

“A study to Knowledge of Mothers of under five children regarding prevention of URTI and explore the use of Home Remedies in its management in selected villages of Nainital district, Uttarakhand”

Dissertation submitted to the

Graphic Era Hill University, Bhimtal, Uttarakhand



In partial fulfillment of the requirements for the degree of

Bachelors of Science in Nursing

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DECLARATION BY THE CANDIDATES

We hereby declare that this dissertation entitled “**A study to assess knowledge of mothers of under five children regarding prevention of URTI and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand**” is a genuine research work carried out by **Pooja Thapa , Pooja Arya , Prajjwal Kumar** under the guidance of **Dr.Pratiti Halder (Associate Professor)** and **Ms. Sapna Kunwar (Nursing tutor)** of Graphic Era Hill University, College of Nursing, Bhimtal.

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ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled entitled “**A study to assess knowledge of mothers of under five children regarding prevention of URTI and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand**” is a bonifide research work done by Pooja Thapa , Pooja Arya , Prajjwal Kumar under the guidance of **Dr. Pratiti Haldar (Associate Professor)** and **Ms. Sapna Kunwar (Nursing Tutor)** of , College of Nursing, Graphic Era Hill University, Bhimtal.

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“No one who achieve success does so without acknowledging the help of others . the wise and confident acknowledge this help with gratitude. ”

- Alfred North Whitehead

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With gratitude

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ABSTRACT:

Research Statement:

A study to assess knowledge of mothers of under five children regarding prevention of URTI and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand.

Introduction:

Respiratory tract infections are the most prevalent medical conditions in children. Children under the age of five are particularly vulnerable to this disease. Since mothers are the ones who look after their children the most, they need to be able to control respiratory tract infections. The purpose of this study was to evaluate mothers' knowledge of URTIs and investigate the home treatments they use to treat URTIs.

Objectives:

- To assess knowledge of mothers of under five children regarding URTI.
- To explore the home remedies used by the mothers in management of URTI.
- To find association- between knowledge of mothers and selected socio demographic variables.

Method:

The flow of the study was to assess the level of knowledge regarding URTI and its prevention and explore the use of home remedies in its management among mothers of under 5 children ; henceforth quantitative approach was used to achieve the goal of the investigation and research design is cross sectional survey design. The head of the the village in the Uttarakhand district of Nainital, Khurpatal, has granted permission to gather data. Mothers of children under five make up the study's samples, and a total of 100 samples were chosen using a non-probabilistic purposive sampling technique. Informed consent was obtained from the samples and a self-administered questionnaire was

provided to evaluate participant knowledge. The study eliminated participants who did not show interest at the time of data collection. Approximately three days were spent in total to acquire the data.

Result and conclusion:

Result reveal that out of 100 respondents , majority (69%) have average knowledge , 18% have good knowledge and remaining 13% have poor knowledge about URTI. Additionally, it was found that the majority of mothers used the following remedies: steam inhalation (41.77%), clove (27.84%), salt water gargle (24.05%), licorice root (16.45%), warm cloth compression (3.7%), eucalyptus oil (0%) and chamomile tea (0%). The majority of mothers also used camphor oil (92.4%), honey (91.13%), warm fluid intake (88.6%), carom seeds (87.34%), ginger (82.27), turmeric milk (75.94%), pepper mint (68.35%), garlic (46.83%), and clove oil (92.4%).

LIST OF CONTENTS

Chapter No.	Content	Page no.
1.	Introduction <ul style="list-style-type: none">➤ Need for the research study➤ Research statement➤ Research objectives➤ Assumptions➤ Operational definitions➤ Variables➤ Delimitations➤ Chapter summary	2
2.	Review of Literature <ul style="list-style-type: none">➤ Research summary	8
3.	Methodology <ul style="list-style-type: none">➤ Research approach➤ Research design➤ Research setting➤ Population➤ Sample➤ Sample size➤ Sampling technique➤ Sampling criteria➤ Data collection tools / instruments➤ Validity of data collection➤ Ethical clearance➤ Data collection process➤ Description of data analysis	16

	➤ Chapter summary	
4.	Data analysis and Interpretation ➤ Research statement ➤ Research objective ➤ Organization of data ➤ Tables and graph ➤ Tables and graphs with inferences ➤ Chapter summary	24
5.	Discussion ➤ Summary ➤ Research statement ➤ Research objectives ➤ Major findings of the study	36
6.	References	43
7.	Appendices	49

LIST OF TABLES

TABLE NO.	CONTENT	PAGE NO.
1.	Frequency & Percentage distribution of socio-demographic characteristics.	25-26
2.	Mean and Standard Deviation showing knowledge of mothers of under 5 year children regarding Upper Respiratory Tract Infection.	27
3.	Frequency and Percentage Distribution of mothers opting for use of home remedies in management of URTI.	28
4.	Frequency of types of home remedies used in management of URTI.	30
5.	Association between Socio-demographic variable and knowledge of mothers regarding Upper Respiratory Tract Infection.	32-34

LIST OF FIGURES

S.No.	Content	Page No.
1.	Schematic Presentation of Research Methodology of Study	17
2.	Schematic presentation of data collection process.	22
3.	Mean and standard deviation of knowledge scores regarding URTIs.	28
4.	Pie diagram showing percentage distribution of Mean and Standard Deviation of mothers of under 5 year children regarding knowledge of URTI.	29
5.	Bar Graph showing Percentage distribution of common Home remedies used by Mothers in management of URTI.	31

LIST OF APPENDICES

S NO.	Annexures	Page No.
1.	Letter seeking permission for conducting research study from Principal.	49
2.	Letter seeking permission from Ethical committee.	50
3.	Letter requesting the expert opinion and suggestions for content validity	51
4.	List of Validators	53
5.	Consent form from respondents ➤ English ➤ Hindi	54-55
6.	Tool for Data Collection ➤ English ➤ Hindi	56-72
7.	Photographs	73-76

LIST OF ABBREVIATIONS

S.No.	Abbreviations	Full form
1.	ARI	Acute Respiratory Infection
2.	N	Total Number of Samples
3.	SD	Standard Deviation
4.	URTI	Upper Respiratory Tract Infection
5.	WHO	World Health Organisation

CHAPTER 1

CHAPTER 1:

INTRODUCTION

The respiratory system serves as both the body's entrance point for ambient oxygen and its exit point for carbon dioxide.¹ The Upper and Lower respiratory tracts make up the whole Respiratory tract or Pulmonary tract.²

Compared to other parts of the body, infections of the respiratory tract are more common.³ Infection that impacts the upper respiratory system include nose, sinuses, pharynx, and larynx, is usually referred by the acronym Upper Respiratory Tract Infection (URTI)⁴. It includes all infections of respiratory system less than thirty days duration. Since breathing difficulties are regarded as a threat to life itself, it is believed that our body need a steady flow of oxygen to maintain metabolism. Regardless of the likelihood of death, children suffering from respiratory illnesses frequently experience anxiety and fear of losing their lives^{3,4}.

One of the leading causes of fatalities and morbidity in children under five is acute respiratory infection (ARI), which has a significant financial impact and is the primary reason many toddlers seek medical attention.^{4,5} Furthermore, these illnesses are commonly associated with mortality, which makes them the primary cause of death for children under the age of five worldwide; they account for millions of deaths annually.⁵

Lower respiratory infections cause more serious illnesses like influenza, pneumonia, and bronchitis, which are the main causes of ARI mortality, whereas upper respiratory infections are extremely common but seldom life-threatening.⁴ Examples of this include pharyngitis, laryngitis, sinusitis, otitis media, tonsillitis, nasal congestion, and the common cold.^{4,5} Infection to the respiratory system is more common than other part of the body, especially in children under the age of five. Children are more vulnerable to Upper respiratory tract infection because they do not yet have an established immunity to a wide variety of microorganisms.⁶ One of the main causes of morbidity in infants and children is URTIs. In pediatrics, respiratory issues account for a significant part of admissions and outpatient visits.⁷ Bacteria and

viruses are the main causes of ARI. Ninety percent of upper respiratory tract infections (URIs) are caused by viruses; nevertheless, the vast majority of URIs are minor, self-destructive ailments rather than life-threatening conditions. Although bacterial lung infections are prevalent in developing nations and are linked to a higher mortality rate.

Many viral families, including the rhinovirus, coronavirus, parainfluenza, respiratory syncytial virus (RSV), adenovirus, human meta pneumovirus, and influenza, are typically responsible for upper respiratory tract infections (URTIs). The enterovirus is occasionally linked to summertime illnesses. Recently, URTIs have also been connected to the recently identified bocavirus, which is related to the parvovirus.⁸ Malnutrition, low birth weight, meteorological variation, especially throughout the winter and rainy season, overcrowding in homes, inadequate ventilation, air pollution, a lack of environmental cleanliness, and unfavorable socioeconomic circumstances are significant indicators of risk associated with upper respiratory tract infections.⁷ The significant clinical features of Upper Respiratory Tract Infections are watery nasal discharge, mucosal nasal discharge, cough, fever, malaise, anorexia, sore throat, irritability, chest pain, chest pains, chills, tachycardia, respiratory problems, runny nose, ear problems, facial pain and pressure, dry cough, air hunger, dyspnea, Wheezing sound, etc.^{4,7} In places like child care centers and schools, where a large number of youngsters congregate, the likelihood of transmission is significantly increased. Contrary to popular belief, a child's susceptibility to infection is not increased by other variables, such as being cold, wet, or exhausted. In order to prevent the spread of illness in toddlers, it is crucial to wash hands carefully when tending to children who have respiratory infections.^{3,7,8} Controlling the fever is crucial if the child's temperature is noticeably elevated. Additionally, dehydration is a constant risk in children who are anorexic or febrile, particularly if there is vomiting or diarrhea. Acutely infected youngsters often exhibit loss of appetite^{4,9}.

The risk of child mortality may increase if URTIS are not treated promptly since they might result in complications such pneumonia, glomerulonephritis, pneumothorax, and rheumatic fever³. Mothers are crucial to the treatment of their children with URTIS because they know that ignorance and inadequate knowledge are important

factors that impact children's health. Therefore, mothers must recognize mild, moderate, and severe respiratory infections, make wise decisions, and start proper home care as soon as possible to prevent infection progression^{2,9}.

Need for study:

The basis of any nation is its children. Healthy children develop into people who are strong physically and emotionally, making them valuable contributors to the process of creating the nation. In India, the percentage of the population under five is approximately 13%. In developing nations, 12 million children pass away before turning five each year. Acute respiratory infections are the cause of seven out of ten of these deaths. In underdeveloped nations, the mortality rate from acute upper respiratory tract infections is higher than in developed nations, often reaching 1,000 or more per 100,000 live births.⁹ The rural population throughout India has traditionally depended on oral tradition regarding health-related knowledge and practices. The population of remote regions depends only on the assets that are available to meet their most fundamental requirements for care, thus it's important to identify what kinds of complementary home remedies mothers of children under the age of five year children use to manage URTIs.⁵

According to WHO , Acute respiratory infections (ARI) are responsible for almost 20% of all deaths of children aged less than 5 years worldwide. The proportion of under-fives with ARI that are taken to an appropriate health-care provider is a key indicator for coverage of intervention and care-seeking, and provides critical inputs to the monitoring of progress towards child survival-related Millennium Development Goals and Strategies.⁶

Research Statement:

“A study to assess knowledge of mothers of under five year children regarding prevention of URTI and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand”.

