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WASH Assignment 2 in module two

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**ASSIGNMENT 2**

1. **Why is hand washing an essential aspect in WASH interventions?**

Proper hand washing is one of the most effective ways of preventing the spread of diarrheal diseases. Pathogens cannot be seen on hands, and water alone is not always sufficient to remove them. Soap and wood ash are both cleansing and disinfecting agents when used with water and can be used to kill pathogens on hands and utensils. The most important times that hands should be washed with soap and water are:

1. After defecation
2. After cleaning a child who has defecated
3. Before eating and handling food.

Promoting good personal hygiene often requires that community members are mobilized towards this goal and awareness is raised about how to achieve it. It is important that hygiene that hygiene education programmes do more than simply tell people that if they do not wash their hands they will be become sick because of the pathogens they cannot see. This rarely work, instead, education programmes should try different methods to maximize community participation in the programmes and to encourage people to promote good hygiene.

To encourage hand washing to become part of the daily routine, suitable facilities must be located near places such as latrines and kitchens, where they will be needed. If running water is available, the facilities should include a tap and a sink as well as soap. Hands may also be washed at a tap stand. If running water is not available, an oil can or bucket fitted with tap is a simple way of providing hand washing facilities; the larger the container, the less frequently it will need filling. Some containers are mounted on stands with a ledge for soap. A leaking container can also be used to scoop water from the water storage container and provide a stream of running water for hand washing. Another approach involves a suspended container that, when tipped, pours water onto the hands of the user. The system can easily be made from plastic cooking oil containers. Soap itself can be kept clean by suspending it above the ground on a string. (Module two, page3, 4&5)

1. **What are the main standards in WASH interventions in emergencies?**
2. **Water Supply**

Water is essential for life, health and human dignity. In extreme situations, there may not be sufficient water available to meet basic needs, and in these cases supplying a survival level of safe drinking water is of critical importance. In most cases, the main health problems are caused by poor hygiene due to insufficient water and by the consumption of contaminated water.

**Water supply standard 1: access and water quantity**

All people have safe and equitable access to a sufficient quantity of water for drinking, cooking and personal and domestic hygiene. Public water points are sufficiently close to households to enable use of the minimum water requirement.

**Quality and quantity**: in many emergency situations, water-related disease transmission is due as much too insufficient water for personal and domestic hygiene as to contaminated water supplies. Until minimum standards for both quantity and quality are met, the priority should be to provide equitable access to an adequate quantity of water even if it is of intermediate quality, rather than to provide an inadequate quantity of water that meets the minimum quality standard**.**

It should be taken into account that people living with HIV/AIDS need extra water for drinking and personal hygiene. Particular attention should be paid to ensuring that the water requirements of livestock and crops are met, especially in drought situations where lives and livelihoods are dependent on these

**Coverage:** in the initial phase of a response the first priority is to meet the urgent survival needs of all the affected population. People affected by an emergency have a significantly increased vulnerability to disease and therefore the indicators should be reached even if they are higher than the norms of the affected or host population. In such situations it is recommended that agencies plan programmes to raise the levels of water and sanitation facilities of the host population also, to avoid provoking animosity.

Maximum numbers of people per water source: the number of people per source depends on the yield and availability of water at each source. For example, taps often function only at certain times of day and hand pumps and wells may not give constant water if there is a low recharge rate. The rough guidelines (for when water is constantly available) are:

These guidelines assume that the water point is accessible for approximately eight hours a day only; if access is greater than this, people can collect more than the 15 liters per day minimum requirement. These targets must be used with caution, as reaching them does not necessarily guarantee a minimum quantity of water or equitable access.

**Queuing time**: excessive queuing times are indicators of insufficient water availability (either due to an inadequate number of water points or inadequate yields of water points). The potential negative results of excessive queuing times are: 1) reduced per capita water consumption; 2) increased consumption from unprotected surface sources; and 3) reduced time for water collectors to tend to other essential survival tasks.

Access and equity: even if a sufficient quantity of water is available to meet minimum needs, additional measures may be needed to ensure that access is equitable for all groups. Water points should be located in areas that are accessible to all regardless of e.g. sex or ethnicity.

**b. The need for hygiene promotion in emergencies**

Following disasters, hygiene promotion may be particularly important because:

People will expect information about the disaster itself and its aftermath. They will need to know, for example, how they can be reunite with friends and family and where it is safe to stay. In some cases, such as chemical and radiation emergencies, there may be a good deal of suspicion, misinformation and rumor, and it is then essential that people have access to authoritative information.

