

Personal Hygiene and Health

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Abstract: The main aim of this study is to observe the health benefit of personal hygiene and sanitation in COVID-19 pandemic. With the help of this study, we are trying to put light on necessity of personal hygiene and sanitation. While keep personal hygiene practice can gives you extreme health benefit also it can keep away many infectious diseases. As earlier discussed, the benefits of good hygiene are long life, healthy body, great immunity and good environment. On the other hand, poor hygiene behavior can cause of many infectious diseases like, severe reparatory syndrome (COVID-19), diarrhea, severe eye infections, intestine infection or other bacterial disease. However, sanitation and good hygiene behavior can reduce the chances to get infected quickly. As we all are witness of COVID-19 pandemic, so to maintain hygiene is become our primary responsibility for our self and others. The 2nd wave of pandemic is very dangerous. Despite of much awareness about the disease and sanitation, hygiene, the reason of increasing the infection is must to know. Further research can highlight this area with the help of technology.

Keywords: COVID-19, Diarrhea, Personal hygiene, Sanitation.

I. INTRODUCTION

A. Personal Hygiene

It's one of those delicate topics, but one that must be addressed. The effects of poor hygiene are far-reaching beyond the obvious health concerns. Personal hygiene refers to the way you look after your body. Bathing, hand washing, tooth brushing, and other hygiene practises are all part of this routine. Toilet hygiene, shower hygiene, nail hygiene, teeth hygiene, sickness hygiene, and hand hygiene are all examples of personal hygiene (Kimberly Holland, 2018).

Every day, you come into contact with millions of germs and viruses from the outside world. They will stay on your body for a long time and, in some situations, make you sick (Haston

et al., 2020). Personal hygiene habits will help you and those around you avoid getting sick. They can even make you feel better about yourself.

Failing to frequently wash your hands, brush your teeth, and take showers doesn't just affect you. It affects everyone you interact with. Therefore, it is important to investigate about poor personal hygiene, its impact, and why an individual needs to help keep our hygiene regimen headed in the right direction all the time. Poor personal hygiene arises from either intentional or unintentional neglect of your body's cleanliness and health requirements. Your body begins to look unhealthy, you experience unwanted health concerns, and your overall well-being is affected.

In COVID-19, the hygiene factor becomes more important for example hand washing, wearing masks etc. The flu can be one of the effects of poor hygiene. You must know how to prevent contamination from any pathogens. You also need to know how to stop the spreading of your germs to other people. Some examples of poor hygiene behaviors.

Personal hygiene practises are linked to less infections and improved health. Poor personal hygiene, on the other hand, can result in minor side effects such as body odour and greasy skin. They can also lead to more problematic or even life-threatening issues. If you don't wash your hands regularly, for example, germs and bacteria can easily enter your mouth or eyes. This can cause a variety of problems, ranging from stomach bugs to pink eye.

Tooth decay and plaque build-up will occur if you don't brush your teeth. Poor dental hygiene is linked to a number of serious health problems, including heart disease (Noble *et al.*, 2019). Self-esteem can be harmed by poor grooming practises. Looking and feeling presentable will improve your morale and make you feel good about yourself.

COVID-19 wave 2 is currently in progress, as we can see from everywhere. It is now considered more dangerous than ever, so taking care of our personal hygiene becomes our primary responsibility for ourselves as well as for others in this situation. Most of our current good health is due to sanitation and personal and household hygiene habits, and any major

decrease in hygiene standards would result in increased health problems (Aiello *et al.*, 2008). It is important to maintain good hygiene in order to avoid contracting or transmitting germs and infectious diseases to yourself and your children. Many diseases like diarrhoea especially gastroenteritis, severe respiratory infections (COVID-19) including cold and flu, staph infections, worm related conditions, such as threadworms, trachoma, an eye infection which can lead to blindness and tooth decay are spread by touching other people, having faeces (poo) on your hands, handling infected food, and coming into contact with dirty surfaces or items. However, All the good or bad hygiene it has its effect on health.

B. Sanitation

A good sanitation system, as well as good hygiene and safe drinking water, are important for good health and social and economic growth. As a result, in 2008, India's Prime Minister quoted Mahatma Gandhi, who said in 1923 that "sanitation is more necessary than independence" (Singh, 2008). Improvements in one or more of these three aspects of good health can significantly reduce morbidity and severity of various diseases, as well as improve the quality of life of a large number of people in developing countries, especially children. (Esrey *et al.*, 1991; Merchant *et al.*, 2003).