Research Objectives:

- To assess knowledge of mothers of under five children regarding URTI.
- To explore the home remedies used by the mothers in management of URTI.
- To find association- between knowledge of mothers and selected socio demographic variables

Assumptions:

This study assume that;

- mothers of under 5 year children of selected villages of Nainital district, Uttarakhand will have average knowledge regarding URTI and its prevention.
- Study subjects will provide honest response to the knowledge questionnaire.
- Knowledge level may vary from mother to mother.

Operational definitions:

Knowledge: In the present study knowledge refers to awareness of mothers regarding upper respiratory tract infections (URTIs), which will be further assessed by semi structured questionnaire.

Upper Respiratory Tract Infections (URTIs): In the present study Upper respiratory tract infection refers to nasal congestion, sneezing, running nose, coughing, sore throat and fever in children aged 1-5 years.

Home Remedies: In the present study home remedies refers to simple non-pharmaceutical measures' interventions like herbs, edible food item e.g., ginger, garlic etc. adopted for symptom management used by mothers based on personal experiences or cultural beliefs for managing and preventing URTI.

Mothers of under five children: In the present study mothers will be selected from the rural area whose children are in the age group of one to five year..

Variables:

- *Research variables:* Knowledge and home remedies.
- *Demographic variable:* Child age, Child gender, Number of children in the family, Total no. of under 5 children in the family, Religion, Educational level of mother, Educational level of father, Occupation of mother, Occupation of father, Total monthly family income, Type of family, Place of delivery ,Type of delivery, Vaccination status of the child

Delimitations:

The study is delimited to:

- mothers of under five year old children only in selected villages of Nainital district , Uttarakhand.
- mothers available during the period of research study in selected villages of Nainital district , Uttarakhand.

Chapter summary:

The chapter dealt with the introduction, need for study, research statement, research objectives, assumptions, operational definitions, variables, delimitation of the study.

CHAPTER 2:

CHAPTER 2 :

REVIEW OF LITERATURE

Definition:

Review of literature is defined as broad, comprehensive, in depth, systematic and critical review of scholarly publication, unpublished printed or audio visual material and personal communication.¹⁸

The present review of literature has been broadly categorized into following areas:

➤ **Review of literature related to knowledge regarding upper respiratory tract infection:**

1. A semi structured survey study was conducted by Saunders S. (2014), to evaluate the child health related knowledge, attitudes and practices (KAP) of mothers of under-five children at Kep, Cambodia. Total sample size was 200 mothers. A convenience sampling technique was used for the study. The results of the study showed deficient KAP of common childhood illnesses among the mothers. Vaccination rates, nutritional status of children and the antenatal care for mothers were very poor. Public health care system was used by one-quarter of those interviewed for their child's last episode of acute respiratory infection, diarrhea or worms. The study concluded that, there was insufficient knowledge, attitude and practices related to maternal child health. To implement local educational programs for women of child bearing age an urgent intervention was indicated specifically regarding immunizations, sanitation and treatment of diarrhea, worms and ARI¹⁹
2. An observational study was conducted by M.K. Kakeri, P. Kanchi (2015), regarding Acute Respiratory Tract Infections and some associated epidemiological factors in under-five children at Bombay hospital, Mumbai. Among 176 study samples 52(29.55%) suffered from mild ARI, 76 (43.18%) suffered from moderate ARI and 48(27.27%) suffered from severe ARI. The

researcher concluded that, most (59.1%) of the ARIs occurred in children below the age of 5 years than infants (40.9%). The health education to the mothers, regarding proper breast feeding, care during ARI and nutrition will prevent the hospitalization and deaths of under-fives due to ARI.¹⁷

3. A cross sectional study was conducted by Kumar GS, Majumdar A, Kumar V, Naik BN, Selaraj K, Balajee K.(2015), to estimate the prevalence of ARI and selected associated factors among 509 parents of under-five children at Urban Health Centre and Rural Health Centre of Puducherry, India. The study revealed that there was prevalence of 59.1% of overall ARI, in urban areas with 63.7% and 53.7% in rural areas. In age group 0-12 months the prevalence of ARI was highest (63.2%), which was 59.5% among 25-30 months and comparatively lower in 13-24 months age group (52.6%). The study concluded that, the prevalence of ARI was high, particularly in urban areas. ARI is an important public health problem among under-five children. Reduction of ARI among under-five children in the community may be possible with improvement of living conditions in houses.¹⁸

4. A scientific study was conducted by Prabhat kumar(2016) conducted to assess the effectiveness of structured teaching programme on knowledge regarding prevention of Upper respiratory tract infection among mothers of under five children in pediatric ward at Era's lucknow medical college and hospital , Uttar Pradesh. Pre experimental research design was adopted for the research study and conducted in the pediatric ward at Era's medical college and hospital , Lucknow Uttar Pradesh . Mothers of under five children are considered as the sample for the study with the margin of 60 . non probability sampling was done by using purposive sampling technique. The overall pretest mean score on knowledge regarding Prevention of Upper Respiratory Tract Infection among mothers of under five children was 50.77% shows inadequate knowledge.The overall post-test mean score on knowledge regarding

Prevention of Upper Respiratory Tract Infection among mothers of under five children was 78.93% shows adequate knowledge.¹³

5. A descriptive cross sectional study was conducted by Primi Kumar, Paramita Patra, Rima Paul, Moumita Roy ,etal, to assess the level of knowledge regarding prevention and management of acute respiratory infection among mothers of children 0-5 years in selected hospital in Siliguri. About 100 mothers of children 0-5 years were included through convenient sampling method . Data was collected using structured interview method. The result revealed that 20% of mothers have good knowledge in prevention and 33% had good knowledge in management of ARI. Researcher conclude that, As the leading cause of death among children, knowledge assessment about ARI among the mothers is very important, which helps for better understanding of the intensity of the problem³
6. A descriptive cross sectional study was conducted by Sonali S. Sangrulkar ,(2016) to asses the knowledge and practice of mothers regarding Upper respiratory tract infection of under five year children . the researcher adopted survey as a research design and 60 mothers of under 5 year children were adopted as a sample by usIng convenient sampling technique .The finding of the research study were that 57% of mothers having knowledge regarding child's problem, 88% mothers having knowledge regarding child's treatment on URTI. There are 76.66% of them follow preventive measures like hand washing, avoiding close contact. It states 72.50% taking pharmacological management, 61.66% are following home remedies that are steam inhalation, salt water gargling and usage of hot water for drinking. It also reflects that 48.33% of mothers are following some other practices such as putting oil in the ear for ear pain and usage of herbal medicinal plants¹²
7. A descriptive cross sectional study was conducted by Kapil Bhalla , Ashish Gupta , Sanjiv Nanda ,(2019) et al. conducted to assess Parental knowledge

and common practices regarding acute respiratory tract infections in children admitted in a hospital in rural setting , The total number of 1752 children were enrolled in the study who were admitted in pediatric ward through purposive sampling technique. The study revealed that most of the caregivers (58.4%) had poor knowledge about incomplete immunization as a risk factor for developing diseases like diphtheria and pertussis. Majority of caregivers (66.3%) practice home remedies by themselves.¹¹

8. A descriptive cross sectional study was conducted by Saini et.(2019) Al. to assess the knowledge of mothers of under five year regarding URTIs in selected community area Dehradun. About 60 mothers were selected for the study via purposive sampling technique . it was found that maximum 67% mothers were between the age of (26-33 years) and about 67% pf them were employed . only 18 (10%) mothers had excellent knowledge, 17 (28%) had average knowledge and 6 (10%) had poor knowledge regarding URTI . it was concluded that mothers need training and teaching to improve knowledge regarding URTIs and its prevention.¹⁰
9. A cross sectional study was conducted by Mohammad Akteruzzaman, Rahat bin habibb, Shaman Praveen, Shafi ahmed (2020) to assess the Knowledge attitude and practice of mothers about acute respiratory tract infection in under 5 year childdren'. The convenience sampling was adopted to select the sample size of 290 children. The study revealed that Out of 290 studied children, 206(71%) had ARI. Mean age of the children was 16±15 months, while that of the mothers was 25±8 years. The most common symptom perceived was cough (84%) followed by fever (60%), breathing difficulty (25%), sneezing (20%) and wheeze (16%), mostly worsening during winter season (70%), commonest aggravating factor was dust (82%), and most mothers opted for qualified medical practitioner (63%) for treatment. Self-medication was practiced by (38%) and paracetamol was frequently used medication (42%) followed by anti-histamine (33%). Overall, KAP about ARI was mothers were

having well. And further researcher concluded that the study reveals good knowledge of mothers on ARI symptoms, worsening environmental conditions, aggravating factors and complications.¹⁶

10. A cross sectional study was conducted by Maryam Abdul-Kareem, Mohammed Talib Abed, Hayder Mohammed (2021) to assess the mothers practice of knowledge concerning their children under 5 years with Upper Respiratory Tract Infections. The sampling technique adopted was Non-probability (purposive sample) and with sample size of 50 mothers has been chosen , all of them have children under 5 years with upper respiratory tract infection .study revealed that the overall assessment of the study sample good assessment and fair assessment was 32% for each one while the poor assessment was 38%, and there is significant association between age of child, type of feeding, and practice of knowledge mothers concerning upper respiratory infection. The study concludes that Adolescents to early adult's mothers lives at urban areas of Babylon Governorate who graduate from primary school, and their children age was under one year, and most of them their children under artificial feeding.¹⁴

➤ **Review of literature related to Home Remedies used for the management of URTI**

1. A cross sectional survey was conducted by Shireen Qassim Bham, Farhan Saeed and Manzar Alam shah(2014) conducted a research study entitled, to assess the knowledge , Attitude and practice of mothers on acute respiratory infection in children under five years. The sample size was about 335 mother who had at least one child below the age of five. It was found that Out of 335 children 228(68%) had ARI. Mean age of the children was 20 months \pm 17 SD while mean Birth weight was 2.7 kg \pm 1.8 SD. The most common symptom perceived was cough (n=303, 40%), mostly worsening during winter season (n=255,87%), commonest aggravating factor was dust (n=174,81%), most

common complication was Pneumonia (n=135, 83%), and most mothers opted for medical practitioner (n=268,89%) for treatment. Self-medication was practiced by 192(58%) and paracetamol was frequently used medication (n=117,42%). Hence study conclude good knowledge of mothers on ARI symptoms, worsening environmental conditions, aggravating factors and complications. Their attitude towards ARI was appropriate with early consultation with qualified medical practitioner. Better literacy rate, has a positive influence on the Knowledge, Attitude and Practices of mothers.²

2. A descriptive cross sectional study was conducted by Kashif khan(2015) to asses the knowledge, attitude , practices of parents on acute respiratory tract infection in children under five year. the sample size was of 150 parents , who were selected through simple random sampling technique. The result revealed that there were more than half of the participants had poor knowledge related to ARIs. The majority participants had negative attitude toward consulting a physician. This study result shows that half of the participants had poor knowledge and rest had good knowledge regarding childhood acute respiratory infections. Most of the participants had negative attitude towards the consulting a physician.¹⁵

3. A cross sectional study was conducted by Bnandyopadhyay D, Ahemed T. (2016), conducted to assess the knowledge, attitude and practice regarding the ARI among mothers in both urban & rural communities of Burdwan district, West Bengal, India. The total sample size for the study was 600 mothers via using purposive sampling technique. The study revealed that, there were about 50% illiterate mothers (70% in rural area) and 66.7% mothers were housewives, 40% of mothers preferred private set up as a place of choice for treatment (more in urban area 55%), as a choice of type of treatment 70% of mothers preferred allopathic medicine, 42.5% of mothers rated diseases as serious (more in urban area 55%). The study concluded that Health education may change attitude and health care seeking behaviors of the parents and other family members to take care of the child during ARI.²⁰

4. A semi structured survey study was conducted by Saunders S. (2017), to evaluate the child health related knowledge, attitudes and practices (KAP) of mothers of under-five children at Kep, Cambodia. Total sample size was 200 mothers. A convenience sampling technique was used for the study. The results of the study showed deficient KAP of common childhood illnesses among the mothers. Vaccination rates, nutritional status of children and the antenatal care for mothers were very poor. Public health care system was used by one-quarter of those interviewed for their child's last episode of acute respiratory infection, diarrhea or worms. The study concluded that, there was insufficient knowledge, attitude and practices related to maternal child health. To implement local educational programs for women of child bearing age an urgent intervention was indicated specifically regarding immunizations, sanitation and treatment of diarrhea, worms and ARI¹⁹
5. An exploratory study was conducted by Priyanka Joshi(2020) to assess the home remedies used by mothers of under five in management of upper respiratory tract infection in selected rural area of Haldwani. . about 75 mothers were selected for the study via non probability purposive sampling. . it was found that maximum mothers 27(36%) mentioned that the reason for resorting home remedies that they were advised by the old family members , 14 (18.6%) mothers informed that the home remedies are easily available at home , 14 (18.6%) mothers found positive effect of home remedies during previous experience.⁵

Chapter summary:

The chapter ends with the statement that all review material was gathered from variety of index , non-index and library-subscribed generals . Reviews indicate the information gathered to evaluate the knowledge regarding upper respiratory tract infection (URTI) and for exploring home remedies in its management. All the research studies were reviewed to gain essential information to complete the research study.

