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Original Research Paper

Psychiatry

A CROSS-SECTIONAL STUDY OF THE QUALITY OF LIFE IN PATIENTS WITH SCHIZOPHRENIA.

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ABSTRACT

Background: Few studies have examined the quality of life (QoL) for people with. It examined the level of satisfaction with their QoL in people with schizophrenia had as well as the relationships between socio-demographic characteristics and QoL.

Aims: The present study aimed to evaluate the QOL in outpatients with schizophrenia.

Study Design: Cross-sectional study

Methodology: A cross-sectional study, in the form of an inquiry, was conducted in 400 outpatients, in the psychiatric department after obtaining detailed written consent from the participants and permission from the ethics committee. We used the WHO-QOL BREF.

Statistics: Categorical variables were analysed with the Chi-squared tests. Significance levels for all analyses were set at P = 0.05.

Results: In this study, the data showed that among the 400 participants 84% were having a fair level of quality of life, 12% have a satisfactory level of quality of life, and 4% of them were having a good quality of life.

Conclusions: The study revealed that the good and satisfactory quality of life of schizophrenic patients is associated with the marital status, education status, occupation, joint family type, rural place of residence and correct follow-up and continuation of the prescribed medicine and regular follow-ups is also important to improve the quality of life.

KEYWORDS : WHO QOL BREF, Schizophrenia, quality of life

INTRODUCTION

World Health Organization (WHO) defined health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. It further adds 'mental health is a state of wellbeing in which an individual realizes his or her abilities, can cope with the normal stresses of life, can work productively, and can make a contribution to his or her community.

Quality of life (QOL) means the individual's perception of his place in life according to the contexts of culture and values that live in her arms and linking them to his own goals and expectations, beliefs, and interests, a concept often affected by the individual's psychological and physical state and social relations. (S Briaçon; 2010; P21, WHO-QOL). The WHO has listed unipolar depression, alcohol use, bipolar disorder, schizophrenia, and obsessive-compulsive disorder, among the 10 leading causes of disability worldwide. (Murrey & Lopes, 2000).

Critical four domains of quality of life are physical function, psychological state, social interaction, and somatic sensation. People who were chronically ill with schizophrenia have specific needs to get fulfilled that may influence the existence and subjective quality of life. The important needs are that facing the stigma associated with mental illness, facing family strain, and many patients are having a disability due to the illness. Most of the patients were getting disconnected from the family and staying in residential health care settings. So the patient fails to reach the adult milestones like marriage, getting children, and being employed.

METHODOLOGY

Study method:

The study is a cross-sectional, descriptive study that was carried out in the out-patients of the Department of Psychiatry of a tertiary care centre. Ethical clearance was obtained from the Institutional Ethics Committee (IEC). The study was conducted over 12 and random sampling was used. We included 400 who gave consent to participate in the study. The participants were between 18 to 60 years of age, both male and female included. Those suffering from chronic debilitating medical or surgical illnesses and who showed unwillingness to participate were excluded from the study. The patients were explained about the nature of the study and written informed consent was obtained.

Instrument & Tool

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

Data Analysis:

Data were analyzed by using appropriate statistical tests with the help of SPSS-22 software and Microsoft Excel. Continuous variables are presented as mean± SD. Categorical variables are expressed as frequencies and percentages. Statistical tests applied were Pearson's Chi-square test, A value of P less than 0.05 was considered as statistically significant.

RESULTS

A)socio-demographic Variables Of Schizophrenia Patients

Table - 1 shows the distribution of socio-demographic variables of 400 subjects. Age distribution of 400 subjects showed 180 (45%) were in the age group of 31-40 yrs, 125 (31.25%) were in the age group of 41-50 yrs, 80 (20%) were in the age group of 20-30 yrs, and 15 (3.75%) were in the age group more than 50 yrs. Sex distribution of 400 subjects, 250 (63%) were males, and 150 (37%) were females. Religion distribution of 400 subjects 195 (49%) was Muslims, 165 (41%) were Hindus, and 40 (10%) were Buddhists. Marital status of 400 subjects 260 (65%) was unmarried and 70 (17.5%) were married, and 70 (17.5%) were widow/divorced. Education distribution of 400 subjects 215 (54%) was illiterate, 100 (25%) of them had primary school education, 65 (16%) were having high school education, 20 (5%) were graduate, none of the

