



UNIVERSITY OF MALAWI
KAMUZU COLLEGE OF NURSING

**KNOWLEDGE, ATTITUDE AND PRACTICES OF MOTHERS OF UNDERFIVE
CHILDREN WITH ACUTE RESPIRATORY TRACT INFECTION AT QUEEN
ELIZABETH CENTRAL HOSPITAL, BLANTYRE, MALAWI.**

RESEARCH DISSERTATION

BY

MISS LETICIA CHIMWEMWE SUWEDI (BSC IN NURSING GENERIC YEAR 4)

SUPERVISED

BY

MRS. W. GONDWE

**SUBMITTED TO THE FACULTY OF NURSING IN PARTIAL FULFILLMENT FOR THE
AWARD OF BACHELOR OF SCIENCE DEGREE IN NURSING**

30th NOVEMBER 2010.

DECLARATION

I declare that this research study is a result of my own work. All sources used have been acknowledged in the reference list.

Student: Miss Leticia Suwedi

Signature *L. C. Suwedi*

Date *3/12/10*

Supervisor: Mrs .W. Gondwe

Signature.....

Date.....



DEDICATION

I dedicate this work to my parents, Mr. and Mrs. Suwedi and the entire family. I thank you for your continuous financial, academic and moral support.

To my uncle, Fr. (DR) Suwedi for your academic support and encouragements.

May the good Lord bless you all.

ACKNOWLEDGEMENT

I thank the Almighty GOD for the gift of life and strength that he has rendered me throughout the period of conducting this research study. I do not take it for granted.

I am thankful to my supervisor, Mrs W. Gondwe for the untiring support. Her encouragement gave me strength.

Mr Ngwale, the course lecturer is highly appreciated for the good foundation he built to come up with this proposal.

Lastly, I am thankful to my parents Mr. and Mrs. Suwedi, my uncle Fr. Suwedi , relatives and my friends for their financial, academic encouragement and moral support.

May the good Lord bless you all.

ABSTRACT

Aim: The aim of this study was to determine knowledge, attitude and practices of mothers of under five children with ARI at QECH, Blantyre, Malawi. The objectives of the study included the assessment mothers' knowledge and recognition of ARI, their practices when children develop symptoms of ARI at home. Determining attitudes of mothers towards ARI and identifying what motivates mothers to seek treatment for ARI with their children.

Methodology: It was a qualitative study. Data was collected using an interview guide. The researcher interviewed 10 participants. Data was analyzed manually. Participants included all mothers of under five children with ARI at special care and nursery wards of paediatric department of QECH.

RESULTS: Mothers of under five children with ARI had inadequate knowledge of ARI. There were mixed practices following an illness of their children. Some participants rushed to the hospital while others treated their children at home with left over and over the counter drugs while providing warmth. They did not accent that ARI can be treated by traditional healers.

Participants decided to take children to the hospital basing on their own initiative, influence from parents and husband, hope of acquiring standard care and previous experience of better treatment by health personnel at the hospital.

Recommendations have been suggested for improvements in nursing practice, nursing management, nursing education and nursing research. It is hoped that efforts will be made to address these issues to ensure mothers of under five children with ARI, seek treatment early for their children to reduce morbidity rate

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ALRI	Acute Lower Respiratory tract Infection
ARI	Acute Respiratory tract Infection
AURI	Acute Upper Respiratory tract Infection
FSAU	Food Security Analysis Unit
HBM	Health Belief Model
HIV	Human Immune-Deficiency Virus
IMCI	Integrated Management of Childhood Illness
KCH	Kamuzu Central Hospital
KCN	Kamuzu College of Nursing
MDHS	Malawi Demographic and Health Survey
MDG	Millennium Development Goal
QECH	Queen Elizabeth Central Hospital
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organisation

TABLE OF CONTENTS

<u>Content</u>	<u>page</u>
Declaration.....	i
Dedication.....	ii
Acknowledgement.....	iii
Research abstract.....	iv
List of abbreviations.....	iv

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1 Introduction.....	1
1.2 Background.....	2
1.3 Problem statement.....	4
1.4 Significance of the study.....	5
1.5 Purpose of the study.....	5
1.6 Specific objectives.....	5

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction.....	6
2.2 Knowledge & recognition of ARI by mothers of under five children.....	6
2.3 Attitude of mothers of under five children towards ARI.....	7
2.4 Practices of mothers when their children develop symptoms of ARI.....	8
2.5 What motivates mothers to seek treatment with their children with ARI.....	9

2.6Health seeking behaviours of mothers of under five children with acute respiratory tract infection.....	10
--	----

2.7Conclusion.....	11
--------------------	----

CHAPTER THREE: CONCEPTUAL FRAMEWORK

3.1 Introduction.....	12
-----------------------	----

3.2 Description of Health belief model.....	12
---	----

3.3Application of the model to the study.....	15
---	----

CHAPTER FOUR: METHODOLOGY

4.1 Introduction.....	16
-----------------------	----

4.2 Research design.....	16
--------------------------	----

4.3Research setting.....	16
--------------------------	----

4.4Sampling.....	16
------------------	----

4.5Data collection.....	17
-------------------------	----

4.6Pre- testing.....	17
----------------------	----

4.7Data analysis.....	17
-----------------------	----

4.8Ethical consideration.....	17
-------------------------------	----

CHAPTER FIVE: FINDINGS

5.1 Introduction.....	19
-----------------------	----

5.2 Demographic data.....	19
5.3 Categories of qualitative data.....	21
5.3.1 Mother’s knowledge on ARI.....	21
5.4.1 Mother’s attitude towards ARI.....	23
5.4.2 Practices of mothers when their children develop symptoms of ARI.....	25
5.4.3 What motivates mothers of under five children to seek treatment for ARI.....	26

CHAPTER SIX: DISCUSSION OF FINDINGS

6.1 Introduction.....	27
6.2 Mother’s knowledge on ARI.....	27
6.3 Mothers attitude towards ARI.....	28
6.4 Practices of mothers when their children develop ARI.....	29
6.5 What motivates mothers of under five children to seek treatment for ARI with their children.....	30
6.6 Study limitation.....	31
6.7 Study recommendations.....	31
6.8 Nursing practice.....	32
6.9 Nursing management.....	32
6.10 Nursing education.....	32
6.11 Nursing research.....	33
6.12 Conclusion.....	33
References.....	34

APPENDICES

Appendix I : Questionnaire in English.....	37
Appendix II : Questionnaire in Chichewa.....	39
Appendix III : Consent form in English	41
Appendix IV : Consent form in Chichewa.....	42
Appendix VI : Letter to KCN Research committee.....	44
Appendix VII : Letter of permission to QECH.....	45
Appendix VIII : Letter of permission to QECH.....	47
Appendix VIII: Approval letter from RPC.....	48
Appendix X: Approval letter from QECH.....	49
Appendix XI: Transcribed interview.....	51

CHAPTER ONE

1.1 INTRODUCTION

The respiratory system consists of the nose, pharynx, larynx, trachea, bronchi and lungs (Mosby dictionary, 2006). The main role of the respiratory system is to extract oxygen from the external environment and dispose off waste gases, principally carbon dioxide. This requires the lungs to function as an efficient bellows system thus expelling used air, bringing fresh air in and mixing it efficiently with the one remaining in the lungs (Shier, 2002). The lungs have to provide a large surface area for gas exchange and the alveoli walls have to present minimal resistance to gas diffusion for maximum efficiency. Ventilation must be matched accurately to blood flow through the pulmonary capillary bed. When there is an inhalation of dust, gas and various infectious agents, the body protects the integrity of the respiratory system through, mucus blanket, ciliary action, cough, macrophages and surfactant (Kumar & Clark, 2000).

In response to any foreign body, special cells called goblet cells, that are located in the lining of the tracheobronchial tree, secrete mucus and get inflamed. The mucus entraps the foreign body and carries it by the cilia up ward towards the mouth where it is expectorated through a cough or swallowed. If the goblet cells are chronically inflamed the mucus which carries the foreign body is retained and allowed to pool in the alveoli where macrophages that are phagocyte scavengers of the respiratory system ingest both exogenous and endogenous foreign body. When foreign bodies are killed, the surfactant reduces the surface tension of fluid lining of the alveoli; maintaining a large surface area for gas exchange. If the foreign bodies are not killed, the host defense mechanism is defeated and the person, whether an adult or a child, gets the respiratory tract infection (Dewit, 1998).

However, there are anatomical and physiological differences between children and adults that influence respiratory system function and pose special risk factors for acute respiratory tract infections. Children's eustachian tubes that connect the middle ear to the pharynx are straight rather than angled and are about half the length of an adult's tube. This allows easy access to the middle ear, which allows bacteria and virus to find their way into the upper respiratory tract

(Servonsky & Opas, 1987). These tubes are also narrower and less stiff, which makes them more prone to blockages that create entry of microorganisms.

The adenoids that are glands like structures located in the back of the upper throat near the eustachian tubes are larger in children. They interfere with the opening of eustachian tubes that facilitate entry of microorganisms. The paranasal sinuses are small in children and do not allow proper drainage of secretions creating good media for growth of microorganism. In addition the immune system of children is not fully developed to fight against microorganisms hence predisposing them to acute respiratory tract infections (Thibodeau, 2010).

Acute respiratory tract infection (ARI) is an acute inflammation of the respiratory tract, thus a pathological state resulting from invasion of the tract by the pathogenic microorganisms. Its classification is based on the site of infection as acute upper respiratory tract infections (AURI) that include; nasopharyngitis, tonsillitis and otitis, then acute lower respiratory infection (ALRI) that include; epiglottitis, laryngitis, laryngotracheitis, bronchitis, bronchiolitis and pneumonia. Signs and symptoms of acute respiratory tract infections are fever, coughing, running nose, difficulty breathing, wheezing, cyanosis, stridor, chest in drawing and retractions (Tortora & Derrickson, 2006).

1.2 BACKGROUND

ARI in under five children have been the major cause of morbidity and mortality since 1960's (Garenne, Ronsman & Campbell, 1992). And it is still the major common cause of morbidity and mortality in young children world wide especially in developing countries, Malawi inclusive (Black, Morris & Bryce, 2005). World health organization (WHO) estimates for 2002 show that 10.8 million under five children die each year globally, major causes being neonatal sepsis (36%), ARI (23%), Diarrhea (17%), malaria (8%), HIV & AIDS (3%), Injury (3%) and others (10%) (Black et al, 2005). United Nations International Children's Emergency Fund (UNICEF) statistics (2002) reported that ARI is one of the leading causes of mortality in developing countries. South Asia and sub Saharan Africa have the highest incidents of ARI cases among under five children in developing countries. These two regions combined bear the burden of 70% of the total number of ARI episodes worldwide (Williams, Gouw, Pinto, Bryce & Dye, 2002).

WHO estimates for 1990 indicate that out of nearly 12.9 million children who die each year in developing countries, about 4.3 million die of ARI. WHO estimates further state that the ARI complications accounted to the single largest cause of death in young children being associated with 33% of all childhood deaths in developing countries (Siswanto, 2007).

