



ORIGINAL RESEARCH PAPER

Psychiatry

Development of a Bengali Questionnaire for Eliciting Kurt Schneider's First Rank Symptoms of Schizophrenia

KEY WORDS: Bengali, First Rank Symptoms, Kurt Schneider, Language, Questionnaire, Schizophrenia

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ABSTRACT

Background: Schizophrenia affects 1% of population worldwide. Despite of its enormous impact, issues as basic as its diagnostic criteria remain ill-defined and controversial. Kurt Schneider, a German psychiatrist, pointed out certain symptoms as being characteristic of schizophrenia.[1]. However the variable socio-cultural milieu colouring the expression of this symptoms, as well as the unavailability of an assessment questionnaire in the native language, makes it a daunting task to investigate this enigmatic set of symptoms. The aim of this study was thus to develop a Bengali questionnaire to elicit the First Rank Symptoms of Schneider. Materials and Methods: A 3 stage process scale was developed after extensive literature search, and after arriving at a consensus in between two committees, the questionnaire was pilot tested on 40 subjects and finally the psychometric properties of the derived instrument were obtained. Results: The scale was found to have a high inter-rater as well as rater-rater reliability, (value being .9 and .95 respectively) as well as a high internal consistency (Cronbach's = 0.7). Conclusion: We have therefore been able to develop the Bengali version questionnaire for assessment of the First Rank Symptoms; coincidentally it has thrown light on some other interesting findings, like the relation between individual first rank symptoms which need to be corroborated in further studies.

Introduction

Schizophrenia is perhaps the most serious and devastating mental illness and as such is the cornerstone of psychiatric practice. A disease of worldwide impact it cuts across cultures, ethnicities, religion & gender. Kurt Schneider (1939) set a high value on certain symptoms in the diagnosis of schizophrenia, a set of psychopathological constructs which he named 'First Rank Symptoms, 1 Since then the First Rank symptoms have had a tremendous impact on the way Schizophrenia has been diagnosed in clinical settings all over the world, even stamping their presence in the DSM2 (American Psychiatric Association, 2013) and ICD 3 system of classification.

In Klinische Psychopathologie (1950), 4 he states that in the absence of organic psychoses the presence of First Rank symptoms indicate diagnosis of schizophrenia. First Rank symptoms were derived from clinical experience & interviews and had no specific relationship to the theoretical construct of Schizophrenia. First Rank symptoms according to Schneider have no explanatory power or theoretical significance, but are simply diagnostic tools and which according to P. Crichton are a chance-cluster. 5 The First Rank symptoms as listed by Schneider are - 'audible thoughts, voices heard arguing, voices heard commenting on one's actions; the experience of influences playing on the body (somatic passivity experiences); thought withdrawal and other interferences with thoughts; diffusion of thought, delusional perception, and all feelings, impulses (drives) and volitional acts that are experienced by the patient as the work or influence of others.

However in spite of the un-opposed interest the First Rank Symptoms evoked at first, they came under considerable criticism later, it has been argued on the basis of data from different sources that these symptoms are neither characteristic nor specific for schizophrenia, First Rank Symptoms it has been advocated may be found in a wide variety of mental illness ranging from personality disorder 6 through drug withdrawal 7 syndrome to affective disorders.⁸

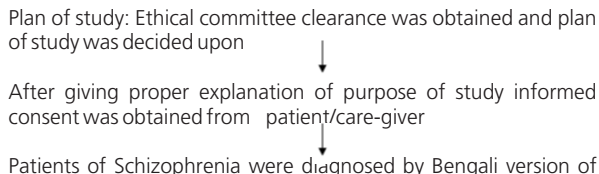
Thus, the diagnostic validity of first rank symptoms has been fiercely debated; with both conforming and arguing schools laying evidence to their respective claims. Moreover, though studies on this subject are plentiful worldwide, works in the Indian subcontinent are rather lacking.