On the other hand, Poor sanitation has been linked to a variety of infectious and nutritional outcomes, both of which contribute to a large global disease burden. Diarrhea is the leading cause of death, with an estimated 1.4 million deaths per year (Pruss-Ustun *et al.*, 2016). Trachoma is the world's most common infectious cause of blindness. (Resnikoff *et al.*, 2004), About one billion people are at risk of soil-transmitted helminth (STH) infections, which result in approximately five million disability adjusted life years (DALYs), or in other words 5 million years of safe life lost, and schistosomiasis results in another two million loss. (Murray *et al.*, 2013; Pullan *et al.*, 2014). Additionally to the direct impact of sanitation on human health, sanitation-related sequelae aggravate poverty and economic development (Guerrant *et al.*, 2013).

Sanitation is a key deterrent to infection since it keeps bacteria out of the system. (Wagner & Lanoix, 1958) and consistent sanitation and hygienic practises are likely to help prevent transmission. Since, pandemic is an emerging public health concern. It takes 5-6 days on average for symptoms to appear after a person is infected with the virus, but it can take up to 14 days (World Health Organization). The majority of people infected with the COVID-19 virus will have mild to moderate respiratory symptoms and will recover without needing any special care. People over the age of 65, as well as those with underlying medical conditions such as cardiovascular disease, diabetes, chronic respiratory disease, and cancer, are at a higher risk of developing serious illness (WHO, 2020). Being well educated about the COVID-19 virus, the disease it causes, and how it spreads is the best way to avoid and slow down transmission. Clean your hands regularly or use an alcohol-

based rub to protect yourself and others from infection, and avoid touching your skin also ensure the sanitation around you (WHO, 2020). According to World Health Organization, following are the steps to avoid contamination and slow the spread of COVID-19 or other pathogens:

- Wash your hands with soap and water on a daily basis, or scrub them with an alcohol-based hand rub.
- Keep at least a metre distance from people who are coughing or sneezing.
- Keep your hands away from any surface and from your face.
- When coughing or sneezing, cover your mouth and nose.
- If you're sick, stay at home.
- Don't smoke or engage in other lung-damaging habits.
- Maintain physical separation by avoiding excessive travel and avoiding large numbers of people.

C. Health Impact of Personal Hygiene and Sanitation

Lack of sanitation and hygiene leads to serious disease like diarrhoea and severe respiratory syndrome (SARS-CoV-2) and severe pathogens. In today's context where people are afraid to spread of COVID-19, government is requesting to all people to maintain the hygiene and sanitation. Diseases associated with poor sanitation are particularly linked to poverty and infancy, accounting for roughly 10% of the global burden of disease (Pruss-Ustun *et al.*, 2008).

D. Diarrhoeal Diseases

Diarrhoea is the third leading cause of death in children under the age of five, accounting for 13% of all deaths in this age group and killing an estimated 300,000 children per year in India (million death study collaboration, 2010, Lakshminarayanan, 2015). India has steadily reduced the number of children under the age of five who die, with the overall number of deaths falling from 2.5 million in 2001 to 1.5 million in 2012. Many universal services were created and were successful, enabling for this remarkable reduction, like "swachhata abhiyan" and immunization programs, program to control of diarrheal diseases and acute respiratory infection. Also many Systematic reviews suggest that improved sanitation can reduce rates of diarrhoeal diseases by 32%-37% (Fewtrell *et al.*, 2005; Waddington & Snilstveit, 2009).

E. Acute Respiratory Infections

Acute respiratory infections (ARI) are the leading cause of morbidity and mortality in children around the world (Leowski, 1986). In many countries, respiratory infections, along with diarrheal diseases, continue to be major causes of hospitalisation in children as well as elders. Despite significant success in reducing mortality over the last two decades, pneumonia, a

serious type of acute lower respiratory infections, continues to be a common cause of preventable neonatal and infant mortality (Walker *et al.*, 2013). Although, visible progress has been observed in reducing mortality rate over the past two decade. But after COVID-19 pandemic covered the world with its severe or mild symptom medication is facing difficulties to reduce the death of public. However, the chain of pandemic could break with the help of proper hygiene and sanitation. Because of this serious infectious disease there are total 13.8 million active cases in the world and 2.9 million deaths (World Health Organization, 2021).

F. Under Nutrition

Around half of the effects of childhood and maternal underweight are due to poor sanitation, hygiene, and water, largely due to the synergy between diarrhoeal diseases and under nutrition, in which exposure to one increases susceptibility to the other (World Bank, 2008; Victora, Adair & Fall, 2008).

