

**KNOWLEDGE, ATTITUDE AND
MANAGEMENT SKILLS OF NURSES
TOWARDS SUBSTANCE DEPENDENT
PATIENTS AT MATHARI HOSPITAL,
NAIROBI**

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A Dissertation Presented in Partial Fulfillment of the
Requirement for the Award of the Degree of Master
of Science in Mental Health and Psychiatric Nursing,
University of Nairobi.

By

Mutunga Catherine Syombua

2006

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DECLARATION

I, Catherine Syombua Mutunga, hereby declare that all the work submitted is original and it has never been presented to any university for the award of any degree.

Signed  (candidate)

Dated 1st Nov' 2006.


APPROVAL

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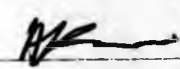
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ACKNOWLEDGMENTS

This dissertation is dedicated to my family: David my husband, my children Daniel and Joy, and all the members of my family for their support and patience during this study. Also to my father Peter Mutunga and my mother Patricia K. Mutunga for their love, encouragement and support.

ACKNOWLEDGEMENTS

This dissertation came to accomplishment through the assistance of many individuals who need special mention and acknowledgement that without their support, the project could not have been successful, and the final report so presented.

My deep appreciation to my principal supervisor **Mrs. I. Kivuti- Bitok** and other supervisors **Dr. A. Karani and Dr. C. Othieno** without whose guidance and constructive criticism this project would not have been accomplished.

Mr. Nyambola, Mr. P. Waithaka, Prof. Wangombe, and Mr. A. Ayieko Ong'any deserve special mention especially on their advice as statisticians and on the whole practicability of the methodology, analysis and final presentation.

Sincere gratitude also goes to my postgraduate classmates: Wagoro Miriam, Makworo Drucilla, Vincent Mukthar, Githemo Grace, Rotich Everlin, Hannah Inyama, and Mark Lewa Ngui whose criticism made the dissertation as refined as it is now.

I am very grateful to all of you and many other unmentioned individuals who contributed to this achievement dearly.

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ABBREVIATIONS

AIDS: Acquired Immune Deficiency Syndrome

C.I: Confidence interval.

HIV: Human Immunodeficiency Virus

MOH: Ministry of Health

NACADA: National Agency for Campaign against Drug Abuse

OAU/AU: Organization of African Unity (Now African Union)

UNDCP: United Nations Drug Control Program

WHO: World Health Organization

APA: American Psychiatric Association

UN: United Nations

KNH: Kenyatta National Hospital

O.R: Odds ratio

P: probability

VCT: voluntary counseling and testing

Z: Normal distribution

OPERATIONAL DEFINATIONS

Substance abuse: use of substances for wrong purpose or use of drug incorrectly with significant adverse consequences related to the repeated use of the substance.

Substance dependence: uncontrolled compulsive drug taking, repeated administration and craving for more of the drug leading to increased physiological tolerance to exposure

Drug: A drug is any substance, which when taken into the living organism may modify one or more of the organisms functions. Mind altering drugs are known as psychoactive drugs. These alter the mental state and function and are drugs most abused (Asuni 1986)

Hard drugs: The stronger drug that is more likely to lead to dependence, e.g. cocaine and heroin.

Illicit: Illegal or not allowed by the law. Marijuana, cocaine and heroin are illegal drugs in Kenya

Substance: A drug of abuse, a medication or a toxin

Drug use: The consumption of any drug

Experienced: Worked for more than 15 years

ABSTRACT

Introduction: Substance use is significantly related to a number of health issues including HIV/AIDS, sexually transmitted diseases, and other health problems (Incardi, 1995. Trapido & Lewis 1990). Several studies have been done to explore the aspects of community statistics on substance dependence. However, Very few studies focusing on the nurses' knowledge, attitude and skills towards substance dependent patients have been done worldwide and actually none-in Kenya. The objective of this study was to determine the nurses' knowledge, attitude and skills towards management of substance dependent patients and the effect of post-basic psychiatric training on them.

Methods: A cross sectional descriptive study was done. The study population was nurses in direct care of mentally ill patients at Mathari hospital. A sample of 184 nurses was randomly selected from all the 242 eligible nurses. Data on participants' knowledge, attitude and skills was collected using a semi-structured questionnaire, self administered by the participants. The data was entered, cleaned and analyzed in epi-info soft ware 2000 version 3.3.2 and standard normal distribution (z-value) to compute the frequencies and the associations between knowledge, attitude and practice with participants' experience, post-basic psychiatry training and other demographic variables. These associations were tested using chi-square tests of statistical significance.

Results: One fifty five (155) participants responded of whom 66% (101) were females. 80% (124) of the participants were from the civil department. Working experience ranged from 1 to 33 years with a mean and median of 15 years. 27.7% (43) of all the participants had a post basic psychiatric training. 43.2% (67) of the respondents had heard about

heroin, 29% (45) correctly identified its formulations while 29.7% (45) correctly identified the route of heroin use. 49% (21) of those with post-basic training correctly identified the route of heroin administration while 21% (24) of those without post-basic training correctly identified its use. OR 3.5 (95% CI 1.7-7.4), P= 0.0007. 74% (114) would not prefer nursing substance dependent patients as their first choice. 74.8% (115) of the participants felt like quitting their profession due to nursing these patients. 54% (23), of those with post-basic training felt like quitting, 83% (93) of those without felt like quitting OR 0.2 (95% CI 0.1-0.5) $\chi^2 = 14.3$ P= 0.0001. 16% (25) of all the nurses had drawn a nursing care plan for patients with substance induced psychosis. 40% (17) of those with post-basic psychiatric training had drawn a nursing care plan for a patient with substance dependent psychiatric problem as compared to 7% (8) of those without, OR 8.5 (95% CI 3.3- 21.8), P < 0.0001.

Discussion: This study of nurses' knowledge, attitude and skills at the biggest referral mental hospital in Kenya showed that nurses lack adequate knowledge on substances. Other studies have shown that inadequate knowledge leads to negative attitude and poor skills, (Horne 1985), as was shown in this study. Nurses with post-basic training were shown to be having more knowledge of substances which translated to better skills and more positive attitude towards substance dependent psychiatric patients.

Recommendation: As a strategy to improve nurses' attitude and skills towards substance dependent psychiatric patients, more nurses caring for mentally ill patients should be encouraged to go for post basic psychiatric training to improve their knowledge.

CHAPTER ONE: INTRODUCTION

1.1 Background Information

Psychoactive substances are mind-altering substances. These alter the mental state and function and are substances most abused (Asuni 1986). Substance dependence: is a cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues to use the substance despite significant substance related problems. There is a pattern of repeated self-administration that usually results in tolerance, withdrawal and compulsive substance taking behavior (APA 2000)

It is estimated that globally, at least 70-80% of high school students are involved in alcohol and other substances of abuse (Linsey 1992). Most of these patients end up into the mental hospital, either because of substance-induced depression or psychosis. There is a general agreement that substance dependency is a crime against the society and the perception of substance abusers as criminals (Acuda & Nease 1985), therefore, the mental health specialists are not exempted from the negative attitude towards the substance abusers (Dancy & Ralston 2002).

The impact of mental illness and substance abuse upon people, and nations has been profoundly under estimated and under appreciated. Much of the personal and societal burden of substance abuse disorders could be prevented or alleviated if people at risk of experiencing these disorders sought and received appropriate prevention and treatment intervention (Druce 1995). The negative impacts of the illicit substance trade touch every society in the world. The 2000 world substance report estimates that, 5% of the global population aged 15-64 years have consumed illicit substances at least once in the last 12 months. (Skodol & Oldan 2000)

To provide services responsive to society's health care needs, nursing activities and nursing roles must adapt to changes in health care needs and treatment trends. If the society perceives substance abuse as deviant behavior then the abusers are considered deviant. Mental health professionals have a casual if not hostile approach towards substance abusers. (Jerome & Jason 1998)

In Kenya, during the past decade, the use and abuse of substances especially cocaine (Slang, Rock, crack) morphine, heroin, and cannabis (marijuana, bhang), have risen dramatically and have spawned major health and social problems (WHO 1998)

While all health professionals encounter clients with substance-related health problems, nurses, as the largest group of health care providers, have the greatest contact with clients and patients.

Unfortunately, education on the substances of abuse has been slow though still considered essential in the advancing nursing professionalism. The nurses should have a positive attitude, get information and develop skills on the illicit substance related problems.

Registered nurses who work in substance dependent services are integral to the treatment people receive as they try to break from the harmful effects of illicit substances. They care for clients with poly-substance abuse coupled with mental illness. The nurses are expected to teach the patients on physical aspects of substance dependency and the body in recovery. Registered nurses ought to apply their extensive knowledge of medication to manage withdrawal. Well-developed assessment, organizational and supervisory skills are a must (Alberta 2004)

1.2 Statement of the Research Problem

Generally, recent surveys of nurses and other health professionals have indicated negative attitude towards substance abusers, which has compromised the nurses' opportunity to increase learning and clinical skills (Blum & Braverman 2000). More so, most mental health professionals are ill prepared to help substance-abusing individuals to achieve recovery (Jerome & Jason 1998, Mac Galanter & Kleeber 1999).

In America research has shown that stigma from nurses and other health care providers deter many substance dependent Americans from entering treatment (Skodol & Oldan 2000).

A study done in Northern Ireland, Europe suggest that action need to be taken to address the deficit in knowledge, skills and values of health care professionals including nurses in relation to illicit substance users (McLaughlin, McKennas & Leslie 2000). According to the proposed mental health policy in Kenya 2004, there is an agreement that all health personnel including nurses should be well versed with treatment of mental disorders and substance dependence. It also points out that, in all health institutions well trained mental health nurses should be deployed to handle the patients suffering from substance dependent disorders. For nurses to be able to comfortably handle these patients, adequate knowledge, positive attitude and skills should be focused. Boiwo (2005), in his project on the attitude of nurse towards psychiatric nursing in Nairobi noted that 52% of nurses had negative attitude towards psychiatric nursing. Maxwell (1985) observed that, psychiatrists and other health workers especially nurses consider mental health facilities ignored. This impact negatively in terms of morale and motivation both for the patients care and nurses training. He further said that for effective management of mental illness including substance dependent and training of personnel in the country, urgent improvement of facilities is needed.

A report from Mathari hospital November 2005 shows that only 48% are psychiatric trained nurses. Data received from record department shows a 65% rate of re-admission of substance dependent patients. Years 2001-2004 report: Total admissions of substance dependant patients was 1,091 while readmissions were 700 patients. These patients average stay in the hospital is three months and some of the patients are readmitted almost immediately after discharge. This is a serious issue, which need to be addressed in the fight against substance dependency.

There are inadequate facilities for substance dependence patients' rehabilitation. The female patients are managed together with other female patients who have other psychiatric conditions. This leads to poor monitoring of the substance dependent patient, which might lead to the patients continuing with the same habit in the hospital. For a successful battle, the enemy ought to be well known, therefore its time to focus on the care provided to the substance dependent patients by health care professionals in the fight against substance abuse.

1.3 Research Questions

1. What is the level of knowledge of the nurses towards the management of substance dependent patients
2. What are the nurses' attitude towards substance dependent patients
3. What is the level of management skills of the nurses in the care of substance dependent patients
4. Is there significant difference in knowledge, attitude and skills between trained and non-trained psychiatric nurses in the management of substance dependent patients?

1.4 Objectives

1.4.1 Broad objectives

To determine the knowledge, attitude and skills of the psychiatric nurses towards management of substance dependent patients

1.4.2 Specific objectives

1. To establish the level of knowledge of nurses in the care of substance dependent patients.
2. To assess the attitude of nurses towards substance dependent patients.
3. To assess the level of skills of nurses in the management of substance dependent patients.
4. To determine the difference in knowledge, attitude and skills between trained and non-trained psychiatric nurses in the management of substance dependent psychiatric patients.