One important problem in studying First Rank Symptoms is lack of a suitable questionnaire to elicit it. In addition, the socio-cultural context plays a major role in elicitation of the First Rank Symptoms, as evidenced by different workers. 9 Al-Ansari 10 warns that caution is necessary in detecting these symptoms in societies where socio-culturally shared beliefs shared a resemblance to the First Rank Symptoms. The native dialect i.e the lingua franca also gives a distinct flavour and richness to the phenomenological descriptions and have a major impact towards eliciting and assessment of the First Rank symptoms. Thus if one intends to study First Rank symptoms in any given language defined population, the need to develop a suitable local language questionnaire becomes imperative.

As our study was conducted in the Bengali speaking population, thus we attempted to develop a Bengali questionnaire to assess First Rank Symptoms among patients suffering from schizophrenia.

Materials and Methods:

Logistics Place of study: Tertiary care centre (Calcutta National Medical College & Hospital) Department of Psychiatry Study design: A cross-sectional Hospital based observational study. Study sample:40



M.I.N.I 11(Mini International Neuropsychiatric Interview) scale

Scale development

After detailed literature search and consultation with senior psychiatrists (Academics and Practitioners), some basic idea about how the First Rank symptoms are assessed in our setup was gathered. We also found items of Mellor's classical study, 12 SAPS Questionnaire, 13 PSE 1014 and some standard psychiatric interview guides as valuable sources for guiding us to assess FRS. We developed a small questionnaire committee comprising of senior psychiatrists, bilingual language experts with non medical background, anthropologist and clinical psychologist to develop an initial Bengali language draft of the questionnaire. This questionnaire was circulated among another group of psychiatric clinicians and language experts to get suggestions regarding language style, face validity of questions, ease of understanding questions. Final Bengali questionnaire was developed by incorporating these suggestions in subsequent meeting of questionnaire committee. It was also decided that binary response to these questions (presence/absence) rather than graded response is likely to be easier to understand.

Scale testing

A pilot study among 40 patients suffering from schizophrenia was done using this instrument. Ease of patients' understanding was found to be high. Each patient was also assessed independently by a senior psychiatrist. The instrument was found to have strong concordance with clinician's assessment of First Rank symptoms (kappa value of 0.9). The instrument was re-administered to the same patients after 2 days. Rater-rater reliability was found to very high (kappa=0.95).

The final instrument was re-administered to 40 patients to assess psychometric properties of the instrument

Results

The developed scale comprised of 11 items scored dichotomously (presence = 1/absence = 0).

Table 1: Distribution of endorsement of First Rank symptoms by sample population

Individual First Rank Symptoms	Endorsed by
1. Audible Thoughts	3
2. Voices Commenting	7
3. Voices Arguing	9
4. Thought Broadcasting	4
5. Thought Insertion	1
6. Thought Withdrawal	1
7. Made Volition	1
8. Made Impulse	1
9. Made Affect	1
10. Somatic Passivity	0
11. Delusional Percept	1

Table 1 Findings show a relative excess in the occurrence of the twin voice and thought phenomena, ie, Audible thoughts and Thought Broadcasting, as well as Voices arguing and Voices commenting. Somatic passivity phenomenon was conspicuous by its absence. The remaining first rank symptoms had fairly similar frequencies in occurrence Findings were obtained (Table 2) to evaluate the correlation between the individual First Rank symptoms among the 40 patients studied. The results were obtained by (a) fitting the First Rank symptoms against one another, (b) Fisher Exact test was done and (c) the correlation coefficient and p values were obtained. Somatic passivity was excluded due to its absence. The results showed some interesting findings, which probably indicate the necessity for a large scale study. The matrix illustration with the tetrachoric correlation analysis is shown below.

