

# **Gandhi's Perspectives on Environmental Sanitation to Public Health-Transition over the Years**

*Seminar Paper*

**UGC - HUMAN RESOURCE DEVELOPMENT CENTRE  
UNIVERSITY OF CALICUT**



*For the partial fulfillment of the 1<sup>st</sup> Refresher Course in Gandhian Studies  
Conducted from 15.02.2019 - 07.03.2019*

*By*

**JISHA P J**

Assistant Professor

Department of Microbiology

EMEA College Of Arts And Science, Kondotty.

Mail ID: [jishapj76@gmail.com](mailto:jishapj76@gmail.com)

# **Gandhi's Perspectives on Environmental Sanitation to Public Health-Transition over the Years**

**Jisha P J**

**Assistant Professor Of Microbiology,  
EMEA College Of Arts And Science, Kondotty**

## **Introduction**

Gandhiji incorporated education in health and hygiene in his 18 point constructive programmes aimed at achieving complete independence by truthful and non-violent means. Indians gained freedom under his leadership, but his dream of a clean India is still unfulfilled. Mahatma Gandhi said "Sanitation is more important than independence". He made cleanliness and sanitation an integral part of the Gandhian way of living. His dream was total sanitation for all. Cleanliness is most important for physical well being and a healthy environment. It has bearing on public and personal hygiene. It is essential for everyone to learn about cleanliness, hygiene, sanitation and the various diseases that are caused due to poor hygienic conditions.

The habits learnt at a young age get embedded into one's personality. Even if we inculcate certain habits like washing hands before meals, regular brushing of teeth, and bathing from a young age, we are not bothered about cleanliness of public places. Mahatma Gandhi said, "I will not let anyone walk through my mind with their dirty feet." Gandhiji dwelt on cleanliness and good habits and pointed out its close relationship to good health. No one should spit or clean his nose on the streets. In some cases the sputum is so harmful that the germs infect others. Gandhiji's concept of natural positive health at the physical, psychological level goes beyond the WHO definition of health.

The cause of many of our diseases is the condition of our lavatories and our bad habit of disposing of excreta anywhere and everywhere. Gandhi, therefore, believes in the absolute necessity of a clean place for answering the call of nature and clean articles for use at the time. He did not fail to emphasise the need to educate villagers on hygiene and sanitation. Neither temples nor other public spaces are free from filth. Neither leaders nor citizens are particularly engaged with the problem of cleaning up our cities and towns with genuine measures, reducing needless consumption, reducing waste, confining dirt to its designated place, cleaning up our river and treating our environment with greater respect. Wherever and whenever Gandhi went, he found unsanitary conditions in some form or other and said that though few could afford shoes, it was unthinkable to walk barefoot in India. Even in a city

like Bombay, people walked about the streets under the fear of being spat upon by the occupants of buildings around. The filth and stench of public urinal and latrines on railway stations and in dharmashalas were awful. Gandhi deplored the passenger's habit of dirtying the railway compartments. The roads used by the poor villagers and their bullocks were always ill kept. He saw people taking a dip in a sacred pond without caring to know how dirty that bathing place or the water was. They themselves dirtied the river-banks.

Whenever Gandhi got an opportunity to do a little bit of cleaning work, he felt happy. To him the test of a people's standard of cleanliness was the condition of their latrines. He described himself as a bhangi and said he would be content if he could die as a sweeper.

## Public Health Importance:

1. Human excreta is an important cause of environmental pollution.
2. Improper excreta disposal causes soil pollution, water pollution, contamination of foods and propagation of flies.
3. The resulting diseases are typhoid and paratyphoid fever, dysenteries, diarrhoeas, cholera, hookworm disease, viral hepatitis and similar other intestinal infections.

## Reasons for poor sanitation in India:

Sanitation is one of the methods to provide primary health care to the actual need of the community possibly through minimising the level of pollutants in the environment.

- Low priority accorded to sanitation
- Lack of felt need
- Lack of coordination between different implementing agencies
- Inadequate sectorial planning
- Illiteracy and ignorance
- Lack of infrastructure.
- Weak and inefficient institutional mechanism.
- Inadequate trained human resources
- Inadequate financial resources.
- Lack of community participation and inadequate health education facilities.
- Lack of private sector participation.

