A STUDY OF BEHAVIOUR DURING AUDITORY HALLUCINATIONS IN SCHIZOPHRENICS

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SUMMARY

Thirty untreated urban living Schizophrenics fulfilling the criteria of Feighner et al. (1972) and having Schneiderian hallucinations were studied with the aim of examining the relation of certain variables to their behaviour during auditory hallucinations. For those whose behaviour had no direction, the voices were less real in comparison to those with positive or negative direction. For those with negative direction in behaviour, voice were positioned more outside than within sensory range and the individual episodes of hallucination were of longer duration. The voices were more real for those who had emotional experience without physical activity and those without emotions of physical activity.

Behaviour during auditory hallucinations is rich and varied and ranges between indifference and excitement (Bleuler, 1950; Fish, 1976; Slater & Roth, 1969). Knowledge of the varieties of behaviour is important in clinical practice.

There is no characteristic behaviour during auditory hallucinations and the so called 'hallucinatory behaviour' is not very reliable. Overt behaviour alone is not the indicator of the presence of hallucinations. Patterson et al. (1976) found poor correlation between nurses' observation and patients' self-report of hallucinations. Hence covert, non-physical behaviour also should be considered. The necessity to study covert behaviour was stressed by Lowe (1973).

There are many variables that are associated with the behaviour during auditory hallucinations. The content of hallucination, its duration and frequency, knowledge of 'emitter of the voice', position of voice in space and degree of insight into illness can alter this behaviour. It was found that schizophrenic hallucinations were not uniformly real (Aggemaes, 1972; Ramanathan et al, 1981; Ramanathan, 1982). Slade (1975) found that impairment in reality testing and high psychoticism scores were associated with the presence of hallucinations in schizophrenics. Slade also found that hallucinations were precipitated by an increase in anxiety level. These variables can influence behaviour during hallucination.

The present study is aimed at examining the relation of the following variables to the behaviour during auditory hallucinations in schizophrenics.

1. Reality of auditory hallucinations,
2. Reality testing ability of the patient,
3. Duration of the schizophrenic illness,
4. Duration of auditory hallucinations,
5. Duration of each episode of hallucination,
6. Frequency of hallucinations as to daily occurrence or otherwise and the number of episodes per day,
7. Psychoticism scores,
8. Knowledge of the 'speaker' (known or unknown persons),
9. Position of the voice in space (within or outside sensory range),
10. Degree of insight into illness,
11. Feeling of anxiety prior to hallucinations

MATERIAL AND METHOD

The sample consisted of thirty schizophrenics who were collected from the out-patient department of the Institute of Mental Health, Madras between April and October, 1980. The criteria for inclusion were as follows.

1. Patient should be definitely schizo-
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According to the criteria of Feighner et al. (1972),

1. The patient's age should be between 15 and 45 years,

2. He/she should be currently hallucinating and the last episode should have occurred within 24 hours prior to the interview,

3. He/she should have verbal auditory hallucinations only and part or whole of the content should be characteristic as described by Schneider (1959),

4. The voice should be independent of the patient's mood,

5. The voice should be clearly located in external space and should be audible and comprehensible,

6. He/she should remain untreated with any physical method for his/her illness viz. drugs, convulsive therapy and/or psychosurgery,

7. He/she should be co-operative for interview and testing,

8. He/she should be an urban resident.

To assess the reality of auditory hallucinations, the clinical technique described by Schilder et al (1976) was used. The qualities of reality as applied to auditory hallucinations were detailed in a previous report (Ramanathan, 1982). The scores given for reality of the voice were positive, negative or doubtful.

Reality testing ability was measured with F + % in Rorschach Test, as it is the best single indicator of reality-testing (Carr, 1975). Eysenck's Personality Questionnaire (Eysenck and Eysenck, 1976) was used for measuring psychoticism. And for assessing the degree of insight into illness Present State Examination Schedule (Wing et al, 1974) was used. And to determine socio-economic status a scale devised by Gupta and Sethi (1978) was employed.

Lastly clinical interview with the help of a standard proforma was the method adopted. Each patient was interviewed along with one or more family members for ensuring reliable information. Each patient was questioned in detail about hallucinations after establishing rapport with him or her. It was ascertained that the patient was not reporting a dream. His or her level of consciousness during hallucination was ascertained by questioning about how the surroundings appeared then. For eliciting the details of behaviour during hallucination the last episode was questioned about. Patient's experiences within the hallucinatory episode only were recorded and his or her interpretations outside the episode were not taken into account. Psychological testing was done immediately following clinical interview.

RESULTS

The overt physical activities during the hallucinations, as reported, were closing the ears, moving away, shouting back, leaning the body, looking at others for knowing whether they were also disturbed by the voice and searching for the 'speaker'. The covert non physical mental activities were listening to the voice, praying, analysing the contents of the voice and shifting attention. The emotional experiences included fear, anger, sadness and pleasure. Apart from these information regarding fine physical activities like wrinkling the forehead, could not be reliably obtained. For statistical convenience a broad grouping was attempted and three groups were sorted out based on the direction of behaviour.