Table 2: Correlation between the individual First Rank Symptoms

Each intersecting cell shows three values i) rho value, ii) total number of observations, iii) the p value										
	AT	VC	VA	TB	TI	TW	MV	MI	MA	DP
AT	1.000 0 40									
VC	0.017 3 40 1.000 0	1.000 0 40								
VA	0.175 0 40 0.545 0	0.399 6 40 0.316 5	1.000 0 40							
TB	0.173 0 40 1.000 0	0.798 6 40 0.013 0	0.046 5 40 1.000 0	1.000 0 40						
TI	0.617 2 40 1.000 0	0.400 1 40 1.000 0	0.323 3 40 1.000 0	0.549 1 40 1.000 0	1.00 00 40 1.000 0					
TW	0.617 2 40 1.000 0	0.400 1 40 1.000 0	0.323 3 40 1.000 0	0.549 1 40 1.000 0	0.84 49 40 1.00 0	1.000 0				
MV	0.617 2 40 1.000 0	0.400 1 40 0.175 0	0.323 3 40 1.000 0	0.549 1 40 0.100 0	0.84 49 40 1.00 00	0.844 9 40 1.000 0	1.00 00			
MI	0.617 2 40 1.000 0	0.400 1 40 1.000 0	0.323 3 40 1.000 0	0.549 1 40 1.000 0	1.00 0 40 0.02 0	0.844 9 40 1.000 0	0.84 49 40 1.00 00	1.00 00		
MA	0.617 2 40 1.000 0	0.400 1 40 1.000 0	0.323 3 40 0.225 0	0.549 1 40 1.000 0	0.84 49 40 1.00 00	0.844 9 40 1.000 0	0.84 49 40 1.00 00	0.84 49 40 1.00 00	1.00 00	
DP	0.617 2 40 1.000 0	0.400 1 40 0.175 0	0.323 3 40 1.000 0	0.549 1 40 0.100 0	0.84 49 40 1.00 00	0.844 9 40 1.000 0	1.00 00	0.84 49 40 1.00 00	0.84 49 40 1.00 00	1.00 00

AT=Audible Thoughts, VC=Voices Commenting, VA=Voices Arguing, TB=Thought Broadcasting, TI=Thought Insertion, TW=Thought Withdrawal, MV=Mae Volition, MI=Made Impulse, MA=Made Affect, DP=Delusional Percept

Table 2 shows the significant associations between individual first rank symptoms are elucidated in the following tables in terms of Fisher's exact value which was obtained by tetrachoric correlation analysis.

The first rank symptoms found to be significantly associated were the 2 voice phenomenon ie "Voices Commenting" & "Audible Thoughts", and also between the hallucinatory phenomenon of "Voices Arguing" and delusional experience of "Thought Broadcasting"

iii) Reliability amidst the sample population was estimated by Cronbach's α value, which came out to be 0.7

Discussion

Hence the Bengali version questionnaire for assessment of the First

Rank symptoms was developed This is a pioneering study in the fact that it is the first time that an attempt has been made to develop a questionnaire in the vernacular language to elicit one of the most enigmatic symptom cluster of classical psychiatry, till date no such endeavour has been tried in the sub-continent, however while comparing the present study to past major ones a number of differences come to the forefront which are listed below,

i) Present study assessed the rate of First Rank Symptoms among the subjects who were newly diagnosed as schizophrenia, whereas other studies assessed the prevalence of FRS among patients of schizophrenia regardless of the novelty of diagnosis

ii) Different criteria for the diagnosis of Schizophrenia were used among the studies, for example ICD-8 in IPSS¹⁵, ICD-10 in Ahmed's¹⁶ study, while the present study relied on the strict criteria of DSM

iii) Different methods & definitions were used for eliciting the First Rank symptoms, for ex in the IPSS study PSE was used, while in the present study we devised a new questionnaire for eliciting the symptoms.

iv) The studies were done across different countries with different socio-linguo-cultural backgrounds.

Hence the differences indicate that it is highly improbable to decipher or explain the intricacies of this quintessentially misinterpreted symptom cluster, and any questionnaire set which borrows from the English question-set is highly impractical for a populace with a culturally ingrained language usage, Here is where the study becomes all the more relevant, as an easily understandable question in vernacular is the need of the hour.

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