

# Knowledge and Practice Regarding Hand Washing among Mothers of Under Five Children in Selected Rural Community Area of Dehradun

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## ABSTRACT

Hand hygiene is effective process of removing the harmful microorganism that is present on hands. Poor hand hygiene practice is one of the major problem which cause severe infection and even death among children. It was estimated that 88 percent of diarrheal deaths worldwide was attributable to unsafe water, inadequate sanitation and poor hand hygiene. Good hand washing practice of mothers a very important public health aspects to prevent communicable disease among under five children. Various research studies have highlighted that simple act of hand washing and basic hygiene behavior could prevent diarrhea, acute respiratory infections and skin infections among children.

**Objective:** To assess the level of knowledge and Practice of under-five children's mothers regarding hand washing.

**Methodology:** The quantitative research survey was conducted on 105 under-five children's mothers in Mazri Grant village, Dehradun. Knowledge Questionnaires and Practice Checklist was used by researcher for collection of information. Ethical and administrative permission was taken from higher authority of SRHU.

**Results:** Research finding highlight that 67.6. % mothers were in age group of 19-29 year. More than fifty percentage (58.1%) mothers informed that their children had experienced of diarrhea in past six months. Nearby 65.8% mothers have good knowledge about hand washing but only 34.3% mothers were doing good practice of hand washing.

**Conclusion:** Majority of the mothers do not have adequate practices regarding hand washing in day to day life.

**KEYWORDS:** under five children's mother, Hand washing, Knowledge and Practice

## INTRODUCTION

Hygiene can be defined as cluster of activities which is executed to maintain health of individual and family. Hygiene play a main role to safeguard the transmission of infectious diseases from one to another in community area.<sup>1</sup> According to WHO "Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases."<sup>2</sup>

Hand washing with soap and water is one of safe, cheap, less time consuming and most effective measures against infectious disease, It can be adopted by any socio-economic class in community area.<sup>3</sup> The main purpose of hand washing is to remove dirt as well as germs and very effective method to control infection and its transmission to others.<sup>4</sup>

Hand washing with soap could protect about 1 out of every 3 young children who get sick with diarrhea and almost 1 out of 5 young children with respiratory infections like pneumonia<sup>(5-6)</sup>.

According to WHO estimates, 3.8 million children aged less than five die each year from diarrhea and acute respiratory tract infections. An estimated 88 percent of diarrheal deaths worldwide are attributable to unsafe water, inadequate sanitation and poor hygiene<sup>(7)</sup>.

In developing countries approximately 2 million people, the vast majority of whom are under-five children, die from diarrhea each year<sup>(8)</sup>.

Mothers are more engaged in personal care and feeding of their under-five children. Inadvertently, their hands pick up micro-organisms and other materials that may be harmful to children. So mother should have follow proper practice of hand washing. In general we can say 'critical moments' for hand washing include after using the toilet, cleaning a child up following defecation, before preparing food and before eating<sup>(9)</sup>.

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Hand washing, if regularly and properly practiced by under 5 children's mothers, it will go a long way in reducing the prevalence of infectious diseases, hospital admissions due to these diseases and also mortality among the under 5 years old children, thereby making them grow well and healthy<sup>(10)</sup>.

In 2006 study was conducted in Idumebo (Nigeria) a rural community found that 30% of mothers administer complimentary feeds to their infants without proper hand washing<sup>(11)</sup>.

Effective hand washing involves the brief rubbing together of all surfaces of lathered hands, followed by rinsing under a stream of water. This action suspends microorganisms and mechanically removes them by rinsing with water thereby reducing the number of microbes on the hands in most situations<sup>(12)</sup>.

Globally, hand washing day is observed every year on 15<sup>th</sup> October. In today's period hand washing become a very crucial part of or habit of every one's life no matter whether he or she ordinary person or professional.<sup>(13)</sup>

Understanding usual hand washing is an important baseline assessment for any programme intended to improve sanitation. Keeping this in view present study was taken up to study the knowledge attitude practices relating to hand washing of mothers. Thus, there is an important link between poor hand washing practices of mothers and the

morbidity of children less than 5 years of age especially those living in rural communities.

#### OBJECTIVES:

- To assess the level of knowledge of under-five children's mothers regarding hand washing.
- To assess the level of practice of under-five children's mothers regarding hand washing.

#### MATERIAL AND METHODS:

The present descriptive survey research study was carried out among 105 under five children's mothers which were selected by purpose sampling technique in selected community area of Dehradun. Research variable include in study was Knowledge and practice regarding hand washing. The tools used for study were structured demographic Performa, Knowledge Questionnaires and Self Reported Practice Checklist. Research tools was validated from five experts in nursing For pretest questionnaire were administered to 5 under five children mother's. The reliability for knowledge questionnaire was obtained by split half method ( $r=0.85$ ) and practice test retest method which was found to be reliable at 0.96 for practice. Ethical permission was obtained from the concerned institutional authorities and prior informed consent was taken from the study participants. The research data was collected and enter in MS Excel. Frequency and percentages distribution were used to analyses categorical variables of study.