On average, a child has 5 to 8 attacks annually. There are more than 156 million new cases of children with ARI globally in developing countries, accounting for more than 95 % and Africa alone has more than 42 %. In these developing countries 1.5 million children do not reach their first birthday and 5 million do not reach their fifth birthday due to ARI (Rudan, 2004). Integrated Management of childhood Illness (IMCI) approach policy for accelerated child survival and development in Malawi 2006, stated that Malawi's under five child mortality rate is 175 per 1,000 live births and is among the world's highest rate. Major leading cause of morbidity and mortality in under five children contributing to these rates are Malaria (40%), ARI (12%), diarrhea (7%) and malnutrition (2%) the remaining (39%) is for other conditions that contribute less to this rate. The main contributing factor to these rates is poor health seeking behavior that put children at risk of death. This is affecting Malawi in the achievement of Millennium Development Goal (MDG) number 4: reducing child mortality (IMCI approach policy for accelerated child survival and development in Malawi, 2006).

According to Malawi Demographic Health Survey (MDHS) 2004, a study conducted in 1992 to 2000 showed that 42% of children had symptoms of ARI 2 weeks preceding the survey. Among the children only 20% were taken to a health facility and most of them presented with late symptoms. In northern Malawi, out of 459 children who had symptoms of ARI, only 17.9% sought treatment from a health provider and most of them with late symptoms. From 1,976 children in southern Malawi, who had symptoms of ARI, only 21.4% sought treatment and with late symptoms from a health facility. Lastly, from 1,976 children in central Malawi who had symptoms of ARI, only 18.2% sought treatment and with late symptoms (MDHS, 2004).

WHO, 2002, shows that despite the huge loss of lives to ARI each year, the promise inherent in simplified case management has not been successfully realized globally and one main reason is the under utilization of health facilities in countries and communities in which many children die from ARI. In Bangladesh, for example, 92% of sick children are not taken to health facilities at

appropriate time (Schumacher, Swedbeg, Diallo, Kelter & Pasha, 2002). And in Malawi, 80% of sick children having ARI are not taken to health facilities at appropriate time (MDHS, 2004).

The WHO estimates show that seeking prompt and appropriate care could reduce child deaths due to ARI by 20% (Sreeramareddy, Shanker, Sreekumaran, Suba, Josh & Ramachandran, 2006). Children are an embodiment of our dreams and hopes for the future but are most vulnerable to ARI. 80% of children suffering from ARI in Malawi are not taken to a health facility for treatment or report with late symptoms (MDHS, 2004). Review of records at Queen Elizabeth central hospital (QECH) of the year 2009 has revealed that ARI is among the major causes of child mortality accounting for 41.34%, indicating that ARI at QECH is also leading to a lot of deaths. As stipulated by WHO (2002), IMCI approach policy for accelerated child survival and development in Malawi (2006) and MDHS (2004) the major contributing factor of high child mortality is the issue of reporting late by children having ARI. Despite high mortality rate of 41.3%, most mothers are still taking their children with ARI late to the hospital. Taking children with ARI to the hospital late or not seeking care is detrimental to their health, because they do not get the required medical attention to restore their health faster (Kallander, Hidenwall, Waiswa, Galiwongo, & Pario, 2008). The prognosis turns out to be poor as such this may lead into respiratory failure, which is the inability of the respiratory system to maintain adequate oxygenation and eventually this might lead into death (Whaley & Wong, 1999). It is not known why mothers of under five children with ARI report late for treatment. Therefore the study will explore the knowledge, attitude and practices of mothers of under five children at QECH, one of the major hospitals in Malawi.

1.3 PROBLEM STATEMENT

80% of children suffering from ARI in Malawi are taken late to health facilities (MDHS, 2004). WHO (2002) estimates show that seeking prompt and appropriate care could reduce child deaths due to ARI by 20%. ARI is among the major causes of child mortality in Malawi accounting for 12 % (IMCI approach policy for accelerated child survival and development in Malawi, 2006). ARI is also among the major leading causes of child mortality at QECH accounting for 41.34% (QECH, records 2009). Despite the high mortality rate, most mothers of under five children with ARI are still reporting late for treatment. It is not known why mothers of under five children

report late for treatment, this gap has promoted the researcher to conduct the study to determine if mothers have knowledge on ARI, their attitude and practices, at Queen Elizabeth central hospital, Blantyre, Malawi.

1.4 SIGNIFICANCE OF THE STUDY

The study may help to identify mothers' needs and barriers faced when seeking care; hence this information may help the nation to address their needs to promote quality and satisfaction care.

The study may help in sensitizing mothers on the need to report to a health facility with their children before the condition worsens.

The study may help in enrichment of nurses' body of knowledge that may be incorporated in nursing practice and education.

The study findings may act as a basis for further researches.

1.5 THE PURPOSE OF THE STUDY

To determine knowledge, attitude and practices of mothers of under five children with ARI at Queen Elizabeth central hospital, Blantyre, Malawi.

1.6 SPECIFIC OBJECTIVES

1. To assess mothers' knowledge and recognition of ARI
2. To assess their practices when a child develop symptoms of ARI at home.
3. To determine attitudes of mothers towards ARI.
4. To identify what motivates mothers to seek treatment for ARI with their children.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews the literature and previous studies concerning ARI. It will focus on knowledge of mothers on ARI, recognition of ARI, attitude of mothers towards ARI, practices that are done when a child develop symptoms of ARI at home ,what motivates mothers to seek treatment for ARI with their children and health seeking behaviours of mothers of under five children with ARI.

2.2 KNOWLEDGE AND RECOGNITION OF ARI BY MOTHERS OF UNDER FIVE CHILDREN.

Adequate knowledge and early recognition of ARI by mothers of under five children is vital because it alerts them to provide appropriate care to their sick children. Kallender, Tomso, Nsabangosani, Sabiliti, Pariyo & Peterson, (2008) indicated that mothers' knowledge is very important for ARI prevention and management. Knowledge of mothers has significant association with child care practice (Nglocan, 1999). According to disease control and prevention program that was launched at WHO (1995) joint statement, mothers should have knowledge about ARI and its management to decrease morbidity and mortality of children with ARI.

Simuyu, Wafulu & Ndauti (2003) conducted a cross sectional survey of 309 mothers of under five children with ARI in Baringo district Kenya, to determine their knowledge attitude and practices on ARI conditions, such as epiglottitis, laryngitis, laryngotracheitis, bronchitis, bronchiolitis and pneumonia. 60.2% of mothers mentioned causes, signs and symptoms, treatment, management and prevention of ARI. 4.5% mentioned that ARI conditions are caused by germs, dust and gases. 87.5% mentioned that ARI is caused by cold weather and avoidable of cold conditions would prevent it. 18% knew signs and symptoms like cough, difficulties in breathing and increased respiratory rate. 34% of mothers who had the knowledge had no formal education, their mean age being 31.5 from the ranges of 16 to 51. Overall, the results of the study found that mothers of under five children had good knowledge on mild forms of ARI.

Galvez, Modeste, Lee, Betancourt & Wilkins (2000) in the study to assess knowledge and recognition of ARI among 501 mothers of under five children in Peru, also found that mothers were able to recognise that their children were having ARI. 80% of mothers correctly picked rapid breathing and chest retractions from the list of possible signs and symptoms.

Among the types of ARI, 84% of mothers of under five children have knowledge on pneumonia because it's common. (Galvez, Modeste, Lee, Betancourt & Wilkins, 2000; Simuyu, Wafulu, Ndauti, 2003; Siswanto, 2007).

Much as the majority of women had knowledge about ARI, in Africa, Hidenwall, Rutebemberwa, Pariyo, Tomson & Peterson (2003) in their study in Uganda on knowledge of symptoms of ARI and how the knowledge influences management of under five children with ARI, reported that there is still community knowledge gap on ARI. It was found that 44% of mothers were unable to mention symptoms of ARI. As a result, they were not able to recognise the symptoms in their children. Kallender et al., (2008) wrote that there is still a gap because there are a large number of caretakers including mothers who have poor knowledge of ARI. Therefore there is a need to continue educating mothers through promotion of community based public education to promote management of children having ARI (Galvez et al., 2000; Hidenwall et al., 2003; Siswanto, 2007).

In Malawi, there is no published data on knowledge on acute respiratory tract infection among mothers of under five children.

2.3 ATTITUDE OF MOTHERS OF UNDERFIVE CHILDREN TOWARDS ARI

Perception or attitude towards illness appears to be a factor that influences mothers to provide appropriate care to sick children (Vassanthamala, Arokiasary, 1989). Mothers' attitude plays a role in determining who qualifies to be a patient and how serious they perceive the illness (Pelto and Pelto, 1997).

In the study of determining mother's knowledge attitudes and practices regarding ARI in under five children, Simuyu et al., (2003) found that 91.6% of mothers of under five children regarded

ARI conditions to be serious and associated it with high mortality. 8.4% perceived ARI to be a mild form of illness and that spirits are related to some of its symptoms.

Pelto & Pelto (1997) wrote that older persons are perceived to be more knowledgeable, especially where traditional aspects of ARI and their management are concerned. Older persons are then responsible for teaching mothers of under five children on the seriousness of ARI conditions hence influencing their attitude towards ARI. In a study on people's knowledge, beliefs and perception on ARI in Ghana, Awedoba (2003) found that in matrilineal society's mothers of under five children had to consult older people to determine the seriousness of a child's health condition before seeking medical attention. This influenced their attitude and perception, whether a child with an ARI condition was to be assigned the sick role or not.

2.4 PRACTICES OF MOTHERS WHEN THEIR CHILDREN DEVELOP SYMPTOMS OF ARI

When people fall ill, they exploit various kinds of treatment, in the home where illnesses are first defined (Brodwin, 1996). Giving sick children left over drugs is one of the home management of under five children with ARI. Chang and Tang (2006) conducted a study among 421 parents on parental knowledge, attitude and antibiotic use for ARI at a primary health care clinic in Malaysia. They found that 45.5% of parents sought treatment late. Among the 45%, 15% of the parents gave their children left over antibiotics, 24% gave shared antibiotics and 6.5% bought antibiotics for their children with ARI. Improper medication and dosages may suppress symptoms of ARI and later leading into serious symptoms. If symptoms are suppressed mothers of under five children can not seek treatment in good time creating room for complications

Another home management includes wrapping up children with ARI, too tightly with excessive clothes. Simuyu et al., (2003) conducted a study on determining mother's knowledge attitudes and practices regarding ARI in under five children in Kenya. He found that 87.5% of 309 mothers of under five children with ARI thought that ARI is caused by cold weather and avoidable of cold conditions would prevent it. Hence they were wrapping their children with ARI with excessive clothes too tightly. Wrapping up children when it's cold is necessary, but if the clothes are too tight, it makes breathing more distressful for a child who already has ARI.

Sometimes because of mothers' beliefs towards ARI, they opt to seek spiritual explanations or rely on advice from elderly people or friends. 59.8% of 309 mothers in a study of determining mother's knowledge attitudes and practices regarding ARI in under five children in Kenya, said they would seek help from traditional herbalist (Simuyu et al., 2003). Awedoba (2003) in the study on mothers knowledge beliefs and perception on ARI in Ghana also found that 30% of 402 mothers of under five children had sought help from traditional healers after being influenced by elderly people in their communities.

