RELATION BETWEEN QUALITY OF LIFE AND LOCUS OF CONTROL AMONG SCHIZOPHRENIC PATIENTS

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ABSTRACT

Background: Schizophrenia is a heterogeneous disease, which includes psychotic features, cognitive impairment and daily performance disruption. Aim: To explore the association between quality of life and locus of control in schizophrenic patients. Subjects and method: **Design:** A descriptive correlational research design was utilized for the current study. Setting: The study was conducted in psychiatric outpatient clinics at Port Said Psychiatric Health Hospital. Tool: Tool I: Schizophrenia Quality of Life Scale; composed of 30 items. Tool II: General Locus of Control Scale which is composed of 24 items, in addition the personal and clinical data sheet. Results: Revealed that there was a significant association between total quality of life and presence of antipsychotic side effects & duration of hospitalization. Locus of control was found to be significantly associated with working status and education level. There was positive statistically significant correlation between quality of life and locus of control. **Conclusion:** Most of the studied patients showed the high quality of life and external locus of control, there was a positive statistically significant correlation between the quality of life and locus of control. Recommendations: Developing educational strategies regarding the locus of control to encourage patients to attribute their ill health to the events under their control rather than to 'chance.'

Key Words: Locus of control, Quality of life, Schizophrenic patients.

INTRODUCTION

Schizophrenia is one of the most significant public health diseases worldwide. It is a severe mental illness, characterized by significant disruption of thinking, influencing language, perception, as well as the sense of self. Schizophrenia usually includes psychotic experiences including auditory hallucination or delusions. It could lead to impairment of functioning through inability to earn a livelihood, or disrupting studies (World Health Organization, 2013).

Schizophrenia, which is one of the most disabling mental worldwide, and is accompanied by relapse, high hospitalization rate, in ability to work, death in younger age along significant economic costs worldwide. Especially for these reasons, schizophrenic patients are stigmatized leading to discrimination and consequently influences their life opportunities including health-care services, housing, education, employment as well as social relationships. Schizophrenia affects quality and length of life. This can have a significant impact on schizophrenic patients and society (Evensen, Wisloff, Lystad, Bull & Ueland, 2015).

Over the last years, quality of life (QOL) has been a significant outcome measure in psychiatry as it reflects the efficacy of psychosocial interventions and/or pharmacological treatments; besides, it reflects a more holistic view of an individual beyond symptom reduction alone (Picco, 2016). QOL is a multidimensional construct suggested as a health indicator of the population and its assessment is utilized to improve health promotion actions. QOL is defined as "individual perception of one's own stance in the context of the culture and value system in which person is living and about person's goals, expectations, standards and concerns", comprising physical, psychological, independence level. social relations, environmental and spiritual pattern domains. Features like functional capacity, pain, general and mental health, vitality, social aspects as well as emotional aspects could be assessed using instruments measuring the quality of life (Almeida-Brasil, Silveira, Silva, Lima & Faria, 2017).

Another issue that might affect QOL is personality, which is a personal tendency in reacting with and interpreting situations in a specific way despite altering circumstances. Personality has a role in the QOL of healthy and diseased persons. Such association was particularly observed among persons with mental illnesses including depression, schizophrenia as well as schizoaffective disorder (Huang, Lee, Ketheeswaran, Jones & Revicki, 2017). A significant dimension of personality is the locus of control (LOC) which is

a concept of personality psychology that describes a person's tendency to believe he/she controls the outcomes of his/her life internally through his/her actions or that external forces out of control affect life's events (Kundi, Khan, Qureshi, Akhtar, & Khan, 2014).

The core element of psychiatric nursing is an interactive process in patient-nurse relationships. Since human relationships significantly determine QOL, the nurse-patient relationship can improve QOL. Quality of life provides a better and broad view for such relationship to discuss patients' own perceptions and requirements and to let them to become central players in their care. Nursing interventions in psychiatry has an essential role in psychiatric care and patients' recovery because nursing emphasizes patients' responses to the disease, their functional adaptation as well as holistic requirements (Kornhaber, Walsh, Duff & Walker, 2016).

