**DECLARATION BY THE STUDENT** 

I Deepika Bajwan, declare that the thesis entitled "A Study on barriers related to

prevention and management of acute respiratory infection among mothers of

under five children with a view to develop and evaluate a need based

interventional package in selected rural community of Delhi" is my own work

conducted under the supervision of Dr. Kamli Prakash (Supervisor) and Dr. Jayanti

Semwal (Co-Supervisor) at Himalayan College of Nursing, Swami Rama Himalayan

University, Dehradun, approved by Departmental Research Committee (DRC) on

8<sup>th</sup> March 2019.

I further declare that to the best of my knowledge the thesis does not contain any part

of my work which has been submitted for the award of any degree either in this

University or in any other University/Deemed University without proper citation.

**Besides this:** 

I have successfully completed the Coursework of one semester as per UGC

Regulations–2016 norms. I have also given a Pre-Ph.D. presentation and successfully

incorporated the changes suggested on the basis of feedback and comments received.

I have also published one research paper in a journal from my research work of the

thesis and presented two papers in Conferences/Seminars and have produced evidence

for the same in form of reprint of the paper and the presentation certificates.

Red

Deepika Bajwan Registration No

DD20185010013

i

## **CERTIFICATE**

This is to certify that Deepika Bajwan in the specialization of Nursing Sciences of this University has fulfilled the requirements prescribed for the Ph.D. Degree of the Swami Rama Himalayan University, Dehradun. The thesis entitled, "A Study on barriers related to prevention and management of acute respiratory infection among mothers of under five children with a view to develop and evaluate a need based interventional package in selected rural community of Delhi" was carried out under my direct supervision. No part of the thesis was submitted for the award of any degree or diploma prior to this date.

\* Clearance was obtained from the University Ethics Committee/University Animal Ethics for carrying out the study.

Dr. Kamli Prakash

**Professor** 

Himalayan College of Nursing

Swami Rama Himalayan University

## **CERTIFICATE**

This is to certify that Deepika Bajwan in the specialization of Nursing Sciences of this University has fulfilled the requirements prescribed for the Ph.D. degree of the Swami Rama Himalayan University, Dehradun. The thesis entitled, "A Study on barriers related to prevention and management of acute respiratory infection among mothers of under five children with a view to develop and evaluate a need based interventional package in selected rural community of Delhi" was carried out under my direct supervision. No part of the thesis was submitted for the award of any degree or diploma prior to this date.

\* Clearance was obtained from the University Ethics Committee/ University Animal Ethics for carrying out the study.

Dr. Jayanti Semwal

**Professor** 

Department of Community Health Medicine Swami Rama Himalayan University

## **CERTIFICATE FOR PLAGIARISM**

It is certified that Ph.D. thesis entitled, "A Study on barriers related to prevention and management of acute respiratory infection among mothers of under five children with a view to develop and evaluate a need based interventional package in selected rural community of Delhi" by Deepika Bajwan has been examined by us. We undertake & declare that:

- a) This thesis has significant new work/knowledge as compared to already publish or are under consideration to be published elsewhere. No sentence, equation, diagram, table, paragraph or section has been copied verbatim from previous work unless it is placed under quotation marks and duly referenced.
- **b)** The work presented is original and own work of the author (i.e., there is no plagiarism). No ideas, processes, results, or words of others have been presented as the author's own work.
- c) There is no fabrication of data or results which have been compiled/analyzed.
- **d)** There is no falsification by manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
- e) The thesis has been checked using TURNITIN/software as suggested by UGC (copy of originality report attached).

Deepika Bajwan Registration No. DD20185010013 Dr. Kamli Prakash Supervisor Dr. Jayanti Semwal Co- Supervisor A STUDY ON BARRIERS RELATED TO
PREVENTION AND MANAGEMENT OF ACUTE
RESPIRATORY INFECTION AMONG MOTHERS
OF UNDER FIVE CHILDREN WITH A VIEW TO
DEVELOP AND EVALUATE A NEED BASED
INTERVENTIONAL PACKAGE IN SELECTED
RURAL COMMUNITY OF DELHI".



