ORIGINAL ARTICLE

Phenomenological Differences of Hallucinations between Schizophrenic Patients in Penang & Kelantan

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Summary

Two hundred and seventy patients with schizophrenia (104 patients in Kelantan and 166 patients in Penang) were interviewed using the Present State Examination to elicit the differences in the phenomenology of their hallucinations. The results indicate that there are significant differences in the phenomenology of hallucinations between the Malays of Penang and Kelantan and also among some Chinese patients. These findings indicate that culture does affect the phenomenology of schizophrenia, even among people of the same race but of different regions.

Key words: Phenomenology, hallucinations, schizophrenia.

Introduction

The phenomenology of hallucinatory experiences has been described by Sedmen[1,2]. He defines true hallucinations as experiences which are perceived through the sense organs and which are accepted by the subject as real perceptions but which occur in the absence of any sensory stimuli. Hallucinated objects look, sound, smell, feel or taste like real objects[3]. They appear in the same dimensions of space as normal perceptions and they are independent of the will. Most commonly, true hallucinations are auditory; sometimes olfactory, gustatory or tactile and less commonly visual. When occurring in clear consciousness they are strongly suggestive, though not diagnostic, of schizophrenia. However, anecdotal evidence has indicated that the content of hallucinations in schizophrenia is influenced by culture of the patients. This is important especially in Malaysia where the culture of the people is quite diverse. This is the first ever detailed study of schizophrenic hallucinations among the different races in Malaysia.

This study was planned with the aim of determining the type and content of schizophrenic hallucinations among Kelantanese Malay and Chinese schizophrenics and to compare these variables with those of patients in Penang.

Materials and Methods

Two states were chosen to represent the East and West of Peninsular Malaysia. Penang was chosen because of its predominantly Chinese population, its rapid urbanisation and greater integration of western principles into the people's daily life and culture. The main campus of the Universiti Sains Malaysia is also in Penang. Kota

Bharu was chosen as the Eastern centre mainly because of its predominantly Malay population whose subculture beliefs are slightly different from that of Penang Malays. It is also much less urbanised than Penang.

Penang population

The study group is taken from 2 places, i.e., the Klinik Pakar, USM, and the Psychiatric Unit of Penang General Hospital. The Klinik Pakar, USM, runs daily for 6 days but sees psychiatric patients twice a week. All patients diagnosed as schizophrenia that came to the clinic were included in the study. The Psychiatric Unit of Penang General Hospital is situated on Perak Road, Penang. It has 2 wards, i.e., a female and a male ward. About 100 patients are admitted to the wards at any one time. It is manned by a psychiatrist and 3 medical officers with an adequate number of paramedical personnel. Its catchment area includes the whole of Penang, parts of Northern Perak, Kedah and Perlis. Most of the patients admitted are diagnosed as schizophrenia.

Kelantan population

The study group is also taken from 2 places, i.e., the Psychiatry Ward, USM Hospital, Kubang Kerian, and the Psychiatry Unit of Kota Bharu General Hospital. The Psychiatry Ward of USM Hospital has 16 beds and at any one time there are at least 10 patients in the ward. It is manned by 5 psychiatrists, 2 medical officers and an adequate number of paramedical personnel. The patients admitted are psychotics, neurotics, organic psychotics and personality disorders but about 50% of the patients are diagnosed as schizophrenia.

The Psychiatry Unit of Kota Bharu General Hospital is situated about 6.5 kilometres from the USM Hospital. It has 4 main wards, 2 for male patients and 2 for female patients. It is manned by a psychiatrist, 3 medical officers, a social worker and a clinical psychologist. On an average, there are about 100 patients in the ward. The catchment areas include Kelantan, Terengganu and Pahang. Most of the cases admitted are diagnosed as schizophrenia.

Method

The methods used for all the areas were identical. All patients admitted during the study period of 2 years (June 1989 to February 1991) at each of the centres and diagnosed as schizophrenia based on the ICD-9 by the Consultant Psychiatrist in charge, were included in the study. The patients were supplied with a semi-structured questionnaire covering the history of the illness, family history, past history and the major symptoms of schizophrenia. They were subsequently interviewed simultaneously (for better reliability) by the interviewers using the PSE[4-7]. The PSE was administered as soon as the patient's condition was sufficiently stable to enable the assessment. Those patients who could not respond to the questions due to severe psychotic features or were mute or uncooperative were retested on 2 separate occasions and were dropped if after 3 attempts no information could be obtained.

