HOW OFTEN IS HAND WASHING PRACTICED IN A PRIMARY HEALTH CLINIC

Abstract

Hand cleaning/ hygiene is a way of cleaning hands that reduces the risk of generating and spreading pathogens on hands. It is considered essential for reducing the risk of transmitting infection between patient and Healthcare workers. The purpose of this research is to discuss the significance of hand cleaning in primary health clinics and to discuss some of the methods which can be used to practice hand cleaning. It prevents the spread of potentially fatal germs / infections to the patients and also increases the risk that the infection will spread in the clinic atmosphere. There are several ways to clean your hands. Most commonly, an alcohol-based hand sanitizer is used to reduce the number of germs on the hands of healthcare workers. It is the most preferred method for cleaning hands in health clinics. A review of several pieces of the literature which includes Research paper and Journals is used in this paper. Links to said paper are provided in Reference Section of this paper. Data is also collected from Guidelines by WHO, Laws and Regulation by CDC. Data is collected and after reviewing, is arranged in a desired order which doesn’t deviate from the main purpose/ subject. Hand washing / hand hygiene should be a pedagogical priority. Health-care worker’s hand becomes grossly contaminated, this should be made as an intervention in education so that medical student always knows that it is not just unhealthy but dangerous not keep proper hand hygiene in medical field. It is important to understand why some interventions are successful and others fail. Because hand hygiene is more of a behavioral practice, it should be included in the training course of medical officers, nurses and other clinic related staff. And such kind of training should be continued even after being present in the medical clinic as a professional.

HAND CLEANING IN PRIMARY HEALTH CLINICS

Hand hygiene is an important health topic. Hand cleansing is a simple and effective way to reduce healthcare-related incidents caused by infections. It also prevents the spread of infection all around the primary healthcare clinic. Antibiotic-resistant germs, which are very difficult to treat, can also be prevented by simply cleaning the hands. Hand hygiene means to clean your hands properly. This can be done either by hand washing (with soap / hand wash and water), antiseptic hand washing, antiseptic rubbing or surgical antisepsis. It reduces the risk of healthcare personnel to get effected by any infection from the patient. Proper cleaning of the hands reduces the spread of dangerous germs to the patient. Other causes of the spread of these deadly diseases may include prolonged hospitalization, long-term disability, and increased antimicrobial resistance. It is estimated that five million healthcare-related infections occur every year in small clinics in Europe, resulting in approximately 0.14 million deaths per year. This number is very huge and considering the cause is just common negligence which is practiced everywhere from small clinics to huge medical institutes. And there is little to no resistance to this careless practices seen anywhere. In healthcare, hands are washed 5 to 40 times per shift and 1.7 to 15.2 times per hour. From observational studies in various health units, it is concluded that hand hygiene performance may vary according to work intensity and various other factors. The study indicates that healthcare work is only 6.6 seconds to 30 seconds at max. Several studies have found that the major factor in carelessness in hand hygiene is the lack of awareness and recommendations for health workers.

The purpose of this research is to discuss the significance of hand cleaning in a primary health clinic and to discuss some of the methods which can be used to practice hand cleaning and to prevent any infection or germs to spread.

## Research Objective

Emphasize the importance of hand cleaning in general practice clinics, the risks involved and how to address hand hygiene issues in such clinics. There is no doubt that proper care of the hands reduces the risk of cross-infection between patients and healthcare professionals. One of World Health Organization’s (WHO) prime agenda which states as “Clean Care is Safer Care” should practice in basic health care clinics. They should formulate guidelines for the implementation of this agenda to address healthcare-related infections caused by poor hand hygiene. This paper focuses on a simple, inexpensive, but most effective technique to prevent the spread of infection due to carelessness in hand hygiene. This document will also provide instruction on how to comply with WHO guidelines and regulation by CDC as well.

# Reasons

Although there are several reasons which can be utilized to justify this research but two main reasons to undertake this research are as under;

1. By proper hand wash practices, patients can be protected by infecting form potentially deadly germs
2. Appropriate hand washing practices can stop the spread of healthcare-related infections throughout the health clinic

5 to 10% of hospitalized patients are affected by these infections because they remain in the atmosphere contaminated by carelessness in hand hygiene compliance. However, this can be easily avoided by adopting to infection-control measures. Of these measures, hand cleaning is the most important means of preventing the transmission of such infections. Only 50 to 70% of healthcare workers follow the hand washing methods. Health-associated infections not only spread through infected or dehydrating wounds, but can also emanate from the skin of an intact patient. Other recommendations include awareness-raising, the introduction of hand hygiene products in the clinic, the reduction of workers' workload, and proper cleaning and sterilization of the wards.

## Does the hand get colonized with bacteria in a normal clinic environment?

The hands of most healthcare workers are with pathogens such as methicillin vancomycin-resistant enterococci (VRE), MDR-Gram-negative bacteria (GNBs), Candida spp. and Clostridium difficle. These bacteria / pathogens can survive up to 150 hours in the hand of the worker. Even if such a worker does not directly touch the patient, he may contaminate the gowns, bedding, furniture, food and other items in the patient's room or in another room in the clinic. The highest incidence of hand contamination is reported in intensive care or intensive care units where most cases of cross-infection are reported (Mathur, 2011). The worker's hand can be contaminated by simply touching the patient's skin or by taking his blood sample or even simply recording his blood pressure.

