

Assessment of the practice of Hospital Pharmacists in the Rehabilitation of Drug Abuse victims in Federal Capital Territory (FCT), Nigeria.

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ABSTRACT

Background: Substance abuse and drug addiction remain significant public health challenges in Nigeria, with rising cases contributing to a range of physical, psychological, social, and economic consequences. Drug abuse is one of the social menaces that is plaguing our society. The menace had posed a serious social threat among the adolescent and other groups of the society. Due to the public health challenge globally, the study assessed the practice of hospital pharmacists in the rehabilitation of drug abuse victim in Federal Capital Territory (FCT), Nigeria.

Methods: The study was carried out in hospitals within the Federal Capital Territory (FCT) Abuja in which a well-structured questionnaire was developed and systematically distributed to hospital pharmacists. The research design adopted was survey design. The questionnaire was distributed to the respondents in pharmacy department of different hospitals within the FCT. Prior to the commencement of instrument administration, ethical approval was sought and obtained from the Federal Capital Territory Health Research Ethics Committee. The Statistical Package for Social Sciences IBM SPSS package 20 was used to analyze the data collected through questionnaires. The questions and responses were pre-coded and then entered into the software for analysis.

Results: A total of 234 respondents consisting of 39.0% and 61.0% male and female gender participated respectively. The majority of respondents were aged 30–34 years, with 66.7% married and 24% holding postgraduate qualifications. Most pharmacists (25.2%) had 5–9 years of experience, and 61.5% had never participated in drug abuse rehabilitation. However, those involved were mostly within the 5–9 years' experience range. A total of 80.8% had received training on drug abuse, and 96.6% had encountered drug abuse victims. Most respondents (97.4%) were willing to counsel victims, 60.6% agreed to refer them to mental health clinics, and 87.2% considered pharmacists' role in preventing prescription medicine abuse important. While 29.5% treated suspected abusers like other patients, 62.4% did not. Key barriers to counseling included manpower shortages (96.8%), time constraints, inadequate referral knowledge, and counseling skills. The relationship between additional qualifications and willingness to counsel was not statistically significant ($p = 0.636$).

Conclusion: These findings revealed that the majority of hospital pharmacists do not participate in rehabilitation of drug abuse victims in the hospital despite the invaluable roles required of them. There is a need for hospital pharmacists within the FCT to actively engage in regular counseling through pharmaceutical care in rehabilitation of the victims of drug abuse. The hospital management and government should address the major barriers to patient counseling and pharmaceutical care itemized in this study, which serves as a significant measure to mitigate drug abuse.

1. Introduction

Substance abuse and drug addiction remain significant public health challenges in Nigeria, with rising cases contributing to a range of physical, psychological, social, and economic consequences¹. The Federal Capital Territory (FCT), being a hub of political and economic activity, is not

exempt from this trend, as it experiences a notable burden of drug abuse, particularly among youth and vulnerable populations². In response to this growing crisis, multidisciplinary approaches to drug rehabilitation have become increasingly important, emphasizing the need for active involvement from various healthcare professionals

including hospital pharmacists³.

Hospital pharmacists, traditionally viewed as medication dispensers, are increasingly recognized for their critical roles in patient-centered care. Their training in pharmacology, therapeutics, and medication management positions them as essential contributors to the rehabilitation of drug abuse victims⁴. They can provide pharmacological interventions, medication adherence support, drug interaction monitoring, and patient counseling particularly in managing withdrawal symptoms and preventing relapse⁵.

Despite the potential value of pharmacists in addiction recovery services, their involvement in Nigeria's drug rehabilitation programs remains underexplored⁶.

Drug abuse is one of the world's most expensive health problems, costing billions of money globally. Drug abuse or substance abuse refers to the use of certain chemicals for the purpose of creating pleasurable effects on the brain⁷. There are over 190 million drug users around the world and the problem has been increasing at alarming rates, especially among young adults under the age of thirty⁸. In addition to the financial costs, drug use also exacts a human cost with thousands of lives being damaged and forever changed by drug use and addiction⁹. The term drug abuse as extreme and persistent self-administration of a drug without regard to the medically acceptable patterns¹⁰. This implies the use of a drug to the extent that it interferes with the health and social function of an individual¹¹. The United States National Institute on Drug Abuse (NIDA) estimated that approximately 2.8% of the population was using psychotherapeutic drugs for nonmedical purposes¹². The abuse of drugs, especially amongst adolescents is one of the most alarming health related phenomena in Nigeria and other parts of the world¹³. As a result, several adolescents experience mental health problems, either temporarily or for a long period.

