Mr SAMUEL S.P. MGANO

DIPLOMA IN WATER AND SANITATION HEALTH

AIPMS

FINAL EXAM

No 1262 Usanga, Chipinge Zimbabwe

Adm no AIPMS/261/2019

**Question 1: What is Sanitation and Hygiene?**

Sanitation refers to the provision of facilities and services for the safe management of human excreta from the toilet to containment and storage treatment onsite or conveyance, treatment and eventual safe end use or disposal. (According to World Health Organization (WHO). This includes all processes of managing waste from collection to recycling or landfills. Sanitation is very important in the aspect of WASH as it plays hand in hand with the prevention of diseases. If the excreta are properly disposed of in away to that makes sure that there is no contact or transfer to the mouth of human beings then it is successful. Hygiene is the behavioural methods of having a clean and sanitary environment. Washing of hands is one way of preventing diseases from entering the body especially from faecal matter. But to achieve this you need to have clean water from a secure source or clean source that means its clean to drink and wash in. Washing hands is for certain times like before cooking or preparing food, before eating or feeding children, and after defecating or changing and cleaning babies. The Diagram below better explains the positive impact of hand washing when it comes to faecal matter.

Part 1 Part 2



Adapted from (WASH DIPLOMA MODULE 1, 2018)

In part one nothing stops the flow of infection to the different aspects but in Part 2 hand washing stops the contamination and carrying of faeces to food and new host. Another way of stopping the flow of infection is by keeping the house or community clean, that is why sanitation and hygiene work hand in hand. Sanitation removes the waste from the environment and hygiene is to know what to do to have a keep the environment clean and ingest clean foods.

**Question 2: Why are water, sanitation, and hygiene important?**

Answer:

Water, sanitation and hygiene are very important as they work together in the improvement of the well being of humans. Water touches the management of drinkable, clean water systems that provide nourishment and a liquid to clean the environment. Water is life as humans cannot live without water and need it on a daily basis. To best explain the importance of the three aspects of WASH in the community l would like to state an example with the recent cyclone Idai that hit the Chimanimani and Chipinge district in the eastern part of Zimbabwe. Most of the areas were destroyed water systems were washed away. WASH then came in to play to firstly provide water for drinking, washing and bathing. Not undermining drinking water, this done by drilling boreholes, securing springs and rehabilitating the piped water systems. At the same time latrines have to be built as part of sanitation to dispose of faecal matter so that there will not be an out break of diseases and the refuge collection to be able to prevent vectors from starting to hamper human life through diseases that they can transmit. But in all this you might provide the water and the latrines to the community but Hygiene’s promotion then comes in to educate the community how to properly use the tools in their disposal to live a clean and healthy life. For example, washing of hands with soap before handling or preparing food will be ensure that the food ingested will not have faecal matter. Washing hands from the toilet, the removal of refuge to collection points so that there cannot be the increase of rats etc that transmit diseases. This will have a positive long-lasting effect as stunting and malnutrition will be reduced and death rate will be low.

**Question 3. What is open defecation?**

Answer.

Open Defecation is the excretion of faecal matter by communities on the surface of the ground or water body that has not been set aside for that purpose. This a very damaging to the environment and human life as it contaminates the soil and water. This practice can increase the rate of infection of diseases like water borne diseases. This usually happens when there are no toilets in the area. But also, there is a lack of human hygiene that is apparent. Open defecation spreads diseases in many ways like through vectors like flies and rats, through sea page to underground waters and also through the contamination of the soil thus when children play and don’t wash their hands they will eat and consume bacteria.

**Question 4: What is Sanitation Marketing?**

Answer.

Is a platform that aims to create market places for buyers and sellers of a particular good or service to interact to facilitate an exchange. The goods and services start from capture, storage, transportation, treatment and reuse. There are already technologies that have been developed in addressing sanitation marketing. By developing small service providers sanitation marketing can be better achieved. (Sanitation Marketing Philippines) This balls down to communities investing in toilets and other services like toilet construction, toilet components, household water treatment like water guard, sludge treatment and disposal, and micro financing for poor households. There should be stimulus and regulations that will provide market places for sanitation marketing.

