



FACTORS INFLUENCING RELAPSE AMONG SUBSTANCE ABUSE PATIENTS ATTENDING NEUROPSYCHIATRIC HOSPITAL RUMUIGBO PORT HARCOURT, NIGERIA

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ABSTRACT

This study is a descriptive non-experimental survey, to determine factors influencing relapse among substance abuse patients attending Neuropsychiatric Hospital Rumuigbo Port Harcourt, Rivers state. It was guided by two specific objectives and one hypothesis. Taro Yamen's technique was used to select a sample size of 52 respondents for the study. Data was collected using a self structured questionnaire and was subjected to analysis using both descriptive and inferential statistics and results presented in tables. Findings among others showed that factors influencing relapse include; influence from peer group against continuing with drugs after discharge from hospital, availability of the substance of abuse within the client's neighborhood after discharge from hospital, inability to afford drug of treatment due to high cost, patients that have no close family member to observe and cater for them. Measures such as early and effective referral system, availability and affordability of drugs in the community mental health hospital, subsidizing the cost of medication by government, educating patients' family members on proper home management of patient's condition, compliance, treatment and follow-up of the patients, are useful in preventing relapse. From the statistical calculation; calculated chi-square (X^2) 18.83 is < the tabulated (X^2) 21.03 at 0.05. Since the calculated $X^2(18.83)$ is less than the tabulated $X^2(21.03)$ the null hypothesis is accepted, hence, there is no significant relationship between the age and relapse among respondents. Recommendations based on the findings include, that health care workers especially nurses should provide information to and incorporate the patient's family friends in the management of care as this will aid in home management of the patient's condition thus preventing relapse.

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INTRODUCTION

Substance abuse is related disorders that involve maladaptive pattern of substance use leading to significant impairment in functioning, it is not a character flaw but rather a medical condition that has developed over time.

Psychoactive drugs have been in use since the beginning of recorded history for pleasure, utility, curiosity, and social reasons (Jellinek, 2002). In Nigeria both men and women abuse drugs equally even to intoxication, Africans has consumed different drugs for centuries especially alcohol, tobacco, Indian hemp, cola nuts and others to enhance a wide variety of social functions like

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marriage, naming ceremonies, religious and other cultural activities (Acuda, 1991). Human beings are attracted to psychoactive substance because they help them to adapt to an ever – changing environment. Smoking, drinking, and taking drugs reduce tension and frustration, relieve boredom fatigue and in some cases help people to escape from the harsh realities of the world (Santrock, 2003). Despite such personal gratification and temporary adaptation, psychoactive drugs carry a high price tag; drug dependence, personal and social disorganization, and a predisposition to serious and sometimes fatal diseases (Goldberg, 2000). The number of global drug addicts is now 300 million, what's more, each year more than 200 000 people are killed and 10 million people lose the ability to work as a result of drug abuse (Xu *et al.*, 2012).

There were 2.58 million drug addicts registered in China including 1.38 million opiod drug addicts which make up 53%; according to the proportion of explicit and implicit drug addicts, the actual number of drug addicts in China is probably more than 10 million (Du *et al.*, 2008). Most people voluntarily take drugs and repeated drugs use can lead to brain changes which lead to intense urges to take more drugs and change the brain chemistry. These brain changes can be persisted which is why drug addiction is considered “relapsing” disease. Relapse is the re-occurrence of symptoms of a disease after a period of improvement. Sometimes people quit their drug use for a while, but start using it again, no matter how hard they try.

This return to drug use is called a relapse. Approximately 40% of the psychiatric patients attending the clinic for follow-up care are regularly readmitted to the psychiatric institution each year⁷. People recovering from addiction often have one or more relapses along the way (Jellinek, 2002). Combined addiction treatment medicine with behavioral therapy ensures the best chances of success for most patients. Treatment approaches tailored to each patient's drug use patterns and any co-occurring medical, mental, and social problems can lead to continued recovery, cooper (2009). Despite the care given to them by the health workers some still, go into relapse even while on admission. This study sought to determine factors influencing relapse among substance (cocaine, cannabis, nicotine and alcohol) abuse patients in Neuropsychiatric Hospital Rumuigbo Port Harcourt, Rivers State.

METHODOLOGY

Research Design

The research design used for the study was the descriptive non-experimental survey. It entailed the survey of factors influencing relapse among substance abuse patients attending Neuro-Psychiatric Hospital, Rumuigbo, Port Harcourt, Nigeria.