## Hand Hygiene in Surgery

Cleaning of hands or hand hygiene does not only relate to the primary health clinic, but its importance is far greater. In surgery following things related to hand hygiene should always be considered. Surgeon should always remove any kind of accessories he is wearing at the time of surgery. He should also clean his fingernails, making sure that there is no debris his nails. Always perform surgical hand antisepsis using alcohol-based hand sanitizer. Scrub hands and forearms for about 2–6 minutes. Double gloving is also recommended. All of these steps are significant because bacteria on the hands of surgeons may become reason on infecting the wound.

## Methods of Cleaning Hands

There may be several methods of cleaning one’s hand, but the most effective product for reducing germs count is alcohol based hand sanitizer. It should therefore always be used by health care providers and is the most preferred method of cleaning hands in health clinics. Another thing that should be recommended and practiced is to wash your hands with soap and water when there is visible dirt on your hands and before you eat and use the toilet.

### **When to Use an Alcohol Based solutions.**

Alcohol based hand sanitizers always be used;

1. Right before touching the patient’s skin
2. Before performing aseptic tasks
3. Before moving from soiled part of the patient’s body to the dry part of his/ her body
4. After contact with blood or contaminated surface
5. Immediately after glove removal
6. After touching patient

### **Wash with Soap & Water**

Proper water wash using soap should be performed when;

1. Hands are wet
2. After caring for a person with diarrhea
3. Before and after having meal
4. After exposure to spores

# Literature Search

A review of several pieces of the literature which includes Research paper and Journals is used in this paper. Links to said paper are provided in Reference Section of this paper. Data is also collected from Guideline by WHO, Laws and Regulation by CDC. Data is collected and after reviewing, is arranged in a desired order which doesn’t deviate from the main purpose/ subject.

In every hospital at least one out of 31 patients have health-care associated infection caused by carelessness of health-care providers. Healthcare providers should wash their hand twice as many times they are already doing. It is in the basic survival tactics of microbes encrypted genetically which help them survive in the nature (Allegranzi, 2011). Basic protocols should be follow if we want to fight these microbes. Healthcare providers should make hand washing practices their daily activities and serve as a role model for future generations of doctors, nurses and other healthcare workers.

## Measures

Hand washing / hand hygiene should be a pedagogical priority. The hand of health workers is heavily contaminated. This should be done as an intervention in the training so that the medical student always knows that it is not only unhealthy but also dangerous not to uphold proper hand hygiene in the medical field. Alcohol base hand sanitizers should always be used for decontaminating hands as it is the easiest and most effective mean. In health clinics, emphasis should be placed on infection control by sharing responsibility with senior members of the organization through continuous monitoring and feedback of data. All of the above mentioned steps should be initiated immediately in every primary health clinic. According to Literature review from 1960 to 1900; 23 cases of infection transmission are reported annually in medical offices, clinics and emergency departments, 11 cases are reported in ophthalmologist offices and clinics, 13 in dental offices, and 6 in alternative care settings.

And according WHO data on Health Care Workers hand’s contamination; 85.4 % of Staph spp, 56.4 % S. aureus, 9.1 % MRSA is found on primary pediatric care doctor’s hands. Similarly, 85.6 % of Staph spp, 69.2.4 % S. aureus, 7.7 % MRSA is found in the hand of outpatient dermatology doctors. 97.2 % of Staph spp, 22.2 % S. aureus, 7 % MRSA is found the hand Ophthalmologist. Apart from that Pseudomonas, S. aureus and MRSA were found in patient’s hands and in exam room air.

# Conclusion

Through evidence and analytic reasoning, it is concluded from this research paper that hand cleaning in a primary health clinic is very severe issue. It can cause various healthcare associated infections which can even be deadly. It is important to understand why some interventions succeed and others fail. Since hand hygiene is more of a behavioral practice, it should be included in the training course of medical officers, nurses and other clinic related staff. And such kind of training should be continued even after being present in the medical clinic as a professional. Awareness campaign should be started as well, so that such practices are adopted by every health clinic.

According to data collected, hand cleaning is not practiced in primary health clinics as it should be due to the negligence of Healthcare worker including specialist in the field. These infections are causing Healthcare associated Infections. To prevent this, we have to take various steps. First, there should be direct monitoring, automated electronic monitoring, automated product consumption and automatic reporting. Healthcare workers should receive appropriate training and public awareness.

Young medical students who sees their professors as a mentor or role model they can be easily taught by such professors. Using this approach, student’s behavior can be easily effected and thus proper hand hygiene can be imprinted in their minds. And it is good initiative to provide a positive role models to final year MBBS students.

# References

Allegranzi, B. (2011). *Hand hygiene in primary care.* Madrid: WHO Patient Safety, Spain Ministry of Health. Retrieved from https://www.seguridaddelpaciente.es/resources/documentos/VI\_Conferencia/03allegranzi.pdf

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