The menace of drug abuse has become a global health challenge with substantive morbidity and mortality¹⁴⁻¹⁵. It is evident that drug use and abuse is still a problem in Nigeria and the world at large despite the various measures taken to curb it¹⁵. Drug abuse menace has strangled both youths and elderly¹⁶. Although there have been many forms of campaigns against the dangers of drug abuse, but the menace is still increasing and most of the victims have little or no knowledge of how dangerous the vice is¹⁷. Overtime, numerous writers and health experts have shared their perspectives on drug use, misuse and its consequences. While their efforts to address the issue and propose solutions are commendable, these interventions have yet to

yield a sustainable cure¹⁸. It is against this background that this study attempts to assess the role of one of the key players, (Hospital Pharmacists) in rehabilitation of drug abusers within Federal Capital Territory (FCT), Abuja, Nigeria.

Methods

Population and sample size

A data from Association of Hospital and Administrative Pharmacists (AHAPN) FCT Abuja branch 2020 directory shows that FCT hospitals have a total of 454 licensed pharmacists. The sample size of this research was calculated using a standard formular¹⁹. The research design adopted was survey design. The designed questionnaire was distributed to the respondents in pharmacy department of different hospitals within the FCT. Prior to the commencement of instrument administration, ethical approval was sought and obtained from the Federal Capital Territory Health Research Ethics Committee.

Description of study Area

This study was carried out in the Federal Capital Territory (FCT), Abuja, the capital of Nigeria. The FCT is centrally located and comprises six area councils: Abuja Municipal, Bwari, Gwagwalada, Kuje, Kwali, and Abaji. It hosts several major hospitals and health institutions, making it an ideal setting to assess hospital pharmacists' involvement in drug abuse rehabilitation. The region also faces rising cases of substance abuse, especially among youths, which highlights the relevance of the study¹⁰.

Roles of Hospital Pharmacists

Hospital pharmacists provide pharmaceutical care services within hospital settings, including dispensing and counseling. They ensure rational drug use, monitor for adverse reactions, and manage drug therapy problems. Their role has expanded to include clinical pharmacy services through collaboration with other healthcare professionals¹⁰. In drug abuse rehabilitation, they support medication-assisted treatment and detoxification. They also assist in managing withdrawal symptoms, counseling, and relapse prevention. However, their involvement in addiction rehabilitation in Nigeria is still underexplored¹⁰.

Inclusion Criteria: The inclusion criteria include registered hospital pharmacists currently practicing in secondary or tertiary healthcare facilities within the FCT, pharmacists who have at least 1 year of clinical experience in hospital pharmacy practice, pharmacists who are involved in patient care, medication therapy management, or pharmaceutical

care services, pharmacists who provide informed consent to participate in the study, pharmacists with a recognized license to practice issued by the Pharmacy Council of Nigeria (PCN).

Exclusion Criteria: This include intern pharmacists or pharmacy technicians, as they are not fully licensed or independently practicing, pharmacists working exclusively in administrative or procurement roles with no direct patient contact, hospital pharmacists on extended leave or secondment during the period of data collection and pharmacists who decline consent or fail to complete the survey/questionnaire/interview.

Data analysis: The Statistical Package for Social Sciences IBM SPSS package 20 was used to analyze the data collected through questionnaires. The questions and responses were pre-coded and then entered into the software. Results were presented as frequencies,

percentages, Inferential statistics, such as chi-square, was used in testing of hypotheses for additional qualifications after first degree and pharmacist's willingness to counsel drug abuse patients at the hospital level

Results

Demography

The demographical findings shows that 8.6% of the respondents were above 50 years whereas, 20.5% were within 20 – 29 years and majority are within 30-34 years. The status of marriage shows that 66.7 % of the total respondents to be married with 24% having postgraduate qualification. The demographic data representing the study population is represented on Figures 1, 2 and 3.

