



## **Personality Disorder in a Nigerian Prison Community**

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### **Author's contribution**

*The sole author designed, analysed, interpreted and prepared the manuscript.*

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### **ABSTRACT**

**Background:** Personality disorders have since the 19<sup>th</sup> century been known and established as psychiatric diagnosis, yet very few epidemiological studies have been done. Absence of information about this disorder in the prisons led to the assessment of its prevalence in Agodi prisons in Nigeria.

**Objective:** To determine the prevalence of personality disorder in a prison community.

**Methods:** A total of 213 inmates who met the study criteria were interviewed, using (IPDE) International Personality Disorder Examination, a semi structured questionnaire modified to conform to DSM 111-R (Diagnostic and Statistical Manual) and ICD-10 (International Classification of Diseases) classifications. Using the Statistical Package for Social Sciences (SPSS/PC+), cross tabulation of the variables was obtained using chi-square and t- test.

**Results:** The results showed that at least 31% of prison inmates have personality disorders with antisocial personality disorder being most prevalent. A strong association between criminality and personality disorder was established.

*Keywords: Inmates; prison; personality disorder; criminality; DSM 111-R; recidivism.*

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## 1. INTRODUCTION

Throughout the history of modern psychiatry, Psychiatrists have sought to explain behaviours that they did not understand, could not diagnose properly or which appeared untreatable by labelling it as personality disorder [1]. In 1923, Schneider made the first classification based on clinical observations which eventually formed the bases of modern day DSM and ICD classifications, [2]. It gained full recognition by the WHO in 1988 by its classification in the DSM111-R and in the ICD -10 in 1991 [3,4].

Despite the consensus on the importance of personality in human functioning, epidemiological survey has been very scanty and lacking in this part of the world. The prevalence of the disorders in various communities would actually encourage these researches. Clinical aspects of criminality and psychiatric morbidity have been studied in Nigerian prisons [5,6] but no study has yet been done on personality disorders.

DSM111-R basically considered personality disorders independent of mental state by making it an axis-11 diagnosis. It recognises eleven types of personality disorders and groups them into three clusters.

The impact of DSM111-R and the internal consistency of the personality disorder criteria has been examined by using two hundred and ninety-one (291) patients, who had been identified by their clinicians as manifesting personality disorder [7]

This study looked at the pattern of personality disorders in the prison community, prevalence of specific types using the International Personality Disorder Examination (IPDE) the English version [8].

## 2. MATERIALS AND METHODS

The study was conducted at Agodi prisons in Ibadan, the capital city of Oyo state, in Western Nigeria. Agodi prison was founded in 1906 with a capacity for two hundred and ninety-four inmates. As at the time of this study, there were 549 inmates resident in the prison. The inmates were classified into four groups; convicts, lodgers, lifers and awaiting trials. The study criteria accommodated and included all prisoners who had nine years of education and above, who were in good health and who consented to the study. The minimum nine years of education

required was to ensure that the inmates had a good understanding of the questionnaire.

The study was a cross sectional study, it used the interview technique. A 15 item demographic data questionnaire which assessed demographic variables and conviction history of inmates was administered to inmates by an independent assessor (a nurse in the prison clinic). Only those who had been assessed by this questionnaire were interviewed by the author. The International Personality Disorder Examination IPDE English version [9] was used to assess personality disorders in the inmates. This questionnaire is an outgrowth and modification of the personality disorder examination (PDE) questionnaire [10]. It is modified to conform to DSM111-R and ICD-10 classifications. It is a semi structured questionnaire which assesses patients under six broad headings of; work, self, inter-personal relationship, affect, reality-testing and impulse control. It is a 150 item questionnaire, scored on a three-point scale of 0, 1, 2. Score of 2 is regarded as a positive score. Diagnosis was made using DSM111-R criteria. Using the statistical package for social sciences (SPSS/PC+) cross tabulation of the variables of interest were obtained. Using chi-square ( $\chi^2$ ) and t-test,  $p < 0.05$  was chosen as the level of significance.

## 3. RESULTS

A total of two hundred and thirteen (213) male inmates were interviewed. No female inmate met the inclusive criteria for the study. 56 (26%) inmates were convicts, while the rest were lodgers, lifers, or awaiting trial. The convicts, lifers, and lodgers did not differ significantly from other inmates on all assessed variables.

The mean age of inmates was 28.5 yr, 105 (49%) were single, while 108 (51%) were married. There was a preponderance of low skilled workers among the inmates. Because of the study inclusion criteria, educational level of the population appears fairly well distributed as more than 27% of them had more than 12 years of education.

Thirty-four percent of the convicts were serving a one-year jail term, while more than 20% were serving more than eight years jail term. Of the 56 convicts, 11 had been jailed once previously, while 11% of the total sample had been arrested once in the past. Five percent had more than two previous arrests and 2% was being detained for

the fifth time. Stealing, robbery, assault, and fraud constituted 70% of reasons for the arrest and convictions. Six inmates had positive first degree history of stealing and 70 inmates pleaded guilty of the charges. The mean age for first arrest was 26.7 yr, while 21% of the sample had their first arrest before 21 yr. A total of 106 inmates had their first arrest before age 30 yr. More than 63% of the sample had spent more than 2 years as against 5% that had spent over 6 years.

The prevalence of DSM111-R personality disorder is shown in Table 1. 65 inmates (31%) had at least one DSM111-R diagnosis of personality disorder. The mean age of inmates diagnosed by DSM111-R was 28.2 SD+6 yr, and 43 of them were married. There was no significant association between DSM111-R and age, marital status, and employment status. 51 inmates (33%) of the 115 inmates with previous arrests for stealing and robbery, had DSM111-R axis-11 disorder while 22 of the 36 inmates previously arrested for assault had DSM111-R diagnosis.

