KAMUZU COLLEGE OF NURSING

RESEARCH PROPOSAL

FACTORS THAT CONTRIBUTE TO MEDICATION ADMINISTRATION ERRORS

BY: SARAH .C. PHIRI

SUBMITTED TO FACULTY OF NURSING IN PARTIAL FULFILMENT

OF A

BACHELOR OF SCIENCE DEGREE IN NURSING

RESEARCH SUPERVISOR: DR BETTY MKWINDA NYASULU

DATE OF SUBMISSION: 7th JULY, 2010

TITLE

FOCTORS THAT CONTRIBUTE TO MEDICATION ADMINISTRATION ERRORS

A RESEARCH PROPOSAL

SUBMITTED TO:

THE UNIVERSITY OF MALAWI

KAMUZU COLLEGE OF NURSING

FOR THE AWARD OF A BACHELOR OF SCIENCE DEGREE IN NURSING

BY:

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SUPERVISED BY:

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LECTURER IN LANGUAGE AND COMMUNICATION

BASIC STUDIES DEPARTMENT

DECLARATION

I hereby declare that this proposal is as a result of my hard work and effort. It has not been presented for any degree and is not currently being submitted for any other degree.

NAME OF CANDIDATE : Sarah .c. Phiri

SIGNATURE : 

DATE : 7th July, 2010

NAME OF RESEARCH SUPERVISOR : Dr Betty Mkwinda Nyasulu

SIGNATURE : .....

DATE : .....

DEDICATION

To my brothers, who through thick and thin have been there for me. Kessie, for your support through the trying times, Dean, who never complains no matter what you are going through my little angel and my girlfriends, Isabel, Moira, Thoko and zione, you are my best friends but also my sisters.

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MAY JAH GUIDE AND BLESS YOU ALL

3.0 CHAPTER THREE

4.0 CHAPTER FOUR

TABLES

ACKNOWLEDGEMENT

I thank Jehovah GOD father almighty for the life and strength that kept me going, when I thought I was not going to go through another day and or the wisdom, throughout the time I was writing this proposal.

I express my gratitude to my supervisor Dr Betty Nkhwinda Nyasulu for her untiring guidance and effort through out the study.

I do not take the library staff for granted they were so supportive by helping me to find the appropriate literature to the study.

Lastly I sincerely thank my loved ones, for their moral and financial support.

CHAPTER ONE

ABSTRACT

this study will be a descriptive qualitative study on factors that contribute to medication administration errors. The findings of the study will help health care providers to come up with strategies that can be put in place in order to reduce medication errors during medication administration on what patients will like to be done when secluding them. The study will be conducted at Queen Elizabeth Central Hospital on a sample of 10 Nurses using one to one in-depth interview. Data will be analyzed using content analysis.

1.0 INTRODUCTION

The medication process is a complex subsystem of a hospital. Prescribing, preparing and administration of medication are therefore reliant on a variety of processes intended to ensure that patients receive appropriate treatment. However if there is a problem in one of the phases of either the organisation system or the medication processes it increases the likelihood that the patient will not get the correct medication resulting in an error.

Medication administration errors are reported to occur in one in five medication dosages. Such events have long been scrutinised with the primary focus being the practice of nurses and their role in medication errors. This is the case because administration of medication is a common basic activity in nursing practice. Nurses are accountable for the safe administration of the medication. This analysis frequently points at nurses as the deliverers of unsafe practices if any error occurs during the medication process.

A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer.(HCP live Health care professionals Home page.)They are mistakes, associated with drugs and intravenous solutions, which are made during the prescription, transcription, dispensing and administration phases of drug preparation and distribution (Wolf1989).

There are so many types of errors that are associated with medication administration. These errors are grouped into two categories which are errors of omission and errors of commission (Wolf 1989).Each category of error involves failing to give medication as prescribed by the Doctor. Both errors can either be done intentionally or unintentionally. Errors of omission are those errors, which occur as a result of a Nurse failing to perform or practice as expected, in order to administer the medication correctly as prescribed. Errors of commission are those that result from an action done by a Nurse which is not supposed to be done during correct administration of medication.

There are nine categories of medication errors namely, wrong patient error, wrong dose error, wrong rate error, wrong dosage form error, wrong route, wrong time error, wrong preparation error, incorrect administration technique and unauthorised drug error.

Research reveals that 7,000 people die because of medication errors (interdisciplinary nursing quality research initiative) these errors are worse in developing countries. Malawi being the third and tenth poorest country in Africa as well as in the world respectively is experiencing a lot of problems concerning health which include, congestion in hospitals resulting into overstretching of human, material and financial resources. This has affected the delivery of healthcare in health facilities due to lack of resources leading to medication errors through the medication process. This leads to complications some resulting in deaths many of which could have been prevented.

