# Hand washing an essential aspect in WASH intervention. Why ?

1. HAND WASHING .

The global burden diseases study found that from 2006-2016 the number of global death. Attributed to unsafe water sanitation and hygiene WASH descriesed by 25% while lost disability adjusted life years daily discresed by mothers 35%while among the top ten heading risk in 1990 rates of unsafe water and unsafe sanitation (in addition of child growth failure ) have declined the most over the period of 1990-2016

Interventions strategies showed that hand hygiene could reduce the incidence of diarrhea and respiratory conditions among school children with through hand hygiene intervention strategies being training funding and policy training and funding implementation more than policy .in indonasia and lao integrative intervention contributed increased attendences and improved educational outcome

1.1 IMPORTANCE OF HANDWASHING

1.1 .Diarrhea diseass and acute respiratory infections

This multi-country study accessed the prevalens ratio of child diarrhea between abasic of hand washing stations and does without. The prevencs ratio 0.95% suggested a protective efficiency of having hand washing stations with soap

Most important discommended times for hand washing to prevent acute diarrhea in children under the age of 5 years before preparing food and after defections .

Hand washing after conduct with domestic animal was associated with descresed risk of moderate to severe diarrhea in children in western Kenya.

A health education intervention on hand washing for mothers of children under 5years slowed 10.6 reductions of childhood diarrhea post interventions .

BACTERIAL INFECTTIOS

Hand washing hygiene can be important preventive measures against clostridium diiate infections and may be understood by educational reminder and opportunities for patients to wash hands regullary can improve patients hand hygiene through wash interventions .

Hand washing with soap and water treatment intervention, the cholera hospital –based intervention for 7 days shows significant reductions in symptomatic cholera infections during the intervention period and there was sustained high intake of observed hand washing with soap.

VIRAL INFECTIONS

Improved hygiene practices , especially hand washing with soapand safe disposal of faces and bodily fluids ,appear to reduce the incidence of new cases .

Another systematic review concludes that multi-level hand washing interventions for children in developing countries can reduces the incidence of diarrhea ,respiratory infections and in turn school absenteeism.

Hygiene is associated with reduced school absenteeism according to a systematic review of the literature hygiene interventions reduces school absenteeism related to gastrointestinal illness, in adequate evidences is available .

Having adequate unlocked toilets with hand washing stations for girls is crucial to help girls adolescent girls effectively manage their menstrual hygiene at school in state of staying at home .

## References

Darvesh N, Das jk , Vaivada T , Gaffery MF .Water ,sanitation ,and hygiene interventions for acute child hood diarrhea :systematic review to provide estimate live saved.

George cm, biswas s, jung D ,perin T, Morina s. mediating the effect of interventions on hand washing with soap .randomized controlled trial .health education behave .

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# QTN 2. THE MAIN STNDARDS IN WASH INTERVENTTIONS IN EMMERGENCY

1. SANITATIONS.

The goal of sanitation programs in emergency response is to break disease transmission by isolating feces from the environment ,either using out put driven approaches (e.g latrine constructions )or community driven approaches (e.g stop open defection).

Output driven –Latrine are designed and built by responders according to a pre-planned number of latrines

Output Driven sanitation .

Providing access to sanitations through output driven latrine constructions is common , with numerous different guidelines and options from NGOs, and academics (de lange et al. 2014) latrines constructions is often carried out with water and hygiene interventions described in other sections of the document.

* Acute Disaster Latrine –in dense urban areas or places were digging is not feasible ,portable toilets were successful at providing safe dignified sanitations immediately after the Haiti earthquake
* Eco sanitations –ecological sanitations includes many latrine designs but all focus on decompositions of waste rather than desluding.
* Rehabilitations of existing latrines –rehabilitating latrines was aviable options after an earth quake in iran and china .
* Vulnerability targeting –specific consideration for women and vulnerable populations (elderly, preganant and children ) were documented in south sudan and india .engaging with specific populations was not burdensome but led to more appropriate latrine designs
* Disease reductions –Latrine repair with other flood response measures led to drop in diarrhea cases immediately following the interventions

# . HYGIENE

In the following sections ,hygiene intervention are sub-categorized as hygiene promotion (including hygiene education and social mobilization) distribution of hygiene kits and environmental hygiene household disinfection and environmental cleanup.