1.5 Hypotheses

1. At least 50% of the nurses have adequate knowledge for the management of substance dependent patients.
2. At least 50% of the respondents have positive attitude towards substance dependent patients.
3. At least 50% of the respondents have adequate skills for the management of substance dependent patients.
4. There is no significant difference in knowledge, attitude and skills between trained and non-trained psychiatric nurses in the management of substance dependent patients.

1.6 Theoretical Framework

This study is based on the Interpersonal nursing theory of Hildegard E. Peplau.(Forchuk & Brown 1989).The theory seeks to explain the psychotherapeutic role of the nurse in the interpersonal relationship. By experiencing a health relationship with the nurse, the patient can learn to have more satisfying interpersonal relationship. If the nurse develops negative attitude towards the patient, the nurse and the patient remain strangers.

Peplau defines nursing as a significant, therapeutic and interpersonal process (Forchuk & Brown 1989). Psychiatric nurses must first become aware of themselves, their personal needs and their personal relations. Nurses can then manage their own behavior and use themselves as therapeutic agents to assist clients to respond and modify substance dependent behaviors. Nurse patient relationship should be a mutual learning experience.

For the nurse to develop a positive attitude towards the substance dependent patients, the nurse should be patient focused, maintaining a non-judgmental approach, offering unconditional warmth and providing hope of having substance free life. The interpersonal process is a participatory relationship between nurse and patient.

The nurse has six roles;

Teacher: One who imparts knowledge in reference to a need or interest.

Resource: One who provides specific needed information that aids in the understanding of a problem or new situation.

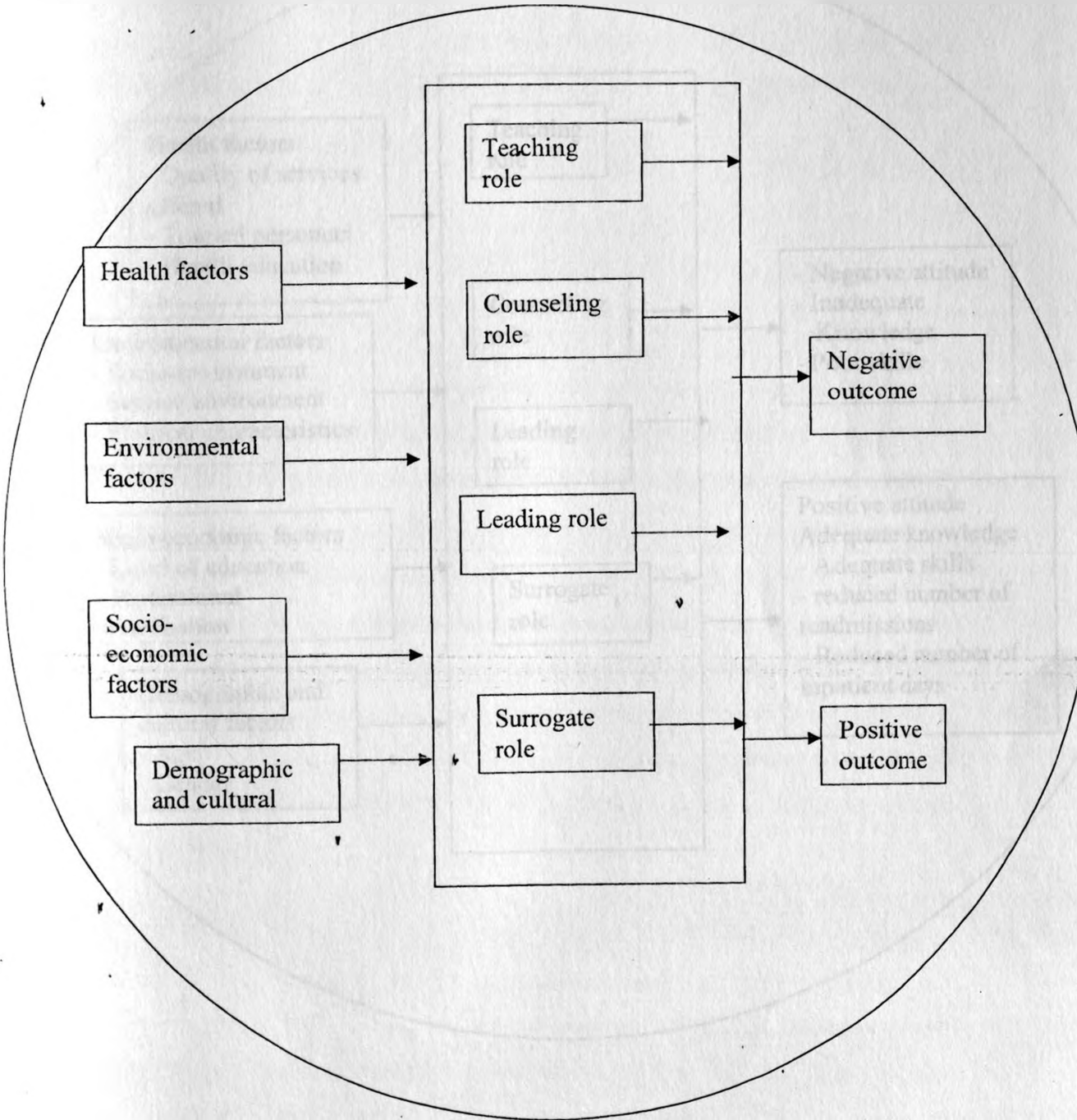
Counsellor: One who, through the use of certain skills and attitudes, aid another in recognizing, facing, accepting, and resolving problems that are interfering with other person's ability to live happily and effectively,

Leader: One who carries the process of initiation and maintenance of group goals through interaction.

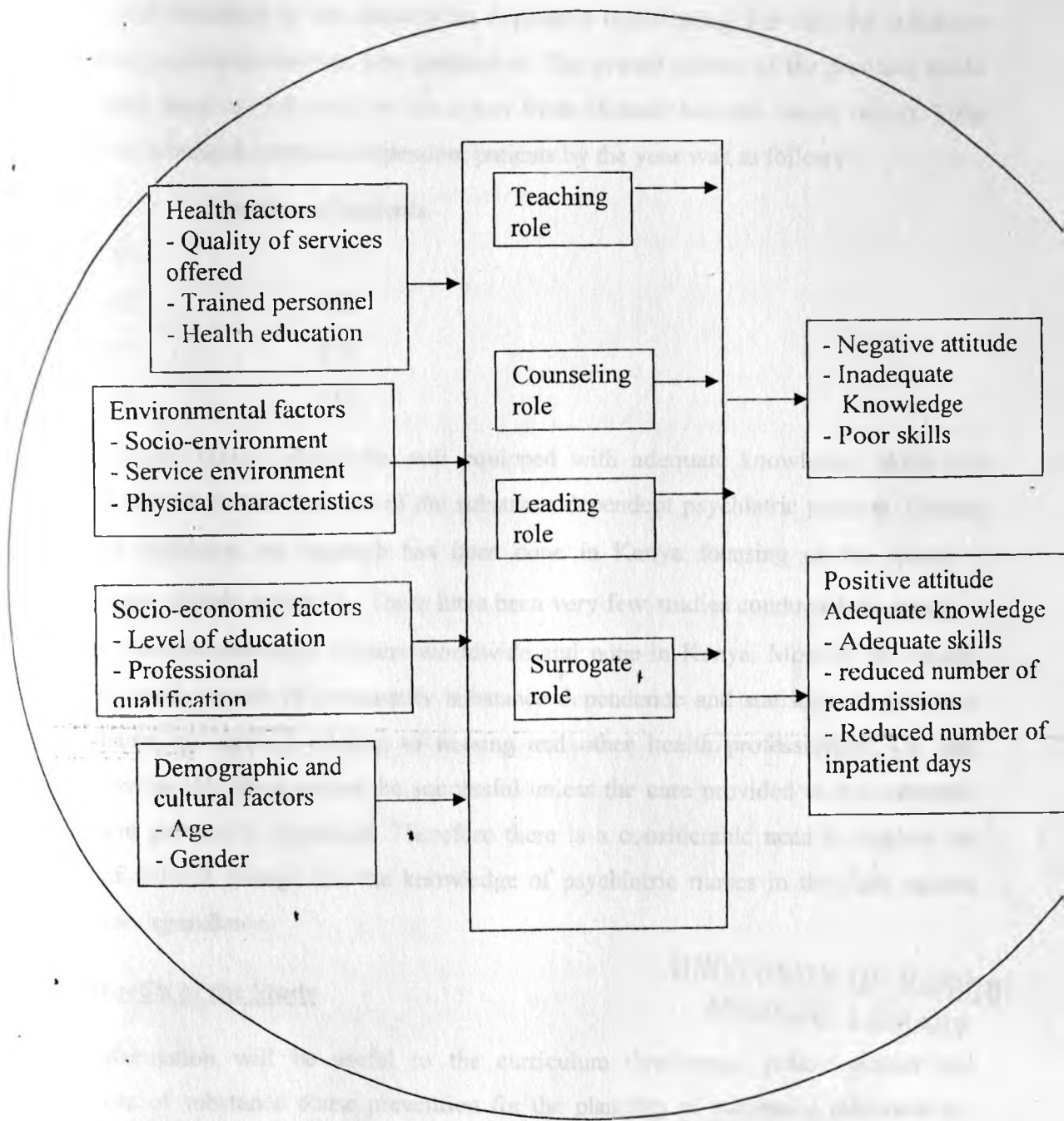
Technical expert: One who provides physical care by displaying clinical skills and has the ability to operate equipment in this care.

Surrogate: One who takes the place of another. This applies in the period when the patient is unable to take care of him/herself especially during withdrawal phase of substance dependence.

1.7 **Figure i.** Conceptual framework on the nurses' role in care of substance dependent patients during nurse patients interpersonal relationship. This conceptual framework is modified from Peplau interpersonal relationship (Forchure & Brown 1989)



1.8 Figure ii. Operational framework on the nurses' role in case of substance dependent patients during nurse patients interpersonal relationship.



1.9 Justification of the Study

Kenya like many other developing nations has limited resources to cover only the basic needs of its people. Abuse of substances not only drains the country resources since the control and treatment of the abuse is an expensive undertaking, but also the substance dependent population become less productive. The overall picture of the problem shows an upward trend as indicated by the report from Mathari hospital yearly report. Total number of admitted substance dependent patients by the year was as follows

Year	Number of patients
• 2001	215
• 2002	292
• 2003	273
• 2004	312

Mental health nurses should be well equipped with adequate knowledge, skills and positive attitude toward the care of the substance dependent psychiatric patients. Despite all these problems, no research has been done in Kenya focusing on the nurses' knowledge, attitude and skills. There have been very few studies conducted on nurses' attitude towards substance abusers worldwide and none-in Kenya. Most of the studies have explored aspects of community substance dependence and statistics of substance dependence but none-is relating to nursing and other health professionals. The war against substance abuse cannot be successful unless the care provided to the substance dependent patients is improved. Therefore there is a considerable need to explore the effect of attitude change and the knowledge of psychiatric nurses in the fight against substance dependence.

1.10 Benefits of the Study

This information will be useful to the curriculum developers, policy makers and specialists of substance abuse prevention for the planning of successful interventions. Mathari hospital is a national referral Hospital and a teaching hospital therefore this research will benefit all substance dependent patients countrywide.