CHAPTER 3:

CHAPTER 3

METHODOLOGY

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. A research methodology describes the techniques and procedures used to identify and analyze information regarding a specific research topic. It is a process by which researchers design their study so that they can achieve their objectives using the selected research instruments.¹⁷ It includes all the important aspects of research, including research design, data collection methods, data analysis methods, and the overall framework within which the research is conducted.¹⁰

This chapter deals with methodology of the study. It presents its details as ; Research approach , research design, setting , sample , sample size , sampling technique , description of data collection procedure and plan of data analysis.

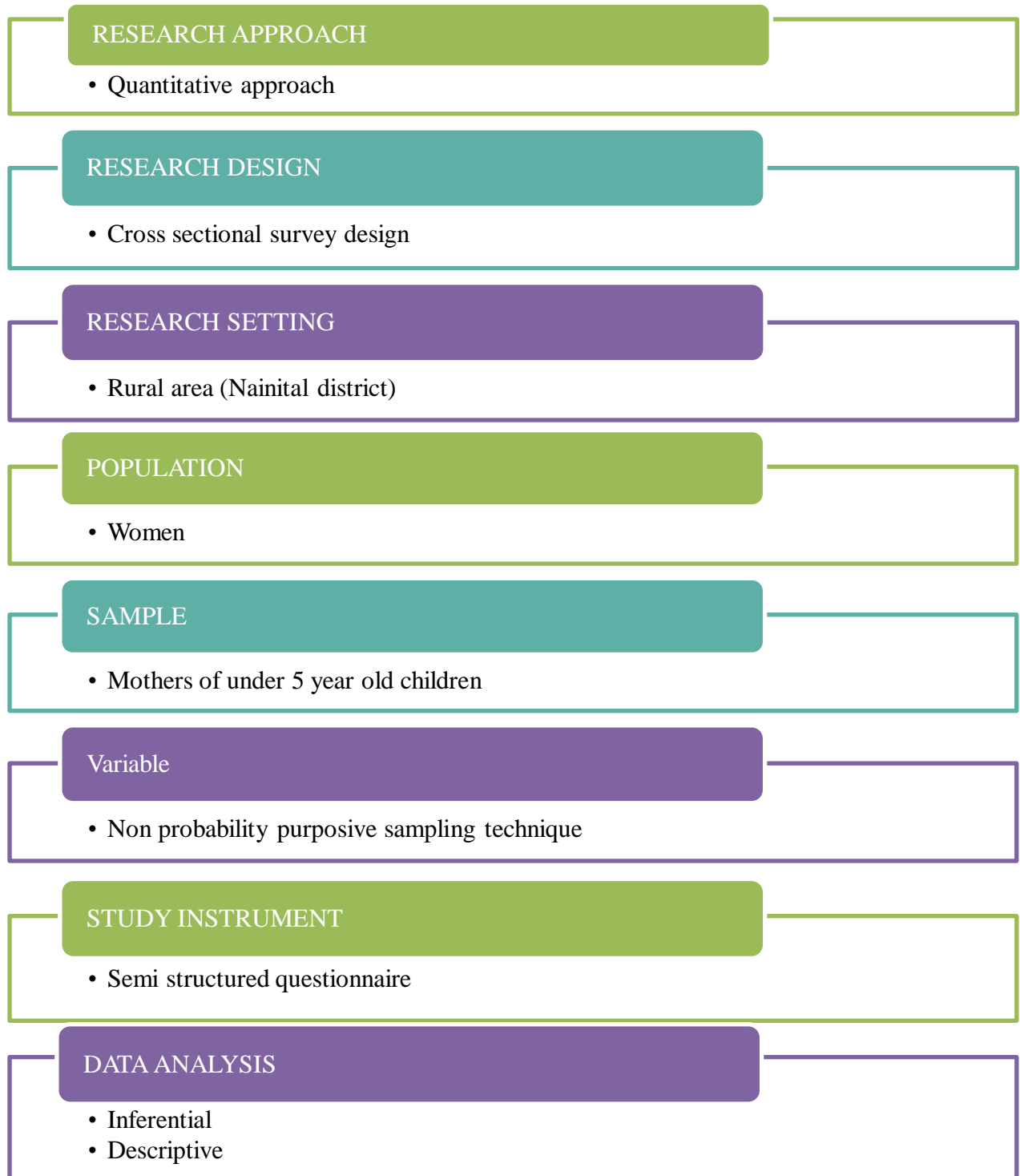


Figure.1 Schematic Presentation of Research Methodology of Study

Research approach:

Research approach is the planned and systematic approach used to collect or investigate evidences of phenomenon under the research study by the help of qualitative , quantitative or both methods.⁸

The flow of the study was to assess the level of knowledge regarding URTI and its prevention and explore the use of home remedies in its management among mothers of under 5 children ; henceforth quantitative approach was used to achieve the goal of the investigation.

Research design:

Research design is overall plan for obtaining answers to the questions being studied and for handling the difficulties encountered during research process.⁷

Cross sectional survey design was used for the present study.

Research setting:

Research Setting refers to the area where the study was initiated.³

Study was conducted in the Khurpatal village of Nainital , Uttarakhand.

Population:

Population is the comprehensive group of individuals who have common interests and goal.¹²

The population for the present study was the mothers of under five year of children.

Sample:

Sample is defined as the small unit of people taken from the complete population that denotes the entire population.¹⁹

The samples for the present study are mothers of under five year children of selected rural villages of Nainital district , Uttarakhand.

Sample size:

The sample size for the present study was 100 mothers of under 5 children.

According to study conducted by Saini S , Rawat N et.al ,the prevalence in the study was 49.9%¹⁰

Sampling technique:

Sampling technique is the process of selecting a portion of the population to represent the entire population.¹⁷

Non probability purposive sampling technique was used in the present study.

Sampling criteria:

1. Inclusion criteria:

This criterion includes:

- Mothers of less than 5 year children in selected villages of Nainital district Uttarakhand.
- Mothers of less than 5 year children who were available during the time of data collection.
- Mothers of under 5 year children who were willing to participate in the study.

2. Exclusion criteria:

This criterion excludes:

- Mothers of under 5 year children who were not available during the time of data collection
- Mothers of under 5 year children who were not willing to participate in the study

Data collection instruments:

The tools used for data collection were:

- Tool 1 : Socio demographic Performa
- Tool 2 : Knowledge questionnaire
- Tool 3 : semi structured tool on use of home remedies.

Tool description:

The self administer questionnaire consists of three sections.

Tool 1 : Socio demographic Performa

This tool consisted of the following items ; Child age, child gender, number of children in the family, total no. of children of under five in the family, religion, educational level of mother, educational level of father, occupation of mother, occupation of father, total monthly family income, type of family, place of delivery ,type of delivery

Tool 2 :

This tool consisted of total 27 items regarding Upper Respiratory Tract Infections and its prevention.

The questions asked in tool were from following domains:

Each question carried of 1 marks , and was interpreted as whether the samples are having poor, average and good knowledge. The samples scoring below 8 were considered as poor , 9-16 as average and above 17 as good knowledge.

Tool 3:

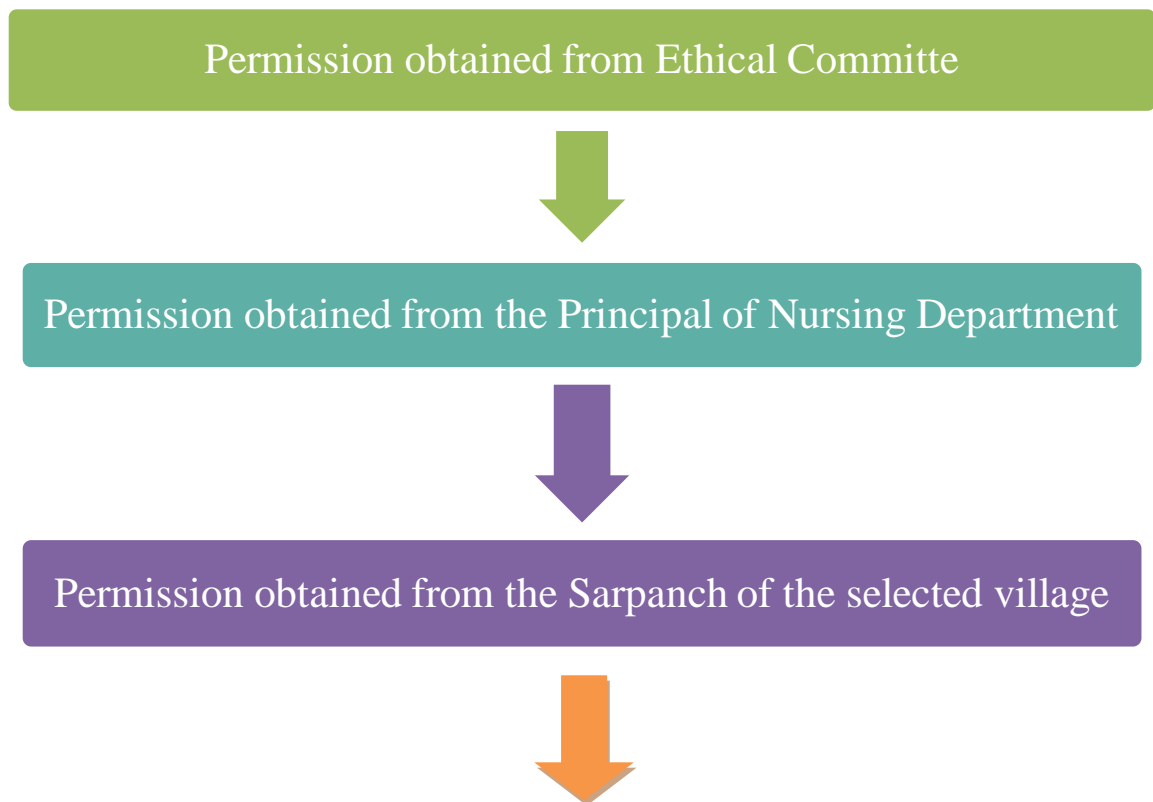
This tool consisted of semi structured checklist with following items. It comprises of 3 questions only which states that whether mother use home remedies in prevention of URTIs , if yes then what type of home remedies are used and how they ease certain symptoms by using home remedies.

