ABSTRACT

Sanitation is an investment with high economic returns. Poor sanitation is a major public health issue in India. Poor sanitation is thought to be a major cause of enteric infections among young children. A third of the 2.5 billion people worldwide without access to improved sanitation live in India, as do two-thirds of the 1.1 billion practicing open defecation and a quarter of the 1.5 million who die annually from diarrhoeal diseases. Most of the rural population in India is unaware of the entrenched connection between cleanliness and health. The absence of sanitary conditions leads to many illnesses and diseases, which in turn lead to major social and economic problems of families and community as a whole. India’s sanitation deficit leads to losses worth roughly 6% of India’s gross domestic product and an estimated future losses equivalent to 3.4% of 2006 GDP. Hence the need of the hour is to undertake the initiatives to create awareness about sanitation and toilet culture in India like the recently launched “Swachh Bharat Mission” by the Government. The previous programmes and campaigns failed to bring about the change in the attitude and behavior of the people with regards to sanitation. The present campaign aims to involve all stakeholders to make it a people’s movement.

Keywords: Swachh Bharat Mission, Sanitation, Health problems, Diarrhoea, Toilets, Sanitation Campaign.

INTRODUCTION

Health and hygiene are the most important elements for the overall human well-being and development. Hygiene and sanitation are among the most cost-effective public health interventions. Environmental sanitation even today is a major public health issue in India. Apart from causing mortality and morbidity and polluting water, poor sanitation in India has harmful effects on many aspects of human welfare: education, mobility, use of public space, life choices, and, ultimately, livelihoods, incomes, and general well-being. The contribution of sanitation to well-being includes such intensely personal and subjective, experiences and feelings as dignity, safety, convenience, comfort and status. It is evident that inadequate sanitation and poor hygienic practices lead to huge public health costs as well as environmental and other welfare impacts. Previous research has shown that in low-income countries, investments in sanitation reap a high benefit at least five times greater than the amount invested. Better sanitation in the West during the 19th and early 20th centuries led to huge improvements in health long before the advent of vaccines and antibiotics, and researchers have long known that sanitation plays a crucial role in child mortality and malnutrition. The sanitation campaign in India has been implemented from time to time by different Governments to address the challenge of poor sanitation. But these programmes focused mainly on the building of latrines—the main metric for showing progress towards sanitation targets. Hence the recently launched campaign “Swachh Bharat Mission” is India’s biggest ever national level cleanliness drive post independence. The need of the hour is to promote the present sanitation campaign and make it a people’s movement.

Current sanitation scenario in India

India accounts for roughly a third of the world’s population without improved sanitation and two-thirds of the population practicing open defecation. An estimated 2.5 billion people have no access to improved sanitation. 71% of these people live in rural areas with more than 90% of them practicing open defecation. Percent of urban population without proper sanitation in India is 63%. As per the 2011 census, there is no drainage facility in 48.9% households, while 33% households have only open drainage system.

Burden of diseases due to poor sanitation in India

About 1.8 million people die every year from diarrheal diseases; 90% of these are children under 5, and most are in developing countries. Poor sanitation is associated with various infectious diseases, including diarrhea, soil-transmitted helminth infection, trachoma, & schistosomiasis.
Diarrhoea accounts for the largest share of sanitation-related morbidity and mortality, causing an estimated 1.4 million deaths annually, including 19% of all deaths of children younger than 5 years in low-income settings\textsuperscript{10,11}. Furthermore, evidence has linked poor sanitation with stunting, environmental enteropathy, and impaired cognitive development—long-term disorders that aggravate poverty and slow economic development\textsuperscript{12}. Children are affected more than adults. The rampant spread of diseases inhibits children’s ability to absorb nutrients, stunting their growth\textsuperscript{13}. It is also attributed that a large part of India’s malnutrition burden is owing to the unhygienic environment in which children grow up. New research on malnutrition, which leads to childhood stunting, suggests that a root cause may be an abundance of human waste polluting soil and water, rather than a scarcity of food as shown in figure 1\textsuperscript{14}. India loses at least 1000 children a day to diarrhoeal deaths and the reason for these deaths is open defecation and lack of proper sanitation facilities.