In Chipinge there are a number of septic tanks and toilets that are not working and by providing those services you can realise employment creation. I have notices it Botswana the local government has helped establish community toilets that are managed by the local youth association. You pay to use the toilets and the youth association maintains and are employed at the same time. Government policies are key to the increase of this field and services as it speaks to increase of the WASH profile in the area. In Tanzania there is the development of sanplats that will help to put a lid on latrines so they can be cleaned better thus being kept clean. The success of this project falls on the cooperation of government and local suppliers. At the same time having campaigns like road shows to educated the communities about the necessities of these technologies. (Sanitation Marketing rural Tanzania)

**Question 5: What are some of the biggest challenges you face in teaching hygiene and sanitation?**

Answer

There are a number of challenges that can be faced when teaching hygiene and sanitation and these can be entailed in the following:

This topic talks to the very essence of human behaviour and to change human ways its hard. There aspects of taboo especially when it comes to this topic and communities stop learning new ways to be safe. Below are some topics that would hinder teaching hygiene and sanitation to communities

Religion: Will not allow good hygiene because of certain practises, thus no matter if the community wants to be taught they will not as it is against their religion. For example, is some religions in Zimbabwe its normal to put cow dung on ladies’ genitals when they are pregnant. As long as the sect leader approves. In the recent cyclone Idai some springs that were rehabilitated without the local religious leaders’ consent are not being used for drinking and washing.

Local politics: When the local political party cartels the trainings for people affiliated by them this is evident in the recent cyclone Idai when anything to do with NGO’s it was directed to areas and people affiliated by the ruling party.

Taste: there might be the need to drink clean water but some will not purify water with aqua tab’s or boil because they like the taste of river water. There are communities that reject borehole water for river water thus being contaminated.

Norm: Some are used to doing this their own way thus change is suspicious.

**Question 6) What is sustainable sanitation?**

Answer.

Sustainable sanitation has three key components so that it can exist that is:

* Government taking responsibility of all aspects of sanitation and waste management in the communities. The main points help in having sustainable sanitation in the community so that it can have long lasting effects. Government support is critical as policies need to be made and implemented and national and local level. The lack of good government support then we cannot have sustainable sanitation. Government also helps in the construction and implementation of toilets in the community
* Changing social norms and the eradication of open defecation in households and communities, this done by a number of promotion campaigns to help the community to see the benefits of living a healthier life. The training of children in schools can be used as an entry to the community and a way to spread good hygiene to the masses.
* Provision of solutions, operations and maintenance and capacity building of communities. Having Community Lead programs means the operations are in the hands of the community and they understand the need for proper use of the facilities and maintained. This helps in the sustainability of sanitation as the benefits are see by the community thus they are motivated to promote good sanitary programmes.

**Question 7) What are the steps for planning and implementing a successful WASH behaviour change campaign**

Answer:

There are three activities you involve in plannining and implementing a successful WASH behaviour change campaign.

* Planning for change helps the group to plan the action steps for implementation. Segmenting the participants into various groups and developing the promotional pack.
* Allocation of responsibilities to each participant based on target groups and risk practices
* Identifying possible problems and plan ways to overcome them.

(Trainees Participatory Hygiene and Sanitation Promotion Manual)

There would be a group of participants that would take part of the programme and in the planning phase the participants are given tools to implement changes in sanitation and hygiene behaviour. The target groups would be community leaders, teachers including women and a promotional pack is design for them that will better engage the minds of the community. Then there is need to allocated different tasks for different participants. This will help when identifying the different strengths that they have and offering them to leverage on them. A plan of action needs to be clearly laid out and a time frame should be set. Then there will be need for monitoring and evaluation of the programme for accountability purposes but also to learn from the mistakes from the programme.

**Question 8) What are the challenges faced by WASH Projects in Africa**

Answer:

There are a number of challenges that face WASH projects in Africa. To name a few lack good governance is a problem. There is rampant corruption and mismanagement on the local and national level thus the WASH projects end up not kicking off or they die off because of these factors. The politics of the day also hampers the WASH projects as everything is politized to one party and the rest are not given much attention. Funding also is a problem as most countries don’t prioritise the WASH projects in their area thus have to look for funding from banking institutes and NGO’s. This then limits the scope of works and most of the work is done in urban areas that rural areas where most of the projects can have more impact. NGO’s also provide a problem as some are employee centred that recipient centred. Meaning in the recent crisis in our area a lot of NGO’s did not do any meaningful help as most of the funding was going to operations and salaries than in the need that was apparent. According to Sphere for a programme to be sustainable the program officers need to be from locals but most officers were from Harare 500km away and would go to their families every weekend. Because of this a lot of WASH projects face challenges long term or fail altogether.

Accessibilty is another challenge as a lot of location are hard to get to thus very hard to implement WASH projects.

**Question 9) You have visited one of the schools in your locality. What part of its surroundings can you see that satisfy the criteria for disease prevention? List the parts of the building and its surroundings, and state why they are important.**

Answer.

In disease preventation there needs to be a number of factors that need to be adhered to especially when it comes to a school. The school has a vast population that needs to be taken care of in a safe clean environment:

* Water:

The presence of a clean water source is the first thing that I look at. Either it’s a borehole that is installed properly to have a bush pump or a covered well. This will show that the children are using a clean water for washing and bathing. The best would be a plumbed water source to taps and connected directly to toilets and wash basins so that the transfer of water from source to use does not have any contamination.