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CHAPTER TWO: LITERATURE REVIEW

2.1 Historical perspective

Attitude towards psychiatric patients and understanding of human relationship are key factors shaping quality of care given to patients. Ackever (1963) found out that psychiatric nursing has been misunderstood due to somatic aspects. Nurses fear bodily harm they may encounter when managing mentally ill patients. Kalman (1958) observed that fears associated with psychiatric nursing are deep rooted in many health workers, a fallacious idea, which is particularly disturbing to many health workers. Walk (1961) said that quite a big number of people have misconception that psychiatric patients are always violent and dangerous. This scares the nurses and affects their attitudes towards psychiatric patients negatively.

2.2 Attitude /belief

The need for a positive attitude towards patients with illicit substance abuse problem is related to the philosophic underpinning nursing as a profession. From the time of Florence Nightingale, nursing interventions have been directed towards returning the patient to normal function. In general, recent surveys of nurses and other health professional have indicated negative attitude towards substance abusers. Such negative attitude, compromise opportunities to increase learning and clinical skills (Kyriacos 1998). Hoffman and Heinemann (1987) suggest that modest progress in attitudinal change should be paralleled by curriculum changes in schools of nursing. A report from Mathari hospital indicates that only 48% of nurses are trained psychiatric nurses. This figure is too small considering that, Mathari is the country's referral and psychiatric training hospital. Since the hospital has been training for more than 20 years; a higher percentage of psychiatric trained nurses is expected. This gives a lot of questions to the attitude of nurses towards mental health especially to the problems requiring special attention like substance dependence.

2.3 Studies review

2.3.1 America

The most recent findings from the national household survey on substance abuse found that in 2001, more than 7% of Americans aged 12 and older had used an illicit substance within the past month. However, research has shown that major barriers worldwide deter

many individuals from entering treatment. For the United States as a whole, these barriers are primarily stigma from health care providers (Skodol & Oldan 2000).

2.3.2 Europe

A study done in Northern Ireland report that substance abusers are loathed and feared by the health care staff. The staff also admitted to be lacking in the knowledge and skills necessary for the delivery of appropriate support and treatment for substance abusers. The patients reported to have experienced 'care' that they felt was filled with judgement, hostility and loathing. Results suggest that action need to be taken to address the deficit in knowledge, skills and values of health care professionals in relation to illicit substance abusers. (McLaughlin, McKennas & Leslie 2000. Payne (2000) in his project aimed at measuring confidence in dealing with mental health, knowledge of mental health issues and attitudes towards mental health before and after training. A postal questionnaire was sent to all nurses working in 17 nurse led telephone advice service sites in England before and after health training had been received. The questionnaire was designed to measure knowledge, confidence and attitude. It showed that 20% of nurses had adequate knowledge, confidence had increased and 40% of nurses had positive attitude. Also a Professor of psychiatric nursing at the institute of psychiatry in London, England, Professor Kevin Gournay said 'this lack of nurses understanding of their role in care of substance abusers coupled with mental illness is very worrying (Kevin 1998).

2.3.3 Australia

An Australian study by Johnson (1997) on the care of specialist services outlines the need for integration. She points out that psychiatric staffs often lack training, experience and confidence in the treatment of substance abuse disorders and that nurses only experience these patients in crisis, when intoxicated or in withdrawal states. This often result in patients being confronted with a punitive response.

2.3.4 Africa

Some studies conducted in Africa have suggested that the experience of stigma by substance dependence psychiatric patients may be common (Shibre, Callaghan & Shan 2000), but there is no information on how spread negative attitude to substance dependence patients may be among the psychiatric nurses (Oye, Victor & Olusola 2005).

2.3.5 Kenya

Maxwell (1985) observed that current mental health services in Kenya are wanting. He felt that psychiatrists and other health workers especially nurses consider mental health facilities ignored and this impact negatively in terms of morale and motivation both for the patients care and nurses training. He further said that for effective management of mental illness including substance dependence and training of personnel in the country, urgent change in attitude is needed. The same was echoed during 2004 world mental health day celebration at National level by the chairman board of management Mathari hospital, shared by the director of medical services Dr. James Nyikal (Boiwo 2005)

A country-wide needs assessment study undertaken in 1994 by the government of Kenya and United Nations Drug Control Program (UNDCP) revealed that abuse has permeated all strata of Kenyan society, youth and young adults being the most affected groups. The need for reassessment of government policy on the treatment of addicts is stressed, and it is suggested that the establishment of non-stigmatizing treatment and rehabilitation centers should be considered. It was concluded that, substance abusers are unlikely to be given special attention in health facilities and also the respondents described the treatment offered to substance abusers as inadequate. The health professionals especially nurses need specialized training in the management of substance dependence. The nurses should receive in-service training to enhance their skills in dealing with substance abuse (Mwenesi 1996). Boiwo (2005) studied the attitude of nurse towards psychiatric nursing in Nairobi. Four hospitals were sampled: Mathari hospital, Kenyatta National Hospital, avenue Hospital and Nairobi Hospital. From the study, 52% did not show any interest in specializing in psychiatric nursing. The researcher advised that more have to be done to change the attitude of nurses towards psychiatric nursing and mental health.

CHAPTER THREE: METHODS AND MATERIALS

3.1 Study design

This was a descriptive cross-sectional study with quantitative and qualitative data aimed at assessing the nurses' knowledge, attitude and skills towards substance dependent patients. It is a cross-sectional study as the Nurses' knowledge; attitude and skills were assessed at a point in time.

3.2 Study population

The target population was the nurses of Mathari hospital for the quantitative and qualitative components of the study. In addition the Hospital nurse in charges were interviewed, as key informants.

There were 252 nurses in total, viz.

Kenya registered community health nurses 88 of which only 35 (40%) are psychiatric trained nurses and Enrolled community health nurses 164 of which only 86 (52%) are psychiatric trained nurses.

All the nurses in direct interaction with mentally ill patients were eligible for the study hence 242 nurses were sampled after excluding nurse administrators and VCT nurses.

3.3 Study area

The study was conducted at Mathari Hospital in Nairobi province. The Hospital was purposefully selected because it is the main psychiatric hospital for mental health referral and psychiatric training in Kenya. The hospital is divided into two main departments: civil side and maximum-security unit, each department with its own wards.

The hospital has average bed occupancy of 650 in-patients: Civil unit 432 and Maximum-Security unit.

3.4 Inclusion and exclusion criteria

3.4.1 Inclusion criteria

1. Being a nurse in direct interaction with mentally ill patients at Mathari Hospital.
2. Consenting to participate in the study.

3.4.2 Exclusion criteria

1. Nurses who were not in direct interaction with mentally ill patients.
2. Those who did not consent to participate in the study.

3.5 Sampling and sample size

3.5.1 Sample size

The sample size was calculated using the following formula (Lwanga, 1991)

$$n = \frac{z^2 p (1-p)}{d^2}$$

Where **n** =minimum sample size, **P** = hypothesized proportion of nurses with adequate knowledge on Substances of dependence.

Z = table value from the standard Normal distribution at 5% significance level (1.96)

d= degree of precision/ level of accuracy (5%) With 95% confidence interval and assuming that 50% have adequate knowledge in care of substance dependent patients, 142 nurses was the number which was selected for the study.

$$n = \frac{(1.96)^2 \times 0.5 (1-0.5)}{(0.05)^2} = \frac{3.84 \times 0.5 (0.5)}{(0.0025)} = 384.16$$

$$nf = \frac{n}{1+n/N} = \frac{384.16}{1+384.16/242} = 142$$

' Due to unforeseen non-respondents the investigator added 30% of the sample size therefore the total number of subjects sampled was **184** nurses.

3.5.2 Selection of the study subjects

The hospital has two departments: civil and maximum-security unit. Each department has male wards and female wards separate. All the departments were purposively selected for the study and a simple random sampling procedure was used to select the nurses for the study from an appropriate sampling frame. All the nurses in direct care of mentally ill patients were serialized and their names arranged alphabetically then were numbered and came up with a sampling frame. Every 5th nurse in the frame was not selected. A total of 184 nurses were randomly selected but only 155 nurses consented to participate.

3.6 Study instruments

Data was collected using a structured questionnaire consisting of a section with socio-demographic data and another section on knowledge, attitude and skills. Structured questions are easy to answer. The former section was composed of questions modified from the WHO youth questionnaire. In measuring attitude, questions adopted from Happell & Taylor (1999), where a multi-trait scaling of the result was performed to give a tool consisting of five items rated on five point Likert scales. A high total score indicated highly negative attitude (Brink 2002). The scale was between strongly agree, agree, neutral, disagree and strongly disagree. For the knowledge and skills, questionnaire adapted from Happell & Taylor (1999), was used. The data was collected by the principal investigator who administered the questionnaire after the participating nurses as study subjects had granted consent.

3.7 Pre-testing

To test for the reliability and validity of the questionnaire, a pretest was carried out at Machakos District Hospital. The hospital was selected because it is a government hospital offering in patient mental health services and is attached to a nursing training school. The questionnaire was tested on 15 nurses (7 males and 9 females). Appropriate modifications of the questionnaires were made before the full implementation.

3.8 Variables:

Dependent variables included:

- knowledge,
- attitude
- Skills.

Independent variables included:

- 1) Age
- 2) Marital status
- 3) Post-basic training
- 4) Department (unit)
- 5) Sex
- 6) Academic qualification
- 7) Experience

3.9 Data Management

Only the relevant data was collected during the interview.

All filled questionnaires were scrutinized for completeness and reliability of information obtained. Cleaned data was stored in the computer for easy access and analysis. The information was coded and entered into the computer. The process of data cleaning and entry was done concurrently with data collection and at the completion of data collection.

3.10 data analysis

Epi- info soft ware 2000 Version 3.3.2 and standard normal distribution were used for data analysis. Data was summarized using descriptive statistics with the assistance of a statistician.

The results were presented as quantitative data

Findings and information is presented in: Frequency distribution tables, Pie chart and bar graph. Chi-square is applied to test significance and association between variables like gender of the nurses and their knowledge, attitude and skills.

3.11 Duration of the study

The study was carried out for 37 weeks (between 10th Nov 2005 and 20th May, 2006).

3.12 Minimizing of errors and biases

This was done by ensuring that the subjects were selected randomly, the questionnaire was pre-tested, and the investigator herself keyed the data in the computer immediately after the field work to minimize loss or distortion. Confidentiality of the responses was emphasized to the respondents.

3.13 Ethical consideration

For ethical reasons, the departmental as well as Faculty Board of Postgraduate Committee approval was sought first before presentation to the KNH Ethics and Research Committee who granted the authority. Permission was also sought from the ministry of Science and technology who granted it on behalf of the government. Permission was also sought from Mathari hospital ethics committee. Permission was then obtained from the head nurses in the hospital and selected wards before administration of questionnaires.

All the participating nurses also gave signed individual consents. (Appendix I). To maintain anonymity, subjects were not named and confidentiality was ensured. Feedback will be given to the institution

3.14 Limitations of the study

Although the results of this research have provided us with some valuable information, it is difficult to draw any firm conclusions. The major limitations of this study relate to the fact that it was conducted in only one hospital

CHAPTER IV

4.0 Results

This chapter gives first the socio-demographic characteristics of the participants followed by data measuring knowledge, attitude and skills.

4.1 Demographic information

In the survey, out of the 184 eligible nurses 155 self-administered the questionnaire, giving an 82% response rate. Thirty four percent (53) were males while 66% (102) were female. There were 14.8% (23) respondents less than 30 years of age, 52.9% (82) aged between 30 and 40 years and 32.3% (50) were above 40 years. Females accounted for two thirds (66%) of all the participants (Table 1).

