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# KNOWLEDGE ABOUT PROPER HAND HYGIENE AMONG SCHOOL GOING CHILDREN OF 6TH, 7TH, 8TH, 9TH & 10TH STANDARD DUNGRAWALI SCHOOL MEERUT

### Rijul Ranjan<sup>1</sup>and Saurabh Sharma<sup>2</sup>

<sup>1</sup>Tutor; Mulayam Singh Yadav Medical College <sup>2</sup>Associate Professor, Subharti Medical College, Meerut

ARTICLE INFO	A B S T R A C T		
Article History:	Introduction: Hand washing is the most important preventative measure for the reduction		
Received 13 <sup>th</sup> December, 2019	of contagious disease. Although hand washing is easy to perform, non-adherence is a		
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January, 2020	component intervention packages to improve hand washing among employees; however,		
Accepted 8 <sup>th</sup> February, 2020	interventions are limited to acute settings, are often implemented for a short period of time,		
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	— Objectives		
Key words:	1-To assess the knowledge and practice of "HAND WASHING".		
Hand Washing Children Internetion	2-To assess the knowledge about the advantages of "HAND WASHING".		
Hand wasning, Children, Intervention	Material and Methods: The study was conducted among 350 school going children of 6 <sup>th</sup> -		
	10 <sup>th</sup> standard in School and the study design is QUASI EXPERIMENTAL STUDY.		
	Result: After health education given about 94.2% students got aware about the diseases		
	caused due to improper hand washing. Before health education only 2.85% students knew		
	about the steps of Hand washing but after giving health education 97.14% students got to		
	know about it. After health education session 99% students agreed that by doing proper		
	Hand washing & drying many diseases can be prevented.		

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# INTRODUCTION

Hand washing is the most important preventative measure for the reduction of contagious disease. Although hand washing is easy to perform, non-adherence is a ubiquitous problem. Several studies have demonstrated the effectiveness of multicomponent intervention packages to improve hand washing among employees; however, interventions are limited to acute settings, are often implemented for a short period of time, and rarely, if ever, include information on long-term effectiveness.<sup>1</sup>

Hand hygiene is cost-effective and has been recognized as an effective measure in the control of communicable diseases. The main aim of this study is to evaluate the hand washing knowledge, practices, and skills of students in both private and public institutions of higher learning.<sup>2</sup>

Hand washing practice is comparatively poor in rural areas when compared with the urban population. Studies from various states in India report that large percentage of people in rural sectors do not wash their hands after cleaning child's bottom. Furthermore, among the rural population, the practice of washing hands with mud or ash instead of using soap is quite prevalent which, in turn, leads to many diseases.<sup>3</sup>

\**Corresponding author:* **Rijul Ranjan** Tutor; Mulayam Singh Yadav Medical College Nosocomial infections due to poor hand hygiene are a major cause of increasing morbidity, mortality, and health care costs among hospitalized patients worldwide.<sup>4</sup>

While school-based WASH interventions in low-income and middle-income countries have been examined with regards to a wide range of health and educational outcomes, including: diarrhoea, respiratory infection, school attendance and health outcomes in the domestic environment.<sup>5</sup>

Washing the hands properly with soap and water is the single most important thing one can do to help reduce the spread of infections and help to protect one self, family & those around you.

# **MATERIAL AND METHODS**

The study was conducted among 350 school going children of  $6^{th} - 10^{th}$  standard in School and the study design is QUASI EXPERIMENTAL STUDY. The inclusion criteria applied on the study was those who were present and willing to participate i.e. 350 students. The exclusion criteria were those who were not willing to participate. The data entry was done in MS EXCEL and analysis is done in form of GRAPHS & PIE CHARTS. Study tool is Self-structured and closed ended questionnaire.

Knowledge About Proper Hand Hygiene Among School Going Children of 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> & 10th Standard Dungrawali School Meerut

### RESULT

42.9% students wash their hands before eating &42.9% students never wash their hands. After health education session about 92.9% students start washing their hands before eating so we could increase their knowledge about 50%. only 8.5% of students wash their hand after playing and majority i.e. 75.7% used to wash their hands sometimes. After health education session was given 64.2% started washing their hands after plaving and only 17% left who still did sometimes, so we could increase their knowledge by 55.7%.54.3% students wash their hands after using toilet sand 45.7% did not. When health education session was given 98% start washing their hands after using toilets. So, we could bring change about 43.7% in their knowledge. about 42.8 % of students did not wash their hands after coughing and sneezing but after giving health education only 14.3% students left who did not wash their hands after coughing and sneezing. Before health education session only 7.14% of students know about the diseases caused by the poor hand hygiene but after health education session it was about 94.20% of students who got aware about the diseases so we could bring about 87.06% increase in their knowledge. About 85.66% increase in the knowledge about the diseases caused due to improper hand hygiene was brought by our health education session.

