Disability and Subjective Well Being in Patients of Schizophrenia

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Abstract:

Schizophrenia is a chronic and severe mental disorder that affects approximately 1% of the global population. It is one of the most debilitating psychiatric disorders. The present study aimed to assess the severity of disability in patients with chronic schizophrenia. It also aimed to study the subjective well being and quality of life of chronic schizophrenia patients in comparison with normal control. The research was conducted at Central Institute of psychiatry. In this study, 30 patients with chronic schizophrenia and 30 normal controls were compared. Various scales were applied to measure symptom severity, subjective well being and quality of life. Disability was only measured on the patients with schizophrenia. The results showed that patients with schizophrenia have shown high level of disability, poorer psychological functioning and poor quality of life.

I. INTRODUCTION

Schizophrenia is known as a chronic illness with a variable, but always destructive, pattern affecting the perceptual, cognitive, interpersonal and emotional aspects of the affected patients (Sadock & Sadock, 2005). It accounts for 1.1% of the total disability-adjusted life years and 2.8% for men and 2.6% for women of years lived with disability. Schizophrenia is listed as the fifth leading cause of loss of DALYs worldwide in the age group 15-44 years (WHO 2008). Schizophrenia may cause disability leading to restrictions on many domains of daily life such as hygiene, self-management, vocational, leisure activities, family and social relationships. Schizophrenia is associated with relapses with high hospitalization rates, (Almond et al., 2004) loss of ability to work, mortality in younger age than in general population (Knapp et al., 2004) and, especially for these reasons, also with remarkable economic costs worldwide (Knapp et al., 2004; Sadock & Sadock 2007). Patients with schizophrenia are also stigmatized, which leads to discrimination (Graf et al., 2004; Thornicroft et al., 2004) and thus affects their life opportunities, such as health care services, housing, education, employment and social relationships (Corrigan & Larsson, 2008). Schizophrenia is a significantly disabling disease, there is a lack of comprehensive synthesis of research findings on the full extent of psychosocial difficulties (PSDs) experienced by people living with schizophrenia It has been clearly shown that individuals with schizophrenia have impaired Neuro-cognitive functioning; however, the actual impact of these deficits on their daily life has been somewhat unclear. Several studies have examined the relationship between functional outcome and Neuro-cognitive functioning in schizophrenia. In a review of this topic, Green (1996) divided the literature into three areas of social functioning or outcome, namely community outcome, social problem solving and skill acquisition. Despite the differences in methods, the limited statistical power of many of the studies and the huge variability in the selection of measures, there were some consistent results with respect to the association between Neuro-cognitive functioning and social functioning (Green, 1996). In summary, verbal memory predicted community functioning, problem solving skills and skill acquisition. Vigilance was a reliable predictor of social problem solving and skill acquisition. Card sorting was consistently associated with performance on measures of community outcome, and inconsistently associated with skill acquisition. Addington & Addington (1999) examined social functioning and Neuro-cognitive functioning in a sample of 80 stable outpatients with schizophrenia. This study was designed to overcome some of the methodological problems of the earlier studies it had adequate power. It used a wide range of Neuro-cognitive measures that have been used in previous studies and both community functioning and social problem solving were assessed in the same sample. Results were that social problem solving as assessed by the Assessment of Interpersonal Problem-Solving Skills (AIPSS) (Donahoe et al., 1987) was associated with verbal ability, verbal memory, conceptual flexibility and vigilance. Neuro-cognitive functioning was not associated with community functioning, which was measured by the Social Functioning Scale (SFS) (Birchwood et al., 1990) and the Quality of Life Scale (Heinrichs et al., 1984). The present study aimed to assess the severity of disability in patients with chronic schizophrenia. It also aimed to study the subjective well being and quality of life of chronic schizophrenia patients in comparison with normal controls.