### Thesis Submitted in Partial Fulfillment of the Award of Degree of Doctor of Philosophy In Nursing Sciences

#### SUBMITTED BY DEEPIKA BAJWAN

CO-SUPERVISOR DR. JAYANTI SEMWAL SUPERVISOR

DR. KAMLI PRAKASH

Swami Rama Himalayan University Swami Ram Nagar, Jolly Grant, Dehradun

2024

1

fravas

Junusa

Berl

Director Research
Research and Development Cell
Swami Rama Himalayar Jniversity
Swami Ram Nagar, Jolly Grant
Dehradun-248016, Uttarakhand, India

A Study on Barriers Related to Prevention and Management of Acute Respiratory Infection Among Mothers of Under Five Children With a View to Develop and Evaluate a Need Based Interventional Package

by Deepika Bajwan Bajwan

Submission date: 29-Jul-2024 12:48PM (UTC+0530)

Submission ID: 2424242469

File name: Deepika, ATR\_Finl\_thesis.pdf (11.12M)

Word count: 26783 Character count: 139979

Director Research
Research and Development Cell
Swami Rama Himalayar Jniversity
Swami Ram Nagar, Jolly Grant
Dehradun-248016, Uttarakhand, India

A Study on Barriers Related to Prevention and Management of Acute Respiratory Infection Among Mothers of Under Five Children With a View to Develop and Evaluate a Need Based Interventional Package

ORIGINA	ALITY REPORT	λ			
	0% ARITY INDEX Y SOURCES  reposito Internet Source	7% INTERNET SOURCES  ry-tnmgrmu.ac.	9% PUBLICATIONS	1% STUDENT PA	PERS
2	the Effection Know Preventi Among U Primary Taluk", R	Suresh Chand ctiveness of Self ledge of Mothe on of Acute Res Jnder-Five Child Health Centers ajiv Gandhi Uni (India), 2023	f Instructiona er Regarding spiratory Infed dren in a Sele of Bengaluru	l Module ction cted Rural	1%
3		isham Monika.			<1%

Devi, Keisham Monika. "A Study to Assess the Effectiveness of Planned Teaching Program on Knowledge Regarding Selected Acute Illness and Its Management in Under Five Children Among Mothers of Selected Urban Slum Area at Bengaluru", Rajiv Gandhi University of Health Sciences (India), 2023

nations forward

Director Research
Research and Development Cell
Swami Rama Himalayer Jniversity
Swami Ram Nagai, Jolly Grant
Dehradun-248016, Uttarakhand, India

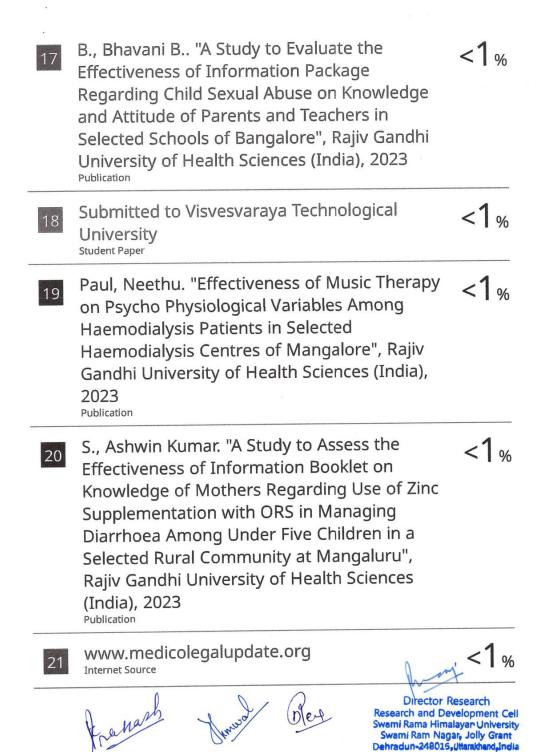
4	Subrahmanyam, Namitha. "A Study to Evaluate the Effectiveness of Interventional Package on Menopause Related Problems and Quality of Life Among Perimenopausal Women in Kerala", Rajiv Gandhi University of Health Sciences (India), 2023	<1%
5	www.msjonline.org	<1%
6	www.researchgate.net Internet Source	<1%
7	ijone.org Internet Source	<1%
8	Biswas, Tania. "A Study to Evaluate the Effectiveness of Sim on Knowledge Regarding Prevention and Home Management of Leucorrhoea Amoung Adolescents Girls in a Selected (Pu) Colleges in Bangalore, Karnataka", Rajiv Gandhi University of Health Sciences (India), 2023	<1%
9	ijisrt.com Internet Source	<1%
10	Research and I Swami Rama His Swami Rama N	Research Development Cell malayar University agar, Jolly Grant 16, Ultarakhand, India

