

## EVALUATION OF THE NURSING CARE ADMINISTERED TO PSYCHOACTIVE SUBSTANCE DEPENDENT PATIENTS MATHARI HOSPITAL IN NAIROBI- KENYA

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### Abstract:-

*Different nursing care approaches have been used in the care of psychoactive substance dependent patients as shown by literature. Nurses form a core component of many healthcare systems so their role in responding to problems related to psychoactive substance use is crucial (Murray & Andrews, 2002). The aim of the study was to evaluate the nursing Care approach administered to Psychoactive Substance Dependent Patients admitted in substance dependence rehabilitation unit at Mathari hospital in Nairobi. This was a cross sectional descriptive study conducted in November 2010. 22 nurses taking care of psychoactive substance dependent patients were purposively included. Pretest was done in Asumbi rehabilitation centre in Nairobi. Data analysis methods included use of descriptive and inferential statistics. The findings were presented using charts, tables, and narrative form. Results indicated that 45% manage withdrawal symptoms, while 41% do routine nursing care to the psychoactive substance dependent patient. The nurses could not identify exactly their role in the care of psychoactive substance dependent patients after detoxification period. Therefore it was recommended that psychoactive substance dependent patients and their relatives should be actively involved in the plan of care.*

**Key Words:** - Institution nursing care approach

## **INTRODUCTION:-**

Literature defines psychoactive substance dependence as a cluster of cognitive, behavioral, and physiological symptoms where a person continues to use psychoactive substance despite significant substance related problems. The patient engages in a pattern of repeated self-administration of psychoactive substance that usually results in tolerance, withdrawal syndrome and/or compulsive psychoactive substance taking behaviour (American Psychiatric Association, 2000).

A United Nations report on substance estimates that at least 25 million people (0.6%) aged between 15-64 years are dependent on psychoactive substance and that about 200 million people use some types of substances of dependence (World Substance Report, 2007). Psychoactive substances are more widely used among males (7.2%) than females (3.9%) and among young people than older people (Greenfacts, 2006). In Kenya, it is estimated that one in every fifteen Kenyan high school and college students is taking psychoactive substance (ChildWelfare Association, 2004).

Use of psychoactive substance poses a significant threat to health, economic and social sectors of the community. In 2005, the World Health Organization (WHO) raised a concern that health problems associated with psychoactive substance dependence had reached alarming levels because psychoactive substance use contributes to a wide range of health problems and high-risk behaviours. These health problems include mental disorders, road traffic injuries, sexually transmitted diseases, and other blood-borne infections like hepatitis B and C (WHO, 2005). Buddy (2008) reported that most of psychoactive substance users end up into mental hospital, either because of psychoactive substance-induced depression or psychosis.

Nurses have a 24 hour contact with patients, and have a unique opportunity presented through their physical interactions with young people, families and significant others (Cohen & Struening, 1992). Previous studies indicated that nurses have inadequate knowledge (Mutunga, et al., 2006) and have deficient scientific approach in caring for psychoactive substance dependent patients (Mutunga & Karani, 2007).

Different approaches have been used in the care of psychoactive substance dependent patients as shown by literature. One of the approaches is the therapeutic community (TC) psychoactive substance abuse treatment model described by Woodhams (2001). This is a therapeutic approach in which staff members interact with psychoactive substance dependent residents in an environment where "community approach" is the organizing principle. This community is assumed to be responsible for one another's treatment, having an equal role in the treatment process rather than staff bearing the primary responsibility for treatment.

Psychiatrists have always used biomedical model of care which is limited to prescription of antidotes to the substances of dependency and symptomatic management of withdrawal symptoms (Fava & Sonino, 2008). In the USA, a report by the United States National Institute of Substance Abuse shows that, most of the treatment approaches are community-based where general health education on substance abuse is given. Sometimes they rehabilitate in the hospital where detoxification is done during which time the nurse receives instruction from the general practitioner. In this kind of management approach, the unique role of the nurse is not defined (United States National Institute of Substance Abuse, 2006).

