Prevalence of positive and negative symptoms in schizophrenia patients with different cultural backgrounds

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ABSTRACT: The purpose of this study was to evaluate the difference between prevalence of positive and negative symptoms in patients with schizophrenia that growing in different cultural basics. The population study consisted of all patients with schizophrenia that referred to Baharan Psychiatric Center of Zahedan city and Ebn-e-Sina Psychiatric Center of Mashhad city between March to August, 2013. For this, 32 schizophrenia patients from Baharan Psychiatric Center and 32 schizophrenia patients from Ebn-e-Sina Psychiatric Center randomly selected. Interviews were conducted with The Positive and Negative Syndrome Scale (PANSS). For data analysis, we used X^2 test. Results showed that with increase the duration of hospital stay, Positive Symptoms Scale, Negative Syndrome Scale and general psychopathology reduced. Also, result showed that drug consume in schizophrenia patients led to improve and decrease the schizophrenia symptoms.

Keywords: PANSS, schizophrenia patients, cultural backgrounds.

INTRODUCTION

Medical knowledge in any country is interwoven with the culture of that country. This mixture in the fields of psychiatry and psychology is more than other fields. Among Culture, psychiatry and psychology are closely interrelated, and do not mix of medical science branches as psychiatry with culture. Therefore psychiatrist and a psychologist who works in any country that deals with any ethnicity or race should be familiar with the culture of that country (Hassanzadeh, 1999). Clinical symptoms of all mental diseases and internal medicine, is a result of a complex interaction of biological, socio - cultural and psychological (Pourafkari, 2010). Can also say that schizophrenia is more complicated and strange than any mental disorder. Schizophrenia is a disorder of thought and insecure mood. Schizophrenia is not a single disorder but rather a set of psychosis. Schizophrenia is a common psychiatric disorder that occurs in about one percent of the society. The process is such that patients experience problems in personal, family and social life (Khodadadi et al., 2011). The prevalence of schizophrenia is equal in men and women, but both sexes show differences in the onset and disease process. Currently not clear the cause of the disease and the disease appears to have a role in the etiology of many reasons. Today, researchers agree that schizophrenia is a disorder with a biological origin; other factors are involved in its manifestation. Affecting factor the schizophrenia incidence would be as follows:

Biological factors (structural and genetic), Biochemical and infection factors (brain infection), psychological factors, and environmental factors. Anderson. Divided symptom of schizophrenia into three groups: positive symptoms, negative symptoms, and the symptoms are classified as mixed. Negative symptoms refer to pathological backgrounds, emotions, words, motives, interests and social relationships and mental illness breaks. During the human history, various theories about human nature expressed, and predict the behavior of man as a

social being has always been a favorite thinkers. Questions are always available such as why man behaves this way? What influences on human behavior? And what factors into human behavior are identified? There are different hypotheses to fit every age, these questions have been answered. One of the key assumptions about human behavior, it is the people who are in similar social and human behavior are based on understanding and a sense of mutual. It seems that schizophrenia and symptoms, depending on the process and its consequences as vary in patients with cultural circumstances. Mechanism in which cultural diversity may protect people against infection or increased risk, it still remains unclear (Myers, 2011). Also, over time and in thousands of clinical experience have shown that the approach has significant effects on chelation therapy to relieve symptoms of psychosis is psychosis. Cultural differences, the impact of cultural processes on mental illness is more pronounced. Cross-cultural psychiatry is working around the world to examine the similarities and cultural changes. Mental illness such as schizophrenia, individuals around the world, society and the economy has suffered a huge cost. Due to the different cultures in each region, and different types of symptoms in patients with schizophrenia, purpose of this study was to evaluate the difference between prevalence of positive and negative symptoms in patients with schizophrenia that growing in different cultural basics.

MATERIALS AND METHODS

The population study consisted of all patients with schizophrenia that referred to Baharan Psychiatric Center of Zahedan city and Ebn-e-Sina Psychiatric Center of Mashhad city between March to August, 2013. For this, 32 schizophrenia patients from Baharan Psychiatric Center and 32 schizophrenia patients from Ebn-e-Sina Psychiatric Center randomly selected.