Acrylic Resin Denture Base Material" - An in Vitro Study", Rajiv Gandhi University of Health Sciences (India), 2023

11	WWW.scilit.net Internet Source	<1%
12	Gogoi, Nirmali. "A Study to Assess the Effectiveness of Self Instructional Module on Home Management of Diarrhea Among Mothers of Under Five Children in Selected Hospital, Bangalore", Rajiv Gandhi University of Health Sciences (India), 2023	<1%
13	nur.tanta.edu.eg Internet Source	<1%
14	www.globalscientificjournal.com	<1%
15	lib.dr.iastate.edu Internet Source	<1%
16	K. D., Dayana. "A Quasi Experimental Study on Effectiveness of Ice Cube Application on Pain and Ecchymosis among Patients Receiving Heparin Subcutaneously in Selected Hospital Mangalore", Rajiv Gandhi University of Health Sciences (India), 2023 Publication	<1%
		M

ix

Director Research Research and Development Cell Swami Rama Himalayar Jniversity Swami Ram Nagar, Jelly Grant Dehradun-248016, Uttarakhand, India



Varghese, Priya. "A Study to Assess the <1% Effectiveness of Information Booklet on Knowledge About Traffic Rules Among Young Adult Aged 16-25 Years in Selected Rural Community of Udupi District", Rajiv Gandhi University of Health Sciences (India), 2023 Publication e-journal.unair.ac.id <1% Internet Source Kakade, Sangeeta. "A Study to Assess 24 Knowledge, Attitude and Practices on Home Remedies of Acute Respiratory Tract Infection Among Mothers of Under Five Children in Selected Urban Slums of Belgaum", Rajiv Gandhi University of Health Sciences (India), 2023 Publication <1% Lakra, Seema. "A Study to Assess the 25 Effectiveness of Planned Teaching Programme on Prevention of Carcinoma of Cervix Among Multiparous Women in Selected Hospitals at Bidar", Rajiv Gandhi University of Health Sciences (India), 2023 Publication C., Bharathi. "A Study to Assess Knowledge <1% 26 and Practice Among Mothers of Under Five Children Regarding Prevention of Home Tragedies in a Selected Urban Slum Areas in Director Research Research and Development Cell Swami Rama Himalayar University Swami Ram Nagar, Jolly Grant Dehradun-248016, Ultarakhand, India

Bangalore with a View to Develop an Information Guide Sheet", Rajiv Gandhi University of Health Sciences (India), 2023

	Publication	
27	Kotnalli R., Mahadevappa. "An In-Vitro Study to Evaluate the Anti-Bacterial and Anti Fungal Effect of Dhupana Yoga in Hospital Area", Rajiv Gandhi University of Health Sciences (India), 2023	<1%
28	Arab World English Journal, Muhammad Ishtiaq, Zuraina Ali, Muhammad Salem. "An Experimental Study of the Effect of Student Teams Achievement Divisions (STAD) on Vocabulary Learning of EFL Adult Learners", SocArXiv, 2017	<1%
29	Submitted to University of New South Wales Student Paper	<1%
30	en.unionpedia.org	<1%
31	www.researchsquare.com Internet Source	<1%
32	atharvapub.net Internet Source	<1%
33	www.ijphrd.com Internet Source	×1%
	Research and I Swami Rama Hi Swami Ram N	r Research Development Cell malayan University agar, Jolly Grant 16,0ttarakhand,India

Research and Development Cell Swami Rama Himalayar University Swami Ram Nagar, Jolly Grant Dehradun-248016, Uttarakhand, India

