



Manifestation of Psychopathologies among Substance Use Disorder Patients and nondependent Psychiatric Patients

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ABSTRACT

The study studied to find out whether psychopathologies play a role among substance use disorder (SUD) patients and non-dependent psychiatric patients in the manifestation of substance dependence problems. The sample size comprised one hundred and twenty (120) patients drawn through purposive sampling. Sixty (60) patients from Drug Alcohol Treatment Education and Rehabilitation (DATER) unit of Federal Neuropsychiatric Hospital, Barnawa, Kaduna. While the remaining sixty (60) patients from male and female wards of the same hospital who are nondependent psychiatric patients. DSM-V diagnostic criteria were applied to diagnose psychopathology as associated with substance dependence by the Psychiatrists while researcher administered Minnesota Multiphasic Personality Inventory (MMPI-2) to further ascertain the presence of psychopathology and for data collection. The results of this study showed that there was a significant main effect of psychopathology among SUD participants, example, Mania, $t(118) = -4.80, p < .001$, Paranoid, $t(118) = -4.42, p < .001$, Schizophrenia, $t(118) = -6.28, p < .001$, Hypochondriasis, $t(118) = -4.37$, and Psychasthenia, $t(118) = -2.70, p < .001$, and nondependent psychiatric participants in the manifestation of substance dependent problems. The overall findings in this study lends support to the hypothesis, which predicted that a statistically significant difference exists between SUD participants and nondependent psychiatric participants in the manifestation of substance dependent problems.

Introduction

Mental health professionals e.g., Psychiatrists, Clinical Psychologists, Psychiatric Nurses, Medical Social Workers, Occupational Therapists, Counselors etc., in their clinical observations on psychiatric patients especially in psychiatric hospitals, indicated that more patients are manifesting/developing mental illness especially substance use disorders (SUDs). When this is compared to patients manifesting mental illness due to biological/genetic disposition, personality, stress or other etiologies shows a clear difference. Literature has it that an association exist between drug dependence and psychopathology. This was confirmed by Dorus and Senay (1980) who have indicated that substance use disorder (SUD) patients have high rate of psychopathology example, anxiety, depression, psychosis etc. They indicated that development/manifestation of psychopathology and substance dependence in drug dependent persons are on alarming rate and have led to more individuals with substance dependence related problems.

Psychopathology is generally described as the behaviors or experiences which are indicative of mental illness. They include any behavior or experience that causes distress, impairment or disability especially one that manifest as a functional breakdown due to cognitive or neurocognitive problem in the brain. Examples of psychopathology/mental disorders classified within the Diagnostic Statistical Manual Fifth Edition, (DSM-V) of American Psychiatric Association and International Statistical Classification of Diseases and Related Health Problems (ICD-10) include; anxiety disorders, major depression, schizophrenia, bipolar disorders, antisocial personality disorder, borderline personality disorder, etc. (ICD-10). Psychopathology in relation to substance dependence has been given to the issue of comorbid psychiatric and substance use disorders (SUD) since 1980's. This otherwise known as dual disorders, in clinical studies and community, has shown its manifestation (Ross, Glasser and Germanson (1980) and Rounsavilla and Kleber (1986)). In addition, indicated that there is high prevalence rate of substance dependence with psychopathology (Eleftherim, Coannis and Thomas, 2010).

There are speculations among mental health professionals, primary health care providers, other health care workers, citizens etc., that there seem to be a relationship or association between

psychopathology and SUDs especially among substance dependent patients and nondependent psychiatric patients. The rate of mental illness especially substance related problems is on increase and it has also been observed that SUD patients have shown to have high rate of anxiety disorders, depression, schizophrenia and other psychopathologies (Dorus and Senay (1980); Ross, Glasser and Germanson (1980) and Rounsavilla and Kleber (1986)). In addition, mental health professionals, for example, Clinical Psychologists, Psychiatrists, Psychiatric Nurses etc., observe many cases of substance related mental illness in most psychiatric hospitals or drug rehabilitation centers. Why is this so?

However, there is almost no study confirming the situation especially in the northern Nigeria. The dearth of available studies on psychopathology among substance use disorder patients and non dependent psychiatric patients in general and specific using Nigeria sample prompted the researcher to undertake this study. The present study contributes to the literature on psychopathology and substance dependence problems by using a Nigeria sample drawn from the psychiatric hospital setting. This study therefore, focused on manifestation of psychopathology among SUD patients both past inpatients and outpatients of Drug Alcohol Treatment Education and Rehabilitation (DATER) unit and nondependent psychiatric patients of Federal Neuropsychiatric Hospital Barnawa, Kaduna. It was hypothesized that:

- 1) SUD patients will obtain higher substance dependence scores than nondependent psychiatric patients.

