

Review Article

ASSESSABLE SANITATION AND TOILETS FOR PERSONS WITH DISABILITIES: A HUMAN RIGHT APPROACH

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Abstract

According to the World Report on Disability (WHO) more than 1 billion people with disabilities worldwide and the rates of disability are increasing due to population ageing, increases in chronic health conditions and other factors. In developing countries there is a massive shortfall of sanitation facilities in general, and in particular of facilities which are accessible to all – including persons with disabilities. This is despite the fact that 15% of the world’s population lives with some kind of disability. The majority of these persons with disabilities live in developing countries (80%). They are among the poorest, most vulnerable and marginalized groups. Barrier Free Environment is one which enables people with disabilities to move about safely and freely and to use the facilities within the built environment. The goal of barrier free design is to provide an environment that supports the independent functioning of individuals so that they can get to, and participate without assistance, in everyday activities such as procurement of goods and services, community living, employment, and leisure. The lack of accessible sanitation facilities can create humiliating situations as it deprives persons with disabilities of their most basic and private needs. It often leads to lower hygiene levels causing additional burdens of disease.

The main objectives of the “Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1996 enacted by the Government of India on January 1, 1996 are to create barrier free environment for persons with disabilities and to make special provisions for the integration of persons with disabilities into the social mainstream. Chapter VII of the Act, Sections 44 to 46 deals with non-discrimination in transport on the roads and in the built environment. In regard to non-discrimination in the built environment, provisions have been made in this Act for ramps in public buildings, adaptation of toilets for wheel chair users, Braille symbols and auditory signals in elevators etc. Besides violating basic human rights, the exclusion from society also results in huge economic losses. The International Labour Organization estimates the annual global loss of GDP due to people with disabilities being excluded from income generating activities at 3%-5%.

Present paper is an attempt to present real picture of availability of sanitation and toilet facilities in general and for persons with disabilities in particular. The need assessment is done with regard to sanitation facilities for persons with disabilities with specification of role of government and nongovernmental organization is providing accessible sanitation facilities for persons with disabilities using right based approach. Special emphasis is on the sanitation and toilet facilities for persons with disabilities living in rural areas. *ASEAN Journal of Psychiatry, Vol. 24 S(Advancements in psychology and mental health), March-April 2023; 1-14.*

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Introduction

The problem of access to sanitation is major for many countries, especially underdeveloped countries (Figure 1). In the process of problem solution, there are two major challenges. The first challenge is to define what “sanitation” really means [1]. The second challenge in the process is to decide what the most important aspects of sanitation problem, which requires priority attention. Solving these

challenges is not as simple as it looks and many professionals are confused with the aspects. Sanitation is broadly defined to include management of human excreta, solid waste, and drainage. With regard to definition of sanitation, general agreement is that, it covers inter alia

- Safe collection storage, treatment, disposal/re-use/ recycling of human excreta

- Management/re-use/recycling of solid wastes.
- Drainage and disposal/re-use/recycling of household wastewater
- Drainage of storm water
- Treatment and disposal/re-use/recycling of sewage effluents
- Collection and management of industrial waste products
- Management of hazardous wastes including hospital wastes, and chemical/radioactive and other dangerous substances.

The complexity of issue increases because of the fact that each community, region or country has different most sensible and cost-effective ways of thinking about sanitation in short term and long term. Differences in social norms, customs and myths further complicate the issues and priorities.

It is known fact that progress in sanitation and improved hygiene has greatly improved health, but many people still have no adequate means of disposing of their waste. This is a growing nuisance for heavily populated areas, carrying the risk of infectious disease, particularly to vulnerable groups such as the very young, the elderly and people suffering from diseases that lower their resistance. Poorly controlled waste also means daily exposure to an unpleasant environment. The build-up of faecal contamination in rivers and other waters is not just a human risk: other species are affected, threatening the ecological balance of the environment. The discharge of untreated wastewater and excreta into the environment affects human health by several routes like polluting drinking water, entry into the food chain, for example via fruits, vegetables or fish and shellfish, bathing, recreational and other contact with contaminated waters, and providing breeding sites for flies and insects that spread diseases (Figure 2).

Human excreta have been implicated in the transmission of many infectious diseases including cholera, typhoid, infectious hepatitis, polio, cryptosporidiosis, and ascariasis. WHO (2004) estimates that about 1.8 million people die annually from diarrhoeal diseases where 90% are children under five, mostly in developing countries. Poor sanitation gives many infections the ideal opportunity to spread: plenty of waste and excreta for the flies to breed on, and unsafe water to drink, wash with or swim in. Among human parasitic diseases, schistosomiasis (sometimes called bilharziasis) ranks second behind malaria in terms of socio-economic and public health importance in tropical and subtropical areas. The disease is endemic in 74 developing countries, infecting more than 200 million people. Of these, 20 million suffer severe consequences from the disease [2].

