KNOWLEDGE, ATTITUDES AND PRACTICE OF RESTRAINT AND SECLUSION OF AGGRESSIVE PSYCHIATRIC INPATIENTS AS A METHOD OF NURSING AT MATHARI HOSPITAL, NAIROBI

A DISSERTATION IN PART FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN NURSING (MENTAL HEALTH AND PSYCHIATRIC NURSING) OF THE UNIVERSITY OF NAIROBI

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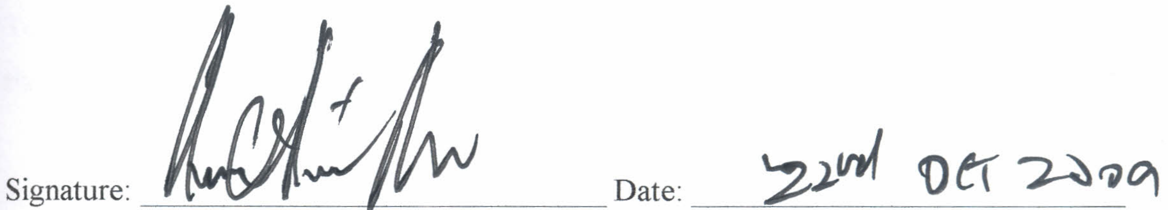

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DEDICATION

To my husband Geoffrey, son Dennis and daughters Judy, Ann and June for their patience, support and encouragement during the course of my study.

To Mental Health and Psychiatric nurses whose knowledge, skills and abilities enable them to work in an exceptionally challenging environment.

To those who create a therapeutic environment among family members, community and the society.

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OPERATIONAL DEFINITIONS

Agitation: a state of feeling of anxiety or excitement as manifested by aggression and violence.

Ducking: Pushing somebody under water for a short while.

Dual diagnosis: The co-occurrence of a substance use disorder with another psychiatric disorder

Gatekeepers: a person who is in charge, allowing people through an institution to conduct research.

Psychiatric Institution: An organization e.g. hospital for treating people with mental illness.

Psychiatric unit: A section in a large hospital that deals with treatment of the mentally ill.

Restraint: A thing that limits something.

Registered nurse: these are professional nurses who have completed a course of study at an approved school of nursing and who have passed a prescribed examination as required by the examination body.

Seclusion: state of being away from others or in a private place.

LIST OF ACRONYMS

B.P	-	Blood Pressure
JCAHO	-	Joint Commission on Accreditation of Health Care
KMTC	-	Kenya Medical Training College
KNH	-	Kenyatta National Hospital
MSU	-	Maximum Security Unit
MTC	-	Medical Training College
NCLEX - RN	-	National Council Licensure Examination for Registered Nurses
NHS	-	National Health services
R/S	-	Restraints/Seclusion
RN:	-	Registered nurse.
SONS	-	School of Nursing Sciences, University of Nairobi
R/S	-	Restraints/Seclusion
WHO	-	World Health Organization

ABSTRACT

Introduction: The use of locked door seclusion rooms and/ or physical restraint (use of belts/force to seclude a patient) is common in most psychiatric institutions. This practice continues to serve as an important treatment function in most psychiatric hospitals. For many centuries attempts have been made by the mental health professionals concerned to eliminate the practice or at least make their use less irrational, less punitive and more therapeutic.

AIM: The aim of this paper was to establish the knowledge, attitudes and practice of nurses on the practice of this treatment modality.

Methods: The study area was Mathari hospital, a referral and teaching hospital for both medical and nursing Students in Kenya. This was a descriptive study. The participants were both Enrolled and Registered nurses and data was collected through a questionnaire. The approximate duration of the study was 6 months. Data analysis was through a statistical package of social sciences (SPSS Version 12.0).

Results: This study reported comprehensive information on nurses' knowledge, attitude and the practice of restraints and seclusion of aggressive in-patients.

Conclusion: The study reported that nurses were equipped with knowledge, and had a positive attitude on the importance of application of various interventions during the practice of restraints and seclusion of the aggressive psychiatric in-patients. The study also established some relationships between knowledge, attitude and the practice of restraints and seclusion of the aggressive in-patients.

Recommendations: Different methods of study and larger sample are recommended to develop a more comprehensive meaning of restraints and seclusion among nurses. Although majority of nurses agreed that clinical guidelines should be used during the practice of restraints and seclusion, an observation research is recommended to establish the use of such clinical guidelines during such practices.

CHAPTER I: INTRODUCTION

1.1. *Introduction*

Despite the controversy over the use of seclusion and restraints, these measures are commonly used to treat and manage disruptive and violent behavior (Sailas & Wahbeck, 2006). Violence is a complex phenomenon that needs to be met with a multi - professional approach.

Restraint is defined as the use of belts to fix a patient to bed, and seclusion as bringing the patient into an empty and locked room without possibility to leave (Martin et al, 2007). Seclusion can vary, but usually the term refers to some form of isolation. The isolation may occur in a locked room within confines of a patient's room. Finke and Linda (2001) argue that, seclusion may entail a requirement to sit in a chair or involve serving a time-out period or some form of involuntary or voluntary confinement. However Brown & Tooke (2004) suggest that restraint and seclusion of psychiatric patients, is viewed by some as a violation of basic human rights, as a necessity for the control of violence, and by others as a therapeutic modality.

Restraint is referred to as the use of leather straps to restrain the extremities of an individual, whose behavior is out of control and who poses an inherent risk to the physical safety, psychological well being of the patient and staff. Seclusion refers to another type of restraint in which the client is confined alone in a room from which he/she is unable to leave (Neil & Gregory 2000). Seclusion continues to be a regular feature of acute inpatient psychiatric care, despite sustained scrutiny and continuing lack of evidence for its rationale. The practice remains a symbol of control ascribed to professionals in management of mentally disordered people who are perceived to be dangerous (Townsend, 2008).

Restraint and seclusion is controversial, opponents of restraint and seclusion have based their arguments on concern for the rights of mental patients, and dedication to treat patients in the least restrictive environment. On the other hand proponents of restraints and seclusion have based their arguments on the theoretical benefits of isolation and reduction of external stimuli. Although it appears to be reasonably well established that restraints and seclusion "works" for example, it provides an effective means for preventing injury and reducing agitation, it is equally established that it has a physical and psychological effects on patients. Frost & Wells (2000) suggest that use of physical restraints in psychiatry has substantial implication for emotional well being of the patient.

The major findings of Morall et al (2002), that aimed at describing and gaining a better understanding of patient with a severe persistent psychiatric disorder, who were placed in a seclusion while hospitalized in a closed psychiatric unit were:

- Patients perceived seclusion as punitive measure and modality of social control and the experience of seclusion serving as an intensification of already existing feelings of exclusion, rejection, abandonment and isolation.
- In addition the findings also suggested that, it is not seclusion or restraints that impacts on the patients' negative emotional experience, but rather the lack of nurse patient contact during seclusion experience.

Although the use of restraint and seclusion can be of therapeutic value, for example it can prevent injury and reduces agitation; this practice has been described as a form of social control and a drastic deprivation of personal liberty over people already experiencing exclusion from the community (Fisher, 1994)

1.2. *Background Information*

The use of seclusion raises uncomfortable feelings, both within the person undergoing the intervention and within the nurses implementing it. The procedure automatically enforces social isolation and involves nursing Staff placing outward controls on the behavior of another human being. Restraint/seclusion is becoming more associated with the negative

side of psychiatric care but some acute psychiatric units continue to use it as an intervention during aggressive behavior (Alty, 1997).

The history of restraint and seclusion started when a large number of private 'madhouses' were established. However large public asylums only became widespread in the UK during the 19th Century. The Lunatic Act 1845 made it compulsory for every county to establish such institutions. The number of confined people rose dramatically through eighteenth centuries (Fulford et al 2006). Treatment usually took the form of restraint often with shackles or straight jackets, combined with punitive procedures such as ducking.

The practice in Mathari hospital in Kenya which came into existence as early as 1910 was not different, and nursing care of the patients was left in the hands of unskilled patient attendants who were working under a few expatriate nurses and the care was mainly custodial.

However many people also stood for a more humanitarian approach. William Tuke established the retreat at York in England that offered 'moral therapy' based on homely environment. Philip Pinel threw away the chains of patients in the Salpetriere and Bicetre hospitals (Fulford et al, 2006)

1.3. Statement of the Problem

Restraint and seclusion of patients remains a common institutional practice. This has received widespread attention from political, ethical, legal and clinical standpoint. Nurses in psychiatric settings continue to play an important role in application of restraint and seclusion in the management of aggressive psychiatric patients (Holmes et al, 2004).
As a psychiatric institution for Nairobi and referral hospital for Provincial and District Psychiatric units, Mathari hospital has witnessed a growing demand for psychiatric care services.

Increased public awareness of their rights as patients and patients' relatives has led to heightened expectations resulting to demand for high quality of care. This requires nurses to differentiate between the 'good' and 'bad' nursing care. Nurses working in psychiatric hospitals/units are therefore faced with the following challenges:

- Equipping themselves with knowledge of the efficacy of treatments and interventions they provide to patients.
- Practicing evidence based psychiatric nursing.
- Documenting the nature and outcomes of the care they provide.

As a lecturer at Kenya Medical Training College (KMTC) Mathari, the researcher noted that the issues of restraints and seclusion were often mentioned during Students evaluation. Students were advised not to indicate their names during such evaluations for confidentiality. Occasionally students also gave verbal reports on issues of restraints and seclusion of aggressive patients. Some of the comments noted in the evaluations were:

- A number of support staff was involved in the practice of restraints and seclusion.
- Once secluded patients were left in seclusion rooms for too long.
- Some seclusion rooms were not conducive i.e. patients did not have mattresses where they could rest, and many times they remained standing while in seclusion.

The reflection on the Students' remarks aroused the researchers' curiosity that envisaged exploring more on this important subject. Moreover, there is no other study that has been done in the past on restraint and seclusion of aggressive patients in the institution before.

1.4. Problem Justification

Restraint and seclusion of persons with mental disabilities without their free and informed consent on the basis of aggression due to mental illness, often together with additional criteria such as being a danger to oneself and others or in need of treatment with or without a legal basis is allowed by many states. The core of the containment

principle is the restriction of patients' movement to the extent that the patient is safe from both self injury and injury of the others. Solitary confinement or seclusion as a form of control or medical treatment cannot be justified for therapeutic reasons.

A key to determining the reason for continued physical restraint in psychiatry may lie in understanding of the influence of staff related factors. Nurses are required to make a judgment about a patients potential to cause serious bodily harm to self or others. This judgment may be influenced by nurses' perceptions of patient behaviors as violent or by their emotional reaction to such patients (Frost & Wells 2000).The nursing staff needs to understand the reasons for use of seclusion, have the opportunity to talk about it, and accept the angry feelings they may have towards the patient. They should also have the freedom to modify the procedure to respond to the differences in patient needs.

Peplau (1988) - a theorist of interpersonal relationship in nursing - reveals that each individual may be viewed as unique biological, spiritual and sociological structure that will not behave the same as any other individual. Orem's (2001) - a theorist of self- care deficit nursing - suggests that the physical, psychological, interpersonal and social aspects of health are inseparable' (George, 2002).

On the other hand due to health concerns or other factors, restraints and seclusion may be contraindicated. This is especially true for patients who have a history of self harm, a dual diagnosis or experience severe anxiety/fear when confined.

However, despite the high rate of aggression of patients in psychiatric wards, uncertainty exists about the nature of the relationship between mental illness, inpatient treatment and aggression. Daffern and Howells (2001) suggest that, as a consequence, the frequently employed strategies used to manage aggressive inpatients such as seclusion, isolation, sedation and restraint are implemented inconsistently and possibly selected on basis of characteristics unrelated to the cause of aggression.

1.5. *Expected Benefits of the Study*

The study findings were expected to open an avenue for review of current nursing guidelines to direct the application of restraint and seclusion. It was also serve as a guide for a rational use of this treatment modality and establish whether current procedure manuals contain clear guidelines or whether there are clear institutional policy to guide staff on application of restraint and seclusion. The study was also to establish the documentation practices before, during and after restraint and seclusion and determine the evaluations on the effectiveness of the practice.

1.6. *Hypothesis*

There is a relationship between knowledge and attitudes, and the practice of restraint/ seclusion

1.7. *Research Objectives*

1.7.1. Main Objectives

The aim of this research study was to establish the nurses' knowledge, attitude and the practice of restraint and seclusion of psychiatric aggressive inpatients.

1.7.2. Specific objectives

1) Determine the level of knowledge of nurses on restraint and seclusion as a method of nursing.
2) Establish the attitude of nurses on restraint and seclusion of psychiatric aggressive inpatients.
3) Establish the current practice on restraint and seclusion of psychiatric aggressive inpatients.

4) Recommend appropriate measures that impact on policy and practice of restraint and seclusion

1.7.3. Research Questions:

1) What is the level of knowledge of nurses in Mathari hospital on restraint and seclusion of psychiatric aggressive inpatients?
2) What is the attitude of nurses working in Mathari hospital on restraint and seclusion of aggressive psychiatric inpatients?
3) What is the current practice of nurses on restraint and seclusion of psychiatric aggressive inpatients in Mathari hospital?

1.8. Research Variables

Dependent or Criterion Variables.

Practice

Attitude

Independent valuables

Knowledge

Confounding variables

Period of working

Number of nurses per shift

Nurse/patient ratio

Professional qualifications

1.9. Theoretical Framework

The theory of reasoned action (TRA) / theory of planned behavior described by Ajzen & Fishbein (1980) were used to inform this study. This theory describes how people develop beliefs, which ultimately determine their behavior. A Person develops beliefs based on observations reflection and experiences.

