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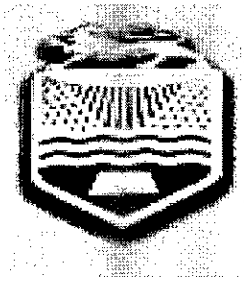

KAMUZU COLLEGE OF NURSING

RESEARCH PROPOSAL
ON

DESCRIPTION OF EFFECTIVENESS OF STANDARD CASE MANAGEMENT OF PNEUMONIA IN UNDERFIVE CHILDREN TOWARDS CLIENTS OUTCOME AT KASUNGU DISTRICT HOSPITAL

SUBMITTED TO THE FACULTY OF NURSING

SUBMMITTED
BY

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BY

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12TH JUNE, 2009

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DECLARATION

I declare that this proposal is completely the result of my own work, in originality and execution, I have acknowledged all sources that I have used by using a complete reference list.

Candidate Mercy Kudya

Signature_____ **Date** 31/07/2009

Supervisor Mrs. E. Chilemba

Signature _____ **Date** 31/07/2009

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ABSTRACT

The aim of the study is to explore the effectiveness of the Standard Case Management of Pneumonia in Underfive Children towards the clients' outcome. Its objectives will be to assess the effectiveness of the standard case management, to describe its effectiveness and identify challenges of standard case management in underfive children. The quantitative descriptive design will be used to this study. A systematic sampling technique will be used to sample the pneumonia files of underfive children at Kasungu District Hospital at Paediatric ward. The number of files to be samples will be 20 of 2008. Questionnaire will be used to collect data from the pneumonia files of underfive children. Data will be analysed manually and the findings will be presented in graphs, tables and pie charts. The major findings will be summarized at the end.

LIST OF ABBREVIATIONS

ARI:	Acute Respiratory Infections
CFR:	Case Fatality Rate
DHO:	District Health Officer
HBM:	Health Belief Model
IMCI:	Integrated Childhood Illness
SCM:	Standard Case Management
UNICEF:	United Nations International Children's Fund
WHO:	World Health Organization

OPERATIONAL DEFINITION

Belief:	The feeling that something is true or definitely exists
Catetaker:	Someone whose job is to look after other people
Culture:	Is the belief, way of life, art and customs that are shared and accepted by people is a particular society
Morbidity:	Is the incidence or prevalence of a disease or off all diseases in a population
Mortality:	Is the ratio of death in an area to the population of that area; expressed by 1,000 per year
Outcome Unknown:	Not coming for follow-up care after completion of treatment
Treatment Failure:	Worsening of fast breathing or worsening of chest in drawing or development of danger signs
Underfive:	A child who is below five years of age

CHAPTER ONE

1.1 INTRODUCTION

Patients outcome in underfive children is of at most importance to combat the high mortality and morbidity rates. Pneumonia is one of the major causes of morbidity and mortality rate in Malawi, CFR was 10% according to ARI Annual Review of 2005. In response to this, WHO introduced to standard case management strategy to manage children.

In Malawi, twenty five districts and eleven CHAM hospitals were introduced to this type of strategy, the standard case management. The standard case management guidelines use correct assessing, classifying, appropriate treatment and discharge plan as basic elements for managing pneumonia.

Kasungu district hospital has been observed that children come back critically ill after early discharge. Therefore the researcher wants to explore the effectiveness of the standard case management towards clients outcome in underfive children with pneumonia.

1.2 BACKGROUND

Pneumonia is the infection of the lung tissue caused by bacteria and virus (Stanfield, 1994). It affects individuals of all ages but it is very common in underfive children and elderly. In small children, there are increased susceptibility in low antibody level due to lack of exposure and immature system with a particular deficit response to 1gG2 (Stansfield, 1994). Then this immature system puts them at risk of contracting infections.

Pneumonia is the leading cause of deaths and morbidity in many developing countries including Malawi, occurring about two million deaths per year (htt://clinicaltrials.gov/ct2/stool). It is because of poor living conditions, pollution

of air, poor nutrition for example living in a house without good ventilation, putting tobacco in side the house without good ventilation, or parent smoking tobacco and not get nutrious food respectively.