# The medicine is Hygiene.

If every individual on the planet maintains a good hygiene for himself and the things around him, diseases will become a thing of the past. Hygiene as defined by the WHO refers to “the conditions and practices that help maintain health and prevent the spread of diseases.” This means more than just keeping ourselves clean. This means shunning all practices that lead to bad health. Throwing garbage on the road, defecating in the open, and many more. Personal health and Hygiene means keeping the body clean, consumption of clean drinking water, washing fruits and vegetables before eating, washing one’s hand, etc. Public hygiene refers to discarding waste and excreta properly, that means, waste segregation and recycling, regular disinfection and maintenance of the city’s water reservoir. Quality of hygiene observed especially in the kitchens of homes and hotels is very important.

Diseases are spread through vectors. Say the vector is contaminating water as in the case of typhoid, cholera, and amoebiasis (food poisoning), by drinking clean water always; we completely eliminate our chances of getting those diseases. Some diseases use insects and animals to spread, like plague uses rats, malaria, filarial, roundworms which in turn use flies and mosquitoes. Mosquitoes thrive in stagnant water and rats in garbage dumps and food that is dumped out in the open. By spraying stagnant water bodies with layer kerosene or other chemicals, we can completely eliminate mosquitoes from our neighbourhood. If that is unfeasible, we can all use mosquito nets or bed nets that cover us in a fine mesh sort of net while we are sleeping. This poses a physical barrier for the mosquito. Rats thrive on unsystematic waste disposal. By segregating the waste we can ensure that we don’t leave food lying around for rats to eat. A country has to strive to educate more doctors so that medical need of every citizen is taken care of. The importance of cleanliness should be inculcated in every citizen and this will in turn show in the cleanliness of the places we live in.

Sanitation is another very important aspect. Many of the common diseases mentioned earlier such as roundworms spread through the faeces of infected people. By ensuring that people are not defecating out in the open, we can completely eliminate such diseases and even more severe ones such as the one caused by *E. Coli*. The advancement in biology has given us answers to many questions, we are now able to identify the pathogen and treat an ailment accordingly.

Adequate sanitation and toilets are basic necessities that ensure and promote the health of people in developing countries. The importance of sanitation and toilets lies in helping reduce the spread of diseases. Sanitation systems aim to protect health by providing and promoting a clean environment. Developing countries face challenges in accessing sanitation and hygiene care. Hundreds of millions of people do not have access to adequate clean drinking water and that over one million deaths are a result of diseases transmitted via unclean water, poor sanitation and lack of hygiene. Access to soap is an importance of hygiene, and often a challenge in availability for developing countries. The Water, Sanitation & Hygiene initiative aims to reduce disease and improve lives by looking closely at communities and governments to understand their environment and what is suitable for providing hygiene and water. We need to establish an end to open defecation and upgrade latrines in order to encourage people to practice good hygiene as well as to increase the demand for sanitation.

The World Bank is addressing the importance of sanitation and toilets through the Water Supply, Sanitation and Hygiene (WASH) initiative, which assesses the relationship between poverty and hygiene to properly develop methods in bringing hygiene and water. The World Bank found that the effects of unsafe drinking water and lack of proper hygiene result in various other health issues, such as child stunting. WASH, in coordination with other organizations, works to provide appropriate services. The WASH program aims to reduce childhood mortality via investing clean water access to rural communities.

Shedding light on the importance of sanitation and toilets can lead to proposing and establishing sustainable sanitation for communities with no access to sanitation. The disparities of hygiene access need to be addressed to ensure the health of communities and generations to come.