Nurses form a core component in healthcare system; hence their role in the management of patients suffering from psychoactive substance use related problems is critical (Murray & Andrews, 2002). National Agency for the Campaign against psychoactive substance Abuse (NACADA) has raised a concern that, there are no set guidelines and standards by health providers for management and rehabilitation of psychoactive substance dependent persons (NACADA, 2002).

There is also an agreement by the Ministry of Health, Kenya, that all health personnel should be well-involved in the treatment of mental disorders and psychoactive substance dependence, in accordance to the mental health policy (MoH, 2004). The mental health policy in Kenya too recommends that, well-trained mental health nurses should be deployed to handle patients suffering from psychoactive substance dependent disorders in all health institutions (MoH, 2004). To make nursing care responsive to the psychoactive substance dependent patient's needs, nursing care delivery must consider cultural approaches in the care of psychoactive substance dependent patients.

Evidence suggests that psychoactive substance abuse and its deleterious effects are widespread both in the developed and developing countries. Despite extensive review of literature, no documented information on the CICA care modalities administered to psychoactive substance dependent patients in Kenya in terms of initial care, prevention of relapse and prevention of readmission. Furthermore, literature reveals that nurses employed within psychiatric healthcare settings consider caring for patients with psychoactive substance dependent problems to be a difficult and unpleasant experience (Carroll, 1996).

Nurses form a core component in healthcare system, hence their role in the management of patients suffering from psychoactive substance use related problems is critical (Murray & Andrews, 2002). This is because nurses are with the patients in the rehabilitation centres for 24 hours each day (Cohen & Struening, 1992).

Studies have consistently indicated that the level of therapeutic interaction between psychiatric nurses and psychoactive substance dependent patients is often limited, and that many patients experience a lack of involvement and engagement in the planning and implementation of their own care (Rassool, 1993). One of the most consistent complaints made by patients is that too little effort is made to engage with them in their own care (Laurence, 2002).

## **Statement of the Problem**

Evidence suggests that psychoactive substance abuse and its deleterious effects are widespread both in the developed and developing countries. In Kenya for instance, a review of admission records of patients admitted with psychoactive substance related problems at Mathari hospital reveal an upward trend. Despite extensive review of literature, scanty information exist on the effectiveness of the nursing care administered to these patients in terms of recovery, prevention of relapse and prevention of readmission. Furthermore, literature reveals that nurses employed within psychiatric healthcare settings consider caring for patients with psychoactive substance dependent problems to be a difficult and unpleasant experience (Carroll, 1996). Studies have consistently indicated that the level of therapeutic interaction between psychiatric nurses and psychoactive substance dependent patients is often limited, and that many patients experience a lack of involvement and engagement in the planning and implementation of their own care (Rassool, 1993). In view of the fore mentioned findings from the literature review, the investigator postulates that there is a need to assess the nursing care given to psychoactive substance use patients International Journal of Business & Management Science

## **Methodology**

This was a descriptive cross sectional study on nurses in direct care of psychoactive substance dependent patients. The study was carried out in Mathari Hospital Substance Rehabilitation Unit. Mathari Hospital is located approximately 8 kilometres from the city centre along Nairobi- Thika road. The facility has a 700-bed capacity, with an average 650 bed occupancy and is divided into two sections; the civil section, with a 316 bed capacity for ordinary patients and 34 amenity (private) beds while the maximum-security unit for mentally disordered offenders who are accused of capital offences and for the other mentally disordered offenders referred for assessment and treatment within the criminal justice system, comprises a 350 bed capacity. Within the same facility, there is a 46 bed capacity psychoactive substance rehabilitation unit for both male and female patients. All the psychoactive substance use patients are first admitted in the other wards for detoxification before they are transferred to psychoactive substance rehabilitation unit. Study Population was the Nurses taking care of the psychoactive substance dependent patients. Study participants had to fulfill all of the following inclusion criteria; Nurses in direct care of patients suffering from psychoactive substance use problems and with a minimum work experience in a psychoactive substance care unit of 1 year. Nurses who gave informed voluntary consent to participate in the study.