Ministry Of Health, through its hospitals promote competence of its health workers by organising skill development workshops and trainings on the use of other modern and newly introduced technology, in medication administration. It also promotes policy development in different departments, for routines in medication administration, as well as checklists, in order to prevent errors done by Nurses during medication administration that cause complications and deaths.

The effort by the Ministry Of Health however does not seem to be helping much, because even with this knowledge and skills patients are harmed anyway. This study therefore focuses on exploring the factors that are contributing to medication administration errors.

1.2BACKGROUND

World Health Organisation defined health as "the state of complete well being, physical, social and mental and not merely the absence of disease or infirmity". (Stanhope and Lancaster 2004, p 249). Health is an individual's responsibility, but requires collective action to ensure a society and environment in which people can act responsibly.

Illness is any sort of deviation from the normal equilibrium state of health. When ill, people seek medical attention in order to eradicate the pain and discomfort caused by illness. Health care workers utilise different therapeutic measures like medication, physiotherapy,

hydrotherapy and homeotherapy just to mention a few, in order to intervene to promote health and comfort.

Medicines are prescribed by the Doctor and dispensed by the pharmacist, but the responsibility of for correct administration rests with the Nurses. The patients take the medication home and come back to the hospital for review at a given time according to the patient's condition and medication given, or the patient is admitted in the hospital to be taking the medication under the nurses' observation. Whichever alternative is utilised there are instructions that the patient is supposed to follow in order to promote the medications' maximum effectiveness and prevent errors that are harmful to their health. It is therefore the responsibility of health care provider to make sure the patient understands the instructions before taking medication. The health care workers, including Nurses, mostly regarded as the competent and caring professionals, are in most contact with the patients. In most cases Nurses are the ones who administer medication to patients in the hospital. During the administration of medication process, Nurses are the ones who mostly make medication administration errors. They are therefore responsible for preventing of almost 86% of all medication errors according to a 1995 journal of the American Medical Association study.

Each nurse is accountable for his or her practice. This practice includes preparing, checking and administering medication, updating knowledge of medication, monitoring the effectiveness of treatment, reporting adverse drug reactions, and teaching patients about their drugs. The patient expects to receive the correct medication at each drug round, but this is not always the case. Several studies reveal that medication errors do occur and they are a persistent problem associated with nursing practice.

Some studies reveal that errors of personal factors for example, work overload, personal attitude towards medication routine and system or organisational factors for example, sound alike drugs or look alike drugs, medication prescription protocol and education system issues contribute to these errors.Statictics shows that between 40,000 and 98,000 people die in hospitals in United States of America due to medication errors, however this is worse in developing countries like Malawi (Health care professionals).

Malawian hospitals have put in place measures to reduce medication errors. The 5 rights which are: the right patient, the right medication, the right route, the right time, and the right

dosage serve as a checklist. Every procedure is documented and any medication that has been prescribed is documented in the patients' file as well as in the patients' medication sheet. However patients are having longer hospital stay and there are also many deaths as a result of these medication errors. This study therefore seeks to explore the factors that contribute to these errors.

PROBLEM STATEMENT

During three years of training in clinical experience, the researcher noticed that there were a lot of medication errors that led to a lot of harm to patients by nurses during medication administration.

These errors include administering medication using the wrong route, not administering all doses of medication per day, administering a higher dose of medication and reconstituting medication using wrong diluents, just to mention a few.

This has led patients staying longer in the hospital, others developing complications of their disease conditions and also led to a lot of deaths many of which could have been prevented.

The researcher therefore wants to find out why a lot of these errors happen during medication administration and what can be done to solve this problem, because So far no study has been done in this area in this country and yet people know of these errors but nobody talks or seems concerned about it.

SIGNIFICANCE OF THE STUDY

The findings of this study will provide the Ministry Of Health, with information on the factors that contribute to occurrence of medication errors in hospitals by nurses and those that occur to patients, who do not obtain correct information regarding their prescribed medication, which they are taking at home. This will in turn help them come up with

measures, which they can put in place, to ensure that nurses administer medication to patients with no or little errors in order to promote patients' wellbeing and safety.

Nurses and Midwives Council of Malawi will also benefit, by incorporating the measures into the syllabus of nursing training requirements. The organisation will also incorporate the findings as part of the checklist on the nurses' performance in the clinical area.

Different nursing learning institutions will also incorporate this as one of the learning objectives at clinical learning experience.

The population at large will also benefit in the sense that, people will have a short hospital stay and number of deaths will also reduce since medication administration errors shall have been prevented.

Broad Objectives

To explore the factors that contributes to medication errors during medication administration.

