

Personal Social Capital and Socio-occupational Function of Persons with Schizophrenia: A Comparative Study

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ABSTRACT


Background: Personal social capital is an individual's networks and connections between individuals that can provide support which is characterized by reciprocity, trustworthiness and resources. Individual who are excluded from accessing social capital have a higher risk of schizophrenia and may have informal social control. Social functioning of individuals with schizophrenia gets disturbed therefore improving the functioning levels is considered to be an important goal in treating schizophrenia. **Aim:** To assess and compare personal social capital and socio-occupational functioning of patients with schizophrenia and normal controls. **Materials and Methods:** The sample consisted of 60 individuals (30 patients diagnosed with schizophrenia and 30 normal population) selected from outpatient department (OPD) of the Central Institute of Psychiatry, Ranchi by using purposive sampling method. Positive and negative syndrome scale (for study group) and General health questionnaire (for normal population) applied for screening. Participants who fulfilled inclusion criteria were informed about study and consent was obtained. Socio-demographic and clinical datasheet, Personal Social Capital Scale and socio-occupational functioning scale was administered. **Results:** Present study shows significant difference in personal social capital and socio-occupational functioning of persons with schizophrenia and normal controls. **Conclusion:** The patients with schizophrenia hold lower personal social capital and socio-occupational functioning than normal population. Personal social capital and socio-occupational functioning showed significant positive correlation therefore improvement in socio-occupational functioning can help to enhance personal social capital.

Keywords: Schizophrenia, personal social capital, socio-occupational functioning

INTRODUCTION

Schizophrenia is a serious brain disorder that has been commonly understood as "one of the baffling mental illnesses known". To the best of present knowledge, schizophrenia is a disorder with variable phenotypic expression and poorly understood, complex etiology,

involving a major genetic contribution, as well as environmental factors interacting with the genetic susceptibility.^[1] Patients with schizophrenia have disability that spans across multiple functional domains, including social^[2] and occupational^[3] domains, even when their psychotic symptoms are in remission.^[4]

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Social-occupational functioning is the overall functional outcome and the ability of the individual to live in a community of which he is a part.^[5] In persons with schizophrenia, a chronic mental illness that tends to mask the overall functioning of the individual, the illness and socio-occupational functioning of the individual is often at stake. Mental disorders are known as disturbances which cause clinically significant distress or impairment in social, occupational, and/or other important areas of functioning.^[6] While comparing the social functioning and Quality of Life (QOL) between obsessive compulsive disorder (OCD) and schizophrenic disorders, in 31 OCD patients and 68 schizophrenic patients, Bystritsky and colleagues^[7] found that patients with severe OCD and patients with schizophrenia are equally socially impaired. However, OCD patients experience greater significant functional improvement with multimodal treatment. First episode schizophrenia and multi episode schizophrenia has shown decreased social functioning than normal controls.^[8] Individuals with schizophrenia with impaired executive functioning displayed a positive and statistically significant association between psychosocial functioning and both measures of subjective experience, executive functioning plays a major role in moderating the relationship between subjective experience and psychosocial functioning in schizophrenia.^[9] Awareness of cognitive difficulties could be an interesting target in programs aimed at enhancing the vocational functioning of persons with schizophrenia.^[10] Patients not achieving remission continue to experience functional impairment, and have poorer quality of life after treatment than remitters.^[11, 12] Numerous studies have reported associations between cognitive impairments and decreased psychosocial functioning.^[13-15] The extent of the cognitive difficulties limits the type, amount, and quality of work that persons with schizophrenia can perform.^[16,17] Figueira and Brissos^[18] argued that assessment of psychosocial functioning should be an integral part of schizophrenia patients' assessment, in both the research and clinical setting. This will help in assessing psychosocial outcomes in schizophrenia patients. Smith and co-researchers^[19] reported that individuals from high-expressed emotions households were more impaired in terms of social functioning,

particularly in terms of independence and interpersonal functioning. Family members probably pay close attention to the patient's daily social functioning, and the patient's level of social functioning influence the family's expressed emotions profile.^[20] Impairment of social functioning is viewed to be a hallmark feature of schizophrenia, observed in the earliest descriptions of the disorder by Kraepelin and Bleuler.^[21]