2.5 WHAT MOTIVATES MOTHERS TO SEEK TREATMENT FOR ARI WITH THEIR CHILDREN

Mothers of under five children with ARI are motivated by several factors in order to seek treatment for their sick children. These include perceived seriousness of the illness, the more the illness, the greater the effort in seeking treatment regardless of the distance (Awedoba, 2003). If mothers perceive that ARI attack is not very serious, then seeking treatment will delay. Signs of less ARI attack include cough which is not persistent and running nose (Tortora & Derrickson, 2006).

Kundi, Anjum and Mull (1993) conducted a study on maternal perception of pneumonia a form of ARI and its signs in children, in Pakistan. 32 out of 50 mothers interviewed reported to have been alarmed by persistent severe coughing, high fever, inability to sleep and excessive crying. They perceived these symptoms to be serious and had to seek treatment early.

Support from spouses is another motivating factor for mothers to seek treatment with their children having ARI. Decision making in most house holds is done by the husband and mothers only seek permission if they can take their children to the hospital. If support from spouses is not available, mothers may be motivated by elders or friends who had undergone similar experience (Pelto & Pelto 1997). In a study on knowledge, attitude and practices of parents of under five children with ARI on health seeking behaviours by Food security analysis unit (FSAU), 2007, in Somalia among the agro-pastorists, they reported that fathers are the main decision makers concerning management of most illness and seeking treatment on ARI depend on their consent.

Another motivating factor for mothers to report with their children to a health facility is attitude of health practitioners (Nglocan, 1999). Health practitioners reinforce mothers to be seeking treatment when ever their children develop symptoms of ARI, if they provide adequate and individualised care to mothers whenever they have visited the hospital. In addition to the above, availability of money may motivate mothers to report with their sick children to a health facility faster. Even when people know that they ought to send a child who is very sick with ARI to health facility, the problem of money might yet stand in their way. This problem results in sending children to hospital too late, as parents explore first cheaper treatment modes (Nglocan, 1999).

Awedoba (2003) conducted a study on mothers' knowledge, beliefs and perception on ARI in Ghana Tano district, mothers reported of seeking treatment to the traditional healer because some traditional healers were willing to take fees later, when treatment was successful and the traditional healers were locally found, that did not require them to have money when they were seeking treatment, unlike seeking treatment at health facility.

2.6 HEALTH SEEKING BEHAVIOURS OF MOTHERS OF UNDERFIVE CHILDREN WITH ACUTE RESPIRATORY TRACT INFECTION.

Taking children with ARI to the hospital late or not seeking care is detrimental to their health, because they do not get the required medical attention to restore their health faster (Kallander, Hidenwall, Waiswa, Galiwongo, & Pario, 2008). Generally most mothers of under five children with ARI report late for treatment to the hospital. A long distance to the health clinics is one of the contributing factors. In Asia a study done by Gombojav, Holland, Pollock & Hendreson (2009) on effects of social variables on symptom recognition and medical care seeking behavior for ARI in urban Mongolia showed that 95% of 9024 mothers delayed in seeking care because they were residing in places 1 kilometer far from the clinic.

The trend is also the same in Africa, most mothers of underfive children are reporting late for treatment. A study done by Denno, Bentsi, Mock & Adelson (1994) on maternal knowledge, attitude and practices regarding childhood acute respiratory infections in Ghana, also looked at health care seeking behaviours among 143 mothers of under five children. 39.5% of the mothers

indicated that they delayed accessing a health care facility in the presence of symptoms which signify severe respiratory distress such as dyspnoea, tachypnoea and chest retractions. They delayed because there was poor maternal understanding of the etiology of ARI and there was a variety of herbal and home care therapies.

Similarly in Malawi most mothers of under five children having ARI from all the regions, generally report late for treatment. According to Malawi Demographic Health Survey (MDHS) 2004, a study conducted in 1992 to 2000 showed that 42% of children had symptoms of ARI 2 weeks preceding the survey. Among the children only 20% were taken to a health facility and most of them presented with late symptoms. In northern Malawi, out of 459 children who had symptoms of ARI, only 17.9% sought treatment from a health provider and most of them with late symptoms. From 1,976 children in southern Malawi, who had symptoms of ARI, only 21.4% sought treatment and with late symptoms from a health. The studies did not establish the reasons why mothers of under five children reported late for treatment

2.7 CONCLUSION

From the reviewed literature, on knowledge and recognition of ARI it is showing that mothers of under five children with ARI have some knowledge and are able to recognise some symptoms of ARI. Most mothers regarded ARI to be a serious condition and they associated it with high mortality while very few mothers perceived ARI to be a mild form of illness and that spirits are related to some of its symptoms. On practices mothers usually give their sick children left over drugs, others wrap their sick children so tightly and sometimes they seek help from traditional healers. On motivating factors, mothers seek treatment early if they perceive ARI to be serious, if they are supported by their spouses and if they have money. Generally the majority of mothers of under five children with ARI report late to the hospital. Lastly there is no information documented on knowledge, attitude and practices of mothers of under five children with ARI in Malawi hence the need to conduct the study

CHAPTER THREE

CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION

Conceptual framework guides the researcher to understand the variables under study, their relationship and how these relationships affect their outcomes (Mieller, 1996). The conceptual framework on determining knowledge, attitude and practices of mothers of under five children with ARI at QECH, Blantyre, Malawi has been derived from Health Belief Model (HBM) by Hochbaum (Glanz, Rimer, Lewis, 2002).

3.2 DESCRIPTION OF HEALTH BELIEF MODEL

The model attempts to explain and predict health related behaviors such as health care utilization. It integrates psychological theories of goal setting, decision making and social learning (Polit & Beck, 2006). Three major principle concepts include individual perceptions, modifying factors and variables affecting the likelihood of initiating actions. It postulates that readiness to act on behalf of a person's own health is predicted by the perceived susceptibility to the particular disease, perceived seriousness of the disease, perceived benefits of taking action and the perceived barriers to taking actions as well as cues to action and the modifying factors such as the knowledge, social economic factors, culture, personal experience, sex, age, personality and motivation. This model provides an insight into the relationship between the way the person sees his or her state of health and response to health, illness and treatment. Figure 3.1 gives a summary of the model.

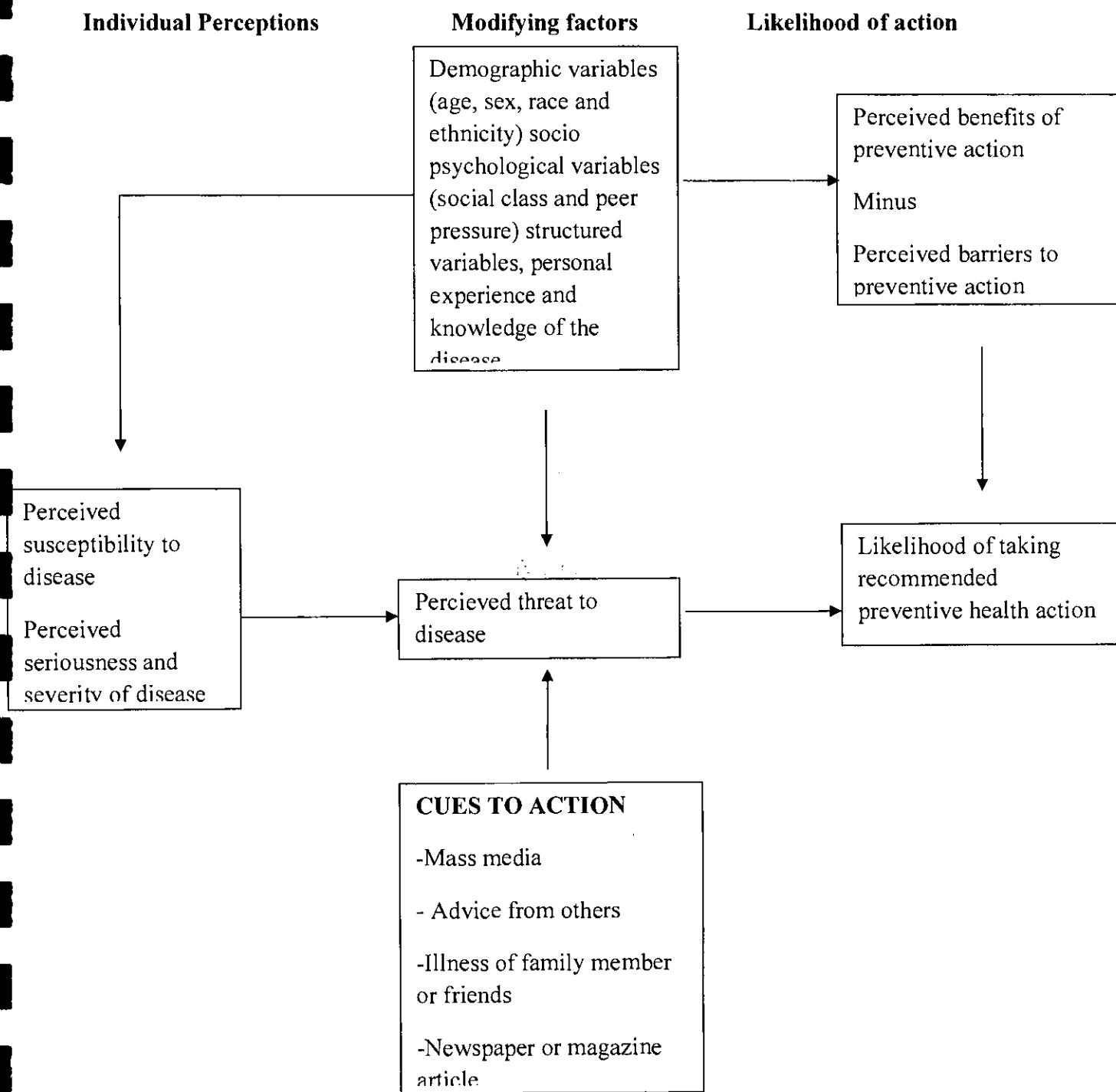


Figure 3.1: Health Belief Model. Source: Berman, Snyder , Kozier and Erb .(2008)

3.3 APPLICATION OF HEALTH BELIEF MODEL TO THE STUDY

Health belief model has been modified to apply variables of interest to the study as illustrated in Figure 3.2.