Specific Objectives

1. T o assess knowledge of nurses on 5 rights of medication administration
2. To find types of medication errors that happens during medication administration.
3. To explore challenges faced by nurses during medication administration.
4. To Identify strategies that can be put in place to prevent medication errors

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INRODUCTION

Medication can save lives but it can also be harmful to patients as well as the health care in general because it can have a large impact on the health care professional implicated, leading to guilt, lowered self esteem and confidence, the possibility of losing their job and legal prosecution when errors occur during medication administration (Sandra Crouch and Carol Chapelhow, 2008). Many deaths and longer hospital stay as a result of medication administration errors in Malawi, has led to a lot of complications in the health care system and the population at large.

Studies have shown that personal and system factors contribute to medication administration errors. Personal factors are those factors that are human related, affect the individual directly and the individual can have control over them because they are intrinsic. System factors are those factors that affect the individual indirectly and the individual does not have any control over them because they are extrinsic. Personal factors that include being physically as well as psychologically disturbed can contribute to medication administration errors. Some Nurses consider it a routine task and may have self satisfaction from careful and safe practice. However some Nurses may feel overwhelmed and have trouble in keeping up with the sheer number of medication available and others may experience some extreme pressure to handle several important responsibilities with little time to spare for their personal issues (Galbraith, Bullock, Manias, Hunt and Richards, 2007). System factors that include late deliverance of medication can also contribute to medication administration errors.

Measures put in place by the Ministry Of Health to prevent medication errors which include the 5 rights principles of medication administration, health facility policies and procedures, checking and documenting strategies which provide a guideline for medication administration, seem to do little effect in preventing longer hospital stay and many deaths.

2.2 INTERNATIONAL LITERATURE.

Medication administration errors are a major concern worldwide. Studies on why they occur reveal that, inadequate knowledge and skills on medication administration contributes to medication errors. This reflects lack of patient knowledge, diagnosis, names, purpose and correct administration of the medication. It also reflects not knowing how to operate intravenous infusion and or pumps, not knowing how to operate medication administration devices, mistaking intravenous lines with nasal gastric tubes, failing to adequately prepare the medication before administration and also failing to monitor for side effects because of having no knowledge. (Gardner, 1987).This study however did not look at checking with guardians a concept that applies to developing countries like Malawi. This concept is very crucial because guardians fully participate in the care of their patients and can be an influence in the errors done by nurses during medication administration. Therefore lack of assessment of patients for PRN (whenever necessary) medication, which can promote dependency and addiction, promotes harm to patients when not necessarily given. If guardians are not given proper and adequate information on the medications' frequency and time, they can give the patient the medication when not necessary, especially on the take home medication.

Bruce and Wong (2001) said 25% of medication errors are those that occur during preparation and administration of intravenous medication. These errors mostly occur in medical wards. Similarly, Taxis and Barber (2003) found out that at least one patient experienced one serious medication error everyday by preparing wrong medication. Additionally they noticed that, selecting wrong solvent, administering a bolus injection too quickly, giving up to five times the prescribed dosage of an anticoagulant and also failing to have spare supplies of adrenaline at hand when administering intravenous medication were other errors.

The nurse being a psychosocial being needs to focus during medication preparation and administration.(Taxis and Barber 2003) also found out that out of one thousand and forty two dosages prescribed for intravenous medication to one hundred and six patients, in forty nine percent of the prescriptions, there was an error during administration because of over learning

the task. This was noticed when nurses just focused on the 5rights only and omitting the other important elements like psycho part where by, one should involve the mind and concentrate on the procedure instead of doing without thinking or doing whilst thinking about other things.

Faqua and Stevens (1988) found out that lack of attention to safeguard medication administration procedures intended to prevent errors like not checking patient identification or allergic identification wrist bands and not checking the medication against the medication administration record. Walters (1992) however found out that receiving medication late form the pharmacy has a big impact on the nurses to correctly follow the normal frequency of medication administration. On the other hand (Gardner, 1987) added to say his study also discovered that lack of standards protocol for the administration of high risk medication like respiratory muscle relaxants, chemotherapy and anti-arrhythmias also make nurses do some errors which in turn do harm to patients .

Mathematical skills of Nurses, also contribute to medication errors done during medication administration. A study done by (Bindler and Bayne 1984) revealed that medication errors resulting from the poor mathematical skills of Nurses is an ongoing problem. They studied 110 Registered Nurses and found out that 81% of those Nurses were unable to calculate medication doses, at a 90% pass level on a 20- item medication calculation test. They concluded that calculation difficulties continue to exist and have not improved.

Larson et al (1983) found out that transcription errors also contribute to medication administration errors and these include incorrect interpretation of physicians' orders as a result of use of abbreviations, illegible handwriting, use of verbal orders, failure to document medication given or omitted, unclear and in adequate writing. A study carried out by Larson (1983) of which out of 865 medication errors that occurred within 24 hours, 92.7 percent of the orders only stated the dosage of the medication, 90 percent only specified the route, 87.9 percent only stated the frequency, 83 percent of the PRN orders only stated indication of the medication and over 50 percent of the orders were written using abbreviated names for the medication. Nurses are accountable for the safe administration of medication and so they must know all the components of the medication order and question those orders that are not complete, unclear, give a dosage outside the recommended range or contraindicated by the

client allergy or laboratory test results, they are therefore liable if they give a prescribed medication and the dosage is incorrect or contraindicated for the patients health status (Kee, Hayes, McCuistion 2006).