samples is postgraduate. Employment distribution 400 subjects 210 (52.5%) were unemployed, 160 (40%) of the samples were cooli / daily wage workers, and 30 (7.5%) of the samples were private employees, none of the samples were government employees. Family type of 400 the subjects 195 (49%) belongs to the joint family, 115 (29%) belonged to a single-parent family, 90 (22%) belonged to the nuclear family. The dwelling place of subjects 320 (80%) was from the rural area and 80 (20%) from the urban area. Duration of illness of subjects 305 (76%) were having the illness for less than 15years, and 95 (24%) of subjects were having the illness for more than 15 years. Treatment taken for illness of 400 subjects 315 (78.6%) were taking treatment for less than 15 years, 55 (14%) of them were taking treatment from 15 to 30years and 30 (7.5%) were taking treatment for more than 15 years. Follow-ups of 400 subjects 235 (59%) were not taking correct follow-up, and 165 (41%) of them were taking the correct follow-up.

Table 1: Sociodemographic data of Government Employees

Demographic Data		Numbers of subjects	% of subjects
Age	18-30	80	20
	31-40	180	45
	41-50	125	31.25
	>51	15	3.75
Sex	Male	250	63
	Female	150	37
Religion	Hindu	165	41
	Muslim	195	63
	Buddhist	40	10
Education	Primary	100	25
	Secondary	65	16
	Graduate	20	5
	Illiterate	215	54
Marital Status	Married	70	17.5
	Unmarried	260	65
	Widow / separated	70	17.5
Profession	Unemployed	210	52.5
	Semi-skilled	160	40
	Skilled	30	7.5
Family	Joint	195	49
	Single parent	115	29
	Nuclear	90	22
Dwelling Place	Urban	80	20
	Rural	320	80
Duration of illness	Less than 15 years	305	76
	More than 15 years	95	24
Treatment taken	Less than 15years	315	78.6
	15 – 30 years	55	14
	More than 30 years	30	7.5
Follow-ups	Regular	165	41
	Irregular	235	59

B) Quality Of Life Of Schizophrenic Patients.

As depicted in ***Table – 2*** In this study the data shows that subjects 335(84%) were having a fair quality of life, 50 (12%) of the subjects were having a satisfactory quality of life, and 15(4%) of them had a good quality of life.

The overall quality of life score of schizophrenic patients was 39.58%, with a standard deviation of 32.24 which implies that the patients were having a fair level of quality of life.

Table 2 Distribution of subjects according to overall QOL.

Sl No	Level of Quality of life	No. (400)	Percentage (%)
1	Fair	335	84
2	Satisfactory	50	12
3	Good	15	4
	Total	400	100

C) Quality Of Life In Patients With Schizophrenia Among Different Domains

As depicted in ***figure - 1,*** the data shows that in the physical domain 320(80%) of them were having a fair level of quality of life, 55 (13.75%) of the patients were having a satisfactory level of quality of life, 25 (6.25%) of them were having a good quality of life and psychological domain 325 (81.25%) of them were having a fair level of quality of life, 60(15%) of them were having a satisfactory level of quality of life, 15 (3.75%) of them were having a good quality of life. Of social domain 365 (91.25%) of them were having a fair level of quality of life, 30 (7.5%) of them were having a satisfactory level of quality of life, 5 (1.25%) of them was having a good quality of life, of the data in environmental/occupational domain 325 (81.25%) of them were having a fair level of quality of life, 55 (13.75%) of them were having a satisfactory level of quality of life, 20 (5%) of them were having a good quality of life.

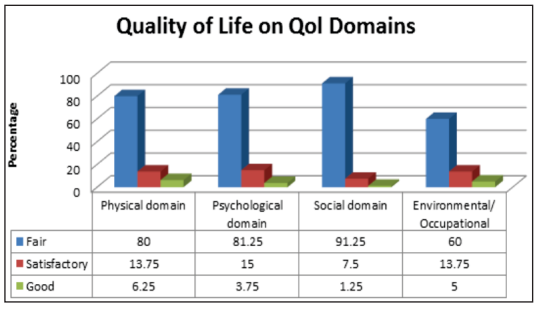

Figure 1 : QOL Over different domains according to WHO-BREF

D) Association Between The Quality Of Life And The Demographic Variables.