Then the standard case management of pneumonia came into existence because of high mortality rate. SCM is the standard guideline introduced by WHO to reduce the case fatality rate in underfive children cause by pneumonia. It has got eight components and these are general assessment of the child or young infants, correct classification of a child with cough or difficult breathing, differential diagnosis, appropriate treatment according to severity and type of pneumonia, providing supportive care, monitoring child's progress and counselling and finally, discharge plan to the care taker of a sick child. All these components aid at good desired outcome. The out come of SCM are treatment completion which should be 85% and above, death within and after 24 hours is 6% and below according to national target ARI Program of 2007, Left against advice below 10%, and treatment failures and outcome unknown is below 5% (Participant manual 2000).

Pneumonia being the major killer of underfive children in the world especially in developing countries. Studies done by Pio Antinio (2003) showed that the incidence of pneumonia in developing countries was high 10-20 per 100 than in developed countries which was 2-4 per 100, however the incidence exceeding 50 per 100 have been reached in settings with prevalence of malnutrition and high HIV infection rate in children.

According to studies done by International Centre for Diarrhoeal Disease Research (1986-88) in Bangladesh showed that the most causative organisms of pneumonia inunderfive children in developed countries were streptoccocuss pneumonia and hemophilus influenza. 401 children with pneumonia, 14% of case fatality rate was due to these causative organisms and 3% CFR was virus. The bacterial was treated with inexpensive antibiotics of which poor countries can afford.

WHO launched a program for control of ARI with major objective to reduce the child mortality and promote rational use of antibiotics depending on the clinical presentations of the child suffering from pneumonia. This was done at Papau New Guinea. Shan F. 1992 published a paper that became a corner stone of the current case management strategy for control of ARI especially pneumonia. The paper had clinical presentation of pneumonia and where a child needs intensive antibiotic or not. This was a simple protocol which the health workers could be trained and able to use in managing sick children. It was accepted by many health professionals.

Then in 1994, SCM was recommended by WHO and UNICEF to be adopted by ARI programs in 130 developing countries. WHO integrated ARI guidelines into IMCI. By 2000 IMCI was adopted by 81 countries where Malawi was inclusive. IMCI is implemented at first level. Malawi has got twenty-five and eleven CHAM hospitals where standard case management is being implemented. In 2000 SCM through ARI program was introduced by Child Long Health Project because of poor health indicators such as infant and underfive mortality which were 104/1000 and 189/1000 live birth respectively. The case fatality rate of pneumonia was 23%. The other reason for introduction was inadequate capacity to manage severe pneumonia at district level. The aim of project to introduce the SCM was to reduce the mortality among paediatrics from pneumonia by maximising benefits of standard case management.

Kasungu district hospital has been observed that children come back critically ill after discharge on oral antibiotics.

1.3 PROBLEM STATEMENT

Patients outcomes determines the level or standard of care that patients receive in any health care setting. The introduction of standard case manage of pneumonia in underfive children was done with the goal of reducing mortality and morbidity rates. Observations reflect that after discharging, children come back in critical conditions and most of them die. This is questionable in terms of its effectiveness of

the standard case management as a method or guideline of treating severe pneumonia as well as very severe pneumonia. Therefore, the study seeks to describe effectiveness of standard case management in underfive children with pneumonia.

1.4 SIGNIFICANCE OF THE STUDY

The results obtained for this study will assist the district management team in collaboration with in-charges of underfive department to initiate underfive death audit. Also to come up with a policy on standard case management at district level.

1.5 OBJECTIVES

1.5.1 Broad Objectives

To explore the effectiveness of the standard case management of pneumonia in underfive children towards clients outcome at Kasungu District Hospital.

1.5.2 Specific Objectives

a. To assess effectiveness of the standard case management of pneumonia.
b. To identify challenges of standard case management of pneumonia in underfive children.
c. To describe the client's outcomes.

CHAPTER TWO

2.1 LITERATURE REVIEW

Literature review is the summary of relevant literature (information) on research problem. The major purpose of literature review is to ascertain what is already known in relation to the problem of interest (Polit and Hungler 1991). The scope of literature review ranges from studies done out of Africa, then those done in Africa as well as those done in Malawi. In Malawi there are not really research which have been done but only annual reviews.