II. METHOD

Participants and Procedure

This was a cross-sectional, comparative, hospital based study conducted in the Inpatient Department of Central Institute of

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Psychiatry, Kanke, Ranchi. This is a tertiary referral center for psychiatric patients with a wide catchment area throughout eastern and northern India and even neighboring country, Nepal. The study was conducted over period of 4 month from-may to August 2014. The study sample consisted of 60 respondents divided into two groups each group consisted of 30 respondents. Earlier for study group 35 patients were screened among them 5 patients were not taken up for the study as they were discharged in between. So, later on only 30 patients were part of the study. The Sample was selected through using purposive sampling method.

The subjects who fulfilled the inclusion and exclusion criteria were taken up for the study. Written informed consent was taken from the patients after explaining the objectives and procedure of the study in details. At first socio-demographic data was collected from the patients, PANSS was applied on patients with schizophrenia. After that WHO-DAS, SUBI and WHO-Quality of life questionnaire were applied on patients to assess the disability, subjective well being and quality of life respectively. GHQ-12 was applied on normal control and those who scored $\leq$3 on GHQ-12 were included in the study and after that WHO-SUBI and WHO-Quality of life was applied on normal control to assess the subjective well being and quality of life respectively.

Measures

Socio-Demographic and Clinical Data Sheet: A socio-demographic and clinical data sheet was specially designed for the present study to record the socio- demographic variables and clinical variables such as age, sex, age of onset, duration of illness, history of past and present illness and family history etc.

General Health Questionnaire- 12 (GHQ-12): (Goldberg and Williams, 1978): This scale consists of 12 items. GHQ12 is a measure of current mental health, it focus on two major areas- the inability to carry out normal function and the appearance of new and distressing experience. It is a self-administered screening Test which is sensitive to the presence of psychiatric disorders in individuals in primary care setting and non- psychiatric clinical settings.

The Positive and Negative Syndrome Scale (PANSS) for Schizophrenia (Kay et al, 1987): This scale was developed by Kay et al, in 1987 and it consists of 30 items, out of which 7 items measure positive symptoms, 7 items measure negative symptoms and 16 items measure general psychopathology. Each item is evaluated on seven point scale (i.e. 1 to 7) and provides information regarding the severity of psychopathology.

WHO Disability Assessment Schedule (WHO/DAS, 1988): The WHO psychiatric disability assessment schedule (WHO DAS, 1988) is designed to assess the social functioning of patient's mental disorder. The schedule consists of 5 domains such as (1) overall behavior (2) social role performance. (3) Patients in hospital (for hospitalized patients only) (4) modifying factors (5) Global evaluation. It is a 5 points likert rating scale.

Subjective well-being inventory: (Sell and Nagpal, 1992): This is a comprehensive and robust instrument (originally in English language) for assessing positive indicators of health. It includes perceptions of well being, happiness, Life satisfaction, positive affects and feeling about social life.

WHO Quality of life brief (WHO-QOL, 1998): WHO Quality of life Hindi Version was a Developed (Saxens et al, 1998) it is a self administered generic questionnaire developed in Hindi. it is a 26 items shorter version of the WHO OQL-100 Scale, which was Developed as a subjective evaluation of the respondent Health ,living condition and functioning and quality of life on the dimension of physical, psychological, religion each of the domains is treated as a separate numeric variable high, higher score higher quality of life.

Data Analysis

The results obtained were analyzed by using the computer software program, statistical packed for social science version 16.0 (SPSS-16.0) with the use of different parametric and non parametric measurements.