Validity:

The content validity of tool was determined by expert opinion. The tool was validated by three experts in the field of Community Health Nursing , Mental Health Nursing. Experts were requested to give suggestions and opinions regarding accuracy , relevancy and appropriateness of the tool. The expert suggested to add items in the tool 1 and tool 3. As per the suggestion , the tool was modified and finalized.

Ethical clearance:

- Researcher had obtained Ethical clearance from ethical committee of Graphic Era Hill University , Bhimtal.
- Permission was taken from the Principal of Graphic Era College Of Nursing , Bhimtal
- Formal permission was taken from Sarpanch of the selected villages of Nainital district , Uttarakhand.
- Informed consent was obtained from all the samples
- Confidentiality of data was maintained strictly.

Data collection process:

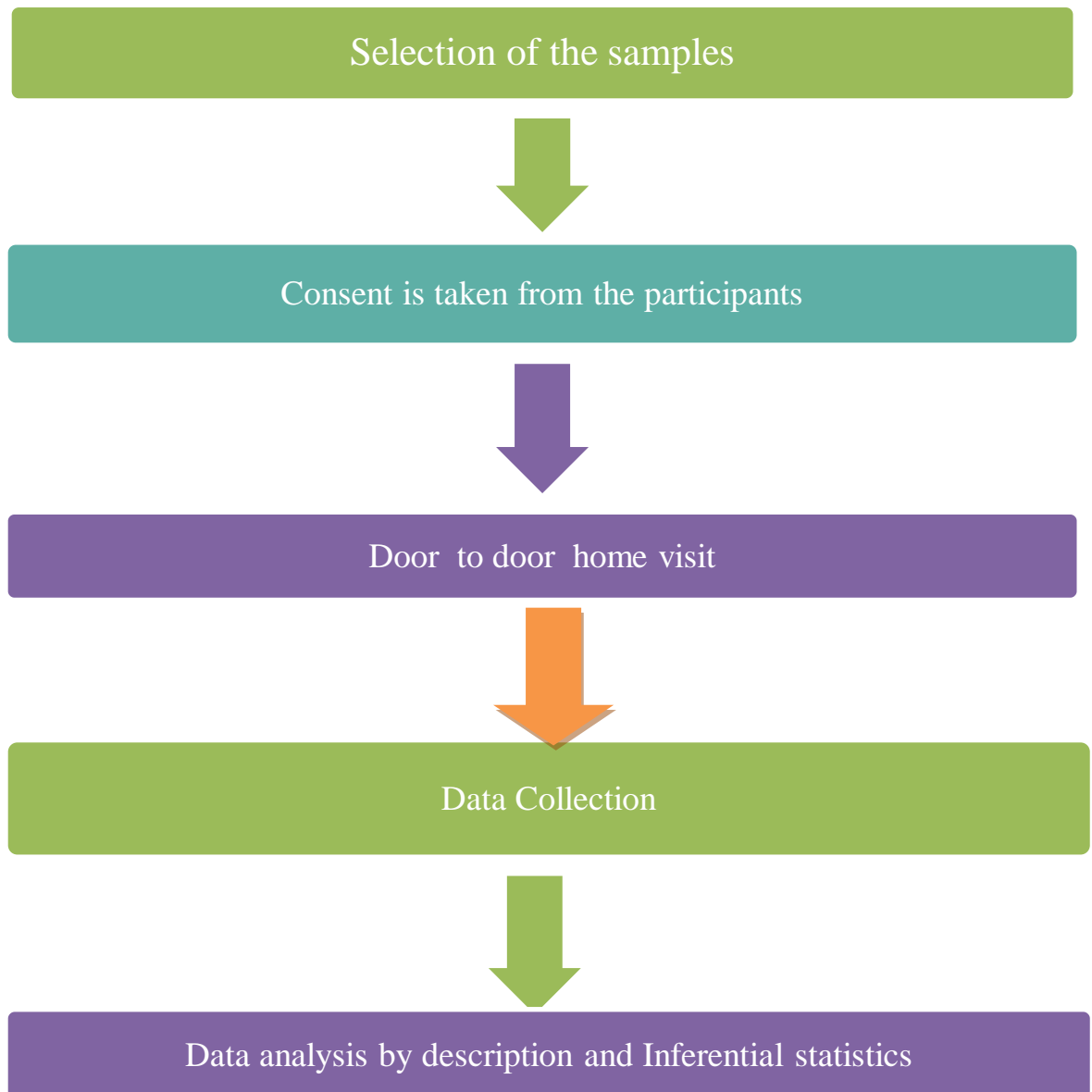


Figure2. Schematic representation of Data Collection Process

Description of Data Analysis:

The data analysis was done based on the objectives of the study by using descriptive and inferential statistics.

Chapter Summary :

This chapter deals with research approach , research design , research setting , research population , research sample , sample size , research sampling criteria, research tool description , tool validity , ethical clearance , data collection process for research , description for data analysis.

CHAPTER 4 :

DATA ANALYSIS AND INTERPRETATION

The methodical use of logical and statistical approaches to the description, summarization, and comparison of data is known as data analysis. It is a technique for arranging data so that theories may be tested and research issues can be addressed. Deductive and inductive reasoning are applied to the gathered raw data through data analysis and interpretation. The data are frequently divided into smaller groups before being analyzed and combined in a way that allows for the confirmation or rejection of hypotheses based on the defined objectives.

This chapter deals with description of demographic characteristics, finding about knowledge of mothers regarding URTIs and its prevention, finding about home remedies used by mothers for prevention of URTIs in children . The data was obtained as per the objective of the study.

Research statement:

A study to assess knowledge of mothers of under five year children regarding prevention of URTI and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand.

Objectives:

- To assess knowledge of mothers of under five children regarding URTI.
- To identify the home remedies used by the mothers in management of URTI.
- To find association- between knowledge of mothers and selected socio demographic variables.

Organization of Data:

All the data was collected and further analyzed, modified, tabulated, and interpret to make raw data into useful information using descriptive and inferential statistics. The data was organized into following sections.

1. **Section 1:** Frequency and percentage distribution of demographic variables.
2. **Section 2:** Knowledge of mothers of under 5 year old children regarding URTI
 - **Section 2A:** area wise mean and standard deviation of knowledge scores
 - **Section 2B:** Area wise frequency and percentage distribution of knowledge scores of mothers
 - **Section 2C:** knowledge level of mother regarding URTIs study findings.
3. **Section 3:** Frequency and percentage distribution of home remedies used by mothers.
4. **Section 4:** Association between level of knowledge of mothers with selected demographic variables.

Section 1: Description of sample characteristics

Table 1: frequency and percentage distribution of sample characteristics.

N=100

S.No.	Demographic variables	Category	Frequency	Percentage
1	Age of child (years)	1-3 years	49	49%
		3-5years	51	51%
2	Gender of child	Male	53	53%
		Female	47	47%
3	No. of child in the family	1	42	42%
		2 or more	58	58%
4	Total no. of under 5 year old children in the family	1	84	84%
		2 or more	16	16%
5	Religion	Hindu	100	100%
		Muslim	0	0%
		Christian	0	0%

		Sikh	0	0%
6	Educational level of the mother	High school	20	20%
		Intermediate	27	27%
		Graduate	27	27%
		Post Graduate	26	26%
7	Educational level of the father	High school	24	24%
		Intermediate	30	30%
		Graduate	21	21%
		Post Graduate	25	25%
8	Occupation of mother	Working	3	3%
		Non-working	97	97%
9	Occupation of father	Working	100	100%
		Non-working	0	0
10	Total monthly family income	5,000-10,000	32	32%
		10,000-15,000	26	26%
		15,000-20,000	9	9%
		Above 20,000	33	33%
11	Type of family	Nuclear	71	71%
		Joint	29	29%
12	Place of delivery	Institutional	100	100%
		Home delivery	0	0%
13	Type of delivery	Normal	77	77%
		L.S.C.S	23%	23%
14	Vaccination status of child	Vaccinated	100	100%
		Not vaccinated	0	0%

The data presented in the Table 1 above shows that out 100 samples , maximum mother had children aged 3-5 year , majority 53 (53%) under five children were male. Maximum 55 (55%) families had more than two children . all 100 (100%) mother belonged to Hindu religion. Mostly 27(27%) mother had intermediate and graduate level education. About 30 (30%) fathers had education level till intermediate.

Maximum 97 (97%) mothers were home makers . Mostly 32 (32%) family's income is 5000-10,000 monthly. Majority 71 (71%) children belongs to joint family. Maximum 77 (77%) mothers had normal delivery.

Section 2:Description of knowledge scores of mothers regarding URTI and its prevention.

this section describes knowledge level of mothers regarding URTI in under five year children and its prevention .The tool used was structured knowledge questionnaire having multiple choice options. Right answers were given as one score and wrong were coded as zero. The knowledge was assessed and interpret as good knowledge(above 17) , average knowledge(9-16) and poor knowledge(below 8). The data has been further categorized into Section 2A and Section 2B.

Section2 A: Mean distribution and knowledge scores.

This section describes mean and standard deviation of knowledge scores regarding URTIs in under five year children and its prevention.

Table2: Mean and standard deviation of knowledge score.

Level of knowledge	Mean	Standard Deviation (SD)
	13.105	5.027

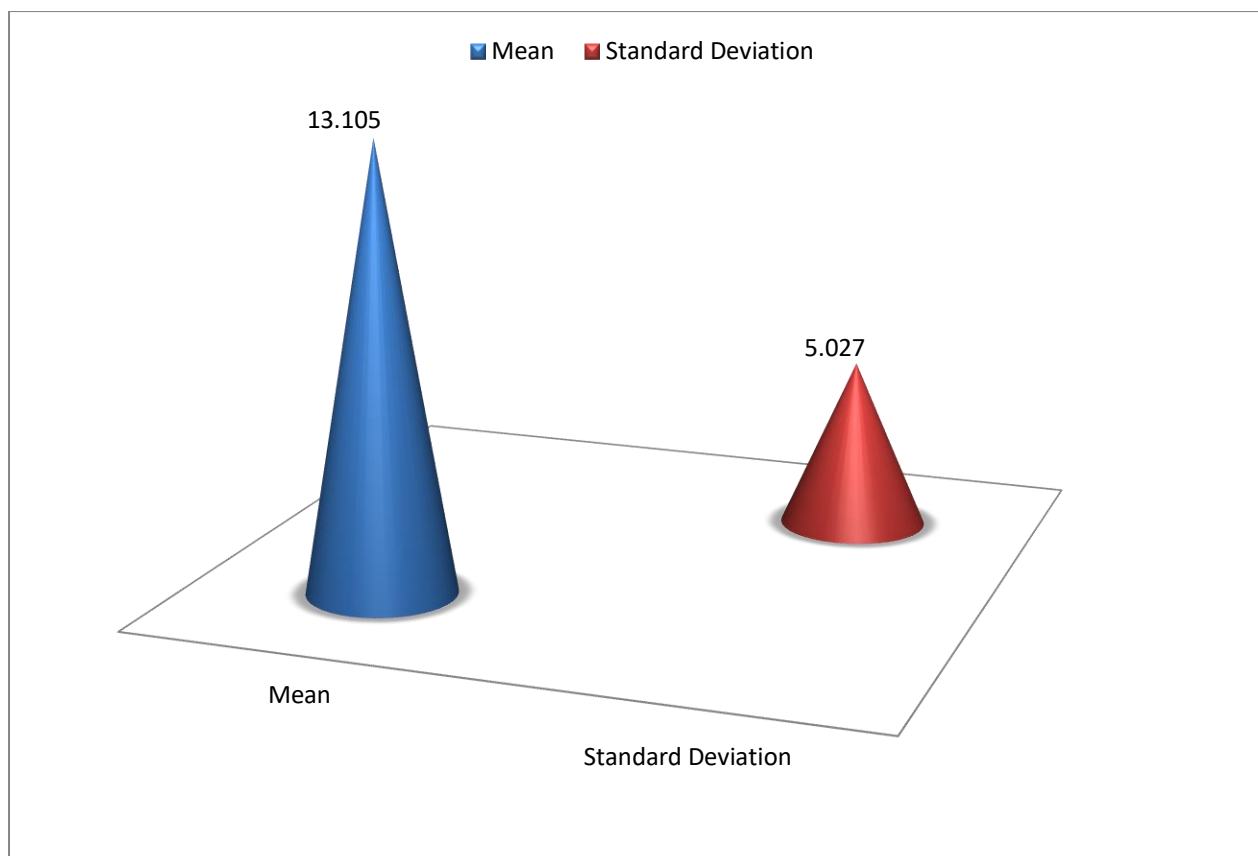


Figure3: Mean and standard deviation of knowledge scores regarding URTIs.

