**Name: Kuyu Michael Pidi**

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**Assignment Model: Two (2)**

ASSIGNMENTS

1. A number of infectious diseases can spread from one person to another by contaminated hands. These diseases include gastrointestinal infections, such as salmonella, and respiratory infection, such as influenza. Washing your hands properly can help prevent the spread of the germs or pathogens (bacteria and viruses) that cause these diseases.

These diseases cause serious complications’, especially for young children, the elderly or those with a weakened immune system. For example people living with HID AIDs. ([www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au))

Critical moments to wash hands

* After using the toilet or changing nappies
* Before, during and after preparing food
* Between handling raw and cooked or ready to eat food
* Before eating
* After using a tissue or handkerchief
* Before and after attending to sick children or other family members
* After handling rubbish or working in the garden
* After handling animals

For effectiveness, use running water instead of a basin of standing water that could become contaminated through use and with soap or ash in the absence of a soap.

**The procedure to wash hands**

* Wet your hands with clean, running water, turn off the tap.
* Apply soap and lather well for 20 seconds (or longer if the dirt is ingrained)
* Rub hands together rapidly across all surfaces of your hands and wrists.
* Including under fingers, back of your hands.
* Rinse well under running water and make sure all traces of soap are removed.
* Dry your hands using a clean towel or air dry them.

1. When a disaster strikes, one of the main aims of humanitarian agencies is to save live by providing most of the basic lifesaving needs like drinking water. Standards are documented principles which are followed by implementing agencies so that measured attainable services are provided to disaster affected population to save their live. These principles also address issues of privacy, dignity, gender base violence in the package.

**The standards: ( sphere standard new revised version)**

**Water supply standard 1**

**Access and water quality**: People have equitable and affordable access to a sufficient quantity of safe water to meet their drinking and domestic needs.

**Key indicators**

Average volume of water used for drinking and domestic hygiene per household.

* Minimum of 15 liters per person per day
* Determine quantity based on context and phase of response

Maximum number of people using water- based facility

* 250 people per tap (based on a flow rate of 7.5 liters/ minute)
* 500 people per hand pump (based on a flow rate of 17 liters/ minute)
* 400 people per open hand well (based on a flow rate of 12.5 liters/ minute)
* 100 people per laundry facility
* 50 people per bathing facility

Percentage of household income used to buy water for drinking and domestic hygiene

* Target 5 per cent or less

Percentage of targeted households who know where and when they will next get their water

Distance from and household to the nearest water point

* <500 meters

Queuing time at water sources

* <30 minutes

Percentage of communal water distribution points free of standing water

Percentage of water systems/facilities that have functional and accountable management system in place.

**Water supply standard 2**

Water quality: water is available and of sufficient quality for drinking and cooking and for personal and domestic hygiene, without causing a risk to health.

**Key indicators**

Percentage of affected people who collect drinking water from protected water sources.

Percentage of households observed to store water safely in a clean and covered containers at all the times.

Percentage of water quality tests meeting minimum water quality standards

* <10 CFU/100ml at point of delivery (unchlorinated water)
* ≥0.2 – 0.5mg/L FRC at point of delivery (chlorinated water)

**Hygiene Promotion**

**Hygiene promotion standard 1**

**Hygiene promotion**: People are aware of key public health risks related to water, sanitation and hygiene and can adopt individual, house and community measures to reduce them.

**Key indicators**

Percentage of affected households who correctly describe three measures to prevent WASH-related diseases

Percentage of target population who correctly cite two critical times for handwashing

Percentage of target population observed to use handwashing stations on leaving communal toilets.

Percentage of affected households where soap and water are available for handwashing

Percentage of affected population who collect water from improved water sources

Percentage of households that store drinking water in clean and covered containers

Percentage of carers who report that they dispose of children’s excreta safely

Percentage of households using incontinence products (pads, urinal bottles, bed pans, commode chairs) who report that they dispose of excreta from adult incontinence safely

Percentage of affected households who dispose of solid waste appropriately

Percentage of people who have provided feedback and say that their feedback was used to adapt and improve WASH facilities and services.

Local environment is free of human and animal faeces

**Hygiene promotion standard 2**

Identification, access to and use of hygiene items: Appropriate items to support hygiene, health, dignity and well-being are available and used by the affected people.

**Key indicators**

All affected households have access to the minimum quantity of essential hygiene items

* Two water containers per household (10-20 litres; one for collection, one for storage)
* 250 grams of soap for bathing per person per month
* 200 grams of soap for laundry per person per month
* Soap and water at a handwashing station (one station per shared toilet or one per household)
* Potty, scoop or nappies to dispose of children’s faeces

Percentage of affected people who report/are observed using hygiene items regularly after distribution

Percentage of household income used to purchase hygiene items for identified priority needs.