Several studies, have questioned the effect of length of nursing experience on medication errors. A study by (Walters 1992) described the influence of Nurses years of experience. He found out that, few medication errors were reported in those Nurses who had been in the nursing profession for over one year, unlike those who were there for less than a year. He concluded that Nurses who are new to a hospital are more likely to make errors than those employed for a longer period of time.

Workload factors have been shown to affect the rate of medication errors (Roseman and Booker, 1995) conducted an exploratory study of 175Nurses in an acute care setting. 32 of those Nurses cited that large patient workload leading to job burnout, are responsible for their errors done during medication administration.

Floating nurses to unfamiliar units and pharmacy design features causes confusion and anxiety due to the setting leading to errors during medication administration.

Medication manufactures also contribute by producing look alike and sound alike medication names, confusing and unclear labelling, packaging of doses like multi dosage vials, similar packaging for different medication and failure to specify medication concentration on dosage calculation charts.

NATIONAL LITERATURE

The Nurses and Midwives council of Malawi emphasizes the importance of maintaining an open culture to encourage the immediate reporting of errors and incidents in the administration of medication to the appropriate Nurse Manager. This then follows proper full investigation at the local level with sensitive management that does not discourage future reporting of such incidents. It also supports the use of multidisciplinary critical incidents panels where improvements to local practice can be discussed and implemented.

Medical Council of Malawi in turn has set aside types of medication to be prescribed and administered by each cadre of health personnel like Medical Assistants, Clinical Officers, Doctors and Nurses at different levels of health facility to reduce these medication errors. In some health care settings, however, it is common that medical students prescribe medication for patients during their practical experience without the counter prescription of the registrar or intern Doctor, contrary to what KEE, HAYES and MCCUISTION (2006) says that medical students must prescribe and the prescription be counter prescribed by an attending or staff physician before they are considered official and then the medication can be administered by the Nurses. They added that if Nurses are unsure of the medication, dosage, effects and contraindications they should consult colleagues, medication reference books and pharmacists before administering medication. That is why Nurses should be aware of medication interactions and understand any factors that may put patients at greater risk of serious effects before administering the medication to patients.

CHAPTER 3

3.0CONCEPTUAL FRAMEWORK OF SYSTEMS APPROACH MODEL

In this study systems approach model has been used. It states that every organism represents a system meaning 'a complex of elements in mutual interaction' which is considered as having the following characteristics: wholeness, openness, organized, boundary, entropy and flexibility. The basic premise in the system approach is that humans are fallible and errors are to be expected, even in the best organizations. Errors are seen as consequences rather than causes, having their origins not so much in the perversity of human nature as in "upstream" systemic factors. These include recurrent error traps in the workplace and the organizational processes that give rise to them. Countermeasures are based on the assumption that though we cannot change the human condition, we can change the conditions under which humans work. A central idea is that of system defences. All hazardous technologies possess barriers and safeguards. When an adverse event occurs, the important issue is not who blundered, but how and why the defences failed.

The systems approach model conceives families as open system in which the whole of the system is more than the sum of its components parts or members but also includes the interactions among them. The health of a family as a unit is influenced by the interactions among members and between the family system and the larger outside system. (Mary Jo Clark 2008).

If one part is affected for example the mouth of a person, then the whole part in the whole individual is also affected since the person cannot eat, talk and is in pain hence the system is a whole.

The system is an open structure in the sense that it allows the infraction of its parts with other parts within or outside it.

It is also organized because its parts contribute and play different roles that at the end will all benefit the whole system for its continuous function.

Flexibility is also another important aspect of a system in the sense that it allows some changes by adapting in order to continue functioning at an optimum level.

The system also has to have a characteristic of entropy that enables it to change spontaneously and promote adaptation for its optimum function.

Entropy system disorganization results from demands of continual readjustment of subsystem interrelations. A certain level of entropy is necessary for the system to continue to function and to avoid stasis or cessation of activity. But as entropy arises above optimal levels, the system's ability to work towards its goal is reduced proportionately for example the number of family members outside activities may increase beyond the capacity designated, chauffeur to accommodate and adjustment will need to be made to ensure effective family function.(Mary Jo Clark 2008)

APPLICATION OF THE SYSTEMS APPROACH MODEL

In systems approach model it says that every individual, community or family should be treated as a whole, because when a person is sick you do not only treat the part that is sick but instead you treat the whole person. Its parts, the arms, legs, stomach just to mention a few, also interact with each other as well as with other things and people outside in order to keep the whole person alive.