Significance of the study

Over the past 20 years, there has been a great interest in QOL among people with schizophrenia being a disabling, lifelong illness, linked to significant social and occupational dysfunctions. QOL as well as overall functioning are significant outcomes in psychiatric care. Although persons having psychiatric illnesses are often at risk of reduced functioning and reduced QOL, schizophrenic patients are more involved (Ridgewell, Blackford, McHugo, & Heckers, 2017).

There have been some studies on the locus of control and psychosis. Schizophrenic persons were revealed to believe in an external LOC (Thakral, Bhatia, Gettig, Nimgaonkar, &Deshpande, 2014). Thus, the current work was conducted to assess the association between QOL and LOC in persons having schizophrenia.

AIM OF THE STUDY

Explore the association between QOL and locus of control among schizophrenic patients.

Objectives of the study

- 1. Evaluate levels of QOL among patients with schizophrenia.
- 2. Determine locus of control types among patients with schizophrenia.
- **3.** Finds out a correlation between the quality of life, locus of control, personal and clinical data
- 4. Explore the relation between QOL and locus of control in patients with schizophrenia.

Research question:

There is a relationship between quality of life and locus of control among schizophrenic patients?

SUBJECTS AND METHOD

I. Technical Design:

It included research design, setting, persons, sample size, as well as tools of data collection.

Research Design:

A descriptive correlational design was used.

Study Setting:

The study was conducted in the psychiatric outpatient unit at Port Said Psychiatric Health Hospital which is affiliated to the General Secretariat of Mental Health and Addiction Treatment (GSMHAT), Ministry of Health. This hospital offers care for psychiatric and abused persons. It encloses 110 beds; serves 3 Governorates (Port Said, El-Ismailia, and El-Suez).

Subjects:

A sample of 150 schizophrenic patients from both sexes was picked-up, fulfilling certain criteria including;

- Certain diagnoses of schizophrenia with no co-morbidity.
- Attendance to an outpatient clinic for follow up.
- The capability of communication in a comprehensible and relevant manner.
- Accompanied by a family member, to complement and validate patient's answers.

Sample Size:

It was calculated utilizing the Cochrane formula (Araoye, 2003).

$$N = 2Z^2 pq/d^2$$

Where, N=sample size, Z= standard normal deviate at 95% confidence level whose value is 1.96, p= proportion of target population having a characteristic of interest (0.046 was utilized based on findings of an earlier research) (Bhugra, 2005).)

q= 1-p

d= accuracy degree (0.05)

q=1-(0.18) =0.82

 $\mathbf{N} = (2(1.96)^2 \times 0.046 \times 0.954) / ((0.05)^2) = 135$

Assuming a 10% attrition rate:

10% of 135 = 13.5

 $135+13.5=148.5\approx 149$

The final sample size will be 150 patients.

Tools of data collection:

The data were collected utilizing the following tools:

TOOL I: Schizophrenia Quality of Life Scale:

It was developed in the English language by Wilkinson, Hesdon, Wild and Cookson, (2000) and translated into Arabic, and evaluated for validity and reliability by Ahmed, (2004) who applied the scale on Egyptian schizophrenic out patients.

The scale comprises 30 statements, which are divided into three subscales addressing various dimensions about the impact of schizophrenia on QOL. It includes psychosocial functioning, motivation and energy, symptoms and adverse effects. Psychosocial functioning, covering various emotional and social problems, as feeling worried about things, feeling of people avoidance, feeling of loneliness, difficulty mixing in social states. Motivation and energy; addressing various problems, such as the ability to carry out daily activities, lacking the will to do things and preferring to stay at home. Finally, symptoms and adverse effects, including sleep disturbance, blurring of vision, muscle fasciculation, dryness of mouth, muscles stiff and shacking/ trembling.... etc.

