

RESEARCH ARTICLE



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Impact assessment of WASH (water, sanitation and hygiene) interventions in schools

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Abstract

Objective: The aim of the study was to evaluate the WASH intervention in PS (Primary Schools) and UPS (Upper Primary Schools) of Majhawan block Mirzapur District in India. **Material and methods:** 20 schools were selected from the Majhawan block of Mirzapur District for the study on the basis of Simple Random Sampling method. Percentage analysis method was used for statistical analysis. **Results:** 100% surveyed schools had access of safe and reliable drinking water. However availability of water in toilets, provision for separate toilets for boys and girls and many other shortcomings were observed like toilets were not clean, special toilets were not there for Divyang students. Lack of awareness in students and parents on WASH practices were also observed. **Conclusion:** Awareness creation about WASH among students, teachers and parents will definitely yield to desired results viz. decline in absenteeism due to health issues, motivation of Girl child for going to schools etc. Training and capacity building programs should be organised at district and school levels.

Keywords: Hand hygiene; hand washing; health education; school children; WASH; UNICEF; WHO; WinS; SSHE; TSC; water; sanitation and hygiene

1 Introduction

Availability and access to the safe Drinking water is one of the pressing challenges of the modern world. Globally, roughly 10% of the population (~ 748 Million people) has no access to potable water⁽¹⁾. The problem of this accessibility is very acute in certain regions and geographies of the world. WHO (World health Organization) has been working on the interventions in the areas of WASH (Water, Sanitation and Hygiene); aiming to prevent the outbreak of water-based diseases and prevent the deaths due to it. One of the studies of WHO estimates that WASH improvements can prevent at least 6.3% of such deaths and globally reduce the water-based diseases by at least 9.1%.^(2,3). Another estimate shows that 75% of all school absenteeism is directly attributable to lack of WASH availability, impacting the academic performances

negatively.⁽⁴⁻⁷⁾ Different studies have shown that Diarrhea outbreaks have been significantly reduced in children by encouraging them to repeated hand washing and reinforcing this with sufficient soap supplies. Similarly, combining appropriate education, personal & community hygiene practices and water treatment, the acute respiratory illness percentage in students, has shown decreasing trends.⁽⁸⁻¹²⁾

The target group was students of the age 6 – 16 years. The activities emphasized the importance of using soap at critical moments during the day (i.e. before eating and handling food, and after defecation) which should wash away and provide protection from germs, parasites and viruses. Focusing on the WASH support has had a positive result in the school attendance of the kids. Similarly it has been observed that supporting clean water and safe hygiene in schools have resulted in positive outcomes in the academic performances.

Its' imperative to note that quality of education has a direct linkage to the access to clean & safe water and basic hygiene & sanitation facilities. Children spend almost one-third of their day in the school and lack of WASH facilities create a significant risk of falling sick and falling prey to various diseases. If schools fail to provide the proper sanitation facilities and clean drinking water, they create environment for absenteeism, which in turn also impact the academic performance adversely.⁽¹³⁻¹⁹⁾ What schools provide to children, also create a foundation for their view of the world, thus influencing the social framework of the future. It is mandatory that schools focus and make efforts to provide healthy and disease free environment, through provision of safe, clean water and hygienic facilities. Else, we can be sure that there will be high incidence of diseases as well as poor academic outcome.

In recent times, even the legislative framework has directed that Governments to work in this direction. “Children are given opportunities and facilities to develop in a healthy manner” is categorically stated in the article 39(f) of the Right to Education Act, 2019. In a similar ruling, the Honorable Supreme Court of India in Dec' 2011 has stated that absence of the basic facilities viz water and toilet facilities is like denying the basic rights. It stated that such denial, “clearly violates the right to free and compulsory education guaranteed under Article 21-A”.⁽²⁰⁾

Area taken for the study: 20 Govt Primary and Upper Primary Schools in Majhawan Block of Mirzapur District, Uttar Pradesh, India. List of schools of Majhawan Block, Mirzapur, Uttar Pradesh is given as supplementary material - Annexure 1.