2.2 INFORMATION AND RELATED STUDIES

2.2.1 Knowledge and Trainings

According to WHO guidelines of standard case management approach of pneumonia, children are critically identified as having pneumonia or not. The severity of the pneumonia classified and treatment appropriate to the degree of severity provided. The guidelines recommended cough or difficulties in breathing as entry criteria - for a diagnosis of pneumonia. The fast breathing will also depend on the age of the child or infant. An infant is 60b/minute or more. A chilled aged 2 months to eleven months is 50b/minute a more and 12 months to 59 months is 40/min or more.

Children with cough or difficulty in breathing and chest in drawing are considered to have severe pneumonia. Presence of danger signs specifically central cynosis or severe respiratory distress or inability to drink in a child with cough or difficulties in breathing is classified as very severe pneumonia. The treatment are given according to the severity of the pneumonia (Participant Manual 2000).

In a study done by Chakraborly, S. and Frick, K. (2002) is rural West Bengal, India on factors influencing private health providers technological quality of care for acute respiratory infection among underfive children WHO guidelines for ARI case

management were used as expected standard of care. It was reported that the health providers had inadequate technical quality of care due lack of knowledge and patient load. They were being given incentives after seeing many patients. The study concluded that to bring about sustainable improvements in private providers ARI disease management practices, training program and interventions that improved compliances were necessary.

2.2.2 Outcome

A study done at Sweden by Wahlstrom, R. et al (2003) on effectiveness of feedback improving case management of malaria, diarrhoea and pneumonia at provincial hospital in LAO PDR revealed that the aggregated mean scores for all diseases malaria, diarrhoea and pneumonia has improved significantly. For malaria were improvement in recording patient's history, and in frequency of microscopy testing. For diarrhoea, regarding weight measurements, palpation of fontennel for children under 2 years and reduction of irrational use of anti diarrhoea and antibiotics; for pneumonia, in recording respiratory count and reducing irrational use of antihistamines and anti cough medications. It concluded that audit feedback system to improve quality of care are feasible and effective also in hospital settings in low - income countries such as Malawi.

A study done in Uruguay by Pirez, M. etal (1997-98) in hospitalised children using standard case management of pneumonia by use of penicillin and derivates (Amecycillin and Ampicillin) and macrolides. For recommended days the decision to treatment and antibiotics were based on radiological findings. It revealed that compliance with the standard case management was highly satisfactory outcome of children treated with penicillin and derivates was good.

2.2.3 Resources

In a study done by Hasan Ashraf at Bangladesh on rendomized controlled al (RCT). The number of beds in the hospital was inadequate for admission of all pneumonia cases that require hospitalisation then they provided institutional care those children who cannot be hospitalised due to bed constraints at day care centres - at

Radda clinic. These children enrolled in Day Care were provided with appropriate antibiotics and supportive care at the clinic from 8am to 5pm. The results showed that this model was effective 251 children enrolled, 80% according to WHO had severe pneumonia and 20% had very severe pneumonia the mean duration of clinic stay was (712) days. 234 (93%) completed the study successfully without problems. 11 (44%) referred to hospitals because of the complications. No death reported at the clinic stay. The study was effective.

This can also apply to Kasungu district hospital where space is inadequate for hospitalised children instead of discharging children after two days on IM or IV antibiotics can be referred to day care-centres.

2.2.4 Knowledge

Mumbarak AL Renas Fordlallah (2006) did a cross section study on pneumonia case management in underfive children in Khantoum, Sudan. The survey was to describe the health care that children underfive receive before reaching a first referral hospital and the case management they receive when admitted as in-patients. Children were between 2 months and 5 years admitted in any of 3 referral hospitals. 224 children enrolled. One of the 3 hospitals was the care provider at which 61% of the care takers sought care at first . 30% of care takers bypass a health centre or another hospital within 5 km of their homes. In a 1/3 of those unavailability of services at facilities by passed was the reason stated. Of the children reaching hospitals after being referred from other facilities. Pneumonia constituted 38%. The findings were incomplete assessment, lead to 90% of the children to have inadequate classification and to discrepancy between classification and treatment. Monitoring of children's progress was inadequate. The researcher suggested that areas to improve SCM include training of health workers on assessment, classification, inpatient treatment and monitoring, in addition to complete recording of findings.

Nicholas D. Water and Lyino T. did a study on investigating the reasons why the first level health workers fail to follow guidelines for the integrated management of

childhood illness in severely ill children at Republic of Tanzania. A retrospective and perspective case reviews of severely ill children aged less than 5 years were conducted at health facilities in 4 districts. 502 cases were reviewed at 62 facilities. Treatment with antimalarials and antibiotics was consistent with diagnosis given by health workers. However 240 children classified as very severe febrile disease, none receive all IMCI recommended therapies and only 25% severely ill were referred.

