ORIGINAL ARTICLE

FREQUENCY OF FIRST RANK SYMPTOMS IN PATIENTS OF SCHIZOPHRENIA: A HOSPITAL BASED STUDY

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ABSTRACT

Background: Schizophrenia affects 1% of population worldwide. In spite of its enormous impact, issues as basic as its diagnostic criteria remain ill-defined and controversial. Schneider claimed that in absence of somatic illness, first rank symptoms are pathognomonic of schizophrenia. However this claim has been criticized and first rank symptoms are reported to be present in other psychiatric disorders as well. The aim of this study was to see the prevalence of first rank symptoms in indoor schizophrenic patients in our set up.

Material & Methods: This was an observational study carried out in Psychiatry unit, Khyber Teaching Hospital Peshawar during the year 2009. One hundred patients admitted during this period who fulfilled the DSM-IV criteria for schizophrenia were included in the study. First rank symptoms were elicited by interviewing the patients based on Present State Examination (P.S.E). First rank symptoms were defined according to Mellor's criteria (1970).

Results: Out of 100 patients, only 34 (34%) reported having one or more first rank symptoms, most frequent being 'voices commenting' and least reported was "thought broadcasting". Interestingly, Delusional Perception was conspicuous by its absence in all patients. Maximum number of first rank symptoms found in an individual was five. Age, and gender did not differ significantly in patients with or without first rank symptoms. However, those experiencing first rank symptoms tended to be older in age and had more occupational dysfunction.

Conclusions: Sixty-six percent of patients diagnosed as schizophrenia do not report any first rank symptom, thus reducing its diagnostic value.

Key words: Schizophrenia, First rank symptoms, Peshawar.

INTRODUCTION

Schizophrenia is perhaps the most serious mental illness and as such is the heartland of psychiatric practice. The word schizophrenia is derived from Greek and means "split mind."[1] Due to many possible combinations of symptoms adversely affecting different spheres of life, there is debate about whether the diagnosis represents a single disorder or a number of discrete syndromes.[2] For the same reason, Eugen Bleuler used the term "schizophrenias" (plural) when he first coined the name. It affects 1% of population world wide and is equally found in different countries, with different cultures and both genders.[3] Because of its chronicity and severity, it is a major cause of disability, social dysfunction, un-employment, poverty and homelessness. World health report has listed it as eighth leading cause of disability.[4] In spite of its enormous impact, issues as basic as its diagnostic criteria remain ill-defined and controversial.[4] Schizophrenia as a diagnostic entity has been criticized as lacking in scientific validity and reliability (like many other psychiatric diagnoses in general).[5]

Over years, different approaches have remained in vogue to overcome this difficulty, of which descriptive psychopathology has been at the central stage. First rank symptoms as introduced by Kurt Schneider in 1958 are one such set of psychopathological findings that have influenced symptom-based diagnosis of schizophrenia.[6] These first rank symptoms included audible thoughts, voices arguing, voices commenting, delusional perception, somatic passivity, made affect, made impulses, made volition, thought insertion, thought withdrawal, and thought broadcasting.[7] Schneider claimed that in absence of somatic (organic) illness, first rank symptoms are pathognomonic of schizophrenia. However this claim has been criticized over years and first rank symptoms are reported to be present in other psychiatric disorders as well, particularly in mania.[8]

Whereas the frequency of first rank symptoms in schizophrenia has been studied in many countries because of their significance and relevance in diagnosis of schizophrenia, Pakistani literature seems to be strikingly lacking in this important area of research. There is thus a dire need to explore various dimensions especially the prevalence of first rank symptoms in our clinical practice and culture.

The aim of this study was to see the overall as well as individual prevalence of first rank symptoms in indoor schizophrenic patients and to see the effects of some demographic variables on the rate of first rank symptoms.

MATERIAL AND METHODS

This was a hospital based study in which 100 schizophrenic patients admitted to psychiatry ward in Khyber Teaching Hospital, Peshawar were selected randomly. The diagnosis was made according to DSM-IV criteria. Interview was based on Present State Examination (PSE 9 by Wing et al 1974). The first rank symptoms were selected according to Mellor's (1970) definition. (Table 1)

Table-I: First rank symptoms as described by Mellor 1970.

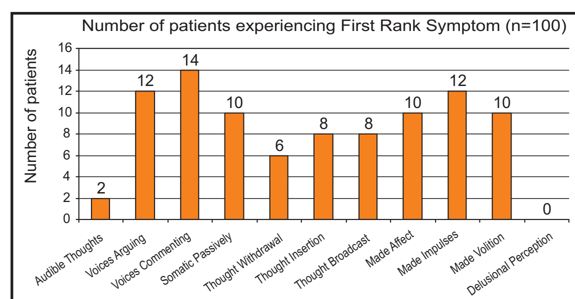
1.	Audible thoughts
2.	Voices arguing
3.	Voice commenting
4.	Somatic passivity
5.	Thought withdrawal
6.	Thought insertion
7.	Thought broad cost
8.	Made affect
9.	Made impulse
10.	Made volition
11.	Delusional percept