Each one of the three subscales/ dimensions is measured by many questions. The psychosocial functioning is measured by 15 questions (4, 7, 8, 9, 11, 14, 16, 18, 19, 22, 24,

26, 27, 28, and 29). Motivation and energy are measured by 7 questions (1, 6, 12, 13, 15, 17, and 20). As for the symptoms and side effects score, it is measured by 8 questions (2, 3, 5, 10, 21, 23, 25, and 30). Respondents were told to answer questions on a 5-point Likert type scale ranging from: "Never" (0) to "Always "(4). Some questions in the motivation and energy domain (12, 13, 15, and 20) have reserved scores that range from "Never" (4) to "Always" (0). The scale measures levels of quality of life in schizophrenic patients good or poor. Higher scores indicate perceived poor quality of life, whereas lower scores indicate QOL (cut point 60, thus the potential range of scores is 0-120).

TOOL II: The General Locus of Control Scale:

The scale was developed by Rotter (1966) in the English Language; and has been translated to Arabic language, validated and tested internal reliability by Kafafy (1982). The scale was frequently applied on different Egyptian subjects, and especially on schizophrenics to determine the locus of control types. It is composed of 29 forced choice items; two of these items were excluded by the researcher (Hamoud, 2008), as they were loaded with political issues that made them inapplicable on Egyptian psychotic patients. Six items of the remained 27 items (1, 7, 13, 18, 23, and 26) are filler items, that were added to make the purpose of the test somewhat ambiguous to the patients and are thus not included in the scoring. In each item the respondent has to choose between two statements which are internal LOC and external LOC. The scale is scored in the external direction (2-a, 3-b, 4-b, 5-b, 6-a, 8-a, 9-b, 10-b, 11-b, 12-b, 14-b, 15-a, 16-a, 17-a, 19-a, 20-a, 21-b, 22-a, 24-a, 25-b, and 27-b). The total locus of control score is obtained by counting the number of external alternatives chosen by a respondent thus the potential range of scores is 0-12. Greater scores reflect amore external locus of control, whereas lower scores reflect more internal LOC on the part of a respondent (cut point 6).

Personal and clinical data sheet: Structured sheet was designed by researchers in the Arabic language. It contained 2 parts: Personal characteristics including age, sex, residency, marital state, educational level, and occupation. Clinical sheet including drug dependence, presence of psychotic family history, presence of side effects of psychotic drugs, age of onset of psychotic illness, duration of treatment/years, number of previous hospital admission, duration of previous hospitalization/ in months, and duration of the last hospitalization.

II. Operational Design:

It included the preparatory phase, pilot study and field of work.

Preparatory Phase:

This included reviewing related literature, various researches and theoretical knowledge of different aspects of the problems using books, research articles, the internet, periodicals and magazines.

Pilot study:

Before conducting the actual research, a pilot study was done on 10% of the study subjects (15 schizophrenic patients) for assessing clarity, feasibility as well as the applicability of tools utilized in data collection. It was conducted on schizophrenic cases that met inclusion criteria and they were ruled out from the study. In addition, this pilot study made the researcher able to deal with the studied persons, be familiar with the setting, and to ensure the time needed to fill in data sheets. The pilot study was conducted at the time from 1/11/2018 to 30/11/2018.

Field work:

- Schizophrenic cases that met inclusion criteria were asked for participation following establishing rapport. An oral consent was then obtained the patients or from their accompanying family members.
- Each patient was interviewed using the study tools.
- Each interview lasted from 45 to 60 min based on the patient's attention, concentration, and willingness to talk or cooperate. Clinical data were double checked from their clinical charts.
- Some of 3-4 cases were interviewed every day.
- Two days a week (Saturday and Tuesday) from 10:00 a.m. to 1:00 p.m.
- Data were collected over 6 months from 15 February 2019 to 15 August 2019. Data were then categorized by the researcher, checked and revised by the supervisors of this thesis.

