

Primary School Pupils in Kenya Learn and Practice Good Hygiene

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Abstract

Most health problems are directly or indirectly associated with environmental sanitation. Most illnesses could be associated with personal hygiene and sanitation of the pupils. Freund, Graybill, and Keith, (2005) in their study in Zambia reported that little was actually known about health of children from 6-15 years and much still remains to be learned. Research now shows that risk of poor health continues throughout childhood and children's health status especially of girls, which actually worsens from age 5-15 years. Several studies have indicated a connection between hand sanitization and infection control in numerous settings such as extended care facilities, schools, and hospitals. Hand hygiene practices improve through increased frequency of hand washing and by increasing awareness of the importance of hand hygiene. This results in fewer Upper Respiratory Infection symptoms, lower illness rates, and lower absenteeism from school. Hand-hygiene interventions are efficacious for preventing gastrointestinal illnesses, in both developed and lesser-developed countries.

Keywords: Hygiene; School; Kenya; Environmental

Introduction

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In Kenya, the likelihood of faecal contamination of the school environment is high because many schools have few latrines, inadequate water supplies, poor quality of available water sources, water storage in containers that permit hands to touch and contaminate stored water and lack of hand-washing facilities [3]. Besides impacting on school attendance, the resulting burden of diarrhoeal diseases and parasitic infestations has a negative impact on students' growth, nutritional status, physical activities, cognition, concentration and school performance [4].

There is a need to design novel strategies for preventive interventions that could allow inclusion of school children as well as adults in an effort to reduce force of infection and re-infection in high

endemic communities even where there are school deworming programmes [5].

Compared to adults, children can easily change their behaviour as a result of increased knowledge and facilitated practices and also as role models for their peers [6]. Knowledge is necessary for practice of proper hygiene in the school environment and households. Hand hygiene is clearly effective against gastro-intestinal and, to a lesser extent, respiratory infections. Many studies have reported an association between improvements in hand hygiene and reductions in rates of infectious illnesses in the community [2]. The current study was aimed at improving on hand washing techniques among school pupils of Gatanga Sub-County, Muranga County, Kenya for better health.

Methodology

An interview schedule and a questionnaire were administered to the caregivers and pupils respectively to the randomly sampled boys and girls for the assessment of health, hygiene and sanitation practices. Data were analysed for the baseline study and gaps identified that needed interventions. Health education was taught to the pupils. Lesson plans showing the lesson organization and presentation were also made with guideline from the classroom curriculum chart and Class 5 and 6 Science books [7-10].

The pupils' were taught using visual aids where necessary. Real objects like the leaky tins and soap were used to demonstrate hand washing following the World Health Organization hand washing techniques (Figures 1 and 2). Adopted from WHO, 2015: Hand-washing Techniques [11]. The pupils and their parents were trained on proper personal hygiene, Food safety while preparing meals, use of toilets and hand washing after visiting the toilet. Demonstrations on leaky tin (an improvised container to hold hand-washing water) construction, proper hand washing using soap and making dish-racks were taught by the field public health staff.



Figure 1: Hand washing technique with soap and water.

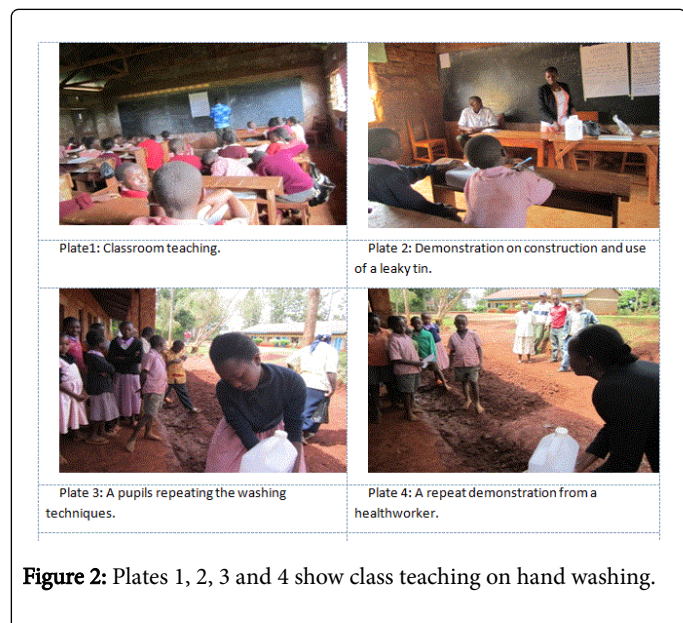


Figure 2: Plates 1, 2, 3 and 4 show class teaching on hand washing.

Results

Hand washing needs improvement for most individuals because rarely do populations follow the WHO rules of hand washing. Many school teachers and management have the basic knowledge on hand washing rules but many factors are limiting to achieve this. This

includes availability of clean safe water, gadgets like leaky tins within the ablution blocks and soap for hand washing. Based on the interviews, the study indicated that 68% of the children washed hands after visiting the toilet while 32% did not at baseline. There could have been over-reporting on hand washing because the schools sources of water were far away and no leaky tins were in visibility. Many did not use soap in hand washing at baseline. Improvement on hand washing with water and soap was noted after the interventions.

In order to avert the harmful effects and complications of intestinal parasites, prompt preventive measures should be taken for the eradication of the high infestation rate which should include public health education, clean drinking water, sanitation facilities, promoting personal hygiene and periodic deworming of the children. Health and sanitation knowledge was offered to the experimental schools with the assistance of public health office. After the interventions, the pupils improved in hand-washing and use of leaky tins.

Leaky tins use in households

Children's potential effectiveness as agents of change in the home was revealed by a study in Nyanza, whereby parents/guardians reported changing their hand washing behaviour because of what their children had told them about hand washing from lessons at school [4].

Leaky tins are containers that are improvised for hand washing purpose in areas where running water is not available using locally available materials like empty cans of any size. These tins are pierced at the bottom with a nail to release water and then covered with a fitting stick after use. Leaky tin use improved in intervention schools with twelve out of forty three households visited having adopted use of the leaky tins. Plate 5 shows a pupil with a leaky tin at home during the home follow-up by the researcher and performance in leaky tins use in pupils' households respectively (Figure 3).



Figure 3: A pupil shows how they do hand washing during a home follow-up next to a wooden toilet.

From the results, it can be concluded that hand washing intervention was successful and led to improved hand-washing amongst the study pupils.

Conclusion

Emphasis should be laid on the importance of personal hygiene, food safety and diseases associated with lack of observance in good personal hygiene both at school and home. Introduction of “leaky tins” next to the toilets and hand washing is of importance. Nutritionists and health workers should continuously educate households and schools to ensure all hygienic practices are observed. This includes hand washing, treated or boiled drinking water at school and households and the use of dish-racks at household level to reduce illnesses which would also reduce school absenteeism. This calls for action amongst the stakeholders to address this health problem amongst this age category.

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