91% of the health workers indicated that certain conditions can be managed without referral. The three reasons for not adhering to IMC guidelines were use of single, narrow diagnoses rather that IMCI classification. They belief that chloramphenicol is unacceptable toxic and lastly, perception was that referring ill child is often not necessary. It also shows that health workers were also lacking knowledge on the guidelines.

2.3 REVIEW DONE IN MALAWI

Training

A study done by Enarson P. etal (2002) on implementation of an oxygen contractor system Malawi. This was done after seeing that the children were dying from pneumonia due to hypoxaemia. It was observed that health workers were not able to use the oxygen and how much to give to the children of various years. It was concluded that health workers should be trained in use of oxygen concentrators.

A review done by Technical Advisory team from the International Union Against Tuberculosis and Lung disease (2005) in 6 districts of southern region of Malawi. These districts were Mangochi, Machinga, Thyolo, Mulanje, Mwanza and Chiradzulu . The review was to evaluate the progress made in strengthening of child lung health project/IMCI, particularly in terms of case management of pneumonia and management structure. The findings revealed that all 6 districts were not meeting the WHO recommendation of minimum hospital stay of four days. The average length stay of the six districts ranged from 2-9 - 3-9 days.

The infants were under treated given getamycin 5mg/kg instead of 7.5mg/kg and benzy/ penicillin twice instead of four times daily and gentamycin not given for all eight days and patients discharged on Amoxicillin done. In Chiradzulu SCM was not followed unauthorized drugs were used with inadequate treatment and discharge plan. These showed that health workers were lacking knowledge on SCM of pneumonia.

Death was the treatment outcome among the six districts hospital Mwanza. Mangochi and Machinga had highest case fatality rate of above 13% which was above the target case fatality of $\leq$ 10% of 2005.

In most districts health workers working in paediatric ward and underfive clinic had not received training of SCM.

The team recommended that the ARI program manager to provide formal annual training courses for personnel working in paediatric services. There should also supportive supervision.

In annual report 2007/08 done by ARI team from CHSU. The report was for 25 district and eleven CHAM hospitals in Malawi. The report revealed the outcome of the standard case management of pneumonia. On treatment completion; 20 hospitals were above 85%, 6 hospitals were below 75% where kasungu was inclusive and 10 hospitals were between 75% and 85%. The WHO target completed treatment is above 85% and the child should be well.

Left Against Advice

In all 36 hospitals 2.5% (397) had left the hospital against medical advice. The highest number of left against advice was 59 (15.8%) in Kasungu followed by Balaka 53 (14.2%) this has attributed to small space in Balaka however Kasungu showed a slight decrease than 2006/07 due to introduction of new ward.

Outcome Unknown

Of all pneumonia admissions in 36 hospitals, 996 (6.2% did not return for follow-up care. Most of the hospitals had the outcome unknown result of less than 5%, but Kasungu, Zomba Central and Mchinji hospitals had the outcome unknown above 10%. Case fatality rate of the hospitals was 6.3%, showed a slight increase over last years 5.6%. The highest was recorded in Mangochi 13.5% and the lowest Ntcheu. 31 hospitals had their case fatality below 10%. Patients admitted with pneumonia the number increased in all hospitals. The team came up with challenges and constraints that there is lack of commitment by most DHOs to implement ARI activities.

The team suggested that the DHOs and DNOs should ensure that health workers trained in ARI case management are allocated to the children's department so that they practice what they have learnt. In cases where most ARI trained health workers have left they practice what they have learnt.

SUMMARY

For standard case management to be effective there is need for the health workers working in paediatric ward to be trained in SCM. This knowledge and skills will help them to counsel the care takers on compliance.

CHAPTER THREE

3.0 CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION

Conceptual framework deals with abstractions (concepts) that are assended by virtue of their relevance to a common theme. (Polit and Becker 2008). In quantative study concepts are referred to as variables. Variable is something that varies for example age, weight, therefore these variables varies from one person to person.

