Menstrual hygiene management practices in three high schools of eThekwini Municipality: An exploratory study

Presented by: Andrew Okem, UKZN
Elisa Roma, UKZN and LSHTM
Robyn Wilmouth, PATH

Photo credit: Andrew Okem/UKZN
Study’s background and objectives

Background:
• Although some progress has been made, there is a knowledge gap on the linkage between menstrual hygiene management (MHM) and sanitation systems in schools.
• Inappropriate disposal of sanitary products/materials can result in failure of sanitation systems, which increases the costs for operation and maintenance (O&M) of sanitation facilities and leads to public health issues.
• eThekwini municipality may shift responsibility for O&M of school sanitation facilities from the Ministry of Education to the eThekwini Water and Sanitation Unit (EWS)

Objectives:
• To document school girls’ experiences with and practices of MHM and menstrual product disposal.
• To inform EWS on the O&M needs of sanitation systems in schools.
• To assess the need for improved options for disposal of sanitary materials/products in eThekwini Municipality.
Research Methods

• Sample selection: three schools purposively selected based on their type of sanitation facilities: pit latrines, ventilated improved pit (VIP) latrines, and flush toilets.

• Mixed-method approach included:
  1. Cross sectional study:
     – 99 students who had menarche selected randomly to participate in survey.
     – Survey questions uploaded into the Mobenzi Researcher software platform
     – Survey implemented using mobile phones with the Mobenzi Researcher software platform that deploys a mobile assisted self-interviewing technique
     – Survey topics included: WASH conditions in respondents’ households and at school; availability of MHM products at school; management of menstrual period during school time and reported school attendance during menstruation.
     – Data then accessed and analyzed securely

Images: http://www.mobenzi.com/researcher/Features/Web-Console
Research Methods

Mobenzi Researcher methodology typically includes:

• A facilitator arrives with a supply of entry level Nokia handsets that are distributed to survey participants;
• Each handset has Mobenzi Researcher installed, which guides the students through the survey;
• Mobenzi Researcher has the ability to deploy surveys in multiple languages and students may select English or isiZulu depending on their personal preference;
• Once a student has completed the survey, their responses cannot be accessed until they have been uploaded, at which point they can be reviewed in an anonymous format by authorized personnel;
• The handsets are returned to the facilitator, who may then deploy the survey in another class or school.

Research Methods

• Mixed-method approach included (cont.):
  
  2. Observations:
  
  – Conducted at all three schools
  – Included use of a camera and photo documentation guide
  – Included use of an observational checklist to document information about location, condition of facility infrastructure, and availability of supplies/consumables

  3. In-depth interviews
  
  – Three respondents from only two of the schools (pit latrines and flush toilets) due to cancellations and scheduling conflicts
  – Interviews audio recorded with approximate length of 60 minutes
  – Topics included: knowledge around menstrual hygiene, exposure to messaging about disposal practices, knowledge of disposal methods, participant’s responses to menstrual products, participant’s responses to potential interventions, and participant’s opinion on the overall topics discussed.

NOTE: Studies conducted by PATH and by UKZN were submitted and approved by the University of KwaZulu-Natal’s Human and Social Sciences research ethics board
Results:
MHM experiences reported through survey

- 1/3 of respondents reported missing school during menstruation (one day)
- Fear of having an accident and/or showing blood during school was the primary reason for missing school (51.5%)
- Sanitary pads are the most used MHM product by the respondents, as noted in the figure.

Recommendation: Develop new approaches to help learners cope with challenges during their menstrual period and to help schools and communities raise awareness amongst men and women.
Results:
Challenges with concentration reported through survey

- (59.9% n=58) of participants reported having problems with concentration during menstruation.
- Reported reasons for lack of concentration during menstrual period are captured in the figure below.

![Pie chart showing reasons for lack of concentration during menstruation](image)

- 38%: I am worried about having an accident and showing blood
- 34.5%: I am in pain or physical discomfort
- 17%: I am tired
- 5%: I am worried people might know I have my period, even if they can’t see it
- 3%: I feel sad or angry
- 2%: I fear other people can smell
Results:  
Hygiene challenges

- Insufficient provision of basic hygiene materials. None of the schools provided soap or toilet paper in the toilet facilities for students.
- Broken faucets and missing hardware inhibited good hygiene behaviors.

Recommendation: Raise awareness of school administrators and decision-makers to understand the challenges faced by students with regard to both hardware and necessary consumable goods such as soap.

Photo credits: Robyn Wilmouth/PATH
Results:
Waste disposal challenges

• 48% of girls responded that they dispose sanitary pads in trash bins in school toilets. However, none of the three schools had disposal bins or bags during the observation period.
• Students in the school with VIP toilets reported never changing their sanitary pads when at school.
• When asked about the types of information provided about menstruation, less then 10% of the girls had received information about how and where to dispose of sanitary products/materials.

When a stakeholder at one of the schools was asked about waste disposal, the respondent replied:
“Used to have a big hole to bury [the used menstrual products]...principal says to burn them, but [that practice is] against the law “
Results:
Challenges for system functionality

• High prevalence of clogged flush toilets, caused by inappropriate disposal of materials such as newspaper (alternative to toilet paper) and sanitary materials into the toilets.

• When toilet paper is not available, newspaper and notebook paper are often alternatives.

• Flush toilets were more prone to be dysfunctional when compared to the dry toilets.

Photo credit: Robyn Wilmouth/PATH
Conclusions and Recommendations

• Schools aiming to implement MHM friendly practices and increase concentration of school girls may thus need to target:
  1. Needs for quality MHM products to prevent leakage;
  2. Provision/access to pain medicine; and
  3. Dissemination of education/awareness to both girls and boys about menstruation, reproductive health and the impacts of bullying.

• Schools (especially those shifting from dry latrines to wet/flush latrines) need to consider:
  1. Behavior change education and messaging;
  2. Provision of supplies suitable to flushing (e.g., toilet paper);
  3. Infrastructure for appropriate disposal (e.g., bins) within facilities;
  4. Infrastructure and services for separation and final disposal of general trash and menstrual waste from school sanitation facilities; and
  5. Dialogue with government officials about solid waste disposal laws and regulations (e.g., burning) versus the challenges and limited options within the context of a school setting in South Africa.
Challenges and Successes

Challenges:

• Both the cross-sectional design and small sample sizes limit the researchers' ability to generalize more broadly.
• The portion of the questionnaire that explored the use of rags/clothes as sanitary protection had little relevance to this study population. This could be significantly shortened in future studies in eThekwini.

Successes:

• Mobile phones ensured girls’ anonymity with regard to their answers. Technique was well received by both the school administrators and the girls.
• Use of the sanitation facility assessment (photo documentation) provided richer understanding of the experiences of young girls.
• The photo documentation provided insights about the sanitation conditions as well as evidence for assessing any contradictions or response bias of survey respondents.
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Contact details of collaborating researchers:
• Dr. Elisa Roma, Elisa.Roma@lshtm.ac.uk
• Andrew Okem, okem@ukzn.ac.za
• Robyn Wilmouth, rwilmouth@path.org