Nurses' Knowledge and Attitude towards Care of Clients with Substance Abuse in Borno State, Nigeria.

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Abstract: *The study assessed nurses' knowledge and their attitude towards care of clients with substance abuse. The study made use of a cross-sectional descriptive survey. The study was conducted in 13 government-owned health facilities. A multi-stage sampling technique was used to select the health facilities and 204 nurses (79 from tertiary, 81 from secondary and 44 from primary health centres). A self structured questionnaire was used for data collection. This questionnaire assessed nurses' knowledge of substance abuse, and their attitude towards care of clients with substance abuse. The Spearman-Brown reliability coefficient for the instrument was found to be 0.80. Nurses' knowledge was graded across four grades of very good (70-100%), good (60-69%), fair (50-59%), and poor (0-49%). For attitude assessment, a 5- point Likert scale was used and scored as very much (5), much (4), very little (3), little (2), none (1). The maximum score obtainable for attitude was 40. Therefore, attitude was grouped as very satisfactory (30-40), satisfactory (19-29), and not satisfactory (1-18). The age range of nurses was between 20 and 55 years (mean age 38±9.36). The overall knowledge scores showed that 42.6% had good knowledge, 19.6% of nurses had very good knowledge, while 14.2% had poor knowledge (mean score 60.5± 17.8). The study revealed that the mean attitude for nurses was 24.3±6.3; however, 74.5% showed satisfactory attitude, 15.7% showed very satisfactory attitude, while 9.8% showed not satisfactory attitude. The study concluded that majority of the nurses had good knowledge of substance abuse and showed satisfactory attitude while caring for clients with substance abuse.*
Key words: *Nurse, knowledge, Attitude, Substance abuse.*

I. Introduction

The problem of substance abuse has become a major social and economic problem throughout the world. It has led to tremendous loss of human potential as well as an enormous drain on the financial resources of the governments of the countries involved in the fight against further spreading of this problem (WHO, 2006). People abuse substances such as drugs, alcohol, and tobacco for varied and complicated reasons, but it is clear that our society pays a significant cost. In the words of Watson (2002), the ever increasing health; social and economic lost related to alcohol consumption, tobacco smoking and the use of illicit drugs have become a major public health concern. Alcohol abuse has always existed in the world, but in the last century, the world has seen an alarming increase in the number of people ruining their lives through drug addiction. The menace is taking away millions of lives on a global scale and causing losses of billions of dollars each month in the global economy. People with these addictions are not fit to work. They are prone to be absent from work often and that hampers productivity.

Cannabis is the most commonly used illegal substance and accounts for an estimated 80% of illicit drug use worldwide (Hall, Doran, Degenhardt, & Shepard, 2006). The next most commonly used illegal psychoactive substances are stimulants; which include amphetamines used by 29.6 million people, cocaine by 13.3 million people and ecstasy by 8.3 million people (Hall et al., 2006). Data on the size of the injecting drug use population indicate that there are about 15.9 million people injecting drugs worldwide and is reported in 148 countries (Matters, Degenhardt, Philllips, Wiessing, Hickman, Strathdee, Panda, Tyndall, Toufik, & Mattick, 2008). The use of stimulants such as amphetamine has increased rapidly in Asia and Europe (WHO, 2004), South Africa (Parry, C., Pluddemann, A., & Myers, B.J. 2007) and the Americas (UNODC, 2009). The non-medical use of tranquillizers and analgesics is also thought to be considerable, although statistics on this area is not available for many countries including Nigeria.

The United Nation Office on Drug and Crime (UNODC) revealed that globally, about two billion people use alcohol and it is estimated that between 172 and 250 million persons used illicit drugs at least once

in 2007 (UNODC, 2009). According to the US Department of Health and Human Services Administration; in 2007, around 20.8 million people in the country were in need of treatment services for alcohol or substance abuse problem but had no access to it (SAMHSA, 2008).

According to WHO (2002), among industrialized countries where smoking has been common, smoking is estimated to cause over 90% of lung cancer in men and about 70% of lung cancer among women. Worldwide, it is estimated that tobacco causes about 8.8% of deaths (4.9 million) and 4.1% of Disability Adjusted Life Years (DALYs). Unless current trends are reversed, that figure is expected to rise to 10million deaths per year by the year 2020 or early 2030s, with 70% of those deaths occurring in developing countries.

