www.jmscr.igmpublication.org Impact Factor 3.79
ISSN (e)-2347-176x

IGM Publication Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publication

Quality of Life in Patients with Chronic Schizophrenia

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Abstract
Background: *The concept of Quality of life (QOL) is perhaps more important in those disorders which run a chronic and debilitating course and where the treatment is incomplete swith pharmacotherapy alone and requires varied psychotherapeutic interventions.*
Aims: *To assess Quality Of Life in patients with chronic schizophrenia on maintenance treatment.*
Material and Methods: Sixty patients of schizophrenia diagnosed as per ICD - 10 with minimum duration of illness being two years and attending outpatient department were recruited in to the study. A written consent of the patient and caregiver for participation in the study was obtained. The interview was semi-structured and all information was recorded in a pre-designed structured proforma. Following this, the patients were administered with WHO QOL scale BREF version, and PANSS scale.
Results: *Mean QOL scores of the patients in various domains of WHOQOL-BREF version scale were physical:20.33, psychological:20.25, social:5.17, environmental:24.60 and total 70.35.Significant positive association was found between patients that were employed and social and total QOL, and also them with total monthly income and social relationships domain. The patients with prominent positive symptoms had poor QOL in psychological and social domains and total QOL. The patients with prominent negative symptoms had poor QOL in psychological and social domains and total QOL. The patients with high scores in general psychopathology had poor QOL in all domains of QOL and Total QOL. The patients with high total PANSS scores had poor QOL in all domains of QOL and Total QOL.*
Conclusion: *Patients were having lowest QOL in social relationships domain of WHO QOL - BREF scale. Employed patients and those patients earning relatively better monthly incomes enjoyed a comparatively better QOL. Schizophrenic patients, especially those with prominent symptoms in the general psychopathology subset had a poorer overall Qol.*
Keywords: *Quality of Life, Schizophrenia, WHO QOL – BREF, PANSS Scale.*

Introduction

Quality of life has been notoriously difficult to define. Of the several available, the most widely used and comprehensively derived definition is that by WHO.[1] "Quality of Life is defined as individuals' 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. It is a broad ranging concept, incorporating in a complex way individuals' physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationships to salient features of the environment. This definition highlights the view that quality of life is subjective, includes both positive and negative facets of life and is multi-dimensional." [2]

Schizophrenia can be the cruellest of illnesses. It can bring to a crashing halt the pursuit of learning, thoughts of love and dreams for the future. The symptoms of psychosis can pummel the very core of ones being, confuse the mind, disorient perceptions, and unsettle important relationships with family and friends. Schizophrenia and psychosis are treatable and recovery of quality of life is possible when people are able to find the right door that opens up options for treatment, support, and hope.

A one-year prospective cohort study was carried out to systematically monitor the quality of life (QOL) of patients with schizophrenia from seven different sites across four European countries: France, Ireland, Portugal and Spain. Their conclusions were that, thoughthe four countries have different resources and patients live in rather different conditions, the main differences as far as their QOL is concerned very much depended on extra-psychiatric variables, principally marital status and income[3].

The UK700 trial[4] made an attempt to identify the predictors of quality of life in people with severe mental illness. Baseline data derived from the UK700 Case Management Trial was used to assess the relative importance of clinical, social and unmet needs variables as predictors of subjective quality of life in patients with severe mental illness. The strongest predictors of subjective quality of life were unmet basic, social and functioning needs, depression and positive psychotic symptoms.

In a Meta-Analysis on psychiatric symptoms and Quality of Life in Schizophrenia. Weighted effect size analyses revealed small relationships between psychiatric symptoms and QOL, with general psychopathology showing the strongest negative associations across all QOL indicators. Positive and negative symptoms were more strongly related to poor QOL among studies of schizophrenia outpatients, whereas general psychopathology showed a consistent negative relationship with QoL across all study samples and treatment settings[5].

Heslegrave et al[6] studied the influence neurocognitive deficits and symptoms on quality of life in schizophrenia. Symptom expression, however, particularly with regard to general psychopathology on the Positive and Negative Syndrome Scale (PANSS), was significantly associated with quality of life.