1.10. Conceptual Framework

The following model (Figure 1) reflects the outcome of relationship between the three variables knowledge, attitude and practice. The study findings reported that there was a relationship between the knowledge and the practice of restraints as indicated in tables 8 and table 11. The participants who agreed with the knowledge agreed with the practice. There was also a relationship between attitude and practice. The participants who agreed on the attitude agreed on practice as indicated in tables 21 and 22.

As indicated in tables 31, 32, 33, and 35 there was a significant relationship between knowledge and attitude. Those participants who agreed on knowledge agreed on practice.

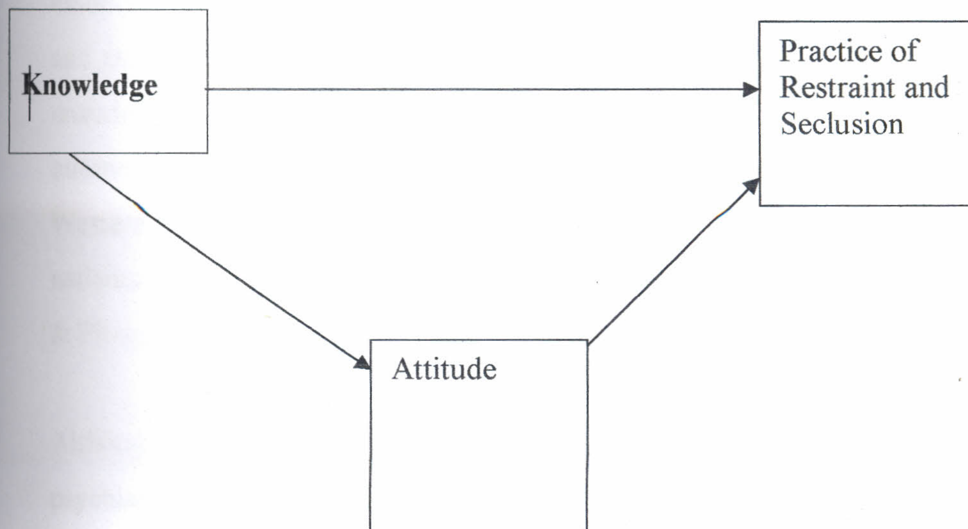

Figure 1: Conceptual Framework

CHAPTER II: LITERATURE REVIEW

2.0 INTRODUCTION

The ultimate method of behavior control is restraints and seclusion which should be used when patients may be harmful to themselves or others, or when they remain agitated non-compliant and violence seems eminent. Physical restraints/ and seclusion may be considered by nurses to make care giving more efficient and less worrisome and prevent lawsuits. Whether restraints/seclusion use is in the best interests and for the greatest benefit of patients or of the nurses is an open question (Chien & lee, 2007).

It is commonly agreed by health professionals in the literature that physical restraints/seclusion should be a first choice among the methods intended to ensure patient safety or treatment compliance (Regan et al, 2006). However research evidence and clinical reports indicate that R/S have been considered and used by nurses for various reasons particularly during emergency situations to manage patients with disturbed emotions and behaviors in a variety of clinical practice. On the other hand nurses' views and attitude towards the use of restraints/seclusion in controlling patients' behavior and ensuring patients' safety may create conflicts with patients' rights, including their autonomy in making decisions for their own care (Silas & Walbeck, 2005). In many Western countries there were between 3.4% and 30% of acute psychiatric aggressive patients subjected to some form of physical restraints during their hospitalization (Evans & Fitzgerald 2002)

Although in Africa there is very little data on use of physical restraints /seclusion to psychiatric aggressive patients, the practice of Physical restraints and seclusion remains widespread and appears to be accepted as inevitable (Mohr et al, 2005). Nurses are mostly involved in the decision to restrain and its implementation. However few studies are found which explore nurses' attitude towards, or issues relating to the practice of physical restraints/seclusion in different clinical settings.

2.1. *Rationale for Use of Restraints and Seclusion*

Physical restraints and seclusion in the hospital is often considered to be accepted and perhaps unquestioned practice related to patient safety for example, prevention of injury to patients or others. This is supported by a research that was conducted by Chien & Lee (2007) in one of the facilities in United States (US) on nurses' knowledge, attitude and the practice of nurses on restraints and seclusion. Two thirds of the nurses believed that patients should be restrained for their own safety and ensure treatment compliance, even if being restrained meant loss of dignity and was resisted by patients and/or their family members. However Stoudmire (1998) suggests that, patients should not be threatened with R/S but when they are inevitable, minimum force should be used immediately.

Restraints and seclusion provide a sound means for calming patients who do not respond to medication. Contrary to most clinicians concerns Gelder et al (2009) argues that, restraining a patient does not interfere with therapeutic alliance, in the end patients are usually grateful that they are prevented from acting destructively.

According to Stuart & Laraia (2001) the rationale for use of restraints and seclusion is based on the following therapeutic principles.

- Containment which restricts patient from harming themselves or others.
- Isolation addresses the need for patients to distance themselves from relationships.
- Decrease in sensory input which provides some relief from sensory overload
- The patient in restraint may be confused or delirious and will probably be frightened at the limitation of movement.
- Seclusion is a common technique for decreasing agitation, because a seclusion room diminishes sights, sounds and voices when patients' normal ability to screen out such environmental stimuli is impaired. The room is also minimally furnished with items to promote the clients comfort and safety.

2.2. *Ethical Considerations On Use Of Restraints/Seclusion*

Whenever nurses have to make decisions regarding the use of restraints/seclusion, they may find themselves in the midst of conflicts between the professional obligations to care for the patients' wellbeing and concerns about a patients right to make informed choice (Mayhew et al, 1999). There's no consensus among nurses to whether the benefits of its use outweighs physical and social risks in aggressive psychiatric care (Silas & Fenton 2000). It is also questioned whether nurses have been well prepared in developing the knowledge, techniques, attitudes and moral values to deal appropriately and effectively with complex patient situations.

The outcome on ethical considerations of restraints/seclusion use in the research conducted by Chien (1999) reported that, the use of physical restraints/seclusion on patients was perceived by psychiatric nurses in the study as beneficial and an effective nursing intervention, with little consideration being given to patients feelings, to loss of dignity and denial of informed consent. Based on this outcome Chien et al (2005) questioned whether or not the nurses are well prepared in managing ethical and legal situations of psychiatric aggressive patients.

2.3. *Causes And Management Of Aggression In Patients*

Aggression should be assessed thoroughly, defining the sequence of events that preceded it, and the role of medical and psychiatric factors, stressful events and environmental factors. Predictors related to the environment include, crowding and a medical team unreceptive to the patient discomfort.

As suggested by Gelder et al (2009) the best strategy is prevention through providing information in a clear and sympathetic way, recognizing risk situations and early signs of agitation and using de-escalation techniques if necessary with pharmacological support. On the other hand Sadock and Sadock (2000) suggest that, restraint/seclusion and psychopharmacological management should not be construed as sufficient.

Environmental measures to limit psychomotor agitation making the patient as comfortable as possible, decreasing background noise, removing potentially harmful objects and identifying situations in which the patient is intolerant were highlighted as some of the best practices. On the other hand Holmes et al (2004) argues that, maintaining an environment without restraints/seclusion is not easy; it takes sensitivity, creativity and interdisciplinary teamwork. However restraint/seclusion is never to be used as a punishment or for convenience of staff and it should not replace personal contact. On the other hand it is not uncommon for patients to perceive the use of restraints as a punishment. Stuart & laraia (2001) emphasizes the importance of maintaining therapeutic alliance with the patient in restraint/seclusion.

In national surveys on use of R/S in psychiatric facilities four point leather restraints remain the most used method of containing an out of control patient. Their advantage over medication is that they are immediately reversible and are an obvious reminder of the patients' condition. However Gelder et al (2006) argues that, physical contact should not be attempted unless the purpose has been clearly understood and agreed with the patient. It should be accompanied quickly by an adequate number of people using the minimum force. The behavior leading to restraint/seclusion and the time the patient is placed and released from restraint/seclusion must also be documented.

2.4. Nurses' Knowledge And Attitude of Restraints and Seclusion

A descriptive study conducted by Jenelli et al (1992) on general nurses on attitudes, knowledge and the practice issues regarding use of physical restraints and seclusion in acute medical unit in USA using a self developed 71 item restraint/seclusion study questionnaire revealed that, nurses obtained a satisfactory level of knowledge score.
A repeat of the similar study was conducted by Jenelli and Delles (2006) among 216 medical nurses in New York using the same questionnaire, reported similar outcomes to

those found in 1990s but significant changes in their attitudes towards their nursing practices relating to the use of restraints/seclusion.

2.5. Legal Requirements on Restraints and Seclusion

Legal requirements for the care of the secluded patients vary from state to state. United Kingdom's recent implementation of the human rights Acts (1998) reveals that, restraints and seclusion could be construed as inhuman and degrading treatment or even torture. Where permitted by law, R/S may become necessary during unmanageable agitation and aggression in the course of acute disorder in confusional states (Gelder et al 2009). Staff training on R/S is necessary because improper use may cause injury to patients or staff. Restraints and seclusion should be used only when strictly necessary and for shortest time possible with constant monitoring of its continuing necessity and patients condition. According to Varcarolis (2000), there should be hospital protocols that are clear and well written to guide the staff.

- ❖ When and how long to restrain and seclude before a physicians order.
- ❖ Nursing intervention during the period of restraint and seclusion for example, how often to check the clients in restraint and seclusion, whom to call, and how often restraint and seclusion should be applied.
- ❖ Multidisciplinary involvement is also highlighted by Varcarolis (2002) as an important factor in restraint and seclusion. For example physicians' signature, patients advocate or relative notification and patient agreement.

The code of practice for England and Wales states that "if seclusion needs to continue, a review should take place every two hours carried by two nurses in the seclusion room and every four hours by the doctor''. If seclusion continues for more than eight hours consecutively or for more than twelve hours intermittently over a period of 48 hours, an independent review must take place by a Resident Medical Officer (RMO), a team of nurses and other health professionals who are not directly involved in the care of the patient at the time the incident which lead to seclusion took place. If there's an agreement on ensuing action, the matter should be referred to the unit general manager (Varcarolis, 2002)

In spite of arrange of practice myths among nurses that the use of physical restraints can protect patients from any harm or injury, a range of serious adverse effects and consequences for example physical problems, and even accidental death by strangulation have been reported in the previous studies (Silas & Walbeck 2005). There are also psychosocial effects on patients who had one or more restraints experiences such as low social functioning, increasing confusion and adverse emotional reactions.

Silvestri (2002) highlighted a case where agitated and psychotic patient (who had been locked in seclusion room) was later found unconscious and without pulse, her head wedged between her beds mattress and steel railing. The Connecticut Supreme court affirmed a $ 3.6 million jury verdict, finding that the plaintiff had offered competent expert testimony indicating that the treatment violated the appropriate standard of care. Nurses are accountable for their own actions in relation to restraint and seclusion, and violation can result in malpractice lawsuits against the physician, the hospital and the nurse.

2.6. Guidelines and Recommendations During Restraints and Seclusion

While there are nursing guidelines or protocols for performing the procedure of using physical restraints, a few institutional guidelines or policy statements have been drawn to help individual nurses determine what they should consider in order to make ethically appropriate (Chien & Lee 2007). The hospital policy makers also do little to support their nurses in making such decisions and implement them.

Documentation should clearly outline the behavior requiring R/S, efforts that were made to attenuate the patient behavior before the use of R/S, the use of medication, continuous documentation of all efforts to remove the patient from R/S and monitoring of the patient to prevent injury. As suggested by Donat (2003) all clinicians should review and

thoroughly understand R/S guidelines, document the rationale for using R/S and the exact details of the process.

Subsequent inappropriate use of physical restraints might be due to absence of a clear and supportive institutional policy, and well defined assessment framework dealing with patients with unwanted or harmful behaviors. The use of restraints may also be associated with nurses' knowledge about its relevant hospital policy and guidelines. This notion is supported by research evidence such as the study by Magee et al (1993) which indicated that in over half of restraint/seclusion procedures, the nurses queried their adherence to the institutional guidelines.

As recommended by Townsend (2008) clients in R/S must be observed and assessed every 10 to 15 minutes with regard to circulation, respiration, nutrition, hydration and elimination. Such attention must be documented in clients' record. The client must be removed from R/S when safer and quiet behavior is observed. This is also emphasized by Silvestri (2002) one of the successful authors of NCLEX - RN review courses throughout England that, patients in restraint/seclusion must be assessed every 15-30 min for physical needs, safety and comfort.

Use of R/S requires written order by physician which must be reviewed and renewed after 24 hrs, and which must specify the type of restraint when safer and quiet behavior is observed. Research has demonstrated that, although individual nurses may have good insight into the nature of judgments, there's lack of agreement about specific interventions concerning restraints and seclusion.

Neil & Gregory (2000) expressed the need for guidelines to help Medical and Nursing Staff to form an agreed management plan for treatment and observation of psychiatric disturbed patients. They categorized patients in three levels:

a) **Level one:** Patients who are disturbed but accepting oral treatment. They suggested that, such patients can be nursed in a quiet area separate from other

patients in order to reduce stimulation. They also required constant observation of Blood Pressure (B.P) and Pulse rate three times daily.

b) **Level two:** Patients who are disturbed and refused oral medication. Should be nursed in a separate room from other patients and B.P, Pulse and temperature should be monitored constantly.

c) **Level three:** Patients in emergency situations where medication is required for immediate prevention of violence. Such patients should be sedated and they may require restraint until medication takes effect.

The patient should be nursed in a side room from other patients. Constant observations for physical and psychological state are taken. B.P, Pulse and Temperature observed after every 10 min then half hourly until the patient is ambulatory. Silvestri (2002) argues that, some state laws have specified the type of physical restraints that may be used, including the consistency of actual material which the restraint is made, consent on a patient unless on an emergency situation exists and can be documented.