All (22) nurses involved in direct care of patients suffering from psychoactive substance use problems were purposively included in the study. To test for the reliability and validity of the study tool, a pre-test was carried out at Asumbi rehabilitation unit. The hospital was selected because it is a referral and a training hospital with a psychiatric unit. Appropriate modifications of the tools were effected before data collection was executed. A semi-structured questionnaire was administered to the nurse participants. This yielded both qualitative and quantitative data.

## **Data Management: Data Cleaning, Entry, Analysis and Presentation**

At the end of each data collection session, the filled out data collection tool were checked out for completeness and consistency. Data collection tools that were found to be incomplete or inconsistent were discarded. The collected data were cleaned, sorted and coded for easy of entry. Data were entered using Epi- info soft ware 2009 Version 3.5.1, and analyzed using both descriptive and inferential statistics including standard deviation, mean, mode, Chi- square, Ttest. Multiple regression analyses were utilized to show relationships between variables. The qualitative data collected was processed to make it ready for analysis. Processing was done through editing, coding, classification and tabulation. Editing involved careful scrutiny of the collected data to ensure that data was correct, accurate and consistent. The edited data was arranged and entered in the computer Microsoft office to facilitate coding and tabulation. The results were presented in tables of frequency distributions, pie chart, percentages, graphs, frequency polygons and narrative form.

The investigator strived to minimize errors and biases first by ensuring that appropriate sampling procedures were followed. Secondly, pretesting and effecting necessary changes to strengthen data collection techniques to ensure maximum accuracy, reliability and validity of data collected. Research assistants were adequately trained and supervised.

The ethical clearance to conduct this research was obtained from the ethics and research committee of Kenyatta National Hospital. The investigator also obtained authority from the Ministry of Medical Services on behalf of the Government of Kenya to conduct this research study in Mathari hospital, Confidentiality of the study participants was ensured throughout the execution of the study. All the information obtained was used only for the purpose of this study. Study participants were required to give their own individual voluntary informed consent of participation in this study.

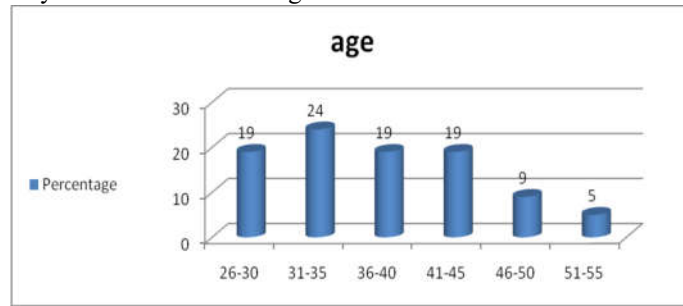
## **Findings**

### **Participants.**

Data were collected from 22 nurses in direct care of psychoactive substance dependent patients. These are all the nurses taking care of the psychoactive substance dependent patients in the rehabilitation unit.

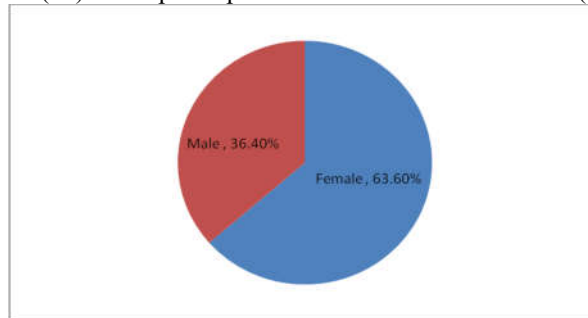
### **Socio-demographic Data**

The nurses' ages ranged between 26 and 55 with a mean age of 37 years. A total of 81% (17) of the participants' age ranged between 26 and 45 years as illustrated in figure 1 below.



