

Hand Hygiene Related Knowledge and Practice During COVID-19 Pandemic

By

Vandana

*Dissertation submitted in partial fulfillment of the requirements of the degree
MBA Hospital and Health Management*

Academic year, 2018-2020



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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled ...Hand hygiene related Knowledge and Practice during COVID-19 Pandemic.....and submitted byVandana.....

.....Enrollment No....0856.....under the supervision of Dr. Nutan P Jain.....

for award of MBA in Hospital and Health/ Pharmaceutical / Rural Management in Health and Hospitals of the University carried out during the period from 24/03/2020.....to18/06/2020.....embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.

Signature

ABSTRACT

Title: Hand Hygiene related Knowledge and Practice during COVID-19 Pandemic

Author: Vandana,

Advisor: Dr. Nutan P. Jain

Key Words: Hand hygiene, COVID-19, Knowledge and Practice

Background

Keeping hands hygiene is one of the simplest and culturally appropriate practices which can be practiced by any person irrespective of place of residence, education level, etc. In recent pandemic COVID 19 it is considered as one of the preventive measures and therefore, a public health concern to all as a provider, manager and the person himself/herself. The objectives were: (i) to review COVID-19 related guidelines for preventive measures; and (ii) to study knowledge and practice of hand hygiene among the people.

Methodology

Study was cross-sectional, descriptive in nature. The respondents were aged ≥ 15 years, living in urban India, having access to internet and social media and willing to fill the questionnaire received via E-mail, Whatsapp, Facebook, and LinkedIn. Healthcare professionals were excluded in this study. The e-questionnaire was sent to 45 contacts via e-mail, 160 via Whatsapp, 140 contacts via Facebook, and 155 contacts via LinkedIn, making it a total of 500 contacts. The total responses received were 100. A platform called **Google Forms** was used to collect data.

Key Results

The majority of the respondents (83 per cent) had good hand hygiene related knowledge. The majority of the respondents (90 per cent) had knowledge of the mode of transmission of COVID-19. However misconception regarding transmission by mosquito bites, airborne, and drinking unclean water was also reported by (16 per cent) respondents. Around half of the respondents reported that they used to lather their hands for more than 20 seconds before rinsing and rest half of them either lathered for 5-10 seconds or 10-15 seconds, which is inadequate time to kill the virus. Three-fourth of the respondents have the knowledge regarding the use of soap and water to be used when hands are visibly dirty, one-fourth think that they can use alcohol based hand rub/hand sanitizer for the purpose. More than half of the respondents (53 per cent) have good hand hygiene practice regarding frequency of washing hands, duration of lathering hands before rinsing and not ignoring hand hygiene when in hurry. One-third of the respondents sometimes ignore hand washing when in hurry. This information can be useful in health promotion activities and creative campaigns to achieve improvement in hand hygiene related knowledge and practices.

Conclusion

COVID-19 related guidelines for preventive measures were issued by Ministry of Health and Family Welfare, Government of India and World Health Organization. The majority of the respondents were well aware of the Hand hygiene related knowledge (around 83 per cent respondents), and more than half of respondents (53 per cent) strictly followed good hand hygiene practices.

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I would also like to thank my family and friends for their moral support that was much required for successfully completing this project.

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INTRODUCTION:

In December 2019, there was cluster of Pneumonia cases in China. Investigations found it to be caused by previously unknown virus, now known '2019 Novel Coronavirus'. Corona viruses are a group of viruses. They consist of a core genetic material surrounded by an envelope with protein spikes. This gives the appearance of "crown". Crown in Latin is called Corona. That is how the Viruses gets their name. There are different kinds of Coronaviruses that cause respiratory and sometimes gastrointestinal symptoms. Respiratory disease can range from common cold to pneumonia and in most people the symptoms tend to be mild. However, there are some types of Coronaviruses that can cause severe disease, these include Severe Acute Respiratory Syndrome-Coronavirus (SARS-COV), first identified in china in 2003 and Middle East Respiratory Syndrome-Coronavirus (MERS-COV), first identified in Saudi Arabia in 2012. The 2019 n-COV was first identified in China in 2019. It initially occurred in a group of people with pneumonia who have been associated with sea food and live animal market in Wuhan. The disease has since spread from sick to others including family members and Healthcare staff. There were many cases and the disease had spread within China and also to number of other countries. COVID-19 is an infectious disease caused by a novel coronavirus introduced to humans for the very first time. It spreads from person to person mainly through the droplets produced when an infected person speaks, coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby. These droplets are too heavy to travel far in the air- they only travel approximately one meter and quickly settle on surfaces. This is the reason human to human spread is happening mainly between close contacts. One should avoid touching eyes, mouth and nose, since contaminated hands can transfer the virus from the surface to own self.

There can be a number of symptoms that can range from mild to severe. There can be fever, respiratory symptoms such as cough and shortness of breath, and in cases of high severity, it can be pneumonia, kidney failure, and death.

