DIPLOMA IN WASH

ASSIGNMENT 2

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

'Number of infectious diseases can be spread from one person to another by contaminated hands. These diseases include gastrointestinal infections, such as Salmonella, and respiratory infections, such as influenza. Washing your hands properly can help prevent the spread of the germs (like bacteria and viruses) that cause these diseases. Some forms of gastrointestinal and respiratory infections can cause serious complications, especially for young children, the elderly, or those with a weakened immune system. Better Health Channel, Handwashing-why it's important, (2015, November)'. Retrieved from https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/handwashing-why-its-important

Significant part of WASH interventions is of preventive nature in order to reduce public health expenditures. Handwashing is critical preemptive measure to safeguard the vulnerable population from diseases. No matter if the WASH infrastructure is in place but if the public is not using it properly and not mobilized to wash their hands on critical timings, there will be limited impact of the other WASH interventions including hard core side.

Worldwide, infections related to health care are drawing growing considerations across the board. This is not only because of the magnitude of the problem in terms of the associated morbidity, mortality and cost of treatment, but also due to the growing recognition that most of these are preventable. The medical community is witnessing in tandem unprecedented advancements in the understanding of pathophysiology of infectious diseases and the global spread of multi-drug resistant infections in health care set-ups. These factors, compounded by the scantiness of availability of new antimicrobials have necessitated a re-look into the role of basic practices of infection prevention in modern day health care. There is now undisputed evidence that strict adherence to hand hygiene reduces the risk of cross-transmission of infections

Purva Mathur (2011, Nov). Hand hygiene: Back to the basics of infection control. Indian Journal for Medical Research. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249958/

2. What are the main standards in WASH interventions in emergencies?

WASH minimum standards are the rudimentary principles and rights personified in the Humanitarian Charter and further elaborated through SPHERE standards.

Water and sanitation are indispensable for persistence in the initial stages of any disaster.

Disaster situations expose the people to diseases and death due to inadequate water and sanitation arrangements and poor hygiene.

Minimum WASH Standards in Emergencies as per SPHERE guidelines

1. WASH program design and implementation

WASH needs of the affected population are met and users are involved in the design, management and maintenance of the facilities where appropriate

2. Hygiene promotion standard: Hygiene promotion implementation

Affected men, women and children of all ages are aware of key public health risks and are mobilized to adopt measures to prevent the deterioration in hygienic conditions and to use and maintain the facilities provided.

3. 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.

4. Water supply standard 2: Water quality

Water is palatable and of sufficient quality to be drunk and used for cooking and personal and domestic hygiene without causing risk to health.

5. Water supply standard 3: Water facilities

People have adequate facilities to collect, store and use sufficient quantities of water for drinking, cooking and personal hygiene, and to ensure that drinking water remains safe until it is consumed.

6. Excreta disposal standard 1: Environment free from human faeces

The living environment in general and specifically the habitat, food production areas, public centres and surroundings of drinking water sources are free from human faecal contamination.

7. Excreta disposal standard 2: Appropriate and adequate toilet facilities

People have adequate, appropriate and acceptable toilet facilities, sufficiently close to their dwellings, to allow rapid, safe and secure access at all times, day and night.

8. Vector control standard 1: Individual and family protection

All disaster-affected people have the knowledge and the means to protect themselves from disease and nuisance vectors that are likely to cause a significant risk to health or well-being

9. Vector control standard 2: Physical, environmental and chemical protection measures

The environment where the disaster-affected people are placed does not expose them to disease-causing and nuisance vectors, and those vectors are kept to a reduced level where possible.

10. Vector control standard 3: Chemical control safety

Chemical vector control measures are carried out in a manner that ensures that staff, the disaster-affected population and the local environment are adequately protected and that avoids creating chemical resistance to the substances used

11. Solid waste management standard 1: Collection and disposal

The affected population has an environment not littered by solid waste, including medical waste, and has the means to dispose of their domestic waste conveniently and effectively.

12. Drainage standard 1: Drainage work

People have an environment in which health risks and other risks posed by water erosion and standing water, including storm water, floodwater, domestic wastewater and wastewater from medical facilities, are minimized.

SPHERE handbook (2011), Chapter 6, Minimum standards in Water Supply, Sanitation and Hygiene Promotion. Retrieved from http://www.spherehandbook.org/content/pages/en/6.minimum-standards-in-water-supply-sanitation-and-hygiene-promotion.pdf

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

Solid waste management is a critical issue during any disaster and is significant public health risk if left unaddressed. 'The safe disposal of solid waste is critical for public health, and is

especially true during an emergency. Not only will existing collection and disposal systems be disrupted, but there will be extra waste caused by the emergency itself. Initially, for camps of displaced people or refugees and similar new sites, there will be no arrangements in place at all. If solid waste is not dealt with quickly, serious health risks will develop which will further demoralize the community already traumatized by the emergency. Rouse Jonathan & Reed Bob (2011), Solid waste management in emergencies, Technical Notes on Drinking Water, Sanitation and Hygiene Emergencies, World Health Organization. Retrieved from in https://www.unicef.org/cholera/Annexes/Supporting Resources/Annex 9/WHOtn7 waste mangt en.pdf

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

UNICEF has defined undernutrition as 'the outcome of insufficient food intake and repeated infectious diseases'. It has also categorized undernutrition as one of the world's most serious problems, with long-lasting harmful impacts on health and devastating consequences for social and economic development. It has specified three main underlying causes of undernutrition, namely unsuitable or insufficient food intake, poor care practices, and infectious diseases, are directly or indirectly related to inadequate access to water, sanitation facilities, and hygiene practices (WASH). There is a growing base of evidence showing the links between poor WASH conditions, especially exposure to poor sanitation, and stunting (low height for age ratio).

Jovana Dodos, Blanche Mattern, Jean Lapegue, Mathias Altmann, and Myriam Ait Aissa (October 2017), Relationship between water, sanitation, hygiene, and nutrition: what do Link NCA nutrition causal analyses say? PRACTICAL ACTION publishing. Retrieved from https://www.developmentbookshelf.com/doi/full/10.3362/1756-3488.17-00005
Lack of access to WASH can affect a child's nutritional status in many ways. Existing evidence supports at least three direct pathways: via diarrhoeal diseases, intestinal parasite infections and environmental enteropathy. WASH may also impact nutritional status indirectly by necessitating walking long distances in search of water and sanitation facilities and diverting a mother's time away from child care (Fenn et al., 2012). WHO, UNICEF, USAID (2015, Nov), IMPROVING NUTRITION OUTCOMES WITH BETTER WATER, SANITATION AND HYGIENE: PRACTICAL SOLUTIONS FOR POLICIES AND PROGRAMMES. Retrieved from

https://www.unicef.org/media/files/IntegratingWASHandNut WHO UNICEF USAID Nov20
15.pdf

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.

I will start with the detailed needs and situation assessment while taking following factors under consideration;

- 1. General trends in illness and epidemiology
- 2. Vulnerabilities of population in the area
- 3. Nutrition status of the children and women
- 4. Food intake score
- 5. Poverty status
- 6. Hygiene practices (particularly handwashing)
- 7. Water and Sanitation services (and quality)
- 8. Health facilities
- 9. Breast feeding practices
- 10. MAUC tests
- 11. Qualified health professionals
- 12. Coordination between key departments and community
- 13. Trainings/capacity building of community and relevant health staff

References

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