**Figure 1: Participants' age**

Figure 2 below indicates that, 64% (14) of the participants were females while 36.4% (8) were male nurses.



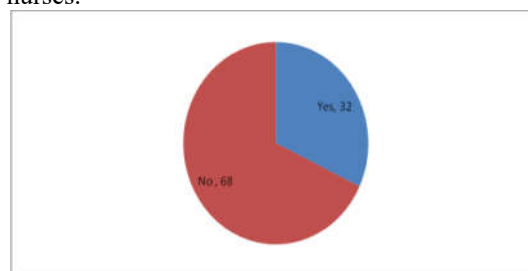
**Figure 2: Participants' gender**

The marital status varied, 68% (15) of the Participants were married 27% (6) were single while 5% (1) were separated as table 1 below shows.

**Table 1 Participants' marital status**

Marital status	Frequency	Percent
Married	15	68
Single	6	27
Separated	1	5
Total	22	100

Figure 3 below shows that, 68% (15) of the participants had not been trained as psychiatric nurses while 32% (7) had been trained as psychiatric nurses.



**Figure 3: Participants' psychiatric training**

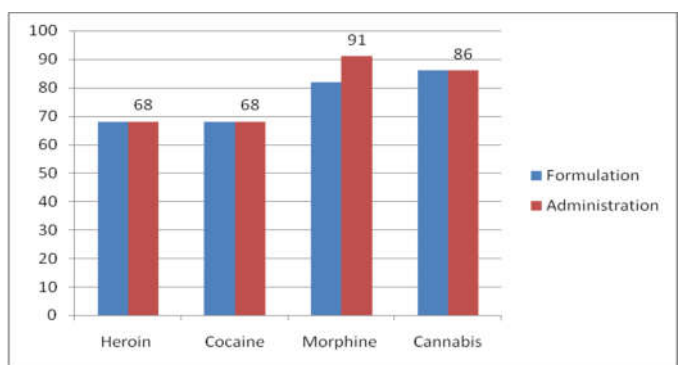
The table 2 below shows that, the duration of years of providing nursing care to psychoactive substance dependent patients ranged between 1 year to 20 years with a mean of 8.9. 36% (8) of the participants had the experience of taking care of psychoactive substance dependent patients of between 1-5 years, 41% (9) had experience of between 6-10 years.

**Table 2: Participants' experience caring for psychoactive substance dependent patients**

Number of years caring for substance dependent patients	Frequency	Percent
1-5	8	36
6-10		41
11-15	1	5
16-20	4	18
Total	22	100

**Participant's Knowledge on psychoactive substance**

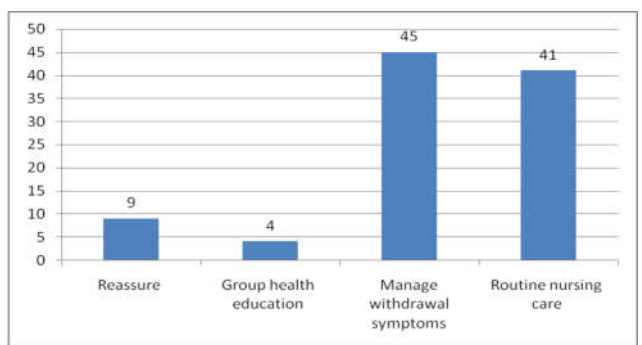
A total of 68% (15) of the participants correctly identified the formulation of heroin, 68% (15) correctly identified the formulation of cocaine, 82% (18) correctly identified the formulation of morphine while 68% (15) correctly identified the route of administration of heroin, 68% (15) correctly identified the administration of cocaine, 91% (20) correctly identified the administration of morphine and 86% (19) correctly identified the administration of cannabis as shown in figure 4 below.



