

Incorporating issues of gender into design of latrine

After reading this you should know/be able to:

- Understand a design process which addresses key gender differences.
- Guidelines to incorporate female perspectives throughout latrine implementation.
- Understand specific components of a latrine to be addressed for gender differences.
- Understand the importance of incorporating gender in latrine design.
- Be able to replicate gender appropriate community approach to design.

Much of the world's population lack appropriate basic sanitation to protect their environment from human fecal contamination, despite years of public programs to implement basic latrines. Two million children die each year from diarrheal diseases, making it one of the top killers of children under five (WHO, 1998). Latrine use is an effective and simple technology to help minimize the burden of infectious diseases (McConville, 2003). Current sanitation programs and promotion of these programs are not meeting the global need. Latrines are an acceptable form of sanitation technology used throughout the world to serve as a barrier between people and pathogens found in feces (Mihelcic et. al., 2009). Building latrines, however, is not enough to improve health. In order to facilitate health improvements, programs need to be culturally appropriate in addressing behavior change. It is also important to consider factors, such as gender, while designing latrines.



Compost Latrine Oma, Panama

Introduction

When latrines are used throughout a community, the benefits reach much wider than the household using them. When households use a latrine, the benefits reach throughout the community, however, in order to reach these benefits, most of the community needs to participate in proper sanitation habits. As explained

by Sandy Cairncross, sanitation is a public good as all share the benefits and consequences caused from sanitation practices (Cairncross, 1999). There are several different types of latrines. This paper will not focus on the specifics of latrine types, rather what aspects of a latrine need to be considered to accommodate both women and men. It is necessary to incorporate behavior change and health education when implementing a sanitation program, but it is also possible to change the product to fit the population. Changing the product rather than the population will allow for easier adaption of the service. Parts of a latrine to be considered are the following: sizing of a latrine, size of superstructure, consideration of washing menstrual towels, consideration of drying menstrual towels, size of squat hole or seat, height of seat- if used, distance from house, security/positioning of door, and slab.

An important aspect of program planning is determining the population, or audience, which the program will serve and effect. While considering this aspect it is important to also consider gender, which is many times neglected in water and sanitation projects. Gender refers to the roles and responsibilities of women and men, and how those roles interact. Sex is biological, where gender is determined through culture and social norms. Gender roles are learned and are dynamic, implying development needs to be flexible and understand the complexity of incorporating gender in projects (Khosla et. al., 2004). Women experience higher incidence of burden when using a poorly functioning or poorly built latrine. Females also experience the majority of negative health consequences while having the least influence on many sanitation projects (IRC, 2005). Some gender issues regarding water and sanitation have been addressed, but there is not a lot of literature or studies looking specifically at latrine design and gender. It is safe to assume that male and female may use the toilet differently. Anatomically, these differences could cause more barriers for women and children compared to the men who are generally building them. Despite the obvious differences, the implications of these differences are many times overlooked and gender consideration is sacrificed for convenience of the builder.

Fundamentals

Latrines vary throughout the world, but the basic principles remain the same and many of the same parts are used to allow a person to urinate and defecate. Basic fundamentals of a Latrine are: superstructure, slab, pit, and squat hole or pedestal. These basic parts of a latrine can be altered, and depending on the latrine may have additional materials and operation systems, these are better depicted in figure 1. It is very important to incorporate gender with every aspect of planning, design, implementation, and maintenance.

Gender Mainstreaming

This incorporation of gender is also known as Gender Mainstreaming. To understand how to gender mainstream a project it is important to understand that gender mainstreaming is achieved through gender equity. Gender equity refers to the process of being fair to both women and men (Khosla et al, 2004). Gender mainstreaming and being fair implies you make the concept of gender a process which is incorporated throughout all phases, and making sure benefits and burdens are shared equally throughout the different segments (Khosla et al, 2004). A simplified way to think about gender mainstreaming is making the question of “who and how” this aspect will impact both males and female at different community levels. This question should be habitual and learned to be a natural process.

Privacy and safety

Privacy may vary from culture to culture, but people generally want to feel secure and not to be seen while using the bathroom. Some religions may even forbid men and women from sharing a latrine (McConville, 2003). Some religions also forbid women from unnecessary appearances in public (IRC, 2008). This implies if women do not have a latrine, or a latrine that supplies adequate privacy, women are left to defecate only when the sun is down (Cairncross, 1999). To ensure privacy, it is important to make the superstructure out of material that will not allow people to see inside. Superstructures are generally made of local material; this could be wood, leaves, aluminum, or brush.