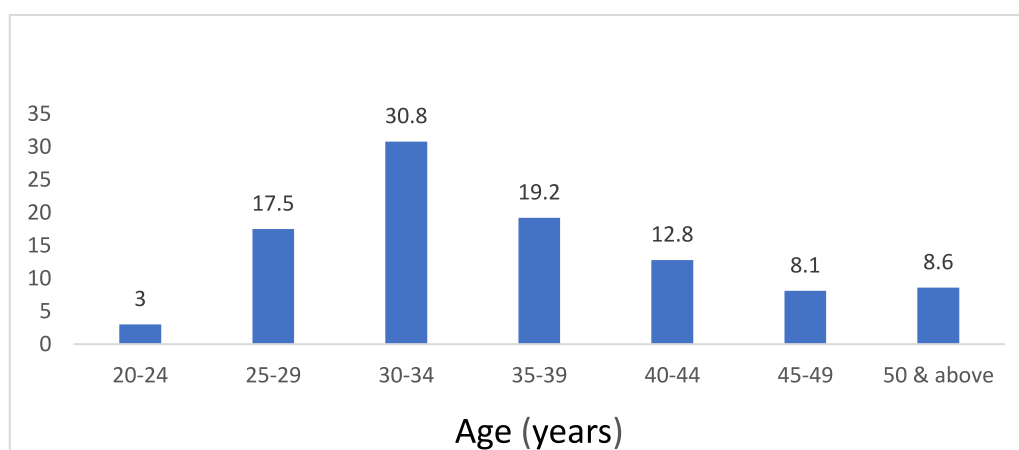


Fig 1. Age Distribution of Hospital Pharmacists in the FCT

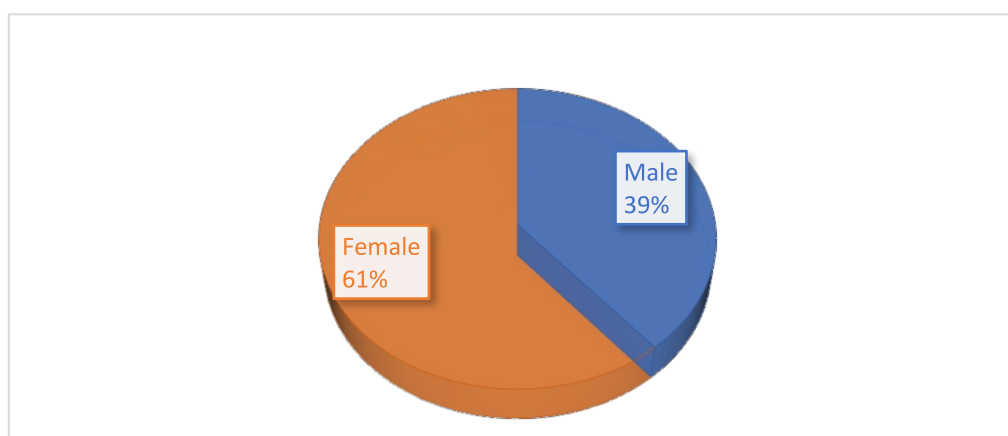


Fig 2. Gender of Respondents

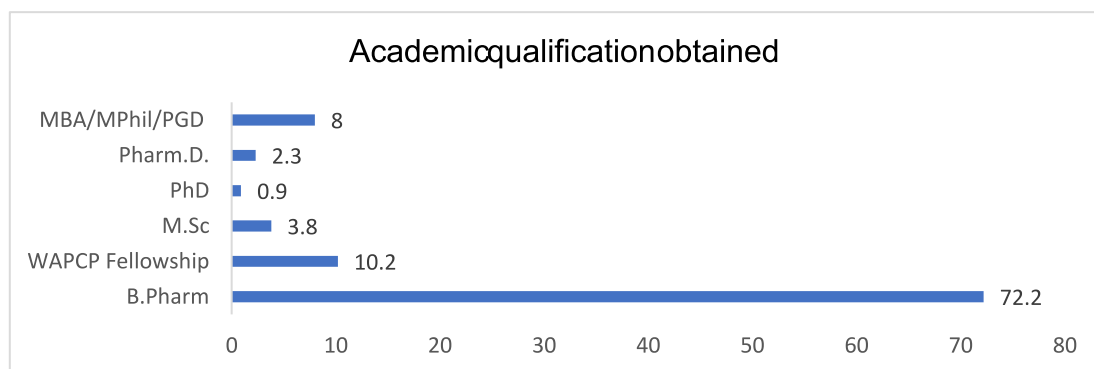


Fig 1. Academic Qualification of Hospital Pharmacists in the FCT

Years of Experience and Employment Status

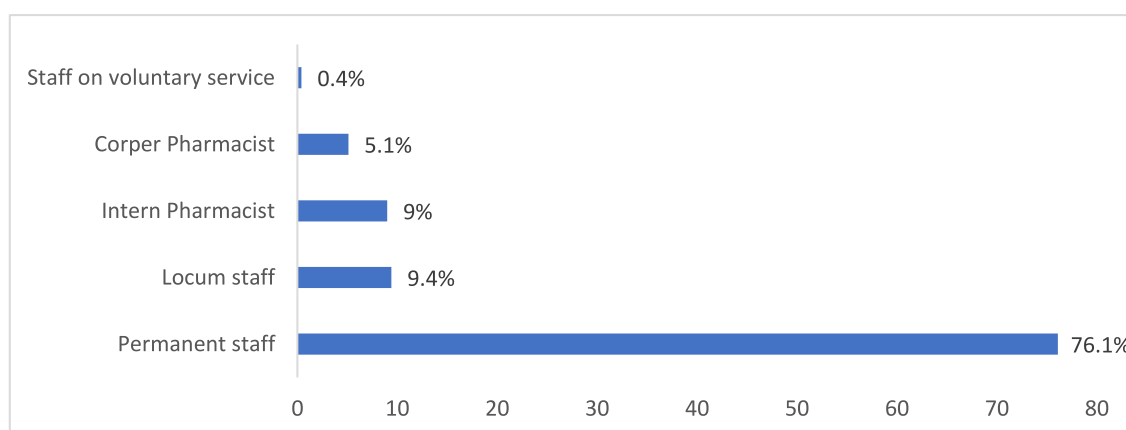


Fig 2. Employment Status of Hospital Pharmacists in the FCT.