Materials and Methods

Materials

This study was done in NMCH, Nellore, on patients who were attending the psychiatric outpatient department.

Methods and Procedure

Sample criterion:

1. Patients attending NMCH o.p between August 2013 to July 2014 were randomly selected for the study. A sample of sixty chronic schizophrenic patients attending NMCH, Nellorewere taken into the study.Inclusion and exclusion criteria were applied and a clinical diagnosis was made according to ICD-10.

Procedure:

After taking institutional ethical committee approval, the study was conducted. Patients were recruited in to the study after taking informed consent from both patient and informant. In a single sitting patients and caregivers were explained about the study, and written consent was taken from them. Patient's socio demographic details were taken andwere administered PANSS and WHO QOL scale BREF version.

Inclusion criteria

I. Patients fulfilling criteria for Schizophrenia as per ICD-10.
II. Patients between 18-60 years of age.
III. Patients of either sex.
IV. Patients were under maintenance treatment of atypical or typical antipsychotic.

Exclusion criteria

1. Patient with primary diagnosis of depression and any comorbidpsychiatric disorder.
2. Patients with any chronic physical illness, organic brain disorder, or substance dependence.
3. Patients with duration of illness less than 2 years.

Statistical analysis

This study contains demographic data, various qualitative and quantitative variables. So in order to analyse and compare the datavarious following statistical methods were used:

1. Descriptive statistics: Descriptive statistics describe the main features of a collection of data quantitatively
2. t-Test: The t-test assesses whether the means of two groups are statistically different from each other.
3. Anova :It is used to compare the means of more than two samples.
4. Correlation analysis:A correlation analysis is a statistical procedure that evaluates the association between two sets of variables.

Results

Table 1 Sociodemographic Variables

SOCIO DEMOGRAPHIC VARIABLES	N	FREQUENCY	PERCENT
Age			
20-30 yrs		31	51.7
30-40 yrs	60	17	28.3
40-50yrs		9	15
>50 yrs		3	5
Gender			
Male	60	35	58.3
female		25	41.7
Region			
Rural	60	25	41.7
Semiurban		11	18.3
Urban		14	40.0
Religion			
Hindu	60	48	80
Muslim		4	6.7
Christian		8	13.3
Education			
Illiterate	60	17	28.3
Upto 10^{th} std		30	50
Inter and Graduate		13	21.7
Occupation			
Unemployed	60	27	45
Business		9	15
Farmer		11	18.3
Self employed		6	10
Employee		7	11.7
Income			
No Income	60	27	45
Upto 1500		8	14.3
1500-3000		13	21.7
>3000		12	20
Marital status			
Married	60	27	45
Separated or divorced		18	30
Unmarried		15	25
Family type			
Joint	60	11	18.3
Nuclear		49	81.7

Table-2 Quality Of Life scores in four domains of WHO-QOL BREF in schizophrenic patients

Qol Domains	N	Minimum	Maximum	Mean	Std .deviation
Physical	60	19	23	20.33	1.115
Psychological	60	12	26	20.25	3.393
Social	60	3	9	5.17	2.180
Environment	60	11	37	24.60	4.465
Total	60	53	84	70.35	5.719

The patients had the lowest scores in the social relationship domain of WHO-QOL BREF scale.

Table 3: Comparison between quality of life parameters (WHO QOL) and socio demographic characteristics in schizophrenic patients (n=60)

Variables	Physical health	Psychological health	Social relationship	Environment	Total
Age	.666	.248	.334	.574	.653
sex	.878	.219	.184	.536	.346
Locality	.789	.331	.067	.364	.262
Religion	.350	.190	.223	.528	.404
Education	.972	.689	.356	.583	.434
Employment	.626	.056	.001**	.092	.002**
Income	.666	.248	.001**	.571	.653
Marital status	.359	.270	.061	.888	.149
Family type	.250	.45	.383	.137	.168

T-test analysis reveals there is no statistically significant difference in QOL scores between the different age groups. Similarly sex, locality, religion, education, marital status and family type had no significant influence on the patient's quality of life.. On ANOVA analysis there is a statistically significant difference between the various groups in social and total quality of life domains in the employed patients. On ANOVA analysis there is a statistically significant difference between the income groups in social quality of life domains.