Depending on the resources it may be necessary to use extra material to cover holes and ensure stability given inclement weather conditions. There should also be an opportunity for people to lock or latch the door once inside. Same considerations should be well thought-out when designing the door and roof.



Pit Latrine in Oma, Panama. Example of superstructure with limited security, privacy, or shield from weather.

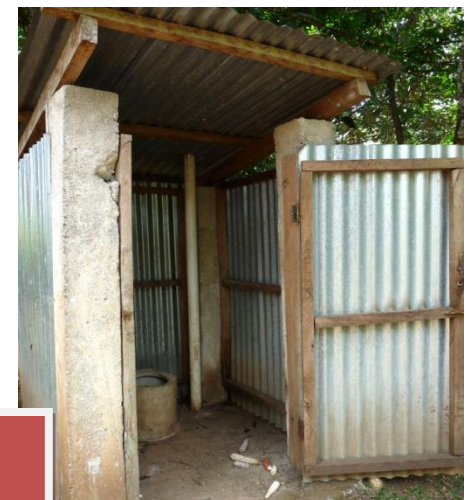
Safety is an issue in two ways: traveling to the latrine, and while in the latrine. Women often feel threatened or unsafe if they have to travel a long distance, especially in the dark, to a latrine. It may seem to make sense that if there is an available latrine, a person will use it. This assumption, however, is not practical. When it is dark outside, and a woman has to choose between walking with no light to a latrine or using the bathroom outside, it makes sense that a person would choose to walk less distance from their house to reduce risk of traveling to the latrine. This is a consideration that must be factored in when sighting the initial spot for the latrine. It is important to evaluate who will be using the latrine and get a sense of how far people will walk in the dark.



Although the latrine superstructure may not be secure, it is close to the house increasing usability.

Superstructure size

Determining the size of the structure may many times be dependent on the size of the hole and materials available. This does not take into consideration several issues including the extra room to accommodate bringing children into the latrine, washing and drying menstrual towels, and the possibility of accompanying girls during the beginning of a menstrual cycle. This should be considered while designing on an individual household or community level.



Pit latrine with ample space for women. but no wash area.

Female Hygiene

Many sanitation programs fail to discuss the implications of a menstrual cycle on latrine design and use. This is discussed very little in literature, and most likely has very little influence during the design phase. Poor females in many countries cannot afford commercial sanitary napkins or pads, so use pieces of towel or material. Due to the sensitivity of many cultures, this material is washed quickly, in private, and reused. Without a proper place to wash and dry these materials, they are not being adequately cleaned but are being reused. The lack of consideration in latrine design further ostracizes this population escalating the idea of female imprisonment during the day. Females who do not have access to a latrine or private area are many times forced to wait until night to use the bathroom and wash towels (Cairncross, 1999). These actions are responsible for a significant number of illness and infection associated with female reproductive health (IRC, 2008).

Allowing room for an area to properly clean and dry menstrual towels would allow women and girls to effectively sanitize the material, reducing infection. A wash area allows for females to privately sanitize towels and should also allow for an area for drying them. This area should be designed by the women using them and discussed in a culturally appropriate manner, taking into consideration the general 'taboo' of menstruation. Despite the given shyness a population might have, careful planning can empower this group to be able to communicate openly and encourage healthy behaviors.

A possible design feature could include a raised concrete platform to scrub, a place for water, and a place to dry towels. It could also be beneficial to assess whether females would want this wash component in the same facility as the general toilet, or a separate structure. Limited data suggests it was preferred to have the wash component in the same area as the toilet (IRC, 2008). When evaluating where to put the latrine it might also be necessary to consider where the water source is. For hygiene purposes water will need to be incorporated, and women are usually the ones to collect the water.

Incorporating female hygiene management into latrine design could also have other implications reaching beyond infection control. This could also address the barrier of girls not being able to attend school while menstruating. It could also open room for discussion and better education regarding menstruation.

Cleanliness

Women are usually the population segment to clean the latrines. It is important to consider specific materials based on how easily they are cleaned. The cleanliness of a latrine will be a factor influencing use, and the easier it is to clean will positively affect the use. Educating the boys and men on proper use and cleanliness is also important.

Children excreta

In some cultures it is thought that child's feces are not harmful; so they may be disposed of in an open field. This needs to be addressed as a behavior change, but to reinforce this behavior change it should be considered in the design phase of latrine planning. Several factors could influence whether a child, who cannot use the toilet on their own, does or does not use a latrine to dispose of the waste. These factors could include some that have already been discussed, such as size, privacy and safety, or could extend to other comfort measures such as flies and smell. Women are generally the ones taking care of the young,

so this feature should be targeted toward women. Disposal is an important factor considering hygienic disposal of children's stool is linked to a reduction of 30-40% diarrheal cases (Cairncross, 1999).