Section 2 B: Frequency and percentage distribution of mothers regarding URTIs and its prevention in mothers

This section describes frequency and percentage distribution of knowledge regarding URTIs in mothers :

Table 3: Frequency and percentage distribution.

N=100

S.No.	Category	Frequency	Percentage
1	Poor	13	13%
2	Average	69	69%
3	Good	18	18%

Table and Figure shows that out of 100 respondents , majority (69%) have average knowledge , 18% have good knowledge and remaining 13% have poor knowledge about URTI.

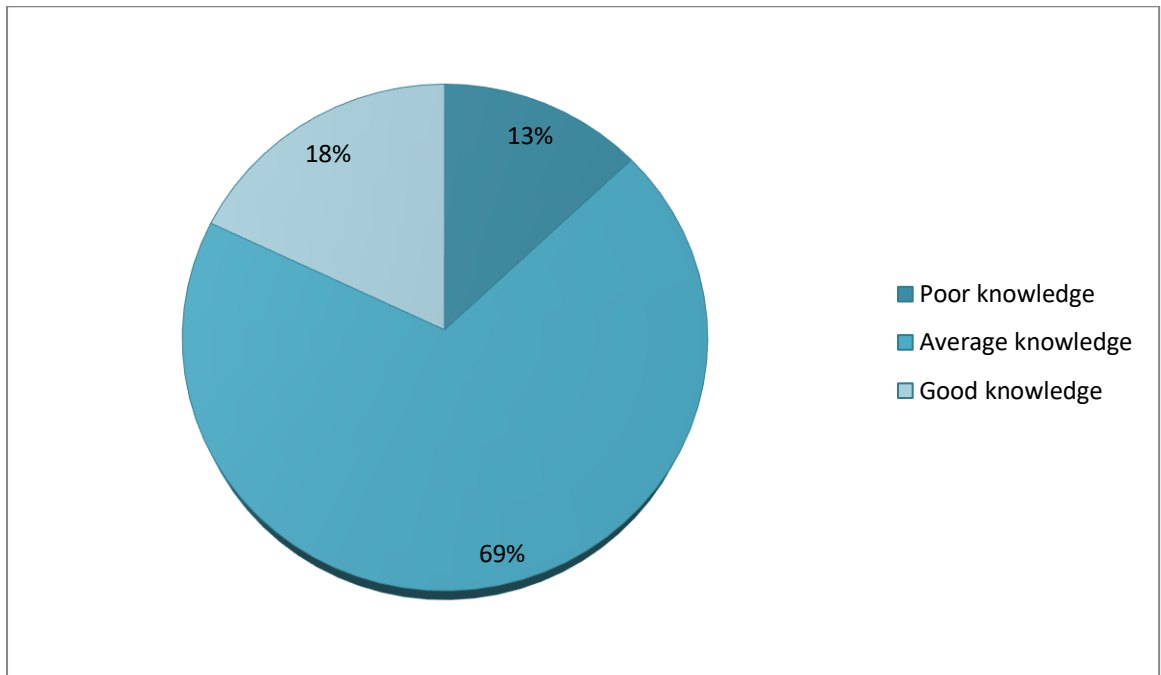


Figure 4: Pie diagram showing percentage distribution of knowledge of mothers of under 5 year regarding URTI.

SECTION 3:

Frequency and Percentage Distribution of home remedies used in the management of URTI.

This section describes the home remedies used by mothers for the management of URTIs . the data regarding type , frequency and method has been described in table below. Out of 100 mothers , only 79 responded that they use home remedies for their children in the management of URTIs.

S No.	Symptoms	Home Remedies	Composition and Method	No. of Respondents	Percentage
1	Coughing	Ginger	Boiling minced ginger with water	49	49%
		Salt water gargling	Luke warm water and salt	16	16%
		Camphor Oil	Vicks VapoRub and camphor oil	35	35%

			applied in chest		
2	Dry Cough	Steam Inhalation	Boiled/Hot water	51	51%
		Honey	Honey, Oral intake	37	37%
		Turmeric Milk	Milk and Turmeric	12	12%
3	Facial Pain/ Pressure	Steam Inhalation	Boiled /Hot water	72	72%
4	Hoarseness of Voice	Honey and ginger	Ginger paste and Honey	44	44%
		Camphor Oil	Vicks VapoRub and camphor oil directly applied in throat	33	33%
		Salt water gargle	Salt and water	23	23%
5	Nasal Congestion	Steam inhalation	Water steam boiled/hot water	43	43%
		Warm fluid intake	Warm Water	57	57%
6	Painful Swallowing	Warm Fluid Intake	Honey ginger clove boiled with water	61	61%
		Salt water gargle	Salt and water	39	39%
7	Sore Throat	Warm fluid intake	Ginger clove and honey boiled with water	88	88%

Table 4: frequency and percentage distribution of home remedies used in management of URTI

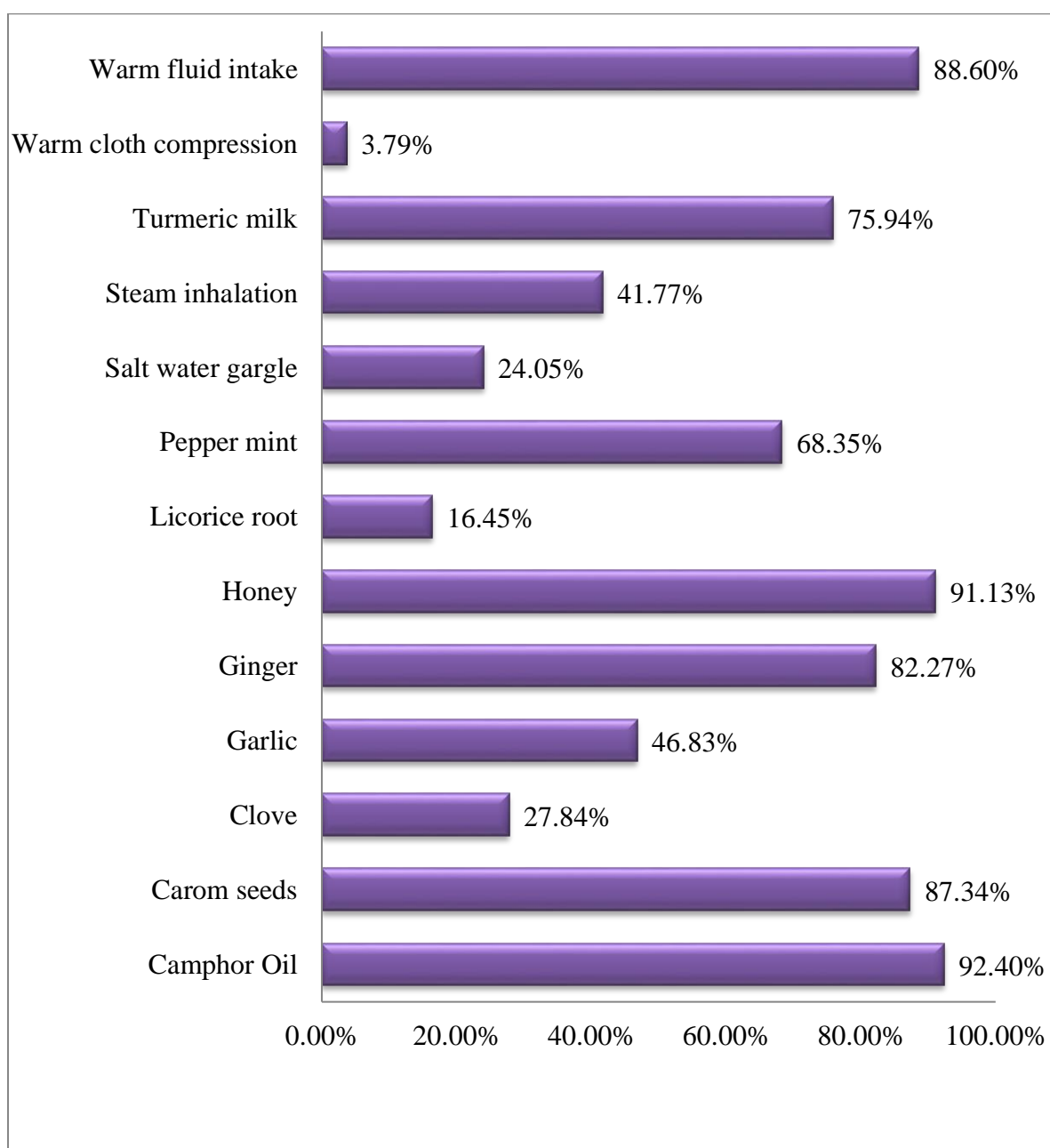


Figure 5: Bar Graph showing Percentage distribution of common Home remedies used by Mothers in management of URTI.

The figure above shows that majority 92 (92%)%mothers use Camphor oil and only 3 (3%) of mothers used warm cloth compression for managing URTIs in their children.

SECTION 4: ASSOCIATION BETWEEN SOCIO DEMOGRAPHIC VARIABLE AND KNOWLEDGE:

This section describes the association between knowledge scores and socio demographic variables i.e. age of the child , gender of the child , total number of child below 5 years in family,educational status of mother , educational status of father , occupation status of mother, occupation status of father, total monthly income in family and type of family.