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Table 4 Correlation between Quality of life parameters and severity of schizophrenic syndromes

PANSS	PHYSICAL	PSYCHOLOGICAL	SOCIAL	ENVIRONMENT	TOTAL
POSITIVE	-0.210	-0.328*	-0.357**	-0.219	-0.268*
NEGATIVE	-0.230	-0.433**	-0.650**	-0.228	-0.430**
GENERAL PSYCHOPATHOLOGY	-0.331*	-0.521**	-0.556**	-0.342*	-0.488**
SUMS	-0.345*	-0.510**	-0.590**	-0.335*	-0.450**

The table shows the correlation between Quality of life parameters and severity of schizophrenic syndromes. The patients with prominent positive symptoms had poorQOL in psychological and social domains and total QOL. The patients with prominent negative symptoms had poor QOL in psychological and social domains and total QOL. The patients with high scores in general psychopathology had poor QOL in all domains of QOL and Total QOL. The patients with high total PANSS scores had poor QOL in all domains of QOL and Total QOL

Discussion

In the present study an attempt has been made to assess the quality of life in patients suffering with schizophrenia for more than two years duration and on maintenance treatment. The study is aimed at finding out the influence of sociodemographic and clinical factors on the quality of life. WHO QOL-BREF scale and PANSS scales have been used for this purpose.

Drift Hypothesis, concerning the relationship between mental illness and social class, is the argument that illness causes one to have a downward shift in social class. The circumstances of one's social class do not cause the onset of a mental disorder, but rather, an individual's deteriorating mental health occurs first, resulting in low social class attainment. This hypothesis probably explains the high rates of unemployment, low socio economic status among people within this sample.

Estimates of unemployment in people with schizophrenia were 70-85%,[7]where as in our sample 45% patients were found to be unemployed. This variation can be explained by the fact that in developed countries jobs are more complicated than in less advance societies.[8]It is also known that progress of schizophrenic patients is better in developing countries because of more handling of patients in families and in society and less institutionalization.[9]

The nature of the schizophrenic illness itself could account for lower QOL scales in social domain. In patients with predominant negative symptoms, depressive symptoms account for lack of sociality among the schizophrenic patients.[10],[11]many patients were unemployed and it may reflect their deficits when interacting and coping with their

human, social and physical environment and the complexity of modern society, [12][13][14][15][16][17] .

Negative symptoms lead to decrease interest in social interactions, psychological well being and ultimately overall QOL.[18],[19]

Co-relational analysis reported that all symptom clusters of PANSS are related to poor QOL. Among all, general psychopathology had high correlation with QOL.[20],[21]

This study demonstrates that though pharmacological advances in the field of psychiatry have led to vast improvements in patient care and their QOL, there are still some deficits to be filled. Psychosocial treatments are likely to be well-suited to improve the broader dimensions of QoL in this population through enhancing a person's social support system or assisting in the meeting of basic needs.

Limitations

The results of the current study should be interpreted in the background of following limitations, which may have affected the observations

I. Current study, based exclusively on hospital based outpatient sample and therefore, is may not be the representative sample of patients in community.
II. The QOL instrument WHO QOL-BREF used in current study is a generic instrument that was not designed specifically for schizophrenic patients.
III. All the variables were assessed cross-sectionally;

The sample size may be regarded as small and hence generalization of our findings to all types of patients is not possible.

Conclusion

The present study was conducted at NMC, Nellore on patients diagnosed with schizophrenia according to ICD-10 with duration more than two years and on maintenance treatment. The conclusions are:

1. Patients were having lowest QOL scores in social relationships domain of WHO QOL - BREF scale.
2. Employed patients reported better QOL in the social domain and also total QOL.
3. There was significant positive correlation of total monthly income with social relationship domain.
4. Schizophrenic patients ,especially those with prominent symptoms in the general psychopathology subset had a poorer overall Qol.

Implications

Evaluation of patients' quality of life can potentially serve as a feedback information source to guide specific areas of improvement of care.

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