The right to R/S of a patient is limited to only duration of real necessity, or if alternative or less restrictive measures are insufficient in protecting the client or others from harm. On the other hand nurses must be mindful of such regulations and must be aware of the kinds of behaviors that place them at risk for malpractice action (Donat 2003). However it is imperative to ensure that all instance of seclusion are properly recorded, not only for the protection of the patient but also for the protection of Staff.

Varcaloris (2000) suggest that, encouraging the patient to talk about angry feelings, finding ways to tolerate or reduce angry and aggressive feelings, and empathetic verbal interventions as some of the good nursing practices during aggressive behavior.
She argues that, when a client feels heard and understood and has help with problem solving; alternative options de-escalation of anger and aggression is often not possible. Empathetic verbal interventions are the most effective method of calming an agitated,

The staff in this facility used the information gained through their evaluations of R/S episodes to design targeted education to address areas of concern. The research also reported that making changes to therapeutic environment was a common way in which staff at psychiatric facilities tried to reduce R/S rates. Management placed an expectation on staff that they allow patients to choose interventions to be used in managing their aggression.

However staff at some facilities improved therapeutic environment through increasing the frequency with which they communicated with their patients about their needs. On daily basis at inpatient acute psychiatric care unit staff assessed patients' mental states and their risks of committing violent or harmful acts to themselves or others. The assessments were used in development of 24 hr individual service plans for patients.

2.7.1. Debriefing of patients

In another facility debriefing of patients following R/S was part of the changes made to practice (Fisher 2003). Debriefing occurred between patients who were placed in seclusion and their treatment teams. They focused on patients and teams views of patients behavior that led to the R/S and planning to avoid recurrences of such behaviors.

2.7.2. Adopting a facility focus

Timetabling a schedule to improve how the ward operated was another method that was used to reduce R/S (Mistral 2002). Regular meetings were held to discuss practical issues in the ward with the patients, and monthly meetings between community and the ward staff.

2.7.3. *Improving staff safety welfare*

Staff burnout was reported among the staff who continuously cared for acutely unwell patients in another study. According to Regan et al (2006) burnout was highlighted as one of the variables that played a significant role in R/S of patients in psychiatric hospitals. He associated the burnout to staff/patients ratios. He recommended a ratio of one nurse to five patients as opposed to one nurse to ten patients as recommended by World Health Organization WHO (2007). To reduce this burn out staff were rostered between caring for acutely unwell patients and caring for those who were less unwell. Staff was also educated in risk assessment and in techniques for controlling and restraining patients, and were issued with personal alarms. In addition if a patient assaulted a member of staff the incident was immediately reported to the police. The action reinforced patients' awareness of how serious it was to assault a staff member.

2.8. *Summary And Critique of Literature Reviewed*

The literature reveals the importance of documentation during the practice of R/S Townsend 2008, Gelder 2006, and Donat 2003. Assessment during the practice of R/S and multidisciplinary involvement has also been emphasized (Silvestri 2002).

The importance of policies and legal guidance has been emphasized to guide the staff during the practice of R/S.

The literature indicates that Jenelli 1992 & 2006 conducted a research that revealed a significant change in nurses' attitude, however it was difficult to establish the variables that lead to this conclusion because they were not indicated. This makes it difficult to conduct a similar research to establish whether the research would give similar outcome in a different area.

Although Silas & Walbeck (2005) indicated that physical problems and Strangulation during R/S have been reported in previous researches, they did not identify the researchers nor indicated when the research was conducted for easier reference.

According to Townsend (2008) nurses lack agreement about specific interventions concerning R/S, however such disagreements were not specified.

Finally the literature highlights some of the methods that have been applied to minimize the practice of R/S in clinical practice as, staff education Gaskin (2007), debriefing after R/S Fisher (2003), and adopting a facility focus e.g. timetabling (Mistral 2002).

CHAPTER III: METHODOLGY

3.1. Study Design

This was a descriptive survey. In this design the variables are partly controlled by the situation for example knowledge and ability to make judgments about patients care. The nurses' judgment is examined in relation to their knowledge and attitude. The research attempted to answer questions concerning the current practices on seclusion and restraint of aggressive patients. This helped to uncover new facts on the subject which provided a springboard for future correlation and experimental studies.

3.2. Study Area

The study was conducted in Mathari hospital Nairobi which comprises of two areas, one area admits civil patients (Civil side), the other area is the Maximum Security Unit (MSU) with patients who are admitted under legal custody. Mathari hospital is located 1.5km from the city centre of Nairobi. It has a bed capacity of 1000 patients. However due to establishment of the Community Psychiatry in Nairobi and the Psychiatric units in most of the districts in the country e.g. Nyeri, Murang'a, Kakamega, Kisumu, Portreiz, Eldoret, Embu, Meru and many others, the number of admissions have gone down to about 600 patients.

The choice of Mathari hospital for the research was significant because it is a referral hospital for psychiatric patients, an institution for higher learning and a center for clinical practice for both doctors and nurses. Based on these facts it is imperative that quality care be given to both inpatients and outpatients so that Students can emulate the same practice during their clinical experience.

3.3. *Study Population*

Mathari Hospital comprises of 226 nurses of whom 108 are registered nurses and 118 enrolled nurses. The participants were both registered and enrolled nurses working in Mathari hospital. They were subjected to a questionnaire designed to investigate the aspects of the variables to be investigated as illustrated in the specific objectives.

3.3.1. Inclusion Criteria

- All the nurses working in Mathari hospital who were present during the time of study.
- All nurses who had worked in Mathari hospital for a minimum period of equal to or more than 1 year.
- All the nurses who consented voluntarily to participate in the study.

3.3.2. Exclusion Criteria

- All the nurses in Mathari who were away during the time of the study.
- All the nurses who had not worked for a minimum period of less than 1 year.
- All the nurses who did not consent to participate in the study.

3.4. *Sampling Method*

A multistage sampling method was used consisting of stratified sampling where the population was first categorized according to the units (wards). Once in the units, systematic sampling was used where every "nth" nurse was selected from a list ordered alphabetically. This controlled the confounding variables because all nurses had equal chances to be selected to participate in the study. On the other hand other medical workers were not involved, all the participants were nurses. The breakdown of the

stratification and calculation of the "n" is under 3.6 (Sampling Frame and sampling Procedure) below.

3.5. Sample Size Determination

With a large sample the researchers are confident that if another sample of the same size was to be selected, findings from the two samples would be similar to a high degree. On the other hand small samples do not reproduce the salient characteristics of the accessible population to an acceptable degree. Resources and time tend to be major constraints in deciding on the sample size to use (Mugenda & Mugenda, 1999). In this respect the formula below which is recommended to determine the sample in social science was used to calculate the sample.

$$N = \frac{Z^2 pq}{d^2}$$

Where:

n = the desired sample size (if the sample size is greater than 10,000)

z = the standard normal deviate at 95% confidence standard level

p = the proportion in the target population estimated to have characteristics being measured.

q = 1- p

d = the level of precision (set at plus or minus 5% or 0.05).

This Formula is used where target population assumed to have characteristic of interest is 50%. E.g. target population with certain characteristics is .50, the Z – statistics is 1.96 and the desired accuracy is .05

$n = \underline{(1.96)^2 \quad} \; (.50)\,(.50)\,(.05)^2$

= 384

Since the target population is less than 10,000 the final estimate is calculated as below

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

Where nf = the desired sample size when the population is less than 10,000

n = the desired sample size when the population is more than 10,000

N = the estimate of the population size

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

$$nf = \frac{384}{1 + (384/226)} = \frac{384}{2.699115} = 142.26885$$

= 142 nurses

3.6. Sampling Frame and Sampling Procedure

The total number of nurses in Mathari hospital is 226. The sample size comprised of 142 nurses. An extra fourteen (14) questionnaires were prepared five (5) for pre-testing and nine (9) extra questionnaires to replace those that could be misplaced or got spoilt by the subjects. This supported the suggestion by Cormark (2000) that it is good practice to inflate the estimate of the sample size at the design stage assuming a certain level of loss may occur. Therefore the total number of questionnaires that were prepared was one hundred and fifty six (156). However among the hundred and forty two (142) questionnaires that were distributed none of them was misplaced nor got spoilt. All the one hundred and forty two questionnaires were completed and returned which was 100%

of the total number of the questionnaires distributed. This was attributed to the participants commitment to fill the questionnaires, and the dedication of research assistant to follow the instructions as guided by the researcher. Table 1 indicates the breakdown of the nurses.

Table 1 Sampling

Ward	Registered nurses	Enrolled nurses	Total	Sample per ward
2F	7	10	17	11
4M&F	8	3	11	7
5F	6	4	10	6
6F	5	6	11	7
1M	5	9	14	9
4M Drug Re.	3	6	9	6
5M	5	7	12	8
6M	8	5	13	8
8M	8	10	18	11
9M	8	9	17	11
Sect A	6	8	14	9
Sect B	5	7	12	8
Sect C	6	9	15	9
OPD	8	4	12	8
CED	2	_	2	1
Community	1	2	3	2
MCH/FP	5	1	6	4
VCT	2	2	4	2
Staff clinic	3	2	5	3
Administration	6	_	6	4
Infirmary	10	5	15	9
Total	117	109	226	143

The following formula was used to calculate the representative sample per area: [n1/n2] nf where

n1 = number of nurses

n2 = total number of nurses Mathari hospital

nf = maximum sample size e.g. Ward 2F [17/226] 143 = 10.68

3.7. Research Instruments

A Structured self administering questionnaire was used that consisted of structured questions with categories of responses constructed by use of Likerts scale which rated on a 4 point scale where 4 was equal to strongly agreed, 3 agree, 2 disagree, and 1 strongly disagree. The numbers in the likerts scale indicated the presence of the characteristic being measured.

A person's attitude score was the total of his/ her rating with a higher score indicating a more favorable attitude while a lower score indicated an unfavorable attitude. The numerical scale minimized subjectivity and made it possible to use quantitative analysis (Cormark 2000).

The validity and reliability of the research instrument was ensured by pre testing. It was also enhanced by the simplicity of the language for easier understanding, the study design and careful planning.

The questionnaire was in three parts, the information in:

- Part 1 explored the knowledge of nurses on practice of restraint and seclusion of aggressive psychiatric inpatients.
- Part 2 reviewed the attitudes of nurses on practice of Restraint and seclusion of aggressive patients.
- Part 3 aimed at establishing the current practice on restraint and seclusion of aggressive psychiatric inpatients.

The participants completed all the three parts by ticking in the appropriate areas.

Demographic, professional and institutional data was collected by use of closed and open ended questions. Participants indicated their responses by putting a tick in the appropriate areas or giving their own opinions in some parts e.g. 'others specify'.

Five questionnaires were given to 5 nurses in the research area for the purpose of pre – testing the instrument. This gave the researcher a chance to:

- Test the adequacy of the research design.
- Have an experience of administering the data collecting instrument to the participants.
- Determine whether the instrument would collect the type of data required.
- Have an opportunity to scrutinize and to make necessary corrections and ensure that items in the instrument were clearly stated prior to the commencement of the research.

For objectivity purposes the nurses involved in pre – testing did not participate in the research.

3.8. Data Collection Methods

Data collection was through a semi structured self administered questionnaire. A research assistant was selected and trained and he was involved in distribution and collecting of the questionnaires from the night participants, while the researcher collected the data from day staff. Participants responded to statements and questions by ticking in their response of choice. The participants were given the following instructions:

- That the study was for the purpose of research
- Not to indicate their name or any identification for confidentiality.
- To ensure the questionnaire was fully completed.
- To hand over the questionnaire to the researcher or research assistant once it was completed.

3.9. Data Cleaning

According to Mugenda &Mugenda (1999) data obtained from the field in raw form is difficult to interpret. In this respect on completion of data collection, the data was verified for completeness, errors, comprehensibility and consistency. This prevented errors at the data entry stage. Responses for closed ended questions in the research instrument were assigned numerical values and open ended questions were categorized and the responses assigned numbers.

3.10. Data analysis

Data were entered into a computer using a spreadsheet then cleaned. Independent variables were analyzed using frequency distributions. Internal consistency of the items measuring "Knowledge", "Attitude" and "Practice" dimensions were examined using Cronbach alpha (α). The items were deemed to have good internal consistency if the α was $\geq .60$. The Mean (*M*) and Standard Deviation (*SD*) of the individual items within a variable are reported. To describe the proportions of the respondents who agreed or disagreed to the items in each of the dimensions ("Knowledge", "Attitude" and "Practice", the Likert scales were collapsed such that "strongly disagree" and "disagree" was coded as '1' and "strongly agree" and "agree" as '2'. Chi-square (χ^2) statistics was then used to check relationships between items across the dimensions especially in reference to "Practice" –the outcome variable, to understand how the items relate to other items across the dimensions. Data was then analyzed using Statistical Package for Social Sciences (SPSS version 12.0). The results are presented in percentages, tables, pie charts and bar graphs with appropriate descriptions of the findings.

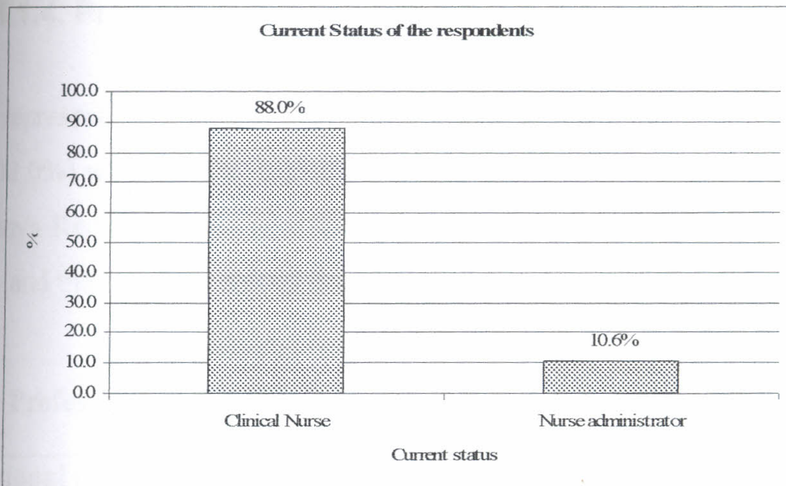

Figure 3: Current status of the participants (n = 142)

4.1.3. Work experience:

Figure 4 presents the work experience of the participants. The participants who had worked between 1 – 10 years were 98(69.0%) those who had worked between 11 – 20 years were 31(21.8%) while 12(8.5.0%) had worked between 21 – 30 years. However 1(0.7%) did not indicate their work experience.