### Hygiene promotions

Is the sharing of personal and environmental hygiene related information to educate emergency affected populations with the goal of reinforcing changing behavior. in an emergency context, hygiene promotion must provide accurate information ,adapt to changing conditions. Hygiene promotion is separated in two approaches

Hygiene education

Hygiene education is the delivery of hygiene massages by responders to emergency affected population to improve knowledge and encourage practices. (instructions on using hand washing tools product ;massages about hand washing with soap

Social mobilization

is a term to describe strategies for engaging communities and responders facilitating communities to address identified risks with local solutions .originating from stable development setting, social mobilizations is the foundation of community driven sanitation described above .

Hygiene kit distribution .

The primary goal of most hygiene kit distributions (non –food items was deliver hand washing tools and support hygiene activities with soap and personal hygiene items (eg toothbrush).

A major component of emergency WASH interventions ,hygiene kit distribution were mentioned in 21 evaluation described through this report that were not specifically hand washing tool interventions.

Kit contents- the most commonly included items were : hand washing tool products,soapa water storage contianers

Environmental hygiene

Environmental hygiene efforts aim to protect populations by reducing disease transmissionriskin the local environment . in emergency response ,environmental hygiene interventions include.

Jerrican –cleaning jerricans with chlorine solution.

Household disinfection –sanitizing a home or building that is potentially contaminated with chlorine solution

Environmental cleanup –Rubbish collection, drainage or landscape that aim to remove contaminated solid and liquid waste.

## WATER REHABILITATATION

The source rehabilitation intervention were separated in to cleaning wells saltwater flooding and well disinfection

Saltwater intrusion well cleaning

Pumping and cleaning well is a activity after a flood tsunami . pumping wells flooded with seawater is expected to reduce the impact of saltwater intrusion.

Well disinfection

Disinfection a contaminated well with chlorine is a common intervention in emergency response and is achieved through shock or port chlorination.

WATER :Source treatment.

Source treatment intervention were separated by scale. Large scale intervention included :bulk water treatment ,decentralized bulk water treatment and water trucking and municipal systems included chlorine dispenser and bucket chlorination.

Water : House hold water treatment and safe storage

Hand washing tools (also called point of use water treatment products ) are interventions used in home to improve microbiological quality of house hold drinking water.

# SOLIDE WAST MANAGEMENT

The challenges of solid waste management in emergencies

Poor solid waste management has multiple negative consequences on communities. It can adversely affect heath and the wider environment, as well as impact on wellbeing beyond the spread of disease. During an emergency the disposal of solid waste can become a critical issue as existing disposal and collection method are likely to cease. On new sites such as refugee camps, there will be no waste management system in place, requiring immediate plans for disposal to be made.

Collection and disposal .

The affected population has an environment littered with solid waste, including medical waste and has no means to dispose their domestic waste conveniently and effectively

* There is no clearly marked and appropriately fenced refuse pits ,bin s or specified area pits at public places, such as markets and fish processing and slaughtering area.
* There is no additional waste storage and collection facilities for host families reflecting the additional waste accumulation in disaster situations which has become a problem in waste management.
* Heaalth hazards for residents and waste workers. This may be through actual contact with waste; inhalation of smoke from waste burning or dust from waste; disease carried by animals and insect thas feed on the waste.
* Environmental pollutions. From burning of waste or from leachate.
* Blockage of open drains and sowers. creates serious secondary problems relating to public health and environmental pollution.
* Spreads of disease by vectors. Heaps of discarded waste provide a breeding ground for flies and rats. This vector can transmit disease and pathogenic micro organism from waste which has become a problem in emergency
* Financial : waste management often requires a large proportion of the municipal budget in typical low income country so it has led to poor management.
* Poverty. The presence and need to dispose of solid waste generates a key source of income for sweepers and waste pickers .
* Relationship with other services and infrastructure .poor solid waste disposal may pollute water source ,increase the load on hospital or health services and cause blockage in sewerage systems and stomwater drains.
* Living conditions. Poorly managed waste can create an ugly and unpleasant environment attracting flies which has led to spread of disease .

REFERENCE

Brown j.Mike ,m Seville E (2011)

Disaster wast management

Rouse j 2006

Solide waste management in emergency .