39	Jacob, Deepa. "A Quasi Experimental Study to Evaluate the Effectiveness of the Structured Teaching Programme on the Familial Concerns Among the Mothers of the Mentally Challenged Children in the Selected Special Schools in Bangalore, Karnataka", Rajiv Gandhi University of Health Sciences (India), 2023	<1%
40	Scirp.org Internet Source	<1%
41	www.ijiras.com Internet Source	<1%
42	T. T., Saramma. "A Study to Assess the Knowledge of Mothers of Underfive Children Regarding Home Management of Diarrhoeal Diseases in Selected Areas of Hasserghatta- PHC, Bangalore", Rajiv Gandhi University of Health Sciences (India), 2023	<1%
43	auctoresonline.org Internet Source	<1%
44	M. Perez-Castellano. "Mannose-binding lectin does not act as an acute-phase reactant in adults with community-acquired pneumococcal pneumonia", Clinical & Experimental Immunology, 8/2006  Director F. Research and De Swemi Ram Him. Swami Ram Nac Dehradun-248016	velopment Cell alayar Jniversity ar, Jolly Grant

45	pjph.org Internet Source	<1%
46	Sulaiman Umar, Sabiu Abdulkarim. "Breast Cancer Awareness and Practice of Self-Breast Examination among Biochemistry Students in Federal University Birnin Kebbi Nigeria", Indian Cancer Awareness Journal, 2024	<1%
47	Das, Nikita. "Effect of a Thirst Bundle Versus Ice on Thirst Intensity and Dryness of Mouth Among Post Operative Patients in a Selected Hospital, Bengaluru", Rajiv Gandhi University of Health Sciences (India), 2023	<1%
48	M., Praveena. "A Study to Evaluate the Effectiveness of Structured Teaching Programme on Knowledge Regarding Prevention of Nosocomial Infection in Children Among Staff Nurses in Selected Paediatric Hospitals, Bengaluru", Rajiv Gandhi University of Health Sciences (India), 2023	<1%
49	mobilization.org.in Internet Source	<1%
50	www.worldwidejournals.com Internet Source	<1%
	Director for Research and De Swami Ram Hama Swami Ram Nag Dehradun-248016,	velopment Ce llayar Iniversit ar, Jolly Grant

- Charles Jenya Soko, Yi-Hao Weng, Dumisani Enricho Nkhoma, Owen Nkoka, Wanda Estinfort, Hung-Yi Chiou, Ya-Wen Chiu.
  "Relationship between cooking fuels and health among under-5 children in Malawi: a nationwide time-trend survey from 2000 to 2016", Population and Environment, 2024
- Anish Paul. "A Study to Assess the
  Effectiveness of Planned Teaching Program
  on Knowledge and Practice of Pediatric
  Nurses Regarding Post Operative Pain
  Management in a Selected Hospital,
  Bangalore", Rajiv Gandhi University of Health
  Sciences (India), 2023
- J., Venkatesh Murthy. "A Study to Evaluate the Effectiveness of Structured Teaching Programme Among Mothers of Children with Tuberculosis on Home Care Management in Selected DOTS Centers, Bangalore City", Rajiv Gandhi University of Health Sciences (India), 2023
  Publication

M., Radhika. "Knowledge and Practice of Auxiliary Nurse Midwives (ANMS) Regarding Reproductive and Child Health Services", Rajiv

Director Research Research and Development Celi Swami Rama Himalayar University Swami Ram Nagar, Jolly Grant Dehradun-248016,Uttarakhand,India

<1%

<1%

Gandhi University of Health Sciences (India), 2023

Publication

Exclude quotes

On

Exclude matches

< 14 words

Exclude bibliography On

was

Res

Director Research Research and Development Cell Swami Rama Himalayar University Swami Ram Nagar, Jelly Grant Dehradun-248016, Uttarakhand, India

xvii

# CERTIFICATE OF VIVA VOCE OF Ph.D. STUDENT

A STUDY ON BARRIERS RELATED TO
PREVENTION AND MANAGEMENT OF
ACUTE RESPIRATORY INFECTION
AMONG MOTHERS OF UNDER FIVE
CHILDREN WITH A VIEW TO
DEVELOP AND EVALUATE A NEED
BASED INTERVENTIONAL PACKAGE
IN SELECTED RURAL COMMUNITY OF
DELHI