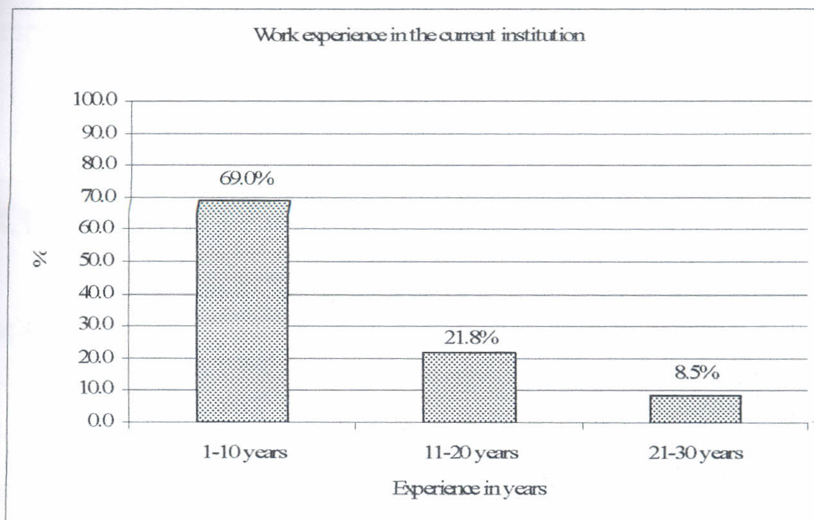

Figure 4: Work experience of the participants (n = 142)

4.1.4. Professional qualification

Table 2 represents the professional qualification of the nurses. The participants reported that 58(31.0%) were Kenya Registered Community Health Nurses (KRCHN) while both plain Kenya Registered Nurses (KRN) and plain Kenya Enrolled Midwife (KEM) were 4(2.1%) and the rest had various professional qualifications as reflected in table 2

Table 2: Professional Qualification (no = 187)

Professional qualification	Frequency	Percent
BScN	8	4.3
KRN	4	2.1
KRN/KRM	9	4.8
KRCHN	58	31.0
KRPN	42	22.5
KECN	35	18.7
KEPN	27	14.4
KEM	4	2.1
Total	187	100.0

NB: A respondent could indicate more than one professional qualification.

4.1.5. Number of Nurses per Shift

Morning shift:

Figure 5 presents the number of nurses in the morning shift from the participants. The participants who reported there were between 1-2 nurses in the morning shifts were 81(57.0%) while 61(43.0%) reported that the commonest number of nurses was 2 - 4.

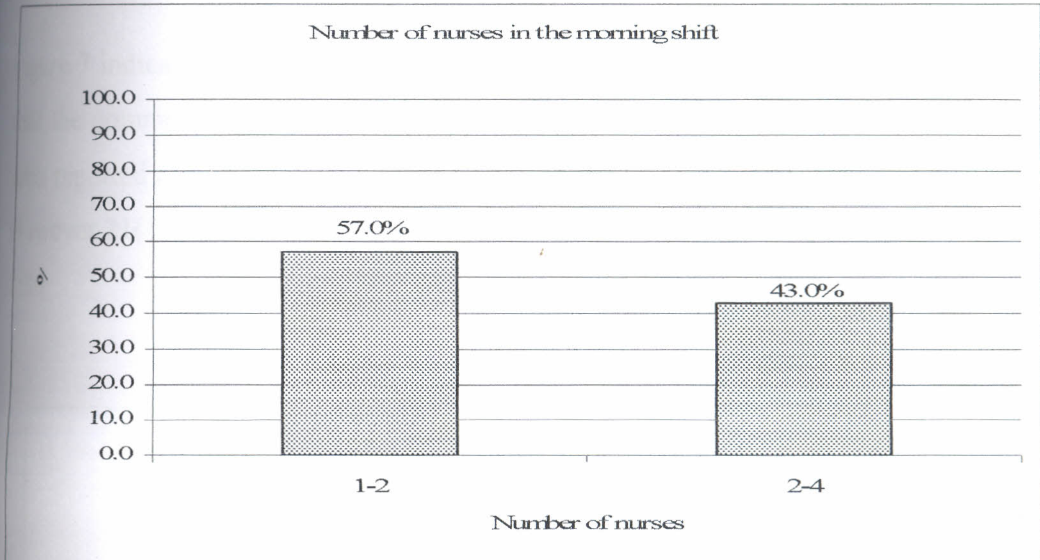

Figure 5: Number of nurses in the morning shift (no = 142)

Evening shift:

Figure 6 indicates that 122(85.9%) of the participants reported that the number of nurses in the evening shifts was 1-2, those who reported nurses 2-4 were 7(4.9%) and 3(2.1%) reported 4-6 nurses in the evening shift while 10(7.04%) did not respond.

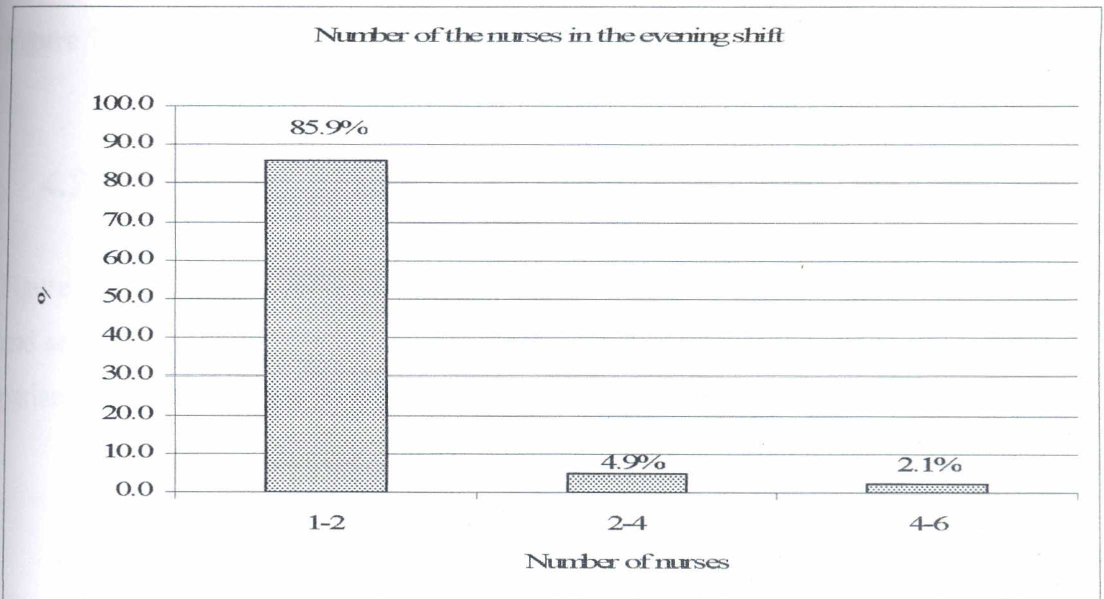

Figure 6: Number of nurses in the evening shift (n = 142).

4.1.6. Nurse/Patient Ratios

Figure 7 indicates the nurse/patient ratios in the clinical areas. The participants reported that the common ratio was 1:20, 40.8% those who reported 1:5 were 23(16.2%) those who reported a ratio of 1:10 were 23(16.2%) while 21(14.8 %) reported a ratio of 1:15. However 21(10.6%) selected the "Others (specify)" option that the ratio was greater than 1:30.

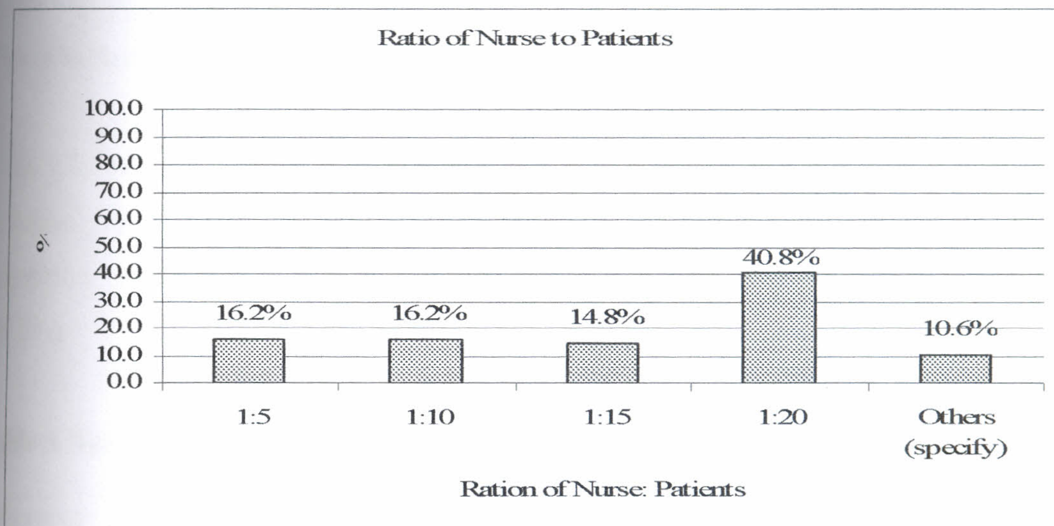

Figure 7 : Nurse/patient ratios (n = 142)

4.2. Practices of Restraint and Seclusion of Patients

Figure 8 indicates the report of the participants' responses on the practices of restraints and seclusion. Those who agreed that they had secluded and restrained were 137 (96.5%) patients while 5(3.5%) had not secluded or restrained a patient.

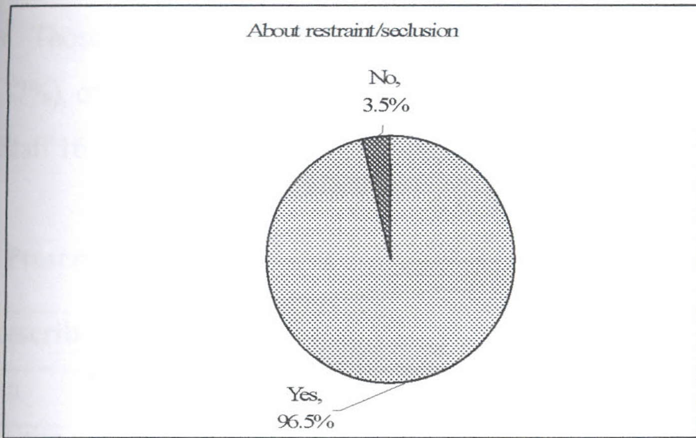

Figure 8: Restraint and seclusion of patients (n = 142)

Table 4.2 indicates the responses from the participants on reasons for Restraints and seclusion. Majority of the participants120 (46.0%) reported violence, others reported aggression 110(42.1%), restlessness 9(3.4%), uncooperative 8(3.1%) and abusive 2(0.8%).

Table 3 Reasons for Restraint and Seclusion (n = 261)

Reasons for Restraint/Seclusion	Frequency [(a)]	Percent
Aggression	110	42.1
Violence	120	46.0
Confusion	12	4.6
Restlessness	9	3.4
Abusive	2	0.8
Uncooperative	8	3.1
Total	261	100

(a) A respondent could indicate more than one reason for restraint/ seclusion

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Table 4 indicates the responses of the participants on the staff who prescribe restraint and seclusion. Those who reported that Registered nurses prescribe restraints and seclusion, were *79(37%), others reported Enrolled nurses 67(31%), physicians 54(25%)* and Support Staff 16 (7%).

Table 4: Prescription of Restraint and Seclusion (no = 216)

Who prescribes restraint/seclusion [(a)]	**Frequency**	**Percent**
Physician	54	25.1
Registered Nurse	79	37.7
Support staff	16	7.0
Enrolled Nurse	67	31.2
Total	216	100

A respondent could indicate more than one person who can prescribe restraint/seclusion.

Table 5 indicates the report of the participants' responses on Nurses' Knowledge on Restraints and Seclusion of patients.

Table 5: Nurses' responses on Knowledge of Restraints and Seclusion of patients

Knowledge *(α- 0.78)*	N	Mean	Std	Disagree n	Disagree %	Agree n	Agree %
1 Procedure manuals and institutional policy guidelines should be used during restraint/seclusion of aggressive patients	142	2.9	1.1	48	33.8	94	66.2
2 Patients and significant others should be explained the procedure purpose before restraint/seclusion	142	2.5	1.0	73	51.4	69	48.6
3 Provision *of psychological comfort to the* patient on restraint/seclusion is important	140	3.3	0.8	12	8.6	128	91.4
4 It is important to provide patient on restraint/seclusion with basic needs e.g. nutrition and elimination	142	3.6	0.6	5	3.5	137	96.5
5 For continued restrictive interventions maintenance of regular observation and evaluation is important	142	3.5	0.6	8	5.6	134	94.4
6 Allocation of one nurse to communicate with the patient during restraint/seclusion is important	141	2.7	1.0	58	41.1	83	58.9
7 Identification and recording of patients' behavior that necessitated the restraint/seclusion is important	142	3.5	0.6	5	3.5	137	96.5
8 It is important to explain to the patient/significant others the behavior necessary for termination of restraint/seclusion	142	3.2	0.9	25	17.6	117	82.4
9 Documentation of nursing intervention before, during and after restraint/seclusion is important	142	3.6	0.6	8	5.6	134	94.4
10 Coercing a patient to restraint/seclusion may be interpreted as malpractice	139	2.5	1.1	73	52.5	66	47.5

Table 6 indicates the report of the participants' responses on Nurses attitude on restraints and seclusion of patients.