The period of experience and employment status of the respondents shows that 25.2% were within 5 – 9 years of experience as hospital pharmacists. Majority of the respondents (61.5%) have not been involved in rehabilitation of drug abuse victims based on this study. Most of the respondents that are involved in the rehabilitation of the victims were found within 5-9 years of experience

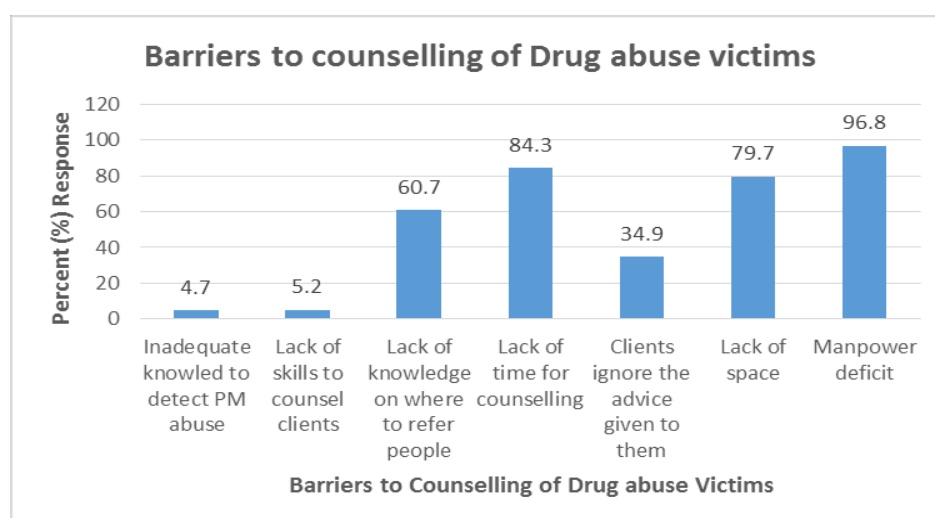


Fig3. Barriers to Counselling Drug Abuse Victims in the FCT.