## Effects of India's Poor Sanitation

Poor sanitation can sometimes be the initial domino that starts a cascading wave of other problems. In the case of India, poor sanitation and open defecation have allowed for an overwhelmingly unhygienic environment and a variety of widespread health problems. In India, there are more people who openly defecate on a regular basis than live in the entirety of Africa. Out of the 1.2 billion inhabitants, 103 million lack safe drinking water and 802

million lack any sanitation services. For starters, combining an unhygienic environment with a high population density creates a breeding ground for preventable disease epidemics. Two common hygiene related diseases, typhoid and diarrhoea, prevent their victims from absorbing necessary nutrients which leads to malnutrition. India has higher rates of malnutrition in children than Sub-Saharan Africa.

## Dangers of the lack of toilet facilities

Not only are there health consequences to open defecation, but social safety consequences as well. Besides diseases directly related to exposure to human waste, open defecation can also put an individual at risk of other dangers. Women who practise open defecation are at a higher risk of being sexually assaulted. When women and children have to relieve themselves, they are forced to venture into the streets rather than using a toilet in the safety of their own home, which compromises their safety. Cases have made worldwide headlines such as a case in 2014 where two girls were gang raped and hanged while they were outside going to the toilet late at night. The case sparked national outrage, with the lack of sanitation being criticized. A senior police officer in Bihar stated that about 400 women would have avoided rape last year if they had toilets in their homes.

Open defecation in rural areas often involves people walking into forested or grassy areas late at night annually. Many mosquito species primarily feed on human blood at night. This again can result in individuals who defecate outside putting themselves at risks of diseases such as dengue fever and malaria through mosquito bites.

## Initiatives taken by government of India

One type of toilet that could potentially work well with India is the composting toilet, which is a toilet that is used for about a year, and subsequently sealed for 6-9 months, where the heat and decomposition of the faeces kills off harmful bacteria and creates rich fertilizer that can be used in gardens. While India's poor sanitation has deep-rooted negative effects, the country has the innovative capacity to find an efficient and widespread solution.

Swachh Swasth Sarvatra focuses on two main objectives. First, the government will facilitate the construction of infrastructure and facilities such as public toilets, and second, will aim to change behavioural factors through educational means. This initiative is not only

in line with the WHO's sustainable development goals, but is part of a national public health campaign Swachh Bharat Abhiyan (Clean India Mission) which Prime Minister Narendra Modi launched on October of 2014.

Swachh Bharat is the India's largest scale public health mission. This campaign has the ambition of making the nation free of open defecation by the year 2019 by building toilets across the country. On 2nd October, 2014, the Indian Prime Minister, Narendra Modi, launched a nation-wide cleanliness campaign on the occasion of Mahatma Gandhi's birth anniversary. The concept of Swachh Bharat is to provide sanitation facilities to every family, including toilets, solid and liquid waste disposal systems, village cleanliness, and safe and adequate drinking water supply. We have to achieve this by 2019 as a befitting tribute to the Father of the Nation, Mahatma Gandhi, on his 150th birth anniversary. Modi said that the Swachh Bharat mission is beyond politics, inspired by patriotism and not politics. He also asked people to pledge '*na main gandagi karoonga, na main gandagi karne doonga*' (I shall not litter and won't allow anyone to do so). He further flagged off a walkathon as part of the Swachh Bharat Campaign, which is not just a slogan, but our responsibility. This turned the people's thoughts to Gandhi's idea of cleanliness.

While an ambitious goal, India has seen this, attempted before, with limited success. In 1999, the central government introduced the Total Sanitation Campaign (TSC). This campaign had much the same goals as Swachh Bharat, aiming to educate on sanitation and provide toilets nationwide. The campaign had the ambitious goal of providing total coverage of toilet facilities to India. The actual impact of the campaign was however far more limited. Of the 138.2 million rural households in India, nearly 3.5 million had constructed household toilets with support from the TSC by 2007. This works out to less than three percent of rural households benefiting from the programme.

Accusations were abundant that the scheme received a lack of priority from the central government, and that funds were mismanaged and inefficiently allocated. A Controller and Auditor General of India (CAG) audit covering the TSC from 2009 to 2014 identified a weak performance against its targets. They also claimed more than thirty percent of individual household latrines were non-functional for reasons like poor quality of construction, incomplete structure, non-maintenance.

