Characteristics of auditory hallucinations in Indian patients with schizophrenia and bipolar affective disorder

Rajesh S. Dhakne, Tahoora Ali¹, Arun Singh Yadav², Suprakash Chaudhury¹, Daniel Saldanha¹
Department of Psychiatry, Ranchi Institute of Neuropsychiatry and Allied Sciences, Ranchi, Jharkhand, ¹Department of Psychiatry, Dr. D.Y. Patil Medical College, Dr. D.Y. Patil Vidyapeeth, ²Department of Psychiatry, Command Hospital (Southern Command), Pune, Maharashtra, India

ABSTRACT

Background: Auditory verbal hallucinations are not a unitary phenomenon and can be further differentiated into certain clinical characteristics, viz., frequency, intensity, control, tone, distractibility, distress, and clarity. These clinical characteristics manifest in varying degrees in different psychiatric disorders. Aim: To study the characteristics of auditory hallucinations in Indian patients with schizophrenia and bipolar affective disorder. Materials and Methods: By purposive sampling, 140 patients of schizophrenia and bipolar affective disorder each were included in the study. Subjects were assessed cross-sectionally using sociodemographic proforma and characteristics of auditory hallucination scale. Results: Characteristics of auditory hallucinations of schizophrenia patients were significantly different from those of bipolar affective disorder patients in the domains of frequency, intensity, tone, self-control, clarity, distractibility, and distress. Conclusion: Characteristics of auditory hallucinations differ in all domains between schizophrenia and bipolar affective disorder.

Keywords: Auditory hallucination, bipolar affective disorder, schizophrenia

The word “hallucination” owes its origin to the Latin word, “hallucinare,” translating to “wander through the mind.” French psychiatrist Esquirol derived the term hallucination to describe the phenomenon of perception without stimulus. However, this simple definition was not enough to describe this complex phenomenon. Later on, various definitions of hallucinations were put forward. The most contemporary and apt definition has been given by David, stating: a hallucination is as “a sensory experience, occurring in the absence of a corresponding stimulation of the relevant sensory organ”. In addition, a hallucination occurs during the awake state, thereby setting it apart from lucid dreams, for instance. Furthermore, a hallucination should have a sufficient sense of reality, such that it

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With time, emerging studies have further detailed out the various characteristics of AVH. Numerous variables were studied including frequency, location in inner or outer space, similarity to externally perceived speech, loudness, constancy, effect on behavior, causal attribution, affective reaction, and content. It was then discovered that the aforementioned variables could be applied as discriminatory indicators among the differential diagnoses of psychotic illnesses. Nayani and David examined some more variables of AVH, namely, personification (familiarity, accent, and gender), coping mechanism and degree of control, number of voices, linguistic complexity, and insight and reality testing. They concluded that AVHs are more commonly experienced inside the head; and that the accompanying distress and coping mechanism get better with time. Characteristics of AVH such as loudness, clarity, location, and reality were parameters used to assess the reliability of patients’ reports. Clarity was the most reliable, whereas reality-testing (insight) was the least reliable characteristic. To summarize, phenomenological variables recognized for AVH are aplenty; however, classifying hallucinations according to these variables was inconsistent and mostly based on clinical case observations. Hence, it would be clear from the above studies that AVHs differ between different psychiatric disorders in various domains such as clarity, loudness, intensity, tone, distress, frequency, and self-control. However, few studies exist in literature comparing these phenomenological variables between major psychiatric groups. Moreover, in India, this kind of study is hard to find. We think that this is the first study in India comparing phenomenological variables of AVHs head-to-head and finding out domains that differentiate them among each other.

MATERIALS AND METHODS

Sample
For this study, 140 patients of schizophrenia and 140 patients of bipolar affective disorder, fulfilling the inclusion and exclusion criteria for schizophrenia and bipolar affective disorder, respectively, were chosen from inpatients of RINPAS, Ranchi, by purposive sampling technique. Sample was matched for age.

Tools of assessment
Sociodemographic and clinical data sheet
This was used to collect demographic and clinical data of the patients.

Characteristics of Auditory Hallucination Questionnaire
The Characteristics of Auditory Hallucination Questionnaire (CAHQ) is a 7-item scale that requires subjects to rate the characteristics of their auditory hallucinations in the previous 24 h on a 5-point Likert scale. Test–retest reliability for the CAHQ has ranged from 0.73 to 0.78 ($P < 0.001$).

Procedure
The patients of schizophrenia and bipolar affective disorder fulfilling the inclusion and exclusion criteria were taken after explaining procedure in detail. Written informed consent was taken. Data were collected from each patient on the sociodemographic and clinical data sheet. Thereafter, CAHQ was applied on each patient.

Analysis of data
The analysis of data was done using appropriate parametric and nonparametric tests.

RESULTS

There was no statistically significant difference in the demographic details of schizophrenia and bipolar disorder patients [Table 1]. Clinical variables of the patients are given in Table 2. There was statistically significant difference between schizophrenia and bipolar disorder patients on the CAHQ [Table 3].

DISCUSSION

Sociodemographic and clinical variables
No significant difference was observed between patients of schizophrenia and bipolar disorder with respect to age, sex,
education, occupation, socioeconomic status, and marital status [Table 1]. Hence, the samples were free from the confounding effect of these variables on psychopathology and clinical characteristics of auditory hallucinations.
were more likely to disclose and seek treatment from primary care physicians, whereas men were more open to seeking treatment from mental health specialists and, hence, comprise the higher proportion of inpatient care. Similar gender bias in seeking treatment for mental illnesses has been observed in our study. With respect to clinical variables, no significant difference was observed in age of onset, duration of illness, past history of psychiatric illness, and family history of psychiatric and medical illness between patients of schizophrenia and bipolar disorder [Table 2]. This has resulted in more matching in sample characteristics avoiding any confounding effect on representation of clinical characteristics of auditory hallucination between two groups.

**Characteristics of auditory hallucination in schizophrenia and bipolar disorder**

Significant difference was observed in characteristics of auditory hallucination, viz., frequency, intensity, self-control, clarity, tone, distractibility, and distress between patients of schizophrenia and bipolar disorder [Table 3]. The mean for these characteristics was much higher in the schizophrenia group as compared to the bipolar group, indicating that hallucinations in schizophrenia are responsible for great morbidity associated with this disease.

Hallucinations have always been a signature symptom of schizophrenia, being experienced by almost 70% of all patients with schizophrenia. Hallucinations are not uncommon in patients suffering from bipolar disorder. Approximately 47% of patients with bipolar disorder experience hallucinations. The AVHs in mania have lesser intensity, are of brief duration, and less intense when compared to AVH in schizophrenia. The impact of abnormally elevated mood on behavior of manic patients far surpasses those due to AVH.

Similar difference in characteristics of AVHs between patients of schizophrenia and bipolar disorder was observed in an earlier study. The authors took 161 patients of schizophrenia and 27 patients of affective psychosis and compared the characteristics of AVH in domain of frequency, duration, loudness, tone, and distress between the two groups. They observed a significant difference on scores of these domains between the groups, with bipolar disorder patients scored significantly less on all domains when compared to patients of schizophrenia. Similar finding has been reflected in an earlier study and also our study.

**CONCLUSION**

Characteristics of auditory hallucinations differ in all domains between major psychiatric groups like schizophrenia and bipolar affective disorder.

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**Conflicts of interest**

There are no conflicts of interest.

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