Research Setting

This study was carried out in a natural setting of Neuropsychiatric Hospital, Rumuigbo in Obio/Akpor Local Government Area of Rivers State. It is owned and managed by Rivers State Government through Rivers State Hospital Management Board. The hospital is made up of a male and a female ward with 21 bed each and five (5) units namely: Education unit, History unit, Psychotherapy unit, Treatment unit and Electroconvulsive Therapy (ECT) unit.

Target Population

The target population for the study includes all substance abuse patients attending Neuro-Psychiatric Hospital, Rumuigbo, Port Harcourt, Nigeria totaling 60.

Sample Population

A sample population of 52 respondents was used for the study using Taro Yamane formular.

Sampling Technique

The sampling technique used for the study is the convenience non-probability sampling technique.

Instrument for Data Collection

A self-structured questionnaire consisting of three (3) sections namely A to C was used to collect data for the study. Section A contains 9 items on socio demographic characteristics of respondents, section B contains 10 items on factors influencing relapse among psychiatric patients while section C contains 7 items on measures to prevent relapse.

Validity of the Instrument

The self-structured questionnaire was submitted to two (2) specialists in measurement and evaluation and the field of study that assessed the face and content validity of the instrument and their comments were used to make necessary corrections before administration.

Reliability of the Instrument

The reliability of the instrument was determined using the Test-Retest method. Copies of the questionnaire were administered to 10 respondents attending Neuro-Psychiatric Hospital and re-administered after 2 weeks. The data collected was coded and analyzed using the Pearson Moment Correlation Coefficient. A value of 0.66 was obtained which was considered adequate for the study. The respondents used for the reliability were excluded from the study population.

Procedure for Data Collection

Data was collected using questionnaire which were personally administered to a total of 52 respondents after necessary explanations to guide the filling of the instrument was provided.

Method of Data Analysis

Data collected was coded on a spreadsheet using descriptive statistics of frequencies and percentages for the research questions and inferential statistics of chi-square test for the hypothesis testing.

Ethical Consideration

Approval was obtained from the ethical committee of the institution where the study was carried out. The consent of individual respondents participating in the study was sought and necessary explanations made before administering the questionnaires. They were also assured that any information provided will be treated confidentially.

DATA ANALYSIS

Table 1 shows that 22(42.31%) were males while 30(57.69%) were females; no respondent was below 15years; 5(9.62%) were between 15 — 20 years, 9(17.31%) were between 21 — 25 years, 8(15.39%) were between 26 —30 years, 11(21.15%) were between 31 — 35 years, 6(11.54%) were between 36 — 40 years and 13(25.00%) were from 41 years and above. 27(51.92%) were single, 23(44.23%) were married 1(1.92%) was divorced/separated, 1(1.92%) was a widow and no respondent was cohabiting. Concerning family income status per month, 27(51.92%) are below #20,000, 9(17.31%) are between #20,000 - < #50,000, 9(17.31%) are between #20,000 - < #100,000, 3(5.77%) are between #100,000 - < #150,000 and 4(7.69%) are from #150,000 and above. 3(5.77%) had no formal education, 4(7.695%) had primary education,

Table 1. Socio-demographic data of respondents (n=52)

| S/N | Variable | Frequency | Percentage |
|-----|----------------------------------|-----------|------------|
| 1 | Gender | | |
| | Male | 22 | 42.31% |
| | Female | 30 | 57.69% |
| 2 | Age of patents | | |
| a. | Below 15yrs | 0 | 0% |
| b. | 15-20yrs | 5 | 9.62% |
| c. | 21-25yrs | 9 | 17.31% |
| d. | 26-30yrs | 8 | 15.39% |
| e. | 31-35yrs | 11 | 21.15% |
| f. | 36-40yrs | 6 | 11.54% |
| g. | 41 and above | 13 | 25.00% |
| 3. | Marital Status of patient | | |
| a. | Single | 27 | 51.92%A |
| b. | Married | 23 | 44.23% |
| c. | Divorce/separated | 1 | 1.92% |
| d. | Widow | 1 | 1.92% |
| e. | Cohabiting | 0 | 0% |
| 4. | Family income status of patients | | |
| a. | Below 20,000 | 27 | 51.92% |
| b. | 20,000 - < 50,000 | 9 | 17.31% |
| c. | 50,000 - < 100,000 | 9 | 17.31% |
| d. | 100,00 - <150,000 | 3 | 5.77% |
| e. | 150,000 and above | 4 | 7.69% |
| 5. | Educational status of patients | | |
| a. | No formal education | 3 | 5.77% |
| b. | Primary | 4 | 7.69% |
| c. | Secondary | 24 | 46.15% |
| d. | Tertiary | 21 | 40.39% |
| 6. | Types of Dwelling place | | |
| a. | Slums | 0 | 0% |
| b. | Batcher | 2 | 3.85 |
| c. | Mud house | 0 | 0% |
| d. | One Room – Two rooms apartment | 19 | 36.54% |
| e. | Self contain – 1 bed rood flat | 13 | 25.00% |
| f. | 2 Bed rood flat and above | 18 | 34.54% |
| 7. | Occupation of patients | | |
| a. | Student | 19 | 36.54% |
| b. | Trader | 15 | 28.85% |
| c. | Civil Servant | 9 | 17.31% |
| d. | Hand Work Craft | 4 | 7.69% |
| e. | Farming/Fishing | 0 | 0% |
| f. | Others | 5 | 9.60% |
| 8. | Religion | | |
| a. | Christian | 52 | 100% |
| b. | Muslim | 0 | |
| c. | Traditional Religion | 0 | 0% |
| d. | Others | 0 | 0% |

