

Quality of Life in Patients of Schizophrenia with or without Depression : A Comparative Study

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Abstract:

Background: Quality of Life (QOL) is the broad term defined as the individual perception of well being and experience of satisfaction by them under current life situation. Depression among patients with schizophrenia observed as one of the most important factor affecting the QOL and we need to further assess it.

Aim and objectives: We aim to compare the quality of life in the patients of schizophrenia with depression and without depression and to assess the influence of many other variables like psychopathology and social support on QOL in patients of schizophrenia with or without depression.

Methodology: The study will be conducted in psychiatry department of AVBRH, Sawangi, which is affiliated to DattaMeghe institute of Medical sciences, Wardha . We will select 120 patients who are clinically diagnosed to have schizophrenia according to the ICD-10 then will further assess them on Calgary Depression Rating Scale for Schizophrenia (CDSS) for dividing them into two groups i.e. with depression and without depression schizophrenia. Then we will be applying Positive and Negative Syndrome Scale for Schizophrenia (PANSS) for psychopathology, WHO QOLscale(WHOQOL-BREF) to assess qol and then Social Support Questionnaire (SSQ) for the perceived social support. Later comparison will be made between both the groups to see which group had more influence on quality of life using appropriate statistical methods.

Expected results: The outcome of this study will help in correlating how significantly the QOL in the clinically diagnosed patients of schizophrenia with depression and without depression gets affected and we will be able to answer the role of QOL , positive and negative symptoms and social support in the patients of schizophrenia with depression and without depression.

Conclusion: With this study we will be able to correlate how significantly depression, psychopathology, social support can affect the QOL in the patients of schizophrenia.

Keywords: QOL , schizophrenia, depression

INTRODUCTION:

Schizophrenia is seen as the long standing and a serious mental disturbance which is having marked characteristics of the disturbances in the various domains of thinking, language, emotions , perception, sense of self and behaviour. It is one of the most common of the serious mental disorders. The impact of the disease is found to be persistent and severe. Schizophrenia occurs across the world. In India the prevalence of schizophrenia and other psychotic disorders is 1.3% (1). Depression is usually seen in patients of schizophrenia and it has been observed that it is one of the most influencing factor for Qol. (2).

The Qol recently emerged as a extremely valuable concept, which can be used as a conclusive indicator for the evaluation of the programmes, in doing research works and it can be used in the clinical trials for interventions at the therapeutic level. The definition which is broadly used for the quality of life is the WHO definition which was given by (WHOQOLGROUP1995) as “perception of individuals about their own situation in life in relation to their values and culture systems in which they live and in context to the aims, expectations, standards and concerns in life.” (3).WHOQOL questionnaire has been validated for using in the psychiatrist population (4).

The Lehman also defined qol as the broad concept which reflects one’s feeling of well being and satisfactory experience by the individual under their present life situations in which they were living. It has been observed that Qol is an important predictor of functioning for patients of schizophrenia (5), (6). How schizophrenia starts affecting the overall quality of life and its components is recently been started to addressed. The factors which shows impact on Qol in patient of schizophrenia includes socio-demographic parameters which comprise of the (age and sex of the patient, marital status of the patient as it have impact on prognosis of the disease, education, and income), depression, psychopathology, social support etc. (7),(8).

In patients with the schizophrenia it has been observed that the factors which are related to illness should be considered in order to make the patients understand that what is the qol and its experience in which the patient’s are living and it seems that depression is the powerful factor of negative evaluation of QOL.(9). In most of previous studies it has been seen that QOL score was markedly decreased in patients suffering from schizophrenia with depression. In the previous study done it has been noticed that there was an individualistic impact on general Quality Of Lifein the patients suffering from serious mental disorder by changing in both the specific domains of QOL and the depression. A combination of the depressive and negative symptoms were recognized as the most important conclusive factors of qol in schizophrenia (10). The foremost prognostic factors of QOL was the two component of social support (first one is attachment and the second one is reassurance of worth). It was seen that poor social support has great effect on QOL. (11)

Rationale:

In patients suffering from schizophrenia the depression was observed as one of the major factor which influences the QOL. Thus the psychopathology, positive and negative symptoms, QOL, social support differ in schizophrenia with or without depression. Therefore we plan this study.