As depicted in ***Table-3*** in detail, this study shows that the quality is associated with the marital status, education, occupation, family type, place, and correct follow-up. The data shows that there is no association between age, sex, religion, and the duration of the illness and the treatment.

Table 3 Associations between QoL and Socio-demographic data.

Sl No	Variables	Category	Quality of life						χ^2
			Fair		Satisfactory		Good		
			No.	%	No.	%	No.	%	
1	AGE	Less than 40 years	225	67	25	50	10	70	1.13
		More than 40 years	110	33	25	50	5	30	
2	SEX	Female	135	40	10	20	0	0	3.01
		Male	200	60	40	80	15	100	
3	RELIGION	Hindu	130	39	25	50	10	66	1.42
		Muslim	170	51	20	40	5	34	
		Buddhist	35	10	5	10	0	0	
4	MARITAL STATUS	Married	20	6	40	80	10	66	38.57
		Unmarried	245	73	5	10	5	34	
		Widow/Divorced	70	21	5	10	0	0	

5	EDUCATION	Illiterate	205	61	5	10	5	34	10.38
		Literate	130	39	45	90	10	66	
6	OCCUPATION	Unemployed	200	59	10	20	5	34	6.03
		Employee	135	41	40	80	50	66	
7	FAMILY TYPE	Nuclear	45	13	35	70	10	66	20.8
		Joint	190	57	5	10	0	0	
		Single parent	100	30	10	20	5	34	
8	PLACE	Rural	30	9	40	80	10	66	31.61
		Urban	305	91	10	20	5	34	
9	DURATION OF ILLNESS	Less than 15 yrs	255	76	40	80	10	66	0.23
		More than 15yrs	80	24	10	20	5	34	
10	DURATION OF TREATMENT	Less than 15 yrs	210	78	85	30	20	0	1.48
		15 to 30 yrs	20	12	10	10	25	34	
		More than 30years	5	10	5	60	20	66	
11	REGULAR FOLLOW-U	Yes	105	31	45	90	15	100	16.77
		No	230	69	5	10	0	0	

DISCUSSION

In this study, people with schizophrenia were mostly male with a mean age of 38.23 years, unemployed, unmarried, and lived with their parents in their own houses. Similar socio-demographic characteristics were found in a study by Zahid et al. (2009) that studied the QoL for 130 people with schizophrenia through the use of the LQoLP-EU in Kuwait. Zahid et al. (2009) found that most of the participants were male with a mean age of 36.8 years, while 53.1% were unemployed, 26.9% were married, 50.8% lived with their parents, and 77.7% lived in their own houses.

Also, people with schizophrenia in this study were found more likely to be married, employed, and all of them were living with their families (partner, relative, or parents) in comparison with the people with schizophrenia in Denmark, Netherlands, Italy, Spain, and the United Kingdom (Gaite et al. 2002) and the United States (Narvaez et al. 2008). The possible explanation for the difference in the socio-demographic characteristics of people with schizophrenia in our study in India, Saudi Arabia, Europe, and the United States is that we have a traditional, religious conservative culture; therefore, most of the participants were unmarried and most of them lived within a family structure. Also, the high unemployment rate among people with schizophrenia in our study in comparison to other people with schizophrenia in Denmark, Netherlands, Italy, Spain, the United Kingdom, and the United States can be explained in that people with mental illness here in our study are supported by their families and it is unusual for them to leave their family home to live by themselves.

No comparisons were made between the monthly income of patients with schizophrenia and people in other countries due to differences in their currency rates and standards of living.

The results of this study showed that most people with schizophrenia in this study were fair and satisfied with their QoL. They were most satisfied with their religion, their legal and safety issues, and their family relations. Similar results were found in four studies by using either the LQoLP or LQoLP-EU to investigate the QoL for outpatients with schizophrenia in Kuwait (Zahid et al.2009), Sweden (Bengtsson-Tops & Hansson 1999), Brazil (De Souza & Coutinho 2006), and Denmark, Netherlands, Italy, Spain, and United Kingdom (Gaite et al. 2002). For example, Zahid et al. (2009) studied the QoL for 130 people with schizophrenia and found that most participants were satisfied with their religion, legal and safety issues, and family relations. Therefore, the high satisfaction with religion reported in our study in people with schizophrenia may reflect the support that religion provides to them.