Altogether, 290 patients were seen but 20 patients had to be dropped due to the above factors. One hundred and ten patients were seen in Kelantan and 6 had to be excluded from the study. Two of these were lost due to discharge before the PSE could be administered; only the history questionnaires were administered. Thirty-five patients were from the USM Hospital and 69 from the Psychiatric Unit, Kota Bharu General Hospital. One hundred and eighty patients were seen in Penang but 14 had to be excluded due to the above factors. Four of the patients were discharged before the full PSE could be administered. Of the remaining 166 patients, 30 were from the USM Klinik Pakar and 136 were from the Psychiatry Unit, Penang General Hospital. The PSE was chosen because it is a very well-structured interview questionnaire with appropriate scoring for all the phenomenological symptoms of schizophrenia and its reliability and validity is well-established[4-7]. The results of the questionnaires were then tabulated and the frequencies for the various symptoms and phenomenological symptoms were matched according to their demographic data. The significance of each of the results was calculated using the T-test and Z-test.

Results

Analysis of hallucinations (Table I) showed that all the patients had true hallucinations and 80% of them had organised hallucinations that influenced their lives. Only 10% had disorganised hallucinations. Of the types of hallucinations, more than 85% of the patients had auditory hallucinations and 25% had visual hallucinations (Table II). Bodily hallucinations were more common in the Malay patients. Analysis of the auditory hallucinations (Table III) indicated that most of the patients attributed the voices to those of members of their family or close relatives and 35% attributed the voices to those of friends and neighbours. More of the Kelantan Malay patients heard voices of God, spirits and demons. A substantial number of Kelantan Malay patients attributed the voices as coming from the legendary "Puteri Sardon". More of the Kelantan Chinese patients than their Penang counterparts attributed the voices to spirits and demons. Regarding the theme of the voices heard (Table IV), more than 80% of the patients heard threats and accusations and more than 30% heard themes pertaining to family affairs. About 20% heard voices giving instructions. More of the Malay patients

Table I
Hallucinations in Malay and Chinese schizophrenic patients

	Penang				Kota Bharu			
Hallucination	**Malay**		**Chinese**		**Malay**		**Chinese**	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
1. Organised not influencing life	17	21	19	23	25	30	2	10
2. Organised influencing life	57	67	56	66	44	52	16	80
3. Multiple or single but disorganised	8	10	9	11	15	52	2	10
	82	100	84	100	84	100	20	100

Table II
Modality of hallucinations in Malay and Chinese schizophrenic patients

	Penang				Kota Bharu			
Modality	**Malay**		**Chinese**		**Malay**		**Chinese**	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Auditory	73	80	72	86	79	94	17	85
Visual	(A)18	22	19	23	(B)43	51	6	30
Tactile	8	10	5	6	8	9.5	2	10
Bodily	21	26	7	8	20	24	2	10
Olfactory	3	4	2	2	2	2	0	0

A vs B; p<0.01

heard voices discussing a religious theme and this was more evident among the Kelantan Malay patients (49%). Most of the patients experienced third person auditory hallucinations but, comparing the patients, the Chinese seemed to experience this more (Table V). Audible thought was the next commonest, and the Kelantan Malay patients experienced this more frequently. Thirteen percent of the patients heard "commentary voices". With regard to those with visual hallucinations, most had hallucinations of family members especially the Penang patients. More of the Kelantan Malay patients had visual hallucinations of religious figures, animals, devils, demons and "Puteri Sardon" while only 1% of their Penang counterparts saw animals and religious figures. More of the Penang Chinese patients than the Malay patients had visual hallucinations of animals, religious figures and devils. Of those patients with bodily hallucinations, most of them and especially the Kelantan Malay patients, experienced the sensation of waves or winds. Kinaesthetic hallucinations and distortion were only seen in Malay patients.

Table III
Voices of auditory hallucinations in Malay and Chinese patients

	Penang				Kota Bharu			
Voices	**Malay**		**Chinese**		**Malay**		**Chinese**	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Family	18	25	20	28	27	34	5	29
Friends/neighbours	22	30	23	32	29	37	6	35
God	3	44	-	-	29	37	-	-
Public figures	4	5	2	3	2	2.5	-	-
Spirits/demons	(A) 3	4	(A)3	4	(B)21	26.5	3	10
Puteri Sardon	-	-	-	-	9	11	-	-
Unknown	23	31	24	33	15	19	3	18

A vs B; p<0.01

Table IV
Major themes of auditory hallucinations in Malay and Chinese patients

	Penang				Kota Bharu			
Major themes	**Malay**		**Chinese**		**Malay**		**Chinese**	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Family affairs	23	31.5	20	28	30	38	5	29
Accusations/threats	60	82	60	83	62	78	14	82
Religion	(A)9	12	4	5.5	(B)39	49	-	-
Instruction	13	18	15	21	19	18	3	18
Unknown	9	12	7	10	6	20	2	12

