



10.5281/zenodo.10842906

Vol. 07 Issue 03 March - 2024

Manuscript ID: #1274

The Influence of Locality on Relapse among Schizophrenic Patients

Chinawa, Francis Chukwuemeka

Department of Psychology Godfrey Okoye University, Thinkers Corner Enugu

Omeje, Obiageli

Enugu State University of Science and Technology (ESUT)

Chikwendu, Chimezie Emmanuel

Department of Psychology Enugu State University of Science and Technology (ESUT)

Ekwo Jude Chukwudi

Department of Psychology Enugu State University of Science and Technology (ESUT)

Douglas, John Ufuoma

Department of Psychology Enugu State University of Science and Technology (ESUT)

Madike, Eunice Nwabugo

Department of Psychology Enugu State University of Science and Technology (ESUT)

Corresponding author: douglasufuoma@gmail.com

Abstract:

This study examined the influence of locality on the relapse rate among schizophrenic patients in Federal Neuropsychiatric Hospital Enugu. 120 participants made up of 60 males and 60 females were used. The 60 males comprised 30 highly educated and 30 less educated while the females were made up of 19 highly educated and 41 less educated. 52 participants were drawn from the rural residence while 68 were from the urban residence. All the participants were treated at the Federal Neuropsychiatric Hospital Enugu. The Positive and Negative Syndrome Scale (PANSS) key, Fishzbein & Oplar (2004) was used to assess the rate of relapse among the schizophrenic patients. Factorial design was used. The data collected was analysed using the One-way Analyses of variance (ANOVA). The result show significant main influence of locality on relapse, $F(1, 113) = 41.340$, $P < 0.001$. These results were discussed with its implication to the health of the patient, the family and society at large. Suggestions and recommendation for further studies made.

Keywords:

Locality, relapses, schizophrenic, patients



This work is licensed under Creative Commons Attribution 4.0 License.

BACKGROUND OF THE STUDY

Schizophrenia is one of the most debilitating mental health disorders which affects about 1% of the population (Kaplan & Sadock, 2003) and seems more rampant in the society when compared with other mental health disorders. The age of onset of schizophrenia for males is 10 to 25 years and 25 to 35 years for females (Kaplan & Sadock, 2003). Schizophrenic symptoms rarely appear before 10 years or after 60 years. The disorder is severe and usually runs a chronic course. It occurs in all social classes (Kaplan & Sadock, 2003). Adreassen (1995) noted that both patients and their families often suffer from poor care and social ostracism because of widespread ignorance about the disorder. Schizophrenia appears as if it is a single disorder, it probably comprises a group of disorder with heterogeneous etiologies, including patients whose clinical presentations, treatment response and cause of illness vary.

Two major figures in psychiatry and neurology who studied the disorder were Kraepelin (1856-1926) and Eugene (1857-1939). Kraepelin, a German psychiatrist proposed that there were three major types of psychosis namely: manic depressive psychosis, paranoia and Dementia praecox. Manic depressive psychosis is a disorder characterized by profound disturbance of affect. In mania, the individual is in a state of euphoria that may be accompanied by troublesome irritability. When in the depressed state, the same individual complains of sadness, feeling gloomy and inability to enjoy even things that used to excite him. Paranoia is a form of delusion that alters an individual's way of thinking and explaining events in the environment. In paranoid delusion, the individual thinks that people are out to kill him. Dementia praecox is a syndrome marked by delusion, hallucination and bizarre motor behaviour (Kaplan & Sadock, 2003).

The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorder. (DSM – IV, 1994) identifies five sub- types of schizophrenia: paranoid, disorganized, catatonic, undifferentiated, and residual. International Statistical Classification of Diseases and Related Health Problems (ICD-10), (1992) in contrast, uses nine subtypes: paranoid schizophrenia, hebephrenia, catatonic schizophrenia, undifferentiated schizophrenia, post schizophrenic depression, , residual schizophrenia, simple schizophrenia, other schizophrenia and schizophrenia unspecified, with eight possibilities for classifying the course of the disorder, ranging from continuous to complete remission.

