

Impact on Clean Cities and Villages - Diseases Externalities in India: An Overview

GowthamAashirvad

Assistant Professor of Management Studies,
Bharath Institute of Science and Technology,
Selaiyur, Chennai, Tamil Nadu 600 073

ABSTRACT

Pollution less society in India is a great concern in the present context. The fruits from the pollution less clean cities and villages i.e. Clean India movement yield healthy life. In turn it uses to enhance the status of the country in front of the developed nations across the globe. But in India, healthy life is questionable for very many reasons; one among the reason is disease externalities. There are a host of disease externalities one must closely consider including drinking water, sanitation and air pollution amongst others. This article considers one of the biggest problems hurting early-life health in today's India; enteric infection due to open defecation.

One significant and internationally unique source of early life disease in India is open defecation, especially in rural India. Open defecation spreads germs into the environment, and therefore makes growing children sick. One form of this sickness is diarrhea, which robs growing children of the food that they eat. Another resulting disease could be environmental enteropathy, a chronic inflammatory response of the intestines to repeated exposure to the germs spread by open defecation; it reduces the ability of children's intestines from absorbing nutrition.

With these basic understanding this article is classified into four sub-divisions initially starts with introduction, secondly, it highlights the literature reviews related to open defecation and clean India, thirdly, it focuses on problems and consequences of open defecation, ultimately concludes with addressing mechanism of open defecation to achieve clean cities and villages in India.

KEY WORDS: Clean India, open defecation, addressing mechanism

INTRODUCTION:

Pollution less society in India is a great concern in the present context. The fruits from the pollution less clean cities and villages i.e Clean India movement yield healthy life. In turn it uses to enhance the status of the country in front of the developed nations across the globe. But in India, healthy life is questionable for very many reasons; one among the reason is disease externalities. There are a host of disease externalities one must closely consider including drinking water, sanitation and air pollution amongst others. This article considers one of the biggest problems hurting early-life health in today's India; enteric infection due to open defecation.

One significant and internationally unique source of early life disease in India is open defecation, especially in rural India. Open defecation spreads germs into the environment, and therefore makes growing children sick. One form of this sickness is diarrhea, which robs growing children of the food that they eat. Another resulting disease could be environmental enteropathy, a chronic inflammatory response of the intestines to repeated exposure to the germs spread by open defecation; it reduces the ability of children's intestines from absorbing nutrition.

Major social problems may have greater concern for any of the policy framing bodies, research institutes and researchers but minor social problems may cause greater disaster like disease externalities. With these basic understanding, this article is focused on the following.

OBJECTIVES:

- i) To review the relevant literature about open defecation in India.
- ii) To highlight the problems and consequences of open defecation in India.
- iii) To suggest the controlling/ addressing mechanism of open defecation to achieve the goal of Clean India.

The second part of this article deals with the review of literature from the various national journals are highlighted here.

LITERATURE REVIEW:

PATEL AMRIT (2016) highlights that a recent UNICEF report says 54 per cent people defecate in the open in India as against just 7 per cent in Brazil and Bangladesh. Only 6 per cent rural children below five years in India use toilets and about 50 per cent of all Indians regularly wash their hands with soap after contact with excreta. The Union Government's Socio-Economic Census (2011) reveals that only 30.7 per cent rural households (HHs) have latrine facilities as against 81.4 percent urban households.

IYERPARAMESWARAN (2017) revealed that since the launch of the Swachh Bharat Mission (SBM) in October 2014, the sanitation coverage in rural India has gone up from 42 per cent to over 63 per cent, the number of people defecating in the open in rural India has come down from about 550 million to about 350 million, 190,000 villages, 130 districts and three states have become Open Defecation Free (ODF). The programme is now well on track to achieve an ODF India by October 2, 2019. Prioritizing sanitation is critical for multiple reasons. The lack of sanitation is the leading cause of diarrhea among children under five, leading to stunting among children and also results in several preventable child deaths. Sanitation is also critical for the safety and dignity of women. With India making massive strides towards becoming an economic super power, ending the practice of open defecation is absolutely imperative.