Infection with trachoma is the leading global cause of preventable blindness: trachoma is closely linked to poor sanitation and is one of the best examples of an infection readily preventable through basic hygiene. Six million people worldwide are permanently blind due to Trachoma. Trachoma is spread by a combination of: poor sanitation, allowing the flies that spread the infection to breed; poor hygiene associated with water scarcity and poor water quality; lack of education and understanding of how easily the infection can spread in the home and between people.

Literature Review

Economic costs of sanitation

The study by the World Bank titled “The Economic Impacts of Inadequate Sanitation in India” estimates that the total economic impacts of inadequate sanitation in India amounts to Rs. 2.44 trillion (US\$53.8 billion) a year which was the equivalent of 6.4 percent of India’s GDP in 2006. This means a per person annual impact of Rs. 2,180 (US\$48). The economic impact of sanitation is divided into

- Health related impacts
- Domestic water related impacts
- Access time impacts and
- Tourism impacts.

Some global facts

According to the latest estimates of the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), released in early 2013 (collected in 2011), 36% of the world’s population –2.5 billion people – lack improved sanitation facilities, and 768 million people still use unsafe drinking water sources. Inadequate access to safe water and sanitation services, coupled with poor hygiene practices, kills and sickens thousands of children every day, and leads to impoverishment and diminished opportunities for thousands more [3].

- The United Nations estimates that there are 2.5 billion people who still do not use an improved sanitation facility and a little over 1 billion practicing open defecation.
- Access to sanitation, the practice of good hygiene, and a safe water supply could save 1.5 million children a year.
- 2.5 billion People – roughly 37% of the world’s population – still lack what many of us take for granted access to adequate sanitation.
- Open defecation is one of the main causes of diarrhoea, which results in the deaths of more than 750,000 children under age 5 every year.

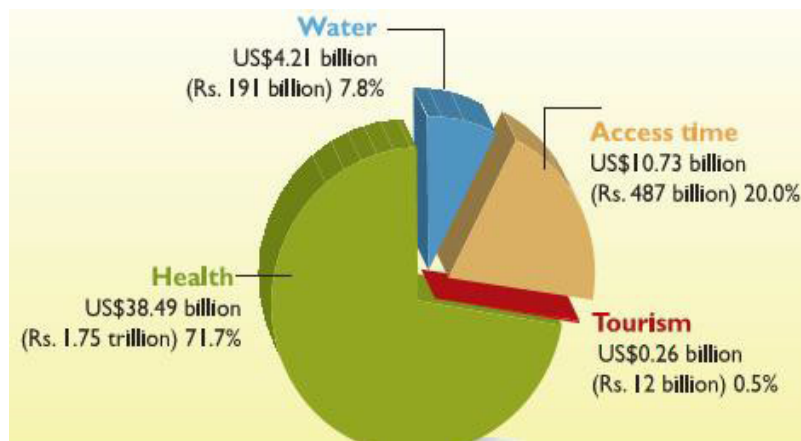


Figure 1. Composition of the economic impacts of inadequate sanitation.