Government surveys of the Swachh Bharat scheme have since revealed similar issues. Nearly six out of every ten toilets built by the government under the Swachh Bharat Abhiyan don't have proper water supply, making them unusable. Though 3.5 crore new toilets have been built under the scheme, many of them exist as just a hole in the ground with walls.

Around 55.4 percent of people in villages where toilets have been built are still opting for open defecation due to the absence of water supply and proper drainage in the toilets. In cities, 7.5 percent of the population were found to still defecate in the open. While this may be a significantly smaller number than in rural areas, it only takes a small number of these individuals to potentially spread an outbreak of a disease such as cholera.

A mere forty percent of faecal waste in India is properly treated. The remainder finds its way into the septic tank, which can lead to pollution of water supplies and gas emissions that are toxic to the surrounding environment. In some states, as many as eighty percent of toilets are connected to septic tanks.

Despite the criticisms, many still support the initiative. The sanitation economy of India is set to double, thanks to Swachh Bharat claimed Jin Montesano, chief public affairs officer, LIXIL Group at the 18th World Toilet Summit. "Swachh Bharat Mission has generated significant interest in addressing the urgent sanitation issues in India.

## Sanitation: India can't meet target before 2054

The WHO/UNICEF joint monitoring programme for water supply and sanitation has said that at its present pace, India would take until 2054 to meet its millennium development goals on sanitation. Orissa will take the longest time until 2160. Despite the Swachh Bharat campaign, much of India still remains without toilets, many of those being built are ineffective due to a lack of sanitation facilities and piping in the area. A prolonged and thorough campaign is needed if India wishes to pick up the pace.

## Sanitation in Indian Cities: A neglected issue

A survey published by the Urban Development ministry shows how basic infrastructure, especially sanitation, cannot keep up with the fast growth of Indian cities. The survey examined 1405 cities in twelve different states and found out that around fifty percent



of these cities don't have a proper water supply system. Even if the households have access to piped water in around eighty percent of these households the average supply is less than five hours per day. Concerning sanitation the numbers are even worse: Over seventy percent of the households in the analyzed cities don't have access to toilets or a sewerage system. Almost sixty percent of the world's population who has to rely on open defecation lives in India, but this number also includes many people in rural areas.

## Inadequate Sanitation Costs India Rs. 2.4 Trillion

Local efforts appear more positive than country wide assessments. While the situation may look dire from a nationwide perspective, local governments are often finding more success. Hyderabad for example has been declared free of open defecation. This followed a series of efforts by the Greater Hyderabad Municipal Corporation (GHMC) to boost access to sanitation in the Telangana state capital. The measures included the building of 1,975 private toilets and 384 communal toilets, with more underway.

## Poor Sanitation, Not Malnutrition - Blame for India's Notoriously Stunted Children

A report published by TIME states that poor sanitation facilities in rural India have led to the stunting of growth in children in the country. Children in India suffer from stunting defects in their growth rate at prevalence far higher than many other nations of similar socio-economic states. The TIME report draws comparison to Sub-Saharan Africa, in which children are more commonly subjected to impoverished conditions, though do not suffer stunting at the same rate. The report suggests that it is therefore not malnutrition that is the driving factor behind stunting in India, but lack of sanitation. With a potential half of the Indian population still practising open defecation, children are exposed to countless diseases related to exposure to human faecal matter.

Diseases such as cholera show sporadic outbreaks across the country, these outbreaks are often seen in rural communities without access to toilet facilities. Many individuals defecate in, or near water sources for the village. A single instance of cholera in a person can therefore spread to the entire community. Diseases such as this often cause diarrhoeal

symptoms. This has a dehydrating effect that could be causing the stunting seen in Indian children. Lack of hydration can inhibit numerous bodily functions; this may be the factor that is affecting the growth rate of the children.

## Hospital acquired infections

Lack of sanitation in hospital facilities is a primary means by which infections spread. As hospitals are a gathering of many people with a myriad of different illnesses, any lapses in sanitation protocol can prove deadly.