G. Benefits of Hygiene and Sanitation

Improved hygiene and sanitation behaviour has both social and economic advantages in addition to its health benefits. Households are aware of these broader advantages. However, scientists have only recently begun to investigate why people want to improve sanitation and change their habits (WSSCC, 2003). Despite the fact that the primary purpose of sanitation programmes is to improve hygiene, householders seldom adopt and use toilets for health purposes. Instead, the desire for privacy and to avoid embarrassment, the desire to be modern, the desire for convenience and to avoid the discomforts or hazards of the bush (e.g. snakes, rodents, rain) and the desire for social recognition or prestige are the key reasons for sanitation adoption and use (Jenkins *et al.*, 2005; 2007).

Improved sanitation has a number of economic benefits, including reduced health-care rates, fewer days off at work or school due to sickness or caring for a sick relative, and time savings (time not spent queuing at shared sanitation facilities or walking for open defecation (Hutton, Haller & Bartram, 2007). According to (Hutton & Haller, 2004). In total, preventing sanitation and water-related diseases could save the health-care system \$7 billion per year; the benefit of deaths averted, calculated using discounted potential profits, adds another \$3.6 billion per year.

Finally, the Disease Control Priorities Project recently discovered that hygiene promotion to avoid diarrhoea is the most cost-effective health initiative in the world, costing just \$3.35 per disability-adjusted life year (DALY) loss averted, with sanitation promotion coming in second at only \$11.15 per DALY loss averted (Cairncross & Valdmanis, 2006).

II. DISCUSSION

Clean people and environments are so common place today that it's impossible to imagine a time when they weren't. Since numerous studies done on this topic, many of them show the major health benefits of hygiene and sanitation. Personal hygiene can prevent a lot of diarrhoea transmission; there's also growing evidence that hand washing can help prevent ARI. (Cairncross *et al.*, 2003). The rapid and consistent rise in COVID-19 cases in India, as well as the virus's identification in faeces and wastewater, has raised concerns about the virus's transmission routes. Thousands of Indians were infected by COVID-19 despite the implementation of preventative measures such as handwashing, sanitation, personal hygiene, social distancing activities, and face mask use. The main aim of this study is to observe the health benefit of personal hygiene and sanitation in this pandemic. No doubt wearing cotton face mask can prevent 20%-40% from the virus and of the various masks tested, the N95 mask had the highest protective efficacy (approximately 80% to 90% reduction (Ueki *et al.*, 2020).

It is believed that clean air and water are a civic right. Local governments have traditionally been responsible for keeping streets clean and disposing of waste and for this, the government is providing garbage vehicles everywhere. In our houses, we have showers, toilets, baths, soaps, detergents, laundries, dishwashers, and vacuum cleaners so that one can manage personal and home hygiene. Many of these things are linked to good health, good morals, good rearing, good housekeeping, and society itself! However, today's agreed environmental and personal hygiene practises are relatively new concepts from last decade. However we are witness of deadly virus disease (COVID-19), SARS-CoV-2 appears to cause enteric infection, according to evidence (Lamers, 2020). And fear of this disease gives a sudden high to hygiene and sanitation. Not only government but local public has major concern to prevent from this deadly virus. Well before COVID-19 there is much infectious disease like pathogen, diarrhoea, trachoma and stomach infections are in prevalence. But this pathogens are now become a part of COVID-19 symptom. So in this situation personal hygiene and sanitation play a very important role to reduce the chances to get infected. But still we cannot say that this is sufficient for prevention. Although, government trying to give best protection with the help of many activities like lockdown, curfew, hospitalization, and advise public to consume home remedies like steaming, herbal tea and other herbal powders that enhance the immunity.

III. CONCLUSION

In our research we conclude some very important finding about the hygiene and sanitation. As earlier discussed the benefit of good hygiene are long life, healthy body, great immunity and good environment. On the other hand, poor hygiene behaviour

can cause of many infectious disease like, severe reparatory syndrome (COVID-19), diarrhoea, severe eye infections, intestine infection or other bacterial disease. However, sanitation and good hygiene behaviour can reduce the chances to get infected quickly. But it is important to do more work in this area. Since vaccination has been started in India but still the COVID-19 wave 2 is frightening everyone. Researchers are suggested to observe the cause of this explosion. Despite of much awareness about the disease and sanitation, hygiene, the reason of increasing the infection is must to know. Further research can highlight this area with the help of technology.

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