Submitted by

Deepika Bajwan DD20185010013

For the Degree of

Doctor of Philosophy
in
Nursing Sciences
is evaluated and approved by

**CO-SUPERVISOR** 

**SUPERVISOR** 

**EXAMINER** 

**Undertaking for the Submission of Ph.D. Thesis** 

I solemnly declare that the research work presented in the thesis titled "A Study on

barriers related to prevention and management of acute respiratory infection

among mothers of under five children with a view to develop and evaluate a need

based interventional package in selected rural community of Delhi" is solely my

research work with no significant contribution from any other person. Small

contribution/help wherever taken has been duly acknowledged and the complete

thesis has been written by me.

I understand the zero-tolerance policy of the Swami Rama Himalayan University

(SRHU) towards plagiarism. Therefore, I as an author of the above titled thesis,

declare that no portion of my thesis has been plagiarized and any material used as

reference is properly referred/cited.

I undertake that the material of the thesis submitted in hardbound and softcopy are the

same and no alteration has been done. If found guilty in the future University may

take any action against me.

I undertake that if I am found of any plagiarism in the above titled thesis even after

award of Ph.D. degree, the university reserves the rights to withdraw/revoke my Ph.D.

degree.

Name: Deepika Bajwan

Registration no.: DD20185010013

Address: Swatantra Nagar, North Delhi

xix

#### **ACKNOWLEDGEMENTS**

I am wholeheartedly grateful to Almighty Lord for blessing me with his wisdom, understanding, courage and strength at each moment whenever I felt am feeble and cannot progress ahead.

I express my heartfelt gratitude to **Dr. Vijay Dhasmana ji**, the Honorable Vice Chancellor and **Dr. Vijendra Chauhan**, the Honorable Pro-Vice Chancellor of Swami Rama Himalayan University, for providing me with the invaluable opportunity to successfully accomplish my Ph.D. journey at SRHU.

I am thankful to Dr. Renu Dhasmana, Director of Nursing and Dr. Kathleen McKeehan, Nursing Advisor at SRHU, for their unwavering support throughout the completion of this study. With profound honor, I express my heartfelt gratitude to my supervisor, Dr. Kamli Prakash, Professor and my Co-Supervisor, Dr. Jayanti Semwal, Professor at Himalayan College of Nursing, for their invaluable help, support, encouragement, and motivation at every step of the study. I owe my deepest gratitude to both of them for their patience, perseverance, and continuous guidance from conceptualization to the completion of my Ph.D. thesis.

I am obliged to **Dr. Sanchita Pugazhendi**, Professor cum Principal, Himalayan College of Nursing, Jolly Grant, Dehradun, for providing me an opportunity to commence this study, timely suggestions and guidance, and facilitating with necessary administrative permission.

My sincere thanks extend to **Dr. Bindu Dey, Director of Research & Development Cell at SRHU,** for providing necessary administrative and logistic support at Swami Rama Himalayan University. Additionally, I would like to express

my gratitude to all members of the DRC in Nursing Sciences and Validators for sparing their time and offering valuable suggestions.

I would like to extend my thanks to **Block development officer and Gram Pradhans** of all the selected villages for their kindness in permitting and facilitating the study.

It's a pleasure to express my heartfelt thanks to Mr. Hem Chandra Sati, Statistician and Ms. Ammu MV Statistician, their enduring patience and valuable inputs in data analysis. I also would like to thank specially all the experts who have validated the tools and the intervention.

My sincere thanks go to all **mothers of under five children** for willingly participating in the study for extending their cooperation and time during the entire study period. I would also like to appreciate the cooperation and support given by ASHA, Aganwadi workers, community leaders and others.

I am sincerely grateful to my present Dean at Galgotias School of Nursing, Greater Noida, for granting me permission to pursue my Ph.D. at Swami Rama Himalayan University.

I extend my heartfelt gratitude to my parents, Mr. Sudesh Kumar Bajwan and Mrs. Kamlesh Devi for their support and blessings.