Method

Participants

The sample consists of hundred and twenty (120) participants (87 males and 33 females, aged 18 years and above) drawn through purposive sampling. Of these 120 participants, fifty (50) males and females in-patients (SUD patients) were admitted into Federal Neuropsychiatric hospital, (FNPN), Barnawa, Kaduna. Ten (10) patients (SUD patients) were recruited as an out-patient. Both fifty (50) in-patients from the ward and ten (10) out-patients were admitted into Drug Alcohol Treatment Education and Rehabilitation (DATER) unit of FNPN, Kaduna, for rehabilitation eventually were recruited for the study. These participants/patients are those rehabilitated in 2013-2014 in DATER unit.

Another sixty participants (nondependent psychiatric patients) were also recruited. The consent of all the participants were sort, obtained and assured of absolute confidentiality. The Health Research Ethical Committee of Federal Neuropsychiatric Hospital, Barnawa, Kaduna, where the study was conducted approved the study. For the purposes of the present study, classification of the 120 patients' sample into psychopathology (that is, SUD patients and nondependent psychiatric patients) were required.

Stimulus material/instruments

Apart from the diagnosis made by the Consultant Psychiatrist, researcher, made use of the psychological assessment instrument namely Minnesota Multiphasic Personality Inventory (MMPI-2) to further ascertain presence of psychopathology and antisocial personality disorder. MMPI-2 is an objective assessment instrument globally use in assessing the presence of psychopathology and personality. It contains about 567 items. The reliability and validity coefficients are within the range of .82 to .90. (Jinadu (1997) and Uzoka (1987)). Uzoka (1987) and Jinadu, et al. (1997) validated the tool and found it useful with Nigerian subjects.

Procedure

The study was made possible by the members of the Health Research Ethical Committee of Federal Neuropsychiatric Hospital (FNHP), Barnawa, Kaduna. They approved the research and permitted that the study be conducted in the DATER unit and in the male and female wards of the hospital. The clinical interview and diagnosis were made by the Consultant Psychiatrist. However, researcher further conducted clinical interview and assessment with the use of psychological assessment instrument called MMPI-2 to further ascertain diagnosis, presence of psychopathology and data collection, before they were finally recruited into the study. Before this, the oral consent of the SUD patients and nondependent psychiatric patients were sort and obtained. Before they were recruited into

DATER for rehabilitation, Clinical Psychologist, conducted motivational interview for the patients both inpatients and outpatients. DATER resident doctor also reviewed them on motivational interview to ascertain their level of motivation for DATER. After the above have been conducted by the Clinical Psychologist and resident doctor in DATER, the participants were further taken in for intake interview. This time being assessed by DATER therapeutic team comprised of Consultant Psychiatrist, Clinical Psychologists, Psychiatrist Nurses, Medical Social Workers and Occupational Therapist, to finally ascertain their motivational level. These participants were found motivated by the therapeutic team and on that basis were recruited for the study.

Design/statistics

The study is a cross sectional design. It consists of one independent variable (I.V.); psychopathology while SUD patients and nondependent psychiatric patients serves as the dependent variables (D. Vs). A t test was used to check for the differences in scores between SUD patients and nondependent psychiatric patients for the hypothesis. All analyses were conducted using the Statistical Package for Social Sciences (SPSS) version 22.

Results

The results of the study include the following: Table 1 showed the background information of respondents. About 72.5% of the respondents were male while 27.5% were females. About 51.7% had schizophrenia, while 48.3% were normal. For Mania score; 34.2% of participants had mania, while 65.8% were normal. About 30% of the subjects had Depression while 70% were normal. Close to a quarter of the respondents (38.3%) were paranoid while 61.7% were normal. Hypochondriasis was present in 17.5% of the participants while 82.5% were normal. For Psychasthenia score; 10.8% of participants had psychasthenia while 89.2% were normal.

Table 1. Background information of respondents

Variable	Frequency	Percentage
Sex		
Male	87	72.5
Female	33	27.5
Total	120	100
Schizophrenia Score		
Schizophrenia	62	51.7
Normal	58	48.3
Total	120	100
Mania Score		
Mania	41	34.2
Normal	79	65.8
Total	120	100
Depression Score		
Depression	36	30
Normal	84	70
Total	120	100
Paranoid Score		
Paranoid	46	38.3
Normal	74	61.7
Total	120	100
Hypochondriasis Score		
Hypochondriasis	21	17.5
Normal	99	82.5
Total	120	100
Psychasthenia Score		
Psychasthenia	13	10.8
Normal	107	89.2
Total	120	100

The mean scores and standard deviation of the groups compared showed that psychopathology example, schizophrenia, mania, paranoid, depression, hypochondriasis and psychasthenia among SUD patients had different scores than non-dependent psychiatric patients.