Men

Although much of the focus has been emphasized for women, it is also important to consider male needs. Size of the squat hole and other structural implications also will affect the use from men. These needs do not, however, need as much attention as men are usually the ones to make decisions. Men should also be considered when discussing female hygiene, and if they are sharing a latrine if it would eliminate one group from using it due to privacy or embarrassment. Designing a latrine, such as a compost latrine, determining if the male will be the one to empty the pit is important, and ensuring he is capable of doing so. Incorporating him in the design will hopefully increase the likelihood of it being correctly.

Incorporating men in other aspects that seem to not affect them is also important. Many times the work of women goes unreported, and incorporating men with this training could potentially increase awareness of relevant labor.

Latrine aspect	Description	Purpose	Gender Consideration
Size of superstructure	The structure around toilet, the "house"	Provide privacy Preserve dignity Protect from weather Facilitate cleanliness	Women need more room for washing menstrual hygiene products Girls may need assistance, room for another person Mothers may need to bring child inside with them
Materials of superstructure	Local materials that can be reproduced and are inexpensive while also providing privacy	Keep latrine low cost and allowing community to continue building.	Provide privacy, especially for females. Make sure materials are secure with minimal transparent areas
Wash area	Area for water and scrubbing	Private area to scrub towels used for female menstruation Adequate area for hand washing	Allowing for privacy while keeping towel clean, reduce incidence of vaginal infections and loss of school from girls
Drying area	Rack for menstrual towels	Private area for drying towels as they are not always culturally acceptable to be dried in an open area	Allow for privacy while drying towels
Size of squat hole or seat (when applicable)	Hole in slab to squat over	Allow excretion to enter hole easily, keeping slab clean.	Size and shape should be considered regarding size differences between men, women, and children. Pregnancy can also alter squatting conditions.
Pedestal (when applicable)	The seat over the hole	More comfortable than a squat hole	Sizing as explained for squat hole. Cleanliness also needs to be addressed.
Distance from home	Latrines are usually set away from homes, distance may depend on soil conditions and water source	Latrines need to be a safe distance from water source while still being close enough to promote easy access.	Women and children may not be comfortable walking long distances from the home. This could be for safety or religious reasons.
Security/position of door	Doors made from local materials can be used; if not available shelter can be built with spiral configuration.	Privacy and security	Children should be able to use and reach door and lock. Women and children are more vulnerable to privacy issues. Locks or latches should be used in combination with

			door with limited holes.
Slab	Usually concrete, serves as barrier over hole and ground	Barrier between waste and human should prevent flies and smell from escaping or entering. Give user sense of cleanliness and security.	Slabs should be thick and made correctly for an added sense of security. Easy to clean with cues for feet when using in the dark.

Figure 1

Cost

Cost is generally thought of as tangible goods costing money; however, we will discuss the costs of changing a design behavior to incorporate gender referring to non monetary costs and benefits. It is true that this gender appropriate approach could use more materials which will cost more money, as well as more time which could also cost money, but the most important costs and benefits are not tangible. It is important to think of cost as social, behavioral, psychological, physical, and structural. Thinking this way will allow designers to compare perceived benefits vs. costs, reduce barriers, and increase incentives. Applying this way of thinking to incorporate gender in latrine design will allow designers to better understand why the population may or may not use a latrine and how design can be changed to better fit the population.

Understanding dignity plays a large role in latrine use is also important. If latrines smell bad and are not comfortable going to the bathroom becomes a larger burden than necessary. Many times a poorly functioning latrine will influence the population to use the bathroom in an unprotected area. The option of using the bathroom in a field is not always a culturally appropriate method for females; this can be thought of as a cost of dignity or causing shame.

Poor health is also a cost of not incorporating gender into latrine design. A poorly designed latrine will not be used as regularly as a well designed latrine. Negative health consequences, due to open defecation, result in a loss of productivity and quality of life for a whole community, not just the person choosing to not use a latrine.

