



Sustaining and Scaling School Water, Sanitation,
and Hygiene Plus Community Impact

SWASH+ Assessing the Feasibility and Acceptability of Girls' Urinals: Final Report

SWASH+: Sustaining and Scaling School Water, Sanitation, and Hygiene Plus Community
Impact

Summary

Background: Improving the appeal of school sanitation facilities for pupils may not only be a means to reduce open defecation or urination at school, but it may also improve students' self esteem and the appeal of attending school. Since September 2006, SWASH+ has been working in primary schools in three districts in Nyanza Province - gathering and analyzing data, learning about challenges, and testing innovations for school water, sanitation, and hygiene (WASH). In February 2009, the Kenya Water for Health Organization (KWAHO) constructed girls' urinals in three schools in Kenya's Nyanza Province.

Findings: Findings in this report have been divided into three main categories including: infrastructure, logistics and socio-cultural factors. Sub-headings appear beneath broader themes. Overall, this research found that urinals are popular with primary school-aged girls. Barring excessive messes or odors, female students report using the urinal an average of two times a day. Sustainability of the facilities was discussed by health patrons as a challenge. A particularly interesting finding involved young girls' penchant for mirrors in urinals. A special section of this report is devoted to findings related to mirrors.

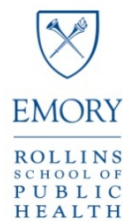
Recommendations: Levels at which an intervention could consider improving girls urinals or facilities generally will be addressed on several levels including: programmatic, community, teacher/school staff, family, student levels. Specific recommendations are listed in the text below.

About SWASH+

SWASH+ is a five-year applied research program to identify, develop and test innovative approaches to school-based water, sanitation and hygiene interventions in Nyanza Province, Kenya. Implementing partners are CARE, Emory University, Water.org.

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EMORY UNIVERSITY CENTER FOR GLOBAL SAFE WATER, CARE, WATER.ORG



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Introduction

SWASH+ held focus group discussions with pupils to better understand context-specific practices and attitudes in order to identify additional WASH challenges that must be addressed to provide a healthy learning environment for pupils in this region.

According to the World Bank, girls' urinals are ideal in settings where the water table is high and a facility for defecation is already present¹. Urinals in schools may also relieve girls from long queues to use the latrines during class breaks. Urinal construction is relatively inexpensive and requires less upkeep and maintenance than a pit latrine. Construction includes doors, squat holes with footings, curtained walls and cement or tiled floors. Mirrors were installed in two schools and will be discussed in greater detail in this report. This research seeks to inform whether and how girls' urinals should be constructed in the future by assessing perceptions and practices among staff and students of existing facilities.

Methods

The following is a synopsis of information collected in a series of direct observation activities and structured interviews with 18 female students and three head teachers in three rural schools where girls' urinals were recently built: Kaditong'e, God Kwach and Atono. Students were asked how they felt about the urinals, why and when they did or did not use the urinals, how they would change the urinals' design and how they would rank the girls' urinals in comparison with other locations for urination (such as a school latrine, a home latrine, or urination in nature). The language used in student interviews was Dholuo. The school staff member, often a head teacher but sometimes a health patron or other responsible party, was asked what issues the school faced in terms of constructing and maintaining the girls' urinals and what improvements or changes they would make to the facilities. The language used in those interviews was English. It is important to note that direct observation activities in this study were limited. While researchers attempted to make unannounced visits, administrators learned of the visits and alerted school staff to have the urinals cleaned.

Findings

Findings in this report have been divided into three main categories including: infrastructure, logistics and socio-cultural factors. Sub-headings appear beneath broader themes. Overall, this research found that urinals are popular with primary school-aged girls. Barring excessive messes or odors, female students report using the urinal an average of two times a day. Daily maintenance and infrastructure repairs are problematic.