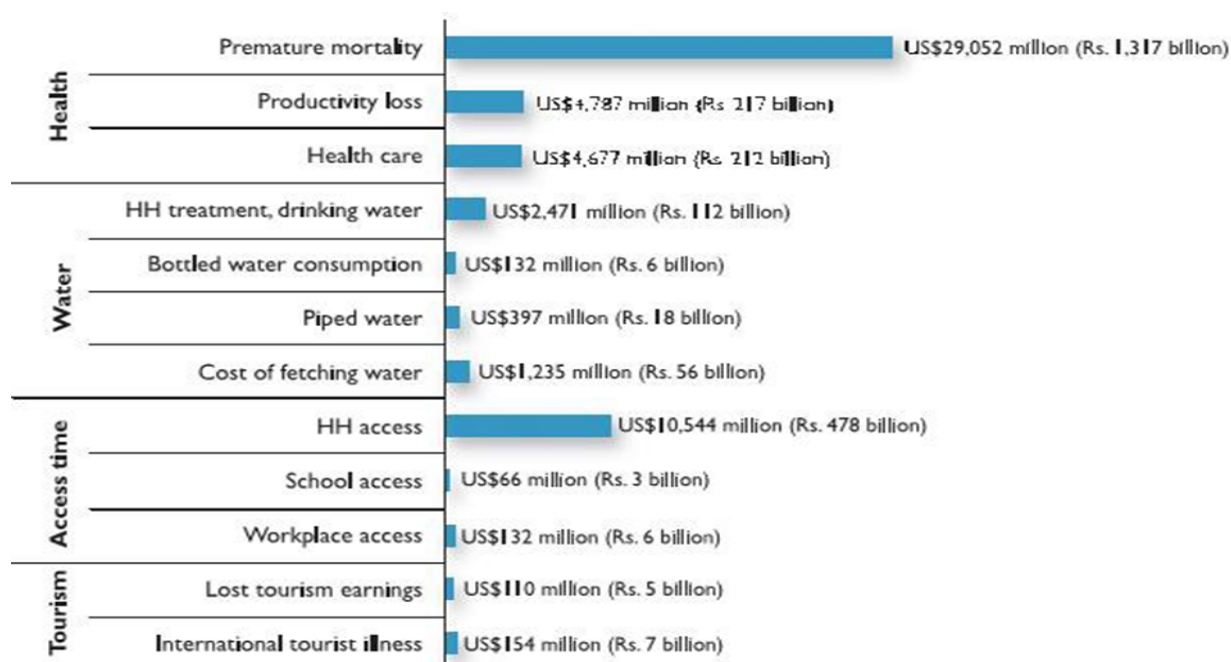


Figure 2. Economic impacts of inadequate sanitation in India by categories.

- Every 20 seconds a child dies because of poor sanitation.
- 80% of diseases in developing countries are caused by unsafe water and poor sanitation, including inadequate sanitation facilities.
- Access to sanitation, the practice of good hygiene, and a safe water supply could save 1.5 million children a year.
- In 2006, the world's population was almost equally divided between urban and rural dwellers. Nevertheless, more than 7 out of 10 people without improved sanitation were rural inhabitants.
- Doing nothing is costly. Every US \$1 spent on sanitation brings a \$5.50 return by keeping people healthy and productive [4].

The Millennium Development Goal 7 (MDG7) Target 10 is to halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation. The world remains off track to meet the MDG sanitation target of 75% and if current trends continue, is set to miss the target by more than half a billion people. Unless the pace of change in the sanitation sector can be accelerated, the MDG target may not be reached until 2026 [5].

Some Indian facts

Globally, India has the largest number of people, close to 594 million which is 48% of population in India practices open defecation. About half the population of India use toilets [6, 7].

With 44% of mothers disposing their children's faeces in the open, there is a very high risk of microbial contamination (bacteria, viruses, amoeba) of water which causes diarrhoea in children.

Children weakened by frequent diarrhoea episodes are more vulnerable to malnutrition, stunting, and opportunistic infections such as pneumonia. About 48% of children in India are suffering from some degree of malnutrition. Diarrhoea and worm infection are two major health conditions that affect school age children impacting their learning abilities.

Although access to sanitation in rural India is improving, the increase is not equitable. Open defecation is still almost universal among the poorest 20% of the population.

Women and girls face shame and a loss of personal dignity and safety risk if there is no toilet at home. They have to wait for the night to relieve them to avoid being seen by others. A very low proportion of the rural population in India uses improved sanitation (facilities which ensure hygienic separation of human excreta from human contact). Almost 70% do not have access to toilets in rural India (Table 1).

There has been good progress in providing toilet and hand washing facilities in schools in India.

The number of schools having toilet facility in India has increased from 0.6 million (52%) in 2005-06 to 1.14 million (84%) in 2010-11 (Table 2). In Indian rural schools, toilet facility increased from 0.4 million schools (49%) in 2005-06 to 0.7 million schools (79%) in 2009-10, where they have at least one toilet facility.

Almost 28 million school children across India do not have access to school toilet facilities. The number of schools having separate toilet facility for girls is increased from 4.20 lakh (37.4%) in 2005-06 to 10.05 lakh (72.16%) in 2011-12. However, there are huge issues of quality of construction of these facilities, functionality and use.

Adequate, well-maintained water supply and sanitation facilities in schools encourage children to attend school regularly and help them achieve their educational goals. Inadequate water supply and sanitation in schools are health hazards and affect school attendance, retention and educational performance.

Although access to improved sanitation is steadily increasing in India, the use of improved sanitation in the country remains an enormous challenge.

7 states in India (Orissa, Meghalaya, Chhattisgarh, Jharkhand, Assam, Uttar Pradesh and Bihar) account for almost 50% (13.8 million) children without access to toilet facilities in schools.

Adolescent girls are especially vulnerable to dropping out, as many are reluctant to continue their schooling because toilet facilities are not private, not safe or simply not available. The number of schools in India having separate toilet facility for girls increased from 0.4 million (37%) in 2005-06 to 0.8 million (60%) in 2010 (Table 3).

Persons with disabilities in India: Census 2011

India, at the current rate of progress will only achieve the sanitation target of MDG 7-c in 2054. Water safety is being compromised by open defecation as faeces in the open contaminate drinking water in family and community wells.