The family is composed of father, mother and children, who interact with each other as well as other families and other people to maintain attachments and optimum function in the community, so if one member of the family is sick then the whole family is affected and so when one member of family is sick the needs of the rest of the family members should also be addressed, because they are disturbed by their relatives illness.

The community is also another system that is composed of families, hospital, churches just to mention a few.

These components interact with one another as well as with other structures outside the community in order to promote optimum function of the community and prevent cessation of the community. When one part of the system is affected then the whole system in this case the community is affected.

It is therefore no doubt that the hospital ward where the nurse operates is also another system that is composed of healthcare personnel, of whom include the Nurses, Doctors, Patient attendants and patients and guardians These personnel interact with one another and the patients and guardians within the hospital ward and with other stakeholders and organisations outside the ward to keep the hospital ward going. If one part of the system is affected then the whole system is also affected.

If the Doctor prescribes wrong medication or if the handwriting is not legible or the order is not complete by just stating the drug and dosage without the frequency, then the nurse will also administer wrong dosage, route and for a wrong duration.

If the nurse is not focussing because of psychological stress, then she/he can not pay attention to administer the medication as required.

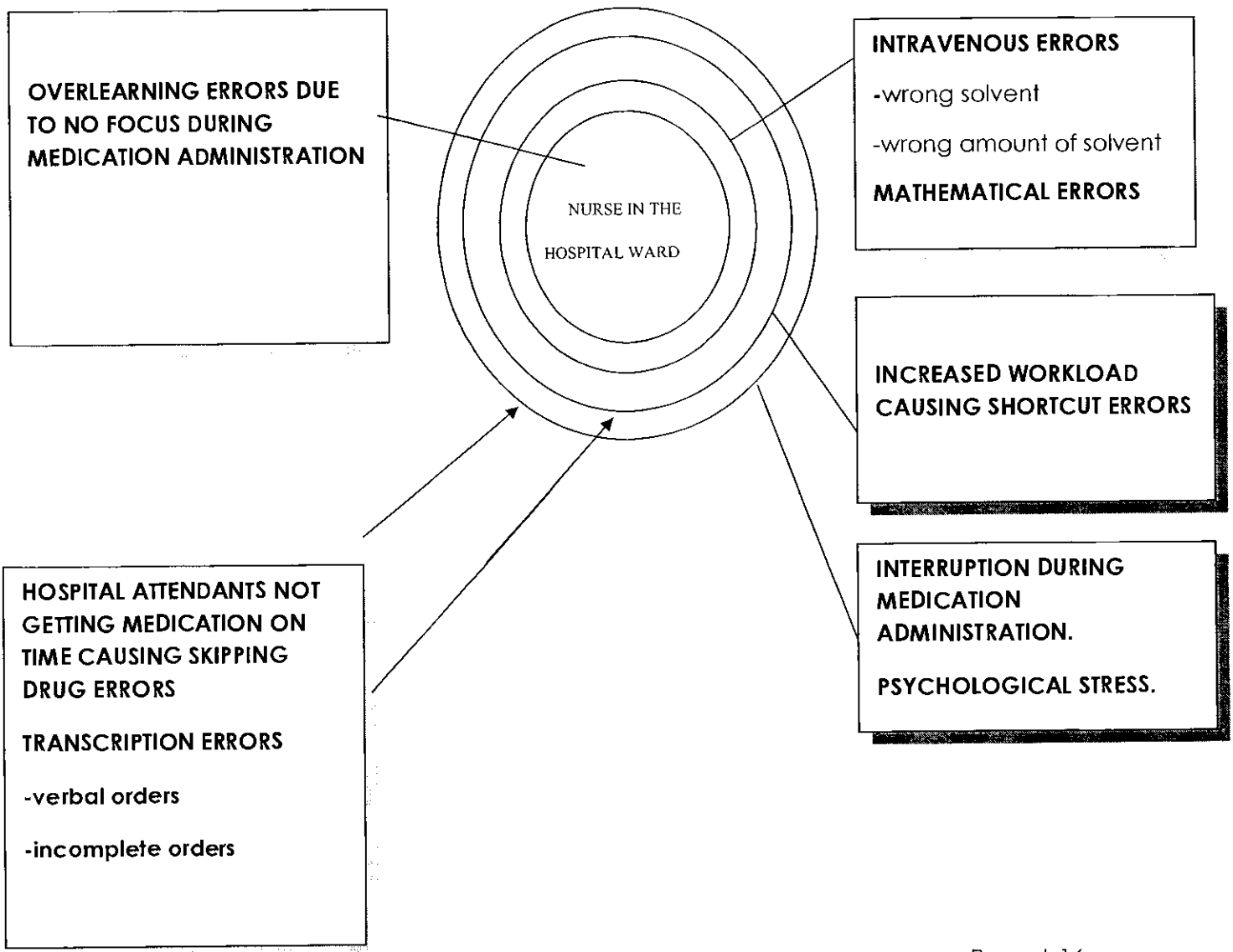
If the patient attendant does not go to the pharmacy to collect medication and other resources as per nurses order of the day or week according to the needs of the ward, for proper and complete tasks to be done by the nurse, as per his/her job description, the nurse may not have adequate resources to correctly administer drugs, following the 5 rights hence doing harm to the patients.