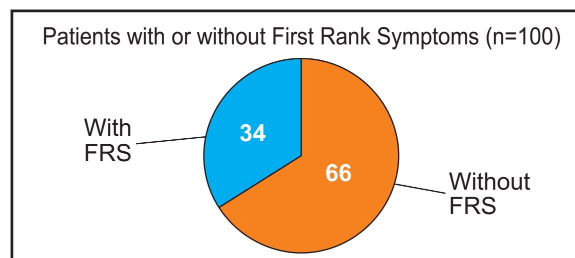
RESULTS

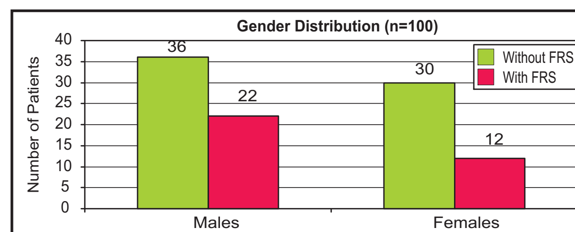
Among 100 patients, 34 (22 males and 12 females) reported having one or more first rank symptoms. These patients were older in age and married whereas the illness was of chronic nature. They did not differ from patients without first rank symptoms on account of educational level, residential category, and past personal and family history of schizophrenia. Non first rank symptoms e.g. incoherent talk, disorganized behaviour, postural abnormalities and changes in personal and social functioning were more frequently reported as presenting complaints. The most frequently

Table 2: Frequency of FRS in 100 patients.

First Rank Symptoms	No. of patients experiencing F.R.S
Avoidable thoughts	02
Voices arguing	12
Voices commenting	14
Somatic passively	10
Thought withdrawal	06
Thought insertion	08
Thought broad cost	08
Made affect	10
Made impulses	12
Made volition	10
Delusional perception	00







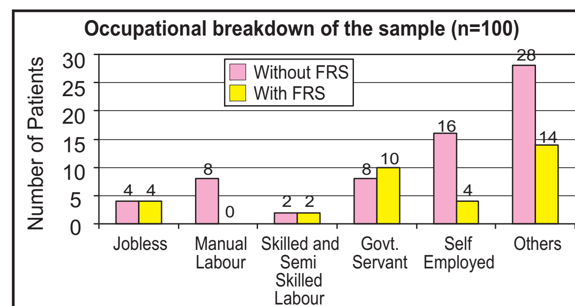


Table 3: Prevalence of first rank symptoms in different countries.

S. No.	Author & Year of study	Country of F.R.S	Preva lence
1.	Mellor (1970)	Britain	72%
2.	Guraji,O and Bamgbeye (1987)	Nigeria	73%
3.	Nedetei and Singh (1983)	Kenya	73%
4.	Zarruk (1978) Arabia	Saudi	56%
5.	Chandrasenna and Rodrego (1979)	Srilanka	25%
7.	Radha Krishnen et al (1983)	India	35%
8.	Koehler (1977)	India	35%
9.	Ahmad & Naeem (1984)	Pakistan	52.5%
10.	Malik et al (1990)	Pakistan	67%
11.	Chopra and Gunter (1987)	Australia	70%
12.	Salleh (1992)	Malay	26.7%
13.	Marshall & Silverstein (1978)	USA	24%
14.	Silverstein & Harrow (1978)	Britain	24%
15.	Carpentor & Strausss (1974)	USSR	30%
16.	Carpentor & Strausss (1974)	Tiawan	79%

reported individual first rank symptoms in order of decreasing frequency were voices commenting, made impulses, voices arguing, made affect and made volition and thought insertion and thought broadcasting. Delusional perception was one first rank symptom which was not found in any patient. Maximum first rank symptoms in an individual patient were five. (Table 2)

DISCUSSION

Earlier studies have shown that first rank symptoms in schizophrenic patients though are often present, their frequency however is highly variable (from 28% to 72% as reported by Mellor 1970). Recent studies also support these findings as is evident from the work of Ihare et al in Japan 2009 (38%),[9] Thorup et al in Denmark 2007(84%),[10] and Botros MM in Egypt 2006 (67%).[11] Furthermore studies have shown inconsistent results even in same country and culture e.g. in United Kingdom, Carpenter[12] reported 76% compared to 24% by Silverstain[13] (1978). Table III shows different studies and their findings.

In our study, the frequency of first rank symptoms was 34%, which is significantly lower than earlier studies conducted in Pakistan in Karachi[14] and Lahore,[15] reporting 52.5% and 67% respectively. However our findings are somewhat similar to those reported from Japan, where Ihara K et al (2007) have reported 38%. This is also in consistence with previous studies conducted by Koehler[16] in Germany (33%), Carpenter[12] in India 35%, Radhakrishnan[17] in India (35%).

However, these results are significantly different from other studies including those by Thorup A (2007) in Denmark (84%), and Botros MM (2006) in Egypt (67%).

The reasons for diverse findings could stem from differences in diagnostic criteria and the definition of first rank symptoms. Other factors may include assessing the patients in different stages of their illness, and whether or they are already receiving treatment.

CONCLUSION

More studies are required in other parts of the country to see the frequency of first rank symptoms so that their relative importance in the diagnosis of schizophrenia is ascertained.

Limitations:

i. Patients in all stages of illness were included.
ii. Patients already receiving treatment for psychosis were included in the study.
iii. Only indoor patients were recruited in the study.

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