MOJUMDARSUJOY (2016) expressed that the sanitation problem is not only that of inadequate infrastructure, but involves changing the mindset of the population regarding the sustained use of toilets, the current rural sanitation programme, the Swachh Bharat Mission(Grameen) (SBM-G), being implemented with the goal to make India free from Open Defecation (ODF) by October 2, 2019, the 150th birth anniversary of Mahatma Gandhi, brings in a new approach, focusing on bringing behavior change through social mobilization and collective action; gives flexibility to States and districts in implementation; provides financial support; aims at garnering partnerships for sanitation and attempts to leverage and use the respect and office of the District Collector for maximum impact. Though the programme has been designed and is being driven by the Central Government, sanitation being a State subject in India, which is further devolved to the local bodies under the 73rd amendment of the Constitution, the responsibility of its implementation in rural areas rests upon every lower tier of administration- States, districts, blocks and finally the Gram Panchayats. For the Mission to achieve success every rural household of the country has to be

reached and for this to happen, each level of delivery has to carry out its part of the responsibility more effectively.

THE HINDU (2017) reported that almost all rural households in Kerala and Haryana had access to a toilet while Bihar fared the worst, apart from Kerala, Tamil Nadu was the other performer as 79 percent of rural households had access to a toilet as per the findings of a government commissioned survey on rural sanitation. The Ministry of Drinking Water and Sanitation on Tuesday released the findings of the survey of 1.4 lakh rural households, under taken by the quality Council of India (QCI) between May and June this year. The survey, covering 4626 villages across all States and Union territories, claimed that 62.45 per cent of the households had access to a toilet. The survey also pointed that 91.29 per cent of the people who had access to a toilet also used it, indicating a change in sanitation behavior. The next part of this article focuses on the problems and consequences of disease externalities: Open Defecation in India.

THE PROBLEMS AND CONSEQUENCES OF DISEASE EXTERNALITIES: OPEN DEFECATION IN INDIA:

There are a host of disease externalities one must closely consider including drinking water, sanitation and air pollution amongst others. This article considers one of the biggest problems hurting early-life health in today’s India; enteric infection due to open defecation. Open defecation in India is much more common than in even much poorer countries. India has the largest rural open defecation rate in South Asia by a very large margin. It is interesting to note that in Bangladesh Open Defecation has almost been fully eliminated. Open Defecation in India from the South Asian Perspective is depicted in the following table.

TABLE 1: OPEN DEFECATION IN INDIA FROM THE SOUTH ASIAN PERSPECTIVE

South Asian Countries	Rural Open Defecation-in-2015(per cent)	GDP per capita –in 2013 (World Bank)
India	61.3	1,498
Nepal	37.5	694
Pakistan	21.4	1,275
Afghanistan	17.4	665
Bhutan	3.8	2,363
Bangladesh	1.8	958
Sri Lanka	0	3.280

Source: Economic Survey 2015-16, Vol.I, P-91.

The above table compared with the WHO and UNICEF Joint Monitoring Programme estimates, 61 per cent of rural Indians defecate in the open in 2015, compared with only 32 per cent of rural people in sub-Saharan Africa. Even sanitation laggards perform better than India, with 17 per cent rural open defecation in Afghanistan and 15 per cent in Kenya. Moreover, many people in rural India who live in households that contain working latrines that are in use by other household members nevertheless defecate in the open.

These facts indicate that income constraints may not be the main determinant of open defecation. Research suggests that rural Indian households reject the types of latrines promoted by

the World Health Organization and the Indian government partly because their pits needed to be emptied every few years.

CONSEQUENCES:

In fact, the consequences of open defecation for Indian children may be worsened by high population density than simple international comparisons. The sharpest fall in height-for-age are seen as the fraction of village households who openly defecate approaches 100 per cent. This is an example of a social externality. Apart from the height and age problem, cultural and traditional reasons and lack of education contribute to this unhygienic practice. Most of the BPL families and lower income groups were not aware of the importance of sanitation for better health and clean environment. Low sanitation coverage due to inadequate efforts to create awareness among rural households that can convince them to have toilet facilities and use them. Lack of affordable sanitation technology and trained implementing agencies and non-availability of choice of toilet designs and area specific technologies, inadequate supporting delivery systems and absence of trained masons, skilled workers and technical manpower. Final part of this article exhibits the addressing mechanism of open defecation to achieve the goal of Clean India with Conclusion.