Group I Passive listening, overt or covert activity without specified direction.

(14 Patients)

Group II Closing the ears, moving away shifting attention and praying.

(8 Patients)

Group III Talking or shouting back to the voice, active listening in the form of leaning the body, searching for the 'speaker' looking at others.

(8 Patients)
and analysing the content of the voice.

1. **Reality of auditory hallucination**:

The scores for the 8 qualities of experienced reality in 30 patients (30 x 8 = 240) are given in Table-1. Auditory hallucinations were less real for Group I (neutral). In comparison to the other two groups. The three groups did not differ significantly when compared for the individual qualities of reality.

2. **Duration of each episode of hallucination**:

The duration of each episode of hallucination was longer for Group II (negative direction) in comparison to the other groups. 3 Patients in Group I (3/14), 6 patients in Group II (6/8) and 1 patient in group III (1/8) were hallucinating for more than half an hour each time (χ² = 8.71; p < .05).

3. **Position of voice in space**:

Voices were positioned more outside than within sensory range for Group II (neutral) in comparison to the other groups. 4 patients in group I (4/14), 7 patients in group II (7/8) and 2 patients in group III (2/8) heard voices from outside sensory range, (χ² = 9.77; p < .01).

The 3 groups did not differ in the age, sex, religion, mother-tongue, socio-economic status, duration of illness, duration of hallucinations, frequency of hallucinations as to daily occurrence or otherwise, frequency as to the number of episodes per day, psychoticism scores, F + %, knowledge of the 'speaker', degree of insight, presence of anxiety prior to the hallucinations, presence of and variety of emotions during hallucinations and type of Schneiderian hallucination.

The sample was reclassified on the basis of intensity into 3 groups viz., the group with no emotional experience or physical activity but with covert activity (Group A), the group with emotional experience without gross physical activity (Group B) and the group with emotional experience with gross physical activity (Group C). The three groups were compared for variables already mentioned. The only statistically significant finding was that the group with emotional experience and gross physical activity had more real hallucinations than the other two groups. The figures are given in Table-II.

**Table 1—Total scores on reality qualities of voices in groups classified on the basis of direction of behaviour**

| Scores on reality qualities | Group I (N=14) | Group II (N=8) | Group III (N=8) | Total (N=30) |
|-----------------------------|----------------|----------------|----------------|-------------|
| Positive                    | 79 (70.54%)    | 55 (85.94%)    | 57 (89.06%)    | 191         |
| Negative                    | 21 (18.75%)    | 8 (12.5%)      | 2 (3.13%)      | 31          |
| Doubtful                    | 12 (19.71%)    | 1 (1.56%)      | 5 (7.81%)      | 18          |
| Total                       | 112            | 64             | 64             | 240         |

χ² = 14.47; d.f. = 4; p < .01
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TABLE II—Total scores on reality qualities of voices in the groups classified on the basis of intensity

| Scores on reality qualities | Group A (N=8) | Group B (N=8) | Group C (N=14) | Total (N=30) |
|----------------------------|---------------|---------------|----------------|--------------|
| Positive                   | 45 (70%)      | 48 (75%)      | 98 (87.5%)     | 191          |
| Negative                   | 7 (11%)       | 15 (23.4%)    | 9 (8%)         | 31           |
| Doubtful                   | 12 (19%)      | 1 (1.6%)      | 5 (4.5%)       | 18           |
| Total                      | 64            | 64            | 112            | 240          |

\[X^2=23.67; \quad \text{d.f.}=4; \quad P < 0.01 \text{ Significant.}\]

DISCUSSION

Because of the strict criteria for inclusion in the study, the possible influences due to variables such as, physical method of treatment, hospitalisation and memory lapses due to long intervals between the last hallucinatory episode and the interview had been eliminated. Selection of Schneider positive urban living schizophrenics fulfilling the criteria of Feighner et al., with only verbal auditory hallucinations has contributed to the homogeneity of the sample.

The voices were less real for the Group with neutral behaviour than the groups with specified direction. The voices were more real for those with more intense behaviour in comparison to those whose behaviour was less intense. The differences in the reality of the voices should logically contribute to the presence of direction and intensity of behaviour. The variables associated with the reality of hallucinations were discussed earlier (Ramanathan, 1982).

It can be supposed that the voice positioned outside sensory range is puzzling and is beyond reliable verification. It is not surprising that those whose voices were more outside than within sensory range preferred withdrawal to positive direction in behaviour. That those whose voices were of longer durations tried to retreat is self-explanatory. And the behaviour during hallucinations can be expected to change in course of time. Hence follow-up studies should be helpful in eliciting a wealth of information.

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