My heartfelt gratitude to **Mr. Mahaveer Singh Panwar** for his exceptional printing services, meticulous attention to detail, and prompt assistance in preparing materials related to this research.

Once again, I would like to express my gratitude to all those who have directly and indirectly contributed in the completion of this work.

Deepika Bajwan

# TABLE OF CONTENTS

S.No.	Title	Page No.
1	Declaration by students	i
2	Certificate by the Supervisor	ii
3	Certificate by the Supervisor	iii
4	Certificate of Plagiarism	iv
5	Antiplagiarism Software Report of PhD	v-xvii
6	Certificate of successful completion of viva-voce	xviii
7	Undertaking for submission of PhD Thesis	xix
8	Acknowledgements	xx-xxi
9	Table of content	xxii-xxvi
10	List of figures	xxvii-xxviii
11	List of tables	xxix-xxx
12	List of Annexures	xxxi
13	Abbreviations	xxxii
14	Abstract	xxxiii-xxxiv
15	Chapter 1- Introduction	1-13
	Background of the Study	1-3
	Need for the Study	4-7
	Statement of the problem	7
	Objectives	7
	Hypothesis	8
	Operational Definition	8-10
	Conceptual Framework	10-12
	Assumptions	13

	Delimitations	13
	Chapter Summary	13
16	Chapter II- Review of Literature	14-31
	Identification of barriers and challenges faced by mothers for prevention and home-based management of acute respiratory infection	14-16
	Prevalence and risk factors of ARI in under five children	16-24
	Knowledge and practice of mothers regarding prevention of ARI among under five children	24-28
	Effectiveness of intervention program on occurrence of ARI among under five children	28-31
	Chapter Summary	31
17	Chapter III-Research Methodology	32-53
	Research Approach	32
	Research Design	33
	Research Variables	34
	Research Settings	34
	Population	35
	Sample & Sample Size	35
	Sample size calculation	35-36
	Sampling criteria	37
	Sampling technique	37-38
	Data collection tools	38-39
	Description of the tools	42-45
	Validity of the tools	45
	Reliability	46
	Translation of tool	46

	Pretesting of tools	46
	Description of Intervention Package	46-47
	Ethical Consideration	47
	Pilot study	47
	Data Collection Process	48-51
	Plan of data analysis	53
	Chapter Summary	53
18	Chapter IV- Analysis & Interpretation of Data	54-97
	Socio-demographic characteristics of study participants of focus group discussion	55-56
	Qualitative Analysis.	56-69
	Distribution of children based on risk factors of	69-77
	ARI.	
	Description of level of Environmental condition of	77-78
	family.	
	Socio-demographic characteristics of under five	78-79
	children and comparison for homogeneity between	
	experimental and control group	
	Sociodemographic characteristics of mothers and	79-81
	comparison for homogeneity between	
	experimental group and control group	
	Comparison of knowledge score of mothers	82
	between experimental and control group	
	Comparison of domain wise knowledge scores of	83-84
	mothers within and between experimental and	
	control group	
	Comparison of practice score of mothers between	85-86
	experimental and control group	

Comparison of domain wise practice scores of	87-88
mothers within and between experimental and	
control group	
Comparison of presence of symptoms of ARI in	89-90
	89-90
under five children between experimental and	
control group at baseline	
Comparison of frequency and percentage of ARI	91-95
symptoms in children between experimental and	
control group	
Comparison of number of episodes of ARI of	96-97
children between experimental and control group	
in six months before and after intervention	
Chapter Summary	97
19 Chapter V-Discussion	98-104
Barriers related to prevention and home	98-99
management of acute respiratory infection among	
mothers of under five children	
Risk factors of acute respiratory infection in under	99-100
five children	
Effectiveness of need based interventional	101-102
package on knowledge of mothers	
Effectiveness of need based interventional	102-103
package on practice of mothers	
Effectiveness of need based interventional	103-104
package on frequency of symptoms and number of	
episodes of acute respiratory infection in under	
five children	
Strength of the study	104