III. RESULTS

Table-1: Comparison of who quality of life in person with schizophrenia and control groups

Domain	Schizophrenia (Mean±SD) (N=30)	Control (Mean±SD) (N=30)	t	*df*	p
WHO-Quality of life	21.60±2.87	28.4±2.84	9.209	58	.000
WHO-Psychology	18.23±2.54	23.37±3.61	6.362	58	.000
WHO-Social	8.43±1.92	12.53±2.51	7.091	58	.000
WHO-Environment	23.70±5.52	28.67±2.79	4.395	58	.000

Table 1 shows the comparison of WHO quality of life in two groups, it shows that control group scored higher in all domains of WHO quality of life in comparison to persons with schizophrenia. It shows that schizophrenia group scored (21.60±2.87) in WHO-Quality of life overall score domain, where as the control group scored (28.4±2.84). In WHO-psychological domain, the schizophrenia group scored (18.23±2.54) where as control group scored (23.37±3.61). Similarly in WHO-social and environmental domain the persons with schizophrenia scored (8.43±1.92, 23.70±5.52) whereas the control group scored (12.53±2.51, 28.67±2.79).This table also shows that all domains of WHO-Quality of life scale was statistically significant at the level of (p=.000).

Table-2: Comparison of subjective well-being in person with schizophrenia and control groups

Domain	Schizophrenia mean±SD (N=30)	Control mean±SD (N=30)	t	df	p
General well–being	5.53±1.431	8.30±1.11	8.33	58	.000
Expatiation achievement	5.93±.691	7.63±1.09	7.17	58	.000
Confidence coping	6.13±1.40	8.00±1.14	5.86	58	.000
Transcendence	6.30±1.17	8.20±.961	6.84	58	.000
Family group support	6.97±1.27	8.63±.614	6.42	58	.000
Social support	6.40±1.54	8.63±.614	7.35	58	.000
Primary group	7.83±1.34	8.30±2.13	1.01	58	.315
Inadequate	13.47±3.13	16.20±3.67	3.16	58	.003
Perceive health	12.17±2.79	14.37±4.14	2.41	58	.019
Deficiency	5.60±1.35	6.78±1.28	3.43	58	.001
Gnarl wellbeing negative	5.70±1.86	7.83±2.45	3.79	58	.000

Table 2 shows the comparison of subjective well-being in person with schizophrenia and control group. It shows that control group scored higher in all domain of subjective well–being in comparison to person with schizophrenia group. It show that schizophrenia group scored (5.53±1.431) in SUBI-General well –being where as control group scored (8.30±1.11).similarly in SUBI Exception achievement, Confidence coping, transcendence, Family group support, General wellbeing negative the domain person with schizophrenia scored compare to less as control group scored this table shows that domain of statically significant at level of (p=.000).in other domain of SUBI in Primary group person with schizophrenia scored (7.83±1.34) as control group scored (8.30±2.13), Statically significant at level of(p=.315).perceive health in person with schizophrenia scored (12.17±2.79) where as control group scored (8.30±2.13), Statically significant at level of(p=.315).and In domain of SUBI in deficiency of person with schizophrenia scored (5.60±1.35) where as control group scored (6.78±1.28) in statically significant at level of (p=.019).

Table-3: PANSS score person with schizophrenia

Domain of PANSS	Mean±SD
PANSS Positive	19.80±4.19
PANSS Negative	15.37±4.18
PANSS General	34.10±6.54

Table 3 shows the PANSS score of chronic schizophrenia group. It shows in PANSS positive domain the mean score were (19.80±4.19). PANSS negative score were (15.37±4.18) and general score were (34.10±6.54)

Table-4: Disability score in person with schizophrenia

Domain of DAS	Mean±SD
DAS cognitive	12.53±2.67
DAS mobility	11.47±3.05
DAS self care	6.30±2.02
DAS getting alone with people	10.83±2.24
DAS householdactivites1	10.06±2.08
DAS householdactivites2	11.63±2.00
DAS participants	19.50±2.60
H1	11.23±6.56
H2	6.33±4.25
H3	5.10±3.39
Total score	81.63±10.47

Table 4 Show the means score of WHO disability in person with schizophrenia. Statically means score much high in domain of cognitive (12.53±2.67), mobility (11.47±3.05), house hold activity1 (10.06±2.08), household activates2 (11.63±2.00) and participants (19.50±2.60)

Table-5: Correlation between WHO disability and PANSS scale score in person with schizophrenia