Table 1: Participants' age and sex distribution (n=155)

Age	Males		Females		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<30	5	9.4	17	16.8	23	14.8
30-40	25	47.2	57	56.4	82	52.9
>40	23	43.4	28	26.8	50	32.3
Total	53 (34%)	100	102 (66%)	100	155	100

4.1.1 Departments distribution

Most of the participants 80% (124) were from the civil department compared to 20% (31) from maximum department.

Table 2: distribution of the participants in the departments

Department	Frequency	Percent
Civil	124	80.3
Maximum	31	19.7
Total	155	100

4.1.2 Professional qualifications

More than half 56.5% (86) of all the participants were enrolled nurses while registered were 43.5 % (63) (Table 3).

Table 3: Participants' Professional qualifications (n=153)

Qualification	Frequency	Percent
Kenya enrolled nurse/midwife	42	27.5
Kenya enrolled nurse	44	29
Kenya registered nurse/midwife	38	25.5
Kenya registered nurse	25	18
Total	153	100

4.1.3 Marital status

More than 80% (129) of all the participants were married while only 15% (24) were single. Two of the participants indicated their marital status as others without specifying (Table 4).

Table 4: participants' marital status (n=155)

Marital status	Frequency	Percent
Married	129	83.2
Single	24	15.4
Others	2	1.4
Total	155	100

4.1.4 Working experience

Majority of the participants 62.3% (96) had a working experience of between 10 and 20 years. The working experience ranged between 1 and 33 years with a mean and median of 15 years (Table 5).

Table 5: Participants working experience (n=154)

Experience	Frequency	Percent (%)
<10	29	18.8
10-20	96	62.3
>20	29	18.8
Total	154	100.0

4.2 Knowledge

The study Instrument was designed to evaluate the nurses' knowledge in the care of substance dependent patients.

4.2.1 Care of substance dependent patients

Around 93.5% (144) of the participants had a substance dependent patient in the ward at the time of the study while all the participants had ever nursed a substance dependent patient in the ward (Table 6).

Table 6: Have substance dependent patients in the ward (n= 154)

Response	Frequency	Percent (%)
Yes	144	93.5
No	10	6.5
Total	154	100

4.2.2 Participants' awareness of substances existence

Eighty-six percent (134) of all the participants knew about cannabis while only 30.3% (47) of the respondents had heard about morphine (Table 7).

Table 7: Participants' awareness of the substances existence (n=154)

Substance	Heard of the substance		Had not heard of the substance	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Cannabis	134	86.5	21	13.5
Cocaine	51	32.9	104	67.1
Morphine	47	30.3	108	69.7
Heroin	67	43.2	88	56

4.2.3: Knowledge of substance formulation

Thirty eight percent (59) of all the respondents correctly identified the formulation for morphine while slightly more than half of all the respondents 53.5% (83) correctly identified cannabis formulation (Table 8).

Table 8: Participants' knowledge of substance formulations (n 155)

Substance	Who indicated various formulations					
	Syrup	Tablets	Powder	Injectables	Rolls	Don't know
Cocaine	2 (1.3)	8 (5.2)	44 (27.7)	15 (9.7)	14(9)	72 (47.1)
Cannabis	2 (1.3)	9 (5.8)	17 (13.5)	8 (5.2)	74 (47.7)	41 (26.5)
Morphine	8 (5.2)	7 (4.5)	6 (3.9)	44 (28.4)	2 (1.3)	88 (56.7)
Heroin	1 (0.6)	6 (3.9)	11 (17.4)	45 (29)	5 (3.2)	87 (55.9)

- The rows total does not add up to 100% since the remaining figures in each entry represents those who said no and those who did not respond.
- The correct formulations are in bold
- Figures in parenthesis indicate percentage

4.2.4 Method/route of substance use

Only 29.7% (45) of the respondents correctly identified the method of using heroin while 56.8% (89) of all the respondents correctly identified the route of using cannabis (Table 9).

Table 9: Participants' knowledge on substance use methods/ route (n- 155)

Substance	Percentage(%) who indicated various methods of use					
	Drinking	Eating	Injecting	Sniffing	Smoking	Don't know
Cocaine	4 (2.6)	4 (2.6)	17 (13.5)	36 (23.2)	15 (9.7)	75 (48.4)
Cannabis	6 (3.9)	16 (12.3)	11 (7.1)	8 (5.2)	73 (44.5)	42 (27)
Morphine	10 (6.5)	8 (5.2)	46(31.0)	4 (2.6)	6 (3.9)	79 (50.8)
Heroin	2 (1.9)	6 (3.9)	45 (29.7)	16 (12.9)	12(8.4)	67(43.2)

- The correct methods of use are in bold
- Figures in parenthesis indicate percentage

4.2.5 Knowledge on effects of substance on the users

Almost all 95.5% (148) of those who participated said that substances have effects on those who use them (Table 10).

Table 10: Participants opinion on whether substances have effects on the users (n=155)

Have effects	Frequency	Percent (%)
Yes	148	95.5
No	6	3.9
Don't know	1	0.6
Total	155	100

4.2.6 Relationship between knowledge and personal characteristics of respondents

The findings of the study presented in table 10 below indicate that females had more adequate knowledge as compared to males (61.2% against 38.8%) though the difference was not statistically significant ($X^2 = 0.315$ $P=0.206$). The participants aged between 30 years and 40 years showed more knowledge in relation to the other age groups (46.3% against 9% and 44.8%). The chi-square test of significance reveals that there is no significant relationship between the age and participants' knowledge on substances of abuse ($\chi^2 = 9.467$ $P=0.08$). There was no significant difference in the knowledge of nurses who had worked for more than 15 years and those who had worked for less than 15 years ($P=0.11$) (Table 11).

Table 11: Relationship between knowledge and personal characteristics of respondents (n=154)

Variable		Knowledge		Total	χ^2	P-value
		Adequate >50%	Inadequate <50%			
Gender	Male	26(38.8)	27(31)	53(34.4)	0.159	0.3
	Female	41(61.2)	60(69)	101(65.6)		
Age (years)	< 30	6(9)	17(19.3)	23(14.8)	0.376	0.08
	30-40	31(46.3)	51(58)	82(52.9)		
	>40	30(44.8)	20(22.7)	50(32.2)		
Experience	Yes	43(27)	45(29)	88(56)	0.106	0.11
	No	24(15)	43(28)	67(43)		

P probability , Figures in parenthesis () indicate percentage

4.2.7 Relationship between post-basic psychiatric training and knowledge

Nurses' knowledge was positively associated with post basic training and the association was statistically significant in most of the situations (Table 12-14)

Awareness of various substances

Nurses with post basic training were generally more aware of all substances as compared to those without. The magnitude of association varied with the substances with the highest magnitude of association occurring in rare substances i.e. Heroin and cocaine (Table12).

Table 12: Association between post-basic and awareness of various substances. with post basic n =43, without post basic n=80

	Awareness	Post basic N, (%)	No post-basic N, (%)	O.R.	χ^2	95% C.I.	P-value
Cannabis	Yes	40 (93)	94 (84)	2.6	2.18	0.7 - 9.1	0.13
	No	3 (7)	18 (16)				
Cocaine	Yes	26 (61)	25 (22)	5.3	20.3	2.5 - 11.3	<0.0001
	No	17 (40)	87 (78)				
Morphine	Yes	22 (51)	25 (22)	3.6	12.15	1.7 - 7.7	0.0004
	No	21 (49)	87 (78)				
Heroin	Yes	31 (72)	36 (32)	5.5	20.45	2.5 - 11.8	<0.0001
	No	12 (28)	76 (68)				

- p=probability Figures in parenthesis () indicate percentage

Knowledge of substance formulation

Nurses with post basic training were more aware of the various substances formulations as compared to those without. The magnitude of association between post basic training and knowledge of substance formulation varied with the substances and was statistically significant for all the substances ($\chi^2 = 22.76$ $P < 0.0001$) (Table 13).

Table 13: Association between post-basic psychiatric training and knowledge of substance formulation. With post basic n=43, without post basic n=80

	Form	Post basic N, (%)	No post-basic N, (%)	O.R.	χ^2	95% C.I.	p-value
Cannabis	Know	35 (81)	39 (35)	8.2	26.4	3.5 - 19.4	<0.0001
	Don't know	8 (19)	73 (65)				
Cocaine	Know	23 (54)	20 (18)	5.3	19.5	2.4 - 11.4	<0.0001
	Don't know	20 (46)	92 (82)				
Morphine	Know	24 (56)	20 (18)	5.8	21.87	2.7 - 12.6	<0.0001
	Don't know	19 (44)	92 (82)				
Heroin	Know	21 (49)	24 (21)	3.5	11.5	1.7 - 7.4	0.0007
	Don't know	22 (51)	88 (79)				

O.R. = odds ratio Figures in parenthesis indicate percentage

Knowledge of route of substance administration

Nurses with post basic training were much more aware of the routes of substance administration as compared to those without post basic training. This association was significantly associated with post-basic training ($\chi^2=14.45$ P=0.0001) (Table 14).

Table 14: Association between post-basic training and route of substance use. with post basic n=43, without post basic n=80

	Route of use	Post basic N, (%)	No post-basic N, (%)	O.R.	χ^2	95% C.I.	p-value
Cannabis	Know	32(74)	37(33)	5.9	27.06	2.7 – 13.0	<0.000
	Don't know	11(26)	75(67)				
Cocaine	Know	18(42)	18(16)	3.8	21.52	1.7 – 8.3	0.001
	Don't know	25(58)	94(84)				
Morphine	Know	23(54)	25(23)	4.0	14.03	1.9 – 8.4	0.0001
	Don't know	20(46)	87(78)				
Heroin	Know	21(49)	24(21)	3.5	11.25	1.7 – 7.4	0.0007
	Don't know	22(51)	88(79)				

- P=probability Figures in parenthesis indicate percentage

4.2.8 Association between nurses' experience and their knowledge on substances of abuse

The measures of association with the knowledge of various substances are summarized in the tables below (Table 15 -17).

Table 15 Association between working experience and awareness of various substances

	Aware of substance	Experience N, (%)	No experience N, (%)	O.R.	χ^2	95% C.I.	P-value
Cannabis	Yes	77 (86)	57 (85)	1.2	0.189	0.5 – 3.1	0.6
	No	11 (14)	10 (15)				
Cocaine	Yes	31 (35)	20 (30)	1.3	0.49	0.6 – 2.5	0.5
	No	57 (65)	47 (70)				
Morphine	Yes	24 (27)	23 (34)	0.7	0.89	0.3 -1.4	0.3
	No	64 (73)	44 (66)				
Heroin	Yes	43 (49)	24 (36)	1.7	2.62	0.9 - 3.3	0.11
	No	45 (51)	43 (64)				

- Figures in parenthesis indicate percentage

Table 16- Association between working experience and knowledge of substance formulation

	Formulation known	Experience		O.R.	χ^2	95% C.I.	P-v
		N, (%)	No experience N, (%)				
Cannabis	Yes	42 (48)	32 (48)	0.95	0.0000	0.5 – 1.9	0.9
	No-	46 (52)	35 (52)				
Cocaine	Yes	23 (26)	20 (30)	0.866	0.26	0.4 – 1.7	0.9
	No	65 (74)	47 (70)				
Morphine	Yes	23 (26)	21 (31)	0.8	0.504	0.4 – 1.6	0.5
	No	65 (74)	46 (69)				
Heroin	Yes	23 (26)	22 (33)	0.7	0.823	0.4 – 1.5	0.3
	No	65 (74)	45 (67)				

Figures in parenthesis indicate percentage

Table 17: Association between working experience and knowledge of route of substance use

	Knowledge of route	Experience		O.R.	X^2	95% C.I.	P-value
		N, (%)	No experience N, (%)				
Cannabis	Know	39 (44)	30 (45)	1.0	0.06	0.5 – 1.9	0.9
	Don't know	49 (56)	37 (55)				
Cocaine	Know	20 (23)	16 (24)	0.9	0.067	0.4 – 2.0	0.9
	Don't know	68 (73)	51 (76)				
Morphine	Know	26 (30)	22 (33)	0.9	0.17	0.4 – 1.7	0.7
	Don't know	62 (70)	45 (67)				
Heroin	Know	23 (26)	22 (33)	0.7	1.45	0.4 -1.5	0.4
	Don't know	65 (74)	45 (67)				

- Figures in parenthesis indicate percentage

4.3 Attitude

One objective of the study was to assess the attitude of the participants toward substance dependent patients.