A vs B; p<0.01

Discussion

Small and Anderson[8] studied 50 newly hospitalised schizophrenics and noted that 76% had hallucinations. Most of their patients had hallucinations involving more than 1 sensory modality, but the most common was of the auditory type. Higashi and Koshika[9] also found that auditory hallucinations were the most common in their series. In our study, all the patients had true hallucinations and generally most of the patients had organised hallucinations influencing their lives. Auditory hallucinations were also the commonest type of hallucination seen in our patients. All the other types of hallucinations seemed to be similar among the 4 groups and also similar to the other 2 studies[8,9]. However, bodily hallucinations seemed more common in Malay patients. The voices identified were mainly those of family and friends[8]. Our series showed similar results among the Penang Malays and Chinese patients. However, the Kelantan Malay patients had different results. As high as 24% of them heard voices attributed to God and 26.5% attributed the voices to spirits and demons, while 11% heard "Puteri Sardon". Again, the influence of cultural beliefs is seen strongly here in the symptoms of these patients. It is also interesting to note that up to 18% of the Kelantan Chinese patients heard voices of spirits and demons, again indicating how the cultural beliefs can transcend race and religion and influence the symptoms of the illness.

The major themes discussed by the voices in Small and Anderson's series[8] are related to family affairs, accusations and threats. However, in our patients, most of the patients experienced accusations and threats and only 30% had family affairs as the main theme. Again, cultural influence in symptomatology is shown in the Kelantan Malay patients where religious issues were the theme in 49% of the patients. With regard to the type of auditory hallucinations, Mellor[10] found that the frequency of commentary voices, audible thought and third person variety were almost the same. However, in this study we found that the third person variety was the most common followed by audible thought and commentary voices. The third person variety was especially more common among the Chinese patients while of the patients who experienced audible thoughts, Kelantan Malay patients were the most common to experience it.

The phenomenology of visual hallucinatory experiences has been investigated by Frieske and Wilson[11], who compared their characteristic in 50 schizophrenics, 30 patients with organic psychoses and in 15 patients with affective disorders. The visual hallucinations were very similar in the 3 groups, but some statistically significant differences were noted.

Table V
Type of auditory hallucinations in Malay and Chinese patients

	Penang				Kota Bharu			
Type	Malay		Chinese		Malay		Chinese	
	n	%	n	%	n	%	n	%
Commentary	9	12	9	12.5	13	16	2	12
Audible thoughts	(A)11	15	11	15	(B)22	28	3	18
Third person	50	68	60	83	47	59	13	76
Others	7	9.5	5	7	4	5	-	-
Unspecified	3	4	3	4	3	4	-	-

A vs B; $p<0.05$

In a similar study, Higashi and Koshika[9], compared the visual hallucinations of 10 patients with typical schizophrenia with those of 31 patients with organic psychoses and noted that they were more often coloured, complex and of moving objects when organic in aetiology.

The content of schizophrenic visual hallucinations has been studied by Small and Anderson[8], whose 15 patients identified their visions as follows:

1. visualising family members;
2. religious;
3. saints;
4. virgins;
5. animals;
6. others.

Interestingly, in our study, the frequency of visual hallucinations was higher in the Kelantan patients, more so in the Kelantan Malays (51%). This figure is much higher than the 20% found in most studies. Only one study[8] shows a high rate of visual hallucination, i.e., 40%, but its sample only consisted of 38 patients. One possible explanation for this is that the visual hallucinations have been influenced by the strong subcultural beliefs of the Malay patients in Kelantan.

Higashi and Koshika[9] also noted that relatives and other familiar persons figured prominently in the hallucinations of their schizophrenic patients and that unknown persons and animals were less common. The same can be said of our findings, familiar persons figured prominently in the hallucinations of our patients. Moreover, the Kelantan Malay patients seemed to experience more non-family members in their hallucinations. However, that may be closely related to their religious and cultural background, e.g., religious figures and "Puteri Sardon", a legendary figure in Kelantan folklore.

In schizophrenia, various types of abnormal bodily sensations may be reported. There may be simple hallucinations of the bodily senses, for example, of touch[8,9] or of heat. There may be passivity experiences in the form of bodily sensations, where the patient has hallucinatory feelings such as pain, sensation of electricity or sexual excitement which are attributed to an external agency. Thirdly, there are kinaesthetic hallucinations in which part or the whole of the body feels distorted or changed in some bizarre way[12]. In our study, most of those patients with bodily sensations experienced the sensation of simple bodily sensations of waves or wind. Kinaesthetic hallucinations were only seen in the Malay patients.

Conclusion

Differences were seen in the types and contents of hallucinations of schizophrenia in most Kelantan Malay patients and some Chinese patients. The Kelantan Malay patients had more experience of hallucinations associated with religious content than the other groups of patients. Visual hallucinations were higher in the Kelantan Malay patients. The findings confirm the anecdotal observation that Malaysian culture influences the symptomatology of mental illness.

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