The construct 'Social Capital' has been evolved strongly as an index to assess the societal position, image and acceptance of the individuals with severe mental illness. There are some irrefutable evidences that psychological morbidity causes significant negative impact on various facets of social capital.^[22] Social capital is generally positively related to health. However, little research has been conducted into how different forms of social capital or social networks influence health.^[23] Social capital is a multifarious construct.^[24-26] Bourdieu^[24] defines social capital in terms of networks and connections between individuals that can provide support and resource. Coleman^[25] conceptualizes social capital as being a resource of the social relations that exist between families and the communities that they are linked to, whereas, Putnam^[26] defines social capital is a way of describing social relationships within societies or groups of people. Hence the study was intended to assess, compare and see correlation between personal social capital and socio-occupational functioning among patients with schizophrenia and normal controls.

MATERIALS AND METHODS

This was a hospital based cross-sectional study was conducted at outpatient department of the Central Institute of Psychiatry, Kanke, Ranchi, India. Purposive sampling method was used to recruit the study sample of 60 participants which consisted of 30 patients diagnosed with schizophrenia (based on ICD 10-DCR) and 30 normal controls. In inclusion the patients on remission for at least 2 months with either genders, within the age range of 18- 50, who scored less than 3 on item P1, P2, P3, N1, N4, N6, G5 and G9 of PANSS. Patients with intellectual disability, history of organicity, epilepsy or any other neurological deficits were excluded. In the normal controls individuals within the age range of 18- 60,

who scored less than 3 in GHQ-12 and with no past history of any psychiatric illness were included. Individuals with intellectual disability, history of organicity, epilepsy or any other neurological deficits were excluded. Those individuals who have given written informed consent for the study were enrolled. The study was carried out with the permission of ethical committee of CIP, Ranchi.

Tools Used

Socio-demographic data sheet: It included details regarding age, sex, education, occupation, marital status, religion, caste, domicile, family income, duration of illness of the patient etc. Additional information about the patient was taken with the help of case record file of the institute and from patients.

Positive and Negative Syndrome Scale (PANSS):^[27] The PANSS is administered as a Structured Clinical Interview.^[28] The instrument assesses symptomatology in three subscales reflecting positive, negative, and general symptoms, as well as a total score. The 30 items are scored from absent [0] to extreme problem [6]. Completion requires approximately 30 minutes. Cronbach's Alpha ranged from 0.70 to 0.85 suggesting an acceptable internal consistency.

General Health Questionnaire (GHQ-12):^[29] The 12-item general health questionnaire (GHQ-12) consists of 12 items, each one assessing the severity of mental problem over the past few weeks using a 4-point Likert type scale (from 0-3). The score was used to generate a total score ranging from 0-36. The positive items were corrected from 0 (always) to 3 (never) and the negatives one from 3 (always) to 0 (never)]. High scores indicate worse health.

Personal Social Capital Scale (PSCS):^[30] Personal capital scale consisted of 10 items with a total of 42 sub items. All 42 sub items were assessed using a five-point Likert scale with 1 = 'none' or a few to 5 = 'all' or a lot. Scores for the individual 10 items were calculated by (i) summarizing the individual sub item scores and (ii) dividing the sum score by the number of sub items. After item scores were derived, bonding social capital score was calculated by adding together the item scores for the five items Cap 1 through Cap 5; bridging social capital score was calculated by

adding together the item scores for the five items Cap 6 through Cap 10. The summation of the bonding capital score and the bridging capital score yielded the total social capital score. This scale has a good reliability and validity with the cronbach alphas score of 0.77-0.87 for the overall scale.