24(46.15%) had secondary education and 2 1(40.39%) had tertiary education. None of the respondents reside in slums or mud house, 2(3.85%) batcher, 19(36.54%) one room to two rooms apartment, 13(25.00%) self contain to one bed room flat and 18(34.62%) two bed room flat and above. 19 (36.54%) were students, 15(28.85%) traders, 9(17.31%) civil servants, 4(7.69%) crafts, none of the respondent was a farmer or fisher

man while 5(9.60%) engage in others as sources of livelihood. All the 52(100%) respondents were Christians.

Table 2 shows that: 30(57.69%) respondents agreed, 17(32.69%) disagreed that peer group influences relapse to ; 20(38.46%) agreed, 30(57.69%) disagreed and 2(3.85%) were undecided to availability of drugs in client neighborhood. 22(42.37%) agreed, 23(44.23%) disagreed and 7(13.46%) were undecided to inability to afford drug of treatment. 22(42.37%) respondents agreed, 23(44.23%) disagreed and 7(13.46%) were undecided to poor compliance of the client. 22(42.37%) respondents agreed, 20(38.46%) disagreed and 10(19.23%) were undecided to patients that have no close family member to observe and cater for them. 28(53.85%) respondents agreed, 18(34.62%) disagreed and 6(11.54%) were undecided to people that have friends, that abuse drugs. 15(28.86%) respondents agreed, 31(59.62%) disagreed and 6(11.54%) were undecided to patients that sees parents abuse drugs. 18(34.62%) respondents agreed, 25(48.07%) disagreed and 8(15.39%) were undecided to patients that sees siblings use hallucinogen or intravenous amphetamine. 20(38.62%) respondents agreed, 19(36.54%) disagreed and 13(25.00%) were undecided to patients that have low self-esteem. 13(25.00%) respondents agreed, 33(62.46%) disagreed and 6(11.54%) were undecided to patients that do not practice any religion.

Table 3 shows that 38 (73.08%) of the respondents said YES and 14 (26.92%) said NO to early and effective referral system as a means of preventing relapse. 39(75.00%) said YES and 13(25.00%) said NO to availability and affordability of drugs in the community mental health hospital as a means of preventing relapse. 45(86.53%) said YES and 7(13.45%) said NO to subsidizing the cost of medication by government as a means of preventing relapse. 45(86.53%) said YES and 7(13.45%) said NO to educating patients family member on proper home management as a means of preventing relapse. 48(92.31%) said YES and 4(7.69%) said NO to compliance, treatment and follow-up of the patients as means of preventing relapse. 40(76.92%) respondents said YES and 12(23.08%) said NO to practice techniques to deal with stressful situations as means of preventing relapse. (48(92.31%) respondents said YES and 4(7.69%) said NO to recognizing situations that may trigger symptoms and try to avoid them or reduce exposure to risk factors as measure of preventing relapse.

HYPOTHESIS TESTING

Hypothesis: There is significant relationship between the age of the patients and the number of times relapse occur among respondents. Chi-square (X^2) test was used to test the hypothesis at 0.05 level of significance.

Null Hypothesis: There is no significant relationship between the age of the patients and relapse occurrence in each patient at neuropsychiatric hospital Rumuigbo Port Harcourt, Nigeria.

Alternate Hypothesis: There is a significant relationship between the age of the patients and the number of times relapse occurred in each patient in Neuropsychiatric Hospital Rumuigbo Rivers State.

From the statistical calculation; calculated chi-square (X^2) 18.83 is < the tabulated (X^2) 21.03 at 0.05. Since the calculated $X^2(18.83)$ is less than the tabulated $X^2(21.03)$ the null hypothesis is accepted, hence, there is no significant relationship between the age and relapse among respondents.

