CHAPTER - 2

Symptoms manifestations in schizophrenia:
Case studies from real life data
2.1 Introduction

In the fourth issue of the Schizophrenia Bulletin (1996) published by the National Institute of Mental Health (NIMH), USA, Robert Bayley, a sufferer of schizophrenia, reported as follows:

"The visions are extremely vivid. Paving stones transform into demonic faces, shattering in front of my petrified eyes. When I am in contact with people, they can become grotesquely deformed...... Buildings and rooms spin and weave their walls close in as I look on, paralysed by fear.......The voices either ramble in alien tongues or scream orders to carry out violent acts. They also persecute me by way of unwavering commentary and ridicule to deceive, derange, and force me into a world of crippling paranoia."


The above report speaks volumes about the enormity of suffering a patient of schizophrenia has to endure. Indeed, the symptoms manifested in schizophrenia significantly impair functioning by interfering with a person's ability to comprehend reality and by bringing about unsavoury behavioural changes. The symptoms of schizophrenia have been classified as positive and negative by...
scientists. Positive symptoms are those which are easily noticeable, more disruptive to the family, more distressing to the patient and make the patient more responsive to medicines. Some of the positive symptoms are hallucinations, delusions and thought disorders. The negative symptoms are not easily discernable and are not very disruptive socially, but can be more disabling than the positive symptoms. Patients with these symptoms are generally less responsive to medicines. Reduced motivation and drive, lack of emotions and lack of energy are some of the common negative symptoms (Thara et al., 2001, Kaplan and Saddok, 1999, Gelder et al., 1996). In this chapter, the different symptoms manifested in schizophrenia have been dealt with in detail. Certain terms commonly used to describe the symptom manifestations in schizophrenia are defined and explained in section 2.2 and some real life observations of symptoms reported by patients of the Gauhati Medical College Hospital (GMCH) and patients visiting some leading psychiatrists of Guwahati are presented in section 2.3.

2.2 Definition of terms used in schizophrenia

1. Delusion: A delusion is a false belief that is firmly held and cannot be corrected with any amount of reasoning and despite evidence to the contrary. It is not a conventional belief that the person might be expected to hold, given his educational and cultural background. For example, a patient who holds the delusion that there are persecutors (persons intending to do some harm) in the
adjoining house will not be convinced by evidence that the house is empty; instead he will retain his belief by suggesting, for example, that the persecutors left the house before it was searched.

2. Overvalued ideas: Delusions must be distinguished from overvalued ideas. These are deeply held personal convictions that are understandable when the patient’s background is known; for example, a person whose mother and sister contracted cancer one after the other may develop the strong conviction that cancer is contagious. Although the distinction between delusions and overvalued ideas is not always easy to make, this seldom lead to practical difficulties since diagnosis of mental illness depends on more than the presence or absence of a single symptom.

3. Hallucination: Hallucinations are false impressions referred to the special senses (hearing, seeing, smelling etc.) for which no cause can be found. In other words, they are false sensory perceptions without concrete external stimuli. Hallucinations occur in the absence of an appropriate object still the patient insists that he or she has perceived something. The commonest hallucinations are auditory and visual.

(i) Auditory hallucination: In auditory hallucination, the patient may complain of hearing noises, music, distant mumbling which he or she cannot identify. Second
person voices with distressing content — "you stink, you are horrible, go kill yourself" and third person voices which discuss or argue about the patient are suggestive of schizophrenia.

(ii) Visual hallucination: These vary in complexity from simple flashes of light to sophisticated 'visions' of people or animals. Visual hallucinations occur more commonly in organic psychoses (where a physical abnormality in the brain, like a tumour, is detected on examination) rather than functional psychoses (psychosis where no physical abnormality can be found on detailed examination and investigations). Visual hallucinations can be frightening as in the case of hallucinations of spiders, insects or rats or may be pleasing as with Lilliputian hallucinations in which the patient sees tiny people.

4. Thought echo: It is a form of hallucination in which the person hears voices speaking out his thoughts aloud (audible thoughts).

5. Thought insertion: It is a form of delusion in which the person believes that some of his thoughts are not his own but has been implanted into his mind by an outside agency.

