

# A Study On Hand Hygiene Practices Among College Students, Trichy

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## 1. INTRODUCTION

World Health Organisation recommended international promotion of hand hygiene to prevent various infections during 1980. In order to motivate and mobilize people around the world to improve their handwashing habits Global Handwashing Day, a global advocacy day dedicated to increasing awareness and understanding about the importance of handwashing. Hand Hygiene has been insisted from the beginning of 1980. The report of UNICEF reveal that only 40% of them adhere the hand hygiene practice. Advocating for good hand hygiene practice within communities have been proven to lower the incidence of getting infected from various disease In the present scenario hand hygiene plays vital role in prevention of covid 19. This study is attempted to assess the attitude and knowledge of hand hygiene during this pandemic situation among college students

### Need for the study

The hands are used more than any other part of the body, from handshaking, to doorknob use, and coughing (Curtis & Cairncross, 2003). Microorganisms are readily transmitted either directly through contact or indirectly by inanimate objects serving as vectors, and contaminated hands are implicated in this process (CDC, 2018b). A causal relationship has been established between hand hygiene and rates of infectious illness (Aiello & Larson, 2002). Similar to hospitals, schools have close, crowded environments that increase the risk of microbial cross-contamination and transmission (White, Shinder, Shinder, & Dyer, 2001). Low handwashing compliance has been linked to the rapid spread of Norwalk-like viruses (Moe, 2001).

In current situation hand hygiene plays vital role in preventing individual from covid 19. As college students, the high rate of person to person contact at college could leave the students susceptible to hygiene related illness if appropriate measures are not put in place. The study attempted to identify the knowledge, practice and facilities of hand hygiene among the college students.

### Objectives of the study

1. To examine the knowledge of Hand Hygiene among college Students
2. To assess the college students' attitude and practice of Hand wash.
3. To identify the hand hygiene facilities provided by the college for students.

## 2. RESEARCH METHODOLOGY

The data for this study consisted of both primary and secondary data. The primary data was collected through wellstructured questionnaire in Google form. The researcher adopted convenience sampling method for gathering information from 300 college students belong to .the first, second- and third-year students of selected Tiruchirappalli district .The secondary data was collected from the sources like Published reports of centre of disease control and Prevention, government reports, relevant books, Journals and websites of WHO, UNICEF.

### **Knowledge of Hand washing**

The study reveals that college students have adequate knowledge of hand hygiene. 92% of the students feel it is necessary to wash their hands frequently to maintain hygiene as it is a part of their personal hygiene. Washing should last for at least twenty seconds, using soap and water, drying hands with a paper towel (CDC 2018b) The study result shows that 81% of respondents wash their hands for 30 seconds with soap or liquid this shows that students posses adequate knowledge. 82% of the college students clean their hands with sanitizers. 64% of the college students carry sanitizer with them to clean their hands.

The study shows that 50% college students clean their hands with wet wipes. Baby wipes may make your hands look clean, but they're not designed to remove germs from your hands. CDC recommends washing hands with soap and water when possible. 78% of the students wash their hands by removing all the items such as ring, watch, bracelet and bangles. 78% of the college students believe that hand hygiene practice of an individual prevent from infection. 88% of the students are aware of the Five moments of handwashing given by WHO.

The fear of spread of covid made them improve their hand washing. The awareness programs of Covid 19 through social media and continuous insist of washing hands with sanitizers helps the students to gain knowledge and understand the significance of five moments of hand washing. Hand hygiene is singled out as the most important infection prevention intervention. Hand hygiene compliance can be improved by continuous education and monitoring, providing a sufficient number of sinks with soap dispensers, paper towels, hand lotions and alcohol-based hand rub placed at easily accessible areas.

### **Handwash Practice**

The majority (85%) of the students reported washing their hands while at college. The moments at college they reported washing their hands were: after sharing their materials (3.1%), after break time (15%), before eating (97%), and after using the restroom (95%). Less than half of the respondents (47.3%) reported washing their hands with soap and water while at college 48% of the students reported that they never wash their hands after money exchange. 76% of the students reported that they always wash their hands after when blowing their nose, sneezing and coughing. 56% of the students always wash their hands after handshaking. 89% of the students wash their hands always before and after touching the sick people. 68% of the students reported that they never wash their hands after using public transportation.

		Knowledge of hand hygiene	Practicing Hand wash
KH	Pearson Correlation	1	.826**
	Sig. (2-tailed)		.000
	N	300	300
PR	Pearson Correlation	.826**	1
	Sig. (2-tailed)	.000	
	N	300	300

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Attitude towards Hand Hygiene

The sample respondents feel convenient in practicing hand hygiene due to the availability of water, soap and washing facility provided by their college. The attitude of college students regarding washing their hand seems to be frustrated when insisted to wash frequently. The process of hand hygiene seems to be irritation when they feel lazy. 76% of college students opined that practicing hand hygiene regularly prevents them from getting infected from diseases. Many of the respondents keep hand washing as optional.