#### RESULTS:

**Table No. 1: Demographic characteristics of under five children's mother by Frequency and Percentage. n= 105**

S. No.	Demographic characteristics	Frequency (f)	Percentage (%)
1.	Mother age (in Year)		
	a) 20-29	71	67.6
	b) 30-40	34	32.4
2.	Educational Status of Mother		
	a) No formal education	4	3.8
	b) Primary	23	21.9
	c) Secondary	44	41.9
	d) Graduate	34	32.4
3.	Occupation		
	Non working	89	84.8
	Working	16	15.2
4.	Type of family		
	Nuclear	49	46.7
	Joint	56	53.3
5.	Number of under five children in family		
	1	87	82.9
	2	18	17.1
6.	Source of water		
	Tank	3	2.9
	Tap water	102	97.1
7.	Source of information		
	Family members	7	6.7
	Mass media	73	69.5
	Health worker	25	23.8
8.	Does your child going to school/ Anganwadi		
	a) Yes	54	51.4
	b) No	51	48.6
9.	Diarrhea incidence in past 6 months		
	a) Yes	61	58.1
	b) No	44	41.9

Most (67.6%) of mothers was in age of 20-29 years, 41.9% mothers were secondary educated, majority of the mothers (84.8%) were non-working, Nearly 43.8% mothers were living in joint family and most of the mothers (82.9%) had only one child in family, Majority of mothers (97.1%) used tap water in their houses, Nearly three fourth (69.5%) got some basic knowledge regarding hand washing from mass media. Nearly half (51.4%) children were going to School/ Anganwadi, Most of mothers (58.1%) informed that their children had expose of diarrhea in past six months.

**Table No. 2 knowledge score of mothers regarding hand washing. n= 105**

Level of Knowledge	Knowledge Score	Frequency (f)	Percentage (%)
Poor	< 8	1	0.9
Average	9-16	35	33.3
Good	17-24	69	65.8

Majority (65.8%) of mothers had good knowledge score and nearby 33.3% of mothers had average knowledge score regarding hand washing.

**Table No. 3 Mothers Practice score regarding hand washing n=105**

Level of Practice	Practice score	Frequency (f)	Percentage (%)
Average	7-12	69	65.7
Good	13-18	36	34.3

Most of (65.7%) mothers had average practice and only 34.3% of mothers had good practice regarding hand washing.

## DISCUSSION:

### Section- A: Description of demographic profile of under five children mothers:

The study findings highlighted that nearly three fifth (67.6%) mothers belong to 19-40 years of age group. 41.9% mothers were secondary educated, maximum mothers (84.4%) were non-working, 53.3% children belong joint family, Most of mother (69.5%) had information about importance of hand washing through mass media. 58.1% mother inform that within 6 month duration their child was suffer from diarrhea. Findings were reliable with cross sectional study done by Mr. Rajiv Kumar Gupta et al (2018) "Hand hygiene: knowledge, attitude and practices among mothers". The result of study revealed that 75.15% of the mothers belonged to 20-29 year age group, 38.79% of the respondents were educated up to secondary level<sup>(14)</sup>.

### Section B: Level of knowledge of mothers regarding hand washing

On interpretation of data; it is revealed that nearly (65.8%) of mothers had good knowledge score regarding hand washing. 33.3% of mothers had average knowledge score. This research finding was supported by cross-sectional study done by Mr. Pravin N Yerpude et al (2014) "Hand Washing Practices among Mothers in an Urban Slum Area". The finding of study highlight that most of (71.49%) mothers have good knowledge and stated that hand washing was important in prevention of some communicable diseases.

### Section C: Level of practice of mothers regarding hand washing

On based of analysis researcher found that less than half (34.3%) mother was doing correct hand washing practice and 65.7% mothers were not proper practice hand washing during care of children. This finding was supported by Mr. S S Datta et al (2011) "Knowledge and practice of hand washing among mothers of under five children in rural coastal South India, The finding of this study highlight that mother not follow correct practice of hand washing<sup>(16)</sup>.

## LIMITATIONS:

- Study design was confined to survey method only.
- Sample Size was very less (105)
- Researchers were not provide any intervention for improving knowledge and practice of under five children's mothers

## CONCLUSION:

The study finding shows that there was gap between knowledge and practice of mothers regarding hand washing. The researchers reiterates the need to spread importance of proper and regular hand washing through proper health education.

**RECOMMENDATION :-** As the research study indicate the mothers were not doing proper practice of hand washing during care of child so the health workers should be create awareness activities until all mothers were start proper practice of hand washing.

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