Socio-occupational Functioning Scale (SOFS):^[5] The concept of social functioning is, however, complex. It comprises of essentially two main components: (i) the ability to look after oneself and maintain daily activities and (ii) the instrumental and social skills to manage oneself and live in the community. Social functioning was operationally defined as comprising of self-care and activities of daily living, communication and interpersonal relations, instrumental living skills and work. Each item is rated on a 5-point Likert scale (1= no impairment, 2= mild impairment, 3= moderate impairment, 4= severe impairment, and 5= extreme impairment). Two types of reliability were calculated: internal consistency and test-retest reliability. Cronbach's was computed as a measure of internal consistency. The coefficient was 0.91 for the total scale. The SOFS was repeated after 1 month on patients from the outpatient and rehabilitation groups using the same caregivers as raters. Test-retest reliability for the total SOFS score as indicated by the intra-class coefficient (ICC) was 0.95 and for individual items it ranged from 0.73 to 0.96. The SOFS demonstrated adequate internal consistency and retest reliability.

The statistical analyses were done with the help of the Statistical Package for Social Sciences-16 (SPSS 16 Version). For socio-demographic variables and clinical variables descriptive statistics were used such as frequency, percentage, mean and standard deviation. For testing the variance, chi-square test, Fisher's exact test and student "t" test were used. To find out the relationship Pearson correlation coefficient (r) was used.

RESULTS

Table-1: Comparison of Age between Study & Controls Groups

Variable	Schizophrenia (N=30) Mean±SD	Normal (N=30) Mean ±SD	t (df-58)	p
Age	34.96±8.94	32.03±8.27	1.31	0.19

N= number, SD= Standard deviation

Table-2: Comparison of Socio-demographic variables between Study & Controls Groups

Variable		Schizophrenia (N=30)	Normal (N=30)	χ^2 /Fisher's Exact Test	df	p
Sex	Male	17 (56.7%)	14 (46.7%)	0.60	1	0.43
	Female	13 (43.3%)	16 (53.3%)			
Marital Status	Unmarried	11(36.7%)	15 (50.0%)	1.08	1	0.29
	Married	19 (33.3%)	15 (50.0%)			
Religion	Hindu	21(70.0%)	17 (56.7%)	1.14	1	0.28
	Other	9 (30.0%)	13 (43.3%)			
Education	Illiterate	10 (33.3%)	9(30.0%)	0.07	1	0.78
	Literate	20 (66.7%)	21 (70.0%)			
Occupation	Employed	10(33.3%)	23 (76.7%)	17.38	1	0.00*
	Unemployed	20 (66.7%)	7 (23.3%)			
Socioeconomic Status	Lower	9(30.0%)	9 (30.0%)	0.14 ^f	2	0.93
	Middle	16 (53.3%)	17 (56.7%)			
	Higher	5(16.7%)	4 (13.3%)			
Habitat	Rural	19 (63.3%)	16 (53.3%)	0.61	1	0.43
	Urban	11(36.7%)	14 (46.7%)			
Family Type	Nuclear	19 (63.3%)	24 (80.0%)	2.05	1	0.15
	Joint	11(36.7%)	6 (20.0%)			
Family History	Present	8(26.7%)	6 (20.0%)	0.37	1	0.54
	Absent	22 (73.3%)	24 (80.0%)			

* $p \leq 0.01$, N= number, χ^2 = chi square, df= degree of freedom

Table-3: Comparison of SOFS between Study & Controls Groups

Schizophrenia (N=30)	Normal (N=30)	t (df-58)	p
Mean \pm SD	Mean \pm SD		
35.30\pm5.03	14.96 \pm 2.48	19.84	0.00*

* $p \leq 0.01$, t = "t" test, df= degree of freedom

Table-4: Comparison of PSC between Study & Controls Groups

PSCS Domains	Schizophrenia (N=30)	Normal (N=30)	t (df-58)	p
	Mean \pm SD	Mean \pm SD		
Bonding	69.77 \pm 4.88	79.47 \pm 6.83	6.31	0.00*
Bridging	25.05 \pm 3.74	30.73 \pm 4.28	5.46	0.00*
Total Social	94.83 \pm 7.26	110.21 \pm 10.12	6.75	0.00*