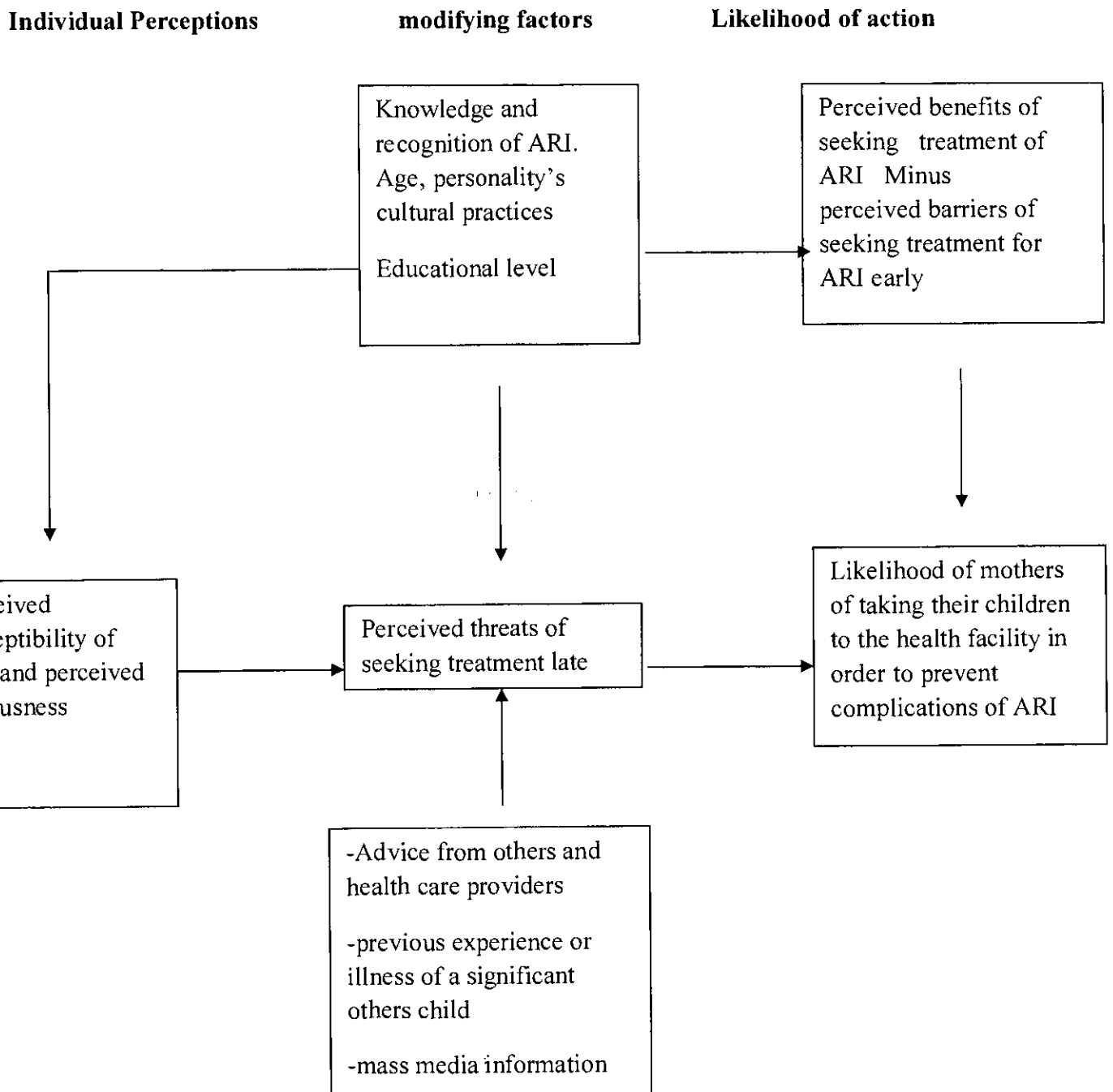


Fig.3. 2: Application of Health Belief Model to the study

Modifying factors

The modified model predicts that, age and educational level influences knowledge of mothers of under five children with ARI. The older the person and the higher the educational level will facilitate an easy understanding of ARI from health care providers, advice from friends, and mass media. If mothers of under five children have relevant knowledge, on ARI like its signs and symptoms, and understand the threat of seeking treatment late. They are more likely to seek treatment early.

Individual perception

If mothers of under five children with ARI recognize a simple sign of ARI, like cough and know that their children are susceptible to develop a serious symptom like difficulties in breathing. They are more likely to seek treatment early.

Likelihood of action

Having adequate knowledge, mothers of under five children with ARI, will think of possible benefits of seeking treatment early, for example their children receiving required medical attention to restore their health faster. If they think of possible barriers like having in adequate financial support may be from their spouses, they may seek treatment late.

Mothers of under five children are more likely to take their children to the hospital if the benefits outweigh the barriers.

CHAPTER FOUR

METHODOLOGY

4.1 INTRODUCTION

This chapter describes the procedures that have been followed in determining the knowledge, attitude and practices of mothers of under five children with ARI at QECH. It includes the research design, sample selection, sample size, research setting, and instruments used. Data collection and analysis and ethical considerations will also be described.

4.2 RESEARCH DESIGN

This is an overall plan for collecting, analyzing data and answers to the research question and testing hypothesis (Polit & Beck, 2006). An explorative qualitative research design was used in the study. This is the mode of systematic enquiry concerned with understanding human beings and the nature of their transactions with themselves and with their surroundings, thus it focuses on how individuals and groups view and understand the world and construct meaning out of their experience (Polit & Beck, 2006). This design was chosen because it's concerned with in-depth study of human phenomena in order to understand their nature and the meaning they have for individuals involved (Burns & Grove, 2001).

4.3 RESEARCH SETTING

The research was conducted at QECH, Blantyre, in the southern region of Malawi. It was done at special care and nursery wards of pediatric department. This department admits under five children with different illnesses including ARI. Hence participants were easily accessed.

4.4 SAMPLING

Burns & Grove (2001) defined sampling as the process of selecting a group of people, events, behaviours or other elements with which to conduct a study. In this study the sample was comprised of mothers of under five children with ARI, at QECH, Blantyre, Malawi. Accidental (convenient) sampling was used to select the participants. Accidental sampling refers to the use of available persons or objects as subjects in the study, thus participants are fortuitously chosen (Neumans, 2006). Any mother of under five children with ARI who was found at special care and nursery wards of pediatric department of QECH was asked for their consent to participate in the study. A sample of 10 participants were interviewed, however data saturation was achieved.

4.5 DATA COLLECTION

Data was collected using an interview guide. The questions were translated in Chichewa for easy communication. The researcher was responsible for interviewing the participants. This was appropriate to cater for both literate and illiterate participants. A tape recorder was used, to grasp all the answers from the participants. The data was collected in October 2010, for a period of two days. It took about 25minutes to complete the interview on each participant and 5 participants were interviewed in a day.

4.6 PRE- TESTING

Pre-testing is the trial administration of a newly developed instrument to identify potential weaknesses, in preparation for the main study (Polit and Beck, 2006). The interview guide was pre tested for efficacy and clarity to the tool. After pre-testing no changes were made. Pre-testing was done on three mothers of under five children with ARI at QECH, just like the main study setting.

4.7 DATA ANALYSIS

Data analysis is a systematic organization and synthetics of research data (Polit and Beck, 2006). The data was analyzed manually by the researcher and confirmed by the supervisor. The results were presented in a table and categories of qualitative data, for clear presentation of the study findings.

4.8 ETHICAL CONSIDERATION

Any good research conforms to moral, ethical and legal standards of the society where the research is being carried out. Rights of subjects must be protected at all times and researchers must always pay serious attention to human welfare (Polit & Beck, 2006).

In this study, a proposal was submitted to research and publications committee (RPC) of Kamuzu College of Nursing (KCN), for approval to conduct the study. Permission was sought from the Hospital Authorities of QECH where the pilot and main study was done respectively.

Participants were informed of the study and asked to participate willingly. To indicate their acceptance they were requested to sign the consent form. Numbers were used instead of their names to ensure privacy and confidentiality. Participants were not exposed to any risk, be it physical or psychological. They were informed of no direct benefits from the study, but the findings may be used to determine knowledge, attitude and practices of mothers of under five children with ARI at QECH. They were free to withdraw at any time without penalty.

CHAPTER FIVE

FINDINGS

5.1 INTRODUCTION

This chapter presents the findings of a study to determine knowledge, attitude and practices of mothers of under five children with ARI at Queen Elizabeth central hospital, Blantyre, Malawi. The findings are divided into demographic data and categories of qualitative data. Data was analyzed manually.

Research findings have been presented by explaining the results with direct quotes from the participants, in order to illustrate important points.

5.2 DEMOGRAPHIC DATA

Ten mothers of under five children with ARI participated in the study. Their ages ranged from 20 to 49 years. They belonged to different tribes such as, Chewa ,Yao, Ngoni, Lomwe, Nyanja and Sena. Among the ten, nine participants were married and only one was divorced. Six participants had primary education, three participants went as far as secondary level and only one participant has never gone to school.

To earn their living three participants did businesses by selling farm produce, three participants worked as public cleaner, office cleaner and ward attendant. The remaining four were house wives.

The participants' demographic data has been summarized in table 5.1 below

Table 5.1 participants' demographic data

Participants number	Tribe	Brief remarks concerning participant
001	Chewa	33years,Married, primary school education, house wife
002	Yao	20years,Married, primary school education, house wife
003	Chewa	35years,Married, secondary school education, Public cleaner
004	Yao	29years,Married, secondary school education, Business
005	Nyanja	22years,Married, secondary school education, ward attendant
006	Ngoni	37years,Married, secondary school education, Cleaner
007	Ngoni	30years,Divorced,primary school education Business
008	Lomwe	32years,Married, secondary school education, house wife

009	Sena	32years,Married,Never attended school, Business
010	Ngoni	49years,Married, primary school education, house wife

5.3 Categories of qualitative data

5.3.1 MOTHER'S KNOWLEGDE ON ARI

All mothers of under five children with ARI, who participated in the study, had an idea of what ARI is. Various answers emerged to show that they knew something about ARI. Two participants mentioned that they just realized their children had changed the breathing pattern, eight mentioned signs and symptoms of ARI like labored breathing, fast breathing and moving of the stomach when the child is breathing. Examples of ARI were also mentioned for example pneumonia and coughing a lot, as well as complications of ARI like falling to breath, failing to talk ,the child getting confused and that the child can die. One of the participants said:

"... I just realized that my child around past two , hmm even though in the morning he was doing okay , playing but around two his condition started changinghmm... he started having labored breathing..."

Another participant mentioned an example of ARI, saying:

"... hmm an example of ARI is pneumonia..."

The information that participants had was mostly obtained from the hospital. Only four Participants were familiarized to the condition because their children had previously suffered from ARI. One participant who got the information from the hospital said.

"...I got to know about the condition, when I went with my child to the hospital; after the doctor examined my child and saw his presentations he said it was ARI..."

Whilst another participant who gained the knowledge through experience said

"...I got to know about ARI when my child changed his breathing pattern because it was not his first time..."

Seven participants acknowledged that there are some things that predispose a child to ARI, they mentioned dust, exposure to cold weather, giving the child water from the fridge, exposure to bad water and sudden change of weather.

One participant was quoted saying

"...I think some of the predisposing factors to ARI may include, when the child is playing with dust and also with dirty or bad water..."

Still some mothers said it can not be explained that there are some predisposing factors to ARI, all they see is that the child has fallen ill.

"...I do not know ...hmm ... it is hard to say, all that I see is that the child is sick..."

On causes of ARI three participants mentioned of vomiting a lot, having hiccup, sleeping on wet beddings, dusty places, bathing cold water and exposure to cold weather. While seven participants said they did not know what exactly causes ARI, they just believed that it is an illness. And one of the participants said

"... hmm ARI is just a disease, I can not single out the real cause..."

Six participants had knowledge on the signs and symptoms of ARI, they mentioned fever, running nose, labored breathing, in appropriate cough, failing to breath, coughing and not breathing completely (shallow breathing) as signs and symptoms of ARI. Four Participants mentioned that they do not know the signs of ARI. Among the participant who had knowledge on the signs one said

"... Hmm...some of the signs can be labored breathing, fever and running nose..."

On how ARI is prevented, participants had different answers, which included not exposing the child to dust, covering the child well during cold weather, learning more on preventive measures

from health personnel's ,the child should not eat flowers and putting the child in warm places. All participants failed to relate prevention of ARI to immunizations.

