DELUSIONAL PATTERNS AND ITS PRE-MORBID PERSONALITY LINKAGES IN NIGERIA PSYCHOTIC PATIENTS THAT ATTENDED A COMMUNITY PSYCHIATRIC REHABILITATION CENTRE IN ANAMBRA STATE NIGERIA BETWEEN 2011 -2013

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Abstract

The study was on the evaluation of the prevalence of delusional types and their correlations with pre-morbid personalities in psychotic patients that attended a Community Rehabilitation Centre in Anambra State Nigeria. Forty participants (27 males and 13 females, age range: 22 – 51 years) were used for the study. DSM IVTR, psychological tests: MMPI, SCL-90R and clinical observations were used for the diagnosis of the patients according to the centre policy. Two recording scales designed by the researchers were used to assign the participants to different types of delusions and pre-morbid personalities. The study design was a longitudinal survey of special population. Descriptive form of statistics and pearson product moment correlation statistics were used in data analysis. The findings showed that some delusional disorders were more prevalent than others (eg., Delusions of reference, control, persecution and spiritual attack) and the delusion of persecution were more in females than in males. Similarly pre-morbid personalities of obedience, gentility, loving, responsible, loner and quiet were more prevalent than others in the participants. Furthermore significant correlations of delusion types

and pre-morbid personalities were also found as well as correlation within the delusion types. Discussions of the study were on the need to increase research as to explain the mechanisms that brought about the findings and the import of examining gender differences in psychotic delusional behaviours. The need for clinicians to consider the correlations of delusions and premorbid personalities will help in improving treatment of psychotic disorders in Nigeria.

Key words: Delusional types, premorbid personalities, psychotic disorders, Rehabilitation centre

Introduction

Disturbing thought contents occupy the minds of psychotics as adaptive even though maladaptive (Cameron, 1963). Through those thoughts, the patients reconstruct their world in such a way that they can find a place for themselves in it. These disturbing thoughts appear to be products of delusional thinking. Many writers and researchers had in the past defined and explained delusion (APA, 1994; Durand & Barlow, 1999; Halgin & Whitenbourne 2007) with common denominators of strongly held beliefs, having no basis in reality or fact and are highly resistant to realistic views. Delusions are fundamental symptoms of psychotic disorder everywhere in the world. Thus, for proper understanding of the psychotic patient, it demands the understanding of his delusional thoughts. In order to elicit these delusional thoughts that are triggered by severe emotional reactions and as well try to identify their possible sources, clinicians in their assessments to try apply appropriate therapeutic methods for healing. However, psychopathological symptom manifestations have been shown to be influenced significantly enough by cultural and familial backgrounds.

Nigeria as well as other African countries have cultural and familial patterns peculiar to them. As such, their delusional patterns may also likely follow their cultural views. It has however been shown that there are delusional types that occur commonly in all cultures and races of the world. However, that such delusional types appear to be common does not preclude that the same pattern of psychic mechanisms underlie them all. Further, some delusions may be more common in an area while less common in other areas.

Thus, this study was to examine the patterns at which those common delusional disorders appear to manifest in Nigerian psychotic patients and the contributions of premorbid personality of the individual. Africa has for some time now advocated for proper understanding of their personalities as it relates to mental health. A lot of works have been published in Nigeria with regard to this (Ebigbo, Oluka, Ezenwa, Obidigbo & Okwaraji, 1995). It is believed that thorough understanding of the African psyche will go a long way to understanding the delusional contents of African Psychotics. At present, no study in Nigeria to the authors' best of knowledge, had studied the delusional patterns of Nigerian psychotics as well as their relationship with the patients' pre-morbid personalities.

The basic issues to be investigated in this study are to determine the distribution pattern of delusions among Nigerian psychotics, its gender roles as well as relationships between delusions and pre-morbid personalities among psychotic patients. It is well documented that some premorbid personalities precede the onset of schizophrenia in many patients (Hans, Marcus, Hason, Auerbach & Mersley, 1992; Walker, 1991). Some of these premorbid personalities had already been captured as personality disorders. Among them were social withdrawal, anxiety and aggression (John, Mednick & Schulsinger, 1982; Watt, 1978; Watt & Lubensky, 1976).