**Figure 4: Participants' knowledge**

**Psychoactive substance Dependence Patient Nursing Care**

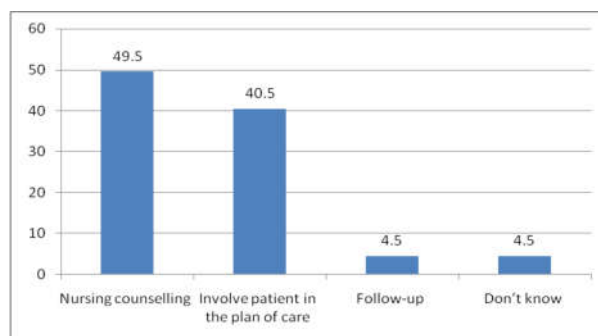
About 9% (2) of the participants indicated that they reassure the patients, 4% (1) give group health education, 45% (10) manage withdrawal symptoms, while 41% (9) do routine nursing care to the psychoactive substance dependent patients as shown in figure 5 below.



**Figure 5: Conventional Institution Care Approach**

**Ways of Improving Nursing Care**

Nurses gave different views on the ways of improving care of psychoactive substance dependent patients as shown in figure 7 below. About 50% (11) of the participants said that nursing counselling will greatly improve the care, 40% (9) suggested involvement of the psychoactive substance dependent patient in their care, 4.5% (1) suggested follow up of the patients post discharge, while 4.5% (1) did not know what can be done to improve the care (see figure 6 below).



**Figure 6: Ways of improving nursing-care**

## DISCUSSION

### Demographic information

Data were collected from 22 nurses in direct care of psychoactive substance dependent patients.

The nurses' ages ranged between 26 and 55 with a mean age of 37.2 years. Despite the fact that these facilities deal mainly with patients with mental problems, only 32% had post-basic psychiatric training. This could probably be a reflection of the low rates of specialization in psychiatry by nurses. Post-basic psychiatric training impacts heavily on the knowledge, attitude and skills of nurses in the management of psychoactive substance dependent patients (Mutunga & Karani, 2007).

The participants had a moderate working experience with 41% of the participants having worked for duration of between 6 and 10 years. These were few years of experience considering the result of the study by Elliott and Frank (2000) where majority of the participants had worked for 25 years and above. The duration of years of nursing psychoactive substance dependent patients ranged between 3 years to 20 years with a mean of 8.9.

### Participant's level of Knowledge

Majority, 86% correctly identified the formulation of cannabis while 86% correctly identified its administration. This was reflected by a study done by Mutunga and Karani in 2007 on the effect of psychiatric nursing training on management of psychoactive substance dependent patients that demonstrated that 76% of all the participants knew about cannabis.

### Psychoactive substance Dependence Patient Care

Majority, 41% of the nurses indicated that they do vital signs (routine nursing care) during detoxification period but they could not point out the specific care they provide to the psychoactive substance dependent patients after detoxification. Detoxification takes at most two weeks and the psychoactive substance dependent patients on average are admitted not less than 8 weeks. Therefore during the psychoactive substance dependent patient's admission, a nurse will be actively involved in the care only a quarter of the duration. Nurses gave interventions by psychiatric physicians as nurses' own intervention (general detoxification). This shows that nurses are not sure of the kind of care they give to psychoactive substance dependent patients. In his study, Rubbin on psychiatric nursing coping in South Africa revealed that majority, (72%) of nurses felt that they were not very useful to the patients post detoxification period. Ten percent of the nurses supported that; nurses should not be deployed in the psychoactive substance rehabilitation wards (Rubbin, 2004)

### Ways of Improving Nursing Care

Nurses gave different views on the ways of improving care of psychoactive substance dependent patients; 50% said that nursing counselling will greatly improve the care while 40% felt that involvement of the psychoactive substance dependent patients in the planning of the care will improve the care. These ideas given by the nurses were consisted with ideas from American nurses (American Psychiatric Association. 2000) who felt that, the nurses caring for psychoactive substance dependent patients should embrace psychoanalytic idea to involve the patient and the family in the care and do counselling of the patients.

## Conclusions

The nurses could not identify exactly their role in the care of psychoactive substance dependent patients after detoxification period.