Paranoid type: The paranoid type of schizophrenia is characterized by pre occupation with one or more delusions or frequent auditory hallucinations. Classically, the paranoid type of schizophrenia is characterized mainly by the presence of delusions of persecution or grandeur. Patients with paranoid schizophrenia usually have their first episode of illness at an older age than those patients with catatonic or disorganized schizophrenia. Patients in whom schizophrenia occurs in the late 20s or 30s have usually established a social life that may help them through their illness, and the ego resources of paranoid patients tend to be greater than those patients with catatonic and disorganized schizophrenia. Patients with paranoid type of schizophrenia show less regression of their mental faculties, emotional responses, and behaviour than do patients with other types of schizophrenia. Patients with paranoid schizophrenia are typically tense, suspicious, hostile or aggressive, but they can occasionally conduct themselves adequately in social situations. Their intelligence in areas not invaded by their psychosis tends to remain intact.

Disorganized Type: The disorganized (formerly called hebephrenic) type of schizophrenia is characterized by a marked regression to primitive, disinhibited, and unorganized behaviour and by the absence of symptoms that meet the criteria for the catatonic type. The onset of this subtype is generally early, occurring before age 25. Disorganized patients are usually active but in an aimless,

non-constructive manner. Their thought disorder is pronounced and their contact with reality is poor. Their personal appearance is dishevelled, their social behaviour and emotional response are inappropriate. They often burst into laughter without any apparent reason. Incongruous grinning and grimacing are common in these patients, whose behaviour is best described as silly or fatuous.

Catatonic Type: The catatonic type of schizophrenia which was common several decades ago, has become rare in Europe and North America. The classic feature of the catatonic type is a marked disturbance in motor function: this disturbance may involve stupor, negativism, rigidity excitement, or posturing. Sometimes, the patient shows rapid alteration between extremes of excitement and stupor. Associated features include stereotypes, mannerisms, and waxy flexibility, mutism is particularly common. During catatonic excitement, patients need careful supervision to prevent them from hurting themselves or others. Medical care may be needed because of malnutrition, exhaustion, hyperpyrexia or self-inflicted injury.

Residual Type: According to DSM-IV-TR (2000), the residual type of schizophrenia is characterized by continuing evidence of the schizophrenic disturbance in the absence of a complete set of active symptoms or sufficient symptoms to meet the diagnosis of another type of schizophrenia. Emotional blunting, social withdrawal, eccentric behaviour, illogical thinking, and mild loosening of association commonly appear in the residual type. When delusions or hallucination occur, they are neither prominent nor accompanied by strong affect undifferentiated type. Schizophrenia in which the clinical picture is so mixed that it is impossible to designate the clinical type is classified as undifferentiated schizophrenia.

Undifferentiated schizophrenia: Undifferentiated schizophrenia usually is characterized by atypical symptoms that do not meet the criteria for the subtypes of paranoid, catatonic or disorganized schizophrenia. The client may exhibit both positive and negative symptoms, odd behaviour, delusions, hallucinations and incoherence may occur. Schizophrenia in which the clinical picture is so mixed that it is impossible to designate the clinical type is classified as undifferentiated.

Generally, an individual is said to be schizophrenic when he manifests delusion, paranoia, hallucination and thought disorder. The above mentioned symptoms are classified as positive symptoms. In delusion, two types are observable namely delusion of grandeur and persecution. In delusion of grandeur, the individual sees himself bigger or more important than he is. For example, some patients see themselves as the king of England or next in command to Jesus Christ. In delusion of persecution, they are overly suspicious of close relations and friends. They may start refusing food offered by even close relations because they fear being poisoned. Hallucination means false sensory perception which may be visual, auditory, gustatory, olfactory, and tactile in nature. The individual sees objects or persons which other people in the same environment do not see. In Visual hallucination; the individual sees objects or things that are not really existing and which other people within the same environment with the patient would not see. Example the patient may be seeing the images of Jesus Christ or even his dead father. Auditory hallucination involves: hearing voices that are not real, for example: the patient can tell you that he is being told by God that he is now the president of this great country Nigeria. Olfactory hallucination: patient perceives odour, smell or fragrance of various classes. Example the patient may tell you that he perceives the smell of a rotten dead body.