4.3.1 Whether substance dependent patients can be helped

Decision on helping substance dependent patients brought controversial information. Majority (83%) (127) thought that these patients can be helped while 17% (27) thought that nothing can be done to them (Table 18).

Table 18: participants' opinion on whether these patients can be helped

Can be helped	Frequency	Percentage (%)
Yes	127	82.5
No	27	17.5
Total	154	100

4.3.2 Whether substance abuse is a problem in Kenya

On the issue of whether substance abuse is a problem in Kenya, Eighty five percent (131) of those who responded said that substance abuse is a problem in Kenya (Table 19).

Table 19: Participants opinion on whether substance abuse is a problem in Kenya

It's a problem	Frequency	Percentage (%)
Yes	131	85.1
No	23	14.9
Total	154	100

4.3.3 Willingness to nurse substance dependent patients

Comparing substance induced psychosis with other conditions like schizophrenia, mood disorders and medical/surgical patients, only 5.9% (9) of the participants selected substance induced psychosis as their most preferred patient to nurse as compared to 74% (115) of those who least preferred nursing these patients. On the scale 1-4 (where 1=most preferred and 4= least preferred). Patients with schizophrenia were the most preferred 53% (82) of the respondents while patients with substance induced psychosis were the least preferred 74% (115) (Table 20).

Table 20: Participants degree of willingness to nurse various patients in percentage

	(1)	(2)	(3)	(4)
Schizophrenia	82 (52.9)	15 (9.7)	12 (8.4)	44 (29.0)
Mood disorder	51 (33.1)	42 (26.6)	17(11)	44 (29.20)
Medical/surgical	74 (45.8)	12 (8.4)	17 (11)	48 (34.8)
Substance induced psychosis	9 (5.9)	4 (2.0)	28 (18.3)	115 (73.9)

1= most preferred 4= list preferred Figures in parenthesis indicate percentage

4.3.4 Willingness to interact with substance dependent patients

The questions on whether the nurses were willing to nurse these patients brought different opinions: Fifty five percent of the participants felt the need to nurse patients with substance induced psychosis, while 54.2% (84) regretted nursing these patients. Majority, 74.8% (116) of the participants felt like quitting their professional due to nursing these patients. Only 28% (43) of the participants had a post basic psychiatric training and half of all the participants thought that post basic psychiatric training is necessary in the management of these patients (Table 21).

Table 21: participants' willingness to interact with substance dependent patients

Attitude	Frequency	Percent (%)
Felt need to nurse patients	86	55.5
Felt guilty nursing them	84	54.2
Felt like quitting	116	74.8
Has P/basic psychiatric	43	27.7
Thinks P/basic necessary	80	51.6

4.3.5 Likert's scale attitudinal statements towards substance dependent patients

Participant's degree of agreement with various attitudinal statements towards substance dependent psychiatric patients gave a controversial data. Seventy nine percent (123) of the respondents agreed that substance dependence affects almost every part of a substance dependent person's life while 52.6% (81) agreed that substances affect the mental stability of the users. Sixty eight percent (107) of the respondents agreed that they like interacting with substance dependent psychiatric patients while less than half (47%) (72) agreed that helping substance dependent psychiatric patients offers them a chance to

test themselves and their abilities. Thirty three percent (53) agreed that only substance dependent patients require health education on the complications of substance dependence, 49% (75) agreed that assisting a substance dependent patient is a reward in itself while 50% (77) agreed that considering the time spent counseling substance dependent patients, they felt thoroughly familiar with their tasks and responsibilities and 49% (76) agreed that already existing mental illness can sometimes cause someone to abuse substances (Table 22).

Table 22: Likert's scale attitudinal statements towards substance dependent patients in percentage

Attitudinal statement	Strongly agree 1	Agree 2	Neutral 3	Disagree 4	Strongly disagree 5
a). Substance dependence affects almost every part of a substance-dependent person's life.	71 (45.8)	52 (33.5)	10 (6.5)	20 (12.9)	2 (1.3)
b). I like interacting with substance-dependent patients	39 (25.2)	68 (43.9)	15 (9.7)	29 (18.7)	4 (2.6)
c). Substances affects mental stability of the user	63 (40.9)	18 (11.7)	27 (17.3)	26 (16.9)	5 (3.2)
d). Helping substance dependent patients offers me a chance to test myself and my abilities	35 (22.6)	37 (23.9)	32 (20.6)	36 (23.2)	15 (9.7)
e). Only substance dependent patients require health education on the complications of substance dependence	24 (14.2)	29 (18.7)	28 (18.1)	37 (23.9)	40 (25.2)
f) Assisting a substance dependent patient is a reward in itself	34 (22.1)	41 (26.6)	30 (18.8)	41 (26.6)	9 (5.8)
g). Considering the time spent counseling substance dependent patients, I feel thoroughly familiar with my tasks and responsibilities	29 (18.7)	48 (31.0)	29 (18.7)	38 (24.5)	11 (7.1)
h) Already existing mental illness can sometimes cause someone to abuse substances.	38 (24.5)	38 (24.5)	20 (12.9)	48 (31.0)	11 (7.1)

4.3.6 Association between post-basic psychiatric training and nurses' attitude towards substance dependent patients.

Generally nurses with post-basic training had a more positive attitude as compared to those without post basic training. The association between post basic training and positive attitude was statically significant in all except one attitudinal issue.

Whether substance dependent patients can get help

Ninety five percent (40) of those with post basic training said that the patient with substance dependent psychiatric disorder could be helped as compared to 78% (87) of those without post basic training. The association (OR of 5.7) between nurses with post-basic training and positive attitude was statistically significant ($\chi^2 = 6.57, P = 0.006$).

Whether substance abuse is a problem in Kenya

A higher percentage of nurses with post basic training appreciated that substance abuse is a problem in Kenya as compared to those without post-basic training though, the association was not statistically significant ($\chi^2 = 1.32, P = 0.2$). Nurses with post basic psychiatric training were 8 times more likely to nurse substance dependent patients compared to those without. The relationship was statistically significant ($\chi^2 = 22.35, P < 0.0001$). Nurses with post basic psychiatric training were less likely to feel guilty nursing these patients with an OR of 0.3. This protective association was significant with a 95% confidence interval of 0.2-0.7 ($\chi^2 = 8.88, P = 0.003$). Nurses with post-basic psychiatric training were less likely to quit their careers due to nursing substance dependent patients as compared to those without ($\chi^2 = 14.1, P = 0.0001$) (Table 23).

Table 23: Relationship between post-basic training and various attitudinal issues. With post basic n=43. without post basic n=80

Attitude	Response	Post basic	No post-basic	O.R	χ^2	95% C.I.	P-value
		N, (%)	N, (%)				
Patient can get help	Yes	40 (95)	87 (78)	5.7	6.47	1.3- 25.5	0.006
	No	2 (05)	25 (22)				
Substance abuse problem in Kenya	Yes	38 (91)	93 (83)	1.9	1.32	0.6-6.1	0.2
	No	4 (09)	19 (17)				
Felt need to nurse these patients	Yes	37 (86)	49 (44)	7.9	22.35	3.1- 20.3	<0.0001
	No	6 (14)	63 (56)				
Felt guilty nursing these patients	Yes	15 (35)	69 (62)	0.3	8.88	0.2 -0.7	0.003
	No	28, 65	43, 38				
Felt like quitting	Yes	23, 54	93, 83	0.2	14.31	0.1 -- 0.5	0.0001
	No	20 46	19, 17				

- Figures in parenthesis indicate percentage

4.3.7 Association between working experience and attitude of nurses towards substance dependent patients

There was no significant difference in attitude between the nurses who had worked for 15 or more years, as compared to those who had worked for less than 15 years (Table 24).

Table 24: Association between working experience and attitude of nurses towards substance dependent patients. (Figures in parenthesis indicate percentage)

Attitude	Response	Experienced	No experience	O.R.	χ^2	95% C.I.	P-value
		N, (%)	N, (%)				
Patient can get help	Yes	66 (76)	61 (91)	0.3	5.99	0.1 – 0.8	0.01
	No	21 (24)	6 (9)				
Substance abuse problem in Kenya	Yes	69 (79)	62 (93)	0.3	5.17	0.1 – 0.9	0.02
	No	18 (21)	5 (7)				
Felt need to nurse these patients	Yes	45 (51)	41 (61)	0.6	1.54	0.3 – 1.3	0.2
	No	43 (49)	26 (39)				
Felt guilty nursing these patients	Yes	47 (53)	37 (55)	0.9	0.05	0.5 – 1.8	0.8
	No	41 (47)	30 (45)				
Felt like quitting	Yes	61 (69)	55 (82)	0.5	3.27	0.2 – 1.1	0.07
	No	27 (31)	12 (18)				

4.4 Skills

4.4.1 History taking

The participants indicated that in two thirds (67.1%) (104) of the instances nurses take patients history and others who also take history are the medical officers or the clinical officers (Table 25).

Table 25: History taking by various cadres of staff (n=155)

Person taking history	Frequency	Percentage (%)
Clerk	4	2.6
Nurse	104	67.1
Clinic assistant	5	3.2
Doctor/CO	128	83.1

4.4.2 Performance skills

Table 26 represents skills performed like physical examination, health education, counseling skills and use of nursing care plan. Only 31.6% (49) of the nurses did physical examination on substance dependent psychiatric patients. Only 27.7% (43) of the respondents routinely gave health education, while 25.2% (39) gave health education on substance abuse. Only 3.2% (5) of all the respondents had postgraduate counseling skills while 53.6% (81) of the respondents had thought of acquiring the skills. 57.4% (89) of the respondents had nursed a patient with withdrawal symptoms while 16.1% (25) had drawn a nursing care plan for patients with substance induced psychosis (Table 26).

Table 26: Participants skills n=155

Skill	Frequency	Percent (%)
Physical examination	49	31.6
Routine H/education	43	27.7
Substance H/education	39	25.2
P/graduate counseling skills	5	3.2
Thought of acquiring counseling	81	53.6
Nursed patients with withdrawal symptoms	89	57.4
Drawn nursing care plan	25	16.1

4.4.3 Association between post-basic psychiatric training and nurses skills in the care of substance dependent patients

Table 27 presents the association between post-basic psychiatric training and nurses skills in the management of substance dependent patients. Nurses with post-basic psychiatric training were much more skilled and applied their skills in handling substance dependent patients, as compared to those without post-basic psychiatric training. Those with post-basic psychiatric training were 11 times more likely to be conducting physical exam on substance abuse psychiatric patients as compared to nurses with no post-basic psychiatric training. (OR 11.3, $\chi^2=39.8$, $P < 0.0001$).

The likelihood of a nurse with post basic psychiatric training to have given a general health education or substance dependent health education was more than 8 times those without ($\chi^2=31.5$ P-value < 0.0001) which implied highly statistically significant relationship Table 27. .

Nursing withdrawal patients

The likelihood of a nurse with post basic psychiatric training to have nursed withdrawal patients was 3 times more than those without. OR 3.3 95% C.I 1.5 – 7.3, and a $\chi^2=9.03$ $P= 0.002$. Nurses with post-basic psychiatric training are more likely to be drawing nursing care plan as compared to those without ($\chi^2=23.9$ $P < 0.0001$).