Keeping hands hygiene is one of the simplest and culturally appropriate practices which can be practiced by any person irrespective of place of residence, education level, etc. In recent pandemic COVID 19 it is considered as one of the preventive measures and therefore, a public health concern to be studied.

Research Question:

What is the Knowledge and Practice of hand hygiene among the people during COVID-19 Pandemic?

Objectives:

- To review COVID-19 related guidelines for preventive measures.
- To study Knowledge and Practice of hand hygiene among the people.

LITERATURE REVIEW:

Title of Article: Keep it clean: The surprising 130-year history of hand washing

Author: Amy Fleming

Year: 2020

Source: <https://www.theguardian.com/world/2020/mar/18/keep-it-clean-the-surprising-130-year-history-of-handwashing>

An article named “Keep it clean: The surprising 130-year history of hand washing” by Amy Fleming published in The Guardian on 18 March 2020 stated that religious rituals of hand washing have been around for a thousands of years in Hindu, Jewish, Islamic and other cultures, but the concept of disease transmission by hand has been a part of the medical belief system for only about 130 years. However, the very first recorded discovery of hand washing has life-saving power came 50 years earlier, as a huge unwelcome shock. “If there had to be a father of hand washing it would be Ignaz Semmelweis,” says Miryam Wahrman, a professor of biology at William Paterson University in New Jersey and also an author of The Hand Book: Surviving in a Germ-Filled World.

Key findings: Actual hand washing compliance, prior to coronavirus pandemic, was still worryingly low, however, in the medical care and in public realm. After urinating, 69 per cent of women washed their hands, and only 43 per cent of men,” she says. “After defecation, 84 per cent of women and 78 per cent of men washed their hands. And before eating – a critical time to wash your hands – 10 per cent of men and 7 per cent of women washed their hands.

At the start of this pandemic, there were lack of pharmaceutical interventions and vaccines to protect people from COVID-19. So looking at non-pharmaceutical measures those can be easily implemented were of utmost importance and hand washing was one of them. It’s simple and of negligible cost. Wash hands with soap and water before touching mouth, nose and eyes. It’s empowering as it really does make a difference.

Review of COVID-19 related guidelines for preventive measures issued by World Health Organization and Ministry of Health and Family Welfare, Government of India:

Standard hygiene practices are recommended to protect from infections and further spread. These include

- Cover your nose and mouth when sneezing or coughing using a tissue, medical mask or flexed elbow so that the droplets doesn’t get in contact with somebody else and avoid the transmission of COVID-19.
- Avoid close contact with sick person so that you can avoid getting infected with COVID-19.
- Proper use of masks and PPE especially in a healthcare setting so that there is no direct contact between you and the infectious agent.
- Cleaning hands thoroughly and frequently with water and soap or alcohol based hand rub to kill the virus so that you can avoid getting infected with COVID-19.
- Avoiding unprotected and unnecessary contact with the animals or washing hands after getting in contact with the animals or animal products to protect yourself from the virus
- Ensuring that animal products are thoroughly cooked before they are consumed as the COVID-19 is told to have started from the live animal market in china.

- It is important to stay back home if you are feeling unwell and immediately seek medical care if the symptoms include cough, fever, and difficulty in breathing and share your travel history with the healthcare provider so that you don't spread COVID-19 to others and seek the best medical help at the earliest

Key findings related to hand hygiene: measures to basic hygiene may seem obvious, but are very important. Washing hands with plain soap and water kills viruses, but only if it's done thoroughly and frequently. Hands should be scrubbed for at least 20 seconds, the time taken to sing "Happy Birthday" song twice, to ensure germs don't be transferred to any objects or spread from human to human. Washing hands has been proved to decrease disease transmission and lower the chances of getting infected.

Hand sanitizers may be helpful, only if they contain at least 60+ percent alcohol, according to the Centers for Disease Control and Prevention, but if your hands are greasy or dirty, the sanitizer won't work, which is why the CDCP recommend hand washing.

Experts acknowledge the toughest of the self-protective measures to be followed- not touching one's face. It is important to avoid touching face because germs can get into the body through the nose, eyes, and mouth. Contaminated hands can transfer the virus when people rub or touch their eyes, scratch their noses, or touch their mouths. We all touch our face reflexively, but trying to be more mindful of touching our face decreases our chance of infection.

Hand washing technique with soap and water:

1. Wet hands with water.
2. Apply enough soap to cover all hand surfaces.
3. Rub hands palm to palm.
4. Rub back of each hand with palm of other hand with fingers interlaced.
5. Rub palm to palm with fingers interlaced.
6. Rub with back of fingers to opposing palms with fingers interlocked.
7. Rub each thumb clasped in opposite hand using a rotational movement.
8. Rub tips of fingers in opposite palm in a circular motion.
9. Rub each wrist with opposite hand.
10. Rinse hands with water.