In Nigeria, accounts of illicit drugs and other substances abused by youths dated most significantly after the civil war. As civilization increased in complexity, substance addiction became a serious problem. UNODC in 2007 estimated that in Nigeria, the age of first use of substance is between 10 to 29years. Consumption of cannabis among the population is 10.8%, followed by psychotropic substances (10.6%), heroin (1.6%) and cocaine (1.4%) in both urban and rural areas. Multiple drug use happens nationwide (7.8%) to varying degrees (UNODC, 2009)

Borno state is bounded by three countries namely Cameroon, Chad and Niger, this makes trafficking of substances within and across the borders very easy. This is evident in the magnitude of illicit drugs seizures at the borders and all over the 27 local government areas of the Borno state by the National Drug Law Enforcement Agency (NDLEA), a regulated body of the federal government of Nigeria that has among others the responsibility of controlling the sell and consumption of regulated drugs. The state command of the NDLEA arrested 221 persons with illicit drugs between 2007 and 2009 made up of 4,869.9Kg Indian hemp, 134.5Kg of psychotropic substances made up of Tramol, Diazepam (Valium) and Nitrazepam and 1400kg of cocaine (NDLEA, Borno Command report).

According to WHO, psychoactive substance abuse and substance abuse disorder can result in a wide range of health and social problems for individuals, their families and the wider community (WHO, 2004). It is estimated that worldwide there are about 25million people with drug dependence (UNODC/WHO, 2008). Harmful alcohol use accounts for 4.5% of the global burden of disease and is responsible for 3.8% of all deaths worldwide (WHO, 2009).

The International Council of Nurses (ICN) has stated that the fundamental responsibility of the nurse is fourfold: - to promote health, to prevent illness, to restore health and to alleviate suffering. Base on this fact, the nurse has to know much about substance abuse and its management, more so to establish good interpersonal relationship for quality nursing care of patients with substance abuse.

II.   Methodology

Research Design:
The study made use of a cross sectional descriptive design. It is cross sectional since data collection was done at one point in time (Polit, Beck, & Hungler, 2001).

Research Setting:
The study was conducted in 13 government-owned health facilities in Borno State which comprised of two tertiary health centres, five secondary health centres, and six primary health care centres.

Target Population for the Study:
The target population for the study was the entire registered nurses working in government owned health centres in Borno state. These health centres comprises of those owned by the local, state and federal government.

Sampling Techniques and Sample size:
Multi-stage sampling technique was used to select the health facilities and the nurses working therein. A total of two hundred and four nurses were selected for the study using Yamane's formula of sample size calculation, (Yamane, 1967) which comprised of 79 nurses from the tertiary health care centres, 81 nurses from the secondary health care centres and 44 nurses from the primary health care centres.

Research Instrument:
A self structured questionnaire was used for the data collection. The questionnaire was designed to collect demographic characteristics of the nurses; the second section was to assess nurses' knowledge of substance abuse and its prevention and management. The third section was made to examine the attitude of nurses towards care of clients with substance abuse using a likert's scale.

Face and content validities were ensured by experts to ascertain the validity of the instrument, while the reliability of the instrument was assessed using the split-half reliability. The Spearman-Brown co-efficient after computation was found to be 0.80.

Ethical consideration:

Permission to conduct the study was secured from the relevant authorities. Participant's right was respected and their consent solicited. Ethical considerations with regard to anonymity as well as the confidential nature of information obtained from respondents were adhered to strictly. Participation in the study was made voluntary.

Data analysis:

The data was analyzed using appropriate descriptive statistics (frequency tables, percentages, means and standard deviation). Inferential analysis was also used during the analysis to test the stated hypotheses. Nurses' knowledge was scored by allocating one (1) mark to every correct answer and zero (0) to an incorrect answer. The scores were brought to percentages for the purpose of analysis. The grading of the score is as follows: 70% to 100% = Very good, 60% to 69% = Good, 50% to 59% = Fair, 0% to 49% =Poor. A 5-point Likert scale of very much, much, little, very little and none was used to measure the attitude of nurses towards care of clients with substance abuse. The maximum score obtainable was 40. A score of 30 to 40 was considered very satisfactory attitude, while a score of 19 to 29 was considered satisfactory attitude and a score of 1 to 18 was regarded as non-satisfactory attitude. The statistical package for social sciences (SPSS), version 17 served as the software for the data analysis.