Table 27: Association between post-basic psychiatric training and various skills. With post basic n=43, without post basic n=80

Skill/practice	Response	Post basic N, (%)	No post-basic N, (%)	O.R.	χ^2	95% C.I.	P-value
Conducts physical examination	Yes	30 (70)	19 (17)	11.3	39.8	4.9 – 25.6	<0.0001
	No	13 (30)	93 (83)				
Gives health education	Yes	26 (61)	17 (15)	8.5	31.5	3.8 – 19.0	<0.0001
	No	17 (39)	112 (85)				
Gives substance abuse H/education	Yes	26 (61)	13 (12)	11.6	39.1	5.0 – 27.0	<0.0001
	No	17 (39)	99 (88)				
Nursed withdrawal patient	Yes	33 (77)	56 (50)	3.3	9.03	1.5- 7.3	0.002
	No	10 (23)	56 (50)				
Drawn nursing care plan	Yes	17 (40)	8 (7)	8.5	23.9	3.3 – 21.8	<0.0001
	No	26 (60)	104 (93)				

4.4.4 Association between working experience and skills of nurses towards substance dependent patients

The duration of time one has been in service did not have a significant implication on their skills towards substance dependent patients $\chi^2 = 1.434$ P = 0.4 (Table 28).

Table 28: Association between working experience and skills of nurses towards substance dependent patients

Skill/practice	Response	Experienced		No experience		O.R.	χ^2	95% C.I.	P-value
		N,	(%)	N,	(%)				
Done physical examination	Yes	27	(31)	22	(33)	0.9	0.085	0.5 – 1.9	0.8
	No	61	(69)	45	(67)				
Gives health education	Yes	27	(31)	16	(24)	1.4	0.87	0.7 – 2.5	0.4
	No	61	(69)	51	(76)				
Gives substance abuse H/education	Yes	25	(28)	14	(21)	1.5	1.13	0.7 – 3.2	0.3
	No	63	(72)	53	(79)				
Nursed withdrawal patient	Yes	57	(65)	32	(48)	2	4.48	1.05 – 3.8	0.34
	No	31	(61)	25	(51)				
Drawn nursing care plan	Yes	16	(18)	9	(13)	1.4	0.63	0.6 – 3.5	0.4
	No	72	(81.8)	58	(86.6)				

- p = probability . Figures in parenthesis indicate percentage

Table 29: Score results of knowledge, attitude and skills (n = 155)

	Positive			Negative			Overall	
	Frequency	Percent	Z(1.96)	Frequency	Percent	Frequency	Percent	
Knowledge	75	48.5	2.65	80	51.5	155	100	
Attitude	60	39	1.85	95	61	155	100	
Skills	74	47.8	2.80	81	52.2	155	100	

Forty eight percent (75) of all the respondents had adequate knowledge with a normal z-value of 2.65, 39% (60) had a positive attitude, normal z- value of 1.85 and 47.8% (74) had adequate skills, a normal z- value of 2.80 based at 95% C.I.

4.5 Nurse In-charge results

Nurse in-charges also gave some information: A total of 7 in charges self administered a special semi-structured questionnaire. 4 (57%) of the respondents were females.

The age of the respondents ranged between 32 and 53 years with a mean and a median of 43 years. All the respondents 100% (7) were married

Professional qualification

Seventy one percent (5) had post basic psychiatric training while only 28.6% (2) did not have post basic psychiatric training

Table 30 Professional qualification

Professional qualification	Frequency	Percent
KRN	2	28.6%
Psychiatric	5	71.4%
Total	7	100.0%

Table 31 Experience of the nurse in-charges

Experience	7	8	9	15	16	21	29	Total
Frequency	1	1	1	1	1	1	1	7
Percent	14.3	14.3	14.3	14.3	14.3	14.3	14.3	100

Years of working experience ranged between 7years and 29years with mean and median of 15years

Whether there are substance dependent patients in all the wards

All the respondents 100% (7) indicated that there substance dependent patients in all the wards.

Nurses reaction during deployment to substance dependent patients' wards

Among the six respondents, 66.7% (4) noted that nurses have positive attitude towards working in these wards though 33.3% (2) reported that nurses have negative attitude towards these wards (Table 32).

Reaction to patients

Most of the respondents 57.1% (4) felt that nurses generally have a positive attitude towards substance dependent patients while 42.9% (3) indicated that nurses have negative attitude (Table 32).

Table 32: Nurses' reaction (n= 7)

	Positive	Negative	Overall
During deployment	4 (66.7)	2 (33.3)	6 (100)
Reaction to patient	4 (57.1)	3 (42.9)	7 (100)
Motivation	6 (85.7)	1 (14.3)	7 (100)

Whether nurses are motivated to work in the wards with substance dependent patients.

Eighty three percent (6) of the in-charges felt that nurses are motivated to work in wards with substance dependent patients but one in-charge felt that they were not.

Whether Post-basic training is necessary

All the in-charge agreed that post basic training is necessary for the management of substance dependent patients.

CHAPTER V

5.0 DISCUSSION

This was a cross-sectional descriptive survey that was aimed at determining the knowledge, attitude and skills of the nurses towards substance dependent patients. A total of 155 nurses participated in the study. The sociodemographic characteristics of the nurses and their knowledge, attitude and management skills on substance abuse are presented. In most of the cases nurses had poor knowledge on substances of abuse, had negative attitude and poor skills in the management of these patients. This agrees with the results of a research done in Australia by Hangemaster, Handley & Plumlee (1993) where the results demonstrated poor knowledge, negative attitude and poor practice of nurses in the management of patients with drug and alcohol related problems.

5.1 Socio-demographics

The study population was composed of a mixed group of nurses currently working in either the maximum or civil departments of Mathari hospital. Two thirds of the nurses were females, a reflection of the gender of workers in the nursing profession world wide as reported by U.S.A labor department (2006). Age distribution also followed a similar trend with most of the participants being in the age category of 30 to 40 years 52.9% (82) and only 14.8% (23) being below the age of 30 years.

Majority 80% (124) of nurses in the hospital work in the civil department of the facility. Maximum department handles patients who have criminal records and the violent. Substance dependent patients are managed in both civil and maximum departments; therefore nearly all the nurses working in the hospital interact with these patients. This was evident in this study with 93.5% (144) of the participants reporting a substance dependent patient in the ward while the remaining seven percent reported having ever worked in a ward with substance dependent patient. These findings are contrasting research findings by Cohen, & Struening, 1982 where 42% of the respondents reported to have substance dependent patients in their wards and 20% reported that they were not in direct contact with these patients.

The level of education and the professional qualifications were above average compared to the general distribution of nurses in the country, 43.5 % (63) of the participants being registered nurse while the remaining were mainly enrolled nurses but there were no degree holders as compared to a study done by Brunton, 1997 in U.S.A where nurses had masters degrees. Despite the fact that this facility deals mainly with patients with mental illnesses, only 27.7% (43) 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 these patients. The participants had a moderate working experience with 62.3% (154) of the participants having worked for duration of between 10 and 20 years. This was not agreeing with the result of the study by Elliott & Frank (1990) where majority of the participants had worked for 25 years and above.

5.2 Knowledge of substance

The participants' knowledge of various substances was assessed by looking at the awareness of the substances, their ability to correctly identify substance formulations and the routes of administration. Of the four substances that were under consideration cannabis was more known among the participants (87%). This is the substance that is more abused in the country than the others as reported by Ong'any (2004) in Kenya that 54% of substance dependants use cannabis and up to 5% of the general populations abusing it as reported by Skodol and Oldan (2000) in the world substance report. Only 30.3% (47) had heard of morphine despite the substance being a controlled substance used in hospitals in the country for severe pain, and only 32.9% (51) of the participants knew about cocaine despite the recent media publicity over the 6 billion cocaine saga. Nurses should know the substances of abuse as these patients might continue to use the substances in the wards during rehabilitation.

Knowledge of substance formulation was also poor; about 53.5% (83) correctly indicated that cannabis is in rolls and tablets, while morphine formulation was correctly identified by 38.1% (59) as syrup, tablets and injectable. Heroin was identified as injectable by only 29% (45) of the participants. This agrees with the findings by Acuda & Nease, (1985) in

Kenya, only 24% of the private practitioners knew about heroin as an injectable. The correct formulations were based on research results by Ong'any (2004). The participant's knowledge of substance formulations was below 50% for all the substances. The route of administration of cannabis was correctly identified by 56.8% (89) participants and only a small percentage 42.7% (64) of the participants correctly identified morphine. This was not in agreement with a research done by Payne (2000) in England where only 20% of the nurses identified the correct route of morphine. Again, the knowledge on the various methods of use of the substances of abuse was less than 50%. Just as expected, majority of participants said that substances have effects to the users, although very few correctly indicated the effects of various substances on the users. It was noted that some (18%) of the participants felt that patients with substance related psychiatric disorder cannot be helped. The nurses indicated the effects of the substance on the users as addiction, psychosis and withdrawal without specifying the real signs and symptoms that the patient would present with. Majority of the participants had not indicated the expected signs and symptoms; this shows that, there is a deficit in the knowledge on the kind of the reactions the nurses expect from the patients whom they actually nurse.

Nurses' knowledge was positively associated with post basic psychiatric training in all cases. Nurses with post basic psychiatric training were generally more aware of all substances as compared to those without. This means that, a post basic psychiatric course either helped the nurses appreciate these patients or the knowledge they acquired was adequate to take care of these patients. Nurses with post basic psychiatric training were more aware of the various substances formulations as compared to those without ($P=0.001$). These results do not agree with results by Brunton, (1997) where there was no significant difference between the two groups ($P=1.000$). The relationship between post basic training and knowledge of substance formulation varied with the substances where the highest magnitude of association occurred in rare substances i.e. heroin and cocaine and was statistically significant for all the substances. Generally, knowledge was quite low with less than 50% of the nurses showing adequate knowledge on the management of these patients.

These findings are similar to those found in a study by McLaughlin, McKenna and Leslie (2000) in Northern Ireland Europe whereby the staff actually accepted that they lacked knowledge necessary for the care of these patients.

Out of the 155 respondents, 48.5% had adequate knowledge in accordance with the criteria in the appendix III. This was lower than the hypothesized value of 50% with a critical value of 2.65, therefore the null hypothesis is accepted.

5.3 Attitude

The attitude of the participants to substance dependent patients in this sample of nurses was found to be negative. These results are in contrast to previous studies in which the attitudes of nurses towards clients with drug- and alcohol-related problems were measured as neutral (Carroll, 1995, Carroll, 1996; Moodley- Kunnie, 1988; Murphy, 1989)

Substance abuse is clearly indicated as a problem in Kenya as shown by 85.1% (131) of the participants. These results agree with WHO report which showed that in Kenya, during the past decade, the use and abuse of substances especially cocaine morphine, heroin, and cannabis, have risen dramatically and have spawned major health and social problems. Despite the response in this study that substance abuse is a problem in Kenya, only 5.9% (9) of the participants would mostly prefer to nurse substance dependent patients, while 73.9% (115) would least prefer nursing substance dependent patients. This supports the study by Moodley- Kunnie, (1988) where 76% of the participants did not feel like nursing substance dependent clients.

The attitudes of nurses towards substance dependent patients may be related to what the Nurse knows and understand about substances or whether they have feelings of like or dis-like for persons who abuse substances.

According to Horne (1985), the components of attitudes include mood, knowledge, thoughts, and beliefs about the attitude therefore when a nurse does not have adequate knowledge, then the attitude remains low.