"...There is a need to note the way the weather is, if its cold children must be dressed in warm clothes..."

Another participant said

"...I do not know if the immunizations have a part in preventing ARI..."

All participants knew what their children were suffering from; they mentioned pneumonia, labored breathing, cough, running nose, pneumonia and anemia, pneumonia and malaria.

"...My child is suffering from pneumonia..."

How ever only two out of ten participants had an idea of what predisposed their children to develop ARI, some of the reasons included not providing comprehensive care by dressing their children warm clothes when it was cold, one participant said

"...Hmm... I think may be I was not dressing him the right clothes..."

Among the other participants who never had an idea on what predisposed their children to ARI said

"...Ahh I do not know exactly because this season seems to be a hot season, but I just saw that my child had developed the illness..."

5.3.2 MOTHER'S ATTITUDE TOWARDS ARI

All participants' were concerned with their children's illness. Different feelings were expressed like, they were depressed, were not feeling okay, were so concerned, not happy, were bored and others mentioned that they were worried.

"...About this problem ...hmm...When I heard ahh I was concerned a lot..."

To qualify their feelings participants said, ARI is a painful illness and others indicated that they were not expecting that their children would be sick to the level of having labored breathing; they complained that when a child is sick every programme that they planned gets disturbed

One participant was quoted saying

"...Am not happy because, when a child gets sick every thing goes disturbed, I wish if there were drugs to ensure that people should not be suffering from ARI..."

On the participant's perception towards ARI, eight mentioned that they were now seeing an improvement in their children's health status unlike the time the child got the illness. They also mentioned that, they consider ARI to be a strange disease and were wondering why their children got the illness despite the improvement.

"...I can see that he is getting well , hmm and right now he is feeling abit okay , he is also breathing normally there is really a difference from how he was breathing when we were coming to the hospital..."

The remaining two had different perception towards ARI; they regarded ARI to be a mild disease because, they believed that GOD would heal their children. And if they were to regard it as a serious disease they would limit their faith in GOD.

"...Ahh I do not consider ARI to be a serious illness, because I know my faith in GOD will help the child to be okay..."

In participants opinion how they considered ARI, they all said it is a bad condition, since the child fails to breath, its sudden, it makes the children weak and it makes them loose hope of life in their children. How ever they said it would have been best if health care personnel's could have been teaching them in details for them to know how to avoid the illness and how they can look after their sick children.

"...I wish I could be taught how I can look after my child, since I have now been discharged..."

Five participants said, traditional healers do not have a role in treating ARI, they qualified this by saying, they are liars, they do not help, they also create disagreements, they only want money and others have never heard any evidence that they cure ARI.

"...I do not see that they have any role and I have never heard that they have cured a patient with ARI..."

Three participants said they do not know if tradition healers have a role or not, with reasons that they have never consulted traditional healers before.

"...Ahh I can not give you the right answers because ever since my entire life I have never consulted a traditional healer before..."

Two participants said traditional healers have a role in treating ARI. One was quoted saying

"...Traditional healers can treat ARI patients, but I think they are not best like health care providers..."

5.3.3 PRACTICES OF MOTHERS WHEN THEIR CHILDREN DEVELOP SYMPTOMS OF ARI.

After recognizing that the child had developed ARI, five participants gave their children medication like Panadol, Cafenol and Bactrim, which they purchased from vendors. One participant gave her child Amoxyl that was left the previous time when the child had an illness since she kept some medication which she got from the hospital. The medication was given in an amount that participants thought it would be adequate for their children. The amount varied according to the age, those under one year were given quarter and the rest of under five children were given half to a full tablet.

After noticing the children were not improving, then the participants decided to take the children to the hospital. The time that was taken before they took their children to the hospital from the time when the child developed the illness ranged from three hours to one week.

“...my child was just having running nose and was coughing ,so I purchased Cafenol from the near by grocery for one week but still he was not improving that’s when I came to the hospital because he was now having labored breathing and I was told it was pneumonia...”

The other three participants rushed to the hospital with their sick children. The maximum time that it took for them was one day but they never gave any medication to their children at home.

“...I never gave my child any medication at home, hmm... I went to the hospital the following morning; because the doctor was not there he had gone to the district hospital...”

All participants provided warmth to their children, others were covered with a baby blanket, piece of clothes, they were putting on a jersey, had a head cup and others were carried at the participants back to provide warmth.

“...I ensured that my child was protected from cold, I dressed him a head cup and carried him with a baby blanket ...”

5.4.3 WHAT MOTIVATES MOTHERS OF UNDER FIVE CHILDREN TO SEEK TREATMENT FOR ARI.

The decision of taking the sick child to the hospital was mostly made, when the participants saw that the condition was getting worse. The signs and symptoms that triggered all the participants included, labored breathing, failing to breast feed and persistent cough. One participant also noted that there could be no assistance if the child condition gets worse because she is divorced and her parents stay away from her. One participant was quoted:

“...when I saw his breathing pattern I decided to take him to the hospital, since he was having labored breathing...”

Five participants made their own initiative to take the sick children to the hospital, because their husbands were not at home and also because they are the ones who stay with the children for along time and can easily notice any change of their Childs health status.

“...I initiated to take my child to the hospital, because his father was not there, he works during the night, but he said it was okay for me to take the child to the hospital...”

Only one couple had made the decision of taking the child to the hospital together

"...My husband and I saw that the condition of our child was not improving hence we decided to take him to the hospital..."

On what encouraged them to come with their children to the hospital, nine participants said that they had hoped that they would get the required treatment for their children.

"I... was encouraged to come here because I thought it is the best place I can get my child for treatment..."

One participant was encouraged to come to the hospital because was once cared for and her child got well, she said

"...I knew that the health personnel's do help because I had once came with the child and was helped..."

CHAPTER SIX

Discussion of findings

6.1 Introduction

Interpretation of the study findings and issues arising from the analysis of the data will be presented. The discussion of the results will be related to other studies and the model applied to the study. The discussion follows the study objectives to match with findings.

6.2 Mother's knowledge on ARI

The majority of the participants had an idea of what ARI is. The information was mostly obtained from the hospital. However the information was not explained in details. Participants were just informed on the diagnosis of their children. This might have lead to mothers not appreciating what their children were suffering from and affecting their care practice. This is in line with (Ngoclan, 1999) which stated that the knowledge of mothers on ARI has a significant association with child care practice.

Despite that participants had an idea of ARI; they lacked formal knowledge on ARI. All participants had no knowledge on the role of immunization in preventing ARI. Participants did not know causes of ARI and had no idea on what predisposed their children to ARI, in spite that the majority had also encountered the condition previously. This was probably due to participants' low level of education which made it difficult for them to understand, since most of the participants had primary education and no participant reached tertiary education. This is also elaborated in the modified health belief model by Hochbaum (Glanz et al, 2002). It predicts that educational level influences knowledge of mothers of under five children with ARI. The high educational level will facilitate an easy understanding of ARI from health care providers or from previous encounter. Findings of this study are similar to those of Simuyu et al., (2003) who indicated that mothers of under five children with ARI, had knowledge of ARI and had formal education.

Most participants did not know the signs and symptoms of ARI. They did not even attempt to mention any. This affected the care provided to their children. They did not recognize early that their children were suffering from ARI, because they did not know the signs of ARI. This contributed to late reporting by mothers to the hospital. This is in harmony with Rutebemberwa et al, (2003) in their study in Uganda on knowledge of symptoms of ARI and how the knowledge influences management of under five children with ARI. He reported that there was community knowledge gap on ARI, as the results showed that mothers were not able to recognize the symptoms of ARI in their children.

6.3MOTHERS ATTITUDE TOWARDS ARI

All participants were concerned with their children's illness. Different feelings were expressed like feeling depressed, worried and concerned. Qualifying their feelings they regarded ARI to be a painful illness and their daily activities were altered as they had to attend to their sick children. The attitude towards illness appears to be one of the factors that influence mothers to provide appropriate care to the sick children (Vassanthamala & Arokiasary, 1989).

All most all the participants felt bad about their children getting sick. Since they were failing to breathe normally, the illness was sudden, it made the children to become weak and lose hope of

life in their children. Simuyu et al., (2003) too, found that most mothers of under five children regarded ARI conditions to be serious and associated it with high mortality. Mother's attitude plays a role in determining the seriousness of the illness and it is directly linked to their perception. Most participants also perceived ARI to be a strange disease and did not know what predisposed their children to the illness. This reflected on their low level of knowledge, because they did not know that their children are susceptible to develop ARI if not taken good care of. If mothers of under five children with ARI recognize the signs of ARI and know that their children are susceptible to develop serious symptoms they are more likely to seek treatment early (Glanz et al, 2002).

Due to their perception, all participants wished to be taught in details how ARI is prevented and the care they can provide to their children if they fall sick. This showed that mothers of under five children with ARI are not given adequate information at the hospital.

The perception of mothers of under five children with ARI, adds another role in determining, where treatment should be sought (Pelto & Pelto, 1997). In the present study, most participants reported that traditional healers do not have a role in treating ARI, because they are liars, they create disagreements, they only want money and they had no evidence that they treat ARI. This is contrary to Awedoba (2003) in a study on mother's knowledge beliefs and perception on ARI in Ghana; who found that most mothers of under five children with ARI had a positive attitude toward traditional healers in treating ARI. Attitude towards traditional healers has an impact towards health seeking behaviors, if mothers perceive that traditional healers have a role in treating ARI, they opt to seek traditional explanations rather than going to the hospital. This might contribute to mothers seeking treatment late at the hospital, delaying in getting the treatment to restore their health faster (Pelto & Pelto, 1997).

6.4 PRACTICES OF MOTHERS WHEN THEIR CHILDREN DEVELOP ARI

When people fall ill, they exploit various kinds of treatment in the home where illness are first defined (Brodwin, 1996). A study by Chang and Tang (2006) on parental knowledge, attitude and antibiotic use for ARI indicated that most parents sought treatment late. Some parents gave

their children left over antibiotics and others bought the antibiotics for them. The least parents hurried to the hospital without any drug remedy at home. In this study there was a balance of participants who rushed to the hospital and those that gave medications to their children at home. The drugs that were given were analgesics and antibiotics. Improper medication may suppress signs and symptoms of ARI and later lead into serious symptoms. If symptoms of ARI are suppressed, mothers of under five children can not seek treatment in good time creating room for complications.

Those participants that gave medication to their children at home sought treatment after noticing no improvement. The time that took before taking their sick children to the hospital ranged from three hours to one week. This could be due to reluctance of the participants to take their children to the hospital because they were giving them drugs at home.

Care provided to the sick children before taking them to hospital, varied. Participants provided warmth to their children, others were wrapped with baby blankets, piece of clothes, dressed them a jersey, had a head cup and others were carried at the participants back to provide warmth. In this study most participants never wrapped their children too tightly. The results contradict to those of Simuyu et al., (2003) who found that most mothers were wrapping their children too tightly. He indicated that most mothers of under five children with ARI thought ARI is caused by cold weather and avoiding of cold conditions would prevent it. Wrapping up children when it is cold is necessary as it prevents them from prolonged exposure to cold that puts them at risk of developing ARI, however if the clothes are too tight, it makes breathing more distressful for a child who already has ARI.