6. Thought withdrawal: It is a form of delusion in which the person believes that the thoughts are being taken out of his mind.
7. Thought broadcasting: It is a form of delusion in which the person believes that his unspoken and unexpressed thoughts are known to people through radio, telepathy or through some other media.

8. Delusional perception: In delusional perception any normal perception seems to acquire a significantly private and illogical meaning for the patient.

9. Delusion of control or influence or passivity: This is a form of delusional perception in which the patient believes that his actions, impulses or thoughts are controlled by an outside agency. It is a symptom that strongly suggests schizophrenia.

10. Neologism: In this abnormality of speech, the patient uses words or phrases invented by himself i.e., the patient coins new terms in his vocabulary which carry personal meaning to him alone.

11. Catatonic behaviour: *Cata* – disturbed, *tonic* – tone. It is characterized by marked disturbance of motor behaviour. It is present in three clinical forms:

(i) Excitement catatonia: Gross increase in movements with a tendency to assault others.
(ii) Stuporous catatonia: Reduction or complete absence of spontaneous movements of the body with partial or complete mutism (reduction of speech), negativism (withdrawing oneself from everyone) and waxy flexibility (rigid posturing where a part of the body held in a particular, rather unusual, position remains there for a long time and does not return to the normal position).

(iii) Mixed catatonia: It is a combination of excitement and stuporous catatonia in which the behaviour of the patient shifts rapidly from hyper to hypo activity.

12. Deterioration of role functioning: This is a situation in which the person is unable to carry out the functions of a parent, spouse or any other role, personal or professional, in a way he is expected to do normally.

13. Depression: This is a situation when the patient feels sad and low most of the time for a long period of time. Depression is characterized by sadness, low self esteem, low desire or lack of motivation, social withdrawal and at times, a strong desire to die.

2.3 Symptom manifestations in schizophrenia: Case studies from real life

As mentioned earlier, data was obtained on the patients attending the Out Patients’ Department (OPD) of the Department of Psychiatry, Gauhati Medical College Hospital (GMCH) to study various aspects of schizophrenia. In all, records of 797 patients of schizophrenia were studied. Another 200 patients of schizophrenia were followed up in a three month study taken up in collaboration with some leading psychiatrists of this region. A detailed report on the epidemiological aspect of the disease is presented in Chapter 7. In this section, a few case studies are presented in order to give an idea about variety of complaints reported by schizophrenics and their attendants when they are brought to the hospital for diagnosis and treatment during an episode of psychotic illness.

It is seen that some symptoms are present more or less in all the patients of schizophrenia at the time of a psychotic episode when they are brought for diagnosis and treatment. These most commonly occurring symptoms are-

- irrelevant speech
- muttering and talking to self
- wandersome attitude – patient goes out without reason or without destination at odd hours which could be even at the middle of the night.
- demonstration of bizarre actions – posturing and gesturing
• lack of personal care
• gazing at the mirror and grimacing or making faces
• sudden spells of laughing and crying for no apparent reason
• disoriented and preoccupied, withdrawn and socially uninteractive
• deterioration of role functioning – patient is unable to do his/her daily activities and other trivial work
• disinhibited – patient is not bothered about decency in dress or action
• severe depression, feeling of worthlessness and strong suicidal tendencies
• increased religiousness – patient shows an inclination towards religion, religious activities and rituals and excessive belief in the supernatural.
• irritability, aggressiveness, unprovoked anger
• sleep disturbance
• change of sexual inclinations – usually a decline
• lack of appetite
• feeling of weakness

The symptoms listed above are usually invariant in nature and hence do not require elaboration. However, the hallmark of schizophrenia is the presence of delusions and hallucinations, and not being attached to reality. It is seen that delusions, hallucinations, suspiciousness and fearfulness take different proportions in different patients. Listed below are some variations in these symptoms as observed in the patients studied. Of these, cases (1) to (9), though
special, are common and are observed in about 80% or more of the patients. The remaining cases pertain to particular examples which have been included here for their distinctiveness.