If the other nurses/colleagues have not done their part for the day correctly by leaving some work undone or have not correctly documented, then the other nurse taking over may give the medication again hence giving the medication twice, or may not do all the other work left because the work load can be too much for the nurse taking over.

If the working relationship amongst the nurses themselves is not well, then they are not going to communicate well as required and so any verbal order by the doctors either to discontinue or to continue drugs may not be done on the patients.

If nurse is being interrupted by other doctors or nurses, patients even guardians, the nurse can administer a wrong dosage of medication to the patients or even a wrong route

DIAGRAM REPRESENTATION OF SYSTEMS APPROACH MODEL AS APPLIED TO A HOSPITAL WARD SYSTEM



CHAPTER 4

4.0 METHODOLOGY

4.1 Introduction

This section describes the research design, setting, sampling, data collection, pilot study, data analysis, and ethical consideration.

4.2 Research Design

In this study a qualitative research design which is a systematic subjective approach will be used to describe the factors that contribute medication administration errors. A qualitative research design will be used so as to explore the medication administration errors. The factors are subjective to the person being asked because what one nurse feels is a contributing factor might not be the same factor to the other nurse. Qualitative research was also used because the Nurses experience shall be explored and explained to have a clear picture of what are the factors that contribute the errors during medication administration, since this method is a means of understanding and interpreting human experience (Burns & Groove, 2005).

4.2.1 Setting

The study will be conducted at Queen Elizabeth Central Hospital in Blantyre district. Queen Elizabeth Central Hospital is identified as the study setting because it is one of the biggest hospitals and central hospitals where most disease conditions are found and most nurses with a wide range of experiences about medication administration errors are found. Therefore most errors from all sorts of types are bound to happen.

4.2.2 Sampling

In this study a sample of 10 Nurses will be used and convenience sampling will also be used whereby sample members will be recruited during the time that is convenient so as to identify only the nurses working at medical wards. Sampling by convenience is important because it is efficient, economical and easy as comparing to other sampling methods because the researcher interviews the subjects who are convenient to him or her.

4.3 Plan for Data collection

Ten in-depth interviews, using an interview guide will be conducted in this study for collecting data. In-depth interviews help to explore issues from the participants that would not be spoken out if other methods were used like focused group discussions and simple ended questions because the interviewer can probe more where needs clarification. They also have an advantage in their ability to produce additional data through observation. Observations give additional and more accurate information and behaviour of people than interviews (Burns &Groove2005). This information can be used in interpreting the responses.

4.4 Pilot Study

A pilot study is a small-scale version or trial run designed to test the methods that will be used in a larger, more rigorous study. A pilot study helps in the evaluation of the adequacy of study methods and procedures, appropriateness and quality of instruments. It ensures validity and reliability of the measuring tool. Validity refers to the ability to obtain needed data. It tells the investigator whether the tool will measure what she/he wants to measure while reliability indicates its accuracy and consistence.

For this study, a pilot study will be conducted at Lilongwe Central Hospital in Lilongwe district.4 nurses will be identified at female and male medical wards.

4.5 Data analysis

Data analysis involves the synthesis of the pieces of information obtained in the course of a study. The responses will be handwritten during the interview. In order to make sense of the data that will be collected, categorization and ordering of information will be done.

4.6 Ethical consideration

Ethical considerations are important when conducting a research study because they provide a basis for moral conduct in respect of human dignity, integrity and authority. To conduct an ethical research, the subjects will first be told about the study i.e. what it involves, the risks which will not be available in this study, the advantages and the purpose of the study. They will also be told that they have the right to participate voluntarily and also to refuse or withdraw from the study whenever they feel that way without any adverse effects on them. The method of data collection will also be explained to the subjects. After explaining to them

and when they accept to participate in the study, they will be asked to sign a consent form which serves as evidence that they have agreed to participate in the study without coercion.

The subjects will be ensured of confidentiality. They will also be told that the accessibility of data will be restricted to the researcher and her supervisor. Confidentiality will be considered based on the fact that it is an important ethical requirement in research because, owing to various implications, some people may not want the information that they provided to be linked with them.

The proposal will be submitted to the KCN Research proposals and Publication committee for approval before conducting the study.