On the issue of willingness to nurse substance dependent patients, in some areas the participants showed a positive attitude though most of the time the attitude was poor. The participants' reaction on who should receive health education on the substances of abuse was overwhelmingly negative and below the 50% hypothesized. Forty four percent of the nurses did not feel the need to nurse the patients and also it is quite touching when three quarters of the participants have ever felt like quitting the profession because of the kind of patients they are nursing.

Only 51.6% (80) of the nurses thought that post basic psychiatric training is necessary in the management of these patients which agrees with the report by Boiwo 2005, in his study on the attitude of nurses towards psychiatric nursing, he discovered that 52% had negative attitude. This explains the reason why; very few participants (28%) had a post basic psychiatric training which confirms a report from Mathari hospital (November 2005) that 48% of the nurses have done post basic psychiatric nursing despite that, the hospital is a referral and a training institution.

Participants also differed in the agreeing or not agreeing several factors concerning patients who abuse substances: 79% (122) of the respondents agreed that substance dependence affects almost every part of a substance dependent person's life while 68% (105) agreed that substances affect the mental stability of the users and also they like interacting with substance dependent psychiatric patients. Less than half (47%) agreed that helping substance dependent psychiatric patients offers them a chance to test themselves and their abilities. Thirty three percent (53) of them felt that only substance dependent patients require health education on the complications of substance dependence therefore, the participants do not support health education as a preventive measure in the fight against substance abuse. Forty nine percent agreed that assisting a substance dependent patient is a reward in itself while 49.7% (77) agreed that considering the time spent counseling substance dependent patients, they felt thoroughly familiar with their tasks and responsibilities while majority of nurses 49% (76) have not accepted that already existing mental illness can sometimes cause someone to abuse substances. The participants' attitude to substance dependent patients in this part was poor. These results

are in contrast to previous studies in which the attitudes of nurses towards clients with substance- and alcohol-related problems were measured as negative (Carroll, 1995). Generally nurses with post-basic training had a more positive attitude as compared to those without post basic training which agree with a research by Novak and Petch (1994) in New South Wales where nurses with in-service education showed more positive attitude. For example, 95% (40) of those with post basic training said that the patient with substance dependent psychiatric disorder could be helped as compared to 78% (87) of those without post basic training. A higher percentage (91%) of nurses with post basic training appreciated that substance abuse is a problem in Kenya as compared to those without post-basic training. Nurses with post basic training felt need to nurse substance abuse patients 8 times more than those without and also they were less likely to quit their careers due to nursing substance dependent patients. Post-basic training enhances the knowledge of the nurses to better understand the substance dependent patients and therefore aids in reducing the negative attitude associated with these patients. Despite having the post-basic training, these nurses experience (worked >15 years) had no significant influence on the nurses' attitude $P=0.47$. These results agrees with those of Carroll, (1995) where experience had no significant effect ($P=1.000$). The evidence that there is little or no significant difference between the nurses who have served for more than 15 years, would suggest that there might be other contributory factors that would explain these results.

Out of the 155 respondents, 39% had positive attitude in accordance with the criteria in the appendix IV. This was lower than the hypothesized value of 50%. The critical value of 1.85 therefore the null hypothesis is accepted.

5.4 Skills

Illicit substance use remains a significant public health threat worldwide. Specifically in this study, an attempt was made to determine the skills of nurses in the management of substance dependent patients.

These results indicated that, the nurses who care for substance dependent patients lack the management skills required. This was in agreement with the study of Mclaughilin, Mckennas & Leslie 2000, Jerome & Jason 1998 and Mac Galanter & Kleeber 1999

among others. Only 67.1% (104) of the participants indicated that nurses normally take patient history. This is not as expected since always a nurse ought to take history of all the patients during admission and make nurse's own impression to plan for the care of the patients. Only 31.6% (49) of the nurses do routine physical examination on substance dependent patients. Responses regarding client education and early intervention were significantly less popular. These responses suggest that the nurses surveyed were more concerned with the management of acute states than with prevention and harm minimization measures, such as early intervention and patient education. Less than 50% of the participants accepted that they give routine general health education and actually only 25.2% (39) of them give health education on the substance of abuse.

Routine health education is the only means of letting the substance dependent patients acquire the knowledge about these substances to enable the patients avoid the substances. According to the author's observations, the only ward where health education is given is in substance rehabilitation ward (4 male) yet there are patients with substance abuse related disorders in all the wards. Provision of health education to patients and the community at large is a good practice that should be encouraged in order to increase public awareness about substances of abuse. In his study, Javamillo (1995) found out different results about nurses who were interested in providing useful information to patients but messages usually were wrong. Likewise Singla, Sharma & Jain (1998) found out that there was lack of emphasis on proper health education among the nurses in India. Wrong or inadequate information about substance dependence given to patients is dangerous. This may strengthen the stigma that exist on substance abusers and even promote self pity among these patients hence increasing their probability for craving for more substances.

The majority of nurses (84%) do not plan for the care of these patients but instead they manage whatever the signs and symptoms that occur. This could imply that management skills of these nurses are still unsatisfactory. Lack of necessary planning by the nurses in the management of substance dependent patients and inadequate counseling skills as

mentioned by the majority of the participants gives the reason why these patients take long to recover and more so they relapse sooner than expected.

It may be, therefore, that many of the nurses who did not plan for the care simply felt that they did not need to because their other medical colleagues were able to offer the skill and expertise required.

Nurses with post-basic psychiatric training were much more skilled and applied their skills in handling substance dependent patients, as compared to those without post-basic psychiatric training. For example, Nurses with post-basic training were 11 times more likely to conduct physical examination on substance abuse psychiatric patients as compared to nurses with no post-basic psychiatric training O.R 11.3.

Therefore there is still a lot to be admired about those with a post basic psychiatric training. Post basic training has a significant influence on nurses' knowledge, attitude and skills towards substance dependent psychiatric patients. This training gives nurses opportunity to be more exposed to these patients and appreciate in depth their complexity. In the course of doing their post-basic training, nurses acquire knowledge on the various substances and their usage.

An interesting finding is that, experience of the nurses did not improve their skills for the care of these patients as expected for example only 25% of those who had working experience of more than 15 years were giving health education on the substances of abuse. A study done in Australia by Elliott & Frank (1990) shows that 85% of the participants gave health education on substances of abuse. The reason for this is mainly ignorance that substance dependence is actually a medical problem.

From my personal experience in this investigation, having nursed the substance dependent patients in two different hospitals, that is, isiolo district hospital and Mathari referral hospital, the possible reason to this could be that most of the nurses were not motivated to nurse these patients as they sought transfers from the remote district hospital to Mathari hospital for convenience of being in the city.

It is worth contemplating that the mere presence of a specialist drug and alcohol unit in a psychiatric hospital sends a message that the care of clients with drug and alcohol problems is an important and legitimate part of health care.

Out of the 155 respondents, 47.8% had adequate skills in accordance with the criteria in the appendix V. This was lower than the hypothesized value of 50% and critical value of 2.80 which rejects the null hypothesis

Other variables like age, gender, marital status, level of education and department had no significant association with nurses' knowledge, attitude and practice.

5.5 Nurse In-charges

Most of the nurse in-charges 71% have a post basic psychiatric training while only 28.6% (2) did not have post basic psychiatric training. From the above results, we can deduce that these nurses have adequate knowledge and thus positive attitude.

Elliott, & Frank (1990) in their study discovered that all the nurse in-charges working in psychiatric unit had a working experience of above 10 years, in this study, all the nurse in-charges have experience of at least 7 years. The in-charges are well versed with what goes on in all the wards since all the respondents 100% (7) agreed that there are substance dependent patients in all the wards. This is in contrast to Taylor (2000) whereby only 48% of the in-charges agreed that there were substance dependent patients in the wards. Although the nurses indicated clearly that they do not like nursing the substance dependent patients, the in-charges 66.7% felt that the nurses have a positive attitude towards these patients. This means that they assume that the subordinate staffs are motivated to work yet they are not or could be a reflection of themselves as they believe that all the nurses should have adequate knowledge and positive attitude to nurse the patients. This agrees with a research by Paulice, Lyman & Mc Cornick (1994) that demonstrated difference between administrators and care providers in their perception of the substance dependent patients.

CHAPTER VI: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

From the results of this study, this is the conclusion.

1. The general knowledge on substances of abuse (morphine, cocaine and heroin) among nurses was inadequate; however knowledge on cannabis was adequate.
2. Although knowledge of the psychiatric trained nurses was relatively high, knowledge of nurses in general was lower than the hypothesized 50%.
3. In seeking to ascertain the attitudes of general nurses towards clients with substance related problems, the study found some difference between those nurses who had a post basic psychiatric nursing and those without. In all the dependent variables: knowledge attitude and skills, a statistically significant difference was detected. Those nurses who had a post basic psychiatric nursing scored slightly higher on these variables than those who had not for example, the likelihood of a nurse with post basic psychiatric training to have given a general health education on substance dependent health education was more than 8 times those without.
4. It was interesting to note that, the participants in this study scored higher on the variables of attitudes, and perceived knowledge which is uncharacteristic of participant reported in similar research.
5. An interesting finding which has an implication for the control of substance dependent in this nation was that nurses were infrequent sources of information on substances of abuse.
6. Attitude of the participants towards substance dependent Patients was overwhelmingly negative and below the hypothesized 50% with most of the participants indicating that they have ever felt like quitting from the institution because of these patients. However, most of the nurses agreed that substances have effects on the users and that these patients can be helped.

7. Nurses must have adequate and correct knowledge on the substances of dependence for better management of substance dependent patients and prevent relapse.
8. Inadequate knowledge and poor skills could hamper the nurses' effort in the care of substance dependent patients.

6.2 Recommendations

For this study, the recommendations are;

1. Nurses with post-basic training have better skills therefore, all the nurses in direct care of substance dependent patients must have a psychiatric training and counseling skills.
2. Due to poor knowledge shown, there should be continuing in-service training or refresher courses on substances of abuse to enhance nurses' knowledge for better management of substance dependent patients.
3. The results demonstrates poor knowledge on the substances of abuse therefore, A greater emphasis on substances of abuse related issues within nursing curricula would be a necessary precursor to assist the nurses realize such potential of knowledge.
4. The participants demonstrated negative attitude thus, nurses should be critically screened to ensure that only those nurses willing to interact with substance dependent patients are selected to nurse search patients.
5. The nursing curriculum should be skill-based to give nurses skills that will enable them to provide better services to the substance dependent patients. This is because of the poor knowledge response in the study.
6. A study on the factors influencing attitude formation and change must be done to determine how negative attitudes towards these patients can be changed.

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APPENDICES

APPENDIX I: CONSENT EXPLANATION

Assessing Psychiatric Nurses Knowledge, Attitude and management Skills towards Substance Dependent Patients in Mathari hospital

Introduction

This is a research study seeking to assess psychiatric nurses' knowledge, attitude and skills towards substance dependent patients. The study is part of requirement of a master's degree and will contribute towards improvement substance dependent patients' care in Kenya. You are required to give information that is true to the best of your knowledge by responding to this questionnaire only. No invasive procedures are involved. Participation is fully voluntary and your anonymity is guaranteed, as the information obtained will be treated confidentially and used solely for the purpose of this study.

In case of any questions relating to your participation in the study, please contact the principal investigator, Mutunga Catherine S, Cell phone: 0723 846810

College Of Health Science

Department Of Nursing Sciences

P.O Box 19676-Nairobi

OR THE Chairman Kenyatta National Hospital Research and ethics Committee

P.O Box 3019- Nairobi.

I agree to take part in this research as a study subject.

Respondent's signature.....

Department.....

Respondent's Code

Date of Interview

Appendix II: Questionnaire

Instructions:

Please don't write your name on the questionnaire.