Post psychoactive substance dependent rehabilitation and discharge, psychoactive substance dependent patient follow-up was minimal

### Recommendations

- [1]. Nurses should be trained on the care of psychoactive substance dependent patients
- [2]. Psychoactive substance dependent patients and their relatives should be actively involved in the plan of care.
- [3]. Measures should be put in place to do a post discharge follow-up of the psychoactive substance dependent patients.

## REFERENCES

- [1]. American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*. (4<sup>th</sup> edition). New York: Basic Books.
- [2]. Buddy T. (2008). Substance Abuse and Mental Illness: Substance Abuse Increases Mental Illness Progression. *Mental Illness Newsletter* July 17, 2008 issue.
- [3]. Carroll J. (1996). Attitudes to Substance Users According to Staff Grade. *Professional Nurse Journal*, **11**(6), 728–730.
- [4]. Cohen E., and Struening H. (1992). Opinions about Mental Illness in the Personnel of Two Large Mental Hospitals. *Journal of Abnormal and Social Psychology*, **64** (5), 349-360.
- [5]. Elliott, T.R., and Frank, R., (2000). Nurses' Personal Experience and Reactions to Depression and Physical Disability. *Sweden Journal of Rehabilitation Psychology*, **35**, 1111-19.
- [6]. Fava, G.A. & Sonino, N., (2008). The Biopsychosocial Model Thirty Years Later. *Psychother Psychosom. Journal of Psychotherapy and Psychosomatics*, **77**:1-2 (online available from <http://www.sciencedaily.com/releases/2008/01/080121115422.htm> accessed on 27<sup>th</sup> March, 2009).
- [7]. GreenFacts., (2006). Scientific Facts on Psychoactive Substances. (Online available from [http://www.greenfacts.org/illicit\\_substances/](http://www.greenfacts.org/illicit_substances/) accessed on 23 January, 2009).
- [8]. Laurence, J., (2002). *Pure Madness: How Fear Drives the Mental Health System*. (1<sup>st</sup> edition). Routledge, London.
- [9]. Mutunga, C., and Karani, A., (2007). Effect of Psychiatric Nursing Training on Management of Substance Dependent Patients. *Kenya Nursing Journal*, **36**(2), 21-26.
- [10]. Payne, C.E., (2000). *The Moderating Effect of Attitude on Nurse*. Blackwell, [online at <http://www.blackwell-synergy.com> accessed on 2 December 2007].
- [11]. NACADA. (2002). Young Adults in Peril: Alcohol and Substance Abuse in Kenya. *Kenya NACADA Nurse Journal*, **11**(6), 718–720.
- [12]. Rassool, G.H., (1993). Nursing and Substance Misuse: Responding To the Challenge. *Journal of Advanced Nursing*, **18**(7), 1401–1407.



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10<sup>th</sup> September 2009

Ref: KNH/UON-ERC/A/302

Catherine Syombua Mutunga Mwenda  
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University of Nairobi

Dear Catherine

RESEARCH PROPOSAL: "A NURSING INTERVENTION MODEL FOR THE CARE OF PSYCHOACTIVE SUBSTANCE DEPENDENT PATIENTS IN KENYA" (P147/5/20/9)

This is to inform you that the Kenyatta National Hospital/UON Ethics and Research Committee has reviewed and approved your above revised research proposal for the period 10<sup>th</sup> September 2009- 9<sup>th</sup> September, 2010.

You will be required to request for a renewal of the approval if you intend to continue with the study beyond the deadline given. Clearance for export of biological specimen must also be obtained from KNH-ERC for each batch.

On behalf of the Committee, I wish you fruitful research and look forward to receiving a summary of the research findings upon completion of the study.

This information will form part of database that will be consulted in future when processing related research study so as to minimize chances of study duplication.

Yours sincerely

DR. L. MUCHIRI  
AG. SECRETARY, KNH/UON-ERC

cc The Chairperson, KNH/UON-ERC  
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