

PEIZ: Pads Everywhere In Zambia

Menstrual Hygiene, An IDDS Zambia 2013 Project

Menstrual hygiene is an important but often overlooked issue worldwide. The PEIZ project team from the International Development Design Summit 2013 investigated the issues faced by females in the village of Kamphelo, Zambia. Many women and girls lack information regarding menstrual hygiene and use old cloths, which are often damp, and dirty leading to infection. A low cost disposable pad was developed out of cotton to provide an alternative for women in the local area. A possible business plan for women to run a social enterprise making and selling pads has been suggested as well as recommendations for further work. These include reducing the cost of the pad, improving the manufacturing process and training NGO personnel.

Context and Situation

The village of Kamphelo, in the Nyampande district, is situated in the Eastern Province of Zambia. Two trips were made to Kamphelo by the project team to gather information on menstrual hygiene practices by speaking to the local community, schoolgirls and staff at the local clinic. The first trip gathered information on the problems facing menstruating women and girls and generated ideas for solutions collaboratively with the community. The second trip gained feedback on the prototype solutions.

Menstruation is a natural cycle that all women experience yet it remains a taboo in most parts of the world. The practical challenges of menstrual hygiene are compounded by socio-economic factors. Cultural practices and taboos surrounding menstruation negatively affect the lives of women and girls. Despite this menstrual hygiene is often overlooked by the water, sanitation and hygiene sector.

In Kamphelo village it was found that there was very little knowledge of the menstruation cycle and hygiene practices. None of a group of twenty schoolgirls aged 13-16 knew why they had periods. Reproductive health is not on the curriculum at school until girls are 15-16 so many girls experience their first period with no real knowledge of what is happening to them. It is common that they will approach their grandmother, as culturally grandmothers are seen as wise and free to talk. It is unusual for mothers and daughters to talk. One girl, who approached the team following the session, had been menstruating for a year yet had told no one. Her grandmother lived far away and she felt unable to tell her stepmother whom she lived with. The grandmothers teach the girls to use cloths to absorb the blood, that they must avoid having sex with men, as they can now get pregnant and the taboos surrounding menstruation. These can include having to be isolated after their first period for anywhere from a week to 2 months. It is considered unacceptable for husbands and wives and particularly fathers and their daughters to talk about menstruation.

Women use old strips of chitenge (cloth wrapper) or clothes to absorb menstrual blood. These can be disposed of directly into the pit latrine or can be washed and reused. However cultural taboos prevent the washing and drying of cloths in public. Women are forced to wash the cloths privately and resort to hiding wet cloths, for example under the mattress or in the rafters of the hut. As a result the cloths do not dry properly. Using wet pads can cause skin irritation and if the skin breaks

can result in infection. On top of this the cloths are not always washed properly due to a lack of soap. Using unclean cloths supports the growth of unwanted bacteria and can also lead to infection.

In order to practice good hygiene it is essential to have access to water and sanitation facilities. At the local school the pit latrine toilets do not have doors or another barrier to entry and therefore girls fear being walked in upon. There is no water close to the latrines for hand washing; instead it is kept in the classrooms. This causes embarrassment for girls who soil their hands while changing their cloths or pads. Those who use cloths also fear leakage with a jersey being tied around the waist to cover stains. Overall, girls feel embarrassed, ashamed and this causes them to be withdrawn and less participatory in class. A combination of all these factors, plus lack of access to pain relief, can cause girls to miss school while on their period, thus missing out on vital education.

Figure 1 Girls toilets at local school



Solutions

After gathering the information from the women and schoolgirls of Kamphelo village, we found that the two key problems relating to menstrual hygiene are a lack of information and a lack of safe, affordable products. We decided to focus on providing a product that would improve menstrual hygiene while being culturally sensitive as providing information and training was not feasible within the month long IDDS summit. Two options were considered providing a dryer so that women used safe, dry cloths or producing pads to replace cloths. Pads are the better option as they overcome more of the issues; they are comfortable and prevent leakage more successfully than strips of cloth.

The two options are disposable or reusable pads. Basically, we chose a disposable pad that will avoid cultural taboos of washing and drying in public. We then worked on different types of products using local materials to come up with an appropriate solution. Different materials and methods of use were considered. These include pads with strings that tied to the underwear, holders built into underwear, strings that tied around the thighs and strings that went up between the legs and tied around the waist. Feedback from the women and girls in Kamphelo indicated that the strings around the waist option was universally the most popular as many women and girls do not wear frequently wear underwear.

The chosen solution utilises locally grown cotton as a highly absorbent centre encased in cotton cloth. The base is 'mutton cloth' and the top is normal cotton cloth. Mutton cloth is used as experiments found liquids did not readily pass through it thus providing a barrier against leakage. Mutton cloth and cotton cloth are available from Petauke, the nearest town to Kamphelo. As mentioned, cotton is grown locally, and can be bought raw from local farmers. It needs processing to remove it from the seeds.

Two women from Kamphelo tried the pad, one for comfort and one for absorbency. The feedback indicated that the pad needed to be thinner, not fully stuffed with cotton wool, otherwise it is

uncomfortable and rides up behind when seated. The pad was found to last all night with no leakages, although it is unclear how heavy the menstrual flow was at the time.

The cost of the prototypes was 0.542 kwacha per pad. 1.2 cents of this was the cotton, with the cost of the different types of cloth roughly equal. This would put a pack of 10 pads at 5.42 kwacha which although below the commercial price of 7 kwacha, it is significantly above the target price of 2.50 kwacha which was suggested by the schoolgirls.

Venture Design

Every intervention or project needs a revenue-generating model in order to make it sustainable. Menstrual hygiene project has great potentials to turn it as a sustainable business. The women can manufacture these pads and sell them to the other women in communities. In order to position this idea in the minds of people in Kamphelo, we did an exhibition where we gave a little bit of the idea to the people to regard.

Business Canvas Model

Business canvas model is a tool to understand whole business in a better manner. The tool includes all the important elements that a business needs to address.