Please put a tick (✓) in the box next to the right response

Where no choices are given, please write / fill in the appropriate answer.

SOCIAL ECONOMIC DATA

1. How old are you?

- 1) Below 30 years []
- 2) Between 30 and 40 years []
- 3) Above 40 years []

2. Gender: Male or Female?

- 1) Male []
- 2) female []

3. What is your marital status?

- 1) Single []
- 2) married windowed []
- 3) separated []
- 4) Others (specify)

4. What is the level of your education?

- 1) Secondary []
- 2) University []
- 3) Others specify!.....

5. What is your professional qualification?

- 1) Kenya enrolled nurse/ midwife []
- 2) Kenya enrolled nurse []
- 3) Kenya registered nurse / midwife []
- 4) Kenya registered nurse []
- 5) B.Sc. (nurse) []
- 6) Others (specify).....

6. How many years of working experience do you have? []

KNOWLEDGE

7. Are there substance dependent or abusing patients in your ward?

- 1) Yes [] 2) No []

8. If no in No.7 have you ever worked in a ward with substance dependent patients?

- 1) Yes [] 2) No []

9. Which of the following substance do you know about or have heard of?

- 1) Cannabis (bhang, marijuana) []
 2) Cocaine []
 3) Morphine []
 4) Heroin []

10. In what form(s) are these substances dispensed [tick (√) the appropriate choice(s)]

Substance	Syrup	Tablets	Powder	Injectables	Rolls	Don't know
Cocaine						
Cannabis						
Morphine						
Heroin						

11. Which are the various way(s) of using these substances [tick (√) the appropriate choice(s)]

Substance	Drinking	Eating	Injecting	Sniffing	Smoking	Don't know
Cocaine						
Cannabis						
Morphine						
Heroin						

12. Are there any effects that these substances have on the psychiatric patients who use them?

- 1) Yes [] 2) No [] 3). don't know []

13. If yes above (Q.12), what are the effects when a patient uses the following substances?

1) Cannabis (marijuana)

2) Cocaine

3) Morphine

4) Heroin

5) Don't know.....

14. Can the patients with substance related psychiatric problems get help for their problem?

1) Yes [] 2) No [] 3). don't know []

ATTITUDE

15. Is substance abuse a problem in Kenya? (Abuse of cannabis, heroin, morphine, and cocaine)

1) Yes [] 2) No [] 3). don't know []

16. Indicate by order of preference one (1) to show the most preferred and four (4) to show the least preferred group of patients you choose to manage.

A).Patients with schizophrenia []

B) Patients with mood disorder []

C). patients with substance induced psychosis []

D). patients with medical or surgical conditions []

17. Have you ever felt the need to nurse substance depended patients?

2) 1) Yes [] 2) No [] 3). don't know []

18. Have you ever felt guilty about the kind of patients you nurse?

3) 1) Yes [] 2) No [] 3). don't know []

19. Have you ever felt like quitting or doing another post graduate course other than psychiatric nursing?

4) 1) Yes [] 2) No [] 3). don't know []

20. Do you have a post-basic psychiatric training?

1) Yes [] 2) No []

21. Do you think a post basic psychiatric training is very necessary for someone to be able to manage substance dependent patient?

- 1) Yes [] 2) No [] 3). don't know []

22. Please tick (✓) to show your response.

	Strongly agree 1	Agree 2	Neutral 3	Disagree 4	Strongly disagree 5
a). Substance dependence affects almost every part of a substance-dependent person's life.					
b). I like interacting with substance-dependent patients					
c). Substances affects mental stability of the user					
d). Helping substance dependent patients offers me a chance to test myself and my abilities					
e). Only substance dependent patients require health education on the complications of substance dependence					
f) Assisting a substance dependent patient is a reward in itself					
g). Considering the time spent counseling substance dependent patients, I feel thoroughly familiar with my tasks and responsibilities					
h) Already existing mental illness can sometimes cause someone to abuse substances.					

SKILLS

23. Who normally takes the history of the patients?

- 1) Clerk []
- 2) Nurse []
- 3) Assistant in clinic []
- 4) Doctor/ clinical officer []
- 5) Others specify

24. Have you ever done a physical examination on a substance dependent patient?

- 1) Yes []
- 2) No []

25. Do you give health education routinely?

- 1) Yes []
- 2) No []

25. Have you ever given health education on substances of dependence especially (cannabis, cocaine, heroin, and morphine)?

- 1) Yes []
- 2) No []

26. If yes above, which one?.....

27. Do you have a postgraduate counseling skills to assist substance dependent patients?

- 1) Yes []
- 2) No []

28. if no above, have you ever thought of acquiring counseling skills to assist these patients?

- 1) Yes []
- 2) No []

29. Have you ever nursed a patient suffering from withdrawal symptoms due to any of the above substances?

- 1) Yes []
- 2) No []

30. If yes above, what was your action?.....

.....

31. Have you ever drawn a nursing- care plan for those with substance withdrawal symptoms?

- 1) Yes []
- 2) No []

End of the interview

Thanks for your participation

INTERVIEW GUIDE FOR NURSE IN-CHARGES

1. How old are you?.....
2. Gender?.....
3. What is your marital status?.....
4. What is your professional qualification?.....
5. How many years of working experience do you have?.....
6. Are there substance dependent patients in all the wards?.....
7. If yes in question 6, what are the nurses' reaction incase they are deployed to the wards with substance dependent patients?.....
8. How do the nurses generally react towards substance dependent patients?.....
9. Are the newly posted staff motivated to work in the wards with substance dependent patients?.....
10. Do you think post basic psychiatric training for nurses will affect the nurses' knowledge, attitude and skills towards management of substance dependent patients?..... †

Appendix III: knowledge score sheet (Happell, & Taylor, 1999).

On knowledge, the questionnaire carried 8 questions with 20 possible correct responses, covering questions on whether there are substance dependent patients, exposure to substance dependent patients, awareness of the substances, knowledge of the formulations, knowledge of ways of using, effects of the substances to the users, and whether these patients can get help. For each correct answer, a participant scored one point, that is, respondents who got all 20 correct answer scored 100 percent. The mean score was 9 points (45%)

Appendix IV: attitude score sheet (Happell, & Taylor, 1999).

On attitude, the questionnaire carried 8 questions with 15 possible correct responses, questions covering on whether there are substances abuse is a problem in Kenya, whether the participants would prefer nursing these patients, felt like quitting, and other attitudinal factors. For each correct answer, a participant scored one point, that is, respondents who got all 15 correct answer scored 100%. The mean score was 6 points (39%)

Appendix V: management skills score sheet (Happell, & Taylor, 1999).

On skills, the questionnaire carried 10 questions with 10 possible correct responses. The questions were covering on: who takes history, performance of physical examination, giving of health education, whether they draw a nursing care plan. For each correct answer, a participant scored one point. Respondents who got all correct answers scored 100%. The mean score was 5 points (47%)

Appendix VI: Authority Letters



RC/01/3201

James Mwangi
Nursing Sciences
Faculty of Medicine, UoN
Nairobi

To

**PROPOSAL: "IMPROVING ATTITUDE AND MANAGEMENT SKILLS
TOWARDS SUBSTANCE ABUSE PATIENTS AT MATHARI
HOSPITAL"** (2005-12/2005)

Dear Sir,
I am pleased to inform you that the proposal for the above mentioned research project has been reviewed and approved by the Research Ethics Committee for the period January 2006 - 12/2006.

You are required to request for a renewal of the approval if you intend to continue the project beyond the deadline given.

The Research Ethics Committee will not be held responsible for receiving a copy of the research findings from you at the end of the study.

Your work will form part of the research files which will be available to Access when related research study on the same topic is conducted in the future.

JAMES MWANGI
CHIEF INVESTIGATOR

Dr. J. Mwangi, Chairperson, KNH-ERC
Deputy Director CS, KNH
Faculty of Medicine, UoN
Chairman, Dept. of Nursing Sciences, UoN



KENYATTA NATIONAL HOSPITAL

Hospital Rd. along, Ngong Rd.

P.O. Box 20723, Nairobi.

Tel: 726300-9

Fax: 725272

Telegrams: "MEDSUP", Nairobi.

Email: KNHplan@Ken.Healthnet.org

Ref: KNH-ERC/ 01/ 3291

Date: 20th February 2006

Catherine Syombua Mutunga
Dept. of Nursing Sciences
Faculty of Medicine,
University of Nairobi

Dear Catherine

**RESEARCH PROPOSAL: "KNOWLEDGE, ATTITUDE AND MANAGEMENT SKILLS
OF NURSES TOWARDS SUBSTANCE DEPENDENT PATIENTS AT MATHARI
HOSPITAL, NAIROBI"
(P215/12/2005)**

This is to inform you that the Kenyatta National Hospital Ethics and Research Committee has reviewed and **approved** your above cited research proposal for the period 20th February 2006 – 19th February 2007.

You will be required to request for a renewal of the approval if you intend to continue with the study beyond the deadline given.

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

PROF A N GUANTAI
SECRETARY, KNH-ERC

c.c. Prof. K.M.Bhatt, Chairperson, KNH-ERC
The Deputy Director CS, KNH
The Dean, Faculty of Medicine, UON
The Chairman, Dept. of Nursing Sciences, UON
Supervisors: Mrs. L. Kivuti-Bitok, Dept. of Nursing Sciences, UON
Dr. A. Karani, Dept. of Nursing Sciences, UON

MINISTRY OF EDUCATION, SCIENCE & TECHNOLOGY

Telegrams: EDUCATION", Nairobi

Fax No.
Telephone: 318581
When replying please quote



JOGOO HOUSE
HARAMBEE AVENUE
P. O. Box 30040
NAIROBI
KENYA

MOEST 13/001/36C 62/2

3 February 2006

Mutunga Catherine Syombua
Nairobi University
P. O. Box 30197
NAIROBI

Dear Madam

RE: RESEARCH AUTHORIZATION

On the basis of your application for authority to carry out research on 'Knowledge, attitude and management skills of nurses towards substance dependent patients at Mathari Hosiptal,

This is to inform you that you and your have been authorized to carry out research in Mathari Hospital in Nairobi, for a period ending 30th June 2006.

You are advised to report to the Director, Mathari Hospital before commencing ~~on~~ your study.

Upon, completion of your research you are expected to submit two copies of your research findings to this office.

Yours faithfully


M. O. ONDIEKI
FOR: PERMANENT SECRETARY

UNIVERSITY OF NAIROBI
MEDICAL LIBRARY

Copy to: The Director
Mathari Hospital
NAIROBI

Appendix VIII Preview of the Study Area

The study was conducted at Mathari hospital in Nairobi province. The hospital is located approximately 10 kilometers from the city centre along Nairobi- Thika road. It is a referral mental hospital and a psychiatric training hospital in the country.

The hospital has two departments: civil side and maximum-security unit, each department with its own wards.

The hospital has a bed capacity of 700 patients and average bed occupancy of 650 in-patients:

- Civil unit 432
- Maximum-Security unit 186

It has a substance rehabilitation ward which accommodates only a small fraction of substance dependent male patients. All the patients are first admitted in the other wards, and then some substance dependent male patients are transferred to substance rehabilitation ward (ward 4 male) only when there is a vacant bed and if they are able to pay amenity charges. Due to inadequate facilities, the rest of substance dependent male and female patients are managed in other wards combined with other patients suffering from other psychiatric conditions.

There are 252 nurses in total, viz.

- Kenya registered community health nurse 88 of which only 35 (40%) are psychiatric trained nurses.
- Enrolled community health nurses 164 of which only 86 (52%) are psychiatric trained nurses.

The nurses are normally rotated in different wards therefore at any one moment a nurse can be deployed in a ward with substance dependent patients.