METHODOLOGY:

Study Design: A cross sectional, descriptive study

An E-survey to study the hand hygiene related Knowledge and Practice during COVID-19 Pandemic by applying a ‘**cross-sectional**’ study design on general public living in urban India, was conducted via online platform- Google form.

Study Population: Respondents aged ≥ 15 years, living in urban India, having access to internet and social media and willing to fill the questionnaire received via E-mail, Whatsapp, Facebook, and LinkedIn.

Exclusion criteria: Healthcare professionals.

Duration of Study: 11 weeks (24 March 2020 – 18 June 2020)

Sampling and Sample Size: Samples were selected using personal and professional contacts on E-mail, Whatsapp, Facebook and LinkedIn. A total of 500 contacts were covered.

The e-questionnaire was sent to 45 contacts via e-mail, 160 via Whatsapp, 140 contacts via Facebook, and 155 contacts via LinkedIn, making it a total of 500 contacts.

Mode of Contact	Number of contacts to whom questionnaire was sent	Number and Percent of contacts responded
E-mail	45	10 (22%)
WhatsApp	160	38 (24%)
LinkedIn	155	32 (21%)
Facebook	140	20 (14%)
Total	500	100 (20%)

A typical E-survey response rate ranges in between 5 per cent to 30 per cent according to an article “Average survey response rate- What you need to know” published by CustomerThermometer, an online survey platform; and 20 per cent was found in this study. The total responses received were 100.

Methods of Data Collection

Literature review

Self-administered questionnaire

Tools of Data Collection

A platform called **Google Forms** was used to collect data. Google Forms is a tool that aid in collecting information from respondents via a survey that can be personalized as per the requirement. The information was then collected and automatically received into the connected spreadsheet. The spreadsheet was populated with the survey responses. It also facilitates the distribution of questionnaires via E-mail, Whatsapp, Facebook, and LinkedIn. This platform

allows participants to access the questionnaire easily. It also guides the respondents to complete all the items before exiting, thereby minimizing the frequency of missing items.

In conducting this study, structured questionnaire was used to collect the relevant data. The questionnaire contained questions about four different parts which included socio-demographic characteristics, Knowledge and Practice related to hand hygiene. There were 5 items related to the socio-demographic characteristics, 6 items related to Knowledge and 7 items about the Practice of hand hygiene. After submitting the response, there was an option kept- “submit another response” to record the response of respondent’s family/friends. E-mail Id was recorded to avoid multiple responses of the respondents.

Data Collection Procedure:

- A list of contacts was prepared, to whom the questionnaire was to be sent. E-mail- 45 contacts, Whatsapp- 160 contacts, Facebook- 140 contacts and LinkedIn- 155 contacts, a total of 500 contacts.
- It was followed by forwarding a pre-text message about the purpose along with the link to the questionnaire via E-mail, Whatsapp, Facebook, and LinkedIn.
- The responses to the questionnaire were directly collected in the spreadsheet as and when people responded.

Ethical Considerations: Ethical considerations are critical. Consent was taken from respondents before the actual questionnaire started. They were shared the whole purpose and the process of the study. They were also shared that there is no risk like “Though your participation is completely voluntary and refusal to participate will have no consequences. Information provided by you will be kept strictly confidential as it is password protected and only the author has access.”

Data Analysis:

The collected data was checked for completeness and entered in to Microsoft Excel. Frequency and per cent were calculated for profiling the respondents, and their Knowledge and practices.

RESULTS:

Review of COVID-19 related guidelines for preventive measures issued by World Health Organization and Ministry of Health and Family Welfare, Government of India:

- Cover nose and mouth when sneezing or coughing using a tissue, medical mask or flexed elbow so that the droplets doesn’t get in contact with somebody else and avoid the transmission of COVID-19.
- Avoid close contact with sick person so that you can avoid getting infected with COVID-19.

- Proper use of masks and PPE especially in a healthcare setting so that there is no direct contact between you and the infectious agent.
- Cleaning hands thoroughly and frequently with water and soap or alcohol based hand rub to kill the virus so that you can avoid getting infected with COVID-19.
- Avoiding unprotected and unnecessary contact with the animals or washing hands after getting in contact with the animals or animal products to protect yourself from the virus
- Ensuring that animal products are thoroughly cooked before they are consumed as the COVID-19 is told to have started from the live animal market in china.
- It is important to stay back home if you are feeling unwell and immediately seek medical care if the symptoms include cough, fever, and difficulty in breathing and share your travel history with the healthcare provider so that you don't spread COVID-19 to others and seek the best medical help at the earliest

Knowledge and Practice of hand hygiene among the people:

Socio-demographic characteristics of respondents:

The majority of the respondents (61 per cent; Female- 22 per cent, Male- 39 per cent) belonged to age group 25-34 years, followed by age group of 15-24 (23 per cent; Female- 13 per cent, Male- 10 per cent). Average age of the respondents was 29 years (range: 17 years-62 years). Over 62 per cent respondents were male and 38 per cent female. The majority of the respondent attained Master's degree level of education (47 per cent; Female- 15 per cent, Male- 32 per cent), followed by those who attained Bachelor's degree level of education (42 per cent; Female- 17 per cent, Male- 25 per cent). More than half of the respondents were Employed (55 per cent; Female- 13 per cent, Male- 42 per cent), and self-employed (19 per cent; Female- 3 per cent, Male- 16 per cent). Over 53 per cent (Female- 20 per cent, Male- 33 per cent) of respondents lived in a nuclear family and 47 per cent (Female- 18 per cent, Male- 29 per cent) in a joint family. The socio-economical characteristics were further analyzed by cross tabulating with gender.

Figure 1: Per cent distribution of respondents by their age groups:

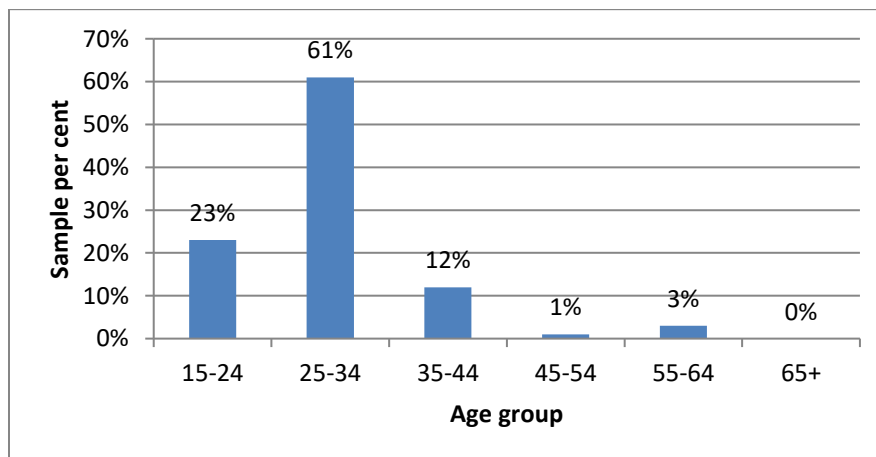


Table 1. Percentage distribution of Socio-economic characteristics of respondents by Gender:

Variables	Gender (%)		
	Female	Male	Total
	n =38	n =62	n =100
Age			
15-24	13	10	23
25-34	22	39	61
35-44	3	9	12
45-54	0	1	1
55-64	0	3	3
Education level			
Less than 10th class	0	1	1
10th	1	2	3
12th	4	0	4
Diploma	1	2	3
Bachelor's degree	17	25	42
Master's degree	15	32	47
Occupation			
Student	10	3	13
Employed	13	42	55
Self employed	3	16	19
Home maker	10	0	10
Unemployed	2	0	2
Retired	0	1	1
Type of family			
Nuclear	20	33	53
Joint	18	29	47

Hand hygiene related Knowledge of the respondents:

The majority of the respondents (83 per cent) have right hand hygiene related knowledge. The majority (75 per cent; Female- 25 per cent, Male- 50 per cent) of the respondents had the understanding that hand sanitizer should contain at least 60 per cent alcohol. Around half of the respondents (49 per cent; Female- 17 per cent, Male- 32 per cent) were aware '20 seconds and more' to be minimum time needed for alcohol based hand rub to kill most germs on hands. Slightly more than two-thirds of respondents (77 per cent; Female- 28 per cent, Male- 49 per cent) were aware that hands should be cleaned with 'soap and water' when they are visibly dirty.

Around 67 per cent (Female- 20 per cent, Male- 47 per cent) of respondents were aware that ‘20 seconds and more’ is appropriate time to lather hands with soap before rinsing. The majority of the respondents were aware of the actual mode of transmission of COVID-19; shaking hands while greeting (91 percent), touching your eyes, nose and mouth (87 percent), close contact with infected person (97 percent), droplets of Infected person when he/she coughs or sneezes (97 percent), touching contaminated objects/surfaces (80 percent), Although a few thought it to be transmitted through mosquito bites(3 per cent), drinking unclean water (9 per cent), blood transfusion (24 per cent), airborne (28 per cent). The majority of the respondents were aware of the methods to prevent the spread of COVID-19; cleaning hands thoroughly and frequently with soap and water or alcohol based hand rub (99 per cent), avoid close contact with anyone having fever and cough (94 per cent), maintain social distancing (93 per cent), avoid touching eyes, nose and mouth (92 per cent).