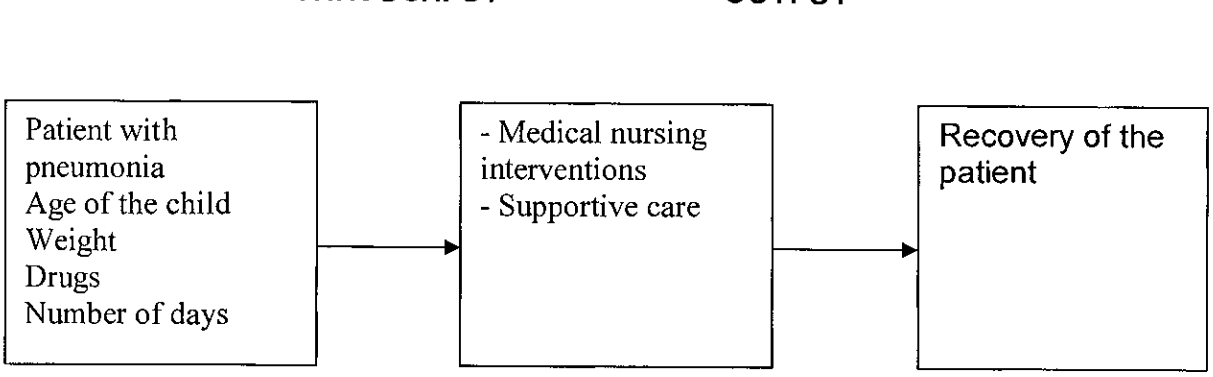
3.2 SYSTEMS THEORY

The theoretical framework used in this study is system theory. It attempts to explain productivity in terms of unifying whole as opposed to series of unrelated parts (Booyens 2001) system is a set of interrelated and interdependent parts designed to achieve a goal and set goals. (Booyens 2001). It consists of three major parts, and these are input, throughput and output.

Input is something put into system to achieve a result or outcome. The system is the hospital and the input is the resources like human, material information.

Through put is the work process to produce the product such as medical treatment of pneumonia, nursing intervention, immunization. The output is the information produced by a system or process from a specific input after running an entire process (Swanburg, 1996). It is the outcome of work like recovery of the patients.

CONCEPTUAL FRAME WORK DIAGRAM (MODIFIED)



The system approach (adapted from Hellriegel and Slocum [1989:61] as sited by Booyens [2001])

3.3 APPLICATION OF THE STUDY

The use of the system theory to this study. The system is the standard case management guidelines which requires the input such as patient with pneumonia, drugs, age of child weight to be in the system. These inputs will be used in the throughout which is the process of managing the children with pneumonia. These kids are being given treatments such as intravenous antibiotics to treat the infection. There is also supporting care some through nursing interventions to promote the client outcome which is the recovery. This is the output. The output determines the input and the throughput. Therefore, to have good desired outcome there is need to use input and throughput effectively.

According to Booyens, (2001) said that to operate effectively, there must be a feedback to provide information on the status and performance of the system. There is need to asses if there is need for collection of the throughput. This is why it is necessary to keep statistics and conduct patients satisfaction survey.

As nurses, there is need to carry out nursing intervention according to the standards. There is need to focus supervision on the guidelines so as to ensure that clients are getting quality care.

CHAPTER 4

4.0 METHODOLOGY

4.1 INTRODUCTION

This chapter discusses the design that will be used to collect data from selected secondary data. It also highlights the study population, sampling, method sample size, plan for data collection, data analaysis.

4.2 RESEARCH DESIGN

Research design is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process (Polit & Beck, 2008). It describes how, when and where data will be collected and analyzed. It also guides the researcher in planning and implementation of the study in order to achieve the intended goal. This study will use the descriptive quantitative research. Quantitative research is formal, objective systematic process in which numerical data are utilized to obtain information about the world (Groove and Burns, 2001). Descriptive research answer the question who, where or how. It deals with everything that was counted and studied, for example, in the study there will be counting of number of files from medical records by focusing on the variables particular variables or factors such as age, sex, diagnosis treatment. It also helps to provide knowledge base when little is known.

4.3 STUDY POPULATION

Population is all elements (individuals, objects substance) that meet certain criteria for inclusion in a given universe (Groove and Burns, 2001). To this study the population will be pneumonia patients file of the under-five children. According to Polit and Beck (2004), population refers to the entire set of individuals (or objects)

having some common characteristics. Therefore the population to be studied will be from secondary data of under-five children once admitted with pneumonia.