FIGURE 1. TILE FLOORING WAS USED FOR THE URINAL IN ATONO PRIMARY (PHOTO BY IMELDA AKINYI)

Infrastructure- Design, Safety, Maintenance and Repairs

A different design was introduced in each of the three schools. At Atono Primary there are two urinal stalls with tile floors. At Kaditong'e Primary there are two urinal stalls with concrete floors. At God Kwach there is one urinal stall with a concrete floor. A mirror was also installed inside structures in Atono and God Kwach. While the mirror in Atono remains, the mirror in God Kwach is no longer present. All urinals had walls and doors to ensure privacy. Three main themes emerged in terms of infrastructure: design, safety and structural maintenance.

Design of the urinals sparked significant dialogue during this research. Students called the urinal facility “fashionable” and praised several elements of the design including the incorporation of mirrors, tile floors, handwashing stations, and the shape of the urinal itself.

Mirrors were discussed in every conversation with young girls in Atono, where mirrors are present in the urinal facility. Mirrors were requested by girls in other schools that lack mirrors. Mirrors are discussed in a shaded section near the end of this report.

Tile floors were mentioned as a favorite element by students and staff in Atono, where there are tile floors, due to the ease of cleaning the tile and the beauty of the tile.

Handwashing stations were described as nice by students. Handwashing stations are consistently placed approximately five meters from the urinals on the path leading toward the school. Head teachers reported that this was important as it served as a cue to action for young girls to wash after using the urinal.

The design of the urinal itself was described as “good” by students as the foot pads prevent urine from splashing on their feet.



FIGURE 2. MIRRORS WERE PLACED IN ATONO PRIMARY. (PHOTO BY IMELDA AKINYI)

Students did not hesitate to offer suggestions on how to improve the urinals. Suggestions included: installing a mirror, installing several mirrors, installing seated toilets, painting the facility in brighter colors and installing running water in the urinal stall. A student in God Kwach said her first priority is to get a mirror, but barring this she would like to sit on something while urinating. A student in Kaditong'e said she would like brighter walls (inside and out) such as yellow or pink, and running water in the urinal so that she could wash discretely when she has her period.

Design elements that some students did not like included the facility's draftiness and elements of the drainage system. While the doors allowed privacy, one girl said they also created a draft on her bottom. Teachers say the chilliness is beneficial as it prevents girls from lingering in the urinal. Girls also reported drainage problems due to feces or sanitary napkins and insect problems including maggots, mosquitoes and flies.



Safety was mentioned by a head teacher who requested that any intervention involving the construction of a new structure also consider tearing down or creating barriers to any old structures. Sometimes children continue to use the old, dilapidated facilities despite warnings about safety. Children seem to revert to old facilities when there are long queues at new facilities.

Maintenance and repairs to the urinal structure appear to be problematic. In Kaditong'e, a staff member reported that the door and latch routinely break due to a strong wind. In Atono, a mirror was broken and left unrepaired, but the school was preparing to hold a meeting about how to replace the mirror. Paint also began chipping in the Atono facility shortly after it was applied. School staffs report that major structural repairs would be difficult due to cost.

Logistics- Convenience, Messes and Daily Maintenance, Sanitation Supply

Three main themes emerged in terms of logistics: convenience, messes/maintenance and supply of soft goods.

Convenience in relation to time spent queuing to relieve oneself was reported by all head teachers and several students as a benefit of the urinal facilities. “

“The congestion in pit latrines has been eased and there is no longer a crowd at the latrines.”

– Head Teacher, Atono

Messes and daily maintenance issues were reported by students at all sites. Before arriving at sites, researchers overheard or witnessed that school staffs were told to clean urinal facilities. While this undermined direct observation activities, conversations with students show that messes often inhibit or discourage urinal use. Messes include fecal matter in the urinal, blood smears in or near the urinal or sanitary pads clogging the urinal. Confusion surrounding how and when the urinals should be used and cleaned may be at the root of messes. For example, younger students use the urinals for long calls. In a related study addressing anal cleansing and how children learn how to use latrines, it appears that children often learn from peers how to use a latrine and how to secure supplies for bottom cleansingⁱⁱ. In another related study that addressed washroom facilities, it appeared that young children preferred washrooms to latrines as they were afraid of the large latrine holes. This may be the case here and warrants further study. Finally, on the subtheme of messes and maintenance, this study revealed that a codified cleaning schedule is lacking. Older students, who are generally tasked with cleaning, report that they especially dislike cleaning small children's feces. In Kaditong'e, cleaning is also problematic in the mornings as villagers use the latrines after school hours.