Table 2. Percentage distribution of Hand hygiene related Knowledge of respondents by Gender:

Variables	Gender (%)		
	Female	Male	Total
	n=38	n=52	n=100
% of alcohol Hand sanitizer should contain			
40% alcohol	13	12	25
60% alcohol	25	50	75
Minimum time needed for alcohol-based hand rub to kill most germs on your hands			
5-10 seconds	7	12	19
10-20 seconds	14	18	32
20 seconds or more	17	32	49
Clean hands when they are visibly dirty and greasy			
Alcohol based hand rub/ hand sanitizer	10	13	23
With Soap and water	28	49	77
Appropriate time to lather hands with soap before rinsing			
5-10 seconds	4	3	7
10-20 seconds	14	12	26
20 seconds or more	20	47	67

Figure 2: Per cent distribution of respondents by their knowledge on mode of transmission of COVID-19:

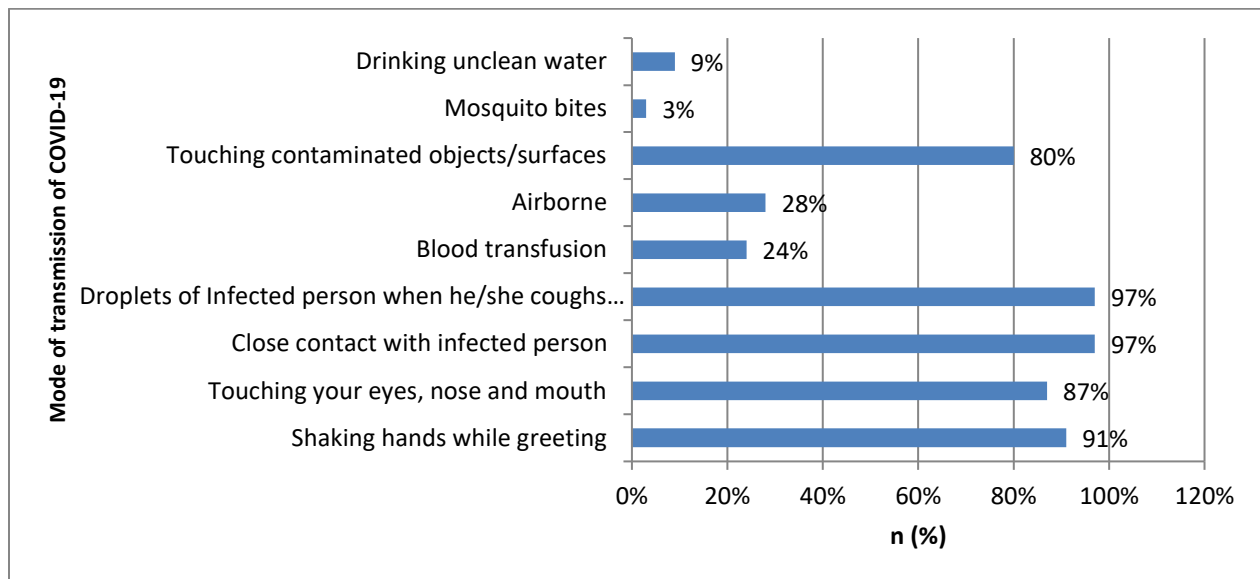
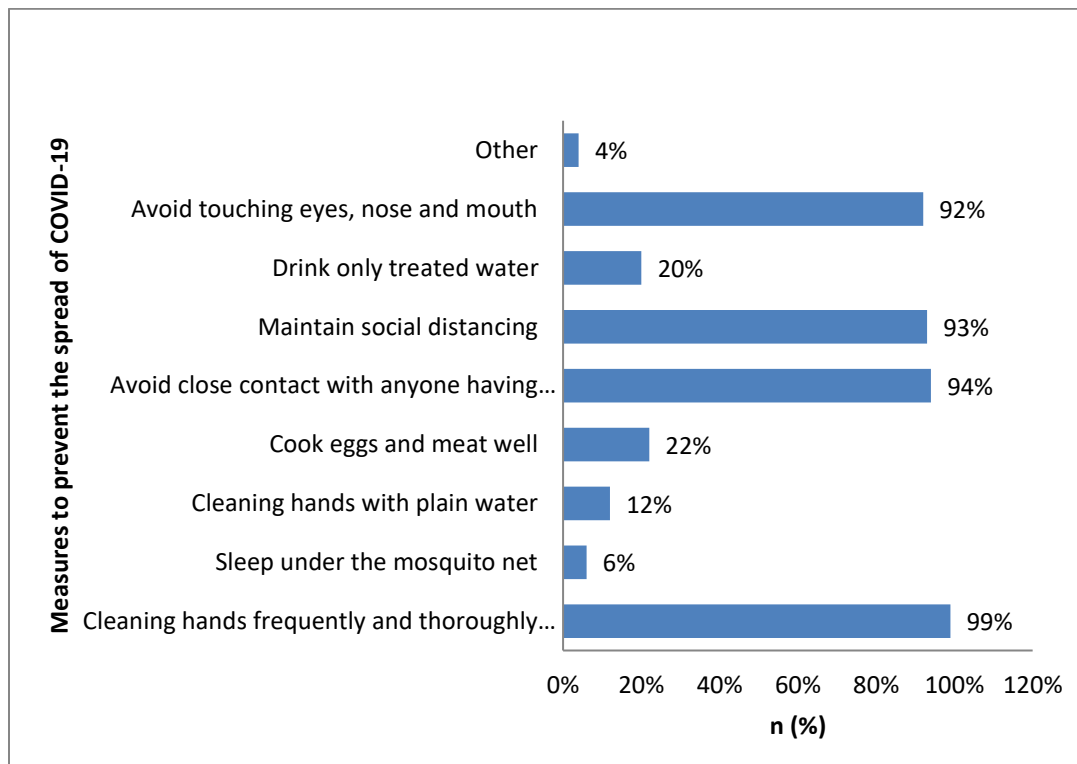