In line with this, the study has the following questions to answer:

1) Will psychotic patients studied show higher percentages in some delusional patterns than others?
2) Will the participants equally show some pattern of differences in the pre-morbid personality studied?
3) Do significant correlations exist between pre-morbid personalities and delusions in the participants?
4) Do significant relationships equally exist among various delusions studied?

Method
Participants

Forty psychotic patients were used for the study. They were recruited within a two year period from patients that consulted the Community Psychiatric Rehabilitation Centre Obosi, in Idemili North Local Government Area of Anambra State. The patients were diagnosed by the centre using DSM IV TR, Psychological tests (MMPI, SCL -90, TAT), oral interview of both patients and families as well as Clinical observations. The participants consisted of 27 males and 13 females within the age range of 22-51 years. Their mean age was 33.63 while their SD age was 5.62. Thirty one of the participants were yet unmarried as at the time of the study (25 males and 6 females), one female got separated while 8 of them were married (2 males and 6 females). Five of the participants were students, 2 were vocational workers, 5 were civil servants, while 15 had no jobs and others were local traders. Eighteen of the participants were university graduates while 14 were secondary school graduates and 8 dropped after their primary school education.

Instruments

Two instruments were used for data collection. They are

i. A recording scale that assessed the delusional patterns of the patients.

ii. A recording scale that assessed the patterns of premorbid personality of each of the participants prior to the psychotic disorder. The first instrument that assessed delusional patterns was rated on a 4 point likert scale (strongly agree, agree, undecided and disagree), to measure the presence of delusions manifested by the participants. The domains of delusions covered by the scale were; the delusions of control, grandeur, infidelity, nihilism, persecution, poverty, reference, somatic, thought broadcasting, thought insertion, thought withdrawal, self-blame and spiritual attack. The basis for

the inclusion of the delusions studied was based on the delusional descriptions by Halgin & Whiten Bourne (2007) except the delusion of spiritual attack. On the other hand, the premorbid personalities studied were obedience, gentle, loving, responsible, kind, easily pacified, easily offended and doesn't want to offend anybody. These personality attributes were used based on our clinical experiences with psychotic patients and their families. From our experiences of over 18 years of clinical practice in Nigeria, we had gathered some dominant premorbid personality attributes that most families often present to us about the sick ones at the initial intake assessments. With such clinical experiences, the researchers had therefore designed the checklist instrument used in the study.

Procedure

The researchers administered the delusion checklist to the participants while the premorbid checklist was administered to the first degree relatives of the participants as soon as they were admitted into the centre for rehabilitation. Only the inpatient clients were eligible for the study. The study was a 2 year longitudinal study (2011 – 2013). As a result, the data for each participant were got and kept until a sizeable number of participants were got. The assessments of the delusional patterns were done through the content analysis of the information obtained from the patient during the first two intake interviews prior to treatment. To ensure the validity of the information got from the participants, content analysis of the interview was done. In line with this, five judges were recruited during the interview exercise to determine the suitability of each participant to be assigned to a delusional pattern. Three against two (3/5) agreement of the judges on a particular delusional pattern (eg: delusion of control) for each participant was the basis for assigning the participant to the degree of a delusion pattern. For example, if 3/5 of the judges agreed on a patient to manifest delusion of persecution on the likert scale 3 (Agree), it then holds that the participant will be assigned the numeric score of three. Any cumulative numeric score of three and above showed that the participant is assigned to the said delusion pattern.

For the other scale, the researchers used the first degree family members of the participants. They were asked to respond to the checklist as it relates to the behaviours of their sick ones prior to the psychotic disorder based on a four point likert scale. Among the participants studied, 25 were represented by their mothers, 10 represented by their older siblings and 5 represented by their fathers.

Design and Statistics

The present study was a longitudinal survey of a specific population in mental health research. The statistics used were descriptive analysis and the Pearson product moment correlation.