III. Administrative Design:

Before study initiation, an official letter from the Dean of the Faculty of Nursing was sent to the Director of Port Said Psychiatric Health Hospital to permit researchers and cooperate with them to conduct this study.

Ethical Considerations:

Ethical consideration approval was acquired from the research ethics committee of GSMHAT, Ministry of Health on 20/1/2019. Later, an approval was taken from Port Said Psychiatric Health Hospital. Then, oral consent was taken from participants or their families before participation after an explanation of the study aim. Patients' anonymity and confidentiality were maintained. Besides, voluntary participation and right of withdrawal from were highlighted to patients.

IV. Statistical Design:

Data underwent analysis by the statistical package for social sciences (SPSS) software package version 21. Quantitative data were represented using the means, and qualitative data were represented as number and %. Analysis of variance test will be utilized to compare between more than 2 groups of normally distributed variables.

RESULTS:

Results showed that > 75% of patients were males (76.7%). The age range was 19-65 years with a Mean age \pm SD 34.71 \pm 8.77 years and more than half of them (59.3%) ranged between 25-<40 years, while more than half of patients (56.0%) were not working. Regarding education, nearly half of studied patients (46.7%) had finished their secondary education, while, 62.7% of patients were single. Looking at their residence, the majority of the studied patients (87.3%) were living in urban and more than two thirds of patients (68.0%) were living in families with parents, brothers and sisters, 58.0% of patients have a friend and 64.7% of them were smokers.

Regarding the clinical characteristics of the studied patients, it shows that only 16.7% of studied patients were drug dependent, while more than one quarter of patients have a positive psychotic family history (26.7%) and approximately two third of patients have side effects of psychotic drugs (69.3%). The age of the studied patients at the onset of psychiatric illness ranged from 18-46 years with Mean \pm SD 24.31 \pm 8.0 years, while, number of previous psychiatric hospitalization ranges 0 – 20 times with mean \pm SD 4.44 \pm 3.55.

Figure (1): Represent levels of QOL in the studied patients. It showed that 80.0% of them demonstrated a high quality of life.

Table (1): Illustrated total QOL score and dimensions in the studied patients; it revealed that psychosocial function score ranged between 5-48 with mean score \pm SD 31.46 \pm 8.19. While; the total quality of life score ranged between 17-90 with a mean \pm SD 60.1 \pm 15.3.

Table (2): Represent the association between patients' total quality of life and personal characteristics, which shows that there is a statistically significant relationship between total patients' QOL and occupation, whereas $p \le 0.05$.

Table (3): Describes the relation between patients' total QOL and clinical characteristics; it showed that there as a statistically significant relation between total QOL of studied patients and presence of side effects of psychotic drugs and duration of the last hospitalization, whereas $p \le 0.05$.

Figure (2): Shows the percentage of each type of locus of control, which shows that 70.0% of the studied patients have external LOC.

Table (4): Represent the correlation between patients' total LOC and personal characteristics, which showed that there was a statistically significant relationship between patients total score of LOC and education, working status whereas $p \le 0.05$.

Table (5): Shows the correlation between patients' total locus of control and clinical characteristics, it demonstrated that there was a statistically significant relationship between the patient's total locus of control and presence of side effects of psychotic drugs, the number of previous psychiatric hospitalization, whereas $p \le 0.05$.

Table (6): It was observed that there was a positive statistically significant association between total patient's QOL and total LOC (r=0.449* p 0.001).