**Hygiene promotion standard 3**

Menstrual hygiene management and incontinence: Women and girls of menstruating age, and males and females with incontinence, have access to hygiene products and WASH facilities that support their dignity and well-being

**Key indicators**

Percentage of women and girls of menstruating age provided with access to appropriate materials for menstrual hygiene management.

Percentage of recipients who are satisfied with menstrual hygiene management materials and facilities

Percentage of people with incontinence that use appropriate incontinence materials and facilities

Percentage of recipients that are satisfied with incontinence management materials and facilities.

**Excreta management**

**Excreta management standard 1**

Environment free from human excreta: all excreta is safely contained on-site to avoid contaminations of the natural, living, learning, working and communal environments.

**Key indicators**

There are no faeces present in the environment in which people live, learn and work

All excreta containment facilities are sited appropriately and are an adequate distance from any surface or groundwater source.

**Excreta management standard 2**

Access to and use of toilets: people have adequate, appropriate and acceptable toilets to allow rapid, safe and secure access at all the times

**Key indicators**

Ratio of shared toilets

* Minimum 1 per 20 people

Distance between dwelling and shared toilet

* Maximum 50 meters

Percentage of toilets that have internal locks and adequate lighting

Percentage of toilets reported as safe by women and girls

Percentage of women and girls satisfied with the menstrual hygiene management options at toilets they regularly use.

**Excreta management standard 3**

Management and maintenance of excreta collection, transport, disposal and treatment: excreta management facilities, infrastructure and systems are safely managed and maintained to ensure service provision and minimum impact on the surrounding environment.

**Key indicators**

All human excreta is disposed of in a manner safe to public health and the environment.

**Vector control**

**Vector control standard 1**

Vector control at settlement level: people live in an environment where vector breeding and feeding sites are targeted to reduce the risks of vector-related problems

**Key indicators**

Percentage of identified breeding sites where the vector’s life cycle is disrupted

**Vector control standard 2**

Household and personal actions to control vectors: all affected people have the knowledge and means to protect themselves and their families from vectors that can cause a significant risk to health or well-being

**Key indicators**

Percentage of affected people who can correctly describe modes of transmission and effective vector control measures at the household level

Percentage of people who have taken appropriate action to protect themselves from relevant vector-borne diseases

Percentage of households with adequate protection for stored food.

**Solid waste management**

**Solid waste management standard 1**

Environment free from solid waste: solid waste is safely contained to avoid pollution of the nature, living, learning, working and communal environments

**Key indicators**

There is no solid waste accumulating around designated neighborhood or communal public collection points

**Solid waste standard 2**

Household and personal actions to safely manage solid waste: people can safely collect and potentially treat waste in their households

**Key indicators**

Percentage of households with access to a designated neighborhood or communal solid waste collection point at an acceptable distance from their dwelling

Percentage of household reporting appropriate and adequate waste storage at household level

**Solid waste management standard 3**

Solid waste management systems at communal level: Designated public collection points do not overflow with waste, and final treatment or disposal of waste is safe and secure

**Key indicators**

Percentage of schools and learning centers with appropriate and adequate waste storage

Percentage of public markets with appropriate and adequate waste storage

Percentage of solid waste pits or incinerators at schools, learning centers, public markets and other public institutions that are managed safely.

**WASH in disease outbreaks and healthcare settings**

WASH in healthcare settings: All healthcare settings maintain minimum WASH infection prevention and control standards, including in disease outbreaks

**Key indicators**

All healthcare workers clean their hands, using soap or alcohol rub, before and after every patient contact.

All patients and carers wash their hands before handling or eating food and after going to the toilet.

All hand washing stations have soap or alcohol rub (or 0.05 per cent chlorine solution in outbreaks)

Number of hand washing stations

* Minimum: one station for every ten inpatients

Drinking water quality at point of delivery

* Minimum : 0.5-1mg/l FRC

Quantity of safe water available

* Minimum: 5 litres per outpatient per day
* Minimum: 60 litres per patient per day in a cholera treatment center
* Minimum: 300-400 litres per patient per day in a viral hemorrhagic fever treatment center

Number of accessible toilets

* Minimum: four in outpatient facilities ( separated for men, women, children and healthcare workers)
* Minimum: 1 per 20 inpatients ( separated for men, women, children and healthcare workers)

**Shelter and settlement/Non-food items standards** are also main in an outbreak, should be used as a guide in planning and interventions for an emergency following and outbreak (sphere standard old version)

1. Waste management is the process of handling and disposing of organic and inorganic solid waste in emergency settings. This involves

* Planning solid waste management systems
* Handling, separating, sorting and processing waste at source
* Transferring to a collection point
* Transporting and final disposal, reuse, re-purposing or recycling.