ADDRESSING MECHANISM OF OPEN DEFECATION TO ACHIEVE THE GOAL OF CLEAN INDIA.

Historically, open defecation in India has declined by about one percentage point per year. If the Sustainable Development Goal of eliminating open defecation by 2030 is going to be met, this historical rate of decline must be more than tripled, and that acceleration must be sustained over fifteen years. It is clear that this represents a major challenge. To overcome this major task of behavioral challenge, the following mechanism could be adopted:

A village-wide campaign is necessary to make rural people fully aware of the adverse effects of open defecation which is mainly responsible for infections and a number of diseases. A massive campaign by employing all available means of communication has to be launched to make all the people in a village including school children, youths and women fully aware of the fact that they should never go barefoot for open defecation.

Rural sanitation as a part of health should find appropriate place as the compulsory subject in primary schools. The ultimate objective of the campaign should be to create demand for safe hygienic toilets and save women in particular from the agony and humiliation of open defecation.

No uniform design of a toilet should be forced on user-beneficiaries. User of a toilet should be free to select design of his/her toilet. Banks can also consider them eligible for loan under priority sectors.

In view of SBM being a programme of national significance to promote defecation-free clean environment Government can consider interest-free bank loans to all beneficiaries to motivate them to have toilets in their houses.

NGOs should have proven and demonstrated expertise and infrastructure. They need to be trained to implement and follow-up the programme.

Individual donors, financial institutions, insurance companies, corporate houses, business community, private companies, NRIs, etc., can consider providing toilet facilities in schools to supplement Government efforts.

The school administration and teachers have a role to teach students to keep toilets neat and clean and to monitor and ensure that students also do so.

Other measures include: higher investment for rural sanitation, aggressive social marketing, strong behavior change communication, village planning, strong alternate delivery system, social mobilization and mass awareness at Panchayat level, development of strong partnership with implementing agencies, NGO, bilateral agencies and Panchayat, BPL and APL families who don't have toilet accessibility should be targeted simultaneously, Incentives and Awards, time frame to complete the provision of proper sanitation facilities to the targeted group.

CONCLUSION:

India, as an emerging economy and targeting double digit annual growth will have to resolve the behavioral challenge, diseases externalities-open defecation and providing toilet facilities with piped sewer system for disposal of human waste from the long-term perspective. Indeed, neither the Government, nor local authorities or beneficiaries can bear the total capital costs and recurring operations and maintenance costs of sewerage systems. For this purpose, Government should mobilize financial resources from international financial institutions, viz., World Bank, Asian Development Bank etc., harnessing technical expertise, technologies and equipment from reputed international professional agencies, formulating perspective plan to be implemented in phases to cover all cities and villages progressively by 2022 in a mission mode with public-private-partnership, training users and youths in all respects of maintenance and follow-up. The thrust cannot be just to construct toilets, but to ensure their continued use keeping clean and maintaining properly which, of course, calls behavioral change for this none can be blamed. But joint responsibility of every stakeholder's viz., Government, NRI, Corporate, NGOs and every individual in the rural and urban India.

REFERENCES:

- Economic Survey 2015-16- Government of India, Ministry of Finance, Department of Economic Affairs, Economic Division, 2016, Vol. I Pp-90-92.
- IyerParameswaran, "The Swachh Bharat Mission: Everyone's Business", Yojana, May 2017, Pp-11&12.
- KadamSandeep, "MahilaMandals Move Mandi towards ODF Plus" Kurukshetra, October 2016, Pp-59&60.
- MojumdarSujoy, "Swachh Bharat Mission (Gramin) Support through Data Analysis", Kurukshetra, October 2016, Pp-10-15.
- Patel Amrit, "Swachh Bharat Abhiyan to end Open Defecation in Rural India", Kurukshetra, October 2016, Pp-61-65.
- Saxena K. Rishabh, "Rural Sanitation: The Way Forward", Kurukshetra, October 2016, Pp-67-69.
- The Hindu, Wednesday, August 9, 2017, P-7.