6.5 WHAT MOTIVATES MOTHERS OF UNDER FIVE CHILDREN TO SEEK TREATMENT FOR ARI WITH THEIR CHILDREN

Mothers of under five children with ARI are motivated by several factors in order to seek treatment for their sick children. In this study the decision of taking the sick children to the hospital was mostly made by participants themselves based on worsening of the children's condition. The signs and symptoms that triggered all participants to take their children to hospital included labored breathing, failing to breast feed and persistent cough. The perceived seriousness

of the illness contributes to the likelihood of taking an action, the more the illness the greater the effort in seeking the treatment early (Glanz et al, 2002).

In seeking treatment for their sick children a variety of motivations played a role in inspiring the participants. The motivations included, participants own initiative, influence from parents and husband, hope of acquiring standard care and previous experience of better treatment by health personnel. The study done by Food security analysis unit FSAU, (2007) supports that husband can motivate participant to seek treatment for their sick children. The study found that fathers are the main decision makers concerning management of most illness and seeking treatment on ARI depends on their consent. The results that have been identified in the study can be as a result of men being the heads of the families. In this study all most all participants solely depended on their husband for financial support to their families, with their occupations they could not generate enough money to support their family. Hence if husbands, the main decision makers are not concerned with seeking treatment for ARI it will lead into seeking treatment for ARI late.

Health belief model by Hochbaum (Glanz et al, 2002) supports the findings, stating that having knowledge, mothers of under five children with ARI will think of possible benefits of seeking treatment early. However if they think of possible barriers like inadequate support from their spouses and not being cared by health personnel they may seek treatment late. Mothers of under five children are more likely to take their children to the hospital if the benefits out weigh the barriers.

6.6 STUDY LIMITATION

The study was done on a small scale and the results cannot be generalized to all mothers of under five children with ARI in Malawi.

6.7 STUDY RECOMMENDATIONS

The study discovered several factors that contributed to mothers of under five children with ARI reporting late to the hospital, since their knowledge attitude and their practices were acquired. The following recommendations are there fore made with implications to nursing practice, nursing management, nursing education and research nursing.

6.8 NURSING PRACTICE

Since the study revealed that mothers of under five children did not get enough information on ARI but rather were just informed on the diagnosis of their children, it is recommended that nurses and other health care providers should make the information available to mothers of under five children with ARI. Nurses should provide scheduled health education at the under five clinic, during hospitalization and on discharge to equip the mothers with the information that can help them to prevent ARI, to complete their medication when given at the hospital and to seek treatment early to prevent high morbidity and mortality rates. Nurses should put into consideration the level of education of participants to ensure information is given in the terminology that can be understood.

It is also recommended that, nurses need to consider mother's psychological needs when providing care to their sick children. Participants mentioned of their feelings towards their children's illness that they felt bad. If participants have altered coping mechanism they may not be cooperative in provision of care of their children.

6.9 NURSING MANAGEMENT

From the study it was deduced that participant were not taught on ARI by health care providers and participants are motivated to seek treatment if health personnel's have good attitude towards them. It is there for recommended that nurse managers should be supervising that patients are given adequate health education by all the nurses.

It is also recommended that, management should discipline nurses that have bad attitude towards mothers of under five children with ARI, in order to meet expectations of the public and to promote quality and satisfaction care. Ngoclan (1999) wrote that mothers of under five children are motivated to report with their sick children to the health facility if health practitioners have good attitudes towards them.

6.10 NURSING EDUCATION

The study also uncovered that participants expect to get the required medical attention to restore the health of their sick children at the hospital; hence it is recommended that nurses should have

continued in service training to update nurses on the management of some conditions, ARI inclusive.

6.11 NURSING REASERCH

Since this study has been conducted on a small scale , there is need to conduct it on a larger scale that should include all the regions in Malawi , so as to come up with the general conclusion of the results on the knowledge , attitude and practices of mothers of under five children with ARI in Malawi.

6.12 CONCLUSION

Mothers of under five children with ARI had inadequate knowledge of ARI. There were mixed practices following an illness of their children. Some participants rushed to the hospital while others treated their children at home with left over and over the counter drugs while providing warmth. They did not accent that ARI can be treated by traditional healers.

Participants decided to take children to the hospital basing on their own initiative, influence from parents and husband, hope of acquiring standard care and previous experience of better treatment by health personnel at the hospital.

Recommendations have been suggested for improvements in nursing practice, nursing management, nursing education and nursing research. It is hoped that efforts will be made to address these issues to ensure mothers of under five children with ARI, seek treatment early for their children to reduce morbidity rate

REFERENCES

- Awedoba, A.K. (1999). Over Coming Cultural Barriers to Patient Care For acute Respiratory Infections in Young Children. *Research review series*, Vol.15 (2):13-33.
- Berman, S. (1995). Otitis Media in Children. *New England journal of medicine*, Vol. 332(23):1560-65.
- Bryce, S.C., Pinto, K., Shibuya, R. & Black, P. (2005). WHO Estimates of the cause of death in children. *Lancet*, Vol.365 (9465):1147-52.
- Craven, R.F. & Hirnle, C.J. (2009). Fundamentals of Nursing: Human Health and Function (6th Edition) Lippincot Williams & Wilkins, Philadelphia.
- Dewit, S.C. (1998). Essentials of Medical Surgical Nursing (4th Edition) Saunders WB, Philadelphia.
- Glanz, K., Rimer, B.K. & Lewis, F.M. (2002). Health Behaviour & Education Theory Research and practice: San Fransisco Wiley & Sons.
- Helman, G.G. (2007). Culture, Health and Illness (5th Edition) Hodder Anorld, London.

Kallendar, K., Tomso, G., Nsabagasani, X., Sabiti, J.N., Pariyo, G. & Peterson, S. (2008) Transactions of the Royal Societies of Tropical Medicine & Hygiene Vol. 100 (10):956-63.

Kumar, I. & Clark, A. (2000). Clinical medicine (6th Edition) St Louis Sydney, Philadelphia.

Kundi, M.Z., Anjum, M. & Mull, D.S. (1993). Maternal perception of pneumonia and pneumonia signs. social science & medicine, Vol.37(5):649-660.

National IMCI Unity. (2006). Malawi IMCI Approach policy for Accelerated child Survival Growth & Development Lilongwe.

National statistics office. (2004). Malawi Demographic Health Survey , Zomba.

Neuman, L.W. (2006). Social Research Methods: Qualitative and Quantitative Approaches (6th Edition) person education Inc Boston.

Nglocan, N.T. (1999). Self Care of Mothers with Children under five Years of Age on ARI. Vinhoiong Province, Vietnam.

Nursing Dictionary. (2006). Nurses Packed Dictionary, Elsevier Mosby.

Polit, D.F. & Beck, C.T. (2006). Nursing Research: Methods, Approaches and Utilization (6th Edition) Philadelphia J.B Lippincot Company

Schumacher, R.E., Swedberg, M.O., Diallo, D.R., Kelter & Pasha, O. (2002). Investigating the cause of death in children in underfive. Airlingtone.

Servonsky, J. & Opas, S.R. (1987) .Nursing Management of Children, Jonhs & Bartlet Boston.

Shier, A. (2002). Holes Human Anatomy & Physiology, Mc Graw- Hill Boston.

Sreeramareddy, C.T., Shankar, R., Sreekumaran, V.B., Subba, H.S., Joshi, S.H. & Ramachandran, U. (2006). Care Seeking Behaviour for Childhood Illnesses. Retrieved May 25, 2010 from <http://www.biomedcentral.com/1472-698x1617>.

Siswanto, E. (2007). Knowledge, Perception of Pneumonia Disease Among Mothers of Under Five Years. Thailand.

Thebodeau, P. (2010). Anatomy & Physiology (19th Edition) Afflirate Gerads Inc, Mosby.

Tortora, G. & Derrickson, B. (2006) Principles of Anatomy (6th Edition) Bonie Iroesh.

Vassanthamala, A. & Arokiasamy, J.T. (1989). Knowledge, Attitude and Practice Factors in Childhood Acute Respiratory Infections .*Asia Pacific Journal of Public Health*, Vol. 3(3):219-23.

Whaley, L. & Wong, D. (1999). Nursing Care of Infants and Children (6th Edition) St Louis Baltimore, Baston.

Willams, B.G., Gouw, E., Pinto, B., Bryce & Dye, C.(2002).Estimates of World Wide Distribution of Child Deaths From Acute Respiratory Infections *Lancet infectious Disease*, Vol. 2(1):25-32.

World Health Organisation. (1995). WHO7UNICEF Joint Statement. Geneva.

APPENDICES

APPENDIX I: INTERVIEW GUIDE

TOPIC: A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICES OF MOTHERS OF UNDER FIVE CHILDREN WITH ACUTE RESPIRATORY TRACT INFECTION AT QUEEN ELIZABETH CENTRAL HOSPITAL BLANTYRE, MALAWI.

ID CODE.....

PART 1: DEMOGRAPHIC DATA(3 minutes)

1. How old are you?.....
2. Which tribe do you belong to?.....
3. What is your education Level?.....
4. What is your marital status?.....
5. What is your occupation?.....

PART 2: MOTHER'S KNOWLEDGE ON ARI(11munites)

6.Tell me about ARI?

PROBES:

- What do you know about ARI?.....
- How did you know about ARI?.....
- Tell me an example of ARI?
- What are the predisposing factors of acute respiratory tract infection?

- What causes acute respiratory tract infection?
- What are the signs and symptoms of acute respiratory tract infection?.....
- How can acute respiratory tract infection be prevented?.....
- . In relation to immunization and warmth
- What is your child suffering from?.....
- How do you think your child got the condition?.....

PART 3: MOTHER'S ATTITUDE TOWARDS ARI (10 minutes)

7. How are you feeling about your child's condition ?

PROBES

- How do you perceive your child's condition?
- In your opinion how do you consider acute respiratory tract infection?
- What role do traditional healers play in treating acute respiratory tract infection?

PART 4: PRACTICES OF MOTHERS WHEN THEIR CHILDREN DEVELOP SYMPTOMS OF ARI (10 minutes)

8. What did you do when your child had acute respiratory tract infection at home?

PROBES

- What drugs did you give your child before taking her to hospital?
- How were you providing warmth to your child?
- How long did it take for you before taking your child to the hospital?

PART 2: WHAT MOTIVATES MOTHERS TO SEEK TREATMENT FOR ARI (11 minutes)

9. How was the decision to bring the child to hospital made?

PROBES

- Who initiated that the child should come to the hospital?
- Who authorized?
- Why did you come to the hospital with the child at that time?
- What is it that encouraged you to come to the hospital with the child at that time?

End of the questionnaire

Thank you for your patience in answering these questions.

APPENDIX II: MAFUNSO A KAFUKUFUKU A MCHICHEWA

MUTU WAKAFUKUFU: KUDZIWA, MALINGALILO NDI ZOCHITIKA ZA AMAYI A ANA OCHEPELA ZAKA ZISANU NDIPO ALI NDI MATENDA AKUSITHA KAPUMIDWE KWADZIDZIDZI PA CHIPATALA CHACHIKULU CHA QUEEN ELIZABETH, BLANTYRE, MALAWI.

ID CODE.....