Tactile hallucination: this is the feeling of crawling sensation on the body. Patient may tell you that snakes are crawling all over his body or that there are ants or worms crawling on his body. Gustatory

hallucination: feeling of various awful/bad tastes in the mouth. The patient can tell you that he is experiencing bitter taste in his mouth and this may lead the patient spittings saliva constantly or frequently brushing his mouth to clear the bitter taste. Thought disorder is characterized by poor logical sequence of thought, the individual pattern of speech is incoherent and off context. Example poor logical sequence of thought can be manifested in the form that his response to questions does not follow one another in sequence (order) that they can make sense to a listener. Likewise, incoherent and talking off context can be seen in the form that one statement of the patient is not connected to the other and does not have any bearing on the point of discourse. When asked how is your health today, he may start with I am fine, and go on to tell you that he is a doctor and the owner of the hospital (Federal Neuropsychiatric Hospital Enugu) and can make you become the president of the world court. On the other hand symptoms such as Anhedonia (Absence of pleasure) occur when the patient loses interest in events or situations that used to give him pleasure before. Alogia or poverty of speech means the reduction or complete absence of speech. For example patient making few sentences or complete mutism for weeks. Affective flattening (blunted affect). This is characteristically a reduction or complete absence of affective (emotional) responses to the environment. For example, there is no facial expression in response to emotionally charged stimuli and no emotional expression in voice. Also, Avolition manifests in the inability of the patient to persist at common, goal-oriented tasks. The patient finds it difficult to get dressed, brush their teeth, and eat breakfast in the morning. When the aforementioned symptoms are observed in an individual, he or she is taken to the hospital for assessment, admission and treatment by the psychiatric team. Subsequent periodic review of the patient's progress is maintained so that the patient may remain stable at home and also in his or her other life endeavours. It is generally expected that when the individual (patient) takes his medication at home, and keeps his appointments with his doctors in the hospital, he or she will remain stable mentally. Sometimes it has been observed that the patients don't remain stable in their mental state despite keeping to their appointments and taking their medications at home. In other words, some patients relapse into schizophrenic reactions.

Relapse in schizophrenia is a major clinical event and it commonly affects the personal and social functioning of the person. Relapse is the re-emergence of psychotic symptoms with significant disturbance in functioning and social behaviour (Burns 2000). Johnson (2000) in Halgin & Whitbourne, (2006) defined relapse as the reappearance of schizophrenic symptoms in a patient who has been free of them following the initial episode; or the exacerbation of persistent positive symptoms. Lader (1995) asserted that relapse is characterized by higher rates of hospitalization, re-emergence of psychotic symptoms and aggravation of positive or negative symptoms.

Relapse can be identified when a patient who has been treated, discharged home and have readjusted to home and society demands gradually breaks down, picking up those abnormal presentations that led to his admission and treatment in the hospital. This can lead to the patient exhibiting some irrational behaviours, thoughts and actions:- aggressiveness, delusions (of persecutions, guilt) incoherent speeches and hostility. Further to this, the patient is seen withdrawing to self (isolating himself) from situations, events and things that were originally interesting to him, may also abandon his job, neglect his hygiene, refuse food, may have poor sleep, and above all may abandon his medications and outpatient appointment with his doctor. When all or some of these features are observed, the patient might no longer realize that he is sick and generally become a problem to himself, the family and the society at large.

In view of the above, the problems associated with relapse would become glaringly clear even to the least unsuspecting passer-by, the problem or consequence range from harm to the patient and others,

loss of job, dwindling business, poor academic performance, exposure to exploitation, high risk for other co-morbidity illnesses to depleting the family resources, nuisance to the family, social stigmatization of the family and to the society, danger to others, low productivity and social barriers.