4.4 SAMPLING

Sampling is the process of selecting population to represent the entire population (Polit and Beck, 2004). According Burns and Groove (2001), sampling is a process of selecting subjects who are representative of the population being studied. In this study, systematic sampling will be used because each K^{th} file of pneumonia patient will be selected from the population. 50 pneumonia cards will be selected from 2008, Jan to December pneumonia cards of underfive children.

4.5 SETTING

Setting refers to location for conducting research such as natural, partially control or highly controlled setting (Burns and Groove, 2001). According to POlit and Beck (2004), settings are the more specific places where data collection occurs. In this study the setting will be natural because, the researcher will not manipulate or change the environment for the study.

The study will be conducted at Kasungu District Hospital at paediatric clerical office where the medical records are kept. Kasungu District Hospital is from the Central region of Malawi in Kasungu District along the main road.

4.6 DATA COLLECTION

According to Polit and Beck (2004), data collection is the gathering of information to address a research problem. Data collection is also defined as the precise, systematic gathering of information relevant to the research purpose or the specific objectives, questions or hypotheses of a study (Burns and Grooves, 2001). Prior to data collection a structured questionnaire was designed to collect secondary data retrospectively. The design or tool had demographic data excluding the names for

details see (Annex A). The questionnaire has got closed ended question where the researcher will be just feeling the blank space. Data collection will be done at KDH in clerk office. The two clerks will help to collect data after being briefed or oriented on how to collect it. The data collection was planned to take four days. The tool was adopted from underfive pneumonia card

Pilot study is a small scale version or trial run, done in preparation of major study. It will be conducted on limited number of files from the sample intended for the eventual project. The purpose is to investigate its feasibility of the study and defect any possible errors in data collection (Polit and Beck, 2004). Pilot study enables the researcher to make informed changes in the sequence before main data collection. The pilot will be done on 5 case files of 2007 at KDH. The pilot study will not be included in the actual study.

4.7 DATA ANALYSIS

Data collected will be analyzed using descriptive statistics. It is used to analyse data gathered in research related to health information. After data gathering, it will be grouped according to the variables, for example, diagnosis of severe pneumonia, how many patients were there.

Grouping of responses will be done, frequencies will be found. In case of technology failure, it is planned that the data will be analysed manually.

Tables, graphs, pie charts will be used to portray the findings of the study. Gender of the respondent will be reflected in pie charts, age of the respondents will be reflected in table form, i.e., frequency distribution, outcomes will be reflected in graphs form.

4.8 ETHICAL CONSIDERATION

The research study is supposed to conform to moral and legal standards. Letters for permission to conduct this study will be written to the research committee and the District Health Officer of Kasungu. In addition, verbal approval will be obtained from the incharge of the paediatric ward and the ARI Coordinator. The names of the patient will not be written to maintain confidentiality. Instead the serial number will be used.

4.1 TIME TABLE

Activity	Feb	Mar	apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Problem identification										
Literature review										
Proposal writing										
Preparation of data collection instruments										
Submission and clearance of research proposal										
pretest questionnaire										
Restructuring questions										
Data collection										
Data entry										
Data analysis										
Report writing										
submission of dissertation										

4.2 BUDGET

Item	Qty	Unit Cost (MK)	Total Cost (MK)
(a) Stationery			
- plain papers	3	750.00	2,250.00
- ball point pens	8	25.00	200.00
- pencils	4	25.00	100.00
- hard cover books	1	550.00	550.00
- plastic folders	3	250.00	750.00
- big envelopes	5	80.00	400.00
- small envelopes	5	30.00	150.00
- flash disk	1	5,000.00	5,000.00
(b) Project Copies			
- copies of research proposal	3	3,000.00	9,000.00
- copies of dissertation	3	4,000.00	12,000.00
- dissemination of results	1	6,000.00	6,000.00
(c) Transport and Communication			
- local running to other resource centres		3,000.00	3,000.00
- phone calls		700.00	700.00
- internet		3,000.00	3,000.00
- transport to and from collection centre		3,000.00	3,000.00
(d) Lunch meals and refreshments	3	800.00	2,400.00
		TOTAL	48,100.00
		CONTINGENCY (10%)	4,810.00
		GRAND TOTAL	**MK51,910.00**

4.3 JUSTIFICATION OF THE BUDGET

Stationery

Adequate stationery will be needed to cater for drafts and writing of final documents of both proposal and the dissertation. The same papers for writing will be used for drafting and writing letters seeking permission for the research.