Results

Table 1: Summary Result of the Number and Percentages of Participants that Fell on Each Domain of Delusions

Delussion	Gender		General
	F	**M**	
	N, %	**N, %**	**N, %**
Thoughts inspection	11,84.6%	22,81.4%	33, 82.5%
Persecution	13,100%	24,88.8%	37, 92.5%
Reference	12,92.3%	26,96.2%	38, 95%
Control	13,100%	25,92.5%	38, 95%
Thought withdrawal	10,76.9%	14,51.8%	24, 60%
Spiritual attack	12,92.3%	25,92.5%	37, 92.5%
Somatic	1,7.6%	12,44.4%	13, 32.5%
Infidelity	7,53.8%	2,7.4%	09, 22.5%
Nihilism	11,84.6%	18,66.6%	29, 72.5%
Self-blame	7,53.8%	22,81.4%	29, 72.5%
Through broadcasting	8,61.5%	3,11.1%	11, 27.5%
Poverty	1,7.6%	2,7.4%	03,7.5%
Grandeur	8,61.5%	17,62.9%	25, 62.5%

Table one showed the percentage of participants that responded to each domain of delusions, according to gender. The findings showed that the 95% of the respondents had delusions of reference and control while 92% had delusions of persecution and spiritual attack. Consequently, 90% of the female respondents had delusions of persecution, reference, control and spiritual attack, while 90% of males had delusions of reference, control and spiritual attack.

Table 2: Summary Result of the Number and Percentage of Participants that Fell on Each Domains of Pre-morbid Personality

Delusion	Gender		General
	F	**M**	
	N, %	**N, %**	**N, %**
Obedience	10,76.9%	24,88.8%	34, 85%
Gentle	10,76.9%	25,92.5%	35, 87.5%
Loving	10,76.9%	26,96.2%	36, 90%
Responsible	10,76.9%	24,88.8%	34,85%
Aggressive	3,23.0%	05,18.5%	08, 20%
Loner	3,23.0%	17,62.9%	20,50%
Studious	6,46.1%	16,59.2%	22, 55%
Quiet	8,61.5%	21,77.7%	29, 72.5%
Extrovert	4,36.7%	4,14..8%	08, 20%
Talkative	3,23.0%	8,29.6%	11, 27.5%
Kind	8,61.5%	22..81.4%	30, 75%

Easily offended	11,84.6%	12,44.4%	23, 57.5%
Easily Pacified	1,7.6%	4,14.8%	05, 12.5%
Doesn't Want to offend anybody	8,61.5%	22,81.4%	30,75%

Table two above showed the distribution of pre-morbid personalities among the respondents. The percentage scores between the two gender showed gender differences in their responses. However males showed higher percentage scores on the dominant personalities common to both gender.

Table 3: Summary Table of Significant Correlations of Personality and Delusions among the Participants

DELUSIONS	OBEDIENT	GENTLE	LOVING	RESPONSIBLE	AGGRESSIVE	LONER	STUDIOUS	QUIET	EXTROVERT	TALKATIVE	KIND	EASILY OFFENDED	EASILY PACIFIED	DOESN'T WANT TO OFFEND ANYBODY
Through insertion	0.42**	0.32*	0.36*	0.29*	_	_	_	0.34*	_	-0.26*	_	_	_	_
Persecution	_	_	0.37**	_	0.32*	_	_	_	_	_	_	_	_	_
Reference	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Control	_	0.33*	0.63*	_	_	_	_	_	_	_	0.33*	_	0.28**	0.34*
Thought withdrawal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
spiritual attack	_	_	0.26*	_	0.30*	_	_	_	-0.26*	_	_	_	_	_
Somatic	0.28*	_	_	_	_	_	_	_	_	-0.28*	_	_	_	_
Infidelity	_	_	_	_	_	_	_	0.32*	0.32*	_	_	_	_	_
Nihilism	_	_	_	_	_	_	_	_	-0.33*	_	_	_	___	_
Self blame	_	_	_	_	_	_	_	_	_	_	_	_	0.26	_
Thought broadcasting	_	_	_	-0.36*	_	-0.26*	_	_	_	-0.29*	-0.27*	___	_	_
Poverty	_	_	_	_	_	_	0.36*	_	_	-0.37**	_	_	_	_
Grandeur	_	_	_	_	0.27*	_	_	_	_	_	-0.28*	_	_	-0.32*

Note: ** Correlation is significant at 0.01 level (1 tailed)
* Correlation is significant at 0.05 level (1 tailed)

Table three showed the distribution of significant correlations of pre-morbid personalities and delusions. For example delusion of thought insertion correlates significantly with pre-morbid personality of obedience.