Sanitation for persons with disabilities

Access to safe and clean water and sanitation facilities is a basic right of all people, including people with disabilities, the denial of which can have serious implications on their well-being. For example, inaccessible toilet and water facilities are major contributing factors for school dropout among children with disabilities. The access to clean water and basic sanitation is a right also guaranteed under the UN Convention on the Rights of Persons with Disabilities.

According to UN estimates, 4% to 6% of the world’s population suffers some form of disability, with the poorest of the poor the most affected. Disability appears in many forms and poses obstacles to daily life also related to water and sanitation. Fetching water, personal hygiene, washing clothes and dishes, and accessing and using the toilet water and sanitation related tasks –all pose challenges to those living with disability.

Article 28 in the Convention on the Rights of Persons with Disabilities focuses on the right of persons with disabilities “to an adequate standard of living for themselves and their families; this includes State Parties duty to ensure equal access to clean water services”.

Millennium Development Goal 7 Target C is to halve the proportion of the population without access to clean water and basic sanitation by 2015 (UN 2000). According to the UN, an estimated one billion individuals, roughly 15% of

Table 1. Disabled population by sex and residence, India, 2011.

Residence	Persons	Males	Percentages	Females	Percentages
Total	26810557	14986202	55.90%	11824355	44.10%
%	100%	100%		100%	
Rural	18631921	10408168	55.86%	8223753	44.14%
%	69.49%	69.45%		69.55%	
Urban	8178636	4578034	55.98%	3600602	44.02%
%	30.51%	30.55%		30.45%	

Source: Census of India 2011

Table 2. Percentage of disabled to total population India, 2011.

Residence	Persons	Males	Females
Total	2.21	2.41	2.01
Rural	2.24	2.43	2.03
Urban	2.17	2.34	1.98

Source: Census of India 2011

Table 3. Disabled population by type of disability India: 2011

Type of Disability	Persons	Males	Females
Total	26,810,557	14,986,202	11,824,355
	100%	100%	100%
In Seeing	5,032,463	2,638,516	2,393,947
	19%	10%	9%
In Hearing	5,071,007	2,677,544	2,393,463
	19%	10%	9%
In Speech	1,998,535	1,122,896	875,639
	7%	4%	3%
In Movement	5,436,604	3,370,374	2,066,230
	20%	13%	8%
Mental Retardation	1,505,624	870,708	634,916
	6%	3%	2%
Mental Illness	722,826	415,732	307,094
	3%	2%	1%
Any Other	4,927,011	2,727,828	2,199,183
	18%	10%	8%
Multiple Disability	2,116,487	1,162,604	953,883
	8%	4%	4%

the world’s population is persons with disabilities (WHO 2011). Presumably, if persons with disabilities make up 15% of the world’s population, then they also comprise roughly 15% of all those reflected in such statistics. Thus, Goal 7 Target C will not be achieved unless persons with disabilities are routinely included in water and sanitation programmes.

Such access is a right also guaranteed under the new UN Convention on the Rights of Persons with Disabilities which came into force in May 2008 (UN 2006). Article 9 of the Convention specifically ensures persons with disability equal access to the physical environment and the identification and elimination of all obstacles and barriers to such accessibility; Article 28 recognizes the right of persons with disabilities to an adequate standard of living for themselves and their families, including adequate food, clothing and housing, and Article 32 ensures that international cooperation, including international development programmes, are inclusive of and accessible to persons with disabilities (UN 2006).

Discussion & Conclusion

Disability directly and indirectly affects a significant proportion of the world’s population. The World Health Organization estimates 15% of people worldwide are affected by disability (over 1 billion people). One household

in four is said to include a person with a disability. The needs of disabled people in developing countries are consistently overlooked when it comes to providing sanitation and hygiene services. For years the sanitation and hygiene need of disabled people have been treated as low priority, to the detriment of disabled people and the wider community, especially families and caregivers. The barriers that disabled people face when using sanitation facilities have been categorized as environmental (such as steps and narrow doors), institutional (such as a lack of information from authorities and exclusion from consultative procedures) and attitudinal (such as prejudicial attitudes from the community and service providers), but little action has been taken to address these.

- Evaluate interventions designed to benefit disabled people within mainstream sanitation approaches, such as Community Led Total Sanitation, to document good practice.
- Undertake in-depth quantitative and qualitative research with disabled people, their families and communities in two countries. This comparative approach would help determine if some challenges are universal. The quantitative element will generate facts and figures relating to the type and extent of the challenges.
- Develop guidelines regarding baseline questions, indicators and outputs for inclusion within national and international monitoring and evaluation mechanisms.
- Undertake cost benefit analyses of improving access to sanitation and hygiene services for disabled people, and of not taking action
- It is unethical to conduct research to understand a problem and then not attempt to alleviate it. After the initial research the team will design interventions to respond to the research findings, and then use similar methodology to assess the impact of intervention.

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