III. Results
Table 1: Socio-demographic characteristics of nurses:

Variables	Frequency (N = 204)	Percentage (%)
Gender		
Male	96	47.1
Female	108	52.9
Total	204	100
Age in years		
20-25	20	9.8
26-31	42	20.6
32-37	33	16.2
38-43	31	15.2
44-49	56	27.5
50-55	22	10.8
Total	204	100
Marital Status		
Single	44	21.6
Married	150	73.5
Divorced	4	2.0
Widowed	6	2.9
Total	204	100
Level of Nursing Education		
Diploma	183	89.7
Degree	19	9.3
Undergraduate	2	1.0
Postgraduate	0	0.0
Total	204	100

As reflected in table 1, the age range of the nurses was between 20 and 55 years, with an average of 38 years, and a standard deviation of ±9.36. Ninety-six (96) of the respondents, which constituted 47.1%, were male, while 108, which make up 52.9%, of the total respondents were females.

Regarding nurses marital status, 44(21.6%) of the nurses were single, while 150(73.5%) were married, 4(2.0%) nurses were divorced and 6(2.9%) widowed. With respect to level of Nursing education, 183 (89.7%) of the nurses were diploma holders, 19(9.3%) of them had a degree in nursing while 2(1.0%) of the nurses were undergraduate. None had a postgraduate qualification in nursing.

Table 2: Knowledge score of nurses

Nurses' knowledge graded in percentage					
Health facilities	70-100% very Good	60-69% Good	50-59% Fair	0-49% Poor	Total
Tertiary Health Care Centres	23	33	18	5	79
Secondary Health Care Centres	11	34	23	13	81
Primary Health Care Centres	6	20	7	11	44
Total	40	87	48	29	204
% of respondents in each grade	19.6	42.6	23.5	14.2	

The result on table 2 showed that 23 nurses from tertiary health care centres, 11 nurses from secondary health centres and 6 nurses from primary health care centre scored 70-100% (very good). Thirty-three (33) nurses from tertiary health centres, 34 nurses from secondary health centres and 20 nurses from primary health care centres scored 60-69% (good). Eighteen (18) nurses from tertiary health care centres, 23 nurses from secondary health care centres and 7 nurses from primary health care centres scored 50-59% (fair). Five(5) nurses from tertiary health care centres, 13 nurses from secondary health care centres and 11 nurses from primary health care centres scored less than 50% (poor). The overall scores showed that 40(19.6%) of the respondents scored between 70-100%, 87(42.6%) scored between 60-69% while 48(23.5%) scored between 50-59% and 29(14.2%) scored between 0-49%.

Table 3: Attitude of nurses toward care of clients with substance abuse

Attitude	Frequency	Percentage
Very satisfactory	32	15.7
Satisfactory	152	74.5
Non satisfactory	20	9.8
Total	204	100

The above table is a computed result from the Likert scale that was used to examine the attitude of nurses toward care of clients with substance abuse. A score of 30 to 40 was considered very satisfactory attitude, while a score of 19 to 29 was considered satisfactory attitude and a score of 1 to 18 was regarded as non-satisfactory attitude.

It reveals that 32 (15.7%) of nurses showed very satisfactory attitude, 152 (74.5%) which constituted the majority of the nurses exhibit satisfactory attitude while 20 (9.8%) nurses showed non satisfactory attitude toward care of clients of substance abuse.

Testing of Research Hypotheses
Hypothesis 1: There is no significant difference in nurses' knowledge on primary prevention and management of clients with substance abuse in the three levels of health care. The hypothesis was subjected to statistical analysis using Pearson Chi-Square test.

Table 4: Cross tabulation of knowledge score of nurses across the level of health care.

Health centres	Knowledge score of nurses				
	Very good	Good	Fair	Poor	Total
Tertiary health care	23 29.1%	33 41.8%	18 22.8%	5 6.3%	79 100%
Secondary health care	11 13.6%	34 42.0%	23 28.4%	13 16.0%	81 100%
Primary health care	6 13.6%	20 45.5%	7 15.9%	11 25.0%	44 100%
Total	40 19.6%	87 42.6%	48 23.5%	29 14.2%	204 100%

Chi-Square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.213[a]	6	0.019

The result (Pearson Chi-Square= 15.213, P = 0.019 shows that there is significant difference in nurses' knowledge on primary prevention and management of clients with substance abuse in the three levels of health care at 0.05 significant level (P-value (0.019) > α(0.05). Therefore the hypothesis which states that there is no significant difference in nurses' knowledge on primary prevention and management of clients with substance abuse in the three levels of health care is rejected.
Hypothesis 2: There is no significant difference in nurses' attitude towards care of clients with substance abuse across the levels of care. The hypothesis was also subjected to statistical analysis using Pearson Chi-Square test.

Table 5: Cross tabulation of nurses' attitude towards care of clients with substance abuse across the levels of care.