Case (1): The patient constantly hears voices calling him. In some cases the voices are reported to come from outside and in some other cases the voices are reported to come from within the person. This is termed as auditory hallucination and it persists in spite of evidence to the contrary.

Case (2): The patient believes that the people around him/her are getting together and talking about the patient, conspiring to either kill or harm the patient in some way or the other. This is a case of delusion, precisely called 'paranoid delusion'.

Case (3): The patient reports that he/she sees people getting together and describes in vivid details about their plans to kill him/her. This is an example of visual hallucination.

Case (4): The patient believes that his/her thoughts are broadcasted in the radio. Some other patients believe that their thoughts are somehow audible to all in the neighbourhood, as if broadcasted in the air. This is a case of thought broadcast.
Case (5): The patient believes that someone has done or is trying to do black magic against him/her. This is included in 'paranoid / persecutory delusion' and is culture-based and particularly prevalent in this part of the country.

Case (6): The patient believes that someone is trying to poison and kill him/her. All neighbours and even family members are considered enemies and therefore refuses food offered by others and insists on cooking his/her own meals. This is another case of paranoid delusion.

Case (7): The patient gets the smell of semen all around his house and believes someone has come during his absence and had sexual relations with his wife. Cases like this are included in olfactory hallucination.

Case (8): The patient suspects his/her spouse's loyalty. Suspicion could include infidelity with the spouse's own siblings or even parents. This is an outcome of paranoid delusion, or rather, delusion of jealousy.

Case (9): The patient nurses hatred and suspicion towards spouse and all of his/her family members in every matter. This is a case of suspiciousness, an outcome of paranoid delusion.
Particular examples

Case (10): One patient had the belief that Goddess Kamakhya had married him in 1983 and had taken away his *atma* (soul) and since then he has been empty from inside. *(Delusion)*

Case (11): One patient expresses hatred towards his mother as he strongly believes that she is not loyal towards his father but has sexual inclination towards him i.e., her own son. *(Delusion)*

Case (12): One patient, a Muslim by religion, believes that he was fed pork by his Naga wife and her relatives while he was in Nagaland. He further believes that it is due to this that all his illnesses started as *Allah* has cursed him for his disobedience of religious norms. *(Delusion)*

Case (13): One patient believes that non vegetarian food will not go down her throat. Infact, her throat is blocked by an egg which she had eaten earlier. *(Delusion)*

Case (14): A patient hears the voice of God calling him from the river and hence rushes to the waters whenever he remains unattended. *(Auditory hallucination)*
Case (15): A patient, a Hindu, hears voices of people accusing him of killing and eating a cow and calling upon the Gods to curse him. *(Auditory hallucination)*

Case (16): A patient believes that she is Goddess Kali and insists on having human flesh and other raw meat. *(Delusion)*

Case (17): One patient fears trees, water, flowers etc. – she believes that all natural objects will kill her if she touches them. *(Delusion)*

Case (18): A patient undresses and also urinates and excretes in public at the most inappropriate places. *(Disinhibited behaviour and not being attached to reality)*

Case (19): One patient insists that he has actually seen animals like cows, goats etc. flying in the sky. *(Visual hallucination)*

Case (20): One patient keeps talking to the television about extra terrestrial telepathy connections and about politics. He believes that he is a great man and members of political parties are trying to kill him. *(Delusion of grandiosity)*
Case (21): One patient insists that he can read other people’s minds; he can hear their minds speaking aloud. (*Combination of hallucination and delusion*)

Case (22): One patient sees her long dead husband coming to her house and she starts destroying household things by throwing them at the imaginary figure of her husband out of fear of ghosts. She even set her house on fire on two occasions. (*Visual hallucination*)

Case (23): One patient was reported to refuse to take a bath, change clothes or even comb her hair for several months. (*Lack of personal hygiene - This complaint is quite common though the time period varies*)

### 2.4 Conclusion

It can thus be seen that a schizophrenic patient suffers strange symptoms. In the following chapter, an attempt has been made to study these symptoms mathematically by identifying their structure functions and subsequently determining the probabilities of occurrence of the symptoms and their interactions at the time of diagnosis.