Table 6: Responses on nurses' attitude on restraints and seclusion of patients

Attitudes *(α- 0.68)*	N	Mean	Std	Disagree		Agree	
				n	%	n	%
1 Restraint/seclusion should be applied as a method of nursing	140	3.0	0.9	28	20	112	80
2 Restraint/seclusion interferes with patient's social interaction	140	2.6	0.8	62	44.3	78	55.7
3 Restraint/seclusion affects nurse/patients interpersonal relationship	142	2.5	1.0	74	52.1	68	47.9
4 Patients on restraint/seclusion should be observed and monitored regularly	141	3.5	0.8	15	10.6	126	89.4
5 Patients should give their consent before restraint/seclusion	139	1.6	0.8	125	89.9	14	10.1
6 Patients' relatives should be informed about the reasons for restraint/seclusion of their patients	140	3.1	0.9	26	18.6	114	81.4
7 Physicians/other team members' should be involved in restraint and seclusion of patients	142	3.1	0.9	32	22.5	110	77.5
8 Nurses should spend time with patients to explain issues that lead to restraint/seclusion	142	2.9	0.9	44	31	98	69
9 A nurse should be allocated to communicate with restrained/secluded patients	142	2.7	1.0	56	39.4	86	60.6
10 Other methods of nursing should be tried before application of restraint/seclusion	142	2.9	1.0	42	29.6	100	70.4

Table 7 indicates the report of the participants' responses on current practices on restraints and seclusion of patients.

Table 7: Responses on current Practices on restraints and seclusion of patients.

Practices (*α- 0.78*)	N	Mean	Std	Disagree		Agree	
				n	%	n	%
1 Restraint/seclusion is usually prescribed by the doctor	140	2.1	1.0	97	69.3%	43	30.7%
2 Restrained/secluded patients are frequently observed and monitored	142	3.4	0.8	13	9.2%	129	90.8%
3 Nurses often communicate with restrained/secluded patients	142	3.2	0.8	21	14.8%	121	85.2%
4 The need for continued restraint/seclusion is always assessed regularly	141	3.3	0.8	14	9.9%	127	90.1%
5 Other team members e.g. doctors are involved during review of restrained/secluded patients	141	3.1	0.9	29	20.6%	112	79.4%
6 Nurses help restrained/secluded patients meet their biological needs e.g. nutrition, elimination	142	3.5	0.8	11	7.7%	131	92.3%
7 Restrained/secluded patients are given opportunity to use bathroom as they require	142	2.7	1.0	58	40.8%	84	59.2%
8 During restraint/seclusion, nursing intervention and observation records are strictly maintained	141	2.9	0.9	49	34.8%	92	65.2%
9 Rooms set for restraint/seclusion are usually conducive e.g. are warm, with a mattress and plastic utensils	141	2.7	1.1	61	43.3%	80	56.7%
10 Patients are usually informed prior to restraint/seclusion	142	2.0	0.9	106	74.6%	36	25.4%

4.3. *Knowledge and Practice*

Tables 8- 17 indicates the report of the outcome of the participants' responses using chi square (χ^2) method to establish a P-value to determine whether there was a relationship or no relationship between knowledge and the practice of nurses on restraints and seclusion of the aggressive in-patients.

Table 8: Relationship between use of procedure manuals/institutional guidelines and prescription of restraints/seclusion by the doctor.

		K_1 Procedure manuals and institutional policy guidelines should be used during restraint/seclusion of aggressive patients		χ^2	P-value
		Disagree	Agree		
P_1 Restraint/seclusion is usually prescribed by the doctor	Disagree	39 (40.2%)	58 (59.8%)	6.234	.013
	Agree	8 (18.6%)	35 (81.4%)		

The study findings reported that there was a relationship between knowledge and practice of nurses on use of procedure manuals, policy guidelines during restraints and seclusion of patients and prescription of restraint and seclusion by the doctor χ^2 (1^0) 6.234 = P-value .013. Those who agreed with knowledge agreed with practice.

Table 9: Explanation of the procedure and purpose before R/S and frequent observation of restrained/secluded patients.

		K_2 Patients and significant others should be explained the procedure purpose before restraint/seclusion		χ^2	P-value
		Disagree	Agree		
P_2 Restrained/secluded patients are frequently observed and monitored	Disagree	9 (69.2%)	4 (30.8%)	1.820	.177
	Agree	64 (49.6%)	65 (50.4%)		

There was no relationship between knowledge and practice of nurses in explaining of the procedure and purpose of restraint/seclusion to the significant others and the frequent observation of the restrained and secluded patients χ^2 (1^0) 1.820 = P-value .177

Tables 10: Provision of psychological comfort to the patients on R/S and communication of restrained /secluded patients.

		K_3 Provision of psychological comfort to the patient on restraint/seclusion is important		χ^2	P-value
		Disagree	Agree		
P_3 Nurses often communicate with restrained/secluded patients	Disagree	2 (10.0%)	18 (90.0%)	.061	.805
	Agree	10 (8.3%)	110 (91.7%)		

There was no relationship between knowledge and practice on provision of psychological comfort to the aggressive in-patients on restraints/seclusion and frequent communication to restrained and secluded patients χ^2 (1^0) ·061 P-value.805

Table 11: Provision of basic needs to patients on R/S and assessment of continued R/S

		K_4 It is important to provide patient on restraint/seclusion with basic needs e.g. nutrition and elimination		χ^2	P-value
		Disagree	Agree		
P_4 The need for continued restraint/seclusion is always assessed regularly	Disagree	2 (14.3%)	12 (85.7%)	5.241	.022
	Agree	3 (3.5%)	124 (96.5%)		

There was a strong relationship between knowledge and practice of nurses on the importance of provision of secluded and restrained aggressive in-patients with basic needs and the need for continued regular assessment of such patients $\chi^2(1^0)$ 5.241= P-value .022. Those who agreed with knowledge agreed with practice.

Table 12: Importance of maintenance of regular observation and evaluation and involvement of other team members during R/S

		K_5 For continued restrictive interventions maintenance of regular observation and evaluation of patients records is important		χ^2	P-value
		Disagree	Agree		
P_5 Other team members e.g. doctors are involved during review of restrained/secluded patients	Disagree	4 (13.8%)	25 (86.2%)	4.497	.034
	Agree	4 (5.7%)	108 (94.3%)		

There was a significant relationship between the knowledge and practice of nurses on the importance of continued restrictive interventions maintenance of regular observations, evaluation and involvement of other team members e.g. doctors during the review of restrained and secluded patients' χ^2 (1^0) 4.497= P-value .034. Those who agreed with knowledge agreed with practice.

Table13: Importance of communicating to patients during R/S and meeting biological needs of secluded/restrained patients

		K_6 Allocation of one nurse to communicate with the patient during restraint/seclusion is important		χ^2	P-value
		Disagree	Agree		
P_6 Nurses help restrained/secluded patients meet their biological needs e.g. nutrition, elimination	Disagree	4 (36.4%)	7 (63.6%)	.112	.738
	Agree	54 (41.5%)	76 (58.5%)		

The study reported no relationship between knowledge and the practice of nurses in allocation of one nurse to communicate with patient during restraints/seclusion and nurses helping the patients meet their biological need e.g. nutrition
$\chi^2(1^0)$.112 = P-value .738

Table 14: Identification/recording patients behavior that necessitate R/S and giving restrained/secluded patients opportunity to use bathrooms

		K_7 Identification and recording of patients' behavior that necessitated the restraint/seclusion is important		χ^2	P-value
		Disagree	Agree		
P_7 Restrained/secluded patients are given opportunity to use bathroom as they require	Disagree	2 (3.4%)	56 (96.6%)	.002	.969
	Agree	3 (3.6%)	81 (96.4%)		

There was no relationship between knowledge and the practice of nurses on the importance of identification and recording of patients' behavior that necessitated the restraints/seclusion and giving secluded/restrained patients opportunity to use bathrooms as they required

$\chi^2 (1^0)$ .002 = P-value .969

Table15: Explaining the behavior necessary for termination of R/S to patients and significant others and strict maintenance of records/nursing interventions.

		K_8 It is important to explain to the patient/significant others the behavior necessary for termination of restraint/seclusion		χ^2	P-value
		Disagree	Agree		
P_8 During restraint/seclusion, nursing intervention and observation records are strictly maintained	Disagree	11 (22.4%)	38 (77.6%)	1.566	.211
	Agree	13 (14.1%)	79 (85.9%)		

There was no relationship between the knowledge and practice of nurses on the importance of explaining to the patient/significant others the behavior necessary for termination of restraints/seclusion and strict maintenance of nursing interventions and observations records $\chi^2 (1^0)$1.566 = P-value .211

Table 16: Importance of documentation of nursing intervention before, during and after R/S and conduciveness of rooms set for S/R.

		K_9 Documentation of nursing intervention before, during and after restraint/seclusion is important		χ^2	P-value
		Disagree	Agree		
P_9 Room set for restraint/seclusion is usually conducive e.g. are warm, with a mattress and plastic utensils	Disagree	2 (3.3%)	59 (96.7%)	1.152	.283
	Agree	6 (7.5%)	74 (92.5%)		

There was no relationship between the knowledge and practice of nurses and the importance of documentation of nursing intervention before, during, after restraints/seclusion and setting of conducive rooms for restraints and seclusion of the patients χ^2 (1^0)1.152 = P-value.283

Table 17: Interpretation of coercing of patients to R/S as malpractice and Informing patients prior to R/S.

		K_10 Coercing a patient to restraint/seclusion may be interpreted as malpractice		χ^2	P-value
		Disagree	Agree		
P_10 Patients are usually informed prior to restraint/seclusion	Disagree	52 (50.5%)	51 (49.5%)	.659	.417
	Agree	21 (58.3%)	15 (41.7%)		

There was no relationship between the knowledge and practice of nurses on interpretation of coercing a patient to restraint/seclusion as malpractice and informing the patients prior to restraints and seclusion χ^2 (1^0).659 = P-value .417

4.4. *Attitude and Practice*

Table 18 – 27 indicates a report of ten 10 items that were tested using chi square (χ^2) method to establish a P-value to determine whether there was a relationship or no relationship between attitude and the practice of nurses on restraints and seclusion of the aggressive in-patients.

Table 18: Application of R/S as a method of nursing and prescribing of R/S by the doctor.

		A_1 Restraint/seclusion should be applied as a method of nursing		χ^2	P-value
		Disagree	Agree		
P_1 Restraint/seclusion is usually prescribed by the doctor	Disagree	18 (18.8%)	78 (81.3%)	0.375	.540
	Agree	10 (23.3%)	33 (76.7%)		

There was no relationship between the attitude and the practice of nurses in application of restraints/seclusion as a method of nursing and prescription of restraint /seclusion to the patients by the doctor χ^2 (1^0) 0.375 = P-value .540

Table 19: Restraint/seclusion interferes with social interaction of patients and frequent observation/ monitoring of restrained/secluded patients.

		A_2 Restraint/seclusion interferes with patient's social interaction		χ^2	P-value
		Disagree	Agree		
P_2 Restrained/secluded patients are frequently observed and monitored	Disagree	7 (58.3%)	5 (41.7%)	1.050	.306
	Agree	55 (43.0%)	73 (57.0%)		

The study reported no relationship between attitude and practice of nurses on whether restraints/seclusion interferes with patients' social interaction and frequently observing and monitoring of restrained/secluded patients' χ^2 (1^0) 1.050 = P-value .306

Table 20: Restraint/seclusion affects nurse/patient relationship and nurses often communicate to restrained/secluded patients.

		A_3 Restraint/seclusion affects nurse/patients interpersonal relationship		χ^2	P-value
		Disagree	Agree		
P_3 Nurses often communicate with restrained/secluded patients	Disagree	11 (52.4%)	10 (47.6%)	.001	.979
	Agree	63 (52.1%)	58 (47.9%)		

There was no relationship between attitude and practice of nurses on whether restraints/seclusion affect nurse/patient interpersonal relationship and nurses often communicating with restrained/secluded patients' χ^2 (1^0) .001 = P-value .979

Table 21: Restrained/secluded patients should be observed and monitored regularly and regular assessment of restrained/secluded patients.

		A_4 Patients on restraint/seclusion should be observed and monitored regularly		χ^2	P-value
		Disagree	Agree		
P_4 The need for continued restraint/seclusion is always assessed regularly	Disagree	5 (35.7%)	9 (64.3%)	10.163	.001
	Agree	10 (7.9%)	116 (92.1%)		

There was a significant relationship between attitude and practice of nurses on regular observation and monitoring of restrained/secluded patients and the need for continued regular assessment of the patients' χ^2 (1^0) 10.163 = P-value .001. Those who agreed with attitude agreed with the practice.

Table 22: Patients giving consent before R/S and involvement of other team members during review of patients on R/S.

		A_5 Patients should give their consent before restraint/seclusion		χ^2	P-value
		Disagree	Agree		
P_5 Other team members e.g. doctors are involved during review of restrained/secluded patients	Disagree	23 (79.3%)	6 (20.7%)	4.478	.034
	Agree	101 (92.7%)	8 (7.3%)		

There was a relationship between attitude and practice of nurses on patients giving consent before restraint/seclusion and involvement of other team members e.g. doctors during the practice of restraints and seclusion χ^2 (1^0) 4.478 = P-value .034. Those who agreed with attitude agreed with the practice

Table 23: Informing patients and relatives about the reasons for R/S and meeting basic needs of restrained/secluded patients

		A_6 Patients' relatives should be informed about the reasons for restraint/seclusion of their patients		χ^2	P-value
		Disagree	Agree		
P_6 Nurses help restrained/secluded patients meet their biological needs e.g. nutrition, elimination	Disagree	3 (27.3%)	8 (72.7%)	0.596	.439
	Agree	23 (17.8%)	106 (82.2%)		

There was no relationship between attitude and practice of nurses on informing patients' relatives the reasons for restraints/seclusion of their patients and nurses helping restrained/secluded patients meet their biological need e.g. nutrition χ^2 (1^0).956 = P-value.439

Tables 24: Involvement of other team members during R/S and use of bathrooms by restrained/secluded patients.