4.7 Limitations of the study

The time to develop the proposal and carry out the research is limited since the study takes place in an academic setting along with other courses of study. Thus it does not provide the researcher to prepare for a larger study.

4.8 Dissemination of results

A copy of the dissertation will be placed in the libraries of Kamuzu college of Nursing and other results will be disseminated to Kamuzu Central Hospital and Queen Elizabeth Central Hospital.

TOPIC : A STUDY ON FACTORS THAT CONTRIBUTE TO MEDICATION ADMINISTRATION ERRORS.

TIME TABLE FOR RESEARCH PROCESS

YEAR: 2010

Task to be done	April	May-June	June-July	July-August	September-October-	November
Identify Research Title						
Literature review						
Proposal writing, submission of proposal						
Waiting for approval of the proposal						
Piloting, Data collection						
Data analysis						
Report writing						
Dissemination of results						

APPENDIX D

PROPOSED BUDGET

QUANTITY	ITEM OF EXPENDITURE	UNIT COST (MKW)	TOTAL (MWK)
STATIONERY			
1	Ream	900.00	900.00
5	Pens	25.00	125.00
4	Large Envelopes	50.00	200.00
3	Large Envelopes	20.00	60.00
1	USB Flash (2GB)	3,500.00	3,500.00
	SUBTOTAL		4,785.00
SECRETARIAL SERVICES			
3	Printing proposal	500.00	1500.00
12	Photocopying interview guide	20.00	140.00
6	Binding 3 proposal & 3 dissertation	500.00	3000.00
5	Printing dissertation	600.00	3000.00
	SUBTOTAL		7640.00
COMMUNICATION			
Blantyre to Lilongwe x2 trips @ k1500	Travelling	1500.00	6000.00
	Internet	1500.00	1500.00
	Phone	2500.00	2500.00
	SUBTOTAL		10,000.00
	Meals	3000.00	3000.00
	Allowance	5000.00	5000.00
	SUBTOTAL		8000.00
	GRAND TOTAL		30,425.00

JUSTIFICATION OF THE BUDGET

STATIONERY

Plain white papers will be needed for printing and photocopying the research proposal and the Questionnaires. Large envelopes will e needed for carrying papers and during data collection and also for keeping information for any correspondence.

Pens and pencils will also be required for data collection, and analysis. The USB flash will be used for storing the information.

TRANSPORT BILLS

Money will be needed by the researcher for transport i.e. when travelling from Blantyre to Lilongwe to collect data.

PHOTOCOPYING AND PRINTING COSTS

Money as stipulated on the budget will be needed for photocopying and printing the questionnaires, research proposal and dissertation.

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APPENDIX A

INTERVIEW GUIDE QUESTIONAIRRE

DEMOGRAPHIC DATA.

1. Age: 24 – 30
   36 – 45
   46 – 55
   56 – 65
   Above 65

2. Gender: Male
   Female

3. Marital status: Married
   Single
   Divorced
   Widow
   Widower

4. Religion: Catholic
   Presbyterian
   Seventh Day
   Islam
   Other (specify)

5. What is your highest education level: Certificate
   Diploma
   Degree
   Masters Degree

6. How long have you been working----------?

KNOWLEDGE ON MEDICATION ERRORS.

7. What types of medication errors happen here: Preparing the wrong medication

- Selecting the wrong solvent
- Giving medication to the wrong patient
- Giving medication using wrong route
- Giving medication during the wrong time
- Giving a bolus injection too quickly
- All
- Other (specify)

8. Why do you think they happen? (Justify)

9. What strategies are put in place to prevent these medication errors?

10. Are these strategies implemented? If yes how
If no why?

11. What are the strategies that you think can be put in place to prevent these errors? (Explain)

NURSES FEELINGS AND EXPERIENCE ON MEDICATION ADMINISTRATION ERRORS.

12. Which statement clearly describes your feelings?

I have ever made an error. (a) Accidentally

(b) Deliberately

12. If deliberately -my needs were not met so I was frustrated.
-I wanted to finish my work quickly
-I was very tired because I was overworked.
-I hated the medication long and complicated process of
Preparation.

13. Accidentally because-My mind was pre occupied with personal issues.
-I was interrupted during the medication preparation and administration process.
-I was administering medication the way it was ordered.
-The medication was wrongly packed and labeled.
-I was new to the unit and did not know the preparation and administration process of the medication in that unit.

14. How much do you like the process of medication administration?

a) A routine, part of my job description and I do it because I do not have a choice.

b) I feel it is one o the most important aspects of patient care and I have to do it.

c) I hate that part of my job.

d) I find it important and I enjoy doing it.