### Relation between Knowledge of Hand Hygiene and Practice

The above table indicates that The Pearson's r correlation between the knowledge of hand hygiene and the practice of hand wash variables is 0.826. The Pearson's r is close to 1. The level of significant value of correlation is 0.01.

This indicates that there is a strong relationship between the two variables. This means that changes in one variable are strongly correlated with changes in the second variable. In the above table makes clear that Pearson's r value of 0.826 was positive. Since Pearson's r is positive, it is concluded that when the students knowledge of hand hygiene level increase the practicing of hand wash also increases.

### Hand Hygiene Facilities

The respondents opined that their college placed censor sanitizer machine for hand hygiene, In some colleges sanitary bottles were kept for cleaning hand. 78% of the college students states that hand washing liquid and soap is placed for washing their hands. 65% of the students agreed that water is always available at their college. The students (68%)opined that Clean wash basins were provided by their college with proper disposable dustbins. 85% of the students agreed that sanitizers were kept at the entrance of their college.

### Relation between Hand wash Facilities and Practicing Hand wash

		Hand wash Facilities	Practicing Hand wash
HF	Pearson Correlation	1	.840**
	Sig. (2-tailed)		.000
	N	300	300
PH	Pearson Correlation	.840**	1
	Sig. (2-tailed)	.000	
	N	300	300

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This indicates that there is a strong relationship between the two variables. This means that changes in one variable are strongly correlated with changes in the second variable. The above table represents that Pearson's  $r$  is 0.840. This number is very close to 1. This shows that there is a strong relationship between facility of hand wash and practicing hand wash. In the above table makes clear that Pearson's  $r$  value of 0.840 was positive. Since Pearson's  $r$  is positive, it is concluded that when the facility of hand wash in the college increases the level of practicing hand wash will also increases.

### 3. FINDINGS AND DISCUSSIONS

The study reveals that the overall knowledge of hand hygiene among college students was high which was a positive finding. This was perhaps due to their usual understanding on personal and hand hygiene, obtained from formal and informal learning processes. Although participants in this current study had high knowledge of hand hygiene the study results shows that less than half of the students are not practicing handwash at college when handshake(47%),washing with soaps(48%) and after using public transport(68%).

Hand hygiene is considered a behaviour that includes handwashing with soap and water and/or hand-rubbing using hand sanitizer without water (WHO, 2009a).It has long been known that practicing hand hygiene, either washing the hands with water and soap or using alcohol-based hand rub is the most effective way of preventing the spread of infectious diseases (Anderson et al., 2008). In current situation college should insist more on practicing hand hygiene to prevent them from various infection.The effective practice that can lower the risk of diseases is hand hygiene (Zakeri, Ahmadi, Rafeemanesh, & Saleh, 2017).Students possess with high knowledge of hand hygiene alone will not help them to prevent from illness but they have implement in practicing.

CDC recommends when one should wash hands regardless of the location; before eating food; before and after caring for someone who is sick, after using the restroom after blowing nose, coughing, or sneezing; after touching an animal, after touching garbage (CDC, 2018b).In this current study, self - reported practices were highest after touching the garbage (96%) and using the restroom (95%). The next highest hand hygiene practices reported were after touching sick people (89%).Practices were lowest before using the public transport and after money exchange. In comparison to other studies, describing the self-reported hand hygiene practices showed that most of the participants wash their hands after using restrooms (Uner, Sevensan, Basaran, Balci, & Bilaloglu, 2009) which was similar to the findings of this study. In previous studies hand sanitizers are the best alternative to handwashing for hand cleaning (Vessey, 2007).Students are used to clean their hands with sanitizers. The college provide censor sanitizer machine and bottle sanitizers for cleaning their hands.The spread of Covid made to focus more on hand hygiene and increase usage of sanitizers.

### 4. CONCLUSION

The study reveals that knowledge of hand hygiene and practicing hand wash are strongly correlated. Likewise facilities provided in the college influence the hand wash practicing. The increase in the level of knowledge of hand hygiene obviously increase practice. So The college authorities and teachers need to be sensitized about the importance of hand

hygiene practice. among students. the students' handwash knowledge was influenced by their parents' educational status, it is also recommendable that the Parents-Teachers-Association (PTA) meetings could be used as a platform to educate the parents about the healthy handwash practice.

Lazy attitude of the students towards handwash should be avoided by ensuring the facilities are always accessible to all the students. The college also need to create an enabling environment to encourage the practice of healthy handwashing through routine public demonstrations or group handwashing sessions.

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### Web sites

- <https://www.cdc.gov/handwashing/handwashing-family.html>  
[https://www.who.int/gpsc/tools/Five\\_moments/en/](https://www.who.int/gpsc/tools/Five_moments/en/)