DISCUSSION OF FINDINGS

Factors Influencing Relapse

The study observed that several factors influence relapse, some of the factors include; influence from peer group against continuing with drugs after discharge from hospital, availability of the substance of abuse within the client's neighborhood after discharge from hospital, inability to afford drug of treatment due to high cost, patients that have no close family member to observe and cater for them, People that have friends that abuse drugs, patients that see parent abuses drugs, patients who's siblings abuse drugs, poor compliance of the client to his/her treatment regimen. This study corroborates other findings.

'Factors influencing relapse are more in those having lower educational and socio-economic status, unemployed, having family history of substance abuse and past history of crime. Poor follow-up after detoxification were also associated with relapse, in addition to poor family and social support (Amit *et al.*, 2012). Unemployment, peer pressure, family and social stresses were factors that showed statistical significant associations with repeat admissions (Al-Nahedh, 2015). Non adherence to antipsychotic medications is leading risk factors for relapse; others include: poor family, stressful life events (Adella *et al.*, 2014).

Measures to Prevent Relapse

The study observed that early and effective referral system, availability and affordability of drugs in the community mental

Table 2. Factors influencing relapse Among Substance Abuse Patients (n=52)

| S/N | ITEMS | FREQUENCY/PERCENTAGE | | |
|-----|--|----------------------|--------------|--------------|
| 10 | Influence from peer group to continue with drugs after discharge from hospital | 30 57.69% | 17 32.69% | 5 9.62% |
| 11 | Availability of drug in the client neighborhood after discharge from hospital | 20 38.46% | 30 57.69% | 2 3.85% |
| 12 | Inability to afford drug of treatment due to high cost. | 22 42.37% | 23 44.23% | 7 13.46% |
| 13 | Poor compliance of the client to his/her treatment regimen. | 22 42.37% | 22 44.23% | 7 13.46% |
| 14 | Patients that have no close family member to observe and cater for them. | 22 42.37% | 20 38.46% | 10 19.23% |
| 15 | People that have friends that abuse drugs. | 28 53.85% | 18 34.64% | 6 11.54% |
| 16 | Patients that see parent abuses drugs. | 15 28.85% | 31 34.62% | 6 11.54% |
| 17 | Patients who's siblings use hallucinogen or intravenous amphetamine. | 18 34.62% | 19 36.54% | 13 25.00% |
| 18 | Patients that have low self-esteem. | 20 38.62% | 19 36.54% | 13 25.00% |
| 19 | Patients that do not practice any religion correctly. | 13 25.00% | 33 62.46% | 6 11.54% |

Table 3: Measures that can help in preventing relapse (n=52)

| S/No | Items | Frequency/Percentage | |
|------|---|----------------------|--------------|
| | 52 Respondents (Patients) | Yes | No |
| 1 | Early and effective referral system | 38 73.08% | 14 26.92% |
| 2 | Availability and affordability of drugs in the community mental health hospital. | 39 75.00% | 13 25.00% |
| 3 | Subsidizing the cost of medication by government | 45 86.53% | 7 13.45% |
| 4 | Educating patients' family members on proper home management of patient's condition. | 45 86.53% | 7 13.45% |
| 5 | Compliance, treatment and follow-up of the patients | 48 92.31% | 4 7.69% |
| 6 | Practice techniques to deal with stressful situations example, anger management and positive thinking. | 40 76.92% | 12 23.08% |
| 7 | Recognize situations that may trigger symptoms and try to avoid them or reduce exposure to risk factors | 48 92.31% | 4 7.69% |

Table 5. relationship between Patient's age and relapse among substance abuse patients (n=52)

| S/N | Age of Patients | Number of Relapse and Expected Frequency (fc) | | | | X ² Cal | X ² Tab | Decision |
|-----|-----------------|---|--------------|------------------|-------|--------------------|--------------------|------------|
| | | 1 – 5 Times | 5 – 10 Times | 11 times & Above | Total | | | |
| 1 | Below 15 yrs | 0(0.00) | 0(0.00) | 0(0.00) | 0 | | | |
| 2 | 15 – 20yrs | 5(3.37) | 0(1.44) | 0(0.19) | 5 | | | Accept |
| 3 | 21 – 25yrs | 6(6.06) | 3(2.60) | 0(0.35) | 9 | | | Null |
| 4 | 26 – 30yrs | 4(5.39) | 4(6.24) | 0(0.31) | 8 | 18.83 | 21.03 | Hypothesis |
| 5 | 31 – 35yrs | 7(6.73) | 3(2.89) | 0(0.39) | 10 | | | |
| 6 | 36 – 40yrs | 5(4.71) | 0(2.02) | 2(0.27) | 7 | | | |
| 7 | 41 and Above | 8(8.75) | 5(3.73) | 0(0.50) | 13 | | | |
| | Total | 35 | 15 | 2 | 52 | | | |

