acute phase of the disease that associated with presence of prominent positive symptoms. This result was consistent by **Arafa et al., (2017)** proposed

the majority of the studied sample had positive symptoms of schizophrenia.

In relation to total level of positive symptoms among the studied patients, the study revealed that, more than half of them had severe level of positive symptoms of schizophrenia. This may be due to the studied sample newly diagnosed with the disease of schizophrenia in acute phase that characterized by severe level of positive symptoms. Also, **Kalin, (2019)** illustrates that the general psychopathology of the disease of schizophrenia, genetic factors, chemical imbalance in the brain, extreme stress and anxiety levels and overuse of drugs also play a role in developing positive symptoms. This result was consistent with the study by **Wen et al., (2021**) stated high centrality of positive symptoms with symptoms of delusions, hallucinations, disorganization, excitement and grandiosity. Also, this result was congruent with the study by **Spaniel et al., (2016)** found the same result. On the other hand, this result contradicted with the study developed by **Arafa et al., (2017)** reported that the majority of the studied patient had moderate level of positive symptoms of schizophrenia.

In relation to the total level of negative symptoms of schizophrenia among the studied patients, the present study revealed that, more than half of schizophrenic patients had severe level of negative symptoms. According to the study done by **Butcher et al., (2020)** stated that, causes of negative symptoms may be due to exposure to positive symptoms, severe level of anxiety, affective symptoms, depressive symptoms, environmental deprivation and poor premorbid adjustment. In addition, lower empathetic capacity, negative self-concept, lower self-esteem and other dysfunctional beliefs about the self, as well as decreased social cognition, social

attitudes and attitudes towards self-representation, low expectation of satisfaction and success in socially oriented activities and pessimistic attitude towards the future. Also, hospitalization that can be social environment under stimulation and antipsychotic medications play a role in developing and exacerbating negative symptoms with schizophrenic patients.

This result was congruent with **Correll & Schooler, (2020)** found the same one and stated that negative symptoms could be effect of primary positive symptoms for example: patient becomes socially withdrawn after experiencing delusions of persecution or paranoia; or diminished expression could be a coping strategy in patient who is unable to process overwhelming external stimuli associated with psychotic episodes in schizophrenia.

Also, this result supported by the study done by **Butcher et al., (2020)** revealed that, the huge impact of negative symptoms on schizophrenic patients, with poor concentration and motivation, which subsequently made it difficult to engage in normal activities and often resulted in withdrawal. On the other hand, this finding was in disagreement with a study carried by **Mendes et al., (2018)** stated negative symptoms severity was moderate among the studied sample of schizophrenic patients.

Regarding the total level of quality of life of the studied patients, result of the present study revealed that, half of the studied patients had poor level of quality of life. This may be due to general psychopathology of the disease of schizophrenia, impact of the clinical symptoms (positive and negative symptoms) and antipsychotic medications play a role. Low level of psychological stability and emotional well-being that connected with mental disorder with such patients due to

psychotic symptoms severity which cause patient feels worthlessness. Also, stress among such patients arises from many factors such as hospitalization and lack of social skills, empathy and support.

This result supported by **Avila et al., (2020)** proposed that half of the studied sample of schizophrenic patients had low level of quality of life and negative symptoms, psychiatric comorbidity and the side-effects of drugs are factors that negatively influence the quality of life with schizophrenic patients. In the same side this result agreement with result by **Kebeta et al., (2020)** supported the present study result which showed that the majority of patients had low level of quality and stated that positive symptoms, negative symptoms, general psychopathologies, comorbid physical illness and medication non adherence were negatively associated with quality of life among schizophrenic patients.

This finding was also agreement with study done by **Manea et al., (2020)** stated that, the majority of patients had poor level of quality of life. Also, the study done by **Hjorth et al., (2017)** reported that, newly diagnosed patients had low level of quality of life compared with long-term patients and elevated risk factors for poor physical health. On the other hand, this result was contradicted with the study developed with **Özçelik & Yıldırım, (2018)** stated that, the quality of life evaluations were at moderate level at the studied sample of schizophrenic patients. Also, the result was in parallel with the study done by **Mahmoud et al., (2021)** stated that, most of the studied patients of schizophrenia had a high level of quality of life.