Indicative of this is a case that has been unveiled at the Tuberculosis Hospital. A total of 66 employees contracted the disease in the past five years, authorities said in reply to an RTI query. Of these, seventeen died. This number may be the tip of the iceberg as the figures only account for hospital staff. If staff themselves are becoming infected due to lapses in sanitation protocol it is highly likely the infection has been spread among patients and visiting family.

Sepsis is another significant issue in India. Maternal and newborn mortality rates due to the condition are higher in India than the global average. It is a difficult condition to prevent as it can be caused by an infection from a whole range of pathogens. As such, it is vital that sanitation protocols are in place and strictly followed to reduce the spread of pathogens.

## Conclusion:

We can conclude that cleanliness is important in our life as well as for the nation. It is well known that the Mahatma Gandhi personally took the effort to achieve the change that he wanted to see. It is of course too much to expect our present day leaders to go around the cities with the rising number of slums, and initiate a genuine drive to clean-up the surrounding. It is even less probable that they will pull themselves away from their market-focused pursuits and ineffectual, exclusive pursuit of GDP growth, to focus on the task of nation-building.

Teachers and students role is very important to create awareness on cleanliness. In today's world the role of social media is important to create awareness among the people and inculcate a feeling of nationality among them. Cleanliness is not only the responsibility of the '*safaai kaamgar*' (sanitation worker) or local government. It is the responsibility of all Indians.

It is the responsibility of the Government officers, NGOs and the local community to make India completely clean. It is a need of the present. All the people should actively participate to clean India to fulfil the dream of Mahatma Gandhi for the protection of the environment, for our safety, and for a healthy future.

The root of the problem is the lack of available or accessible toilets to the general population. Unfortunately, use of the toilets found in developed countries would be impractical and nearly impossible to achieve in India. A waste disposal system would need to be put into place, and toilets like these require large amounts of water, which is rarely consistent in developing countries. While India is not known for being wealthy, the country ranks fourth in the world for manufacturing competitiveness. With many citizens capable of designing and manufacturing innovative solutions, the possibility of a low-cost toilet is promising.

The problem of rural sanitation is further complicated due to social and attitudinal problems. A large percentage of our population is poor, illiterate and socially disorganised so, they do not realise, the importance of sanitation. The sanitation programme will be successful only through people's involvement and by designing a system which is suitable to the sociocultural attitudes and customs of the people.

Several awareness programmes, such as Nirmal Bharat Abhiyan, Total sanitation campaign etc. were launched by the government for personal cleanliness and environmental sanitation. However due to the half-hearted cooperation of the citizens of India, all these drives failed to make a strong impact. Swachh Bharat Abhiyan can only be completely successful, if each and every Indian takes up this campaign as his/ her own responsibility and join hands together to make it a triumphant mission. After all cleanliness is next to godliness!

## Bibliography :

- Gandhi M. K., "An Autobiography or The Story of My Experiments With Truth", Navajivan Publishing House, Ahmedabad, India, 1927.
- Gandhi M. K., "Keys to Health", Navajivan Publishing House, Ahmedabad, India, 1948.
- Gandhi M. K., "Social Service, Work and Reform" (Vol-1), Navajivan Publishing House, Ahmedabad, India, 1976.

- Gandhian Approach Towards Health by Dr Ravindra Vasant Nisa
- Importance of Gandhian thoughts about Cleanliness by Dr. Shubhangi Rathi
- World Toilet Day: A review of India's toilets and Swachh Bharat November 19, 2018
- <https://www.mkgandhi.org/bahurupi/chap06.htm>
- [http://www.gandhi-manibhavan.org/gandhiphilosophy/philosophy\\_environment\\_sanitation.htm](http://www.gandhi-manibhavan.org/gandhiphilosophy/philosophy_environment_sanitation.htm)
- <http://www.thehindu.com/opinion/blogs/blog-urban-prospects/article5192535.ece>
- <http://www.niticentral.com/2014/02/27/modi-launches-mahatma-gandhi-swachchata-abhiyan-194080.html>
- Centre February 1, 2018In "Environmental health"India May 23, 2018In "Access to Healthcare"
- <https://www.mkgandhi.org/bahurupi/chap06.htm>