Sanitation supply is a problem. Goods that were not present, but were requested by students include tissue or other wiping materials, soap, gloves, a broom, a container for a broom and detergents/disinfectants. It seems that girls who requested wiping materials are likely requesting them to clean during menstruation as primary school girls in this area reportedly do not wipe after urination.

Socio-Cultural Factors- Emotional Reactions, Educational Issues, Gender Gaps

Three main themes emerged in terms of socio-cultural factors: emotional reactions, educational gaps and gender concerns.

Emotional reactions sparked by urinals include: fear, curiosity, comfort, security, delight and prestige. Young children are reportedly afraid of the urinals, but overcome this fear when they see older girls using them and when they see the mirrors (in Atono). Urinals were described as “very comfortable, like a house” by one respondent in Kaditong’e, who added that “when you enter the urinal, no one will know that you are inside.” The facility gives several girls a sense of security. From a student in Kaditong’e: “The urinals are better than others because when you go to the bush, someone might watch you, but these are private.”

In Atono, girls are happy about having a urinal and especially excited about the facility’s mirrors. “That mirror is so good because it makes me look beautiful,” said an Atono student. Head teachers say that the facility has boosted self-esteem, body awareness and morale among young girls. “The facility allows self examination for the girls and helps them with their neatness. It has helped their

“The facility allows self examination for the girls and helps them with their neatness. It has helped their egos and many more girls have now joined the school.”

– Head Teacher. God Kwach

egos and many more girls have now joined the school,” said a Head Teacher from God Kwach. Teachers and students say the school’s urinal is a symbol of prestige within the community and among other schools. “The drainage is so good and the smell is not like the pit latrine and now people from all over talk about Atono Primary School,” said a student from Atono.

Educational gaps emerged as a point to consider regarding urinals. Younger students are confused about how to use the urinals and what is/is not allowed. “It might happen by accident among the lower primary that at times they drop a bit of feces while urinating,” said a head teacher in Atono. Older students also place sanitary napkins/cloths in the urinals. Wall murals that use words sparingly were present in at least one school, but their ability to convey knowledge and rules was not analyzed. A teacher in Atono said the mural was used to instruct students on how to use the urinal. This was not verified by students. In a similar study involving anal cleansing, teachers reported that they had instructed students on how to use latrines, but students reported that this instruction did not take place. Discussions with students on how and when they learn to use urinals – and whether murals play a role in this – merits further research.

Gender issues arose as boys reportedly grew jealous of girls’ urinals and sneaked into the urinals to



use them or to look at themselves in the mirror. According to one female student in Kaditong’e, boys are also jealous about the cleanliness and upkeep of girls’ facilities. “Girls’ urinals are always clean and boys’ urinals are always dirty and the boys make stains on the walls while the girls are neat.” Boys were not interviewed for this study. Additional research on school latrine designs shows that when improvements in school latrines are given to one gender, the opposite gender may grow resentful or use the improved structures illicitly.

FIGURE 2. A PAINTED MURAL ON THE URINAL FACILITY AT ATONO PRIMARY INSTRUCTS PUPILS ABOUT HAND WASHING. (PHOTO BY IMELDA AKINYI)



Special Report on Mirrors

Mirrors are rarely installed in rural Kenyan schools, as they are an added expense in an already constrained setting. Mirrors were mounted in two facilities included in this study at a unit cost of 1,000 Kenyan Shillings. Mirrors were mentioned by every student in settings where they are present and by many students in settings where they are no longer or were never present. This was striking to researchers as the students were never asked a question about mirrors. Instead the topic emerged when questions about the urinal facility were asked. It appears that mirrors draw students into urinals.

In Atono, where mirrors are currently installed, students praised the mirrors. “The mirror makes me so so happy,” said a student, “because I can use it to make myself beautiful.” Another student said she wished there could be at least two mirrors including a full-length mirror to prevent crowding: “Everyone crowds around our one mirror. Sometimes we get in fights over our mirror.” Still another student suggested designers install more mirrors: “There should be more than one mirror, like, five mirrors.” The head teacher in Atono said students do not have mirrors at home and when they arrive to school, teachers will sometimes send them or allow them to go to the mirror to tidy up and groom.

In God Kwach, there used to be a mirror in the urinal. No explanation was offered as a reason for or solution to the missing mirror. The head teacher said, “The presence of the mirror that was there initially caused girls to waste their time in the urinal. At the same time, boys would sneak into the girls’ urinals to use the mirror.”

In Kaditong’e, where mirrors were never installed, interviewers report that during the interview girls would ask questions about mirrors such as, “So when do we get to get a mirror?” or “They said in orientation we would have a mirror. There is space for a mirror in our urinal, but no mirror.”

The feasibility and acceptability of mirrors should be addressed in future studies. Questions on how girls and boys interact with the mirror, when they use it, whether they use the urinal when they go to look in the mirror and why they like the mirrors warrants further investigation. Questions also remain in terms of teachers’ thoughts on the mirrors and whether they think mirrors are valuable or if they serve as a distraction. It would also be valuable to learn about any changes teachers see in students who use the mirror.

Conclusion

Both girls' urinals and the placement of mirrors inside sanitation facilities appear to be viable interventions in school settings. Students and school staff report that urinals are extremely popular. Students unanimously rank the girls urinals as their preferred facility to relieve themselves, followed most often by home latrines, latrines at school and, finally, open defecation. Urinals are used, on average, twice a day. The most praised aspect of new urinal facilities is mirrors. Tile floors are also popular. Students and staff report positive feelings toward urinals. The need for education on how and when to use the urinal coupled with a codified maintenance schedule is apparent.

Recommendations

There are several levels at which an intervention could improve girls' urinals or facilities generally.

Program level:

Consider tearing down or creating barriers to any old structures upon construction of a new facility. Ensure that a rubbish bin for wiping materials and sanitary napkins is available in the urinals.

Community level:

Encourage the community to stop using school urinals in communities, such as Kaditong'e, where this is a problem. Use walls of the urinal facility to draw educational murals that can educate the community on sanitation and hygiene.

Teacher/School staff level:

Encourage teachers to create and enforce a system of urinal maintenance. Educate teachers on how and when to use the facility and encourage teachers to convey this knowledge to students. Instruct staff on how to maintain urinals and provide staff with hardware or other information on urinal maintenance. Create a school action plan with staff to help them devise strategies for routine maintenance and procurement of soft goods.

Family level:

Create a family hygiene day when parents are encouraged to come to the school and try the new urinal. Allow parents to have a stake in the pride associated with the facility; expose family members to the program's product (the urinal itself) and its sanitation and hygiene messaging. Encourage parents to supply children with materials for wiping.

Student level:

Educate students directly. Students report receiving minimal guidance from parents or instructors. Avert this by creating peer-to-peer activities on urinal use and hygiene and sanitation. Explain to students how to safely dispose of materials used for wiping and how to help maintain the facility's cleanliness.



Further Research

Some topics that emerged as future avenues for research include:

The relationship between urinals and menstrual management. It appears that older girls are using the urinals when they have their periods. What are recommendations on how to help girls manage their periods and benefit from this facility? Is it possible to wash discretely in the urinals? How is the facility's cleanliness affected by blood? Does the presence of blood inhibit use? Is there a demarcation in the age of girls using urinals?

The knowledge among girls on how to use the urinals. How do students learn how to use the urinals? Do they know what is or is not allowed? What is the role of murals in educating or conveying messages?

The role of mirrors in attracting students to the facility. Why do students like the mirrors? How do they interact with the mirrors? How do the mirrors affect the frequency of urinal use?

ⁱ World Bank. *Girls Urinals*. Retrieved 21/10/2009 from <http://www.schoolsanitation.org/BasicPrinciples/Urinals.html>

ⁱⁱ See enclosed report on Anal Cleansing