

Schizophrenia - Insight, Depression: A correlation study

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Abstract

Background: Schizophrenia is one of the severe forms of mental illness which demands enormous personal and economical costs. Recent years have attracted considerable interest in the dual problem of depression in schizophrenia and its relation to insight. Most clinicians believe that poor insight in patients with schizophrenia, though problematic for treatment adherence, may be protective with respect to suicide. **Aims and objectives:** Our study was aimed to find out the correlation between insight and depression in schizophrenic population. **Materials and Methods:** Present study was a cross sectional, single centred, correlation study done in total of 60 subjects. Subjects aged between 20 to 60years, diagnosed to have schizophrenia as per ICD-10 and who have given written consent been considered for the study. Subjects who had other psychiatric disorders such as mood disorder, schizoaffective disorder, mental retardation, epilepsy or detectable organic disease and co morbid substance abuse were excluded from the study. Schizophrenics with acute exacerbation were also excluded from the study. For insight assessment, schedule for assessment of insight (SAI), a three item rating scale was used. For the assessment of depressive symptoms, a nine item rating scale, Calgary Depression Rating Scale (CDRS) was administrated. **Results:** Insight and depression were strongly correlated in schizophrenic population with a Pearson correlation coefficient of 0.758. The correlation between insight and depression was high in subjects with less duration of illness. **Conclusions:** Our study suggests that poor insight may protect against depression in the early stages of recovery from schizophrenia. The correlation between insight and depression was high in subjects with less duration of illness.

Keywords: Depression, Insight, Schizophrenia

Introduction

Schizophrenia is one of the severe forms of mental illness which demands enormous personal and economical costs. Globally it is estimated that 25million people have schizophrenia [1]. Recent years have attracted considerable interest in the dual problem of depression in schizophrenia and its relation to insight. Among the primary dimensions of insight, the following were included: 1) the awareness of having an illness, its signs and symptoms. The awareness and attribution of recognizable symptoms to that illness, the temporal projection of the insight, distinguishing between actual or retrospective insight, and assuming that insight may vary in different stages of the psychotic process [2,3]. Semrad and Eissler, however, had seen

depression in schizophrenia as a moment of therapeutic opportunity, when insight and mastery might overcome more primitive defensive psychotic ego states as they receded [4]. Between 50% and 80% of the patients diagnosed with schizophrenia have been shown to be partially or totally lacking insight into the presence of their mental disorder.

Although a causal chain connecting poor insight with poor treatment adherence and thus with poorer outcome and functioning is straight forward, numerous studies investigating correlates and long-term impact of insight have provided differing results. In addition, higher levels of insight in schizophrenia have been associated with depression and hopelessness, but the causal direction of the relationship was unclear and the data were inconclusive [5]. Schizophrenia is a highly

Manuscript received 25th September 2016
Reviewed: 6th October 2016
Author Corrected: 16th October 2016
Accepted for Publication 31st October 2016

stigmatising disorder and many individuals with this diagnosis feel devalued and discriminated [6]. Societal, and sometimes medical views include the belief that it is a chronic, debilitating condition from which individuals have little chance of recovering [7]. This conceptualisation can be threatening and distressing to those given the diagnosis, and is likely to contribute to the high level of depression experienced by many people with schizophrenia [8]. Indeed, a number of cross-sectional studies support a relationship between higher insight and greater distress, including depression, [9] hopelessness, [10] and suicidality [11].

Most clinicians believe that poor insight in patients with schizophrenia, though problematic for treatment adherence, may be protective with respect to suicide. The assumption is that patients who do not believe that they are ill are less likely to be suicidal. Alternatively, those patients with schizophrenia who recognize and acknowledge the illness will be more suicidal [12]. As per Moore et al, patients with a greater unawareness of their illness had relatively less depressive symptomatology and relatively greater self deception.

This relationship was particularly strong for unawareness of the social consequences of a mental disorder. These results suggest that the presence of depressive symptomatology in schizophrenia is related to insight [13].

Results

Distribution of sample based on gender, marital status, and educational status was shown in table 1 to table 3. Both the insight and depression were more in male population with schizophrenia when compared to females. Married patients have lesser insight and lesser depressive ideas than the unmarried patients. Results were suggestive of higher insight and higher depression in literates when compared to illiterates. Both insight and depression were low among schizophrenic patients with age above 40 years when compared to the patients aged below 30 years. (table4)

Distribution of sample based on the duration of illness was shown in table 5. Both insight and depression were low among schizophrenic patients with duration of illness more than 5 years. Insight and depression were high among schizophrenic patients with duration of illness less than 2 years. The correlation between insight and depression in overall sample was shown table 6. The Pearson correlation coefficient is 0.758 and is suggesting strong correlation between both variables. It is significant at 0.01 levels (p value).

Table-1: Distribution of sample based on gender Dimension.

Dimension	Variable	n	Mean of sample	Sd	t	P
Insight	Male	28	6.46	4.359	0.468	0.642
	Female	32	5.94	4.347		
Depression	Male	28	9.38	6.311	0.668	0.507
	Female	32	8.25	6.733		

Both the insight and depression were more in male population with schizophrenia when compared to females.

Methodology

We have conducted a cross sectional, single centred, correlation study in 60 subjects, from February to May 2016 at Katuri Medical College and Hospital, Guntur.

Inclusion criteria: Subjects aged between 20 to 60 years, who were diagnosed to have schizophrenia as per ICD-10 and who have given written consent.

Exclusion criteria: Subjects who had other psychiatric disorders such as mood disorder, schizoaffective disorder, mental retardation, epilepsy or detectable organic disease and co morbid substance abuse were excluded from the study. Schizophrenics who have acute exacerbation were also excluded. Our study was an outpatient based study; patients who have come for the follow up were taken into the study. Each subject was informed about the study in person and their consent was taken.

Instruments: For insight assessment, Schedule for Assessment of Insight (SAI), a three item rating scale is used [14]. The SAI evaluates insight in three dimensions and was used to rate the insight in psychotic illness. For depressive symptoms assessment a nine item rating scale, Calgary Depression Rating Scale (CDRS) was administrated. Statistical analysis was done by using SPSS 13.0 version. Descriptive statistics and tests of correlation were used.

Table-2: Distribution of sample based on Marital Status.

Dimension	Variable	n	Mean	Sd	t	P
Insight	Male	28	9.73	3.312	6.221	0.001
	Female	32	4.13	3.434		
depression	Male	28	13.45	5.894	4.779	0.001
	Female	32	6.18	5.286		

Married patients have lesser insight and lesser depressive ideas than the unmarried patients.

Table-3: Distribution of sample based on Literacy.

Dimension	Variable	n	Mean	Sd	t	P
Insight	Literate	28	9.32	3.400	6.221	0.001
	illiterate	32	3.44	2.972		
depression	literate	28	13.32	5.320	4.779	0.001
	Illiterate	32	4.94	4.704		

Results were suggestive of higher insight and higher depression in literates when compared to illiterates

Table-4: Distribution of sample based on age.

Dimension	variable	n	Mean	SD	t	p
Insight	below30	17	10.1	2.938	24.451	0.001
	30-40	21	3.44	2.972		
	above 40	22	13.32	5.320		
depression	below30	17	4.94	4.704	17.392	0.001
	30-40	21	7.52	5.750		
	above 40	22	3.56	4.786		

Both insight and depression were low among schizophrenic patients with age above 40 years when compared to the patients aged below 30 years

Table-5: Distribution of sample based on Duration of schizophrenic illness

Dimension	variable	n	Mean	SD	t	p
Insight	<2yrs	24	9.96	2.881	36.065	0.001
	2-5yrs	19	4.74	3.194		
	>5yrs	17	2.47	2.649		
depression	<2yrs	24	15.17	3.608	51.501	0.001
	2-5yrs	19	5.21	4.404		
	>5yrs	17	4.00	3.889		

Distribution of sample based on the duration of illness was shown in table 5. Both insight and depression were low among schizophrenic patients with duration of illness more than 5 years. Insight and depression were high among schizophrenic patients with duration of illness less than 2 years.

Table-6: Correlation between Insight and Depression in overall sample

Variables	Depression
Insight	0.758**

** Correlation is significant at the 0.01 level.

The correlation between insight and depression in overall sample was shown table 6. The Pearson correlation coefficient is 0.758 and is suggesting strong correlation between both variables. It is significant at 0.01 levels (p value).

Table-7: Correlation between Insight and Depression with all variables.

Variable		N	Pearson Correlation	Sig. (2-tailed)	Sig. Level
Gender	Male	28	.750**	.000	0.01
	female	32	.783**	.000	0.01
Age	<30	17	.612**	.016	0.01
	30-40	21	.611**	.003	0.01
	>40	22	.576*	.002	0.05
Area of residence	Urban	30	.810	.000	0.01
	rural	30	.327*	.003	0.05
Educational status	literate	28	.641**	.000	0.01
	Illiterate	32	.282*	0.005	0.05
Marital status	Married	38	.633**	.000	0.01
	Unmarried	32	.451*	.000	0.05
Duration of illness	<2yrs	24	.703**	0.012	0.01
	2-5 yrs	19	.229*	.345	0.05
	>5yrs	17	.201*	.358	0.05

In both males and females the correlation between insight and depression is strong, as given by the Pearson coefficient more than 0.7 with significance at 0.01 levels (Table 7). The influence of age of patient on the correlation was also well established. In the group with age less than 30 yrs Pearson coefficient is 0.612 at a 0.01 significance level, whereas in other age group with age more than 40 years Pearson coefficient is 0.576 at a 0.05 significance level. The residents of urban area have more correlation than rural residents with Pearson coefficients.

Educational status of patient also shown its influence (Table 7), literates had more correlation than illiterates with Pearson coefficients of 0.641 and 0.282 and were significant at 0.01 and 0.05 respectively. Patients who were married have a strong correlation than unmarried with Pearson coefficients of 0.633 and 0.451 and were significant at 0.01 and 0.05 respectively. Patients in the early stages of illness had more correlation than at later stages, as evidenced by Pearson coefficients of 0.703, 0.229, 0.201 in <2yrs, 2-5yrs and >5yrs duration of illness groups respectively (Table 7).

Discussion

Poor insight was sometimes seen as just another symptom or manifestation of the disorder [15]. However, main conceptualisation was that poor insight represents an individual response to the diagnosis of schizophrenia and it has a relation to suicidal ideation [16]. Studies led to the hypothesis that there was a chain of causality from insight, to demoralisation, to depression, to suicidality [11]. In our study there was a strong correlation between insight and depression in schizophrenic population with a Pearson coefficient of 0.758. Our study results were in accordance with previous studies, which suggest that better insight is directly related to greater distress [9, 10, 11, 16]. In a study done by Rocca et al, [17] male gender was associated with an increased severity of depressive

symptoms. In contrary to above study, our results doesn't document any difference in the two genders in strength of correlation as both have >0.7 Pearson coefficient. In our study people residing in urban areas had stronger correlation than those in rural areas, explicable by more literacy rate, more exposure and more deficit awareness of the schizophrenic illness. The distress associated with "deficit awareness" was due to the insight of the practical constraints brought about by these deficits.

Previous studies reported that depressive symptoms are less frequent in schizophrenia patients in the chronic period than in the acute period [18, 19]. Studies on first episode psychosis had shown comparable higher levels

of insight at the onset of illness (60%). A higher insight during the baseline assessment in a first episode psychosis patient was positively correlated with a higher prevalence of depressive symptoms at this time [20]. A higher degree of insight predicts a higher risk for a subsequent post-psychotic depression and a higher risk of suicide during the first four years after receiving the diagnosis of psychosis [21]. Approximately 11% of the first episode psychosis patients, present self-harm episodes prior to their first diagnosis with an increased risk associated to male gender, low social class, depression, a longer Duration of Untreated Psychosis (DUP) and increased insight [22].

In our study also, the results were suggestive of more correlation as well as higher mean values of insight and depression in early stages of schizophrenic illness. As the duration of illness increases the insight about the illness diminishes and the rate of occurrence of depressive symptoms also falls down. Age of the patients also had shown similar trends, because most of the people experience the onset of schizophrenic illness when they are young.

In our study literate population had a stronger correlation than the illiterate population, explicable by more deficit awareness but this finding was in contrary to the study done by Amador et al, who documented that level of education and level of positive and negative symptoms of the illness were unrelated to insight, suggesting that deficits in illness awareness were not a consequence of educational background [23]. Current study had shown that married subjects had a lesser mean values of insight and depression than unmarried, but the correlation between insight and depression was strong in married subjects. This can be explained by the different coping mechanisms used by the patients of schizophrenia. Out of the two styles of coping, "Preference for positive reinterpretation and growth" coping style correlated with lower distress and with lower symptom awareness in married subjects who generally have a better social support. "Social support-seeking" coping style correlated with greater awareness of illness in unmarried schizophrenic subjects [24].

Limitations- Our study was a cross sectional study and the patients were not followed to measure the impact of insight. The results may not be applicable to a large scale population as the sample size was small. Treatment pattern of the patients and role of coping mechanisms were not considered.

Conclusions

Better insight was significantly correlated with lower mood. In addition, our study suggests that poor insight may protect against depression in the early stages of recovery from schizophrenia. The correlation between insight and depression was high in subjects with less duration of illness. There was a positive cross-sectional relationship between insight and depression, but the underlying processes need further clarification.

Funding: Nil, **Conflict of interest:** None initiated, **Permission from IRB:** Yes

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How to cite this article?

Ananda Reddy Endreddy, Subahani Shaik, Bhagawan Rajana. Schizophrenia - Insight, Depression: A correlation study. *Int J Med Res Rev* 2016;4(10):1820-1825.doi:10.17511/ijmrr. 2016.i10.18.
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