**Economic impact of poor sanitation**

The economic impacts of poor sanitation have not been counted properly. Evidence suggests that all water and sanitation improvements are cost-beneficial in all developing world subregions\textsuperscript{5}. The economic benefits from sanitation interventions have been estimated in a WHO study to be considerable and estimated to be on the order of $63 billion per year from reaching the Millennium Development Goals (MDG) sanitation target\textsuperscript{15}. Poor sanitation impairs the health of Indians and consequently productivity losses. India’s sanitation deficit leads to losses worth roughly 6% of India’s gross domestic product (GDP), according to World Bank estimates, by raising the disease burden in the country\textsuperscript{16}. The Economics of Sanitation Initiative (ESI) study estimates that the total annual economic impact of inadequate sanitation in India amounted to a loss of ` INR (Indian Rupees) 2.4 trillion ($53.8 billion) in 2006 amounting to per capita annual loss of ` INR 2,180 ($48). These economic impacts were the equivalent of about 6.4% of India’s gross domestic product (GDP) in 2006\textsuperscript{16}. The health-related economic impact of inadequate sanitation was INR 1.75 trillion ($38.5 billion), which was 72 percent of the total impact. Urban and rural households in the poorest quintile bear the per capita economic losses of INR 1,699 ($37.5) and INR 1,000 ($22) due to inadequate sanitation respectively\textsuperscript{16}. It is also noteworthy that households in higher wealth quintiles also bear substantial impacts due to inadequate sanitation. The total economic impact was estimated to be 3% of GDP in 2006 and an estimated future losses equivalent to 3.4% of 2006 GDP\textsuperscript{17}. In India, additional sanitation and hygiene (hand washing with soap) interventions in 2006 would have prevented 346,000 deaths and 338 million cases of diseases and saved at least 1.7 billion days of time lost in 2006. It is also estimated that up to INR 1.48 trillion ($32.6 billion) of annual economic gains could result from a combination of sanitation and hygiene interventions\textsuperscript{18}.

**The New sanitation campaign in India**

Swachh Bharat Mission (Campaign Clean India) is a national level campaign officially launched by the Government of India on 2\textsuperscript{nd} October 2014\textsuperscript{5}. It will be covering 4041 statutory towns to clean the streets, roads and infrastructure of the country. The campaign is India’s biggest ever cleanliness drive post independence and 3 million government employees and schools and colleges students of India participated in this event. The aim of the campaign is to accomplish the vision of ‘clean India’ by Mahatma Gandhi on his 150\textsuperscript{th} birthday on 2\textsuperscript{nd} October 2019. The total 5 year campaign is expected to cost over INR 62000 crore (US$10 billion). Each individual will devote 100 hours per year towards cleanliness of the surrounding which will come to approximately 2 hours per week. The campaign urges everyone to take up the Swachh Bharat challenge and also inspire others to take up the same challenge given by you\textsuperscript{19}. It also puts the responsibility on all the citizens to make this nationwide campaign a resounding success by efforts as an individual, institutional and organizational campaigner. Celebrities and public figures have taken to the Swachh Bharat challenge in a big way and are making the impact multiply. They have invited other nine people to join the mission, who in turn are expected to nominate nine more. The behavior change communication should generate awareness about sanitation and its linkages with public and environmental health amongst communities and institutions. The mere availability of latrines will not end open defecation immediately since we also need to confront the cultural reasons for bad sanitation. The need of the hour is to have public campaigns, in schools and in the media, to explain the health and economic benefits of using toilets and of better hygiene with active involvement of the community. There is a need to put in the mechanisms to bring about and sustain behavioral changes aimed at adoption of healthy sanitation practices. Though the health aspects are fundamental, the economic and social benefits to sanitation should be emphasized, and will be a key to building support for the campaign. As we know that sanitation is an investment with high economic returns, let us come together and make an investment by active involvement.

**CONCLUSION**

The neglect of public health in India post-independence is partly due to the decisions of policymakers, who focused on disease-specific interventions rather than on an overarching public health network focused on prevention. The only positive ray of hope is the growing political consensus on the importance of toilets. The recently launched Swachh Bharat Mission must be seen as a welcome development. Hopefully, the political consensus and involvement of people from all walks of life will add heft to a campaign for providing more awareness on improved sanitation with a change in attitude. We need a cultural revolution in this country to completely change people’s attitudes toward sanitation and hygiene in the long run. The new found approach of building support by challenging nine persons towards sanitation will definitely take the campaign forward making a chain of action. Not only a strong political will, but the innovative initiative of participation and social mobilization will add strength to the cleanliness campaign. In future comprehensive studies should be undertaken on the health, social and economic benefits of improved sanitation by the present campaign “Swachh Bharat Mission” in India.
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Figure 1. Comparison of India and other countries with respect to relation of malnutrition to open defecation.

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