Zotsatila

Chongani zomwe zikugwirizana ndi mayankho anu.

GAWO LOYAMBA: ZA MBIRI YANU(phindi 3)

1. Muli ndi zaka zingati?
2. Ndinu mtundu wanji wa anthu?
3. Munafika pati ndi maphunziro anu?
4. Pakhani ya ukwati mulipati ?
5. Mumagwira tchito yanji?

GAWO LACHIWILI: ZOMWE MUKUDZIWA ZOKHUZANA NDI MATENDA A KUSITHA KAPUMIDWE KWA DZIDZIDZI.(phindi 11)

6. Mungandiwuzeko za matenda akusitha kapumidwe kwadzidzidzi .
MAFUNSO OUNIKILA:

- Mumadziwa chani zamatenda akusitha kapumidwe kwadzidzidzi?
- Munadziwa bwanji za matenda akusitha ka pumumidwe kwadzidzidzi?
- Mungandiwuzeko chitsanzo chamatendawa?
- chomwe chingaike mwana pa chiopsyezo chokhala ndi matenda akusitha kapumidwe kwadzidzidzi ndi chani?
- Chimayambitsa matenda akusitha ka pumidwe kwadzidzidzi ndi chani?
- zizindikilo zamatendawa ndizotani?
- Mungapewe bwanji matenda akusitha kapumidwe?
- . nanga kumbali ya katemela ndi mphepo?
- kodi mwana wanu akudwala chani?
- Mukuona ngati chinamuyambitsa mwana wanu matendawa ndi chani?

GAWO LACHITATU: MALINGALILO ANU PA MATENDA A KUSITHA KAPUMIDWE KWA DZIDZIDZI(phindi10)

7. Mukumva bwanji ndi vuto la matenda limene mwana wanu ali nalo ?

MAFUNSO OUNIKILA :

-Malingalilo anu ndi otani pa matenda omwe mwana wanu alinawo ?

-Mumaona bwanji matenda a kusitha kapumidwe kwadzidzidzi ?

-kodi asing'anga ali ndimbali yotani pochiza matenda akusitha kapumidwe kwadzidzidzi ?

GAWO LACHINAYI: ZOMWE MUMACHITA ANA AKAKHUZIDWA NDI MATENDA AKUSITHA KAPUMIDWE KWADZIDZIDZI(phindi 10)

8.Munachita chani mwana wanu atadwala matenda akusitha kapumidwe kwadzidzidzi ?

MAFUNSO OUNIKILA

-Munampatsa makhwala anji mwana kunyumba ?

-munamteteza bwanji mwana kumphepo ?

-zinakutengelani thwawi yaitali bwanji musanamutengele mwana kuchipatala ?

GAWO LACHISANU: ZOMWE ZIMATILIMBIKITSA KUMTENGELA MWANA KUCHIPATALA MSANGA(phind 11)

9.Chiganizo chomutengela mwana kuchipatala chinapangidwa bwanji ?

MAFUNSO OUNIKILA

-Anatsogolela kuti mwana abwele kuchipatala ndindani ?

-Ndani analoleza kuti mwana abwere kuchipatala ?

-Chinakupangitsani kubwela kuchipatala pathawi imeneyo ndichani ?

-Chinakulimbikitsani kubwelakuchipatala ndi chani ?

Apa ndiye pamapeto a mafunso

Zikomo kwambiri potenga nawo mbali mukafukufukuyi.

APPENDIX VI: CONSENT FORM

CONSENT TO PARTICIPATE IN A STUDY ON KNOWLEDGE , ATITUDE AND PRACTICES OF MOTHERS OF UNDERFIVE CHILDREN WITH ACUTE RESPIRATORY TRACT INFECTION AT QUEEN ELIZABETH CENTRAL HOSPITAL, BLANTYRE, MALAWI.

I am Leticia Suwedi, a fourth year generic student currently pursuing a Bachelor of Science Degree in Nursing at Kamuzu College of Nursing. In partial fulfillment of my degree program, am required to conduct a research study whose aim is to determine the Knowledge, Attitude and practices of mothers of under five children with acute respiratory tract infection at Queen Elizabeth Central Hospital, Blantyre, Malawi.

You have been selected to participate in the study, since your child has acute respiratory tract infection. You will be interviewed by the researcher using an interview guide which might take about 45 minutes. A tape recorder shall be used in order to grasp all the information that you may provide. A code will be used instead of your name. The information that you will provide shall remain private and confidential. There is no any risk associated with the study.

The information you may contribute to this study will not have direct benefits on you, but it may assist to determine knowledge, attitude and practices of mothers of under five children with ARI at QECH.

You are encouraged to feel free, asking any questions pertaining to the study and you are being assured that all your questions shall be answered accordingly.

Please take note, your participation to this study is absolutely voluntary you are free to accept, refuse or withdraw at any point of the study, if you decline or withdraw the standard treatment of your child or care shall not be compromised.

If you wish to participate in this research study please append your signature as evidence of your acceptance

I, the undersigned, have read and understood the information and conditions of participating in the above research study. I agree to participate in the study.

Participant's Signature/thumb print.....Date.....

Researcher's Signature.....Date.....

Researcher's Contacts

Supervisor's Contacts

0888762852

0888738294

APPENDIX VII: CONSENT FORM (CHICHEWA VERSION)

CHILOLEZO CHOTENGA NAWO MBALI MUKAFUKUFUKU WA AMAYI AMENE ALI NDI MWANA OCHEPELA ZAKA ZISANU NDIPO ALI NDI MATENDA A KUSITHA KAPUMIDWE KWA DZIDZIDZI KU CHIPATALA CHA QUEEN ELIZABETH CENTRAL BLANTYRE ,MALAWI.

Ine ndine Leticia Suwedi, wophunzira Wa kusukulu ya unamwino ya Kamuzu College. Pofuna ku kwanilitsa zoyenelela kuti ndimalize maphunziro anga a za ukachenjede wa unamwino , ndi kuyenela kuchita kafukufuku wofuna kudziwa zomwe amayi a ana ,ochepele zaka zisanu ndipo akudwala matenda akusitha kapumidwe kwadzidzi akudziwa, malingalilo awo komanso zochitika za amayi pakhani ya matenda amenewa, amayiwa ndi omwe agonekedwa mchipatala cha Queen Elizabeth ndi ana awo.

Mwasakhidwa kuti mutengepo nawo mbali mukafukufuku ameneyu, chifukwa muli ndi mwana amene Ali ndi matenda a kusitha kapumidwe kwa dzidzidzi.muzafunsiidwa mafunso ndi wochita kafukufuyi kwa phindi ma kumi anayi ndi zisanu.ndipo chimsunga mawu chizagwiritsidwa tchito kuti izasunge zonse zomwe tizakambilane.Nambala izagwiritsidwa tchito mmalo mwa dzina ndi adiresi yanu kuti tisunge chinsinsi pa mayankho anu. Zomwe inu mutanene sizidzamveka Kwa aliyensee.

Mukulonjezedwa kuti simudzaphwetekedwa mwa njira Ina iliyonse, ndipo zotsatira za kafukufukuyu sizizakhala ndi ubwino wa pafupi Kwa inu koma zidzathandiza ku zindikila zomwe amayi a ana ochepele zaka zisanu ndipo akudwala matenda akusitha kapumidwe kwadzidzidzi akudziwa, malingalilo awo komanso zochitika za amayi pakhani ya matenda amenewa ku QECH.

Ndikukulimbikitsani kuti mukhale omasuka kufunsa mafunso amene mungakhale nawo okhuzana ndi kafukufukuyu. Ndipo ndikukutsimikizilani kuti mafunso anu adzayakhidwa moyenelela.

Dziwani kuti ndinu omasuka mukutenga nawo mbali mukafukufukuyu kotero muli ndi ufulu ovomera, kukana kapena kusiya kutengapo mbali mukafukufukuyu.

Ngati mwasangalatsidwa kutengapo mbali mukafukufuyi, chonde sainani kusonyeza chilolezo chanu.

Ine amene ndasayina pansipa ndawerenga uthenga onse ndipo ndamvetsetsa za mbiri za kafukufukuyu ndipo ndikufuna kutengapo mbali mu kafukufukuyu mwa ufulu wanga

Wotenga mbali mukafukufuku.....

Tsiku.....

Wochita kafukufuku.....

Tsiku.....

Nambala ya wochita kafukufuku

0888762852

Woyanganila wochita kafukufu

0888738294

APPENDIX III: LETTER TO KAMUZU COLLEGE OF NURSING RESEARCH AND PUBLICATION COMMITTEE REQUESTING FOR APPROVAL

The University of Malawi
Kamuzu college of Nursing
Private Bag 1
Lilongwe.
15 July 2010

The chairperson
Research and publications committee
Kamuzu College of Nursing
Lilongwe.

Dear Sir/Madam,

APPLICATION FOR CLEARANCE TO CONDUCT A REASERCH STUDY

I am Leticia Suwedi, a fourth year generic student currently pursuing a Bachelor of Science Degree in Nursing at Kamuzu College of Nursing. In partial fulfillment of my degree program, am required to conduct a research study. The title of my study is: Knowledge, Attitude and practices of mothers of under five children with acute respiratory tract infection at Queen Elizabeth Central Hospital, Blantyre, Malawi.

The purpose of this letter is to seek approval to conduct the study at Queen Elizabeth Central Hospital Blantyre, Malawi. It will be done at special care and nursery wards of pediatric department. Any mother of under five children with ARI, who will be found at these wards, and have given consent, will be participants of the study.

Looking forward to your favourable consideration.

Yours faithfully,

Leticia Suwedi

APPENDIX V: LETTER REQUESTING FOR PERMISSION TO CONDUCT A PILOT STUDY AT QECH

The University of Malawi
Kamuzu college of Nursing
Private Bag 1
Lilongwe.
5th August 2010

TO: The Hospital Director
Queen Elizabeth Central Hospital
P. O BOX
Blantyre.

Through: The chairperson
Research and publications committee
Kamuzu College of Nursing
Private Bag 1
Lilongwe

Dear Sir/Madam,

APPLICATION FOR PERMISSION TO CONDUCT A PILOT STUDY AT QUEEN ELIZABETH CENTRAL HOSPITAL BLANTYRE MALAWI.

I am Leticia Suwedi, a fourth year generic student currently pursuing a Bachelor of Science Degree in Nursing at Kamuzu College of Nursing. In partial fulfillment of my degree program, am required to conduct a research study. The title of my study is: Knowledge, Attitude and practices of mothers of under five children with acute respiratory tract infection at Queen Elizabeth Central Hospital, Blantyre, Malawi.

The purpose of this letter is to seek for permission to conduct a pilot study at your institution, Queen Elizabeth Central Hospital. The pilot study will be conducted in October 2010. It will be

done at the pediatric department. Any mother of under five children with ARI, who will be found at this department, and have given consent, will be participants of the pilot study

Looking forward to your favourable consideration.

Yours faithfully,

Leticia Suwedi

**APPENDIX IV: LETTER REQUESTING FOR PERMISSION TO CONDUCT A STUDY
AT QECH**

The University of Malawi
Kamuzu college of Nursing
Private Bag 1
Lilongwe.

6th September 2010

TO: The Hospital Director
Queen Elizabeth Central Hospital
P. O BOX
Blantyre.