Figure 3: Per cent distribution of respondents by their knowledge on measures to prevent the spread of covid-19:



Hand hygiene related Practices of the respondents:

More than half of the respondents (53 per cent) have good hand hygiene practice regarding frequency of washing hands, duration of lathering hands before rinsing and not ignoring hand hygiene when in hurry. All the respondents (100 per cent) dry their hands after washing them. Around 63 per cent (Female- 29 per cent, Male- 34 per cent) of respondents use 'personal towel or handkerchief' to dry their hands, 15 per cent (Female- 2 per cent, Male- 13 per cent) use 'disposable tissues', 11 per cent (Female- 3 per cent, Male- 8 per cent) use 'cloth towel roll', 6 per cent (Female- 1 per cent, Male- 5 per cent) 'rub hands on their own clothing', 4 per cent (Female- 2 per cent, Male- 2 per cent) 'air evaporate' them and 1 per cent (Female- 1 per cent, Male- 0 per cent) use 'hand dryer'. Around 28 per cent (Female- 6 per cent, Male- 22 per cent) of respondents cleaned hands '10-15 times a day', 13 per cent (Female- 6 per cent, Male- 7 per cent) respondents cleaned hands '15-20 times a day', 13 per cent (Female- 7 per cent, Male- 6 per cent) respondents cleaned hands 'more than 20 times a day' since the onset of Corona Virus Disease Outbreak. Around 44 per cent (Female- 12 per cent, Male- 32 per cent) of respondents lather their hands for 'more than 20 seconds' before rinsing. More than half (63 per cent Female- 27 per cent, Male- 36 per cent) of respondents 'never' ignore hand washing even when in hurry. Around 89 per cent of respondents use 'soap and water' to clean their hands, 8 per cent use 'only water', 83 per cent use 'hand rub/ hand sanitizer', either one or in combination. Around 86 per cent of respondents clean their hands 'before, during and after caring for a sick person', 95 per cent of respondents clean their hands 'after visiting a public space, including public transportation, markets and places of worship', 92 per cent of respondents clean their hands 'before and after eating', 88 per cent of respondents clean their hands 'after handling garbage', 81 per cent of respondents clean their hands 'before and after using mask', 71 per cent of respondents clean their hands 'After touching animals and pets', 92 per cent of respondents clean their hands 'after blowing your nose, coughing or sneezing', 94 per cent of respondents clean their hands 'after using the toilet', 63 per cent of respondents clean their hands 'after changing babies' diapers or helping children use the toilet', 88 per cent of respondents clean their hands 'After touching surfaces outside of the home, including money', 94 per cent of respondents clean their hands 'when they are visibly dirty', 1 per cent of respondents clean their hands 'after handling groceries and milk pouches', 1 per cent of respondents clean their hands 'after washing clothes and utensils'.

Table 3. Percentage distribution of Hand hygiene related Practice of respondents by Gender:

Variables	Gender (%)		
	Female	Male	Total
	n =38	n =52	n =100
Dry hands after washing them			
Yes	38	62	100
Method used for drying hands			
Air evaporation	2	2	4
Cloth towel roll	3	8	11
Hand dryer	1	0	1
Rub hands on own clothing	1	5	6
Use disposable tissue	2	13	15
Use personal towel or handkerchief	29	34	63
Frequency of cleaning hands since the onset of Corona Virus Disease Outbreak			
Less than 5 times a day	4	5	9
5 to 10 times a day	15	22	37
10 to 15 times a day	6	22	28
15 to 20 times a day	6	7	13
More than 20 times a day	7	6	13
Duration to lather hands before rinsing			
5-10 seconds	6	3	9
10-20 seconds	20	27	47
20 seconds or more	12	32	44
Ignoring hand washing in hurry			
Never	27	36	63
Sometimes	11	24	35
Often	0	2	2

Figure 4: Per cent distribution of respondents by the things they used to clean hands:

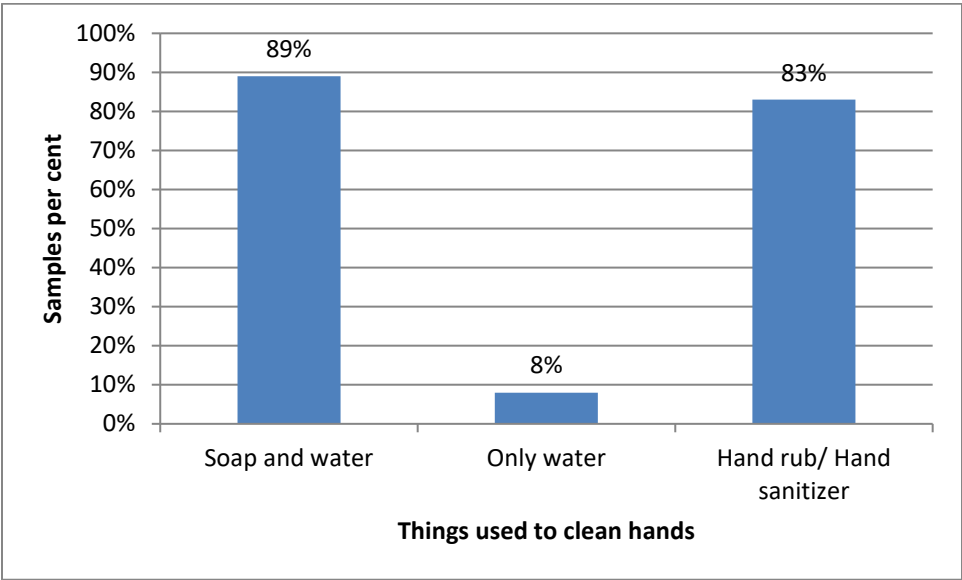
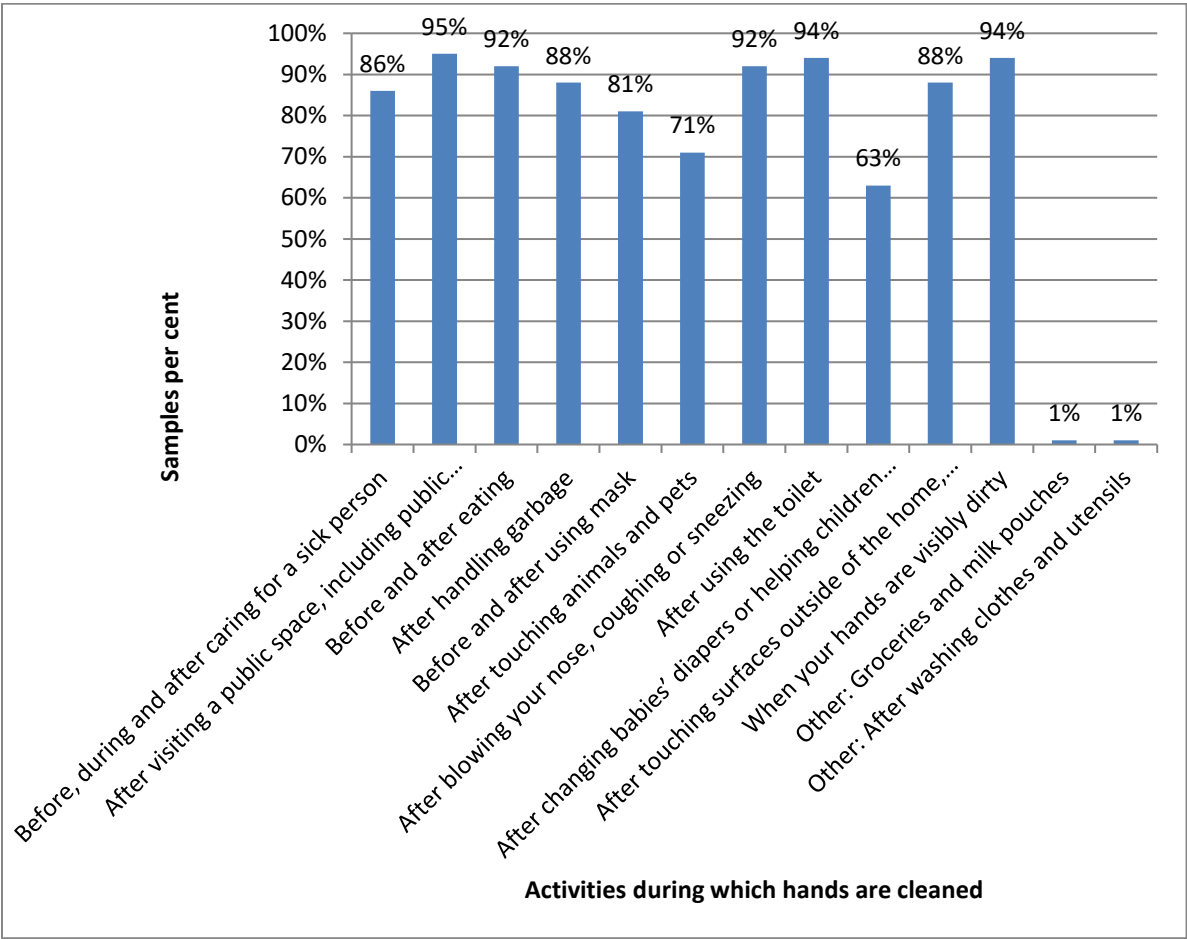