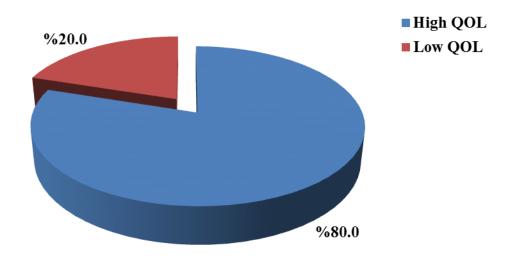


Figure 1: Distribution levels of quality of life in the studied patients (n=150)

Items	Range	Mean ± SD
Psychosocial function	5-48	31.46 ± 8.19
Motivation energy	4-26	13.68 ± 4.1
Symptoms and side effects	1 – 26	14.96 ± 5.72
Total QOL	17 – 90	60.1 ± 15.3

Table 1: Total quality of life score and dimension among the studied patients (n=150)

	Total quality of life		
Personal characteristics	No		
Age			
<25y	19	56.63 ± 12.79	
25-<40y	89	61.51 ± 15.07	F=2.079
40-<55y	41	57.95 ± 16.21	P=0.105
> 55 y	1	89 ± 0	
Sex			
Male	115	59.3 ± 15.83	t=1.169
Female	35	62.74 ± 13.28	P=0.244
Working Status			
Working	66	55.12 ± 16.71	t=3.568
Not working	84	64.01 ± 12.9	P=0.001*
Education			
Illiterate	20	62.3 ± 10.85	
Read and write	16	59.25 ± 14.61	
Primary education	13	53.15 ± 15.61	F=0.807
Preparatory education	20	59.8 ± 17.83	P=0.546
Secondary education	70	60.36 ± 16.48	
University	11	64.45 ± 8.78	
<u>Marital Status</u>			
Single	94		F=1.571
Married	31	60.49 ± 14.96	P=0.211
Divorced	25	56.29 ± 16.54	
Widowed	0	63.36 ± 14.61	
<u>Residence</u>			
Rural	19	55.63 ± 18.07	t=1.366
Urban	131	60.75 ± 14.82	P=0.174
Living with			
Alone	10	57.4 ± 21.01	
With husband	30	56.2 ± 15.72	F=1.078
With parents, brothers& sisters	102	61.25 ± 14.55	P=0.361
Do you have friend?	0-		
Yes	87 (2	59.07 ± 16.84	t=1.012
No	63	61.52 ± 12.88	p=0.313
Smoked	07	50 01 · 15 01	4 0 300
Yes	97 52	59.81 ± 15.81	t=0.308
No	53	60.62 ± 14.45	p=0.758

Table 2: Relation between patients' total quality of life and personal characteristics (n=150)

*t= t test

* f=one way Anova

*: Statistically significant at $p \le 0.05$

	Total quality of life			
Clinical characteristics	No	Mean ± SD	Test of significance	
Drug dependent			t=1.010	
Yes	25	56.24 ± 22.13	P=0.321	
No	125	60.87 ± 13.52		
Presence of psychotic family history				
Yes	40	59.1 ± 17.14	t=0.482	
No	110	60.46 ± 14.64	P=0.631	
Presence of side effects of psychotic drugs Yes No	104 46	64.2 ± 12.7 50.83 ± 16.7	t=4.847 P=<0.001*	
Number of family Members	-	-	r=0.124 P=0.137	
Age at onset of psychiatric illness	-	-	r=-0.039 P=0.634	
Duration of treatment (in years)	-	-	r=0.051 P=0.536	
Number of previous psychiatric hospitalization	_	-	r=-0.078 P=0.352	
Duration of previous hospitalization (in months)	-	-	r=-0.045 P=0.600	
Duration of last hospitalization (in months)	-	-	r=-0.337 P=<0.001*	

Table 3: Relation between patient total quality of life and clinical characteristics (n=150)

*t=t test

* f=one way Anova $\;$ r: Pearson coefficient *: Statistically significant at $p \leq 0.05$