Through: The chairperson
Research and publications committee
Kamuzu College of Nursing
Private Bag 1
Lilongwe

Dear Sir/Madam,

**APPLICATION FOR PERMISSION TO CONDUCT A RESEARCH STUDY AT QUEEN
ELIZABETH CENTRAL HOSPITAL BLANTYRE, MALAWI.**

I am Leticia Suwedi, a fourth year generic student currently pursuing a Bachelor of Science Degree in Nursing at Kamuzu College of Nursing. In partial fulfillment of my degree program, am required to conduct a research study. The title of my study is: Knowledge, Attitude and

practices of mothers of under five children with acute respiratory tract infection at Queen Elizabeth Central Hospital, Blantyre, Malawi.

The purpose of this letter is to seek for permission to conduct a study at Queen Elizabeth Central Hospital. The study will be conducted in October 2010. It will be done at special care and nursery wards of pediatric department. Any mother of under five children with ARI, who will be found at these wards, and have given consent, will be participants of the study.

Looking forward to your favourable consideration.

Yours faithfully,

Leticia Suwedi

APPENDIX V



University of Malawi
KAMUZU COLLEGE OF NURSING

RESEARCH AND PUBLICATIONS COMMITTEE

APPROVAL CERTIFICATE

TITLE: Knowledge, Attitudes and Practices of mothers of underfive children with Acute Respiratory Tract Infection at Queen Elizabeth Central Hospital, Blantyre

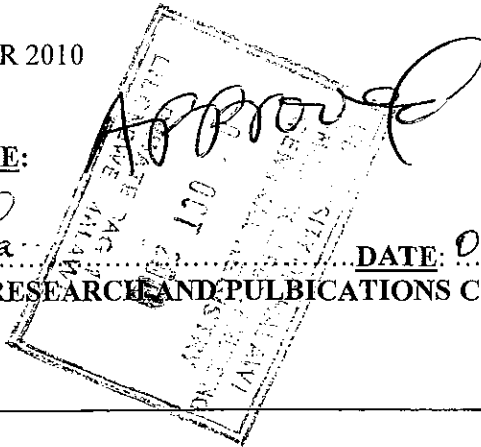
INVESTIGATOR: LETICIA CHIMWEMWE SUWEDI

DEPARTMENT/YEAR OF STUDY:

REVIEW DATE : SEPTEMBER 2010

DECISION OF THE COMMITTEE:

SIGNATURE:  DATE: 01-10-10
CHAIRPERSON, RESEARCH AND PUBLICATIONS COMMITTEE



cc Supervisor:

DECLARATION OF INVESTIGATOR(S)

I/we fully understand the conditions under which I am/we are authorized to carry out the above mentioned research and I/we guarantee to ensure compliance with these conditions. In case of any departure from the research procedure as approved, I/we will resubmit the proposal to the committee.

DATE 01-10-10 SIGNATURE(S) L. Suwedi

APPENDIX VI

The University of Malawi
Kamuzu college of Nursing
Private Bag 1
Lilongwe.
4th October, 2010

TO: The Hospital Director
Queen Elizabeth Central Hospital
P. O BOX 95
Blantyre.

Through: The chairperson
Research and publications committee
Kamuzu College of Nursing
Private Bag 1
Lilongwe

*Permission Granted
Research
Central
05-10-2010*

Dear Sir/Madam,

**APPLICATION FOR PERMISSION TO CONDUCT A PILOT STUDY AT
QUEEN ELIZABETH CENTRAL HOSPITAL BLANTYRE MALAWI.**

I am Leticia Suwedi, a fourth year generic student currently pursuing a Bachelor of Science Degree in Nursing at Kamuzu College of Nursing. In partial fulfillment of my degree program, am required to conduct a research study. The title of my study is: Knowledge, Attitude and practices of mothers of under five children with acute respiratory tract infection at Queen Elizabeth Central Hospital, Blantyre, Malawi.

The purpose of this letter is to seek for permission to conduct a pilot study at your institution, Queen Elizabeth Central Hospital. The pilot study will be conducted in October 2010. It will be done at the pediatric department. Any mother of under five children with ARI, who will be found at this department, and have given consent, will be participants of the pilot study

Looking forward to your favourable consideration.

Yours faithfully,

Leticia Suwedi

*L.C Suwedi
0999.155912*

APPENDIX VII

TRINSCRIBED INTERVIEWON ID CODE 008 (Name withheld for confidentiality purpose) 11/10/10

Eighth interview

PART 1

Researcher: you are welcome to this place, hmmm how are you?

Respondent: ahh I am fine.

Researcher: ok!, ahh ,I am Leticia suwedi a fourth year generic student currently pursuing a bachelor of science degree in nursing at Kamuzu college of nursing. In partial fulfillment of my degree program, am required to conduct a research study whose aim is to determine the knowledge, attitude and practices of mothers of under five children with acute respiratory tract infection. You have been selected to participate in the study, since your child has acute respiratory tract infection...hmmm...am not going to ask your name for confidentiality, a code shall be used instead. (008).

You are going to be interviewed for a few minutes and it's only for today. A tape recorder shall be used to grasp all the information that you may provide, to save time instead of writing every thing you may say.

Respondent: ok,

Researcher: there is no any risk associated with the study, and no direct benefits shall be provided like giving you money but the study shall help to determine the knowledge, attitude and practices of mothers of under five children. Hmmm please take note, your participation to the study is absolutely voluntary, you are free to accept, refuse or withdrawal at any point of the study. If you decline or withdrawal the standard treatment of your child care shall not be compromised. What is your say?

Respondent: you can go ahead.

Researcher: ok, to show your acceptance to participate in the study , please append your signature on this form.(after reading the consent form she signed , to show her acceptance)

Researcher: as mentioned earlier, please be free, and if you have any question you are free to ask.

Respondent: hmmmI don't have a question.

Researcher: now am going to ask about your demographic data, but I will not need you to mention your name.

Respondent: ok.

Researcher: How old are you?

Respondent: 32

Researcher: which tribe do you belong to?

Respondent: Khokhola but others call it lomwe.

Researcher: what is your education level?

Respondent: standard 8.

Researcher: What is your marital status?

Respondent: Am married

Researcher: What is your occupation?

Respondent: Am doing nothing but I was once a cleaner.

PART 2: MOTHER'S KNOWLEDGE ON ARI.

- **Researcher:** Can you tell me about Acute respiratory tract infection?

-

Respondent: Yes , I just realized that my child, around past 2, hmmm ...even though in the morning he was doing okay , playing ... but around 2 his condition started changing ,hmm ..he was having labored breathing, then because of his labored breathing , I rushed with him to the hospital, where I was told that the child was anemic and had pneumonia....and they further said that it was best for me to go the central hospital ,Queens'..

Researcher: okayso...ehh ...how did you exactly know about acute respiratory tract infection?

Respondent: ohh....hmm.... about this condition, I got to know it after I consulted to the doctor and after he had explained to me.

Researcher: what are the predisposing factors of acute respiratory tract infection?

Respondent: hmmm.....” To my side I think may be exposing a child to cold weather or... hmm...ahh not caring a lot for the child.

Researcher: When you say not caring a lot for the child what exactly do you mean?

Respondent: Not covering the child when it's cold or...ahh not exposing the child

Researcher: What about... the exact causes of acute respiratory tract infection, what are they?

Respondent: ahh..... About that...Hmm let me say that I am not sure, but maybe I will just try ... may be when exposed a lot cold.

Researcher: okay, thanks Ahh.. . How can acute respiratory tract infection be prevented?

Respondent: ahh... about prevention we are supposed to take good care of the children Carefully hmm....not exposing them to cold weather and when we notice that the child is not feeling well we should rush to the hospital.

Researcher: How about immunization what role does it take in prevention of acute respiratory tract infection?

Respondent: hmm, ahh on that I do not know.

Researcher: Okay ... what is your child suffering from?

Respondent: He is suffering from pneumonia.

Researcher: How do you think your child got the condition?

Respondent: hmmm, I think maybe I wasn't dressing him right clothes.

Researcher: Right clothes like what? Hmm or what do you mean?

Respondent: May be a jezzy, covering him with a shawel or may be... covering him with some peace of clothes (zitenje)

Researcher: Okay... How are you feeling about your child's condition?

Respondent: About this problem ...hmmm ...when I heard...ahh I was so concerned alot,

Researcher: So... how do you perceive your child' condition.

Respondent: Right now ahh, I feel he is better, he has changed, rather than the time we were coming.

Researcher: When you say that he has changed, what is it you are seeing exactly?

Respondent: I can see that he is getting well ,hmm and right now he is feeling abit okay , he is also breathing normally, there is really a difference from how he was breathing when we were coming.

Researcher: In your opinion how do you consider acute respiratory tract infection?

Respondent: I consider this condition as a bad one, hence I think ...hmm.... Maybe if it is possible,, ahh health workers should be helping us ..ahh... advising us right things to be doing. Saying when something is like this we should be doing the other way.

Researcher: Okay, may explain what role do traditional healers play in treating acute respiratory tract infection?

Respondent: ahh.. On that, I cannot give you the right answer, because ever since my entire life I have never consulted traditional healers.

Researcher: What did you do when your child had acute respiratory tract infection at home?

Respondent: when my child felt sick hmm...I just carried him on my back and went with him to the nearest hospital.

Researcher: Before you went to the hospital what did you do at home?

Respondent: Before I went with him to the hospital, I just bathed him and dressed him on the right clothes, then I rushed to the hospital, but there is nothing special I did at home.

Researcher: What drugs did you give your child at home?

Respondent: They are the drugs that I got from the hospital that I went with him, before I came here, they gave me bactrim and panadol.

Researcher: So ehh, what about protecting him to cold weather what did you do?

Respondent: About protecting him to cold weather, I dressed him heavy clothes not to expose him to cold weather.

Researcher: Okay, how long did it take for you to take your child to the hospital?

Respondent: I did not take so long...Hmmm may be just estimating it was about 30 minutes.

Researcher: So how was the decision to take bring your child to the hospital made?

Respondent: After I saw his condition ,,,,hmm , the way he was breathing , I thought that it was not right to stay with him at home , after all I stay alone ,my parents stay's far away from

my home . So I found it necessary that I should rush with him to the hospital. That's when I was referred to come here.

Researcher: So who initiated that the child should come to the hospital?

Respondent: Alone ... as I have explained I found it worthy to rush to the hospital.

Researcher: So who authorized you to come with your child to the hospital?

Respondent: It was me as well.

Researcher: where was the father of the child, and what role did he take? Because I just heard mentioning your parents only.

Respondent: ahh ..., I thought he is a male, we females are the ones who take care of children, but he just knew that I have taken the child to the hospital.

Researcher: why did you come to the hospital with your child at that time?

Respondent: On that time, I saw that the child hmm...was so sick and he does not stay like that always ...hmm even the way he was breathing, all the times he does not breathe like that. And as I went to the nearest hospital I was told that I had to take the child to the central hospital.

Researcher: So what encouraged you to come to the hospital with the child at that time?

Respondent: I wanted to receive right treatment for my child, because at the hospital its where we get all the required treatment

Researcher: Thank you very much, for your participation, if you have any question please feel free to ask.

Respondent: hmmm.... No I do not have any question.

Researcher: Okay, so thank you very much.

Respondent: You are welcome