Research has increasingly focused on predictors of the course and relapse of schizophrenia. Increasing attention has been paid to the measurement of outcomes in psychosis. However, progress in identifying predictors of relapse has been hampered by the lack of clearly defined or operational criteria available to measure the concept (Lader 1995). Fallon, Marshall, Boyd, Razani and Wood-Siveria (1993) made several recommendations regarding the development of consensus criteria for the definition and measurement of relapse. These include:

Developing an operational definition of relapse, which specified criteria for both quantitative and qualitative symptoms. These criteria should incorporate both the identification of specific psychotic symptoms, symptoms presentation and the rate of severity of such symptoms. This is because in certain situations even if the symptoms are there, but not severe enough to prevent/hinder the patient from functioning, he may not be considered a candidate for hospital admission, and hence could be regarded as a relapse case.

The duration of symptoms required for relapse to be indicated.

Assessment of other clinical indicators of relapse such as nonspecific symptoms, and level of social and occupational functioning of the patient to avoid having confounding results.

Some studies on the cost implications of relapse indicate that the direct cost of health care services for individuals who experience a relapse is four times higher than for those who do not relapse (Adewuya et al., 2009) while the risk of relapse, that is, chances of one relapsing after treatment of schizophrenia has been estimated at 3.5% per month and about 40% experience a relapse within the year following hospital admission (Adewuya et al 2009). Relapse in schizophrenia is associated with high economic burden due to the cost of frequent hospital admission, dislodgement of the family set down mode of operations, loss of man-hours, and sometimes replacement of damaged family property due to aggressiveness and destructive behaviours of the patient during relapse. Its prevention has become an important goal in the management of schizophrenia. Since prevention is advocated more in health management, it is paramount that more relapses should also be treated as such. However, it is pertinent to mention that certain variables are suspected to cause relapse in schizophrenia. Such variables as locality, educational level, gender, non-adherence to medication, side effects of medication, expressed emotions in the family, stress, and poor social support seem to have a hand in relapse (Adewuya 2009). Naturally, the place of residence (locality) of an individual tends to influence the person's behaviour and people who are living in urban areas are seemingly more informed than those in rural areas, and therefore are more likely to adhere to instructions that would help guide them from relapsing.

In other words, certain factors have been identified in the etiology of relapse in schizophrenia thus the researcher set out to explore this in Igbo cultural environment since it has not been established in this part of the world. Hence the following hypothesis.

- I. There will be a significant influence of locality on relapse

METHOD

Participants

One hundred and twenty participants (120) between the ages of 18 - 54 years, were used for the study. 80% of the participants were Christian while 20% Muslim. The participants were made up of 60 males and 60 females. The 60 males comprised 30 highly educated and 30 less educated, while the females were made up of 11 highly educated and 41 less educated. The classification of participants according to locality showed that 52 came from rural areas such as Olo, Ebe, Eza, Ikwo and Akpoga while 68 were from the urban areas.

To ensure the credibility of the participants, the following measures were taken. Using a random sampling technique, the participant's case files were drawn within the past six months from Federal Neuropsychiatric Hospital Enugu. This was the period the patient was expected to come back for review. It was ensured that only participants treated and discharged from Federal Neuro psychiatric Hospital were used in the study.

INSTRUMENT

The researcher used the Positive and Negative Syndrome Scale (PANSS) by Kay, Fishbein&Opler (2004). The Positive and Negative Syndrome Scale (PANSS) consists of a formalized clinical interview and 17 operationally defined items for psychopathology assessment. The researcher modified the scale by adding three indigenous items. This is to obtain information that cannot be assessed by the Positive and Negative Syndrome Scale (PANSS) – Kay, Fishbein&Opler (2004). The instrument has a 0 - 6 response interval, while 0 indicates no relapse, 6 indicates the highest level of relapse. A maximum score is 120 points while a minimum is 0.

PILOT STUDY

The Positive and Negative Syndrome Scale (PANSS) by Kay, Fishbein&Opler (2004) was validated by administering it to twenty (20) relapsed Schizophrenic patients at the psychiatric unit of the University of Nigeria Teaching Hospital, Ituku Ozalla Enugu. Administration of PANSS was done with the help of a resident Clinical Psychologist and psychiatrist. It was administered as part of the routine test they administered to their patients. This was collected over three weeks of administration. The data of the pilot study was analysed using split half technique in which the items were divided into odd and even numbers Items, Pearson product, and Moment Correlation was calculated. The result of the calculation shows a reliability estimate of $r = 0.73$ at $P < 0.1$. Full scale reliability shows .709 using Cronbach alpha. Based on these results, the Positive and Negative Syndrome Scale (PANSS) was seen as a reliable and valid instrument.

PROCEDURE:

The researcher followed the guidelines as established by the Ethical Committee of Federal Neuropsychiatric Hospital, Enugu for research efforts. In so doing, an application was written to the Committee detailing what was to be studied and how the research would be conducted. Following approval of the research, the following procedure was followed in gathering data for the research.

- a. The researcher engaged the services of the Clinical psychologist, Psychiatrist and Psychiatric Nurse who served as research assistants. They were briefed on the Positive and Negative

Syndrome Scale (PANSS) during the weekly Clinical reports. The briefing concerned the administration and scoring of the Positive and Negative Syndrome Scale.

- b. The Positive and Negative Syndrome Scale was administered to the participants as a routine testing instrument on the patients.
- c. The reports from clinical Psychologist Psychiatrist and Psychiatric Nurse were gathered weekly for analysis.

Design and Statistics

A 1-way factorial design was used because of the enormous variables that were involved in the present study. It was used based on the following Assumptions (Aron & Aron 2003). All the variables can be studied at once without computing many statistics. It can give results of the interaction effect. This considers the effect of having more than one variable under study. The data was analyzed using one-way Analysis of variance (ANOVA) with F statistics.

RESULTS

Table I: Summary table of mean and standard deviation of gender, education and locality on relapse.

RELAPSE

Variance	Levels	Mean	Standard deviation	N
Locality	Urban	61.691	21.556	68
	Rural	38.653	21.036	52

As shown in table 1 above, urban participants (M=61.691, SD=21.566) relapse more than the rural participants (M=38.653) (SD=21.036)

Table II: Summary table of 3 way analysis of variance of the influence of locality on relapse

Source	Sum of square	DF	Mean square	F	Sig.
Locality	15850.433	1	15850.433	41.340	.000
Gender locality	372.180	1	372.180	.971	.327
Error	43326.005	113	383.416		
Total	390191.000	120			
Corrected total	69340.792	110			

Table 1 shows significant main influence of locality on relapse, $F(1, 113)=41.340$, $P<0.001$. This means that there is a significant difference between participants in urban areas and participant in rural areas on relapse. Thus, locality has a strong influence on relapse of schizophrenia; accepting the hypothesis.

DISCUSSION

Result on influence of locality on schizophrenic relapse shows that schizophrenic patients that live in the urban areas relapse more than those who live in rural areas. This result is at variance with previous research results that shows that people from the rural area relapse more than those from the urban areas (Cooney et al 2001; Gottesman, 1991). The reason for the disparate results is not far. The urban centers are anonymous, family ties are more likely to be the nuclear family who may lack the emotional stability to take care of a schizophrenic. The presence of the patient may exert so much pressure on them that they will quickly send the patient back to the psychiatric hospital. The rural patient on the other hand may be viewed as a liability. He may be taken to a native doctor and left there, allowed to wander about or even dumped in a faraway urban area believing that people will feed him to enable him live. The two scenarios (The urban families sending their relations back to the psychiatric hospital and the rural families allowing their relation to wander about has a statistical implication. It may mean that urban schizophrenics relapse more than rural schizophrenics. The true position may be that rural schizophrenic may relapse but are not brought back to the psychiatric hospital. Several reasons can be adduced for that. It is possible that the rural patients have relations who do not have enough money to transport the patient to the hospital and pay for his up keep.