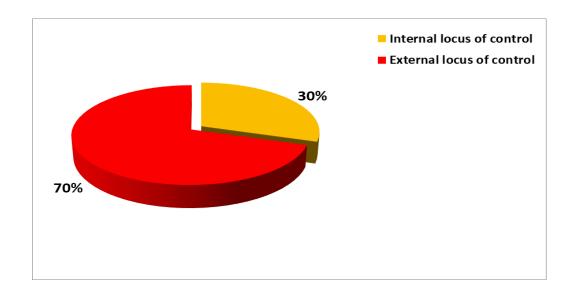


Figure 2: Distribution types of locus of control in the studied patients (n=150)

		Total locus of control			
Personal Characteristics		Mean ± SD	Test of significance		
Age					
<u>< 25y</u>	19	12.79 ± 4.86	F=1.124		
25-<40y	89	13.06 ± 3.57	P=0.341		
40-<55y	41	13.46 ± 3.11			
> 55 y	1	7 ± 0			
Sex					
Male	115	13.25 ± 3.67	t=0.968		
Female	35	12.57 ± 3.56	P=0.335		
Working Status					
Working	66	12.38 ± 3.83	t=2.156		
Not working	84	13.65 ± 3.41	P=0.033*		
Education					
Illiterate	20	13.8 ± 3.12			
Read and write	16	13.56 ± 3.86			
Primary education	13	13.15 ± 3.87	F=1.017		
Preparatory education	20	11.6 ± 3.6	P=0.41*		
Secondary education	70	13.31 ± 3.62			
University	11	12.36 ± 4.11			
Marital Status					
Single	94	13.46 ± 3.74	F=1.401		
Married	31	12.71 ± 3.25	P=0.250		
Divorced	25	12.2 ± 3.67			
Widowed	0				
Residence					
Rural	19	13.05 ± 3.76	t=0.052		
Urban	131	13.1 ± 3.64	P=0.959		
Living with					
Alone	10	12.5 ± 3.37			
With husband	30	12.7 ± 3.24	F=0.328		
With parents brothers & sisters	102	13.29 ± 3.8	P=0.805		
Do you have a friend?					
Yes	87	12.83 ± 3.52	t=1.050		
No	63	13.46 ± 3.8	P=0.295		
Smoked					
Yes	97	13.33 ± 3.46	t=1.077		
No	53	12.66 ± 3.95	P=0.283		

Table 4: Relation between total locus of control and personal characteristics (n=150)

*t= t test

*f=one way Anova

*: Statistically significant at p

Clinical characteristics		Total locus of control		
		Mean ± SD	Test of significance	
Drug dependent				
Yes	25	13.4 ± 4.01	t=0.460	
No	125	13.03 ± 3.58	P=0.646	
Presence of psychotic family history				
Yes	40	13.78 ± 3.79	t=1.386	
No	110	12.85 ± 3.57	P=0.168	
Presence of side effects of psychotic drugs				
Yes	104	13.97 ± 3.14	t=4.748	
No	46	11.11 ± 3.94	P=<0.001*	
Number of Family Members			r=0.008	
	-	-	P=0.924	
Age at onset of psychiatric illness			r=0.055	
	-	-	P=0.504	
Duration of treatment (in years)			r=0.031	
	-	-	P=0.708	
Number of previous psychiatric hospitalization			r=-0.173	
	-	-	P=0.036*	
Duration of previous hospitalization (in months)			r=-0.091	
	-	-	P=0.285	
Duration of last hospitalization (in months)			r=-0.118	
	-	-	P=0.157	

Table 5: Relation between patients' total locus of control and clinical characteristics

r: Pearson coefficient *: Statistically significant at $p \le 0.05$

Table 6: Relation between total quality of life and total locus of control

	Total locus of control		
	r	Р	
Total quality of Life	0.449	< 0.001*	

r: Pearson coefficient *: Statistically significant at $p \le 0.05$

DISCUSSION:

Over the last 20 years, there has been a great interest in QOL among persons with schizophrenia which is a severe, disabling, lifelong disorder, linked to severe social and occupational dysfunction (Dziwota, Stepulak, Włoszczak-Szubzda & Olajossy, 2018). It is essential to study health LOC as mental health professionals have reported that this might affect outcomes among schizophrenic patients as external beliefs can decrease the extent of personal efforts towards recovery and internal approaches could enhance the opportunities of rehabilitation and recovery (Thakral, Bhatia, Gettig, Nimgaonkar & Deshpande, 2014).