Regarding to the correlation between total positive, negative symptoms and total quality of life among schizophrenic patients, the current study revealed that, there were highly statistically significant negative correlations between total positive symptoms, total negative symptoms and total level of quality of life among the studied sample of schizophrenic patients. This meant that the higher levels of positive, negative symptoms lead to poor level of quality of life. This may be due to, that positive and negative symptoms of schizophrenia are associated with economic, professional, physical, emotional, social and functional difficulties in patients with schizophrenia especially who have long hospitalization periods, delayed recovery and poor treatment outcomes, which considerably worsen their quality of life.

This result was consistent with **Desalegn et al., (2020)** stated that, psychiatric symptoms including positive, negative and general psychopathology were found to be key significant associated factors of poor quality of life among people with schizophrenia. Also, this result was in agreement with a study done by **Kebeta et al., (2020)** stated that, there was negative correlation between severity of the psychiatric symptoms including positive and negative symptoms and quality of life and this could be due to the nature and chronic course of the illness of schizophrenia.

This result was supported by study done by **De Pinho et al., (2017)** reported that, quality of life and functioning in patients with schizophrenia can be influenced by negative symptoms and contradicted in relation to positive symptoms, the results are not congruent. Therefore, this study indicated that more research is needed in order to obtain better evidence with regards to the influence of positive on the quality of life and functioning with patients of schizophrenia. In the same line, the study done by **Kousar & Riaz, (2021)** had empirically proved that contrary to positive symptoms, the effect of

negative symptoms in interaction with neuropsychiatric symptoms worsens the quality of life of schizophrenic patients.

Conclusion

More than half of studied patients had severe level of positive symptoms, more than half had severe level of negative symptoms and half of them had poor level of quality of life which answered the research questions about what is the severity of positive, negative symptoms and level of quality of life among schizophrenic patients. Moreover, the study showed highly statistically significant negative correlations between total positive symptoms, total negative symptoms and total quality of life among schizophrenic patients.

Recommendations

Recommendations for patients and families:

▪ Awareness programs for patients and their families about the disease of schizophrenia increase their knowledge about how to deal with positive and negative symptoms and how to adhere to medications to prevent relapse.

▪ Psycho-educational programs should be established for patients with schizophrenia to enhance their coping skills, social skills, problem solving skills and emotion focused coping strategies that hence their quality of life and alleviate positive and negative symptoms.

▪ Planning sessions should be done for families to discuss the impact of positive and negative symptoms on patient's quality of life and the importance of psychological support that improves outcomes.

▪ Future studies should be done on a large number of patients with schizophrenia about how to manage positive and negative symptoms and enhance their quality of life.

Recommendations for education:

▪ Educational programs for nurses to teach them how to deal with positive symptoms especially delusions and hallucinations and negative symptoms.

▪ Awareness programs for nurses towards the importance of providing interaction via recreational activities to enhance patients' emotional well-being, quality of life and alleviate psychotic symptoms among patients.

Recommendations for service:

▪ Group activity therapy should be a part of patients' usual care in all psychiatric and mental hospitals.

▪ Make referrals to patients with schizophrenia and their families to institutions of civil society that can help them by providing occupational and financial support.

▪ Applying therapeutic activity programs at the treatment and rehabilitation centers for patients with schizophrenia.

References:

Abd EL Aziz, E., Rady, H., Nasr EL Din, M. (2017). Effectiveness of Social Skills Training Program on Social Functioning and Severity of Symptoms among Patients with Schizophrenia. American Journal of Nursing Science, 6, (6), Pp 454-466.

Andreasen, N. (1984). Scale for Assessment of Positive Symptoms (SAPS), Scale for the Assessment of Negative Symptoms (SANS). University of Iowa, Iowa city, IA.