		A_7 Physicians/other team members' should be involved in restraint and seclusion of patients		χ^2	P-value
		Disagree	Agree		
P_7 Restrained/secluded patients are given opportunity to use bathroom as they require	Disagree	15 (25.9%)	43 (74.1%)	0. 622	.430
	Agree	17 (20.2%)	67 (79.8%)		

The study reported no relationship between attitude and practice of nurses on physicians/other team members being involved in restraints /seclusion of patients and giving restrained/secluded patients to use bathrooms as they require χ^2 (1^0).0.622 = P-value .430

Table 25: spending time with patients explaining issues that lead to R/S and strict maintenance of nursing interventions and observation records during R/S.

		A_8 Nurses should spend time with patients to explain issues that lead to restraint/seclusion		χ^2	P-value
		Disagree	Agree		
P_8 During restraint/seclusion, nursing intervention and observation records are strictly maintained	Disagree	17 (34.7%)	32 (65.3%)	0.624	.429

Participants reported no relationship between attitude and practice of nurses spending time with the patients explaining issues that lead to restraints/seclusion and strict maintenance of nursing interventions and observation records of the patients'

$\chi^2(1^0)$.0.624 = P-value .429

Table 26: Allocation of a nurse to communicate with R/S patients and conduciveness of a room set for R/S.

		A_9 A nurse should be allocated to communicate with restrained/secluded patients		χ^2	P-value
		Disagree	Agree		
P_9 Room set for restraint/seclusion is usually conducive e.g. are warm, with a mattress and plastic utensils	Disagree	22 (36.1%)	39 (63.9%)	0.391	.532
	Agree	33 (41.3%)	47 (58.8%)		

The study found no relationship between attitude and practice of nurses allocating a nurse to communicate with restrained/secluded patients and room set for seclusion being conducive e.g. warm with a mattress and plastic items

$\chi^2(1^0)$.0.391 = P-value .532

Table 27: Application of other methods of nursing before application of R/S and informing patients prior to R/S

		A_10 Other methods of nursing should be tried before application of restraint/seclusion		χ^2	P-value
		Disagree	Agree		
P_10 Patients are usually informed prior to restraint/seclusion	Disagree	32 (30.2%)	74 (69.8%)	0.075	.784
	Agree	10 (27.8%)	26 (72.2%)		

The study reported no relationship between attitude and practice of nurses trying other methods of nursing before application of restraint/seclusion and informing the patients prior to restraints and seclusion χ^2 (1^0) 0.075 = P-value .784

4.5. *Knowledge and Attitude*

Tables 28 - 37 indicate a report of ten 10 items that were tested using chi square (χ^2) method to establish a P-value to determine whether there was a relationship or no relationship between the knowledge and the attitude of nurses on restraints and seclusion of the aggressive in-patients.

Table 28: Use of procedure manuals and institutional policy guidelines during R/S of patients and application of R/S as a method of nursing.

		K_1 Procedure manuals and institutional policy guidelines should be used during restraint/seclusion of aggressive patients		χ^2	P-value
		Disagree	Agree		
A_1 Restraint/seclusion should be applied as a method of nursing	Disagree	6 (21.4%)	22 (78.6%)	2.072	.150
	Agree	40 (35.7%)	72 (64.3%)		

There was no relationship between knowledge and attitude of nurses on the use of procedure manuals and institutional guidelines during restraints/seclusion and application of restraints/seclusion as a method of nursing χ^2 (1^0) 2.072 = P-value .150

Table 29: Explaining patients and significant others the procedure purpose before R/S and interference of patients interaction by R/S

		K_2 Patients and significant others should be explained the procedure purpose before restraint/seclusion		χ^2	P-value
		Disagree	Agree		
A_2 Restraint/seclusion interferes with patient's social interaction	Disagree	36 (58.1%)	26 (41.9%)	2.405	.121
	Agree	35 (44.9%)	43 (55.1%)		

There was no relationship between knowledge and attitude of nurses in explaining to patients/significant others the procedure purpose before restraints/seclusion and interference of patients social interaction during restraints and seclusion χ^2 (1^0) 2.405 = P-value .121

Table 30: Use of procedure manuals and institutional policy guidelines during R/S and R/S affecting nurse/patient relationship

		K_1 Procedure manuals and institutional policy guidelines should be used during restraint/seclusion of aggressive patients		χ^2	P-value
		Disagree	Agree		
A_3 Restraint/seclusion affects nurse/patients interpersonal relationship	Disagree	26 (35.1%)	48 (64.9%)	.123	.726
	Agree	22 (32.4%)	46 (67.6%)		

The study findings found no relationship between nurses knowledge and attitude on procedure manuals/policy guidelines during restraints/seclusion and restraints and seclusion affecting nurse/patient relationship χ^2 (1^0).123 = P-value .726

Table 31: Provision of basic needs to patients on R/S and regular observation /monitoring of restrained/secluded patients.

		K_4 It is important to provide patient on restraint/seclusion with basic needs e.g. nutrition and elimination		χ^2	P-value
		Disagree	Agree		
	Disagree	5 (33.3%)	10 (66.7%)		

		K_4 It is important to provide patient on restraint/seclusion with basic needs e.g. nutrition and elimination		χ^2	P-value
		Disagree	Agree		
restraint/seclusion should be observed and monitored regularly	Agree	0 (0.0%)	126 (100.0%)		

There was a significant relationship between the knowledge and attitude of nurses in provision of basic needs e.g. nutrition, elimination to the restrained/secluded aggressive in – inpatients and observation and monitoring them regularly χ^2 (1^0) 43.544 = P-value .000. Those who agreed with knowledge agreed with attitude.

Table 32: Maintenance of regular observations and evaluation is important for continued R/S and patients giving their consent before R/S

		K_5 For continued R/S restrictive interventions in maintenance of regular observation and evaluation is important		χ^2	P-value
		Disagree	Agree		
A_5 Patients should give their consent before restraint/seclusion	Disagree	3 (2.4%)	122 (97.6%)	11.037	.001
	Agree	3 (21.4%)	11 (78.6%)		

There was a strong relationship between the knowledge and attitude of nurses for continued restrictive interventions in maintenance of regular observation, evaluation of patients on restraints/seclusion and patients giving consent before the implementation of the intervention χ^2 (1^0) 11.037 = P-value .001. Those who agreed with knowledge agreed with attitude.

Table 33: Importance of allocating one nurse during R/S and informing patients' relatives the reasons for R/S

		K_6 Allocation of one nurse to communicate with the patient during restraint/seclusion is important		χ^2	P-value
		Disagree	Agree		
A_6 Patients' relatives should be informed about the reasons for restraint/seclusion of their patients	Disagree	16 (61.5%)	10 (38.5%)	5.163	.023
	Agree	42 (37.2%)	71 (62.8%)		

There was a significant relationship between the knowledge and attitude of the nurses in allocation of one nurse to communicate with the patient during restraint/seclusion and informing patients' relatives about the reasons for restraint/seclusion of their patient χ^2 (1^0) 5.163 = P- value .023. Those who agreed with knowledge agreed with attitude.

Table 34: Importance of identification and recording of patients' behavior that necessitated R/S and involvement of physicians and other team members during R/S:

		K_7 Identification and recording of patients' behavior that necessitated the restraint/seclusion is important		χ^2	P-value
		Disagree	Agree		
A_7 Physicians/other team members' should be involved in restraint and seclusion of patients	Disagree	2 (6.3%)	30 (93.7%)	.906	.341
	Agree	3 (2.7%)	107 (97.3%)		

There was no relationship between the knowledge and attitude nurses in identification and recording of patients' behavior that necessitated the restraints/seclusion and involvement of physicians and other team members in restraints and seclusion of patients' χ^2 (1^0).906 = P-value .341

Table 35: Importance of explaining to the patient and significant others the behavior necessary for termination of R/S and explaining the issues that lead to R/S

		K_8 It is important to explain to the patient/significant others the behavior necessary for termination of restraint/seclusion		χ^2	P-value
		Disagree	Agree		
A_8 Nurses should spend time with patients to explain issues that lead to restraint/seclusion	Disagree	13 (6.3%)	31 (93.7%)	6.266	.012
	Agree	12 (12.2%)	86 (87.8%)		

There was a relationship between knowledge and attitude of nurses on the importance of explaining to the patient/significant others the behavior necessary for termination of restrained/secluded patients, and nurses spending time with patients to explain issues that lead to restraints/seclusion of the patient χ^2 (1^0).6.266 P-value .012. Those who agreed with knowledge agreed with attitude.

Table 36: Documentation of nursing intervention before, during and after R/S, and allocation of one nurse to communicate with restrained/secluded patients.

		K_9 Documentation of nursing intervention before, during and after restraint/seclusion is important		χ^2	P-value
		Disagree	Agree		
A_9 A nurse should be allocated to communicate with restrained/secluded patients	Disagree	5 (8.9%)	51 (91.1%)	1.888	.169
	Agree	3 (3.5%)	83 (96.5%)		

The study findings did not get any relationship between the knowledge and attitude of nurses on the importance of documentation of nursing intervention before, during, after restraints/seclusion and allocation of a nurse to communicate with restrained /secluded patients χ^2 (1^0).1.888 = P-value .169

Table 37: interpretation of Coercing a patient to R/S as malpractice and trying of other methods of nursing before application of R/S

		K_10 Coercing a patient to restraint/seclusion may be interpreted as malpractice		χ^2	P-value
		Disagree	Agree		
A_10 Other methods of nursing should be tried before application of restraint/seclusion	Disagree	26 (61.9%)	16 (38.1%)	2.127	.145
	Agree	47 (48.5%)	50 (51.5%)		

There was no relationship between knowledge and attitude of nurses' interpretation that coercing a patient to restraints and seclusion may be interpreted as malpractice and trying other methods of nursing before application of restraints and seclusion χ^2 (1^0) 2.127 = P-value .145

5. CHAPTER V: DISCUSSION

The findings of the study provided information about the nurses' knowledge, attitudes and the practice on restraints and seclusion of aggressive psychiatric in- patients. The study findings revealed that the nurses were knowledgeable on the use of procedure manuals and policy guidelines during the practice of restraints and seclusion, and that restraints and seclusion should prescribed by the doctor. This goes in line the suggestion of Donat (2003) that all clinicians should review and thoroughly understand restraints and seclusion guidelines, document the rationale for implementing the practice and the exact details of the process. The importance of use of policy guidelines is emphasized by Neil & Gregory (2000) that medical and nursing staffs are required to form an agreed management plan for treatment and observation of psychiatric disturbed patients.

Some state laws in United Kingdom and United States of America have specified the type of physical restraints that may be used during the management of aggressive patients, including the consistency of the actual materials which the restraints is made, consent on a patient unless on an emergency. A research that was conducted by Gasken (2007) in the University of Victoria in Australia associated staff education with R/S. Staff education was central to the efforts of many organizations to reduce R/S.

The participants agreed that restraints/seclusion should be prescribed by the doctor. Silvesri (2002) one of the successful authors of NCLEX – RN review courses throughout England argues that, restraints/seclusion requires written orders from the physicians and such protocols should be clear and well written to guide the staff on who when and how to restrain/seclude a patient. The study also revealed that nurses were equipped with *knowledge on the importance of provision o basic needs to the patients who were restrained/secluded, and the need for continued regular assessment of such patients. This agrees with Townsend (2008) that, clients in restraints/seclusion must be observed and* assessed every 10 – 15 min with regard to nutrition hydration and elimination. This is also emphasized by Silvesri (2002) that patients in restraints/seclusion must be assessed every 15 – 30 minutes for physical and safety needs as well as comfort.

The study revealed that nurses were knowledgeable on the importance of continued regular assessment of patients on restraints and seclusion. Ninety six point five per cent (95.6%) agreed that the need for the practice of restraint/seclusion is always assessed regularly. This goes in line with Gelder et al (2009) that restraint and seclusion should be used only when strictly necessary and for shortest time possible with constant monitoring of its continuing necessity and patients condition. The code of practice of England and Wales states that "if restraints or seclusions need to continue, a review should take place every two hours carried by two nurses and every four hours by the doctors (Varcarolis 2000). The report indicated that for continued restrictive interventions, maintenance of regular observations and evaluation of patients' records was important. The participants agreed that other team members especially doctors are involved during review of restrained/secluded patients. According to Holmes (2004) maintaining an environment without restraints and seclusion is not easy, it takes sensitivity creativity and interdisciplinary teamwork. However Stuart and Laraia (2001) suggest that, the behavior leading to restraints/seclusion and the time the patient is placed on restraints/seclusion must also be documented.

The participants who agreed that nurses were knowledgeable on regular observation and monitoring of restrained/secluded patients also agreed on the need for continued regular assessment during restraints and seclusion. This compares with similar responses in attitude of the nurses that observation and monitoring of patients in restraints and seclusion should be regularly continued. Although the participants reported that nurses agreed on patients giving consent before restraints/seclusion and involvement of other team members during restraints/seclusion, the responses contradicted the responses of the same in attitude where they disagreed on the same. This did not go in line with Gelder (2006) that physical contact should not be attempted unless the purpose has been clearly understood and agreed with the patient.