Regarding the quality of life, the current study revealed that most of the studied patients had a high level of quality of life, this might be because of the majority of them are educated, being employed, house sharing with family and short hospitalization. This result was similar to a study done in Jordan by Hasan, and Tumah, (2019) who studied the determinants of QOL in schizophrenic patients and reported that QoL scores were higher than those reported elsewhere for schizophrenia patients, they explained this result by the fact that participants were recruited from the outpatient clinic and were more stabilized than those being treated in a psychiatric hospital.

On the contrary to this finding a study done in Ethiopia by Desalegn, Girma, and Abdeta (2020) who studied the quality of life and its association with psychiatric symptoms and socio-demographics of persons with schizophrenia and reported that QOL in schizophrenic patients was low and among the domains of QOL, respondents scored lowest mean in the social relationships domain which indicates that the social relationships domain of schizophrenic patients was the most influenced.

Concerning to relation between quality of life and personal characteristics, the current study revealed that there is a statistically significant relationship between total QOL and working status. This may be explained by the fact the working increases their self-esteem and give them a feeling of satisfaction. This finding is in agreement with Guedes de Pinho, Pereira, and Chaves, (2018) who studied QOL in schizophrenic patients and showed that being employed was associated with higher QOL. This result wasn't in harmony with a study done in Serbia by PetrovicKitic, and Jankovic, (2018) that studied QOL in institutionalized persons with schizophrenia and found that QOL of schizophrenic persons was better among men with a university degree, when the duration of the disease was shorter.

Regarding relation between quality of life and clinical characteristics, the current study also displayed that there is a statistically significant relationship between QOL and duration of the last hospitalization. It is may be because a long period of hospitalization deprives them of social support and to do their occupational role so psychosocial rehabilitation interventions at schizophrenic persons, taking into account their satisfaction with social support would improve their QOL.

This result was in harmony with the result of Guedes de Pinho, Pereira, and Chaves, (2018) done a study in Portugal on schizophrenic patients and reported that the higher number of hospitalizations in psychiatric units, the worse QOL of them. On the same line, a study conducted in Brazil by Silva, Mason, Abelha, Lovisi, and Cavalcanti, (2011) who studied QOL of patients having schizophrenic spectrum disorders and reported that patients those reporting previous psychiatric hospitalizations had worse QOL result.

Concerning locus of control, the present research revealed that most of the studied patients had an external locus of control, this result can be interpreted to that they do not know to what extent their lives are affected by casual events. Alternatively, they are more likely to attribute events and outcomes as part of other people, chance or other factors "external" to themselves.

This finding is in agreement with Buhagiar, Parsonage, and Osborn, (2011) who studied physical health behaviours and health locus of control in schizophrenic persons and bipolar disorder and found that schizophrenic patients had external health LOC. Thus, they tend to attribute their disease to 'chance' rather than to the events under their own control.

In disagreement with this, a study was done in Chicago by Harrow, Hansford, and Astrachan-Fletcher (2009) who studied LOC and its relation to schizophrenia, recovery, depression and psychosis, and reported that LOC was more closely related to various dimensions of personality than to the diagnosis of schizophrenia. Thus, an external LOC was significantly related to a number of dimensions of psychopathology and personality including anxiety, hostility, anomie, poor self-esteem, and fewer subsequent periods of recovery.