Operation and maintenance

Latrine committee

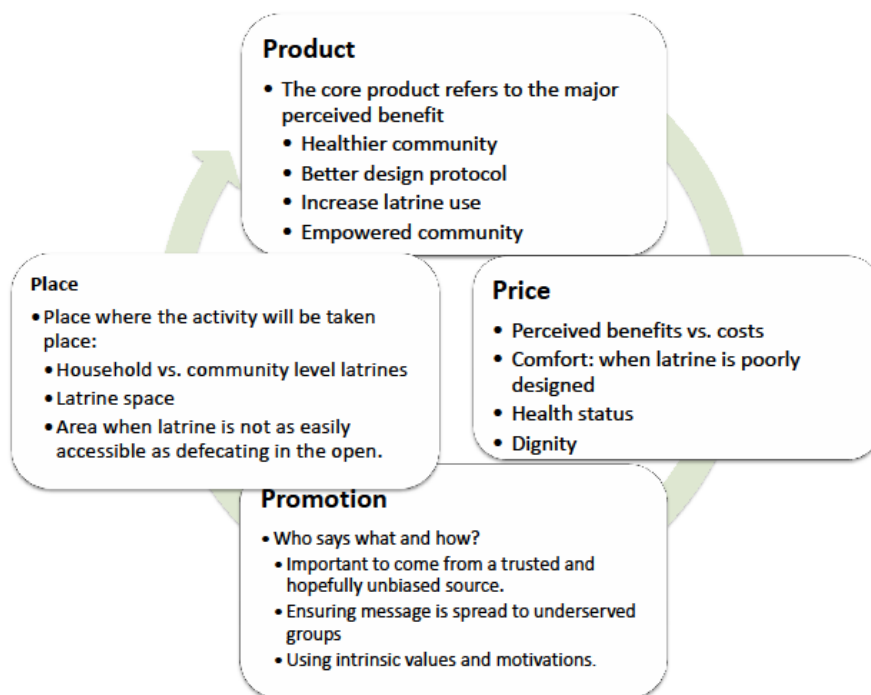
When designing a latrine it is important to involve the community, as this will not only help to provide ownership and empowerment, but will also incorporate information from the people who know best what they need and what they want. When implementing a community latrine, it is important to form a committee which will help plan, build, educate, and maintain the population and latrine. Community latrines may not always be ideal, as it limits privacy and security, but these problems can be minimized with careful planning. It is important to have equal representation from male and females, as well as other considerations such as a person's role in community and socioeconomic level. Incorporating both genders will allow both sides to have a voice, but it is also important to not only allow for both sides to vocalize

concerns, but also use those suggestions and concerns in the design and implementation phase. It is easy to allow a group to speak, but leaders must be able to go the extra step to use these suggestions to make sure the end product fits the population. This can also help initiate dialogue between different sectors, encouraging communication.

Maintenance will be possible if participatory education is part of the planning, design, and construction phases. It is important to educate both males and females, and they may culturally have separate roles regarding maintenance. It will also give a sense of reliability and teamwork.

Social Marketing approach to latrine design

The social marketing approach focuses on a behavior change as the main objective, and is a process to work with a community to achieve a desired aspiration, in this case, increased use of latrines and gender friendly designs. Using tools from social marketing allows the designer to focus on the priority population and evaluate the needs and aspirations of this specific group. Social marketing concentrates on a behavior change, relying heavily on the community to drive research and decision making. An opportunity of behavior change will present itself in an attractive way to the population increasing likelihood of adoption. Considering the product, place, promotion, and price will help the designer to work with the community to create a program suitable for respective group. This program will fit the population, instead of trying to make the population fit the program.



Steps to Integrating a Gender Perspective: Reducing participation barrier. Based off of *The Exchange*, Gender and Water and Sanitation.

1. Communication
 - a. How implementation will be *promoted*
 - i. Who will say what about program?
 - ii. Will this reach both male and female at different social levels?
 - iii. Is this culturally appropriate?
2. Culture and Gender analysis (Khosla et al, 2004).
 - a. Ask the “who” questions, such as: who does this impact, who has control over what, who does what, and who benefits.
 - b. Are the *costs* distributed equally?
 - i. Who is paying for services?
 - ii. Price should also be thought of as non-tangible ideals such as dignity and time and other barriers for specific culture.
3. Community meetings
 - a. When considering meeting time and place ensure both women and men can attend. Take into consideration cultural norms and expectation about how men and women interact considering if separate or multiple meetings would be appropriate. Also considering seating and ensuring all parties can hear and see, and no one group aesthetically appears dominant.
 - b. Helping incorporate awareness and the understanding of the importance of women’s participation.
 - c. Providing a safe and comfortable environment.
4. Decision making
 - a. Providing an opportunity for equal decision making.
5. Committee representation
 - a. Providing an opportunity and enforcing equal representation on committees.
6. Education
 - a. Giving women and girls the role of leaders, educators, and enforcers, and change agents of hygiene as opposed to a traditional role as the passive audience.
 - b. Separate hygiene education for men and boys addressing their own responsibilities and practices. Also addressing gender issues affecting hygiene and sanitation.
7. Training
 - a. Train both female and males for technical, managerial, and hygiene tasks making sure trainings are culturally appropriate for both genders.



Further readings

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