In India, Shah et al. (2011) investigated the relationship between spirituality, religiousness, and coping skills in 103 people with schizophrenia. The results showed that there was a strong relationship between spirituality, religiousness, and coping skills. Therefore, high satisfaction with religion can be explained by the role of religion in helping people to manage and cope with their mental illness.

Secondly, religion is a source that provides hope, love, and life essence, which is another important reason for high satisfaction with religion among people with mental illness. For example, in Switzerland, the role of religion in the life of people with mental illness was examined by Mohr et al. (2006). In their study, 115 people with mental illness were interviewed about the importance of religion in their life. The results showed that 71% of the patients reported that religious practices such as prayer, inspired and implanted an optimistic self-view in the form of "hope, comfort, the meaning of life, enjoyment of life, love, compassion, self-respect, self-confidence, and so on" (Mohr et al. 2006, pp.1953- 1954). Thus, religion is considered an important source of hope and the meaning of life for people with mental illness. Therefore, the participants feel mostly satisfied with their religion.

Finally, religion is a vital source of support for people with mental illness through attending religious services and practice, which is an important reason for high satisfaction with religion among people with mental illness. For example, in Switzerland, Borras et al. (2007) investigated the role of religion on the attitude toward medication in 103 people with schizophrenia. The results showed that the majority of the participants reported regular personal and community religious practice (i.e., prayer and reading religious material). Participants who were adherent to medication regimens were more likely to attend community religious practice than were non-adherent patients. Also, one-third of the participants insisted that attending the community religious practices was a very important source of support in comparison to the non-adherent patients. Therefore, it seems that religion can play a vital role in providing community support for people with mental illness through attending religious services and practices.

In this study, the people with schizophrenia were mostly less satisfied with their leisure activities, work, and financial status. Similar results were found in three studies through using either the LQoLP or LQoLP-EU to investigate the QoL for outpatients with schizophrenia in Sweden (Bengtsson- Tops & Hansson 1999), Brazil (De Souza & Coutinho 2006) and Denmark, Netherlands, Italy, Spain, and United Kingdom (Gaite et al. 2002). The high level of dissatisfaction with leisure activities, work, and financial status of people with schizophrenia in our study may reflect the attitude of the public toward people with mental illness, which may limit their engagement in leisure and work activities.

There are some possible explanations why people with schizophrenia in our study were dissatisfied with their activities. These are associated with a high level of

discrimination and stigmatization of people with mental illness. The literature review identified three main themes that explain the finding regarding the high level of dissatisfaction of Indian people with schizophrenia with their leisure activities, work, and financial status.

Those are; 1) public fear and view of people with mental illness as dangerous, 2) lack of knowledge about people with mental illness, and 3) mental illness limiting the individual's ability to work.

Firstly, public fear and view of people with mental illness as dangerous may be considered a strong factor that limits the engagement of people with mental illness in leisure activities and work. For example, Bener, and Ghuloum (2010) examined the attitudes toward people with mental illnesses in 2,514 Qatari and Arab expatriates during the period from 2008 to 2009. They found that the community's fear and the consequent nonacceptance of people with mental illnesses may limit the engagement of people with mental illness in society and particularly in leisure activities and working beside other people.

Secondly, the lack of knowledge about people with mental illness may impact their participation in leisure and work activities. For example, in Oman, Al-Adawi et al. (2002) examined the attitudes of 173 medical students, 64 relatives of people with mental illnesses, and 231of the general public toward people with mental illnesses. The results showed that the majority of the relatives of people with a mental illness reported that people with mental illnesses were unable to differentiate between good and bad. Also, the participants preferred that mental healthcare facilities be located away from the community. Thus, the lack of knowledge about people with mental illness could work as a hindrance to their involvement in leisure and work activities and therefore will affect their financial situation.

Finally, the view of mental illness as limiting the ability of the individual to work is another factor that affects people with schizophrenia in our study and their satisfaction with their work status and financial situation. For example, in the United States, Scheid (2005) examined the effects of stigma in the employment of people with mental illnesses. The study's participants were 117 employers interviewed regarding the employment of people with a mental illness during the period from 1996 to 1997. The result of the study showed that the majority of the employers felt uncomfortable in hiring people who were taking antipsychotic medication, and people with a previous history of hospitalization for mental illnesses. Generally, employers saw mental illness as limiting one's ability to be able to work or to work under stressful conditions. Consequently, the view of mental illness as limiting the ability of the individual to work could affect the employment of people with mental illness and therefore, their satisfaction with their work and financial status.