LIMITATIONS OF THE STUDY

Every human effort in getting the best out of any situations do have some set backs. Sometimes, the setbacks may be human error or variables that have to do with time and resources. In this vein, this study was handicapped by some factory such as:

1. Time: Time was a big constrain which limited the study to only Neuropsychiatric hospital Enugu. If there were enough time the researcher would have extended its work to other Neuropsychiatric Hospital outside Enugu for a probable comparism.
2. Finance: The second major constraint was finance. The financial involvement in conducting the research was high and this also has limited the extent the researchers survey would have reached. The clients would also have been interviewed in their homes to really get the best of the result especially in relation to home environmental influence in relapse.
3. Poor Knowledge about Research: This factor is inherent in our people as these participant family members were very much reluctant in giving out information regarding the true nature of their roles in sustaining and maintaining the improvement levels the patient gained while on admission. Such reluctance was interpreted to mean that if they were open, and or easily gave information about their home circumstances and role in managing the patient at home, they may be penalized for not doing what they ought to have done when they would have done so.

Suggestions For Further Studies

Since society and human attributes are dynamic, it should be borne in mind that there is no particular research work that can effectively answer questions relating to such situation and this particular work is one of such, the research suggest the following further studies to digest relapse in schizophrenia.

1. Cultural influences in relapse of the schizophrenic patient.
2. The role of substance used and alcohol in the relapse state of schizophrenic patients.
3. The influence of drug side effect in relapse of schizophrenic patients.
4. Socio- economic status of the family of the schizophrenic and relapse.
5. The influence of Institutionalization in psychiatric hospitals and relapse.

SUMMARY & CONCLUSION

The study of locality as factors influencing the rate of relapse in schizophrenic patients who were treated at the Neuropsychiatric Hospital Enugu and were discharged home revealed amazing results. Basically, the result showed a no significant difference in relapse related.

Finally, from the outcome of the study, the author wish to submit this as his conclusion. Locality all have a major role to play in the management of schizophrenic patients, but their various difference or summed up influences depends on how these factors among other factors influencing relapse were handled, when properly handled, their influence would reduce relapse, while the reverse is the case when poorly handled. Therefore show love, understanding, acceptance, empathy and tolerance to the schizophrenic and he/she will not relapse.

References

- Adewuya, A. O. Owoeye, O. A. Erinfolami A. R (2000) *Prevalent and Correlates of poor medication adherence* amongst psychiatric outpatients in south-west Nigeria. *General Hospital Psychiatry*, March – April.
- Adreasen, N.C. (1995) Positive and Negative Symptoms in Schizophrenia: A critical reappraisal. *Archives of General Psychiatry*, 47, 615-61.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (4th Edition) (DSM-IV)*. APA 1994.
- Burns, C.A. (2000) Factors influencing relapse in the long-term course of schizophrenia. *Schizophrenia Research* 2000;28(2-3) 199 – 206.
- Fallon, I. R. (1984) Relapse: A reappraisal of assessment of outcome in schizophrenia. *Schizophrenia Bulletin*, 10 (2), 293 – 299.
- Fallon, I. R. Marshall, G. N. Boyd, J. L. Raxani, J. & Woodsiverio, (1983) Relapse in schizophrenia: A review of the concept and its definitions. *Psychological Medicine*, 13(3), 469 – 477.
- Halgin, R.P. & White Bourne, S.K. (2006) *Abnormal Psychology. Clinical Perspective on psychological disorders (4th Ed)* Boston, Allyn & Bacon.
- Kaplan, J.S. & Sadock, V.A. (2003) *Synopsis of Psychiatry and Behavioural Sciences (10th ed)* Lippincott Williams Publishing Company, Philadelphia, USA.
- Kay, S. R. Fissbein A. & Opler L. A. (2004). The Positive and Negative Syndrome Scale (PANSS) for Schizophrenia. *Schizophrenia Bulletin* 13, 261 – 276.
- Lader, M. (1995). *What is relapse in Schizophrenia? International Clinical Psychopharmacology (a supply. 5)* 5 – 9.