14. What are the challenges you face during medication administration. (Explain).

15. What are the rights that you know during medication administration errors?

APPENDIX B

CONSENT FORM

TO WHOM IT MAY CONCERN

I am Sarah chifundo Phiri, a fourth year student from Kamuzu College of Nursing studying a Bachelor of Science degree in generic nursing. As a partial fulfilment in attainment of the degree, I am supposed to conduct a Research study. My study is on Factors Contributing to Medication Administration Errors.

You are one of the participants being requested to take part in the study. You are not forced to participate in the study, it is voluntary. You have the right to participate or withdraw from the study anytime you feel like when you have already started participating and the withdrawal will not affect you in anyway. The study is important because it will help the government of Malawi and the Ministry of Health to know the factors that contribute to medication administration errors in hospitals.

Your participation into this study does not put you at any risk and there is no direct benefit. Confidentiality will be strictly observed as the information given will be anonymous i.e. code numbers in place of names will be used to identify the responses to the interview guide. The findings of the study will only be accessible to the researcher and the supervisor.

I the undersigned, having fully understood the contents of the consent form, freely give consent to participate in the study.

Participant Signature.....
Date.....
Researchers signature.....
Date.....

APPENDIX C

University of Malawi,

Kamuzu college of Nursing,

Private Bag 1,
Lilongwe,
Date.....

The Research and Publication Committee,
Kamuzu College of Nursing,
Private Bag 1,
Lilongwe.

ATTENTION: The Chairperson

THROUGH: Dr. Betty Mkwinda-Nyasulu
The Research Supervisor
Kamuzu College of Nursing
Lilongwe Campus
Private Bag 1
Lilongwe

Dear Sir/Madam

APPLICATION FOR COLLEGE CLEARANCE TO CONDUCT A RESEARCH STUDY

I write to seek permission to conduct a research study on factors that contribute to medication administration errors. Attached is my research proposal.

I am a fourth year student of Bachelors of Science in generic nursing. As a partial fulfilment for the award of this degree, I am expected to conduct a study.

Your consideration is greatly appreciated.
Yours faithfully

Sarah C. Phiri (Miss)

APPENDIX D

University of Malawi

Kamuzu College of Nursing

P/B 1

Lilongwe

Attention: The Research Officer

The Secretary for Health

Ministry Of Health

P/B 328

Lilongwe 3

Date.....

Through: The Research Supervisor.

Dear Sir/Madam,

REQUESTING FOR NATIONAL CLEARANCE TO CONDUCT A RESEARCH STUDY ON FACTORS THAT CONTRIBUTE TO MEDICATION ADMINISTRATION ERRORS AT QUEEN ELIZABETH CENTRAL HOSPITAL

This letter seeks for your permission so that I conduct the study at Queen Elizabeth Central Hospital.

I am a fourth year student pursuing the Bachelor of Science degree in nursing at Kamuzu College of Nursing. I am required to conduct a research study in partial fulfilment of my degree programme.

The title of the study is factors that contribute to medication administration errors at Queen Elizabeth Central Hospital.

The findings of this research will help in improving errors that occur due to medication errors in our hospitals.

Your favourable considerations will be greatly appreciated.

Yours faithfully,

Sarah C. Phiri (Ms.)

APPENDIX E

University of Malawi

Kamuzu College of Nursing

P/Bag 1

Lilongwe

The Hospital Director

Lilongwe Central Hospital

P.O. Box 149,

Lilongwe.

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT A PILOT RESEARCH STUDY AT YOUR INSTITUTION

I am a fourth year student pursuing the Bachelor of Science in Nursing at the above college. I am required to do a research study as a partial fulfilment of the degree programme. The title of the study is '**factors contributing to medication administration errors.**'

I am requesting to conduct a pilot study at your health institution to ensure the validity and reliability of the questionnaire which is to be used as the instrument for data collection.

The findings of this study will assist in the formulation of strategies to reduce medication errors during medication administration, hence improving the health care provision in Malawi.

I will highly appreciate if this letter will meet your favourable considerations.

Yours faithfully,

SARAH CHIFUNDO PHIRI. (Miss)

APPENDIX F

University of Malawi,

Kamuzu College of Nursing,

P/Bag 1,

Lilongwe.

The Hospital Director,

Queen Elizabeth Central Hospital,

P.O. Box 95,

Blantyre.

Dear Sir,

REQUEST FOR PERMISSION TO CONDUCT A PILOT RESEARCH STUDY AT YOUR INSTITUTION

I seek your permission to conduct a study at your health institution.

I am a fourth year student pursuing the Bachelor of Science in Nursing at the above college. I am required to do a research study as a partial fulfilment of the degree programme. The title of the study is '**factors contributing to medication administration errors**.'

The findings of this study will assist in the formulation of strategies, to reduce medication errors during medication administration, hence improving the healthcare provision in Malawi.

I will highly appreciate if this letter will meet your favourable consideration.

Yours faithfully,

SARAH .C. PHIRI. (Miss