

A Long-Term School WASH Programme and its Relevance in Minimising the Spread of Current and Future Pandemics through Improved Hygiene Practices and Basic Access to Water and Sanitation

Asad Umar* & Satviki Varma**

*Senior Programme Officer & Sector Lead - WASH, H&N, Aga Khan Foundation

**Senior Programme Officer - Health & Nutrition, Aga Khan Foundation

Abstract

Safely managed WASH (Water, Sanitation and Hygiene) services not only help in preventing and protecting human health during the Covid-19 pandemic, but will remain critical during the recovery phase. In this paper, an attempt has been made to reflect on the relevance of a school's hygiene education programme that aims to enhance a school's learning environment, promote behaviour improvement for safe hygiene and sanitation practices, and to encourage the adoption of key hygiene practices amongst school children. The three year intervention covered 3000 primary and upper primary schools across UP, Bihar, MP and Gujarat. The results reveal a positive outcome in terms of improved WASH access at schools and improved hygiene practices, especially the hand WASH behaviour with 89% students regularly practicing it. The assessment results also reflect that schools are the most effective vehicles for Behaviour Change in the community as students become hygiene ambassadors to inculcate improved behaviour. The findings related to awareness and hygiene practices bear out the effectiveness of the BCC(Behaviour Change Communication) activities during the intervention.

Keywords: *School, Wash, Hygiene, water, Sanitation, pandemic, Children*

Introduction

The world in 2020 has been gripped by a pandemic of a novel coronavirus. A virus to which the population at large has no immunity, which is highly contagious, and for which no vaccine exists, has forced countries to recognise the importance of foundational measures of disease control. The provision of safe water, sanitation and hygienic conditions is essential in protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak. Ensuring good and consistently applied WASH and waste management practices in communities, homes, schools, marketplaces, prisons and health care facilities will further help to prevent human-to-human transmission of the COVID-19 virus (WHO/UNICEF-2020). A systematic review by Saunders-Hastings et al. (2017) shows frequent handwashing to have a large and significant protective effect against pandemic influenza. The importance of handwashing as a public health intervention is widely recognised, including for the control of respiratory disease (Rabie & Curtis 2006; Mbakaya et al.2017; Prüss-Üstun et al.2019). Therefore, handwashing with soap is a mainstay

of the guidance for controlling the spread of COVID-19 (WHO-2020).

Adequate access to water, hygiene and sanitation (WASH) is every human's and child's right. Ensuring WASH accessibility in schools is encompassed in the 2030 Agenda for Sustainable Development (UNICEF&WHO-2016) . The importance of adequate WASH services is reinforced by the COVID-19 outbreak as the pandemic places hygiene at the centre of disease prevention. However, there is a lack of understanding of hygiene behaviours and access to soap in low and middle-income countries (Guy Howard,2020). One in four persons worldwide did not have access to a handwashing facility with soap and water on premises in 2015; handwashing with soap occurred for about 26% after the events of potential faecal contact, globally. In regions with high access to handwashing facilities, handwashing with soap was performed by about 51%, and in regions with more limited access, by about 22% after the events of potential faecal contact (Wolf et.al 2019). Frequent and proper handwashing with soap can be used to prevent the spread of diseases and infections, yet recent statistics

demonstrate that 40 % of households lack access to a handwashing facility with soap and water. And 18 % of those households have no place to wash hands (USAID-2020). This also applies in the case of India, where communicating the importance of washing hands with soap to avoid the spread of Covid-19 is quite challenging, as the National Sample Survey's (NSS) 76th round report, 2019, reveals that only 35.8 per % of households in the country practise hand-washing with soap or detergent before a meal and in rural areas it is only 25.3%.' What is more alarming is that about 26 %people do not wash their hands with soap or detergent after defecation (NSS 76th Round-2019).

To build community resilience against current and future pandemics, it is critical for the country to improve the practices of hand washing with soap, at the household and institution level. To bring in long-term behaviour changes, consistent efforts are needed. In this paper, an attempt has been made to analyse the performance of a long-term school hygiene education programme and how the programme has ensured the achievement of consistent improvement in the key hygiene behaviours and practices, both at school and community level.

While India has made substantial progress in ensuring basic WASH facilities in schools (UNICEF, WHO-2018), in order to address the challenges of current and future pandemics, it is critical to also safeguard the rights of the vulnerable population, especially children including girls, children with disabilities and those who are left behind. A successful WASH-in-Schools programme not only improves health, but also fosters learning, contributes to dignity and gender equality, and enables children to participate as agents of change for their siblings, their parents and the community at large (UNICEF 2010).

The Aga Khan Foundation (AKF) India, in association with its network partners has been implementing an integrated WASH-in-school initiative, supporting the national Clean School Campaign, with the twin objective of enabling access to inclusive and gender-sensitive WASH facilities in schools as well as addressing mindsets and behaviours of children towards improved hygiene habits to enable them to become catalysts of change in their schools and communities. This intervention is also aligned with the Colombo Declaration of 2011, which

advocates for the need to ensure functioning and child-friendly toilets for every new and existing schools, separate for girls and boys, with facilities for menstrual hygiene management. For the first time, the issue of functioning toilets and menstrual hygiene management were elevated for inclusion in an official statement. To date, the initiative has enabled more than 200 schools with improved infrastructure to address the needs of excluded children and the incorporation of operations and maintenance through innovative financing models and systems strengthening. Hygiene curriculum was introduced to ensure that, from a young age, children learn about personal hygiene and to empower them to demand equitable access to WASH services. Hence, to develop agency among children, the school hygiene education programme supported by Banega Swasth India campaign of Reckitt Benckiser, is an endeavour to equip children across 3000+ schools with the knowledge of critical hygiene behaviours and practices. This paper is based on the experiences of Aga Khan Foundation's WASH-in-schools' initiative and the objective is to examine the role of improved access to WASH facilities and hygiene education in schools and its contribution towards building a system both within schools and communities to promote preventive behaviour to minimise the spread of the COVID pandemic.

Key approaches adopted

The programme focuses on providing schools with adequate water, sanitation and hygiene (WASH) facilities, with a reliable water system that delivers clean and sufficient water for hand-washing and drinking, sufficient number of toilets for students and teachers that are private, safe clean, and culturally and gender appropriate, water-use and hand-washing facilities close to toilets, and sustained hygiene promotion (Adams J et.al.2016). With this approach, the programme targeted outreach into the rural areas with focus on marginalised populations, through a comprehensive School Hygiene Education Programme. The aim of the initiative is to enhance a school's learning environment, to promote behaviour improvements for safe hygiene and sanitation practices, and to encourage the adoption of key hygiene practices amongst school children. The initiative has attempted to undertake a child-centred approach in improving WASH access and hygiene

behaviour in schools. Teachers' proactive engagement in introducing hygiene curriculum, the role of Panchayat and School Management Committees in WASH asset creation and maintenance, child parliament and soap banks were some of the key enablers. The critical barriers that were addressed through this initiative were social exclusion and gender norms, physical immobility to access WASH facilities, high student density and lack of awareness about personal hygiene. The programme also promoted linkage between the school and the community to ensure the sustainable adoption of hygiene practices. To promote better tracking of the WASH access, AKF also introduced real-time tracking tools in select schools. This programme approach is one of the most effective approaches to sustain hygiene behaviour during the current pandemic.

While the intervention has focused on the immediate WASH needs of school-going children, it has also prioritised the needs of the most marginalised and vulnerable communities, thus bridging the gaps in knowledge, behaviours and practices towards appropriate hygiene behaviours. The school-led hygiene promotion has been a cost-effective approach to reaching some of the most marginalised and excluded groups through the student cadre of Hygiene Ambassadors, leading awareness campaigns and drives into their communities to build their resilience against the ongoing pandemic.

The key Components and results achieved

Improvement in basic water sanitation and hygiene access

The Global baseline report on water, sanitation and hygiene in schools by WHO/UNICEF Joint Monitoring Programme says that globally 69% of schools had a basic drinking water service, whereas 19% of schools had no drinking water service. In terms of sanitation, 66% of schools had a basic sanitation service, whereas 23% of schools had no sanitation service. And 53% of schools had a basic hygiene service, defined as a handwashing facility with water and soap available, whereas 36% of schools had no hygiene service (JMP 2018).

Considering the Joint Monitoring Programme framework for schools as a reference point, the findings from intervention schools provided good insights towards the basic minimum level of WASH access. AKF adopted an integrated

WASH-in-schools' approach that fostered social inclusion and individual respect, protecting the human rights of girls to privacy and safety, as well as reaching out to young children. While promoting the inclusive design, accessibility audits were undertaken during the construction of facilities with students and key questions were asked about the drinking water accessible to those with limited mobility, accessibility of at least one usable toilet to those with limited mobility, and handwashing facilities accessible to smaller children and to those with limited mobility. Promotion of child-centred design principles should be a prerequisite to ensure that facilities should cater to all, including small children, girls of menstruation age, and children with disabilities (Jasper C 2012). With this principle, in more than 200 schools across four states, height-appropriate handwashing stations, segregated toilets equipped with menstrual hygiene management facilities for girls and barrier-free access to toilet facilities with western-style toilets were promoted. Nudges and colourful wall paintings helped to promote correct hygiene behaviours on handwashing and toilet use reaching first-generation learners in schools.

In terms of sanitation access across all intervention locations, almost all schools had a toilet, but around 30% toilets were not in regular use. This shows that substantial work is still needed to ensure improved WASH access across the schools. However, in terms of student's perception on the status of WASH facilities in schools, 75% felt they have access to better WASH facilities based on water and soap availability. Water was available in 92% schools for drinking, handwashing, toilet use, cooking and cleaning. More than 90% schools in Uttar Pradesh relied on handpumps, while in Gujarat, 41% had panchayat water supply. To ensure safe access of water, 34% schools adopt chlorination as the preferred mode of bacteriological treatment, whereas 20% schools have RO facilities especially in quality affected areas of Gujarat. Overall, 70% of the schools had some provision for wastewater disposal.

Effective handwashing requires access to facilities (water, containers, soap) that enable hygiene behaviours. (Wolf et al. 2019). In the intervention comparing the availability of water and toilets in schools, the presence of handwashing facilities was found only in 46%

schools with dedicated hand washing stations and access to soap, and in remaining schools, students depended on handpumps for hand washing. While these efforts have shown remarkable improvement, more work is needed to monitor the disability provision in basic services and to adapt sanitation design.

Inclusive systems for Operations and Maintenance in schools

Water, sanitation, and hygiene in school aims to make a visible impact on the health and hygiene of children through improvement in their health and hygiene practices, and those of their families and the communities. However, as indicated in a Water Aid India (2016) study, 83% teachers cited lack of dedicated funds and capacity of SMCs as the key reason for poor maintenance and management of WASH facilities. With this backdrop, the current initiative engages with School Management Committees with focus on developing a collaborative, supportive, and active platform to streamline inclusive and sustainable WASH-access. Over 10,500 members have roles and responsibilities to ensure the school-level monitoring of sanitation status and upkeep of facilities, dissuading cleaning by children from disadvantaged sections, as well as prioritising the earmarked school fund for school cleaning.

Schools serve as an amalgamation ground for children of various cultures, societal strands and gender to come together with the objective of inclusive learning. AKF has been working through the platform of Child Parliament Clubs in more than 1000 schools, which enables the collectivisation of children, regardless of their background, to develop systems for monitoring the upkeep of school sanitation facilities. The dedicated hygiene sessions have helped students on to adopt correct hygiene behaviours and user discipline for toilet use.

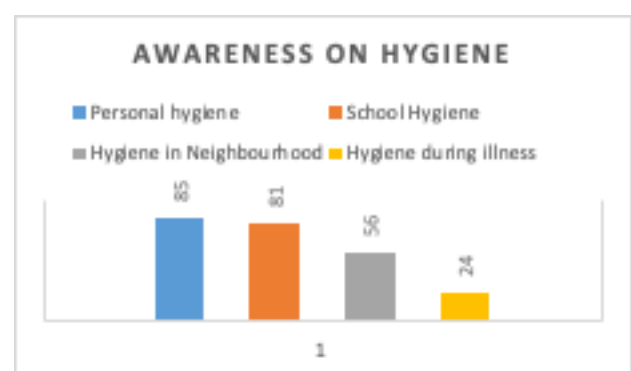
The study findings related to awareness and practice of improved hygiene bear out the effectiveness of the Behaviour Change Communication activities. Institutional strengthening such as the empowerment of School Management Committees is also prioritised to ensure inclusive access and better management of WASH facilities. As indicated in Swachh Vidyalaya guidelines, schools are required to prepare development plans. 83% schools prepared a plan, but only 57% schools

said they have enough funds to maintain toilets. In an exclusive survey on Operation and Maintenance undertaken in 400+ schools, 63% reported having assigned a dedicated cleaner for the facilities utilising the school Operations and Maintenance budget. 97% children interviewed showcased knowledge on how to use toilets and ensure cleanliness after use and oversee that other students use it well too, thereby reinforcing personal hygiene management in schools.

Adopting and Sustaining hygiene behaviours

The improved hygiene education resulted in more demand for access to soaps for handwashing at critical times, and to ensure supply of soaps in schools, AKF initiated the soap bank pilots and more than 250 soap banks have been established through community and school management engagement. Efforts are also underway to create mechanisms to track the supply and consumption of soaps by training student bodies (*BalSansads* and Child Sanitation Clubs) on tracking soap donation and its utilisation. As noted in a large scale review of interventions by Celia McMichael (2019), the intervention has also demonstrated evidence of positive change among students with regard to changes in WASH knowledge, attitudes and hygiene behaviours, including hand-washing with soap.

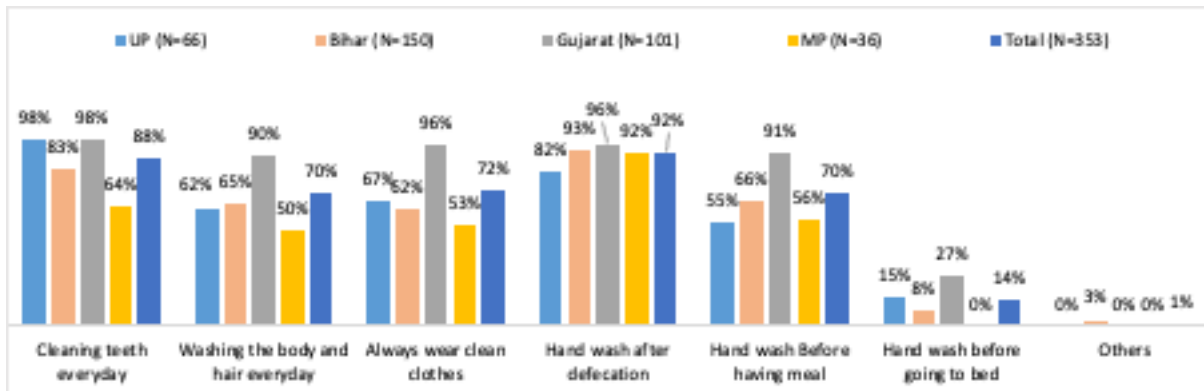
The study revealed that student's engagement through Bal Sansad (students club) and Meena Manch (a platform for adolescent girls) has emerged as an important platform for students to learn and internalise hygiene practices. This is evident from the fact that most students were found to be aware of the hygiene practices. In terms of improved hand wash behaviour, 89% students regularly practice it, 54% said they



learnt about the frequency and critical timing of washing hands. Other than personal hygiene, the intervention also helped to improve children's awareness and knowledge on hygiene within

school, in the neighbourhood and during illness. The efforts to empower teachers emerged as a key enabler in improved hygiene behaviour, as 96% students attributed teacher’s role to improve knowledge on the benefits of health and hygiene.

indicators across 4 key themes of safety, privacy, access to safe sanitation and cleanliness mechanisms. Of the 150 schools, 45 middle schools were further examined on indicators for menstrual hygiene management services in



: Hygiene practices by respondents

Ensuring MHM secure schools

While designing the MHM interventions in schools, AKF looked at equity issues, areas, and children from communities that are deprived and marginalised. The intervention has its focus on 15 dedicated sessions on MHM, including components on nutrition, hygiene, product use and disposal, and securing access to female-friendly facilities in schools to manage safe menstruation. A pilot study to examine the status of WASH facilities with a lens to ensure female-friendly services in schools was undertaken in 150 schools in the peri urban locations of Patna city. The schools were examined on 16

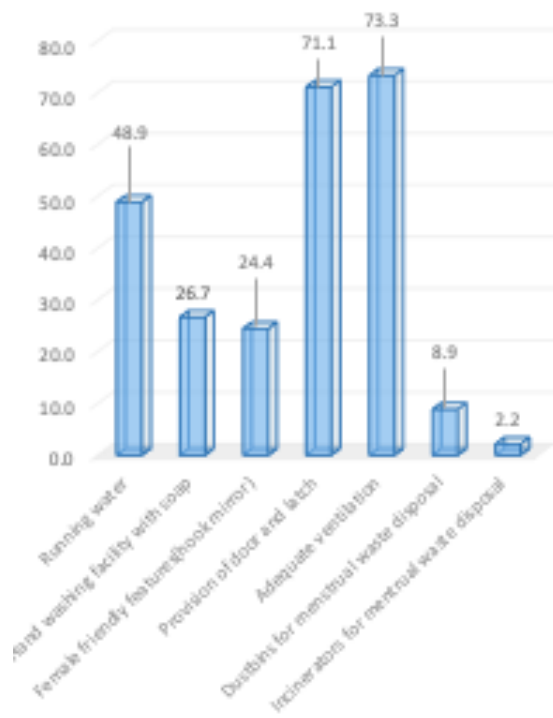
schools, in accordance with National WASH in School guidelines.

Insights from the assessment are shaping the strategy to inform investments in infrastructure improvements for safe menstrual management in schools.

Conclusion

Many factors may have contributed to the spread of COVID-19 around the globe, but handwashing culture alone appears to be an important factor in explaining why some counties have been hit harder by the outbreak. Countries where people do not have a habit of washing their hands automatically tend to have a much higher exposure to COVID-19. In the absence of a cure or vaccine, the current outbreak humanity to find ways of reducing the potential risk of infection. Frequent handwashing with soap for at least 20 seconds is widely advised as a preventive measure against COVID-19. It is possible to quickly influence individual hygiene behaviour in the short term, however, changing handwashing culture in a particular country or globally is a much more difficult task. (Pogrebna & Kharlamov-2020). This is an important observation as we have to find ways to change the hand washing culture, and the ongoing AKF WASH-in-Schools programme with focus on hygiene education has demonstrated approaches that lead to the empowerment of children and communities and integrate inclusivity in project design to achieve long-term improvement in hygiene behaviour at scale. This is evident from three-year programme findings, which reflect that improved hand wash behaviour is regularly practiced by 89%

Status of female friendly toilets and menstrual waste disposal (%)



students. The paper tried to present the case for long-term change in hand washing habits through sustained access of water, sanitation and hygiene facilities as well as hygiene behaviours among students. The intervention has also highlighted the fact that school-to-community led hygiene promotion models hold merit in reaching the remote and most vulnerable population, as well as create a future-ready generation armed with the appropriate understanding of hygiene behaviours. These efforts can go a long way in developing more cohesive systems within schools and communities, thereby developing community resilience towards current and future pandemics. The current Pandemic COVID-19 has reinforced the fact that drinking water, sanitation and hygiene are recognised as basic human rights, as they are indispensable in sustaining healthy lives

and fundamental in maintaining the dignity of all human beings.

Acknowledgements

The authors would like to acknowledge the immense support and guidance of Aga Khan Foundation Chief Executive Office, MS. Tinni Sawhney in strengthening WASH in school programme. They would also like extend sincere thanks to Mr. Ravi Bhatnagar, Director, External Affairs & Partnerships AMESA, Reckitt Benckiser for his unstinted support to build a strong school hygiene education programme. The support and cooperation of school children, teachers, Project teams as well as AKDN partners AKRSP & AHAH, in delivering an impactful programme on the ground is sincerely acknowledged.

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