Aim :

To compare the quality of life in patients of schizophrenia with depression and without depression

Objectives:

- To assess the influence of psychopathology on quality of life in patients of schizophrenia with or without depression.
- To assess the influence of social support on quality of life in patient of schizophrenia with and without depression.

METHOD USED :

Design for study : It will be a hospital-based cross- sectional study for a duration of 2 yrs. (Jan 2021- June 2022)

Setting: The setting for the research is at the Inpatient and outpatient department of Psychiatry, AVBRH, Sawangi (Meghe), Wardha - 442001.

Participants: Study participants will be the patient attending psychiatry OPD or admitted to psychiatry Ward.

Inclusion criteria for participants :

- Patients who are diagnosed clinically to have Schizophrenia using the ICD-10 (International Classification of Diseases 10th revision) criteria.(12)
- Patients within the age group of 18 to 65 years.
- Having an illness of duration 2-5 yrs.
- Patient who will give written informed consent.
- Subjects with diagnosis of schizophrenia will be assessed and later divided into 2 groups that is with depression and without depression.
- Both the groups were selected on the basis of matching for socio-demographic variable.

Exclusion criteriafor participants :

- Subjects not willing to give the informed consent in written.
- Patients who are not cooperating for the study.
- Patients who had history of developmental delay or any other major organic brain pathology.

- Patient who had diagnosis of schizo- affective disorders and other co-morbid psychiatric illnesses like substance abuse, disorder of personality, mentally retarded patient ,organicity. apart from schizophrenia diagnosis.
- Patient who had past history of head injury
- Subjects having co-morbid medical illnesses.

Sample Size - 120 (60 patients of Schizophrenia with depression and 60 patients of Schizophrenia without depression). we have taken sample size 120 keeping in view of dropouts.

Formula used : $n = (Z\alpha + Z\beta)^2 (\delta_1^2 + \delta_2^2 / K)$

Δ^2

where ,

$Z\alpha$ is the level of significance at 5% i.e. 95% of the confidence interval = 1.96

$Z\beta$ i.e. the power of test which is 80% = 0.84

δ_1 is the SD of general psychopathology score in depressed = 6.97

δ_2 is the SD of general psychopathology score in non depressed = 7.11

Δ is the difference between two means

= 35.20 – 31.40

= 3.8

$K = 1$

Therefore $n = (1.96 + 0.84)^2 [6.97^2 + (7.11/1)^2]$

3.8^2

= 53.82

= 55 patients needed in each group , round up figure of 60 is taken.

We have taken sample size 120 keeping in view of dropouts. Therefore 60 patients in each group.

Type of sampling : convenience sampling.

METHODOLOGY:

Informed consent of the patients / caregivers will be taken. Sociodemographic data of the patients will be collected. The patients will then be subjected to the following questionnaires:

- **Socio demographic Proforma**
- **Calgary depression rating scale (CDSS)**
- **Positive and negative syndrome scale for schizophrenia (PANSS)**

- **World health organization quality of life scale in brief version (WHOQOL-BREF)**
- **Social support questionnaire (SSQ)**