Printing and Binding

Money will be used for printing and binding the proposal and dissertation.

Transport and Communication

There is need for traveling during literature search, pilot study and data collection. The researcher will need to travel twice to and from Kasungu, that is to deliver letters of permission to Kasungu DHO and time of data collection. She will also need to travel to MOH to deliver letters of permission to conduct the research. There is need for communication between the researcher and research supervisor.

Lunch meals and refreshments

During data collection period, the researcher will need meals for her lunch and refreshments, since she will spend more hours at health facility

Contingency

There is need for amount of money that will be set aside for any inconveniency that may arise during the research.

Project Copies

The researcher will be required to produce 3 copies of finished proposal and 3 finished dissertation which will be submitted to the following equally: KCN, Kasungu DHo and one to be kept by researcher herself.

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APPENDIX: A

QUESTIONNAIRE ON EFFECTIVENESS OF STANDARD CASE MANAGEMENT OF PNEUMONIA IN UNDERFIVE CHILDREN TOWARDS CLIENTS OUTCOME

DEMOGRAPHIC DATA

1. Number of the file..... .....
2. Age in months.....
3. Gender Male { } Female { }
4. Weight .....
5. Height .....

6. Address ....
   Village ..... T.A. .....
7. Diagnosis .....
8. First admission ..... Readmission.....
9. Treatment given for pneumonia.....
10. Number of days stayed in hospital.....
11. Number of days shifted to oral drug .....
12. Child's outcome ..... Recovered .....
    Died before 24 hours .....
    Died after 24 hours .....
    Left against advice .....
13. Type of medication on discharge ..... or none .....
14. Follow-up care .....
    Prognosis .....

APPENDIX B

University of Malawi
Kamuzu College of Nursing
Private Bag 1
LILONGWE

National Research Coordinator
Ministry of Health
P O Box 30337
LILONGWE 3

Dear Sir/Madam

PERMISSION FOR CLEARANCE

I write to request for national clearance to enable me conduct a research in Malawi. The tile of the study is ***"Description of the effectiveness of the standard case management of pneumonia in underfive children towards clients outcome at Kasungu District Hospital."*** I propose to conduct the study in September, 2009.

I am a mature entry student at the above-mentioned College pursuing a Bachelor of Science in Nursing Education. In partial fulfillment of the program, I am required to conduct a research study.

Your assistance will be greatly appreciated.

Yours faithfully

MERCY KUDYA (MRS)

APPENDIX C

University of Malawi
Kamuzu College of Nursing
Private Bag 1
LILONGWE

Research and Publications Committee
Kamuzu College of Nursing
P/Bag
LILONGWE

Dear Sir/Madam

APPLICATION FOR APPROVAL TO CONDUCT A RESEARCH STUDY

I am a mature entry student, pursuing a Bachelor of Science in Nursing Education. I partial fulfillment of the program, I am expected to conduct a research study. I write to apply for approval to conduct a study on ***"Effectiveness of standard case management of pneumonia in under-five Children towards clients outcome at Kasungu District Hospital."***

Yours favourable response will be greatly appreciated.

Yours faithfully

MERCY KUDYA (MRS)

APPENDIX D

University of Malawi
Kamuzu College of Nursing
Private Bag 1
LILONGWE

The District Health Officer
Kasungu District Hospital
P O Box 19
KASUNGU

Dear Sir/Madam

APPLICATION FOR PERMISSION TO CONDUCT A STUDY OF DESCRIPTION OF EFFECTIVENESS OF STANDARD CASE MANAGEMENT OF PNEUMONIA OF UNDERFIVE CHILDREN AT KASUNGU DISTRICT HOSPITAL

I write to apply for your permission to conduct research at paediatric ward at district hospital. The tile of the research is as above.

I am a mature entry student at the above-mentioned College pursuing a Bachelor of Science in Nursing Education. In partial fulfillment of the program, I am required to conduct a research study. I propose to conduct the study in September, 2009.

The study will help to identify which areas needs improvement.

Your assistance will be greatly appreciated.

Yours faithfully

MERCY KUDYA (MRS