Figure 5: Per cent distribution of respondents by activities during which they cleaned hands:



DISCUSSION:

The majority of the respondents (83 per cent) had good hand hygiene related knowledge. The majority of the respondents (90 per cent) had knowledge of the mode of transmission of COVID-19. However misconception regarding transmission by mosquito bites, airborne, and drinking unclean water was also reported by (16 per cent) respondents. Around half of the respondents reported that they used to lather their hands for more than 20 seconds before rinsing and rest half of them either lathered for 5-10 seconds or 10-15 seconds, which is inadequate time to kill the virus. Three-fourth of the respondents have the knowledge regarding the use of soap and water to be used when hands are visibly dirty, one-fourth think that they can use alcohol based hand rub/ hand sanitizer for the purpose. More than half of the respondents (53 per cent) have good hand hygiene practice regarding frequency of washing hands, duration of lathering hands before rinsing and not ignoring hand hygiene when in hurry. More than half (63 per cent) of respondents 'never' ignore hand washing even when in hurry and 35 per cent of the respondents sometimes ignored hand washing when in hurry.

The findings of this study contributed to understanding the Knowledge and practice gap and public behavior towards hand hygiene during the COVID-19 Pandemic.

CONCLUSION:

COVID-19 related guidelines for preventive measures were issued by Ministry of Health and Family Welfare, Government of India and World Health Organization, following which can help in protecting people from virus exposure and reduce the chances of spread of COVID-19.

The majority of the respondents were well aware of the Hand hygiene related knowledge (around 83 per cent respondents), and around half of them (53 per cent) strictly followed good hand hygiene practices.

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Appendix 1

Questionnaire tool

Age *

Your answer

Gender *

Male
Female
Other

Which of the following best describes the area you live in? *

Urban
Rural

Education level *

Less than 10th class
10th
12th
Diploma
Bachelor's degree
Master's degree
Doctorate (PhD)

Occupation *

Unemployed
Employed
Self employed
Student
Retired
Home maker
Unable to work

Type of family *

Joint

Nuclear

How does COVID-19 spread? (Multiple responses) *

Shaking hands while greeting

Touching your eyes, nose and mouth

Close contact with infected person

Droplets of Infected person when he/she coughs or sneezes

Blood transfusion

Airborne

Touching contaminated objects/surfaces

Mosquito bites

Drinking unclean water

How can we prevent the spread of COVID-19? (Multiple responses) *

Cleaning hands frequently and thoroughly with soap and water or alcohol based hand rub

Sleep under the mosquito net

Cleaning hands with plain water

Cook eggs and meat well

Avoid close contact with anyone having fever and cough

Maintain social distancing

Drink only treated water

Avoid touching eyes, nose and mouth

Other:

Hand sanitizer should contain at least *

40 per cent alcohol

60 per cent alcohol

What is the minimum time needed for alcohol-based hand rub to kill most germs on your hands? *

5-10 seconds

10-20 seconds

20 seconds or more

How hands should be cleaned when they are visibly dirty and greasy? *

With Soap and water

Alcohol based hand rub/ hand sanitizer

The appropriate time to lather hands with soap before rinsing? *

5-10 seconds

10-20 seconds

20 seconds or more

Do you dry your hands after washing them? *

Yes

No

How do you dry your hands? *

Rub hands on own clothing

Air evaporation

Use personal towel or handkerchief

Use disposable tissue

Cloth towel roll

Hand dryer

Which one of the following do you use to clean your hands? (Multiple responses) *

Soap and water

Only water

Hand rub/ Hand sanitizer

How frequently do you clean your hands since the onset of Corona Virus Disease Outbreak? *

Less than 5 times a day

5 to 10 times a day

10 to 15 times a day

15 to 20 times a day

More than 20 times a day

For how long do you lather your hands before rinsing? *

5-10 seconds
10-20 seconds
20 seconds or more

Do you ignore hand washing when in hurry? *

Often
Sometimes
Never

During which of the following activities do you clean your hands? *

Before, during and after caring for a sick person
After visiting a public space, including public transportation, markets and places of worship
Before and after eating
After handling garbage
Before and after using mask
After touching animals and pets
After blowing your nose, coughing or sneezing
After using the toilet
After changing babies' diapers or helping children use the toilet
After touching surfaces outside of the home, including money
When your hands are visibly dirty
Other: