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PREVALENCE OF POSITIVE, NEGATIVE, AND GENERAL PSYCHOPATHOLOGICAL SYMPTOMS AMONG PATIENTS WITH SCHIZOPHRENIA DISORDER

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Abstract

Background: *It is known that adherence to pharmacological treatment in schizophrenia patients can be increased by working on their insight into their disorder. Therefore, the current study was designed to see the patterns of positive, negative and general psychopathological symptoms among patients with schizophrenia.*

Methodology: *A total of 440 patients were taken from the different psychiatric hospitals in Karachi, Pakistan. All the patients were diagnosed with schizophrenia disorder and are under treatment. Patients with comorbid conditions were excluded from the study. Patients' age range was 25-45 years with M=29.33, SD=7.35 years. All the participants were taken from middle-income groups through purposive sampling.*

Results: *At initial screening prevalence of positive symptoms was estimated in a high range which is > 55-73%, the prevalence of negative symptoms was 54-72% and the general psychopathological symptoms were estimated at 25-80% in the sample, which reflects that there is a high range of schizophrenia symptoms*

Conclusion: *It is concluded that there is a high risk of prevalence of positive, negative and general psychopathological symptoms among patients with schizophrenia and these symptoms' severity might be increased if these symptoms are not managed using proper treatment modalities.*

INTRODUCTION

Worldwide, schizophrenia is a frequent and diverse mental illness (Rose et al., 2010; APA, 2013). According to Prince et al. (2007), it is responsible for approximately 14% of all diseases that people worldwide get, and this percentage is rising. According to the World Health Organisation (WHO), 21 million people worldwide suffer from schizophrenia, and those who have the disorder have a two to three times higher risk of dying young than the general population (WHO, 2018). It has been estimated that the prevalence of schizophrenia disorder is between 0.3% and 0.7% globally, according to the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5). An additional estimate indicates that 7 out of 1000 individuals between the ages of 15 and 35 suffer from schizophrenia (WHO, 2011). Furthermore, in the US, about 22.1% of the Schizophrenia is multifaceted disorder composed of several symptoms (delusion, hallucination, disorganized speech etc.) (Huxley et al., 2014; Malaspina et al., 2014) having severe deficits (i.e. cognitive, behavioral & social) (Tandom et al., 2013), and impairments (attention, memory, executive functioning etc) (Wykes et al., 2011; Rushworth et al., 2013). Negative symptoms and comorbid disorders also appear with time when positive symptoms remain untreated (Foussias et al., 2014). Without treatment patients usually become very aggressive, raise conflicts with family and become more illogical (Fusar-Poli et al., 2014). Log duration of illness negatively affects patients' attitude and motivation toward treatment (Wittchen et al., 2011). Severity also affects working alliance, treatment process and treatment adherence (Wiesjahn et al., 2014)17. Patients with positive attitude better respond to medication and psychotherapy as

According to Nakagami (2010), one of the main deficiencies associated with schizophrenia is a lack of motivation. As an internal negative symptom of schizophrenia, low motivation is associated with poorer treatment outcomes and adherence (Choi et al., 2009; Nakagami, 2008) as well as psychosocial and functional outcomes (Fervaha et al., 2015; Foussias et al., 2015). Motivational deficits are extended in form of negative symptoms which decrease related interior treatment procedures (i.e. interest, drive, curiosity), initiatives (i.e. plan, pursue, engage and follow ups) and outcomes (i.e. working relation, adherence & recovery process) (Messinger et al., 2011). It is proven from the studies that motivational deficits create barriers and distort therapeutic procedures which affect decision-making and value-based rewards (Juck et al., 2006; Strauss et al., 2014) as well as it decreases patients' expectations and

Low socioeconomic status is stalwartly linked with psychotic disorders (Lee at al., 2018). Multiple socioeconomic risk factors correlate with schizophrenia having impact of inequality and deprivation (Burns et al., 2014; Chan et al., 2015). Lower-income increases the chances of a person to develop schizophrenia and makes prognosis even worse (Burns et al., 2014; Saraceno et al., 1997). Positive symptoms, negative symptoms, and prevalence, all go up due to low socio-economic level (Mazumder et al., 2015). Various studies have been proven schizophrenia disorder is more common in individuals having low-income resources (Mazumder et al., 2015), low parental assets (Byrne, 2004), group homes (Wheeler 2007), cultural deprivation (Burns et al., 2014) and social inequality (Burns et al., 2014). People with low income-group not only have sufficient amount

The aim of the present study is first to check the untreated patients with schizophrenia disorder perceive high severity overtime due unawareness and it causes severe functional impairment. Schizophrenia patients usually perceive low motivation and negative attitude toward treatment due to lack of insight significantly affects treatment adherence. Patient's economical resource is another major reason of low efficacy. Further, we hypothesized that psychoeducation program works as supportive intervention to develop and sustain patients' motivation and attitude towards during treatment along with psychotropic medications.

Materials and Methods

Design

Utilizing a one-group pretest-posttest research design, we evaluated the results of two different therapies (pharmacological and psychological) for individuals with schizophrenia. Both before and after the

interventions, results were collected. G. C. University Faisalabad's Institutional Review Board (IRB) and Research Ethical Committee (REC) gave their approval to this protocol. Participants

In the provinces of Sindh and Punjab, participants were gathered from various outpatient departments (OPDs) of hospitals and psychiatric clinics. The research was conducted from June 2017 to October 2019. The appropriate sample size was estimated using Tabachnick and Fidell's formula, which states that N>50+8K (Tabachnick & Fidell, 2013).

270 of the 400 people who were first approached granted their approval. Following our own comprehensive psychological evaluation, however, 255 people were retained because they satisfied the DSM-V diagnostic criteria for schizophrenia disorder. The patients' inclusion and exclusion criteria were then established at this point. Exclusion criteria included participants with severe functional impairment who were currently receiving inpatient therapy or who had previously received inpatient treatment. Additionally, patients with a history of multiple episodes and those who had been untreated for more than a year were not allowed to participate in the trial. Additionally, individuals with any physical or intellectual disability, as well as those with medical and mental comorbidities, were not allowed to participate.

Additionally, the trial was limited to patients who could read and write. Additionally, patients were drawn from all socioeconomic and marital backgrounds. Out of 255, 35 were once more disqualified from the study for a variety of reasons. Six patients were excluded because of comorbidity, four patients left the city, three patients switched hospitals, four patients declined to participate after the evaluation, five patients stopped taking their medications, and thirteen participants were excluded because the assessment was not completed. After completing a pre-assessment evaluation, qualified patients were referred for therapy. The post-assessment of 220 patients was finally finished. The age range of the participants was 18–50 years (M=35.45 years, SD=10.27).

Measures

According to Kay et al. (1978), the Positive and Negative Syndrome Scale (PANSS) was used. The PANSS, which consists of 30 items, is intended to evaluate the severity of symptoms in individuals with schizophrenia. Positive, negative, and general psychopathological symptoms in a patient with schizophrenia illness are the three domains that PANSS targets. The first seven (P1–P7) items measure positive symptoms, the next seven (N1–N7) items measure negative symptoms, and the final sixteen (G1–G16) items evaluate overall psychopathological symptoms. A seven-point Likert scale is used to rate each item, with 1 denoting indifference and 7 denoting passion. There are three levels of symptom severity on this scale: minimum, mild, and moderate-severe. The administration of this scale takes about forty to fifty minutes. A qualified clinical psychologist conducted the PANSS through a clinical interview for the current investigation.

The process

Once the Research Ethical Committee (REC) gave its clearance, the current study got underway. The researcher approached patients from several OPDs and informed them of the importance of the study. Additionally, they were informed that the information collected would be kept private and that your identify would never be revealed. The consent form was given to participants who indicated their desire to take part in the study. Patients who experienced any discomfort were also informed by the therapist that they might leave the trial at any moment. Purposive sampling was employed to gather the information. Individuals completed the pretest, posttest, and psychological evaluation processes.

Analytical statistics

The sample demographics were calculated using descriptive statistics. Frequency distribution statistics were used to examine the severity of the PANSS symptoms. Additionally, t-test statistics were employed to determine the difference between patients who had a high and low attitude about asking for help. The differences between socioeconomic status groups and patient motives were evaluated using one-way analysis of variance statistics. To determine the difference between the PANSS pretest and posttest scores, a paired sample t-test was employed. Using IBM SPSS Statistics

(Version 24), all analyses with a p-value <.05 were conducted with an alpha of.05.

RESULTS

Out of 255 individuals, 35 (13.73%) were eliminated from the study because their treatment follow-ups were not completed, and 220 (86.27%) were eligible for the post-assessment. The study comprised both males (58.20%) and females (41.80%). Additionally, 39.10 percent were single, 44.50% were married, and 16.40 percent were separated. Metric 28.20%, metric 32.70%, intermediate 26.40%, and undergraduate educational level 12.70% were below the metric. Nuclear family patients made up 71.80% of the total, while joint family patients made up 28.20%. Socioeconomic status showed that 31.8% of participants were in the low income group, 33.60% were in the middle income group, and 34.50% were in the high income group. The patients ranged in age from 18 to 52 (M = 35.45 & SD = 10.27). Delusion (72.70%), conceptual distortion (59.10%), hallucinations (67.30%), excitation (54.50%), grandiosity (61.80%0), suspiciousness (70.90%), and hostility (71.8%) were the most common positive symptoms. Blunted affect (68.20%), emotional withdrawal (70%), poor rapport (71.80%), passive social withdraw (57.30%), difficulties with abstract thought (53.60%), lack of spontaneity (57.30%), and stereotype thinking (60.90%) were the most common unfavorable symptoms. Additionally, it was discovered that the prevalence of general psychopathological symptoms ranged from 24.5% to 80% (Table 1).

Table 1 : Frequency statistics of patients with minimal, mild and moderate-severe symptoms on PANSS among patients with schizophrenia disorder (n=440)

Symptoms	Minimal Symptoms on PANSS n(%)	Mild Symptoms on PANSS n(%)	Moderate-Severe Symptoms on PANSS n(%)
P1-Delusion	52(23.6%)	08(03.6%)	160(72.3%)
P2-Conceptual distortion	84(38.2%)	06(02.7%)	130(59.1%)
P3-Hallucinatons	64(29.1%)	08(03.6%)	148(67.3%)
P4-Excitement	92(41.8%)	08(03.6%)	120(54.5%)
P5-Grandiosity	62(28.2%	22(10.0%)	136(61.8%)
P6-Suspiciousness/persecution	50(22.7%)	14(06.4%)	156(70.9%)
P7-Hostility	44(20.0%)	18(08.2%)	158(71.8%)
N1-Blunted affect	54(24.5%)	16(07.3%)	150(68.2%)
N2-Emotional withdrawal	54(24.5%)	12(05.5%)	154(70.0%)
N3-Poor rapport	34(15.5%)	28(12.7%)	158(71.8%)
N4-Passive social withdraw	84(38.2%)	10(04.5%)	126(57.3%)
N5-Difficulty in abstract thinking	84(38.2%)	18(08.2%)	18(53.6%)
N6-Lack of spontaneity	66(30.0%)	28(12.7%)	126(57.3%)
N7-Stereotype thinking	72(32.7%)	14(06.4%)	134(60.9%)
G1-Somatic concern	102(46.4%)	14(06.4%)	104(47.3%)
G2-Anxiety	56(25.5%)	04(01.8%)	160(72.7%)
G3-Guilt feelings	76(34.5%)	04(01.8%)	140(63.6%)
G4-Tension	78(35.5%)	12(05.5%)	130(59.1%)
G5-Mannerism and posturing	132(60.0%)	18(08.2%)	70(31.8%)
G6-Depression	62(28.2%)	14(06.4%)	144(65.5%)
G7-Motor retardation	104(47.3%)	24(10.9%)	92(41.8%)
G8-Uncooperativeness	142(64.5%)	24(10.9%)	54(24.5%)
G9-Unusual thought content	74(33.6%)	48(21.8%)	98(44.5%)
G10-Disorientation	56(25.5%)	52(23.6%)	112(50.9%)
G11-Poor attention	104(47.3%)	38(17.3%)	78(35.5%)

G12-Lack of judgment / insight	80(36.4%)	20(09.1%)	120(54.5%)
G13-Disturbance of volition	38(17.3%)	06(02.7%)	176(80.0%)
G14-Poor impulse control	78(35.5%)	10(04.5%)	132(60.0%)
G15-Preoccupation	64(29.1%)	14(06.4%)	142(64.5%)
G16-Active social avoidance	48(21.8%)	14(06.4%)	158(71.8%)

Table1 indicates the patients' baseline screening that high frequency indicates higher prevalence of symptoms and low frequency indicates lower prevalence of symptoms

DISCUSSION

In our study sample severity of positive, negative and general psychopathological symptoms was found higher at initial screening which indicates untreated patients perceive high symptoms severity overtime (Leucht et al., 2013). Untreated symptoms increase deficits and impairment in domain of social, cognitive and behavioral outcomes (Carter & Barch, 2007; Sullivan et al., 2012). Psychotic episode, prodromal period and occasional symptoms enhance symptoms severity and eventually symptoms transit into negative symptoms and collectively produce severe dysfunctional outcomes (Sabbag et al., 2011). Early management empower patients' behavioral and cognition functioning which also refer to device interpreting and understanding the body gesture, facial expression, and state of mind with better mode of verbal and non-verbal communication (Brown et al., 2012, Hoe et al., 2012; Fitch et al., 2010, Frith & Frith, 2012). Psychotropic mediation is the best choice of treatment (Asenjolobos et al., 2010; Hartling et al., 2013) and it produces positive outcomes with support of psychological interventions as supportive therapy (Kalkstein et al., 2010; Naber & Lambert, 2009). Our results indicate patients with high motivation report better outcomes on positive, negative and general psychopathological symptoms as compared to patient with low motivation (Barrowclough et al., 2010). Lack of motivation usually occurs in patients due to lack of awareness and insight. Patients commonly belief in medication and avoid self-effort to overcome the problems due to poor insight and nature of illness. Common problems as we seen in patients were their irrational beliefs, absence of insight and cognitive deficits (Buckley et al., 2003). Some of them avoid medication due to worse side effects this is again due to lack of insight. The functional impairment augments due to patient's severity, distortion and cognitive deficits (Nakagami et al., 2010). This phenomenon usually has an effect on patient's reality contact, attitudes toward life and motivations (Choi et al., 2010). If we boost up patients' motivations toward treatment person starts to be optimistic and shows interest in treatment as well as we can engage the patients in treatment positively (Medalia & Saperstein, 2011; Sorokin et al., 2017). High motivations ember to the patients internally and intentionally and they want to change oneself toward better life, while less motivated patients trigger their beliefs more negative, perceive further cognitive distortions and they believe treatment experience is not fine and it is worthless (Kessler et al., 2001). In addition, they sustain their positive and negative symptoms and perceived more depressive symptoms with the course of illness (Bentall et al., 2010; Messinger et al., 2011; Reddy 2016; Medalia et al., 2010).

CONCLUSION

It is concluded that the early management of patients with schizophrenia disorder reduce the frequency of positive, negative and general psychopathological symptoms. Patients' motivation and positive attitude toward seeking-help is very important to sustain patients' engagement in treatment. Socioeconomic status is another root cause which significantly increases or decreases the process and outcomes of the treatment. Psychoeducation program throughout the treatment along with medications increase treatment efficacy and process of recovery.

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