There may be many unfamiliar arrangements for water and food supply, excreta disposal, especially when people are forced to evacuate their homes. Rapidly available information about the new arrangements and the importance of complying with them (e.g. the importance of using designated defecation fields) is essential.

Environmental health staff needs to understand rapidly the health risk faced by the affected population and the services required to reduce those risks. They need to know what can be provided by the affected population, how much external assistance to meet the needs and wishes of the affected people.

Disaster affected people may face greatly increased risks to their health, and will need to develop adequate responses. For example, under normal circumstances, defecation in fields around houses may be quite customary and safe, but in a crowded camp the same behavior poses a serious hazard. Water sources may become contaminated as a result of overcrowding, which may also lead to increased transmission and incidence of communicable diseases.

**Setting up a hygiene promotion Programme in an emergency.**

A possible plan of action might include the following activities:

Rapidly establish a team to deal with hygiene promotion and to provide information on environmental health.

Rapidly assess the health risks to be addressed using information, education and mobilization on; Key health problems, in order of priority and magnitude. Physical resources needed and those available (the types of shelter, food, water and sanitation).Human resources available for hygiene promotion activities (health workers, teachers, religious leaders, non-governmental organization with available staff, writers and artist)

Community characteristics (whether and to what extent there is a sense of community, a pattern of leadership, or local organization, and whether there are cultural traditions regarding health).

Means of communication and hygiene education materials available (radio transmitters and receivers, visual material, megaphones, newspapers, printing and copying equipment, and traditional communications channels, such as singing and storytelling).

Form close liaison with the community. This may be achieved by working through existing community organizations such as women’s groups and trade union or by establishing community health committees.

Choose the subjects to be covered and type of preventive action to be taken (e.g. promoting hand washing, ensuring water safety), with a focus on priority issues, rather than ranges topics. Action can have the greatest impact on reducing morbidity and mortality should be emphasized. Behavior changes that are promoted should be chosen on the basis of the assessment of health risks, environmental health facilities, and services available in each situation.

Identify and select trainers, health motivators and leaders from the affected population and from non-governmental organization, including children, women and others who can provide peer-group education. It is particularly important to involve women: in many societies women play major role in water collection and domestic and personal hygiene and they may also be particularly affected by the change in environmental health conditions. Develop clear health messages and choose the educational approach and methods to be used. This can be based on prepared messages and communication systems, but must be done in collaboration with selected trainers and representatives to ensure that the cultural background, traditional practices and perceptions of the target population are taken into account.

Develop, field-test and use new educational materials, or review existing materials (e.g. posters, leaflets, radioscopies, health talks) and adapt them as necessary).

Review activities and their immediate impact, and revise and adapt approaches to reflect changes in conditions and health status, if necessary. This may involve interviews, observation and questionnaire surveys to evaluate changes in knowledge, practice and environmental health conditions.

To help meet the needs of particularly vulnerable people among new arrival at emergency settlements, special measures may be needed to raise their awareness about health risks, hygiene practices, arrangements for water supply and sanitation, and about the support for families and community groups. (Module 2, Page 1)

Hygiene promotion activities should be coordinated to ensure that messages address priority issues, are consistent and complementary, and that hygiene education is integrated with measures to improve services and facilities.

**Participatory approach to hygiene promotion**

Hygiene promotion necessarily involves close liaison with the affected population, even in an emergency. To establish successful contacts with the community, it is necessary to:

Avoid making assumption about what people already know or do not know about health, hygiene and sanitation. Even the most obvious request or arrangement should be discussed with the community health committee or equivalent representative, who may themselves need to take soundings from the population.

Establish rapid procedures for obtaining reactions, ideas and information from communities. Appropriate activities include observing current practices, in depth interviews with key informants (such as local leaders, teachers, and midwives), survey interviews, discussion with focus groups, and various other forms of participatory appraisal techniques. Approach people with respect and empathy.

Build on indigenous knowledge and practices (while explaining how to adapt to emergency conditions in which such practices may become difficult or dangerous). This approach may give rise to useful innovations and improvisations by the community.

**Environmental health messages in emergencies.**

Following disasters, environmental health concerned with areas that include water supply and sanitation, waste disposal, vector control, personal hygiene, shelter and food safety. These, in turn, may be subdivided and specific health messages identified. It is most important that only a small number of very important messages are chosen for communication, based on assessment of health risks, to avoid confusing the target audience, and wasting efforts on behavior changes that have little impact on health

1. **Waste Management is becoming one problem in the emergencies. Why?**

Waste management is becoming one problem because improperly stored refuse can cause health, safety and economic problems**.** All living organisms create waste, but humans create far more waste than other species. To prevent damaging the Earth’s ecosystems and maintain a high quality of life for the planet’s inhabitants, humans must manage and store their waste efficiently and safely.