**Table 1. DSM111-R prevalence of personality disorders among 213 inmates**

Personality Disorders	n=213	%
Paranoid	16	7.5
Schizoid	10	4.6
Schizotypal	-	-
Borderline	19	8.9
Antisocial	20	9.3
Narcissistic	10	4.6
Histrionic	12	5.6
Obsessive-Compulsive	3	1.4
Passive Aggressive	8	3.7
Avoidant	4	1.8
Dependent	4	1.8
Total	65	31

#### 4. DISCUSSION

The International Personality Disorder Examination (IPDE) (WHO, 1991), provides a comprehensive instrument which assesses all the personality disorders. Earlier studies in the prisons [11] assessed only anti-social personality disorder, due to limitations of assessment instrument. The findings from this study showed that an estimated 31% of inmates of Agodi prisons had a DSM111-R diagnosis of personality disorder. Other studies [12] carried out on a normal community setting, reported a prevalence of 13.5%. A prevalence rate of 10.3%

was reported on another community setting, (10% among males and 10.5% among females) [13]. More than 50% of the inmates were married, while 49.2% were single, (p=ns). In another community study, a significant association was reported between DSM111-R personality disorder and marital status, indicating the susceptibility of single patients [14]. Curiously, Agodi prisons had more married inmates.

More than 80% of the studied sample were from lower socio-economic class and 82% turned out to be either unskilled or low skilled. Earlier studies, Makanjuola, 1981, Faluyi 1986, on Nigerian prisons have reported similar findings.

This study did not find any significant association between level of education, occupation, marital status and DSM111-R personality disorders. This is in keeping with the work of Reich et al (1988). The prevalence of DSM111-R personality disorder in this study is similar to the findings of Cassey et al (1984) who reported 34% prevalence from 2743 patients from a primary health care setting, using (PAS) Personality Assessment Schedule. A prevalence of 74% was also reported from a sample of depressed patients [15].

The relationship between personality disorder and criminality has always been discussed using anti-social personality disorder. No studies had related criminality with personality disorder as a whole. Guze and his colleagues [16] studied 223 males and 66 female felons who were discharged from prisons, and diagnosed 70% of them as sociopaths, alcoholics, and drug addicts. He concluded that sociopathy, alcoholism and drug dependence were associated with serious crimes. Stealing and assault were the most committed crimes and accounted for 70% of both previous and current arrests and convictions. 62% of all DSM111-R diagnosis had history of previous arrests or conviction for stealing, assault and fraud. Recidivists were more likely to have DSM111-R personality disorder (P<.05).

56% of inmates who pleaded guilty had DSM111-R diagnosis, these inmates were more likely to be recidivists and convicts. This explains the strong association between pleading guilty and having a DSM111-R diagnosis.

Though much work has been done on ant-social personality disorder, there is still no consensus on the prevalence for any community. In a

comparative study of two prison communities, Hare (1983), reported a prevalence of 16.5% from 246 inmates using DSM111. He added that DSM111 did not readily identify individuals who avoided early contact with the law. This finding is in agreement with the findings of this study in spite of the difference in prevalence rates. About 9.3% (20) of the inmates had a DSM111-R diagnosis of antisocial personality disorder, 68% of which were married, though majority admitted having problems remaining married. Other studies including the ECA study [17], reported prevalences of 3% and 3.4% respectively using standardised diagnostic criteria. Makanjuola (1981) reported 18% prevalence from a referred prison sample. This study reported 7.5% of the inmates as having DSM111-R paranoid personality disorder. Studies done using unstructured instruments reported a prevalence of between .03% and 28.4% showing a very wide disparity [18,19]. More recent studies, [20,21], reported rates ranging between .4% and 1.8%. The prison community appears to have a higher prevalence rate.

The mid-town Manhattan study reported a prevalence of 2.5% for Dependent personality disorder, this is close to the finding of this study which reported 4% prevalence rate for Dependent personality disorder. About 9% of the inmates had DSM111-R of Borderline personality disorder. These inmates did not show much of disruption in their social life, as was reported by Zimmerman (1988 and 1990). Apart from community study of Zimmerman (1990) where a prevalence rate of 5.6 was reported, the only community report on schizotypal personality disorder was the one that assessed first degree relations of schizophrenia. The prison turned out not having inmates with schizotypal personality disorder as zero percent prevalence was reported.

5% of inmates met the diagnosis of schizoid personality disorder, appearing slightly different from other community reports by Langer and Michael (1963) from the mid-town Manhattan study.

The prison community appears to have more people with narcissistic personality disorder than other communities. A prevalence of 5% was reported by this study. 5.6% of inmates had Histrionic personality disorder. This is in agreement with earlier studies as in the Stirling county study of 2.2% and Zimmerman's 3% (1990). Reich et al reported a prevalence of 6.4%

for obsessive-compulsive personality disorder, and another research [22] reported 1.7%. The finding of this study which reported 1.4% prevalence for Obsessive-Compulsive personality disorder did not differ with these reports. 3.7% of inmates had Passive-Aggressive personality disorder, similar to the 3% reported by Zimmerman et al (1990). 1% of the inmates had Avoidant personality disorder in keeping with community report of Maier et al (1990) which reported 1.1% prevalence.

## 5. CONCLUSION

This study showed that at least 31% of prison inmates have personality disorder, with antisocial personality disorder being the most prevalent. A strong association between criminality and personality disorder has been established. A community that harbours such a large percentage of disordered inhabitants would definitely require the services of a qualified psychiatrist.

## CONSENT

Consent was given by all the relevant authorities and all the inmates who participated in the study.

## ETHICAL APPROVAL

Ethical approval was given by the hospital's ethical committee.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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