health hospital, subsidizing the cost of medication by government, educating patients' family members on proper home management of patient's condition, compliance, treatment and follow-up of the patients, practicing techniques to deal with stressful situations example, anger management and positive thinking, recognizing situations that may trigger symptoms and trying to avoid them or reduce exposure to risk the factors were among the measures to prevent relapse. This was supported by the findings of other studies. 'Strengthening mental health psycho-education sessions, community home visits, family support, adherence to antipsychotic medication, employment and religion helps reduce relapse'¹⁰.using the detoxification medications combined with appropriate psychological counseling and social support measures will help the effectiveness of relapse prevention which is a kind of alternative community detoxification pattern. Appropriate and standard psychological counseling is very important for anti-drug treatment (Chao *et al.*, 2016).

Hypothesis Analysis

The findings of this study showed that there is no significant relationship between age and relapse. Since the calculated $X^2(18.83)$ is less than the tabulated $X^2(21.03)$ the null hypothesis is accepted, hence, there is no significant relationship between the age and relapse among respondents.this observation is in contrast with other findings which reported that factors influencing relapse are more in substance abusers of less than 30 years of age (Amit *et al.*, 2012); age was among the factors that showed statistical association with repeat admissions (Al-Nahedh, 2015).

Summary

This study determined the factors responsible for relapse among substance abuse patients in Neuropsychiatric Hospital, Rumuigbo. Two objectives were used to guide the study. The study was a descriptive study and a sample size of 52 respondents (patients) participated in the study. A self-structured questionnaire was the instrument used to collect data for the study. Data generated were presented on tables and analyzed using frequency and simple percentage while hypothesis was tested with chi-square.the study observed that factors influencing relapse include; influence from peer group against continuing with drugs after discharge from hospital, availability of the substance of abuse within the client's neighborhood after discharge from hospital, inability to afford drug of treatment due to high cost, patients that have no close family member to observe and cater for them, People that have friends that abuse drugs, patients that see parent abuses drugs, patients who's siblings abuse drugs, poor compliance of the client to his/her treatment regimen. Measures such as early and effective referral system, availability and affordability of drugs in the community mental health hospital, subsidizing the cost of medication by government, educating patients' family members on proper home management of patient's condition, compliance, treatment and follow-up of the patients, practicing techniques to deal with stressful situations example, anger management and positive thinking, recognizing situations that may trigger symptoms and trying to avoid them or reduce exposure to risk the factors are useful in preventing relapse.

Conclusion

In conclusion, psychiatric relapse has been found to pose huge burden to the family, community, government and health

facility. If proper management is instituted that involves the family in patient's care it is likely the issue of relapse will be reduced to the barest minimum. There is also the need to educate the family and community on the causes of mental illness and campaign against stigmatization should be a major focus.

Implication for Nursing

Family intervention strategy: From the findings in this work, it was observed that relapse of psychiatric patients' are majorly influenced by patient's inability to cope with stress/frustration (Lack of resilience), societal stigmatization (discrimination), isolation and most family's attitude (discouragement) towards the patient, neglect and lack of supervision by family members and patient's relative lack of knowledge about the condition and its management at home. There is therefore need for nurses to partner with families of the patient, educate them on the disease and its symptoms, side effects of drugs, importance of treatment compliance so as to motivate them and enable them possess adequate knowledge to supervise and support the patient at home.

Campaign against stigmatization: A major factor-influencing relapse was found to be stigmatization of the mentally ill and her family members, which causes stress and undue frustration to the individuals concern. Effort must therefore be made by both the government and health professional to provide education and information on causes of mental illness in the community and also, campaign against stigmatization of the mentally ill.

Recommendations

- Health care workers especially nurses should provide information to and incorporate the patient's family friends in the management of care as this will aid in home management of the patient's condition thus preventing relapse.
- Family members should be encouraged to support the patient and avoid negative behavior that will cause the patient to be stressed or frustrated.
- Government should provide information to the communities on the causes of mental illness and institute campaign against societal discrimination/stigmatization of the mentally ill.
- Government should through the ministry of health ensure a steady and adequate supply of antipsychotic drugs and price should be subsidized.
- Government should build primary health care centers and provide trained and qualified health professionals. This will help strengthen the referral system such that patients can be effectively managed even in their community.

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