Human beings have been practicing primitive waste management techniques for thousands of years. Early humans simply dug a hole and buried their refuse and trash. This was an effective technique for these early people because their population was relatively small, and they did not produce as much garbage as modern humans do. Burying the trash helps to prevent bugs and rodents from becoming a nuisance and spreading diseases.

In the modern world, humans cannot simply bury their trash. While primitive humans produced very little waste, and that which was produced would biodegrade quickly, modern humans produce large amounts of waste, much of which is not biodegradable. Additionally, many types of garbage may be damaging to the soil, ground water and surrounding habitat. To address this problem, modern waste management professionals place garbage in lined holes and use bacteria to help facilitate rapid decomposition of the garbage. (Website, reference/science-waste-management-important)

**Solid Waste Management**

If organic solid waste is not disposed of, major risks are incurred of fly and rat breeding and surface water pollution. Uncollected and accumulating solid waste and the debris left after a natural disaster or conflict may also create a depressing and ugly environment, discouraging efforts to improve other aspects of environmental health. Solid waste often blocks drainage channels and leads to environmental health problems associated with stagnant and polluted surface water.

Solid waste management standard 1: collection and disposal People have an environment that is acceptably uncontaminated by solid waste, including medical waste, and have the means to dispose of their domestic waste conveniently and effectively. (Module Two, page 5(57&58)

1. **Discuss how environmental health and sanitation affect the nutritional status of the** **vulnerable groups**

A healthy and well balanced diet is essential for good health. When there is not enough food, or if the diet does not contain the right balance of food stuffs, people become more prone to illness and may become undernourished or malnourished. Children, in particular, are vulnerable to poor nutrition. Undernourishment and malnourishment can lower their resistance and make them more likely to suffer from infectious diseases. Often, children will eat only small amounts of food if it is spicy, even if it is nutritious, and it so important to make children’s food less spicy than adult food. Also, because their stomachs are small, children can eat only small portions and need to be fed more frequently than healthy adults. It is also important that children are fed not just foods high in starch or carbohydrate. Although tis foods can quickly make a child feel full, he or she can become malnourished if other key foodstuffs are not eaten. A well balance diet usually has a mixture of food with proteins (for example beans, peas, meat, fish or eggs), carbohydrates (such as vegetables, fish, fruits or milk), and some fats or oils (such as cooking oil). Sometimes not all these foods are available and it is important that community members ask health workers how to make best use of the available foods for a balance diet.

In many situations, nutrition can be improved by changing agricultural or gardening practices. Often, even small plots of land can be provide nutritious food, provided that the right crops are grown. Health workers or agriculture extension workers can be asked for advice about which crops to grow to provide community members with well balance diet. This is an enormous subject and is covered in more detail in materials developed by other programmes and organizations. However, it is important that communities request advice and support for improving nutrition. (Module two, page 1)

**5. Assuming you have been appointed to head an organization dealing with health development in your area, describe the critical factors that you will consider in planning for health service in that area.**

**Water Supply**

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Water supply standard 1: access and water quantity

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**Hygiene promotion campaign**

The aim of any water and sanitation programme is to promote good personal and environmental hygiene in order to protect health. Hygiene promotion is defined here as the mix between the population‘s knowledge, practice and resources and agency knowledge and resources, which together enable risky hygiene behaviors to be avoided. The three key factors are

1) A mutual sharing of information and knowledge,

2) The mobilization of communities and

3) The provision of essential materials and facilities.

Effective hygiene promotion relies on an exchange of information between the agency and the affected community in order to identify key hygiene problems and to design implement and monitor programme to promote hygiene practices that will ensure the optimal use of facilities and the greatest impact on public health. Community mobilization is especially pertinent during disasters as the emphasis must be on encouraging people to take action to protect their health and make good use of facilities and services provided, rather than on the dissemination of messages. It must be stressed that hygiene promotion should never be a substitute for good sanitation and water supplies, which are fundamental to good hygiene.

Hygiene promotion is integral to all the standards within this chapter. It is presented here as one overarching standard with related indicators. Further specific indicators are given within each standard for water supply, excreta disposal, vector control, solid waste management and drainage. (Module two, page 1(19))