Nurses' attitude	Health Care centres			
	Tertiary health care	Secondary health care	Primary health care	Total
Very satisfactory	17 53.1%	9 28.1%	6 18.8%	32 100%
Satisfactory	57 37.5%	67 44.1%	28 18.4%	152 100%
Non satisfactory	5 25%	5 25%	10 50%	20 100%
Total	79 38.7%	81 39.7%	44 21.6%	204 100%

Chi-Square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.959ᵃ	4	0.007

The result (Pearson Chi-Square= 13.959, P = 0.007 shows that there is significant difference in nurses' attitude towards care of clients with substance abuse across the levels of care at 0.05 significant level (P-value (0.007) > α(0.05). Therefore the hypothesis which states that there is no difference in nurses' attitude towards care of clients with substance abuse across the levels of care is rejected.

IV.   Discussion of Findings

The study revealed that majority of the nurses passed the test that was conducted to them to assess their knowledge on prevention and management of substance abuse, though the high number emerging from the only tertiary health care centre that was sampled and used in the study. The above finding has contributed to the rejection of the first null hypothesis that was developed to guide this study which states that there is no significant difference in the nurses' knowledge on primary prevention and management of clients with substance abuse among the three levels of health care. The result of the finding is contrary to the findings conducted by by Owens, L., Gilmore, I.T., & Pirmohamed, M. (2000) in Liverpool to determine nurses' level of baseline knowledge of alcohol use and misuse and their attitudes in becoming involved in management of patients with alcohol related problems. They found out that knowledge and skills gap existed in the delivery of effective advice on alcohol related issues. Indeed, the result suggested that only one in two women and one in three men were receiving correct advice on sensible limits of alcohol consumption, this despite the fact that alcohol histories are taken. Owen's et al findings showed knowledge deficit in contrary to this findings, this could be due to the fact that Owen and his colleague concentrated on effective advice to patients alone neglecting the other components of preventive and curative aspect of cure which also forms part of what should have being included when assessing competency or knowledge. Furthermore, improvement in the nursing education of nurses has taken a wider dimension in updating nurses in all field of nursing so as to catch up with the goal of the profession. To buttress the above statement, Roche & Pidd in 2010 stated that "current effort in the development of the drugs and alcohol work force, recognize that education and training are one aspect of a wide range of factors that can influence nurses ability to care for patients with alcohol problems" (Roche & Pidd, 2010).

Regarding attitude of nurses towards care of clients with substance abuse, the summary of the findings showed that nurses have satisfactory or positive attitude towards clients of substance abuse. This finding is contrary to the findings of Howard & Chung, 2000. Their findings showed that negative attitudes have been found in a significant number of nursing population since the 1960s and 1970s, and although the proportion of nurses with pessimistic attitudes appeared to lessen throughout later decades, negative attitudes still exist today (Howard & Chung, 2000). Chung, J., Changh, J., Yeung, R., Wan, R. & Ho, S. T. (2003) revealed that nurses working in local emergency rooms in Hong Kong do exhibit negative attitude when working with alcoholic patients. Grafham et al study in 2003 supported the findings of this study. They reported that the culture of care for addiction is changing, with many nurses perceived substance misuse as more of illness than a moral weakness (Grafham e tal, 2004). In other words, they found that nurses have positive attitude towards patients with substance abuse problems. Although the generally negative attitudes towards patients with alcohol and other substance abuse problems observed in previous research were found in the current studies, nurses appeared to have an average attitude that were consistently quite positive, if not neutral. One possible reason for this may be a growing acceptance of people with alcohol and other substance abuse problems, likely related to

increase in nurses' knowledge about typical, behavioral, and cognitive causes of these conditions (Ducci & Goldman, 2008).

V.   Conclusion and Recommendations

Substance abuse has remained a threat to humanity with varying health implications to individuals, families, communities and the nation at large. This menace has constituted a challenge to nursing profession. This has become imperative to nurses to be knowledgeable about substance abuse so as to be fully equipped to render quality nursing care to clients of substance abuse.

Nursing and Midwifery Council of Nigeria (NMCN) that is responsible in training of psychiatric nurses should not only focus her attention in training such professionals in schools of psychiatric nursing alone but to add to the curricula of other schools of nursing, departments of nursing science of Nigerian universities, an elaborated course content equivalent to that of the schools of psychiatric so as to equip nurses with the principles and practice of psychiatric nursing.

Nurses at all levels of health care facilities should understand that only a sound mind, stable mental acuity can allow an individual to realize his or her own abilities, cope with the normal stress of life, work productively and fruitfully and have the capacity to make contributions to his or her community.

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