Tools for Evaluation :-

- **Socio-demographic and Clinical Data Sheet** – The proforma in the semi- structured manner which is made for this study. It contains the details about socio- demographic details such as age, sex, education, religion, employment status, marital status, place of residence, urban/ rural, socio-economic status, etc. The clinical data sheet also contains variables like age at which the illness started, total duration of the illness, the precipitating factors, any of the treatment history if it is available, duration of the treatment taken, drugs and their doses, any side effects noted, compliance to treatment, current treatment, past medical or psychiatric illness, any family history of psychiatric illness, any medical or surgical history.
- **Calgary depression rating scale for schizophrenia (CDSS)** – It is utilize to indicate that the depression is present in patients suffering from schizophrenia at both the acute and residual stages. The scale contains nine items in which 8 are the structured questions and the 9th is the observational item that depends upon the observation made during the interview process. Items were designed to measure the following- Depression, Hopelessness, Self deprecation, ideas of guilt, Pathological guilt, Morning depression, Early awakening, Suicidal ideation and Observed depression. Every item has a grading on a scale of 0–4. Final score of 6 or greater demonstrates that the presence of depression.(13)(14)
- **Positive and Negative Syndrome Scale for schizophrenia (PANSS)** - It is a evaluation which is based on the details linked to the previous week, it consists of thirty variables and it rates on 1–7 point rating scale. In these 30 items, seven items are grouped into a positive features assessing scale, seven items are grouped into negative features assessing scale, remaining 16 items constitutes the general psychopathology scale which tells the overall severity of schizophrenic disorder by summation of all the 16 items. It is used to evaluate the schizophrenia psychopathology which involves the positive, negative and the general psychopathology symptoms. The scale has internal reliability. (15)
- **WHOQOL-BREF scale**- The scale is used to measure the QOL and it consists of 26-item which can be self-administered and it was obtained from its original 100-item questionnaire which is known as the WHOQOL-100 scale. The WHOQOL-BREF scale comprise of 4 domains which includes psychological domain, physical domain, environmental domain and social relationships domain. Two separate items will be assessing the overall QOL . The scores for these 4 domains are standardized on a 0 to 100 point scale, in which score 100 is for the best possible quality of life and score 0 is for the worst possible quality of life.(16)

- **Social Support Questionnaire (SSQ)**- This questionnaire is used to know about the perceived social support in the individual. This contains 12 variables and it was observed that a high score predicts the more perceived social support. The variables in the questionnaire refers to the following domains : support, concern, help, reinforcement and disapproval that a person gets from one's family, friends, social relationships and from his colleagues in the work place. This scale involves the three domains which are Tangible Support, Belonging Support, Appraisal Support. SSQ can be used in the multiple situations in which there is requirement for the perceived social support as an intervening variable , independent variable or dependent variable.(17)

STATISTICAL ANALYSIS :

The analysis of data will be done using SPSS software 20 using appropriate statistical tools. Descriptive analysis will be used for obtaining socio-demographic data of the patients. Continuous variable will be calculated in terms of mean and standard deviation. Categorical calculation in terms of frequency and percentage. Correlation analysis between the variables will be done using Pearson's product moment and Spearman's rank order correlation. Multivariate (Regression) Analysis will be done using the enter method for studying the outcome of various independent variables on QOL.

Expected Outcomes:

The outcome of this study will help in correlating how significantly the qol in the patients with schizophrenia with depression and without depression gets affected and we will able to answer role of QOL, social support and positive and negative symptoms in schizophrenia with depression and without depression.

DISCUSSION:

According to the study which was conducted by Karrow et al in 2005 suggested that the cognitive and negative symptoms had some influence on the different domains of QOL , but in the research, it was observed that positive symptom clusters didn't had any specific relation with QOL during the acute phase in the patients suffering from schizophrenia.(18)

A comparative study that was conducted in 2006 by norholm and bech and the conclusion of the study was that the depression in schizophrenia was seen as the major factor impacting the QOL.(19)

In a study done by Górecka and Czernikiewicz in the 2004 and it shows that the qol had some correlation with the both negative and positive symptoms and the entire duration spent in the hospitals, but no link was observed between the QOL and symptoms of the depression from the beginning of the therapy for schizophrenia. (20)

A study which was conducted by Reine G et al in 2003 and it shows that in patients of schizophrenia, the symptoms of depression were more focused because they show to had more strong association with the overall QOL .(21)

The study which was conducted by AjitAvasthi et al in 2011 in that study they reached to the conclusion that general psychopathology on PANSS had more impact on QOL and it seems that depression didn't had any major effect on QOL in patients with diagnosis of schizophrenia (22). Few of the related studies were reported (23-27).

LIMITATIONS:

It is relatively a small sized hospital-based, cross-sectional study. A larger general population- based longitudinal study will help to know more about how various factors affects the life quality in patient with diagnosis of schizophrenia with depression and without depression. As this study will be done only in one hospital in India, its results cannot be generalized for all over the country and it seems that mild to moderate degree of depression in group with depressed schizophrenia can additionally limit the results usefulness.

CONCLUSION:

With this study we will be able to correlate how significantly the QOL in the clinically diagnosed patient of schizophrenia gets affected by the depression and how QOL is influenced by the psychopathology and social support in the patients of schizophrenia.

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