S.No .	Socio Demographic characteristics	F	Level of Knowledge			Chi square	d f	P value
			Poor knowledg e	Average knowledg e	Good knowledg e			
1	Age, of the child					1.2613	2	0.5322
	1-3 years	49	7	33	9			
	3-5years	51	6	36	9			
2	Gender of child					1.6456	2	0.4493
	Male	52	6	39	7			
	Female	48	6	31	11			
4	Total no. of child below 5 year in family					14.8324	2	0.0006

	1 child	84	9	63	12			
	2 or more child	16	4	8	4			
6	Educational status of mother					1.79032	6	0.09376
	High schooling	20	3	15	2			
	Intermediate	27	3	19	5			
	Graduate	27	5	17	5			
	Post graduate	26	3	18	5			
7	Educational status of father					5.6487	6	0.4640
	High schooling	24	4	16	4			
	Intermediate	30	5	19	6			
	Graduate	21	3	13	5			
	Post graduate	25	1	22	2			
8	Occupational status of mother					1.3895	2	0.499
	Working	3	0	3	0			
	Non-working	97	13	66	18			

9	Occupational status of father					0		
	Working	100	13	69	18			
	Non-working	0	0	0	0			
10	Total monthly income in family					5.99415	6	0.4243
	5,000-10,000	32	4	21	7			
	10,000-15,000	28	6	16	6			
	15,000-20,000	6	1	5	0			
	Above 20,000	34	2	27	5			
11	Type of family					6.947	2	0.0310
	Joint	68	11	42	15			
	Nuclear	32	2	28	2			

Table 5: Association between knowledge scores and socio demographic variable and knowledge.

CHAPTER 5:

CHAPTER 5 :

SUMMARY, DISCUSSION, CONCLUSION, IMPLICATIONS, LIMITATIONS & RECOMMENDATIONS.

This chapter comprises the summary of major findings through the study, discussion, conclusion, implication, limitations and recommendations for further research. The chapter will focus on research objectives and compare the research findings of the study

Summary:

A cross sectional study was conducted to assess the knowledge of mothers of under five children regarding prevention of URTI and to explore the use of home remedies in its management in selected villages of Nainital district , Uttarakhand. The study is having Quantitative research approach and selected the sample size of 100 mothers of under 5 year children by using non-probability purposive sampling technique , and the data was collected by using self administered questionnaire. Descriptive statistics (Frequency , Percentage Distribution) and Inferential Statistics (chi- square) were used for the analysis of data and to test the hypothesis.

Research statement :

“A study to assess knowledge of mothers of under five year children regarding prevention of URTI and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand”.

Research Objectives:

- To assess knowledge of mothers of under five children regarding URTI.
- To explore the home remedies used by the mothers in management of URTI.
- To find association- between knowledge of mothers and selected socio demographic variables

Major finding of the study :

The major findings of the study were categorized into following criteria:

Sample characteristics:

1. **Child's Age:** Present study reflects that majority of children falls under the age group of 3-5years (51%) and rest were in the age group of 1-3years (49%).
2. **Gender of child:** Present study reflects that majority of children were Males (53%) and rest were Females (47%).
3. **No. of child in the family:** Present study reflects that majority of families were having 2 or more child (58%) and rest are having only 1 child (42%).
4. **Total no. of under 5 year old children in the family:** Present study reflects that majority of families were having only one child who belongs to the age group of 0-5years (84%) and rest of the families were having 2 or more child who belongs to the age group of 0-5years (16%).
5. **Religion:** Present study reflects that majority of respondents belongs to Hinduism religion (100%) and none of them belongs to the Muslim , Christian, Sikh religion (0%).
6. **Educational level of Mother:** Present study reflects that majority of mothers of under 5 year old children were having education till Intermediate (27%) and Graduation (27%) , Post Graduation (26%) and least were having basic education till high school (20%).
7. **Educational level of Father:** Present study reflects that majority of fathers of under 5 year old children were having education till Intermediate (30%) , post graduation(25%) , high schooling(24%) and least were graduate (21%).
8. **Occupation of Mother:** Present study reflects that majority of mothers were non working (97%) and rest were working (3%).
9. **Occupation of Father:** Present study reflects that all the fathers of under 5 year children were working (100%) and none of them were non working (0%).

- 10. Total monthly family income:** Present study reflects that majority of families are having monthly income of above 20,000 (33%) , 5,000 – 10,000 (32%) , 10,000 – 15,000 (26%) , and 15,000 – 20,000.
- 11. Type of Family:** Present study reflects that majority of the respondents belongs to Nuclear family (71%) and rest of them belongs to joint family (29%).
- 12. Place of Delivery:** Present study reflects that majority of the respondents had Institutional delivery (100%) and none of them have home delivery (0%).
- 13. Type of delivery:** Present study reflects that majority of mothers had Normal delivery (77%) and rest of them had L.S.C.S (23%)
- 14. Vaccination status of the child:** Present study reflects that all of the children were fully vaccinated (100%).

Knowledge regarding URTIs and its prevention:

In this present study, out of 100 respondents majority of the mothers are having average knowledge regarding URTI (69%) , poor knowledge (18%) and rest are having good knowledge (13%). Hence , Mean(13.105) and Standard Deviation(5.027) value of mothers of under 5 year children regarding knowledge of Upper Respiratory Tract Infection.

Use of home remedies:

Further it was identified that majority of mothers were using Camphor oil (92.4%) , Honey (91.13%), Warm fluid intake (88.6%), Carom seeds (87.34%), Ginger (82.27), Turmeric milk (75.94%), Pepper Mint (68.35%), Garlic (46.83%), Steam inhalation (41.77%), Clove (27.84%), Salt water gargle (24.05%), Licorice root (16.45%), Warm cloth compression (3.7%) , eucalyptus oil (0%) and chamomile tea (0%).

Discussion:

The discussion has been done under following areas:

Sample characteristics:

In view of selected demographic variable revealed that majority of the children belongs to the age group of 3-5 years (51%), majority of the children were Male (53%) , majority of families were having 2 or more than 2 children(58%) and most of them are having only 1 child that falls under the age group of 5 years (84%) and all of them belongs to Hinduism religion (100%) , majority of the women were having education till Post Graduation (26%) and majority of them were non working(97%) and most of the fathers were having basic education till intermediate (30%) and all of them were working (100%) , majority of them were having total monthly family income between 5,000 – 10,000 (32%) and most of them belongs to Nuclear family (71%), Place of delivery of all the mothers were Institutional (100%), majority of them were having normal delivery (77%) and all of the children were vaccinated (100%).

Knowledge regarding URTIs and its Prevention:

In present study In this present study, out of 100 respondents majority of the mothers are having average knowledge regarding URTI (69%) , poor knowledge (18%) and rest are having good knowledge (13%). Hence , Mean(13.105) and Standard Deviation(5.027) value of mothers of under 5 year children regarding knowledge of Upper Respiratory Tract Infection.

- Similar results were found in study conducted by **Saini** about 60 mothers were selected for the study via purposive sampling technique . it was found that maximum 67% mothers were between the age of (26-33 years) and about 67% pf them were employed . only 18 (10%) mothers had excellent knowledge, 17 (28%) had average knowledge and 6 (10%) had poor knowledge regarding URTI¹⁰
- In another similar study by **Primi Kumar** et.al About 100 mothers of children 0-5 years were included through convenient sampling method . Data was collected using structured interview method. The result revealed that 20% of mothers have good knowledge in prevention and 33% had good knowledge in management of ARI³

Use of home remedies and its use in prevention of URTIs:

In present study Further it was identified that majority of mothers were using Camphor oil (92.4%) , Honey (91.13%), Warm fluid intake (88.6%), Carom seeds (87.34%), Ginger (82.27), Turmeric milk (75.94%), Pepper Mint (68.35%), Garlic (46.83%), Steam inhalation (41.77%), Clove (27.84%), Salt water gargle (24.05%), Licorice root (16.45%), Warm cloth compression (3.7%) , eucalyptus oil (0%) and chamomile tea (0%).

- Similar study by **Priyanka Johi** states that maximum mothers 27(36%) mentioned that the reason for resorting home remedies that they were advised by the old family members , 14 (18.6%) mothers informed that the home remedies are easily available at home , 14 (18.6%) mothers found positive effect of home remedies during previous experience⁵
- Another similar study by **Bnandopadhyay D , Ahmed T** states there were about 50% illiterate mothers (70% in rural area) and 66.7% mothers were housewives, 40% of mothers preferred private set up as a place of choice for treatment (more in urban area 55%), as a choice of type of treatment 70% of mothers preferred allopathic medicine, 42.5% of mothers rated diseases as serious (more in urban area 55%).²⁰

Association between socio demographic characteristics and knowledge:

Implications:

1. Nursing Practice:

- Infections of the respiratory tract are a widespread issue in our nation, and nurses are crucial to the prevention, timely diagnosis, and effective treatment of these infections in both hospital and community settings. This study will obliquely assist in motivating nurses to evaluate mothers of children under five about the management and prevention of respiratory tract infections in order to avoid any complications from ARI.

- In the restricted amount of time that staff nurses have in the hospital, this study also assists them in offering counseling to patients.
- This study emphasizes that nurses have to impart health education among mothers
Of under 5 year old children , as health education is one of the most important nursing intervention and nurse's responsibility.

2. Nursing Administration:

- The primary duty of the nurse administration is to supply the nurses with relevant resources and instruction to encourage them to raise awareness of respiratory tract infections and protocols pertaining to the protection of children under five's health.
- The administrators of the hospital should take the initiative to assign nurses to teach mothers or other family members how to prevent respiratory tract infections.

3. Nursing Research:

- Additional research can be carried out in light of the findings. The results of this study indicate that mothers of children under five possess a depth of knowledge that requires additional research.
- A qualitative study focusing on the Quality of Life of children under five who are most likely to get respiratory tract infections could be carried out.

Limitations:

The present study was limited to:

- The results could not be broadly generalized because of the small sample size, constrained setting, and linguistic criteria
- The study's instrument solely analyzed the mothers of children under five in relation to upper respiratory tract infection prevention.

Recommendations:

- A larger sample size could be used in the same study for order generalization of finding.
- It is possible to conduct research to assess the effectiveness of the organized training program with respect to respiratory tract infection prevention and management.
- Another study might be carried out including structured teaching program with alternative teaching strategies, such as information booklets, demonstrations, and video-assisted instruction.
- An exploratory study could be conducted to identify the different elements contributing to mothers with less than five year children's ignorance and lack of experience with respiratory tract infection prevention and treatment respectively.
- A comparable investigation can be carried out to evaluate mothers with children under five years old's awareness of any other sickness, such as diarrhea, starvation, etc.

Chapter summary:

This chapter deals with summary , discussion , conclusion , implication , limitations and recommendations of the present study.

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ANNEXURES

Annexure 1: Letter seeking permission for conducting research study from principal .

To,
The Principal
Graphic Era Hill University
College Of Nursing,
Bhimtal , Uttarakhand

Subject: Request for permission to conduct research study

Respected madam,
We the students of Group 12 of B.Sc. Nursing 4th year would like to conduct a research study as a part of our academic pursuits. The title of our study is, “ A study to assess the knowledge of mothers of under 5 year children regarding prevention of URTI and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand” under the guidance of Dr. Pratiti Halder and Ms. Sapna Kunwar.

Therefore, We request you to kindly allow us permission to conduct this research study

Thanking You!
Sincerely,
Pooja Thapa
Pooja Arya
Prajwal Kumar

Permitted.

[Signature]
Principal
Graphic Era Hill University
College Of Nursing
Bhimtal , Uttarakhand

**Annexure 2 : Letter seeking permission for conducting research from
Ethical Committee**



Graphic Era
HILL UNIVERSITY
Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)
University under section 2(f) of UGC Act, 1956
College of Nursing, Bhimtal Campus

Letter Head No.: GEHU/CON/IEC/2024-62

Date: 02.12.2023

Institutional Ethics Committee

Clearance Certificate


Subject: In reference to protocol submitted by Pooja Arya, Pooja Thapa and Prajwal Kumar
on 15th November 2023


This is to certify that the protocol entitled "A study to assess the knowledge of mothers of under five children regarding prevention of Upper Respiratory Tract Infections (URTIs) and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand" submitted to the Ethics Committee, College of Nursing, Graphic Era Hill University, has been reviewed and discussed for approval on 2nd December 2023.