Regarding the relation between locus of control and personal characteristics, the current research observed that there was a statistically significant relationship between LOC and education, working status. This result can be interpreted to the fact that high education and working contribute to raising their awareness and distracts their thinking

from their disease state and does not make them attribute everything that happens to them to their health conditions. This finding was in agreement with a study done by Sarıçam, Duran, Çardak, and Halmatov (2012) who reported that there is a significant relationship observed between working conditions ,the number of working hours per day, internal and external LOC.

On the contrary to this finding a study done by Pourhoseinzadeh, Gheibizadeh, and Moradikalboland, (2017) who reported that there was no significant correlation between the locus of control (internal and external) and age, job, education, type of service, as well as ethnicity. However, there was a significant correlation between the locus of control (internal and external) and gender, marital status. Concerning gender, males usually enjoyed an internal locus of control while females enjoyed an external locus of control. Additionally, single patients had an external locus of control while married patients had an internal locus of control.

Concerning the correlation between total QOL and total LOC, the current study revealed that there was a positive statistically significant correlation between total LOC and total QOL of patients. This probably due to that the fact those with an internal locus of control see the world through a more adaptive perspective. They believe that hard working and personal capabilities will result in positive outcomes. This makes them more likely to meet challenges and succeed in their future endeavors so developing educational strategies for schizophrenic patients regarding locus of control would improve their QOL.

Such finding was consistent with a study conducted in Iran by Mohammad Aliha (2015) who studied the association between QOL and health locus of control beliefs in hemodialysis persons and found that the QOL had a significant association with health LOC beliefs. This result was in disagreement with Paulbeck (2013) who studied locus of control and QOL in individuals with schizotypy and stated that quality of life was not significantly correlated to the locus of control.

CONCLUSION:

Based on the results of the current research, the following can be concluded:

The majority of the studied patients had a high quality of life and external locus of control and there was a positive statistically significant correlation between QOL and locus of control

RECOMMENDATIONS:

Based on the results of the present study, the researchers suggested the upcoming recommendations:

- Psychosocial rehabilitation interventions for schizophrenic patients, taking into account their satisfaction with social support, the reduction of hospitalizations and the promotion of their occupational role.
- Developing educational strategies regarding the locus of control to encourage patients to attribute their ill health to the events under their own control rather than to 'chance'.
- A longitudinal assessment of the quality of life and other variables would serve to strengthen the contribution of future researchers to the existing literature on quality of life outcomes in schizophrenia.
- Further research studies about the relation between QOL and locus of control should be carried out.

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العلاقة بين جودة الحياة ومركز التحكم لدي مرضي الفصام

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السخسلاصيسة

يعتبر الفصام هو مرض غير متجانس يشمل سمات ذهانية وضعف فى الإدراي واضطراب يومي في الأداء. هدف الرسالة: تهدف الرسالة الي اكتشاف العلاقة بين جودة الحياة ومركز التحكم لدي مرضي الفصام. استخدام التصميم: تم استخدام تصميم بحث وصفي ارتباطي وأجريت هذه الدراسة في العيادات الخارجية للأمراض النفسية بمستشفى الصحة النفسية ببورسعيد. وشملت عينة البحث 150 مريض بالفصام 115 منهم ذكور و 35 اناث تم اختيار هم عشوائيا. تم جمع البيانات من خلال الاستبيان الذاتي. يتكون من ثلاثة أجزاء، الجزء الأول: مقياس جودة الحياة لمرض الفصام (GLC) يتكون من 30 فقرة، الجزءالثاني: الموقع العام لمقياس التحكم (GLC) والذى يتكون من 44 فقرة والجزء الثالث: الخصائص الشخصية والسريرية. لخصت نتائج الدراسة: أظهرت النتائج وجود علاقة ذات دلالة إحصائية بين جودة الحياة ومركز التحكم لدي مرضي الفصام وأوصت الدراسة بقطوير استراتيجيات تعليمية فيما يتعلق بمركز التحكم لتشجيع المرضى على إسناد اعتلال صحتهم إلى الأحداث الذاتي تقع تحت سيطرتهم بدلاً من "الصدفة".