Table 2. Table of mean scores and standard deviation on psychopathology among SUD patients and non-dependent psychiatric patients

Category of patients	Group statistics				
	N	Mean	STD. Deviation	STD.	
Psychopathology					
SUD patient	60	3.20	2.496	.322	
Non-Dependent Psychiatric Patient	60	2.12	1.595	.206	
Mania score					
SUD patient	60	1.47	.503	.065	
Non-dependent Psychiatric Patient	60	1.85	.360	.046	
Paranoid score					
SUD patient	60	1.43	.500	.065	
Non-dependent Psychiatric Patient	60	1.80	.403	.052	
Schizophrenia					
Score	SUD patient	60	1.23	.427	.055
	Non-dependent Psychiatric Patient	60	1.73	.446	.058
Depression score					
	SUD patient	60	1.68	.469	.061
	Non-dependent Psychiatric Patient	60	1.72	.454	.059
Hypochondriasis					
Score	SUD patient	60	1.68	.469	.061
	Non-dependent Psychiatric Patient	60	1.97	.181	.023
Psych asthenia					
Score	SUD patient	60	1.82	.390	.050
	Non-dependent Psychiatric Patient	60	1.97	.181	.023

Table 3. A summary table of t test analysis on psychopathology with unequal sample size, example (mania, paranoid, schizophrenia, hypochondriasis and psychasthenia) showing differences among SUD patients and non-dependent psychiatric patients.

		Levene's Test for Equality of Variances			T-test for Equality of Means					
		F	SIG.	T	DF	SIG. (2-tailed)	Mean Diff	STD ERROR DIFF.	95% Confidence Interval of The Difference LOWER UPPER	
Psychopathology	Equal variances Assumed	12.037	.001	2.833	118	.005	1.083	.382	.326	1.841
	not assumed			2.833	100.313	.006	1.083	.382	.325	1.842
Mania Score	Equal variances Assumed	54.694	.000	-4.799	118	.000	-.383	.080	-.542	-.225
	not assumed			-4.799	106.883	.000	-.383	.080	-.542	-.225
Paranoid Score	Equal variances Assumed	27.878	.000	-4.423	118	.000	-.367	.083	-.531	-.202
	not assumed			-4.423	112.972	.000	-.367	.083	-.531	-.202
Schizophrenia score	Equal variances Assumed	.701	.404	-6.276	118	.000	-.500	.080	-.658	-.342
	not assumed			-6.276	117.767	.000	-.500	.080	-.658	-.342
Depression score	Equal variances Assumed	.624	.431	-.395	118	.693	-.033	.084	-.200	.134
	not assumed			-.395	117.881	.693	-.033	.084	-.200	.134
Hypochondriasis Score	Equal variances Assumed	140.033	.000	-4.365	118	.000	-.283	.065	-.412	-.155
	not assumed			-4.365	76.190	.000	-.283	.065	-.413	-.154
Psychasthenia Score	Equal variances Assumed	36.974	.000	-2.701	118	.008	-.150	.056	-.260	-.040
	not assumed			-2.701	83.271	.008	-.150	.056	-.260	-.040

Table 3.

It could be seen from the summary table that t test analysis performed on the data showed that there was a significant main effect of psychopathology, example, Mania, $t(118) = -4.80$, $p < .001$, Paranoid, $t(118) = -4.42$, $p < .001$, Schizophrenia, $t(118) = -6.28$, $p < .001$, Hypochondriasis, $t(118) = -4.37$, and Psychasthenia, $t(118) = -2.70$, $p < .001$, except Depression that wasn't significant. This is to say that, the presence of psychopathology namely mania, paranoid, schizophrenia, hypochondriasis and psychasthenia among SUD patients differed significantly with non-dependent psychiatric patients. This finding supports the hypothesis which predicted that a statistically significant difference exists between SUD participants and nondependent psychiatric participants in the development of substance dependent problems.

Summary

1) SUD patients manifested more psychopathology than nondependent psychiatric patients.

Discussion

The result of the study confirmed the hypothesis which predicted that a statistical significance difference will exist between SUD patients and nondependent psychiatric patients in the development of substance dependent problems (That is to say that, presence of psychopathology namely mania, paranoid, schizophrenia, psychasthenia and hypochondriasis among SUD patients differed significantly with non-dependent psychiatric patients. This finding is in line with, studies Ross, Glasser and Germanson (1980) and Rounsavilla, Anton, Carrol, Budde, Prusoff et. al. (1991). Also, Rounsavilla *et al.* Study confirmed it and is in line with the study of Rounsavilla and Kleber (1986). They all indicated that there is high prevalence rate of substance dependence with psychopathology. This indicated that psychopathology play a role in precipitating substance dependence problems among SUD patients than nondependent psychiatric patients. That is to say that, SUD patients are likely to develop psychopathology than non-dependent psychiatric patients. From the above, the results generally meet the prediction of this study. The results have provided the basis for the answer to the question raised in the study. The significant difference found in the study between SUD patients and non-dependent patients is quite revealing.

Conclusion

The result obtained from this study show that there exists significant difference between SUD patients and non-dependent patients in the manifestation of substance dependent problem. Thus, researcher concludes that variables that predispose individuals to substance dependence problems are psychological. In this study, psychopathology was implicated in substance dependence. This is in line with other researchers/authorities cited in the study above. The researcher thinks that this is a challenge to which Clinical Psychologists must rise to considering the overwhelming influence of psychological variables on health and mental health.

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Declaration of conflicting interests

Author declares there is no conflicting interests.

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