Environmental analysis: Annual Status of Education Report, 2018 (ASER) has highlighted some great statistics. Reviewing the figures of the state of Uttar Pradesh, what is scathing to note that Usability & Availability of basic toilet facilities in the state was only 54.8% in 2016 which has increased to 72.7% in 2018. Further it states that this availability of facilities specifically for the girls was only 51.5% in 2016 which has increased to 67.2% in 2018.⁽²¹⁾

Uttar Pradesh has always been one of the challenging states when it comes to education, hygiene and cleanliness. One of the cases in point is the district of Mirzapur, which is a backward district in the state, averaging very low on providing the basic hygiene facilities in the schools. Apparently, the right to WASH interventions in the school is significantly violated. In addition to statistics highlighted above, absence of interventions for basic hygiene viz Soaps for hand-washing, clean toilets, upkeep & maintenance of clean surroundings, exposes students (specifically adolescent girls to high incidences of disease and illness, leading to high early dropout rates and life threatening health issues.

Mirzapur overview: Mirzapur is the district located on the banks of river Ganges in Eastern Uttar Pradesh. Mirzapur district is composed of 1967 villages, 4 Tehsils, 4 Municipal Corporations and 12 Blocks. One of the 12 blocks, located near Varanasi District, is a block of Majhawan. As per census of 2011, Mirzapur has a population of 2,496,970, with 86% of the population being rural. The district has 1613 Government Primary Schools, 617 Upper Primary Schools and 10 KGBVs (Kasturba Gandhi Balika Vidyalaya). However, the overall literacy rate in the district is 68.47%, with male literacy rate being 78.96% and female literacy rate is lagging at 56.85%.⁽²²⁾

Aim of the study: The aim of the study was to evaluate the WASH intervention in PS (Primary Schools) and UPS (Upper Primary Schools) in 20 selected schools of Majhawan block Mirzapur District. It is expected that the findings of this evaluation would help Government of Uttar Pradesh and other agencies, to work on areas, where there is scope for improvement, while continuing and consolidating the existing good practices.

2 Methodology and tools used

- Desk review of available literature, documents and Govt. Orders.
- Interview method.
- Random Sampling Method.
- Percentage analysis.

3 Results

It has been observed that 100% schools have access of safe and reliable drinking water facility. 100% schools have availability of water for use in toilets. 100% Students are following hand wash practices with soap before having MDM (Mid Day Meal) and after toilet uses. 100% schools have India Mark force lift pumps for water solution. 100% schools have separate toilets for girls and boys. 100% hygiene practices are followed by cooks of Mid-Day Meal.

Shortcomings observed were only 20% school's toilets were well cleaned and running water facility was available. Only 20% schools have Functional toilets facility for children with special need. Only 65% schools conduct regular hygiene education for students. Lack of awareness in students and parents on WASH practices. 70% schools have facility of safe disposal of solid and liquid waste. 53% Parents have no proper information on hygienic behavior. No school has RO water to supply safe drinking water. 65 % students follow the hand wash practices with soap at their home before having the meal. 89 % students follow hand wash practices with soap after using toilet while rest uses alternatives like ashes and soil at their home. Only 43 % students have proper knowledge of hand washing steps. 18% Parents have no proper arrangement for soap, fresh and safe drinking water source.

4 Conclusion

Awareness creation about WASH among students, teachers and parents will yield the desired results. Training and capacity building programs should be organised at district and school levels. Proper coordination should be established with different departments and schemes. School authorities must ensure implementation of WASH guidelines and policies. Competition may be organised among schools and good practicing schools should be rewarded to create the feeling of competition and achievement. The KPI (Key Performance Indicators) fixed for the purpose should be monitored regularly.

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Conflict of Interest: Nil.

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Ethical Clearance: Data used in the study is from both primary & secondary sources where ethical clearance is not required. However, required references from where the data have been used are mentioned. Also, permission from the competent authorities from various schools were taken before data collection.

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