Hospital Pharmacists' Role and Knowledge of Drug Abuse

This study shows that 189 respondents (80.8%) have received training on drug abuse and 221 (94.4%) respondents considered the use of medication without prescription as a form of drug abuse. It was found that 226 hospital pharmacists (96.6%) have had an encounter with drug abuse victims.

Attitude and Practice of Pharmacists towards Drug Abusers

The study revealed that a significant proportion of respondents (97.4%) were willing to advise victims of drug abuse, while 2.6% were uncertain about their willingness to do so. Additionally, 60.6% agreed to refer suspected drug abusers to a mental health clinic, whereas 32.1% disagreed, and 7.3% were unsure about the appropriateness of such referrals. Regarding the role of pharmacists in preventing prescription medicine abuse, 87.2% of respondents considered it important or very important, 5.1% considered it unimportant, and 7.7% were uncertain. When asked whether they treat suspected drug abusers the same as other patients, 29.5% reported doing so, while 62.4% stated otherwise. Furthermore, 97.9% of respondents expressed willingness to provide counseling on the abuse of prescribed medications, with 2.1% being unsure and none expressing unwillingness. On future referrals of abusers to mental health clinics, 91.5% agreed they would do so, while 3.4% disagreed. Figure 5 highlights the main barriers to counseling patients on drug abuse. A majority (96.8%)

identified manpower shortage as the primary barrier, followed by lack of time and space, inadequate knowledge of referral options, clients ignoring advice, limited ability to detect prescription medicine abuse, and insufficient counseling skills. Additionally, 98.2% of respondents agreed that it is necessary to provide patient counseling during medication dispensing.

Relationship between additional Qualifications after first degree and Hospital Pharmacist's willingness to counsel drug abuse victims

Table 1 illustrates the association between hospital pharmacists' possession of additional qualifications beyond their first degree and their willingness to provide counseling to patients with drug abuse problems. The statistical analysis conducted using the Chi-square test yielded a Chi-square value of 0.278 and a corresponding p-value of 0.636. Since the p-value exceeds the conventional significance level ($\alpha = 0.05$), the result is not statistically significant. Therefore, we fail to reject the null hypothesis, indicating that there is no significant association between having additional academic or professional qualifications and the pharmacists' willingness to counsel drug abuse patients within the hospital setting.

Table 1. Relationship between additional qualifications after first degree and pharmacist's willingness to counsel drug abuse patients at the hospital level.

Chi-Square Tests	Value	Df	Asymp. Sig. (2 sided)	-Exact Sig. (2 sided)	-Exact Sig. (1 sided)	-
Pearson Chi-Square	.278 ^a	1	.636			
Continuity Correction ^b	.000	1	1.000			
Likelihood Ratio	.502	1	.479			
Fisher's Exact Test				1.000	.793	
Linear-by-Linear Association	.276	1	.635			
N of Valid Cases	234					

a. 2 cells (50.0%) have an expected count less than 5. The minimum expected count is .24.

b. Computed only for a 2x2 table

Discussion

The demographic data of the respondents were profiled, and the findings revealed that both genders were adequately represented. However, the number of female pharmacists working in hospitals within the FCT exceeded that of their male counterparts. This may be attributed to the tendency of females to remain longer in employment positions, possibly due to familial or marital responsibilities that discourage frequent job changes. The study also revealed that the majority of respondents were youths and young adults. According to the Nigerian National Youth Policy (2009), youth is defined as individuals aged between 18 and 35 years. This implies that the respondents were within a productive age bracket, where their energy and enthusiasm can be harnessed effectively. Moreover, their relatively young age may make them more open to adopting innovations, unlike older pharmacists who may often be more resistant to change.