Multidisciplinary involvement for example physicians signature, patients advocate, relative notification and patient agreement were highlighted by varcarolis (2002) as

important factors in restraint/seclusion. According to Silvesri, some state laws have specified the type of physical restraints that may be used. These include consistency of actual material which restraint is made, consent on a patient unless an emergency situation exists and can be documented. It is therefore important that nurses be mindful of such regulations and must be aware of the kinds of behaviors that place them at risk for malpractice action (Donat 2003).

The study reviewed nurses attitude on the provision of basic needs for example nutrition and regular observation of restrained/secluded patients agreed with knowledge and practice. The report revealed that nurses agreed with maintenance of regular observations and evaluation for continued restraints/seclusion of patients. This is similar with the responses for knowledge and practice. However on contrary with the knowledge that patients should not give consent before restraints/seclusion, the study reported that nurse's attitude agreed that patients should give consent before restraints/seclusion. This agrees with Gelder et al (2006) that physical contact should be clearly understood and agreed with the patient.

This study reported that allocation of one nurse to communicate with the patient during restraints and seclusion was important. The participants also agreed that patients' relatives should be informed about restraints/seclusion of patients. Encouraging the patient to talk about angry feelings, finding ways to tolerate or reduce angry, aggressive feelings and empathetic verbal interventions are some of the good nursing care practices highlighted by Varcarolis (2000) during aggressive behavior. A research that was conducted in one of the facilities in Melbourne (2007) revealed that therapeutic environment through increasing the frequency with which the nurses communicated with their patients about their needs, reduced the rate of restraints and seclusion (Gaskin 2007).

Debriefing of patients following R/S to avoid recurrences of the behaviors that led to R/S, where the team focused on patients and teams views of patients' behaviors that led to R/S was reported as an important factor to reduce the rate of R/S. (Fisher 2003).

The study reported that nurses knowledge and attitude on communication of restrained/ secluded patients was in practice. A research that was conducted by Gaskin (2007) revealed that communication with patients during clinical practice reduced the rate of restraints and seclusion.

Therefore, this study reported that nurses were equipped with knowledge on the importance of communication as an important intervention during the practice of restraints/seclusion. This was similar to the outcome of the research that was conducted by Gaskin 2007 in Melbourne that of revealed that communication with patients during clinical practice had a significant role during the intervention of the restrained and secluded patients. Debriefing after R/S was highlighted as an important practice after the practice of restraints and seclusion.

5.1. *Study Limitations*

Inadequate fund and limited time were the two main limitations during the research study. Working on the project as well as going to the clinical areas to prepare for practical assessments was quite demanding, especially because there were presentations to be done during the clinical practice. The entrance to the clinical area was not easy; there were various protocols to be followed. This caused delay in accessing the clinical area. However the study was successful because of the sampling method that was used, where only one hundred and forty two participants were involved. This made it easier to correct data within the allocated time. The research assistant commitment in collecting the distributed questionnaires also made the research process to progress successfully.

5.2 *Research dissemination*

Copies of the research findings will be distributed in the following areas:

- Two copies National Council for Science and Technology.
- two copies to the Medical library University of Nairobi
- A copy to the School of Nursing University of Nairobi

- A copy to Mathari Hospital Continuing Education
- A copy to Mathari MTC Nairobi
- Publication in the Nursing journals

6. CONCLUSION

Few studies have been found relating to the knowledge, attitude and the practice of restraints and seclusion. This study reveals the outcome of the participants' responses in terms of nurses' knowledge, attitude and their relationship with the practice of restraints and seclusion of aggressive in-patients.

The participants reported that nurses were equipped with knowledge and had a positive attitude on use of procedure manuals/ institutional policy guidelines during the practice of restraints/seclusion. The study reported that nurses were knowledgeable on the importance of various interventions during the practice of restraints and seclusion for example, provision of basic needs e.g. food and elimination. They also agreed that patients should be observed regularly for vital signs e.g. B.P and temperature. It was not possible to investigate how often the nurses provided the basic needs and observed the restrained/secluded patients because of the nature of the data that was being investigated. However it is important to investigate this in future studies in order to get comprehensive information in this area.

Although the participants reported in knowledge that nurses agreed on patients giving consent before restraints/seclusion and the involvement of other team members during the practice of R/S, this was not similar in attitudes where nurses disagreed on the same. This requires investigations to explore why the differences. However knowledge and attitude should correlate to practice.

The participants reported that nurses were equipped with knowledge on the importance of communication as an important tool in the management of patients in restraints and seclusion. This compares with the research outcome by Gaskin 2007).

This study findings hopes to open an avenue for future research, on the perspectives of other people involved in restraints and seclusion of aggressive patients in order to obtain a complete picture of the use of this practice.

7. RECOMMENDATIONS

In the light of the outcome of this study, the following are recommended:

- Further research using an action/observational research method to evaluate the effects of educational intervention on psychiatric nurses' attitudes and decisions regarding use of restraints and seclusion.
- Equip the psychiatric nurses with knowledge in terms of their role and ethical issues during restraint and seclusion of patients in order to achieve an appropriate use of these practices.
- Future research on perspectives of other personnel involved in restraint and seclusion of patients such as medical staff, patients and their families in order to obtain a more complete picture of the use of restraint and seclusion.
- An investigation to establish the reasons for the gap between the knowledge and the attitude of nurses on patients giving consent before R/S and other members involvement in the practice of R/S.
- The Nursing council in conjunction with the Ministry of Health should make frequent visits in the hospitals to ensure that the set policy guidelines are adhered to during the practice of R/S.
- Nurses should be updated with current information on R/S by the department of Continuing education for better practice on this important management.

REFERENCES

1) **Ajzen, I. and Fishbeine M. (1980): Understanding Attitude And Predicting Social Behavior.** Englewood Cliff, NJ, Prentice Hall.

2) Alty, A. (1997) **Nurses Learning Experience And Expressed Opinions Regarding Seclusion Practice Within One NHS Trust**. A Journal of advanced nursing, 25, 786 -793

3) Brown J., S., and Tooke, S., K. (2004): **Encephale on Seclusion of Psychiatric Patients.** ***Journal on psychiatric and Geriattric nursing*** (30 **(3):** 276– 84

4) Brown G. Archive for March 2007 – My celebrity look – alike according to Heritage.com http://jesusisonline. Word depress.com/2007/03/

5) Cormack, D., (2000): **The Research Process in Nursing.** 4th Edition. UK. Blackwell Science Ltd.

6) Chien, WT, (1999): **The Use Of Physical Restraints/Seclusion to Psycho - Geriatric Patients In Hong Kong**. *Issues on Mental Health Nursing* 20(5): 571-586

7) Chien, WT, Chan CWH, Lam LW & Kam CW (2005): **Psychiatric In- Patients Perceptions Of Positive /Negative Aspects Of Physical Restraints**. *Patient Education/Counseling* 59(1): 80-86

8) Daffern. M. and Howells (2001): **Psychiatric inpatient Aggression ad Violent Behavior.** *Review of structural and functional assessment approaches*. Vol.7 Issue 5 P.477 - 497

9) Donat, D. C. (2003): **An Analysis Of Successful Efforts To Reduce The Use Of S/R At Public Psychiatric Hospital.** *Psychiatric services*, 54, 1119 – 1123.

10) Evans. D. & FitzGerald. M. (2002): **The Experience Of Physical Restraints: A Systematic Review Of Qualitative Research.** *Contemporary Nurse* 13(2-3): 126-135.

11) Fisher N. S. (1994) **Seclusion as Therapeutic Management an invited commentary**. American journal of orthopsychiatry, 65, 245- 248.

12) Fisher, W. A. (2003) **Elements of successful restraints R/S reduction programmes, and their application in a large, urban, state psychiatric hospital**. Journal of Psychiatric Practice, 9, 7 - 15

13) Finke, and Linda, M. (2001). **Journal of Child and Adolescent Psychiatric Nursing.** issues on adolescence Psychiatry 20 220 – 228

14) Frost. S. and Wells D. **Psychiatric Nurses thoughts and feelings about restraint use: A decision dilemma**. Journal of Advanced Nursing, 2000, 31 (2), Issues and innovations in nursing practice 362-369.

15) Fulford (Bill) K., W., M, Thornton T. and Graham G. (2006) **Oxford Textbook of Philosophy and Psychiatry.** USA. Press Incu

16) Gaskin. G., Elsom. S., & Happell B. (2007) The British Journal of Psychiatric Nursing. 191: 298 – 303.

17) Gelder. M., Harrison. P. and Cowen. P. (2006) **SHORTER OXFORD TEXTBOOK OF PSYCHIATRY.** 5TH Edition. USA. Oxford University Press.

18) Gelder. M., Andreasen. N. and Lopez. J., and Geddes. J. (2009) **New Oxford Textbook of Psychiatry**. USA. Oxford University Press.

19) George. B., J. (2002) **Nursing Theories the Base for Professional Nursing Practice**. Prentice Hall Upper Saddle River, New Jersey.

20) Holmes. D., Kennedy. S., Peron. A. (2004) **Psychiatric Nursing and Mental Health.** *Journal of Advanced Nursing.* 47 (1) 33

21) Jenelli (2006) Acute/critical care Aggressive Psychiatric Nursing. Knowledge of physical restraints: Implications for staff development. *Journal of Nursing Staff Development* 10(10: 6-11

22) Janelli LM, Kansk GW, Scherer et al (1992) Physical Restraints/Seclusion. Practice, attitudes/knowledge among nursing staff. *Journal of long Term Care Administration* 20(2) 22-25

23) Khurshid. K., (2008). **Proceedings of World Academy of Science, Engineering and Technology**. Phase. ISSN 2070-3740 (28) 445-451.

24) Magee RR, Hyatt EC, and Hardin SB et al (1993) Institutional Policy: use of Restraints with extended care/nursing home patients. *Journal of adolescent Psychiatric nursing.* 1994): 31-39

25) Martin V. Bernhardsgrutter R. Goebel R. et al. (2007). **The use of Mechanical Restraint and Seclusion in patients with Schizophrenia**. A Comparison of practice in Germany and Switzerland. *Journal on clinical Practice Epidemiology Mental Health* 3: (12) 25 -28.

26) Marquis. L., B. and Huston. J., C. (2006) **Leadership Roles and Management Functions in Nursing. Theory of Application.** 5th Edition. USA. Philadelphia. Lippincott &Wilkins.

27) Mayhew P, Christy K, & Berkebile J. et al (1999) Restraints reduction: Research utilization- case study of a patient with cognitive impairment. A Psychiatric nursing Journal 20(6): 305-308.

28) Mistral, W., Hall, A. & McKee, P (2002). Using therapeutic community principals to improve the functioning of high care psychiatric ward in the UK. International Journal of Mental Health Nursing 11, 10 - 17

29) Morrall. P and Cochrane (2002). **Seclusion and Psychiatric Nursing in Post Liberal Society**. *Journal for advancement of Mental Health*. 1 (2) 7-9.

30) Mohr, P., Jaromir P., J., Swingler, S., J., and Treuer T. (2005) **Management of Aggressive Patients** 26 (4) 327 - 335.

31) Mugenda. M., O, and Mugenda. G., A, (1999) **Research Methods Quantative and qualitative approaches.** Kenya. Acts Press.

32) Neil Hunt and Gregory (2000). **Clinical Governance Journal on Treatment of acute behavioral disturbance.** A clinical audit of risk management in psychiatric practice. Vol.10 (4) 270 – 275.

33) Nelstrop, L., Chandler-Otts, J., Bingley, W., Bleetman, T., Corr, F., and Cronin-Davis, J., (2006). *A systematic review of the safety and effectiveness of restraint and seclusion as interventions for short term management of violence in adult psychiatric inpatient settings and emergency departments*. Worldviews on evidence – based Nursing, 3 (1), 8 – 18

34) Regan, K., Curtin, C & Vorderer, L. (2006) Paradigm shifts in inpatient psychiatric care of children: approaching child- and family centered care. *Journal of Child and Adolescent Psychiatric nursing, 19*, 29 – 40.

35) Rogerson, E., Robertson, J., Thomas, M., and Thomson, L., (1992). Trends in Nursing Module. Scotland. UK. Dundee Center for Medical Education.

36) Silas E, & Fenton M. (2000) seclusion/restraint for people with serious mental illnesses. Western Journal of Nursing Research 15(2): 148-162.

37) Sailas A., E. and Wahlbeck K. (2006) **Restraint and seclusion in Psychiatric Inpatient wards.** Helsinki. 18 (5) 555 - 559

38) Silvestri. Linda (2002) **Saunders Comprehensive Review for NCLEX** – RN 2nd Edition. USA. W. B Saunders Company.

39) Stanton (2007) **Hospital nurse staffing and quality care**. Netherlands. August 1, 9 (3) 181-191

40) Stoudemire. **A. (1998) Clinical Psychiatry for Medical Students.** 3rd Edition. USA. Lippincott- Raven

41) Stuart, W. G. and Laraia (2001) **Principles and Practice of Psychiatric Nursing**. 7th Edition. USA. Philadelphia. Mosby Inc.

42) Sullivan, A. M., Bezmen, J.,, C.T., et al (2005) **Reducing restraints: alternative to restraints on an inpatient psychiatric service – utilizing safe and effective methods to evaluate and treat the violent patient**. Psychiatric Quarterly, 76, 51 – 65.

43) Townsend, M, C., (2008) **Essential for Psychiatric Mental Health Nursing. Concepts of Care in Evidence Based Practice**. 4th Edition. USA. F.A Davis Company 1915 arch Street Philadelphia.

44) Tomey. M., A. and Alligood. R., M. (2006) **Nursing Theories and Their Work.** Sixth edition. USA. MOSBY ELSEVIER.

45) Varcarolis M. E. (2002) **Foundations of Psychiatric Mental Health Nursing**. 14th edition. New York. W.B Saunders Company.