* Toilets:

Having clean safe toilets or latrines is also important, as a population of young children will need to defecate there should be clean toilets that they can use. Other than having flush toilets, well built latrines can easily do the job. I will also be looking at the accessibility of clean water to wash hands after using the toilet and there should not have a water gathering as vectors like mosquitos and flies can gather and pass on. diseases. There should be no smell proof that its well-built and cleaned regular. For the girl child there is need for a girl friendly latrine that can carter to here needs but will give her dignity that she needs when she leaves the facilities. Having these will greatly reduce open defecation and the spread of water borne diseases.

* Waste Management:

There should be litter bins everywhere that is, in toilets, class rooms, sides of sports fields and offices. These should be regular emptied so that there cannot be the increase in the population of vectors. The area of disposal if the municipal truck is not coming to collect should be away from the school. There should be a separation of waste so that organic waste can be used for compost and the other can be recycled or disposed of.

* Signage

This is important as it educates and reminds students of the need to have good hygiene behavior. Like the sign: “WASH YOUR HANDS” especially on latrines will remind them to do it. “DO NOT LITTER” will educate them to use litter bin. “UNCLEAN WATER” if there are other sources of water that are not clean the sign will stop from using it.

* A well-cut grass and maintained surroundings will make sure vectors like rats, mosquitoes, flies will not breed and spread diseases like malaria. Thus, a clean environment is important.

**Question 10) You have asked the local county government to provide a license for your new hotel in town. The inspector asks you to assist him to describe the basic hygiene for your business before licensing. Kindly describe**

Answer:

Basically, my business has very good hygiene principals. We pride ourselves with having a borehole on site that is water tested and provides clean drinkable water to the whole establishment that means all wash basins and toilet facilities and kitchens etc. This helps in stopping the spread of diseases in combination with other efforts. Our toilets are properly built and plumbed in into a big biogas unit that provides both LP gas and a way to recycle the waste. That means there is no open defecation and no chance of contaminating the soil with faecal matter. There are soaps that have been provided in the toilets so that our guest and wash hands after using the facilities and before going to any other part of the hotel. There is also a second wash basin and soap that is directly outside the toilets as we have realised that some guests have the bad habit not washing hands after using the toilets thus holding the door handle and spreading disease. To stop this, we encourage through signage our guest to wash hands with soap outside the toilets.

Our house keeps clean all surfaces regularly and thus keeping the environment clean from vectors. Our kitchen staff adhere to the highest form of hygiene standards were they clean all surfaces and dispose of the waste matter by separating it and putting it in the allocated bins. Our grounds keeper department then either uses the waste as compost of leaves it to a secured location for the municipal waste management truck to come and collect. This happens daily.

All foods are washed before preparation and the cooks wash their hands with soap regularly. Fresh foods are farmed at the Hotel to make sure its fresh and meets the standards. To guard against poor farming practices that can use contaminated water to irrigate the crops thus suppling contaminated crops.

**Question 11) You have to plan of action for the promotion of WASH in your town. Briefly describe the activities that need to be included in your plan**

Answer:

In Chipinge area after the hit of cyclone Idai there is need to promote WASH and there are different activities that are necessary in a plan of action of this programme:

* TRAINING: It will be necessary to hold trainings for government, local NGO’s, community leaders and other civic leaders so that they can learn about WASH and what it comprises. This helps to get the information to the decision makers that can influence local policies and help the community be more sensitive to WASH parameters.
* SANITATION: Plan an intensive sanitation programme that includes communities in the area. It will be necessary to do a presentation the will explain the different latrines and how they are used. These need to be affordable to the poor people in the community and easy to construct. There is a greater need to include women into these programmes as they are often left out of these. It has been seen that women have a more active role the planning and implementation if WASH programs in the household and need to be advised.
* CAMPAIGN: Now mobilize the community in small groups that will have to include women and be able to teach they the different WASH principals. There is need to done in about three months teaching small target groups at a time so that they can understand and implement in their communities and households.
* SCHOOLS WASH: One of the effective ways to enter the community is through schools as the children come from different walks of life and they can easily retain information and behavior change. The will be need to provide water and sanitation facilities that the children can see and use as a best practice of the environment we want them to have even in their households. Teaching them how to properly use them with operations and maintenance done by teachers and students. The involvement of the PTA in the recurring expenditure for the maintenance and repairs of the facilities is important so that the facilities can be sustainable. Then the setup of a school environmental health club with educational activities in the school and in the community. This will finally and not enterically involve and engage the community in best practices of WASH thus being able to live a better and dignified life. (Trainees Participatory Hygiene and Sanitation Promotion Manual)