Arafa, H., Elmalky, M., & Zaki, M. (2017). Relationship between Positive Symptoms of Schizophrenia and Level of Anxiety among Schizophrenic Patients. Menoufia Nursing Journal, 2, (2), Pp17-26.

Avila, J., Villacrés, L., Rosado, D., & Loor, E. (2020). Cognitive Deterioration and Quality of Life in Patients with

Schizophrenia: A Single Institution Experience. Cureus Journal, 12, (1).

Azaiez, C., Millier, A., Lancon, C., Clay, E., Auquier, P., & et al., (2018). Health Related Quality of Life in Patients Having Schizophrenia Negative Symptoms – A Systematic Review. Journal of Market Access & Health Policy, 6, (1).

Batinic, B. (2019). Cognitive Models of Positive and Negative Symptoms of Schizophrenia and Implications for Treatment. Psychiatria Danubina Journal, 31, (2), Pp 181-184.

Butcher, I., Berry, K., & Haddock, G. (2020). Understanding Individuals' Subjective Experiences of Negative Symptoms of Schizophrenia: A Qualitative Study. British Journal of Clinical Psychology. 59, (3), Pp319-334.

Correll, C., & Schooler, N. (2020). Negative Symptoms in Schizophrenia: A Review and Clinical Guide for Recognition, Assessment, and Treatment. Neuropsychiatric Disease and Treatment Journal, 16, Pp519–534.

De Pinho, L., Pereira, A., & Chaves, C. (2017). Nursing Interventions in Schizophrenia: The Importance of Therapeutic Relationship. Nurse Care Open Access Journal, 3, (6).

Desalegn, D., Girma, S., & Abdeta, T. (2020). Quality of Life and its Association with Psychiatric Symptoms and Socio-demographic Characteristics among People with Schizophrenia: A Hospital-based Cross-sectional Study. PLoS One Journal, 15, (2).

Dong, M., Lu, L., Zhang, Y., Ng, C., Ungvari, G., & et al., (2019). Quality of Life in Schizophrenia: A Meta-Analysis of Comparative Studies. Psychiatric Quarterly Journal, 90, Pp519–532.

El-Azzab, S., & Abu-Salem, E. (2018). Effective Strategies for Nurses Empowering the Life Quality and Antipsychotic Adherence of Patients with Schizophrenia. Journal of Nursing Education and Practice, 8, (10).

Harvey, P., Strassnig, M., & Silberstein, J. (2019). Prediction of Disability in Schizophrenia: Symptoms, Cognition, and Self-assessment. Journal of Experimental Psychopathology, 10, (3).

Hjorth, P., Medici, R., Juel, A., Madsen, J., Vandborg, K., & Munk-Jørgensen, P. (2017). Improving Quality of Life and Physical Health in Patients with Schizophrenia: A 30-month Program Carried out in a Real-life Setting. International Journal of Social Psychiatry, 63, (4), Pp287–296.

Jo, M., Kim, H., Rim, S., Lee, M., Kim, C., & et al., (2020). The Cost-of-illness Trend of Schizophrenia in South Korea from 2006 to 2016. Plos One Journal, 15, (7).

Kalin, N. (2019). Gaining Ground on Schizophrenia: Conceptualizing How to Use Neuroimaging and Genomics in Its Diagnosis and Treatment. The American Journal of Psychiatry, 176, (10), Pp771-773.

Kebeta, T., Desalegn, D., Girma, S., Tessema, W., & Yeshigeta, E. (2020). Quality of Life and Associated Factors among Patients with Schizophrenia Attending Follow-Up Treatment at Jimma Medical Center, Southwest Ethiopia: A Cross-Sectional Study. Hindawi Psychiatry Journal, 2020, (2).

