TYPES AND CONTENTS OF HALLUCINATIONS IN SCHIZOPHRENIA

Avinash De Sousa

ABSTRACT

Objective : Hallucinations are one of the commonest symptoms seen in schizophrenia. This research aimed to study the types and content analysis of various hallucinations seen in patients with schizophrenia.

Design: Cross sectional study.

Place and duration of study: This study was conducted in a private psychiatric hospital in Mumbai from January 2002 to January 2007.

Subjects and Methods: The nature and content of hallucinations in 559 patients with schizophrenia was analyzed. The ptients meeting DSM IV criteria for Schizophrenia were asked to complete a questionnaire which enquired the hallucinatory experience. The data was tabulated and the results presented.

Results: The most common type of hallucinations were of auditory nature (69.23%) and amongst that a majority of patients heard voices of an unknown person (54.52%). Visual hallucinations were less common (8.59%) followed by the other types of hallucinations.

Conclusion: The study was an exploratory study in a private care setting. Auditory hallucinations were the most frequent as is generally reported in literature. More than one third (37%) of those experiencing auditory hallucinations had first rank symptoms.

Key words: Hallucinations, Schizophrenia.

INTRODUCTION

Hallucinations across any sensory modality are seen in schizophrenia with the general incidence of such anomalous experiences being about 50% across all cases[1]. Visual hallucinations occur in 15% subjects, tactile hallucinations in around 5% while the commonest of hallucinatory experiences are auditory being about 55%[2].

The pattern of auditory hallucinations is often specific. The most common of these is a voice. The voice has certain characteristics that make it different from the voice of the patient. Its grammatical form may be different and the owner of the voice may be someone not usually known to the subject. Also noted is the fact that these voices intensify when there is no background noise or if the background noise is meaningless while they diminish when the subject is involved in conversations[3].

The regular occurrence of these voices even prompted the mention of them in first rank symptoms such as voices arguing, voices speaking thoughts aloud and voices commenting on the subjects actions[4].

Avinash De Sousa, Consultant Psychiatrist & Director, Get Well Clinic and Nursing Home, Mumbai.

Correspondence :

Dr. Avinash De Sousa

Visual hallucinations and their patterns are however less established and are very often of things that do not occur normally in this world[5]. Olfactory and gustatory hallucinations are rarer compared to most hallucinatory experiences and so are pseudohallucinations[6-8].

SUBJECTS AND METHODS

The study was conducted on patients between the ages of 20-50 years admitted to a private psychiatric centre of an urban metropolis in India. All patients were diagnosed as Schizophrenia using the DSM-IV criteria.[9] Patients with hallucinatory experiences in their symptomatology were chosen for the study. The total number of patients in the study were 634. Out of these patients without definite evidence of hallucinations (n = 66) and patients with pseudo-hallucinations (n = 9) were excluded from the study. The number of patients thus included for the final analysis was 559. A questionnaire with reference to hallucinations was prepared and given to the patients. The time duration for answering the questionnaire was 30-45 minutes.

RESULTS

The most common form of hallucinations was auditory reported by 69.23% cases followed by visual hallucination seen in 8.59% of cases. The other forms of hallucinatory experiences were much rarer (table 1). Surprisingly no patients reported hallucinations in more than one sensory modality.

Table 1

Type of Hallucinations

Type of Hallucinations	Schizophrenic Patients (n = 559)	Percentage
Auditory	387	69.23%
Visual	48	8.59%
Gustatory	12	2.15%
Olfactory	14	2.51%
Tactile	32	5.72%

On analyzing the content of visual hallucinations God was seen by 33.33% of cases while bizarre visual hallucinations were noted in 29.17%. The hallucinations were seen both in day and night by majority of patients (81.25%) (table 2).

On analyzing the content of auditory hallucinations, amongst the voices heard an equal number of patients heard male and female voices with no sex preponderance (table 3). Most of the voices heard were of unknown people not known to the subject (54.52%). Around 14.99% claimed that the voice they heard was of God. When asked about the emotional tone of the voices a majority reported it as angry (48.32%) while 21.96% reported to be derogatory and abusive in nature.

Around 8.01% reported the hallucinations being pleasant and soothing (praises about them or some pleasant conversations they have had) while 3.1% of the subjects reported musical hallucinations which were quite relaxing to them.

91.47% reported the perception of auditory hallucinations in both ears while 94.57% reported the presence of hallucinations during both day and night.

DISCUSSION

In line with the literature in general, auditory hallucinations were the most common form of hallucinations found in this group.