# THE CRITICAL FACTORS TO BE CONSIDERD IN PLANNING HEALTH SERVICE IN COMMUNITY

In planning health services is complete it requires rigorous evidence based on approach to improve services to meet the future health needs of the population.

Planning .can be defined as

Where one wants to go, how to get there and timetable for the journey, complete planning sets outs indicators for tracking progress and ways to measures of the trip was worth the investment.

1. Develop /analyse service option

This is the point at which the step to achieving the preferred service solutions are developed. All work in this component should be directly informed by the prioritized needs, identified service directions and criteria developed in the previous components.

Service options describe the most appropriate service arrangement and configurations proposed to sustainably address future health service needs.this may include systemredesign or changes to current models of care .service enabler requirement must also be considerd within this component .

* To provide clear identifications of the implication ,benedfits ,limitations and risks of each possible service option
* To provide dicision makers with evidence to make an informed dicision on the option to progress to implementation
* Implementations challenges and risks for the option
* Impact of proposed changes in the option on service enablers
* Need for approvals from government for the option
* Need for additional resources for option and where the resources could be sourced
* Ability of the option to provide a solution to the health service needs

1. Develop objectives and strategies

This is the point at which the steps to achieving the preferred service option are fully developed. The purpose of developing service objective and strategies is to provide the basis for operationalizing the desired outcomes for service.

1. Objectives.

Are statements of achievement or specific statements about what services and the service system need to work towards to realize the future state as identified in the service directions.

Objectivesshould narrow the focus of the service directions and describe the desired future service changes.

* A clear statement of achievement
* Alogical connection to at least one service direction

1. Strategies
   1. Are statements of actions or how service may work towards meetings the statement of achievement set out in the objectives? Strategies need to provide sufficient information for allstakeholders to successfully implement them.

* A clear statement of action –how a service will be provide in the future
* A logical connection to at least one objective and one service direction

Identify the health service directions

The purpose of this component is to form an agreed strategic approach to the future in order to address need. activities focus on developing future service directions from the prioritized health service needs. Identifying service directions will guide development of service options

Service directions.

Should describe clearly and succinctly the directions for the organization to take to address the issues /needs that the planning is seeking to address. The benefits of having clearly defined service directions is that it assists stakeholder to be clear about the intent for the future

* A vision for the future
* Clear picture of intent
* Realistic aspirations explicite and transparent goals
* An achievement horizon

Prioritize the health service needs.

The purpose of this component is to guide the development of future health service solutions. The delivery of health service occurs within a resource constrained system and so service needs and their solutions require prioritization service needs and issues relies on the analysis of research and information collected during previous components to determine the nature and extent of the specific needs

Identify the health service needs.

This component of the health service planning process builds on the finding from the previous two components. Health service need refers to the gap between what service are currently provided to a given population, what will be required win the future to improve the health status of community (and avoid decline).health service needs are identified through the analysis of the information collected from earlier stages of the planning process.

Understand the population and service environment.

The purpose of this component is to understand the population, their health status and the service they access. It is important to understand the population and the adequacy of existing services in supporting health needs.

Understanding acomprehensive data gathering and analysis process ensures that all relevant information informs the development of strategies to address the issues for which the planning activity is being undertaken.

Scope the planning activity

The purpose of this component is to identify the scale of and the parameters for the planning activity. This assists in the identification of service needs, their prioritization and the development of service directions, service options, objective and strategies.

REFERENCE

* + - 1. Ontario ministry of health and long term care. The health planner toolkit. Ontario ministry of health 2006
      2. Rand europ. Framework for assessing ,improving and enhancing health service planning santa monica. Rand corperation 2010
      3. World health organistion regional office for Africa. planning and implementation of district health services. Brazzavile.

# ENVIROMENTAL HEALTH AND SANITATIONS AFFECT THE NUTRITIONAL STATUS OF THE VULNERABLE GROUP

1. Rapid environmental changes are profoundly altering the relationships between humans and the ecosystems in which they live. These changes include

* Overpopulation.
* Loss of biological resources
* Ecosystem destruction associated with industrial and commercial development
* Climatic change
* Urbanization
* Erosion of food crop diversity from years of genetic engineering focused on a few crops
* Modern agriculture employing pesticide and other inputs

The above has affected patterns of human health,disease and nutritional status of vulnerable group