Domain	PANSS Positive	PANSS Negative	PANSS General	PANSS Total
Das cognitive	-.17	.13	.22	.12
Mobility	.075	.46**	.50**	.51**
Self care	.13	.39*	.50**	.50**
Getting alone	-.00	.41*	.57**	.49**
Householdactivity1	.06	.51**	.63**	.60**
Householdactivity2	.15	.10	.49**	.39*
participants	-0.16	.22	.33	.28
H1	-38*	.36*	.19	.10
H2	-.44*	.41*	.28	.15
H3	-.079	.33	.27	.26
total	.096	.43*	.58**	.55**

* p<.05; ** p<.01; *** p<.001

Table - 5 shows the correlation between disability and PANSS. There is some positive co- relation between disability and well-being but PANSS positive syndromes

IV. DISCUSSION

Quality of life in person with schizophrenia and control groups

The experimental group was poorer in psychological functioning than control group also social functioning was found lower in chronic schizophrenia group than control group (p=.000). This finding is in line with Lehman (1982) where they showed the same result. Present study result indicates that chronic schizophrenia is associated with poor quality of life and poor environment because of high stigma, lack of knowledge about to the illness (Rahaman and Indran, 1997). In another study (Mubarak, 2005) it was found that disability was an important confounding factor in lowering the WHO quality of life, because of psychopathology leads to poor quality of life in chronic schizophrenic patients. Also the quality of life reported by chronic schizophrenia might be due to the influence of lack of involvement in family members in patient's illness emotional support.

Subjective Well-Being in Person with Schizophrenia and Control Groups

Chronic schizophrenic group scored lower in most of the domains of subjective well being scale compared to the control group. On the domain of expectation achievement, confidence coping, transcendence, family support, social support and general well being chronic schizophrenic group scored lower. According to Bow-Thomas et al (1999) in schizophrenia the subjective aspect of quality of life is low when the positive psychotic symptoms are in the forefront. Similarly, Huppert et al (2001) also revealed that subjective distress presents in affective and psychotic symptom. Eack, et al (2007) found that quality of life in schizophrenia is more highly related to negative rather than positive symptoms.

WHO Disability Assessment Schedule (DAS) and Positive and Negative Syndrome Scale for schizophrenia (PANSS) in patients with schizophrenia

Significant correlation between WHO-DAS and Positive and Negative Syndrome Scale for Schizophrenia (PANSS) and its sub domains were found. PANSS positive score is negatively correlated with total days of difficulty and difficulties in carrying out usual days activities. PANSS negative score is positively correlated with mobility, self care, getting alone, household activity, total days of difficulty and difficulties in carrying out usual day activities and total disability score. This implies that negative symptoms are more prone to develop disability in schizophrenic patients. The general psychopathology score of PANSS is positively correlated with mobility, self care, getting alone, household activity and total disability score. The total PANNS score is positively correlated with mobility, self care, getting alone, household activity and total disability score.

The relation between Cognitive deficits as well as Positive and Negative symptoms score with disability in schizophrenia was shown by Patterson et al (1998), Leisse & Kallert (2000), Liddle (2000), Bell & Bryson (2001) and Ertugrul & Ulug (2002). Positive symptoms are poor predictors of future work performance in schizophrenia revealed by (Bell and Bryson, 2001; Mueser et al., 2001). In a recent study by Górecka and Czernikiewicz (2004) found that the disability in schizophrenia correlated essentially with negative symptoms, positive symptoms and total duration of hospitalization. Green (1996) and Bell & Bryson (2001) found that Negative symptoms were significantly correlated with functional outcome measures and to have a strong impact on interpersonal relationships. Cognitive functions such as attention, verbal memory, language-processing skills, problem solving, executive function and vigilance, which are all known to be impaired in schizophrenia, are essential for daily functioning, work performance, normal learning and social relations.

V. LIMITATIONS

- The Sample size (n=30) was small, which makes it difficult to generalize results.
- Only inpatients from the institute were taken up for the study.
- Assessment was done in a single session.

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