* $p \leq 0.01$, t = "t" test, df= degree of freedom

Table-5: Correlation of PSC and SOF

Variable	SOFS	Social Capital
SOFS	1	0.627*
Social Capital	0.627*	1

* $p \leq 0.01$

In the present study the mean score of age was 34.96 \pm 8.94 of persons with schizophrenia and 32.03 \pm 8.27 of normal controls. In the study group 10 (33.3%) participants were employed and 23 (76.7%) participants from normal

controls were employed. The no. of unemployed participant in study was 20(66.7%) for study group and 7(23.3%) for normal controls. The comparison of both groups on the basis of socio-occupational functioning shows the total mean score and SD of SOFS in persons with schizophrenia was 35.30 \pm 5.03 and in normal controls was 14.96 \pm 2.48. The mean score and SD bonding capital were 69.77 \pm 4.88 in persons with schizophrenia and 79.47 \pm 6.83 in normal controls. The mean score and SD of bridging capital of persons with schizophrenia and normal controls 25.05 \pm 3.74 & 30.73 \pm 4.28 respectively. The total social capital's mean score and SD of persons with schizophrenia and normal controls were 94.83 \pm 7.26 & 110.21 \pm 10.12.

DISCUSSION

The present study assessed personal social capital and socio-occupational functioning in persons with schizophrenia and normal controls. All socio demographic variables were matched except occupation. There is difference found in employment of patients with schizophrenia. The illness has effect over individuals socio-occupational functioning. In one of the study in London done by Perkins and Rinaldi [31] a 10 years series of annual

cross sectional survey of patients with long term mental health problems had decrease in employment by 8 % from 12 % in 1990 to 4 % in 1999.

The present study showed significant difference in socio-occupational functioning between persons with schizophrenia and normal controls. Social functioning has been defined globally as the capacity of a person to function in different societal roles such as homemaker, worker, student, spouse, family member, or friend. People with schizophrenia tend to experience difficulties in social function and self-care,^[32] high rates of unemployment, and social exclusion due to cognitive impairment and schizophrenia symptoms.^[33] Psychosis is a leading cause of disability worldwide and work performance is reduced in most persons with schizophrenia.^[34] Schizophrenia can diminish motivation, initiative, mood, and emotional expression; these constitute the category of “negative” symptoms. This may lead sufferers to become slower to talk and act, and increasingly indifferent to social contact and emotional interaction. Over time, patients may lose contact with their friends and family, be unable to continue working, and become withdrawn and isolated. At its most extreme, individuals lose the ability to look after themselves.^[35]

The present study shows significant difference in social capital, including bonding and bridging capitals between persons with schizophrenia and normal controls. The social, economic and cultural environment plays a critical role in shaping the epidemiology of risk and outcome of schizophrenia.^[36,37]

The results of this present study indicate the positive correlation between social capital and socio-occupational functioning among persons with schizophrenia and normal controls. The social capital improves when individual shows better functioning so as either way. There are studies indicates people with chronic mental illness can achieve social occupational functioning^[15]. Individual with Employed participants had access to more social capital compared with those who were unemployed.^[38] People with severe mental illness have smaller and poor quality networks than the general population.^[39] The clinical interventions focused on improving the

cognitive impairment and compliance to treatment can play an important role in improving well-being and socio-occupational functioning in schizophrenia patients.

Limitations: The study was conducted on the patients with schizophrenia who were in remission period and compared with normal controls. The sample size was modest in nature and they were selected through purpose sampling. The socio-demographic domain occupations did not matched with normal controls. The results are of short term assessment of patients who came for follow up. A long term follow up should be done in order to have more accurate understanding.

CONCLUSION

Schizophrenia is disorder leads to incapacitating individuals potentials to enjoy a life. The marked decrease is seen in personal social capital and socio-occupational functioning. The clinical professional has a wide role not only deal to improve symptoms but enhancing personal social capital, socio-occupational functioning by using various therapeutic interventions. Treating individuals in his social environment will be the best step towards mental health promotion.

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