46) Varcarolis M. E. (2000) **Psychiatric Nursing Clinical guides. Assessment Tools and Diagnoses**. USA. W. B Saunders Company.

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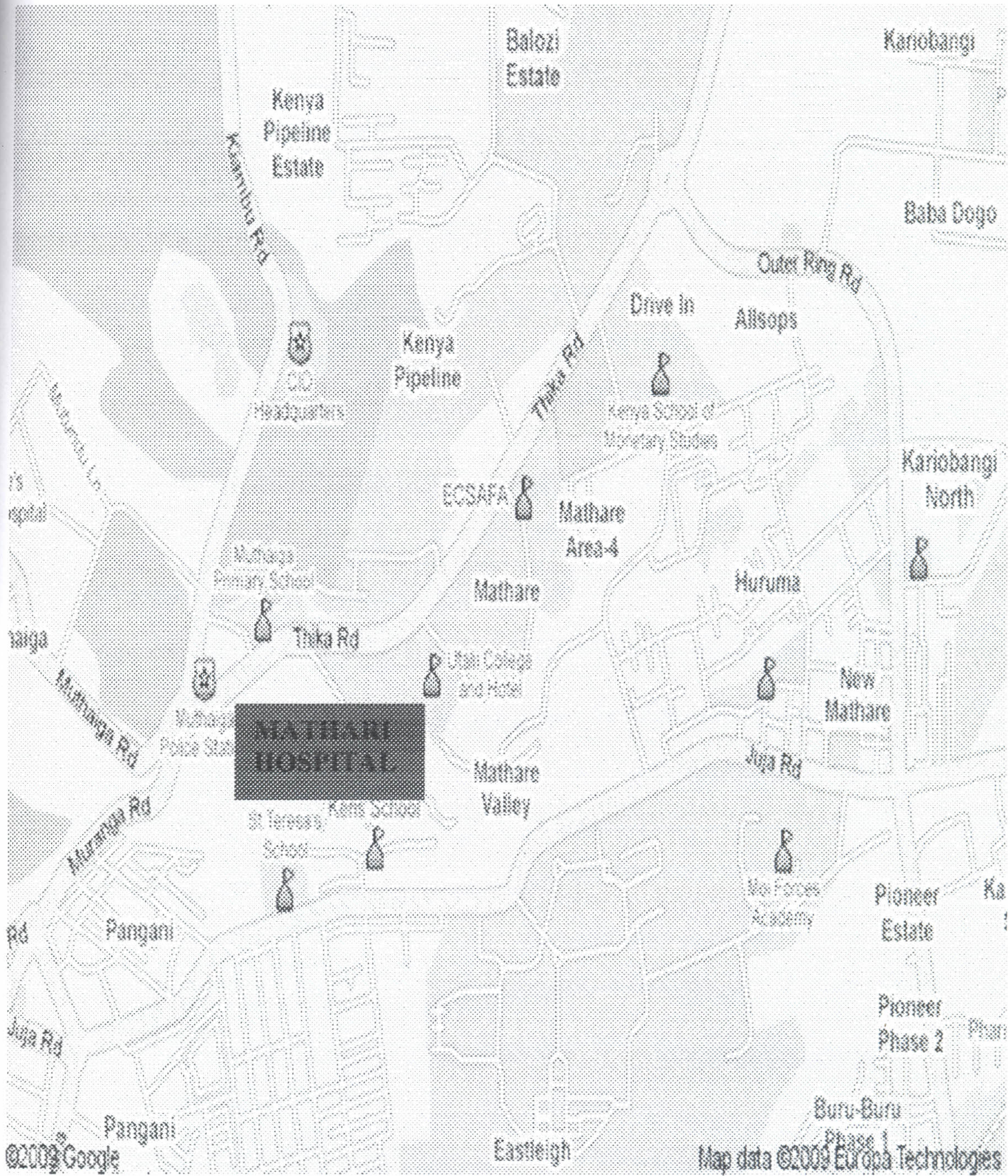
TIME FRAME

YEAR 2008/09		Dec	Jan	Fe	Ma	Apr	May	Jun	Jul	Aug
MONTH										
	ACTIVITIES									
	Proposal Development									
	Literature Review									
	Questionnaires									
	Research Methodology Research Design Population/Sample									
	Proposal submission to ethics committee									
	Correction to the Proposal									
	Training Research Assistants									
	Pre-testing the Interview Schedule									
	Data collection cleaning and editing									
	Data entry and analysis									
	Report draft									
	Oral defense of report at SONS									
	Presentation of final report									

BUDGET

ITEM	UNITS	COST PER UNIT KSH	TOTAL COST KSH
STATIONARY			
Printing papers	5rims	500	2500
Paper punch	1	500	500
Pencils Steadler	1 doz	300	300
Erasers	6	10	60
Flash disks	1	1500	1500
Black cartilage	4	1300	5200
Colored cartilage	1	1500	1500
Stapler	1	250	250
Staples	1pkts	150	150
COMPUTER SERVICES			
Questionnaires: Typing	7 pages	250	1750
Photocopying	7 x 168	3	3528
Printing Proposal and Final Report	110	5	550
Photocopying proposal and final report	10 x110	3	3300
Binding Proposal and Final Report	8 copies	100	800
Binding the books	4 copies	1200	4800
PERSONELL			
Stastician (for data entry and analysis)	1		30,000
Transport	30	500	15,000
Ethics committee fee	1	1000	1000
Ministry of Science and Technology fee	1	1000	1000
Subtotal			**73,688**
15% contingencies			**11,054**
Total			**84,742**

APPENDIX I: MAP OF LOCATION OF MATHARI HOSPITAL



APPENDIX II: PARTICIPANTS CONSENT FORM

Dear Respondent,

My name is Nancy W. Michire, a University Student pursuing Masters Degree in Nursing (Mental Health). One of the requirements for award of this degree is to carry out a research. In this respect my research topic will be: **Knowledge, Attitude And Practice On Use Of Restraint And Seclusion Of Aggressive Psychiatric Inpatients As A Method Of Nursing.**

In order to collect information, I have developed a questionnaire. My request to you is to participate in the study by filling in the questionnaire. You will not be required to write your name or any other identification number on the questionnaire. Participation is voluntary, there are no risks involved, and the information you provide will be treated with confidentiality as required by law. You are also free to withdraw at any stage without fear of victimization.

The results of this study will assist in reviewing the knowledge, attitude and practice of nurses on restraint and seclusion. Review current policies if any or develop new policies to guide restraint and seclusion. This in turn will improve patients care and give nurses guidelines on this important practice.
Incase of any questions relating to your participation in the study or anything that is not clear please contact me as indicated below.

Nancy Michire
School of Nursing Sciences University of Nairobi
P.O Box 19676, Nairobi. Landline – 787867 Mobile – 0722378899
E- mail: nancymichire@yahoo.com

PARTICIPANTS CONSENT

I-- have read and understood the details about this research and voluntarily agree to participate.

Respondents Signature -------------------------------- Date -----------------------------

Investigators signature -------------------------------- Date -----------------------------

APPENDIX III: QUESTIONNAIRE

Instructions

The purpose of this questionnaire is to obtain information for study purposes only. The information obtained will be utilized to review/improve on knowledge, attitude and current practice on restraint/seclusion of aggressive patients.

- ➢ Do not indicate your name or any other identification in the interview schedule.
- ➢ Ensure all the areas are fully completed.
- ➢ Once completed put it in the envelope, seal it and hand over to the researcher.

Demographic Factors

Please respond by ticking against the most appropriate responses

1. Indicate your sex: (1) Male

 (2) Female

Professional Details

1. What is your nursing qualification?

(1) MScN

(2) BScN

(3) KRN

(4) KRN/KRM

(5) KRCHN

(6) KRPN

(7) KECN

(8) KEPN

(9) KEM

Others specify-----------------------------------

2. Indicate your current status: (1) Clinical nurse in Mathari hospital

(2) Nurse administrator Mathari hospital

Institutional details

1. How long have you worked in this institution?

(1) 2– 6 years

(2) 7 – 11 years

(3) 12 – 16 years

Any other specify---

1. Indicate the two commonly number of nurses allocated in your ward per shift?

Morning	Evening
(1) 1- 2	(1) 1 - 2
(2) 2 – 4	(2) 2 - 4
(3) 4 – 6	(3) 4 - 6
Others specify -----------	Others specify -----------

2. What are the two common nurse/patient ratios in your ward?

(1) 1.5

(2) 1: 10

(3) 1: 15

(4) 1: 20

Any other specify ---------------------------------------

3. Have you ever restrained/secluded or seen a secluded patient?

(1)Yes----------- (2) No-----------------

If yes indicate two common reasons for restraint/seclusion?

(1) Aggression

(2) Violence

(3) Confusion

(4) Restlessness

(5) Being abusive

(6) Being uncooperative

Others specify --

4. Who prescribes restraint/seclude patients in the clinical area?

(1) Physicians

(2) Nurses

(3) Support staff

(4) Enrolled Nurses. Others specify ---------------------------------

The statements below will lead in testing the knowledge of nurses' on restraint/seclusion of the mentally ill aggressive psychiatric inpatients. Kindly indicate against the statement in either of the rows 1 2 3 4 Key: 4 = strongly agree 3 = agree = 2 = Disagree 1=strongly disagree.

Rates	4	3	2	1
1. Procedure manuals and institutional policy guideline should be used during restraint/seclusion of aggressive patients.				
2. Patients and significant others should be explained the procedure and purpose before restraint/seclusion				
3. Provision of psychological comfort to the patient on restraint/seclusion is important				
4. It is important to provide patients on restraint/seclusion with basic needs e.g. nutrition and elimination.				
5. For continued restrictive interventions maintenance of regular observation and evaluation is important.				
6. Allocation of one nurse to communicate with the patient during restraint/seclusion is important.				
7. Identification and recording of patients' behavior that necessitated the restraint/seclusion is important.				
8. It is important to explain to the patient/significant others the behaviors necessary for termination of restraint/seclusion				
9. Documentation of nursing interventions before, during and after restraint/seclusion is important.				
10. Coercing a patient to restraint/seclusion may be Interpreted as malpractice.				

The response to the questions in the table below will assist in establishment of the attitude of nurses on restraint and seclusion of aggressive Psychiatric inpatients. Kindly indicate your response by putting a tick against the statement in either of the rows1 2 3 4.

Key: 4 = strongly agree 3 = agree 2 = disagree 1 = strongly disagree

Rates	4	3	2	1
1. Restraint/seclusion should be applied as a method of nursing.				
2. Restraint/seclusion interferes with patients' social interaction.				
3. Restraint/seclusion affects nurse/patient interpersonal relationship.				
4. Patients on restraints/seclusion should be observed and monitored regularly.				
5. Patients should give consent before their restraint/seclusion.				
6. Patients' relatives should be informed about the reasons for restraint/seclusion of their patients.				
7. Physicians/other team members' should be involved in restraint and seclusion of patients.				
8. Nurses should spend time with patients to explain issues that lead to restraint/seclusion.				
9. A nurse should be allocated to communicate with restrained/secluded patients.				
10. Other methods of nursing should be tried before application of restraint/seclusion on patients.				

The table below contains statements that will guide in establishment of current practices on restraint and seclusion of aggressive psychiatric inpatients. Kindly indicate your response by putting a tick against the statement in either of the rows 1 2 3 4.

Key: 4 = strongly agree 3 = agree 2 = disagree 1 = strongly disagree

Rates	4	3	2	1
1. Restraint/seclusion is usually prescribed by the doctor				
2. Restrained/secluded patients are frequently observed and monitored.				
3. Nurses often communicate with restrained/secluded patients.				
4. The need for continued restraint/seclusion is always assessed regularly.				
5. Other team members e.g. doctors are involved during the review of restrained/secluded patients.				
6. Nurses help restrained/secluded patients meet their biological needs e.g. nutrition, elimination				
7. Restrained/secluded patients are given opportunity to use bathroom as they require.				
8. During restraint/seclusion nursing intervention and observation records are strictly maintained.				
9. Rooms set for Restraint/seclusion is usually conducive e.g. are warm, with a mattress and plastic utensils.				
10. Patients are usually informed prior to restraint/seclusion				

THANK YOU

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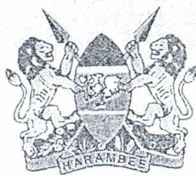

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Date:

14th May 2009

Ms. Michire Nancy Wangechi
University of Nairobi
P.O.Box 30197
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *Knowledge, Attitudes and Practice on use of Restraint and Seclusion of Aggressive Psychiatric Inpatients'*

I am pleased to inform you that you have been authorized to carry out research in Mathari Hospital for a period ending 30th August 2009.

You are advised to report to the Director, Mathari Hospital before embarking on your research.

On completion of your research, you are expected to submit two copies of your research report to this office.

PROF. S. A. ABDULRAZAK Ph.D,MBS
SECRETARY

Copy to:

The Director
Mathari Hospital
NAIROBI

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/UON-ERC/ A/212

29th April 2009

Nancy W. Michire
Dept.of Nursing Sciences
School of Medicine
University of Nairobi

Dear Nancy

Research proposal: "Knowledge, Attitudes and Practice on Use of Restraint and Seclusion of Aggressive Psychiatric Inpatients as a method of nursing" (P61/3/2009)

This is to inform you that the Kenyatta National Hospital Ethics and Research Committee has reviewed and **approved** your above revised research proposal for the period 29th April 2009 –28th April 2010.

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

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

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

Yours sincerely

PROF. A N GUANTAI
SECRETARY, KNH/UON-ERC

c.c. The Chairperson, KNH/UON-ERC
The Deputy Director CS, KNH
The Dean, School of Medicine, UON
The Chairman, Dept.of Nursing Sciences, UON
Supervisors: Mr. Anthony Ayieko Ong'anyi, Dept.of Nursing Sciences, UON
Dr. James Mwaura, Dept.of Nursing Sciences, UON