



HEALTH PROMOTION

Access to water, sanitation and hygiene in schools: A prerequisite to achieving SDGs in India

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Dear Editor,

In 2015, the United Nations General Assembly (UNGA) adopted 17 Sustainable Development Goals (SDGs), comprising 169 targets, aimed at achieving worldwide sustainable development. The eight targets specified in SDG 6 focus on clean water and sanitation, the aim being to ensure the availability and sustainable management of water and sanitation for all by 2030. This involves ending open defecation and providing access to sanitation and hygiene, improving water quality, ensuring the supply of fresh water, implementing integrated water resource management and restoring water-related ecosystems [1, 2].

Since 2019, the world has been fighting the COVID-19 pandemic, and water, sanitation and hygiene (WASH) stand at the forefront of disease prevention efforts worldwide. However, the WASH situation in low- and middle-income countries (LMICs) remains an obstacle to the prevention of COVID-19 infection [3]. WASH play a critical role in improving schoolchildren's education, health and overall well-being. Indeed, the lack of WASH in schools facilitates the spread of preventable diseases and increases school absences, particularly among females. Inadequate funding and budgeting have been identified as a major impediment to integrating successful and sustainable WASH programs into school settings.

An integral and essential part of the social structure, children are known to be receptive to new ideas, and the school serves as a conduit for these [4]. Children spend much of their time at school, which is the best place to learn and practice good water, sanitation and hygiene habits. Furthermore, children can influence their family members and society, thereby changing the community's attitudes towards WASH. Children are therefore critical in shaping the WASH behaviors of future generations [4]. In this respect, school is a cornerstone of the future of an informed and healthy society. Thus, the provision of clean water, sanitation and hygiene in schools can be seen as a necessary prerequisite to achieving SDG 6.

According to the United Nations, billions of people still lack access to safe drinking water, adequate sanitation and adequate hygiene. As per the United Nations' 2021 report, 129 nations worldwide will be unable to

manage water resources sustainably by 2030 unless the current rate of improvement is doubled [5]. According to the 2018 global baseline report, providing universal access to necessary WASH services in schools by 2030 will be a significant challenge. Indeed, in 2016, only 69% of schools globally had access to safe drinking water. Moreover, although schools play a critical role in children's fundamental education, in 2013-14 approximately 22% of schools in India lacked girls' bathrooms, while today water quality still remains a major concern in rural India [6]. In addition, open defecation is a significant global health issue, and in rural India, about 360 million people lack access to latrines [7].

Several national and international initiatives have addressed the above-mentioned concerns. The United Nations Water global analysis and assessment of sanitation and drinking water (GLAAS) initiative is a worldwide effort by the WHO to improve the monitoring, management and reporting of national WASH policies in diverse geographic locations throughout the world [8]. UNICEF estimates that less than half of India's population has access to safe drinking water [9]. According to the 2018 global baseline study, most schools in India now have sanitary facilities, whereas in earlier years half of them did not [6].

India, which is the world's second-most populous country, faces major public health concerns. To tackle these issues, it has implemented measures such as the Swachh Bharat Mission (SBM) and the Total Sanitation Campaign (TSC) project for school sanitation. Moreover, under India's new leadership, a new government ministry was established. Called “Jal Shakti”, this ministry has primary responsibility for water, sanitation and hygiene, and works to achieve SDGs [10]. After the construction of school latrines in India, the number of girls' enrollments has increased in comparison with those of boys [11]. Furthermore, as India is a culturally diversified country, the caste system can also impact sanitation.

Thus, in India, there are still key challenges regarding WASH, such as poor water supply, scant sanitary conditions and deficient knowledge of the use of toilets; these are significant barriers to achieving the country's sanitation objectives [12].

Every child deserves an education and the knowledge necessary to thrive in life, and sanitation, hygiene and access to safe water are fundamental components of a child's development. Moreover, it has been demonstrated that children are significantly more receptive than adults to novel ideas and can readily acquire positive habits during their formative years [13]. If these children are provided with facilities and are educated in the importance of hygiene, they will become powerful agents of change, handing down their knowledge to the next generation. It is therefore critical to incorporate WASH into the school curriculum and infrastructure and to equip teachers to promote essential hygiene behaviors. As India has unmet public health needs, the government needs to improve school education programs by implementing separate toilet facilities for boys and girls and raising awareness through short movies, education on sanitation-related behavioral change, etc. In this way, we can achieve universal sanitation for all and achieve the SDGs.

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Authors' contributions

The first author wrote the manuscript with the help of three other authors. All the authors have equal contributions to developing ideas to write the manuscript. The corresponding author supervised and reviewed the manuscript.

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