Instrument
The Positive and Negative Syndrome Scale (PANSS):
The PANSS or the Positive and Negative Syndrome Scale is a medical scale used for measuring symptom severity of patients with schizophrenia. It was published in 1987 by Stanley Kay, Lewis Opler, and Abraham Fiszbein. It is widely used in the study of antipsychotic therapy. The name refers to the two types of symptoms in schizophrenia, as defined by the American Psychiatric Association: positive symptoms, which refer to an excess or distortion of normal functions (e.g., hallucinations and delusions), and negative symptoms, which represent a diminution or loss of normal functions. The PANSS consists of 30 items measuring specific symptoms, each item ranging from 1 (absent) to 7 (extreme). A total score is built by simply adding up the single items. The scale is based on a formalized psychiatric interview taking approximately 45 minutes and requiring an accurate rater training to reach a satisfying level of reliability. A detailed manual (Kay, 1991) offers a broad description of the aim of this instrument and of the interview procedure, including information about its beneficial psychometrical properties. As indicated by the name, a special focus lays on the measurement of positive and negative symptoms: there are seven items measuring positive symptoms, seven for negative symptoms and 16 items corresponding to general symptoms. The positive symptoms comprise of delusions, conceptual disorganization, hallucinations, hyperactivity, grandiosity, suspiciousness and hostility and together form a positive subscale. In the negative items, the symptoms blunted affect, emotional withdrawal, poor rapport, apathetic social withdrawal, difficulty in abstract thinking, lack of spontaneity and stereotyped thinking are included. Together, they form the negative subscale. A bipolar composite scale can be formed by subtracting the negative from the positive score. The 16 general and respectively global items measure symptoms like anxiety, tension, mannerism, unusual thought contents or disorientation. Since its initiation, several post validity studies using factor analytical methods empirically identified a five-factor structure of the scale (e.g. Bell et al., 1994; Levine and Rabinowitz, 2007) including a negative factor, a positive factor, a disorganized factor, an anxiety or depression factor and an excitement factor.

Data analysis
We used descriptive and X^2 (Chi Square) test for data analysis with SPSS software, Ver 18.

RESULTS AND DISCUSSION

Result
Observed values and the expected values of the prevalence of positive symptoms in first day and Chi Square analysis showed in table 1. These results showed that prevalence of positive symptoms is higher than average

range and are significance differences between observed values and the expected values of the prevalence of positive symptoms.

	Expected N	Observed N
Absent	9.1	7
Minimal	9.1	7
Mild	9.1	4
Moderate	9.1	15
Moderate severe	9.1	14
Severe	9.1	15
Extreme	9.1	2
Total		64
Chi Square	19.563	
df	6	
Sig	0.003	

Observed values and the expected values of the prevalence of positive symptoms in 28th days and Chi Square analysis showed in table 2. These results showed that prevalence of positive symptoms is lower than average range and are significance differences between observed values and the expected values of the prevalence of positive symptoms.

	Expected N	Observed N
Absent	12.8	7
Minimal	12.8	10
Mild	12.8	15
Moderate	12.8	21
Moderate severe	12.8	11
Total		64
Chi Square	9.125	
df	4	
Sig	0.048	

Observed values and the expected values of the prevalence of positive symptoms in 56th days and Chi Square analysis showed in table 3. These results showed that prevalence of positive symptoms is lower than average range and are significance differences between observed values and the expected values of the prevalence of positive symptoms.

	Expected N	Observed N
Absent	21.3	9
Minimal	21.3	38
Mild	21.3	17
Total		64
Chi Square	21.031	
df	2	
Sig	0.000	

Observed values and the expected values of the prevalence of negative symptoms in first day and Chi Square analysis showed in table 1. These results showed that prevalence of negative symptoms is lower than average range and no significance differences between observed values and the expected values of the prevalence of negative symptoms.

	Expected N	Observed N
Absent	9.1	2
Minimal	9.1	9
Mild	9.1	6
Moderate	9.1	13
Moderate severe	9.1	11
Severe	9.1	13
Extreme	9.1	10
Total		64
Chi Square	10.375	
df	6	
Sig	0.11	

Observed values and the expected values of the prevalence of negative symptoms in 28th days and Chi Square analysis showed in table 2. These results showed that prevalence of negative symptoms is higher than average range and are significance differences between observed values and the expected values of the prevalence of negative symptoms.

	Expected N	Observed N
Absent	10.7	3
Minimal	10.7	14
Mild	10.7	15
Moderate	10.7	13
Moderate severe	10.7	13
Severe		6
Total		64
Chi Square	11.375	
df	5	
Sig	0.044	

Observed values and the expected values of the prevalence of negative symptoms in 56th days and Chi Square analysis showed in table 3. These results showed that prevalence of negative symptoms is lower than average range and are significance differences between observed values and the expected values of the prevalence of negative symptoms.

	Expected N	Observed N
Absent	16	6
Minimal	16	34
Mild	16	18
Moderate	16	6
Total		64
Chi Square	33	
df	3	
Sig	0.000	

Discussion

Results showed that the more time they stay past the positive and negative symptom score decreased, And according to the scoring can be stated that the behavior of their delusions, conceptual confusion, autistic behavior, arousal, gentlemanly, suspicion and despair, harm and injury and hostility (positive symptoms), their behavior may also affect the dimensions, emotional isolation, poor relationships, social isolation or combined with passive indifference, difficulty in abstract thinking, lack of mental and spontaneous conversation (negative symptoms) has been declining. Due to these patients are hospitalized and under medical supervision and regular drug use is granted can be said that these symptoms may show declining trend.

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