	Limitations	104
	Chapter Summary	104
20	Chapter VI- Conclusions	105-107
	Implications of the study	106
	Recommendations for Further/Future Research	106-107
	Chapter Summary	107
21	Chapter VII- Summary	108-112
	Results	110-112
	Chapter Summary	112
22	References	113-128
23	Appendices	129-226

# **LIST OF FIGURES**

Figure	Figure Title	Page
No.		No.
1	Conceptual framework adopted from Health Belief	12
	Model (Rosenstock, 1974)	
2	Map of the study site	40
3	Schematic representation of sampling technique	41
4	Schematic representation of data collection procedure	52
5	Bar diagram representing frequency distribution of	72
	pre-lacteal feed	
6	Bar diagram representing frequency distribution of	73
	history of any other illness in child in past six months	
7	Bar diagram representing frequency distribution of	74
	family history of respiratory infection in past six	
	months	
8	Bar diagram representing frequency distribution on	75
	indoor smoking done by family members	
9	Bar diagram representing frequency distribution based	76
	on pets inside house	
10	Bar diagram representing frequency distribution on	77
	smoky fuel used for cooking	
11	Bar diagram representing pre-existing Knowledge	85
	level of mothers	
12	Bar diagram representing pre-existing practice level of	89
	mothers	

13	Line diagram representing frequency distribution of	92	
	presence of nasal discharge among children in		
	Experimental and control group		
14	Line diagram representing frequency distribution of	93	
	presence of sore throat among children in experimental		
	and control group		
15	Line diagram representing frequency distribution of	94	
	presence of cough among children in experimental and		
	control group		
16	Bar diagram representing percentage of presence of	95	
	ARI in children in experimental and control group		
17	Bar diagram representing the percentage distribution	97	
	for absence of ARI episodes in six months before and		
	after intervention in experimental and control group		

# LIST OF TABLES

Figure	Title	Page
No.		No.
1	Socio-demographic characteristics of study	55
	participants of focus group discussion	
2	Qualitative Analysis.	57-61
3	Frequency and percentage distribution of children	69-70
	based on risk factors of ARI	
4	Description of level of Environmental condition of	
	family.	
5	Socio-demographic characteristics of under five	78
	children and comparison for homogeneity between	
	experimental and control group.	
6	Sociodemographic characteristics of mothers and	79-80
	comparison for homogeneity between experimental	
	group and control group	
7	Comparison of knowledge score of mothers between	82
	experimental and control group	
8	Comparison of domain wise knowledge scores of	83
	mothers within and between experimental and control	
	group	
9	Comparison of practice score of mothers between	86
	experimental and control group	
10	Comparison of domain wise practice scores of mothers	87
	within and between experimental and control group	

11	Comparison of presence of symptoms of ARI in under	
	five children between experimental and control group	
	at baseline	
12	Comparison of frequency and percentage of ARI	91
	symptoms in children between experimental and	
	control group	
13	Comparison of number of episodes of ARI in children	96
	between experimental and control group in six months	
	before and after intervention	

# LIST OF ANNEXURES

Appen.	Title	Page
No.		No.
1	Ethical Clearance Certificate - SRHU	129
2	Permission Letter to conduct main research study	130
3	Letter seeking expert's opinion from validators for	
	content validity of the tool	
4	Content Validation certificate	132
5	Informed Consent form for participants	133-136
6	Data Collection Tools	137-174
7	Need based interventional package	175-196
8	Information Booklet	197-207
9	List of experts for tool validation and intervention	208
10	List of formulas used for analysis and interpretation	209
11	CTRI registration	210
12	Pictures of data collection	211-214
13	Paper Publication	215-224
14	Paper presentation certificate	225-226
15	Master data sheet	227-

# LIST OF ABBREVIATIONS

Terminology	Descriptions
WHO	World Health Organization
NFHS	National Family Health Survey
UNICEF	United Nations International Children's Emergency
	Fund
NCR	National Capital Region
UT	Union Territory
ARI	Acute respiratory infection
URTI	Upper respiratory tract infection
LRTI	Lower respiratory tract infection
OPD	Outpatient department
SD	Standard deviation
0/0	Percentage
df	Degree of Freedom
n	Total number of samples
et al	And all others