Seeing God is a very common visual hallucination in the Indian context where culturally people are more religious and often invoke God's blessings regularly through prayer. They also feel that God may talk to them or guide them in important matters. This is replicated in our study. Visual hallucinations are seen in schizophrenia though they are commoner in organic syndromes[10].

Abusive and derogatory voices as found in our study are common findings in schizophrenia when delu-

Table 2

Analysis of the Visual Hallucinations

Visual Hallucinations		Schizophrenic patients (n = 48)	Percentage
Nature	Scenic	4	8.33%
	Bizzare	14	29.17%
	Sexual	2	4.17%
	Flashes of Light	2	4.17%
	God	16	33.33%
	Devils/Spirits	10	20.83%
Other Features	Past experiences	10	20.83%
	Continuity	11	22.92%
Time of the day	Day	4	8.33%
	Night	5	10.42%
	Both	39	81.25%

Table 3

Auditory Hallucination Analysis

Hallucination Analysis		Schizophrenic patients (n = 387)	Percentage
Sex of the Voice	Male	194	50.13%
	Female	193	49.87%
Analysis	Parents / Relatives	69	17.83%
	Unknown	211	54.52%
	Mixed	49	12.66%
	God	58	14.99%
Emotions Expressed	Angry	187	48.32%
	Pleasant	31	8.01%
	Abusive	85	21.96%
	Variability	84	21.71%
First rank symptoms	Voices arguing	41	10.59%
	Commenting	66	17.05%
	Speaking thoughts	38	9.82%
Hearing noises	Noise	33	8.53%
	Musical	12	3.1%
	Mixed	9	2.33%
Other features	Commands	61	15.76%
	Both Ears	354	91.47%
	One ear	33	8.53%
	Past experiences	22	5.68%
	Continuity	47	12.14%
Time of the day	Day	9	2.33%
	Night	12	3.1%
	Both	366	94.57%

sions of a persecutory nature co-exist[11]. It has also been reported that a combination of vivid mental imagery and poor reality testing in schizophrenia predisposes the subject to experience auditory hallucinations[12].

Musical hallucinations are seen rarely in schizophrenia and a variety of psychiatric disorders. They are more common in organic psychiatric states[13]. It is well known that in schizophrenia hallucinations

may occur at certain times of the day or when under predisposition to certain stressors, hence the same was assessed by us[14].

CONCLUSION

The phenomenological studies are not common in schizophrenia in literature from deveoping countries. This study assessed the nature and contents of auditory hallucinations in a large sample. No correlates of the hallucinations have been studied and nor have they been studied with relation to the delusions present. This study was done keeping day to day clinical practice and the essence of descriptive psychopathology in mind. Further studies are needed employing a proper control to assess the associations of the hallucination with different types of hallucinations and other psycho pathologies.

REFERENCES

1. Cutting J, Dunne F. Subjective experience of schizophrenia. Schizophr Bull 1989;15: 217-31.
2. Cutting J. The Right Cerebral Hemisphere and Psychiatric Disorders. Oxford: Oxford University Press. 1990.
3. Margo A, Hemsley DR, Slade PD. The effects of varying auditory input on schizophrenic hallucinations. Br J Psychiatry 1981; 139: 122-7.
4. Schneider K. Clinical Psychopathology. New York: Grune & Straton; 1958.
5. Cutting J. Two Worlds, Two Minds, Two Hemispheres – A Reinterpretation of Psychopathology. Oxford: Oxford University Press. 1996.
6. Rubert SL, Hollender MH, Mehrhof EG. Olfactory hallucinations. Arch Gen Psychiatry 1961; 5: 313-8.
7. Cutting J. The Psychology of Schizophrenia. Edinburgh : Churchill Livingstone; 1985.
8. West LJ. Hallucinations. New York: Grune & Straton; 1962.
9. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th ed. Washington, D.C.: American Psychiatric Association, 1994.
10. Mauri MC, Valli I, Ferrari VM, Regispani M, Cerveri G, Invernizzi G. Hallucinatory disorder – preliminary data for a clinical diagnostic proposal. Cognit Neuropsychiatry 2006; 11: 480-92.
11. Freeman D. Suspicious minds – the psychology of persecutory delusions. Clin Psychol Rev 2007; Jan 25 (Epub ahead of print).
12. Mintz S, Alpert M. Imagery vividness, reality testing and schizophrenic hallucinations. J Abnorm Psychol 1972; 79: 310-6.
13. Mahendran R. The psychopathology of musical hallucinations. Singapore Med J 2007; 48: 68-70.
14. Waters FA, Badcock JC, Michie PT, Maybery MT. Auditory hallucinations in schizophrenia – intrusive thoughts and forgotten memories. Cognit Neuropsychiatry 2006; 11: 65-83.