The Relationship Between Socio-demographic Characteristics And Quality Of Life

Women in this study reported lower levels of QoL than men. They were less satisfied with their work/education, social and family relations, and health. Similar findings were found in women with schizophrenia in Hong Kong (Chan & Yu 2004) and China (Xiang et al. 2010). There are some possible explanations for why women with schizophrenia reported lower QoL than men in this study.

Firstly, women with schizophrenia were found to be dissatisfied with their work and/or education, both of which are influenced by social norms. Women in this study are expected to study and work in occupations that are related to women only. Thus, social norms consideration may limit education and employment opportunities for women. This factor may have a great influence on women's satisfaction with their education and work and therefore, their QoL in general. Therefore, if women, in general, are feelings that social norms limited education and employment opportunities, then for women with schizophrenia the feelings are compounded.

Secondly, women with schizophrenia were found to be dissatisfied with their family and social relationship. The high dissatisfaction with their family and the social relationship may reflect the effects of social norms in the life of women. For example, Mobaraki and Söderfeldt (2010) undertook a literature review to investigate the inequality of gender and its effects on women's health. For this literature review, two main databases (*PubMed* and the *Google* search engine) were used to search for articles related to this review. The authors reported that social norms and conservative religious beliefs have a powerful effect on women's lives.

In this study, people with schizophrenia who were illiterate or only had a primary school education reported a lower QoL than those who had a university or college education. These results are consistent with studies undertaken by Vandiver (1998), Cardoso et al. (2005), Daradkeh and Al Habeeb (2005), Caron et al. (2005b), Dimitriou, Anthony and Dyson (2009), and Narvaez et al. (2008). Only two studies were found to contradict this result: Caron et al. (2005a) and De Souza and Coutinho (2006) found that poorly educated patients with schizophrenia reported a high QoL, though no possible explanation is given to explain how low education is related to high QoL.

Furthermore, in this study unemployed participants were found to have lower QoL scores than those employed. They are less satisfied with their financial situations, their legal and safety issues, and their health. These findings were supported by the findings of studies conducted in Spain (Duno et al. 2001), Hong Kong (Chan & Yu 2004), Canada (Caron, Mercier, Diaz & Martin 2005b), and Nigeria (Adewuya & Makanjuola 2009) on the QoL for people with schizophrenia, in Sweden, Bejerholm and Eklund (2007) examined the relationship between occupational commitment, psychiatric symptoms, and QoL for 74 outpatients with schizophrenia. Their results showed that a high level of occupational commitment was related to fewer psychiatric symptoms and better QoL ratings and vice versa. Therefore, employment for people with schizophrenia is associated with better health and QoL.

This study also showed that married people with schizophrenia had a better QoL than unmarried people. Married people were more satisfied with their financial situation, their family and social relationships, and their health status. These results are supported by Salokangas, Honkonen, Stengard, and Koivisto (2001) and Cardoso et al. (2005), who found similar results in their studies.

Limitations:

Although this study reveals significant findings, some important limitations found were, the participants in this study were patients who were receiving outpatient clinic treatment and stable mental health conditions. Therefore, the findings may not be generalized to people with schizophrenia who are institutionalized in psychiatric hospitals, clinically unstable, and are experiencing severe psychotic symptoms. Used a cross-sectional design by which data were collected at a single point in time. While QoL is a dynamic construct and maybe change from day to day based on the living conditions, the findings of the study may not be sensitive to change over time. There is a possible response bias, as participants may have been reluctant to discuss religion in negative terms in a traditionally religious place and or background.

CONCLUSIONS

Males with schizophrenia reported satisfactory and good QoL

than females, particularly in work/education, family and social relationships, and health. People with schizophrenia who are with graduate education level, employment, marriage, rural place of dwelling, with joint family and a regular follow-up for the treatment have reported higher satisfactory QoL. With comparison of mean SD with WHO-QOL BREF our study showed that 84% were having fair level of quality of life, and 4% were having good quality of life.

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Conflict of interest
None of the above authors have any conflict of interest to report.

Declarations of interest: None.

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