Kousar, T., & Riaz, M. (2021). Effect of Positive and Negative Symptoms on Schizophrenia Related Quality of Life of Hospitalized Schizophrenic Patients at Sargodha and Lahore: Moderating Role of Neuropsychiatric Symptoms. Journal of Pakistan Medical Association, 71, (1).

Mahmoud, A., Ali, S., & Abdel-Ghani, M. (2021). Relation Between Quality Of Life And Locus Of Control Among Schizophrenic

Patients. Port Said Scientific Journal of Nursing, 8, (3).

Manea, A., Zaki, R., & Morsi, A. (2020). The Relationship between Insight and Quality of Life among Schizophrenic Patients. Egyptian Journal of Health Care, 11, (4).

Mendes, D., Mustafé, G., Fernandes, T., Martins, T., & Dantas, C. (2018). Quality Of Life of Chronic Schizophrenia Patients in the Long Term Follow-Up. Schizophrenia Bulletin Journal, 44, (1), S425.

Özçelik, E., & Yıldırım, A. (2018). Schizophrenia Patients' Family Environment, Internalized Stigma and Quality of life. Journal of Psychiatric Nursing, 9, (2), Pp 80-87.

Spaniel, F., Bakstein, E., Anyz, J., Hlinka, J., Sieger, T., & et al., (2016). Relapse in Schizophrenia: Definitively Not a Bolt from the Blue. Neuroscience Letters Journal, 669, (16), Pp68-74.

Takeda, T., Nakataki, M., Ohta, M., Hamatani, S., Matsuura, K., & et al., (2019). Negative and Positive Self-thoughts Predict Subjective Quality of Life in People with Schizophrenia. Neuropsychiatric Disease and Treatment Journal, 15, Pp293-301.

Wen, X., Xu, X., Luo, X., Yin, J., Liang, C., & et al., (2021). Nucks1 Gene Polymorphism rs823114 is Associated with the Positive Symptoms and Neurocognitive Function of Patients with Schizophrenia in Parts of Southern China. Psychiatric Genetics Journal, 31, (4), Pp119-125.

Wilkinson, G., Hesdon, B., Wild, D., Cookson, R., Farina, C., & et al., (2000). Self-report Quality of Life Measure for People with Schizophrenia: The SQLS. British Journal of Psychiatry, 177, (1), Pp 42-46.

العلاقة بين الأعراض الإيجابية والسلبية وجودة الحياة لدي مرضى الفصام

زينب علي محمد – أميمة أبوبكر عثمان – مني محمد بركات

الأعراض الإيجابية والسلبية لمرضي الفصام تساهم بشكل كبير في عدم القدرة علي القيام بالمهام الوظيفية وانخفاض جودة حياة المريض. لذلك هدفت الدراسة إلى فحص العلاقة بين الأعراض الإيجابية والسلبية وجودة الحياة لدى مرضى الفصام. وقد أجريت الدراسة بمستشفى الأمراض النفسية والعقلية بمدينة بنها بمحافظة القليوبية. وتم أخذ عينة ١٠٠ مريض بالفصام كعينة غرضيه للبحث. وقد أسفرت النتائج أن أكثر من نصف المرضي لديهم مستوي شديد من الأعراض الإيجابية وأكثر من نصفهم لديهم مستوى شديد من الأعراض السلبية والنصف لديهم مستوى منخفض من جودة الحياة. كما توجد علاقة سلبية ذات دلالة إحصائية كبيرة بين الأعراض الإيجابية الكلية والاعراض السلبية الكلية وجودة الحياة الكلية بين مرضي الفصام. وبالتالي المرضى الذين يعانون من الأعراض الإيجابية والسلبية الشديدة هم أكثر عرضة لسوء جودة الحياة. وفي ضوء هذه النتائج يوصي بوضع برامج تثقيف نفسي لمرضي الفصام بهدف تعزيز مهارات التكيف، المهارات الإجتماعية، مهارات حل المشكلات ومهارات الرفاهية العاطفية من أجل تحسين مستوي جودة الحياة وتخفيف حدة الأعراض الإيجابية والسلبية.