When solid waste is not managed properly or inadequately, it poses the affected population to a public health risk. Waste create favorable conditions and habitat for insects, rodents and other disease vectors. Untreated waste can pollute surface water and ground water causing diarrhea diseases; this increase the cost of an intervention in terms of water treatment.

Children in emergency settings may play in a poorly managed solid waste, risking injury or sickness. Solid waste if not catered for, can block drainage systems, generating water as a source for malaria breeding.

There is also a possibility that tensions are likely to develop between the host community and the affected population leading to threats and fights among them if waste are poorly managed. Snake bites are noted in emergencies as waste pit acts a harbor for the snakes.

Tensions with host community: in a situation where the displaced or the refugees are mixed up with the host community, there usually develops a problem when the environmental situations worsen compared to when the host community was alone. They say these waste has been a result of the presence of these new people whereby they begin to finger point to the displaced people.

Hepatitis B: when waste is not managed properly the increase with hepatitis increase which will result to a fatal incidences. Overcrowding can increase the chances of spread of this disease.

Accidents: waste pits will be major sources of accident in an emergency. Snakes breeds in this pits when not properly decommissioned.

Equipment: In a real sense the affected community is supposed to participate in a waste management system, this call for proper skills in the mobilization of the community to take part fully for effectiveness. A community base organization may fail to provide personal protective equipment hence leading to infections of the people involved in then waste management.

Attitude and behaviors: Change of a behavior in a long term program. Individuals of the community have different attitudes in waste perception and concepts. Other members will not accept a communal environmental cleanness retarding the active ones causing waste accumulation resulting to fierce smell of the waste over long run as a nuisance to the emergency population.

Effectiveness: At certain time of the waste management, its effectiveness will be lost unless revoke and call for financial motivations when it was started as a voluntary program.

Sustainability: In a community, people have mixed feelings therefore maintaining sustainability to continue routinely system needs tirelessly supervision and awareness of the community increasing the cost in waste management.

1. Environmental health is a branch of public health concern with controlling environmental conditions to protect and maintain people’s health and sense of well-being. Environmental health management includes water quality and supply, waste disposal and sewage treatment, public food safety, solid waste management and drainage

Unhealthy environment (including poor WASH) and inadequate services leads into infectious diseases infections, for example diarrhea, helminthes and a condition such as environmental enteropathy causing under nutrition. Infections or diarrhea reduce appetite and intestinal absorption. The repeated infectious diseases are directly or indirectly related to poor sanitation and environment encompassing inadequate access to clean water, lack of sanitation facilities and poor hygiene practices.

Damaged intestine or intestinal infections by severe whipworm and round worm infections are associated with growth resulting to poor absorption of nutrients thus affecting nutrition status of the vulnerable people and highly noted in children less than five years of age.

1. Health service planning can be defined as where one wants to go, how to get there and the time frame. Milestones and indicators are set out for tracking progress and as ways to measure if the planning was worth the investment. In health planning, the concept of making decisions that reflect and address future needs is accounted for, it involves specifying future goals and then setting courses of action to achieve them.

In general, health planning aims to improve the health status of a given population while safeguarding equity and fairness of access as well as responsiveness of the health system to the perceived needs of the community (guide to health service planning version three 2015)

**Factors to be considered in health service planning**

**Changing populations and populations needs**: Assessing the population characteristics (for example growth, age groupings, cultural diversity and socioeconomic status) and anticipated changes in these will guide the most appropriate service response. Similarly, by identifying population risk factors that contribute to various health issues, services can be designed to reduce these risks for targeted population groups.

**Projecting future service need**: Understanding future demand for services-influenced by changes in populations, disease patterns and treatment technologies is an important element of health service planning. By assessing how demand may grow or decline, decisions about future service developments are better informed.

**Emerging clinical evidence and technologies**: Understanding and assessing the potential impacts of advances in clinical evidence and technologies helps inform the way future services need to be organizes and delivered. This includes being aware of changes in the knowledge and understanding of diseases and disease trends, treatment techniques and service delivery models.

**Prioritizing allocation of resources**: The resources available to invest in health services are limited. Health service planning can identify health service resources required to meet health needs. The prioritization of health needs and service issues identified through rigorous healthy service planning process will support resources being directed towards the areas of greatest need.

**Improving service efficiency**: Health service planning explores alternative service options that can optimize service delivery arrangements to manage increasing demand. Advances in treatment options and in delivery of services in a range of settings (for example hospital in the home) allow for substantial flexibility in health service delivery in the future.

**Providing safe and sustainable services**: Health services must be capable of sustaining the provision of high quality care that continues to meet (or exceed) required minimum standards. Health service planning considers issues of service viability when planning future services