Furthermore, the majority of respondents were married, a finding that could also be related to the higher proportion of female participants. Females tend to marry earlier than males, and this is consistent with previous studies reporting that women often marry at a younger age than their male counterparts²⁰. Over 60% of the respondents had not been involved in the rehabilitation of drug addicts. This may be due to the generally low levels of additional academic qualifications among hospital pharmacists in the FCT. Rehabilitation of drug abuse victims typically requires specialized training, skills, and knowledge. Among those who had participated in rehabilitation activities, most had only been involved for a few years. The study further examined the nature of the respondents' employment, revealing that a significant number were permanent staff. Notably, the study focused solely on permanent employees. Despite the training received, only a few respondents had participated in the rehabilitation of drug abuse victims. In addition, 94.4% of the respondents considered the use of medication without a prescription to be either abuse or a potential public health issue. This finding aligns with previous research in which the unsupervised use of medications was also considered a form of drug abuse⁸. The study found that 96.6% of respondents had encountered individuals who abused or were suspected to be abusing prescription medications (PMs), with most reporting such encounters occurring between one to six times per year. The evidence of prescription drug abuse observed by hospital pharmacists was also assessed. Frequent refilling of prescriptions was cited as one of the most common

indicators of abuse. This finding aligns with previous reports that identified repeated prescription refills as a major sign of drug abuse²⁰. Similarly, the practice of frequent refills as a strategy used by drug abusers to gain continued access to medications has been reported elsewhere¹⁴. The study also evaluated pharmacists' views on the provision of written or verbal advice to suspected drug misusers about associated risks and treatment options. Respondents generally agreed that pharmacists, as trusted healthcare professionals, have a responsibility to evaluate the safety of prescriptions and serve as key players in the healthcare system. A significant proportion strongly agreed with the idea that pharmacists should be consulted before taking any medication. These findings support previous studies in which pharmacists were rated among the most trusted healthcare professionals¹⁴.

The results indicate that a substantial number of respondents were willing to offer advice to individuals involved in drug abuse. This suggests that pharmacists are not only aware of their crucial role in drug abuse prevention but are also willing to offer counseling services. Respondents were also asked whether all suspected drug abusers should be referred to mental health clinics, and the majority agreed with this approach. This finding is consistent with studies recommending such referrals for drug abuse victims¹⁸. When asked about the pharmacist's role in preventing the abuse of prescription medications, a significant proportion of respondents deemed this role important or very important—another finding consistent with previous research²¹. Although most respondents believed that counseling should be an essential part of drug dispensing, several barriers were identified. These include workforce shortages, lack of time, inadequate counseling space, and limited knowledge of referral procedures. These obstacles, despite the respondents' willingness to counsel, mirror findings from previous research which highlighted similar challenges²².

The test of the hypothesis further confirms that Additional qualifications after the first degree (Bachelor of Pharmacy) do not influence Pharmacist's willingness to counsel drug abuse victims at the hospital level. However, Pharmacists are willing to counsel patients and victims of drug abuse but the major issue is the presence of certain barriers to pharmaceutical care as mentioned above. Therefore, for a successful implementation of patient counseling and pharmaceutical care by the hospital pharmacist, these barriers must be removed as plans and strategies may be in place but implementation becomes a problem.

Conclusion

The findings in this study reveal that hospital pharmacists can play an invaluable role in the rehabilitation of drug abuse victims within hospital settings. However, only a few are currently involved in such rehabilitation efforts in the Federal Capital Territory (FCT). Notably, a substantial number of hospital pharmacists have received training on drug abuse, recognize it as a societal problem, interact with affected individuals, and acknowledge their potential role in prevention. Many are also willing to educate, counsel, and refer victims for further treatment. Despite this, active involvement in rehabilitation remains limited. This poor level of involvement is largely attributed to several barriers, including manpower shortages, inadequate space or infrastructure, time constraints, and poor remuneration. Addressing these challenges is essential to enhance the role of hospital pharmacists in combating drug abuse.

Recommendations

Based on the findings of this study, it is recommended that hospital pharmacists within the Federal Capital Territory (FCT) actively participate in the regular counseling of patients through structured pharmaceutical care, particularly in the rehabilitation of individuals affected by drug abuse. To enhance the effectiveness of this role, hospital management and relevant government authorities should prioritize the resolution of key barriers identified in this study—such as workforce shortages, lack of counseling space, time constraints, and insufficient training for referrals.

Furthermore, there is a critical need for the establishment of mini analytical laboratories within hospital settings. These laboratories would facilitate the rapid assessment of biological samples from suspected drug abuse victims, thereby supporting timely and evidence-based interventions. Such measures would significantly strengthen the capacity of hospital pharmacists to contribute meaningfully to the prevention, early detection, and rehabilitation of prescription drug abuse cases.

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