After consideration, the committee has decided to **approve/not approve/withheld** the study in the present submitted form.


Prof. Hansi Negi
(Convenor)



Prof. (Dr.) M.C. Lohani
(Chairperson)


Dr. Santoshi Sengupta
(Member)


Dr. Sandeep Bhudani
(Member)


Dr. Himanshu Joshi
(Member)


Dr. Farha Khan
(Member)


Dr. Pratiti Halder
(Member Secretary)

**Annexure 3 : Letter seeking permsisison from Sarpanch of the village
to conduct research study at Khurpatal village , Nainital district
Uttarakhand**

सेवा में,
सरपंच महोदय

खुरपाताल
नैनीताल, उत्तराखंड
२६३०२

विषय: शोध अध्ययन हेतु आवेदन पत्र

महोदय,
सविनय निवेदन इस प्रकार है की, हम ग्राफ़िक एरा हिल यूनिवर्सिटी,
भीमताल उत्तराखंड के छात्र है। हम आपकी सहमति और सहयोग की
मांग करने के उद्देश्य से आपके पास इस पत्र के माध्यम से आये है।

हम आपकी स्थानीय शैली का अनुसरण व अध्ययन करने का प्रस्ताव रखना
चाहते है। हमारे शोध अध्ययन का विषय है "५ वर्ष के अधीन बच्चों में
सांस संबंधित बीमारियों के निवारण के सम्बन्ध में माताओ की जानकारी,
और इसके प्रबंधन में घरेलु उपायों के प्रयोग की खोज"। इस अध्ययन
का मुख्य उद्देश्य है गांव की माताओ की ऊपरी श्वसन मार्ग संक्रमण के
विषय में ज्ञान का मूल्यांकन करना, व संक्रम के आधारित माताओ द्वारा
प्रयोग किये जाने वाले घरेलु उपचारो को पता लगाना।

हमें इस अध्ययन के लिए आपकी अनुमति और सहयोग की आवश्यकता है
ए हम आपके प्रतिस्थानिक ज्ञान, अनुभव और मार्गदर्शन का मूल्यांकन करते
है। कृपया हमें इस शोध अध्ययन करने की अनुमति प्रदान करें और हमें
आपके सुझाव और दिशानिर्देश देने का सौभाग्य प्राप्त हो।

धन्यवाद!

प्रार्थी

ग्राफ़िक एरा हिल यूनिवर्सिटी,
कॉलेज ऑफ़ नर्सिंग , भीमताल उत्तराखंड

ग्राम प्रधान *Mehar*
ग्राम प्रधान- नैनीताल
वि०छा०- भीम ताल (नैनीताल)

**Annexure 4: Letter requesting the expert opinion and suggestions for content
and tool validity.**

To,
The Principal
Graphic Era Hill University
College Of Nursing,
Bhimtal , Uttarakhand

Subject: Request for permission to conduct research study

Respected madam,

We the students of Group 13 of B.Sc. Nursing 4th year would like to conduct a research study as a part of our academic pursuits. The title of our study is, “A study to assess the nutrition status of students and explore the prevalence of breakfast skipping and its related factor in selected university of bhimtal Uttarakhand” under the guidance of Dr. Pratiti Haldar and Ms. Chandni Manral.

Therefore, We request you to kindly allow us permission to conduct this research study

Thanking You!

Sincerely,

Pooja Thapa

Pooja Arya

Prajwal Kumar

Annexure 5:

List of Validators.

Following are the list of validators that validated tool for data collections:

1. Prof. Hansi Negi

Principal

GEHU, college of Nursing

Bhimtal

2. Mrs. Neha Bhatt

Assistant professor

GEHU, College of nursing

3. Mr. Abhishekh Kirti

Nursing tutor

GEHU, college of nursing.

Annexure 6 : Consent form from respondents.

Consent Form

Respected Sir/ Madam,

We the students of Group 12 , B.Sc. Nursing 4th year , Graphic Era Hill University, College of Nursing, Bhimtal are conducting a research study entitled “A study to assess the knowledge of mothers of under 5 year children regarding prevention of URTI and explore the use of home remedies in its management in selected villages of Nainital district, Uttarakhand ” for partial fulfilment of B.Sc. Nursing degree .

I request you to kindly give your consent for participation in the study. All the information given by you will be kept confidential.

You can withdraw from the study any time.

Signature.....

Name.....

Date.....

सहमति पत्र

आदरणीय महोदय | महोदया,

हम ग्रुप 12, बीएससी नर्सिंग चतुर्थ वर्ष कॉलेज ऑफ नर्सिंग, ग्राफिक एरा हिल यूनिवर्सिटी, भीमताल के छात्र एक शोध अध्ययन कर रहे हैं, जिसका शीर्षक है, "ऊपरी श्वसन पथ के संक्रमण की रोकथाम के संबंध में 5 वर्ष से कम उम्र के बच्चों की माताओं के ज्ञान का आकलन करने के लिए एक अध्ययन" और बीएससी नर्सिंग डिग्री की हमारी आंशिक पूर्ति के लिए उत्तराखंड के नैनीताल जिले के चयनित गांवों में इसके प्रबंधन में घरेलू उपचार के उपयोग का पता लगाएं।

मेरा आपसे अनुरोध है कि कृपया अध्ययन में भाग लेने के लिए अपनी सहमति दें। आपके द्वारा दी गई सभी जानकारी गोपनीय रखी जाएगी।

आप किसी भी समय अध्ययन से हट सकते हैं।

हस्ताक्षर

नाम

तारीख

Annexure 7 : Tool for Data Collection (English)

Section A: Socio-demographic Status

***NOTE:** Following items in the tools are meant to collect personal information only.
Kindly answer the question accordingly*

1. Child age:
2. Child gender:
3. Number of children in the family:
4. Total no. of children of under 5 in the family:
5. Religion:
6. Educational level of mother:
7. Educational level of father:
8. Occupation of mother:
9. Occupation of father:
10. Total monthly family income:
11. Type of family:
12. Place of delivery
13. Type of delivery
14. Vaccination status of the child

Section B: Knowledge regarding URTI

***Note:** Following items in the tool are meant to collect information regarding URTI. Kindly answer the questions by placing a tick mark (✓) in the most appropriate response from your side.*

1. Which organ in the body of child helps in respiration?
 - a) Brain
 - b) Heart
 - c) Liver
 - d) Lungs
2. URTI is most susceptible to which age group?
 - a) Adult
 - b) Elderly
 - c) Infant and young children
 - d) Teenagers
3. The causative agent of URTI is...
 - a) HIV
 - b) Influenza virus
 - c) Genetic
 - d) Trauma
4. The common cause of URTI is ...
 - a) Bacteria
 - b) Influenza
 - c) Parasites
 - d) Idiopathic cause
5. Risk factor of URTI is
 - a) By sneezing and coughing
 - b) Exclusive breast feeding
 - c) Passive smoking
 - d) Regular hand washing

6. Which season is often associated with increase in URTI cases?
- a) Rainy
 - b) Spring
 - c) Summer
 - d) Winter
7. Most common symptom of URTI is...
- a) Chest pain
 - b) Itchy eyes
 - c) Skin rashes
 - d) Sneezing
8. Which of the following is the danger sign of URTI in under 5-year-old children?
- a) Mild cough
 - b) Mild fever
 - c) Runny nose
 - d) Severe difficulty in breathing
9. Which of the following is not considered as a danger sign of URTI in children?
- a) Cough at night
 - b) Lethargy
 - c) Normal appetite
 - d) Rapid breathing
10. Which of the following symptom is least common in children affected with URTI?
- a) Sneezing
 - b) Sore throat
 - c) Vomiting
 - d) Watery eyes
11. Which of the following is the most common route of transmission of URTI?
- a) Air borne
 - b) Oral route
 - c) Healthy person to person

- d) Vector borne
12. How can URTI be transmitted through contaminated surfaces?
- a) Cannot transmit through touching any surface
 - b) Touching surfaces with bare hands
 - c) Touching surfaces with elbows
 - d) Touching surfaces by wearing gloves
13. Can URTI be transmitted to baby through breast feeding by infected mother?
- a) Yes
 - b) No
 - c) I don't know
 - d) Maybe
14. Most common prevention of URTI in household is...
- a) By avoiding hand washing
 - b) Close contact with infected individual
 - c) Isolating infected individual
 - d) Sharing utensils
15. Simplest measure to prevent URTI is...
- a) Avoid eating vegetables
 - b) By avoiding hand washing
 - c) By consuming cold fluids
 - d) Covering mouth and nose by sneezing and coughing
16. How can parents reduce the risk of URTI transmission to the children?
- a) Allowing sick family members to share utensils
 - b) Frequent hand washing and sanitation
 - c) Encouraging close physical contact
 - d) Avoiding vaccination
17. Which age is not recommended for using vapour rub product for easing URTI symptoms in children?
- a) Under 2
 - b) Age between 2-3
 - c) Above 3
 - d) Not recommended for children

18. How should vapour rub be applied for a child with URTI?
- a) Apply a thick layer in the chest
 - b) Apply inside the nostrils
 - c) Rub on the ear
 - d) Rub on the feet
19. What type of food should be given to the child with URTI?
- a) Carbonated food
 - b) Spicy food
 - c) Sugary food
 - d) Warm and nutritious food
20. Which nutrient is important for strengthening immune system during the URTI?
- a) Vitamin A
 - b) Vitamin C
 - c) Iron
 - d) Magnesium
21. Which of the following vaccine prevent URTI in children?
- a) Chicken pox vaccine
 - b) Influenza vaccine
 - c) Adenovirus vaccine
 - d) Anthrax vaccine
22. Which vaccination from the immunization schedule should be used to prevent Acute respiratory tract infection in children?
- a) TT and OPV
 - b) PCV and MR
 - c) JE and Vitamin A
 - d) OPV and Hepatitis
23. Which of the following is the major complication of URTI?
- a) AIDS
 - b) TB
 - c) Runny nose

- d) Pneumonia
24. Major symptom of URTI that leads to Pneumonia is...
- a) Facial pain and body ache
 - b) Headache and dizziness
 - c) Sneezing and itchy nose
 - d) Severe coughing and chest pain
25. Which age group is more susceptible to pneumonia?
- a) Children under the age of 2 year
 - b) Children between the age of 3-5 year
 - c) Children above the age of 5 year
 - d) Teenagers
26. Which type of Pneumonia is most common in children under 5 years of age?
- a) Bacterial Pneumonia
 - b) Fungal Pneumonia
 - c) Mycolpasma Pneumonia
 - d) Viral pneumonia
27. Primary mode of transmission for Pneumonia in children is.....
- a) Via air
 - b) Via junk food
 - c) Via vector
 - d) Via water

Section C: Home remedies used in prevention of URTI

***Note:** Following items are meant to collect the information regarding home remedies of URTI only. Kindly place a tick mark (✓) in front of the responses given. There can be multiple responses also.*

1. Do you use home remedies in prevention of URTI?
 - a) Yes
 - b) No
2. If yes , then choose the following home remedies used in prevention of URTI.