Table 4: Summary Table of Significant Correlations of Delusional Types among the Participants

DELUSIONS	THOUGHT INSERTION	PERSECU-TION	REFERENCE	CONTROL	THOUGHT WITHDRAWAL	SPIRITUAL ATTACK	SOMATIC	INFIDELITY	NIHILISM	SELF BLAME	THOUGHT BROADCASTING	POVERTY	GRANDEUR
Thought insertion	_	_	_	0.57*	0.45*	_	0.34*	_	_	0.28*	_	_	_
Persecution	_	_	_	0.60**	0.33*	_	_	_	0.30*	_	_	_	0.46**
Reference	_	0.36	_	0.33*	_	_	_	_	_	_	_	_	_
Control	0.57**	0.60**	_		0.31*	_	_	_	_	_	_	_	_
Thought withdrawal	0.45**	0.33*	_	0.31*	_	_	0.30*	0.48**	0.29*	_	_	0.29*	_
Spiritual attack	_	0.28*	_	_	_	_	_	_	_	_	_	_	_
Somatic	0.34*	_	_	0.30*	_	_	_	_	_	_	_	_	_
Infidelity	_	_	_	_	0.48**	_	_	_	_	_`	_	_	_
Nihilism	_	0.30*	_	_	0.29*	_	_	_	_	_	_	_	_
Self blame	0.28*	_	_	_	_	_	_	_	_	_	_	0.33*	_
Thought broadcasting	_	_	_	_	_	_	_	0.36*	0.29*	_	_	_	_
Poverty	_	_	_	_	0.29*	_	_	_	_	0.33*	_	_	_
Grandeur	_	0.46*	_	_	_	_	_	_	_	_	_	_	1.00

Note: * Correlation at 0.01 level of testing (1 tailed)
      * Correlation at 0.05 level of testing (1 tailed)

Table four showed the patterns of delusion correlation among the participants studied. The findings showed that some delusions correlated significantly with another.

Discussion

The findings of the study showed distinct patterns in prevalence on delusional disorders studied. Delusions of thought insertion, persecution reference, control and spiritual attack were more prevalent than others. Similarly, gender differences were found in some delusional types including delusions of somatization, infidelity, nihilism, self blame and thought broadcasting. The study showed that males had higher responses on somatic and self blame delusions while females had higher responses on the delusions of infidelity, nihilism and thought broadcasting. The present study, to the author's best of knowledge, was the first to study the prevalence and patterns of correlation of delusional disorders (DD) and gender in Nigeria.

Globally, researchers had tended to study gender differences in DD by comparing risk factors, clinical correlates and illness course characteristics and functionality (de Portugal, Gonzales, Miriam, Haro, Usall & Cervilla, 2010; Gonzalez Rodriguez, Melina-Andreu, Navarro, Gasto, Penades & Catalan, 2014). Similarly, some pre-morbid personalities / behaviours appear to be more prevalent than others in the participants studied. The findings showed that premorbid personalities of obedience, gentility, loving, responsible, quiet and loner were more typical of the participants studied. Equally, males also differed from females on the clusters of the premorbid personalities examined. AlNzawi (2012) had earlier identified gender differences in delusional behaviours among schizophrenic patients in Saudi Arabia. He further showed that regional residence further predicts the contents of the delusion. His findings were in agreement with the present findings on gender differences in delusional behaviours.

On the other hand, significant correlations were found between pre-morbid personalities and delusion types. Specific delusional disorders correlated with some pre-morbid personalities of the participants studied. The casual mechanisms through which these results came to be, needed to be studied intensely. In addition to this, the findings further showed correlations of delusional types among the participants studied. Some delusional thoughts correlate significantly with another.

The present study had actually explored the possible linkages between pre-morbid personalities and delusional disorders. However, the basic limitation of the study was inability to study the likely casual tendencies of the outcome seen in the present study. Furthermore, small number of participants employed may limit full interpretations of the findings.

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