From the above data we came to know that after health education session there is an increase in the knowledge about the steps of hand washing about 94.25% among 70 students of School. By above graph, we can see that before health education maximum of students i.e. about 71% thought that hand washing is not important but after health education 100% i.e. all students got to know the importance of hand washing. Before health education only 30% of students thought that by proper hand washing, we can prevent diseases but after health education 99% of students got to know the role of hand washing in preventing disease, so net increase in their knowledge is about 69%. Health education in school only 21.4% students were having the knowledge about the source of information on hand washing after coughing and sneezing and after the session in the school 71.4 % students were able to know about it. 17.14% students in the school were aware about the source of material used to dry hands and after giving the health education session about 77.14% students in the school got the knowledge about it. Before health education about 1.40% students knew about the steps of hand washing from the school but after health education session done in the school about 98.57% got to know about it. Before health education session about 54.2% students were using only water to wash their hands but after health education session 95.7% used soap for washing their hands. Before health education 40% students were using handkerchief and after health education session 92.8% students start using it so net increase in their knowledge was about 52.8%.Before health education session 52.8% students were using cloths to dry their hands but after health education only 5 students were using it so net difference, we could bring was about 45.6%.Before health education 5 students were using bed sheets to dry their hands and after explaining them none of them used bed sheets again to dry their hands. By above data we can conclude that before health education only 2.85% of students were aware of all 11 steps of hand washing and drying according to WHO criteria but after health education 98.57% of students got know about it.

 
 Table 1 Distribution of Study Population According To Their Knowledge Regarding Handwashing

Variables	Pre-test		Post-test			
variables	Freq	Percentage	Freq	Percentage		
Before eating						
Always	150	42.9	325	92.9		
Often	40	11.4	20	5.7		
Sometimes	10	2.9	5	1.4		
Never	150	42.9	0	0.0		
		After playing				
Always	30	8.5	225	64.2		
Often	15	4.2	65	18.5		
Sometimes	265	75.7	60	17.1		
Never	40	11.4	0	0.0		
After touching animals						
Always	120	34.2	290	82.8		
Often	75	21.4	40	11.4		
Sometimes	45	12.8	20	5.7		
Never	110	31.4	0	0.0		
Total	350	100	350	100		

 
 Table 2 Distribution of Study Population Regarding The Knowledge About Hand Washing

	Pre-test		Post-test		
Variables	Freq	Percentage	Freq	Percentage	
	Afte	er coming from to	oilet		
Yes	190	54.3	340	98	
No	160	45.7	10	2.0	
After coughing and sneezing					
Yes	200	57.2	300	85.7	
No	150	42.8	50	14.3	
Dis	eases cau	sed due to poor h	and hygi	ene	
Yes	25	7.14	330	94.2	
No	325	92.8	20	5.71	
Name of t	he diseas	ses caused due to	poor han	d hygiene	
Yes	25	7.14	345	98.5	
No	325	92.8	5	1.14	
Steps of handwashing					
Yes	10	2.85	345	98.5	
No	340	97.14	5	1.14	
Whether hand washing is important or not?					
Yes	100	28.57	350	100	
No	250	71.42	0	0.0	
Whether h	and wash	ing helps to prevo	ent disea	ses or not?	
Yes	105	30	345	98.57	
No	245	70	5	1.14	
Total	350	100	350	100	

 Table 3 Distribution of Study Population Regarding The

 Source of Knowledge On

Variables	Pre-test		Post-test			
variables	Freq	Percentage	Freq	Percentage		
After coming from toilet						
Home	100	28.5	100	28.5		
School	75	21.4	250	71.4		
Friends	25	7.14	0	0.0		
Others (tv/newspaper)	0	0.0	0	0.0		
No knowledge	150	42.8	0	0.0		
-	Materials u	sed to dry hands				
Home	80	22.85	80	22.85		
School	60	17.14	270	77.14		
Friends	0	0.0	0	0.0		
Others (tv/newspaper)	0	0.0	0	0.0		
No knowledge	210	60	0	0.0		
Steps of handwashing						
Home	0	0.0	0	0.0		
School	5	1.4	345	98.57		
Friends	0	0.0	0	0.0		
Others (tv/newspaper)	5	1.4	5	1,4		
No knowledge	340	97.14	0	0.0		
Total	350	100	350	100		

**Table 4** Distribution of Study Population Regarding ThePractice of Materials Used To Wash Hands.

Variables -	Р	re-test	Post-test	
	Freq	Percentage	Freq	Percentage
Always	150	42.9	325	92.9
Often	40	11.4	20	5.7
Sometimes	10	2.9	5	1.4
Never	150	42.9	0	0.0
Total	350	100	350	100

**Table 5** Distribution of Study Population Regarding ThePractice About The Materials Used To Dry Hands.

Variables –	Pre-test		Post-test	
	Freq	Percentage	Freq	Percentage
Handjerchief	140	40	325	92.8
Clothes	185	52.8	25	7.14
Curtains	0	0.0	0	0.0
Bed sheets	25	7	0	0.0
Total	350	100	350	100

**Table 6** distribution of study population regarding knowledge

 of no. of steps of handwashing and drying acc to who criteria.

Variables –		Pre-test	Post-test		
	Freq	Percentage	Freq	Percentage	
6 steps	100	28.57	0	0.0	
4 steps	65	18.57	5	1.14	
11 steps	10	2.85	345	98.57	
8 steps	175	50	0	0.0	
Total	350	100	350	100	

# CONCLUSION

A Survey was conducted on 70 students of School, Ghaziabad, with the help of a pre designed close ended questionnaire about the Knowledge of Hand Hygiene & data collected over a period of 1 week was analysed for finding the most probable results regarding the proper hand hygiene. We found that –

- 1. After health education given about 94.2% students got aware about the diseases caused due to improper hand washing.
- 2. Before health education only 2.85% students knew about the steps of Hand washing but after giving health education 97.14% students got to know about it.
- 3. After health education session 99% students agreed that by doing proper Hand washing & drying many diseases can be prevented.

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