Sl.No.	Home Remedies	Yes	No
a)	Eucalyptus oil		
b)	Camphor oil		
c)	Carom seeds		
d)	Chamomile tea		
e)	Cloves		
f)	Garlic		
g)	Ginger		
h)	Honey		
i)	Licorice root		
j)	Pepper mint		
k)	Salt water gargle		
l)	Steam inhalation		
m)	Turmeric milk		
n)	Warm cloth compression		
o)	Warm fluid intake		

3. What type of Home remedies you use for your child suffering from following symptoms?

Sl.No.	Symptom	Constituent	Amount	Frequency
1.	Chest pain			
2.	Coughing			
3.	Dry cough			
4.	Facial pain\ Facial pressure			
5.	Hoarseness of voice			
6.	Nasal congestion			
7.	Painful swallowing			
8.	Sore throat:			

4. Do you have any additional comments or suggestion regarding use of home remedies? If yes , kindly elaborate.

खंड क : सामाजिक जनसांख्यिकीय स्थिति

*टिप्पणी: टूल में निम्नलिखित आइटम केवल व्यक्तिगत जानकारी एकत्र करने के लिए हैं।
कृपया तदनुसार प्रश्न का उत्तर दें*

1. बच्चे की उम्र:
2. बाल लिंग:
3. परिवार में बच्चों की संख्या:
4. परिवार में 5 वर्ष से कम उम्र के बच्चों की संख्या:
5. धर्म:
6. माँ का शैक्षिक स्तर:
7. पिता का शैक्षिक स्तर:
8. माता का व्यवसाय:
9. पिता का व्यवसाय:
10. कुल मासिक पारिवारिक आय:
11. परिवार का प्रकार:
12. डिलीवरी का स्थान:
14. डिलीवरी का प्रकार:
13. बच्चे के टीकाकरण की स्थिति:

खंड ख : सांस संबंधी समस्याओं के संबंध में ज्ञान

टिप्पणी: शोध उपकरण में निम्नलिखित सांस संबंधी समस्या के संबंध में जानकारी एकत्र करने के लिए हैं। कृपया नीचे दी गई निम्नलिखित प्रतिक्रियाओं के आगे सही का निशान (□✓) लगाएं। आप दी गई प्रतिक्रियाओं में से केवल एक प्रतिक्रिया का चयन कर सकते हैं।

1. बच्चे के शरीर का कौन सा अंग साँस लेने में सहायता करता है?
 - i. हृदय
 - ii. गुर्दे
 - iii. यकृत
 - iv. फेफड़े
2. यूआरटीआई किस आयु वर्ग में संदिग्ध है?
 - i. आयु (0-5)
 - ii. आयु (5-10)
 - iii. आयु (10-20)
 - iv. 20 वर्ष से अधिक आयु
3. यूआरटीआई का कारक प्रतिनिधि क्या है ?
 - i. किसी चोट के कारण
 - ii. एच.आई.वी
 - iii. इन्फ्लूएंजा विषाणु
 - iv. जननिक
4. यूआरटीआई का मुख्य कारण क्या है ?
 - i. जीवाणु
 - ii. विषाणु
 - iii. अनुवांशिक अंकुशी
 - iv. कवक
5. यूआरटीआई का जोखिम कारण है ?

- i. छींकने और खांसने से
 - ii. विशेष स्तनपान
 - iii. निष्क्रिय धूम्रपान
 - iv. नियमित रूप से हाथ धोना
6. कौन सा मौसम अक्सर यूआरटीआई के मामलों में वृद्धि से जुड़ा होता है?
- i. बरसाती
 - ii. वसंत
 - iii. ग्रीष्म
 - iv. सर्दी
7. यूआरटीआई का सबसे आम लक्षण है...
- i. सीने में दर्द
 - ii. आँखों में खुजली होना
 - iii. त्वचा पर चकत्ते
 - iv. छींक आना
8. 5 वर्ष से कम उम्र के बच्चों में निम्नलिखित में से कौन सा यूआरटीआई का कारण खतरे का संकेत है?
- i. हल्की खांसी
 - ii. हल्का बुखार
 - iii. नाक बहना
 - iv. सांस लेने में गंभीर कठिनाई
9. निम्नलिखित में से किन बच्चों में यूआरटीआई का खतरे का संकेत नहीं माना जाता है?
- i. रात में खांसी
 - ii. सुस्ती
 - iii. सामान्य भूख
 - iv. तेजी से सांस लेना
10. यूआरटीआई से प्रभावित बच्चों में निम्नलिखित में से कौन सा लक्षण नहीं पाया जाता है?
- i. छींक आना

- ii. गले में खराश
 - iii. उल्टी होना
 - iv. आँखों से पानी आना
11. निम्नलिखित में से कौन सा यूआरटीआई के संचरण का सबसे आम मार्ग है?
- i. वायुवाहित
 - ii. मौखिक मार्ग
 - iii. स्वस्थ व्यक्ति से स्वस्थ व्यक्ति को
 - iv. वेक्टर जनित
12. यूआरटीआई दूषित सतहों के माध्यम से कैसे फैल सकता है?
- i. नंगे हाथों से सतहों को छूना
 - ii. कोहनियों से सतहों को छूना
 - iii. दस्ताने पहनकर सतहों को छूना
 - iv. किसी भी सतह को छूने से संचारित नहीं हो सकता
13. क्या संक्रमित मां द्वारा स्तनपान कराने से बच्चे में यूआरटीआई का संक्रमण हो सकता है?
- i. हाँ
 - ii. नहीं
 - iii. मुझे नहीं पता
 - iv. शायद
14. घरों में यूआरटीआई की सबसे आम रोकथाम है...
- i. हाथ धोने से परहेज करके
 - ii. संक्रमित व्यक्ति के साथ निकट संपर्क
 - iii. संक्रमित व्यक्ति को अलग करना
 - iv. बर्तन साझा करना
15. यूआरटीआई को रोकने का सबसे सरल उपाय है...
- i. सब्जियां खाने से बचें
 - ii. हाथ धोने से परहेज करके

- iii. ठंडे तरल पदार्थों का सेवन करने से
 - iv. छींकते और खांसते समय मुंह और नाक को ढंकना
16. माता-पिता बच्चों में यूआरटीआई संचरण के जोखिम को कैसे कम कर सकते हैं?
- i. बीमार परिवार के सदस्यों को बर्तन साझा करने की अनुमति देना
 - ii. बार-बार हाथ धोना
 - iii. घनिष्ठ शारीरिक संपर्क को प्रोत्साहित करना
 - iv. टीकाकरण से बचना
17. किस उम्र के बच्चों में यूआरटीआई के लक्षणों को कम करने के लिए वेपर रब उत्पाद का उपयोग करने की अनुशंसा नहीं की जाती है?
- i. 2 वर्ष के अंतर्गत आयु
 - ii. 2-3 वर्ष के बीच
 - iii. 3 वर्ष से ऊपर
 - iv. बच्चों के लिए अनुशंसित नहीं
18. यूआरटीआई से पीड़ित बच्चे को वेपर रब कैसे लगाना चाहिए?
- i. छाती पर लगाएं
 - ii. नाक के अंदर लगाएं
 - iii. कान पर लगाएं
 - iv. पैरों पर रगड़ें
19. यूआरटीआई से पीड़ित बच्चे को किस प्रकार का भोजन देना चाहिए?
- i. कार्बोनेटेड भोजन
 - ii. मसालेदार भोजन
 - iii. मीठा भोजन
 - iv. गर्म और पौष्टिक भोजन
20. यूआरटीआई के दौरान प्रतिरक्षा प्रणाली को मजबूत करने के लिए कौन सा पोषक तत्व महत्वपूर्ण है?
- i. विटामिन ए
 - ii. विटामिन सी

iii. पोटैशियम

iv. मैग्नीशियम

21. निम्नलिखित में से कौन सा टीका बच्चों में यूआरटीआई को रोकता है?

i. चिकन पॉक्स का टीका

ii. इन्फ्लूएंजा टीका

iii. एडेनोवायरस वैक्सीन

iv. एंथ्रेक्स टीका

22. बच्चों में तीव्र श्वसन पथ संक्रमण को रोकने के लिए टीकाकरण अनुसूची में से कौन सा टीकाकरण इस्तेमाल किया जाना चाहिए?

i. टीटी और ओपीवी

ii. पीसीवी और एमआर

iii. जेई और विटामिन ए

iv. ओपीवी और हेपेटाइटिस

23. निम्नलिखित में से कौन सी यूआरटीआई की प्रमुख जटिलता है?

i. एड्स

ii. टीबी

iii. नाक बहना

iv. निमोनिया

24. यूआरटीआई का प्रमुख लक्षण जो निमोनिया की ओर ले जाता है...

i. चेहरे का दर्द और शरीर में दर्द

ii. सिरदर्द और चक्कर आना

iii. छींक आना और नाक में खुजली होना

iv. गंभीर खांसी और सीने में दर्द

25. कौन सा आयु वर्ग निमोनिया के प्रति अधिक संवेदनशील है?

i. किशोर

ii. 2 वर्ष से कम उम्र के बच्चे

iii. 3-5 वर्ष की आयु के बच्चे

- iv. 5 वर्ष से अधिक उम्र के बच्चे
26. 5 वर्ष से कम उम्र के बच्चों में किस प्रकार का निमोनिया सबसे आम है?
- i. बैक्टीरियल निमोनिया
 - ii. फंगल निमोनिया
 - iii. माइकोप्लाज्मा निमोनिया
 - iv. वायरल निमोनिया
27. बच्चों में निमोनिया के संचरण का प्राथमिक तरीका है...
- i. हवा के माध्यम से
 - ii. जंक फूड के माध्यम से
 - iii. वेक्टर के माध्यम से
 - iv. पानी के माध्यम से

खंड ग: यूआरटीआई की रोकथाम में उपयोग किए जाने वाले घरेलू उपचार

नोट: निम्नलिखित प्रतिक्रिया केवल यूआरटीआई के घरेलू उपचार के बारे में जानकारी एकत्र करने के लिए हैं। कृपया दिए गए उत्तरों के आगे सही का निशान (✓) लगाएं। निम्नलिखित प्रतिक्रिया के एक से अधिक उत्तर भी हो सकते हैं।

1. क्या आप यूआरटीआई की रोकथाम के लिए घरेलू उपचार का उपयोग करते हैं?
- i. हाँ
 - ii. नहीं

यदि हां, तो यूआरटीआई की रोकथाम में उपयोग किए जाने वाले निम्नलिखित घरेलू उपचार चुनें।

क्रम संख्या	घरेलू उपचार	हाँ	नहीं
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	नीलगिरी का तेल		
	कपूर का तेल		
	अजवायन		
	कैमोमाइल(बबूने का फूल) चाय		
	लौंग		
	लहसुन		
	अदरक		
	शहद		
	मुलैठी की जड़		
	काली मिर्च		
	नमक के पानी से गरारा		
	भाप लेना		
	हल्दी वाला दूध		
	गर्म सिकाई		
	गर्म तरल पदार्थ का सेवन		

2. निम्नलिखित लक्षणों से पीड़ित अपने बच्चे के लिए आप किस प्रकार के घरेलू उपचार का उपयोग करते हैं?

क्रम संख्या	लक्षण	प्रयोग किये गये उपाय	मात्रा	संख्या आवृत्ति
1.	छाती में दर्द			
2.	खाँसी			
3.	सूखी खाँसी			
4.	चेहरे का दर्द			
5.	आवाज का भारी होना			
6.	नाक बंद होना			
7.	निगलने में दर्द होना			

8.	गले में खराश			
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9. क्या आपके पास घरेलू उपचारों के उपयोग के संबंध में कोई अतिरिक्त टिप्पणी या सुझाव है? यदि हां, तो कृपया निर्दिष्ट करें:



