



# OVERVIEW: SITUATION OF WASH IN HEALTH FACILITIES IN TANZANIA

Malebo et al

**Affiliation:** National Institute for Medical Research, P.O. Box 9653, Dar es Salaam, Tanzania.

E-mail: [Malebo@hotmail.com](mailto:Malebo@hotmail.com)

# Outline

- Background
- Known causes of neonatal deaths
- Diarrhea in children
- Previous findings
- Why WASH in Health facilities
- Key findings

# Background

- Improvements in water, sanitation and hygiene (WASH) practices and infrastructure is one of the most important and cost-effective methods for decreasing the burden of infectious diseases worldwide
- Insufficient hygiene and sanitation practices and infrastructure are associated with a multitude of diseases, including:
  - ✓ acute respiratory tract infections
  - ✓ skin diseases such as scabies and ringworm
  - ✓ intestinal parasites and diarrheal illness
- **HOWEVER, THIS BURDEN OF DISEASE IS NOT JUST IN CHILDREN; "EVERY YEAR ACROSS THE GLOBE AROUND TWO MILLION PEOPLE DIE OF DIARRHEAL ILLNESS"**

# Known causes of neonatal deaths

- The three major causes of neonatal deaths worldwide are:
  - ✓ infections (36%, which includes sepsis, pneumonia, tetanus and diarrhoea)
  - ✓ pre-term (28%),
  - ✓ birth asphyxia (23%).

# Causative organisms of neonatal infections

- **Primary sepsis**

- Group B streptococcus
- Gram-negative enterics (esp. *E. coli*)
- *Listeria monocytogenes*,
- *Staphylococcus*,
- other streptococci (enterococci)

- **Nosocomial sepsis**

- *Staphylococcus epidermidis*
- *Pseudomonas*,
- *Klebsiella*,
- *Serratia*,
- *Proteus*, and
- yeast are most common

# Diarrhea in children

- Each year diarrhea kills around 760,000 children under five.
- Diarrhea disease is the second leading cause of death in children under five years old.
- **DIARRHEA DISEASE IS BOTH PREVENTABLE AND TREATABLE THROUGH SAFE DRINKING-WATER AND ADEQUATE SANITATION AND HYGIENE (WASH).**

# Why WASH in health facilities?

- **Safe and sufficient drinking-water, along with adequate sanitation and hygiene have implications across all SDGs**
  - ✓ from eradicating poverty and hunger,
  - ✓ reducing child mortality,
  - ✓ improving maternal health,
  - ✓ combating infectious diseases,
  - ✓ to ensuring environmental sustainability.

**WHO, 2015**

# Why WASH in health facilities?

"Sanitation is a cornerstone of public health," said WHO Director-General Dr Margaret Chan.

*"Improved sanitation contributes enormously to human health and well-being, especially for girls and women.*

*We know that simple, achievable interventions can reduce the risk of contracting diarrhea disease by a third."*



# Multiple benefits of adequate WASH in health care facilities



Adopted from Global WASH Action Plan

# Challenges

- **Using contaminated drinking water to provide medications, including *anti-tuberculosis drugs, de-worming medications, first doses of antibiotics for common infections, zinc and Vitamin A, and oral rehydration solutions* can increase the risk of enteric infections in all patients and the risk of opportunistic infections in HIV-infected persons.**

# Handwashing in Health Facilities

- Estimated over 50% of health care facilities (HCFs) in developing countries lack access to hand washing facilities (WHO/UNICEF, 2015).
- The risk of healthcare-associated infections (HAIs) in developing countries is approximately 2–20 times greater than in higher-income countries.
- Poor hand hygiene in healthcare facilities is a long-recognized risk factor for HAIs.
- Lack of safe water for handwashing and personal hygiene **can increase the risk of skin and enteric infections in all patients and the risk of opportunistic infections in HIV-infected persons.**

# How to address WASH in health facilities?

Three key factors have to be addressed:

- Predisposing factors - knowledge, attitudes and belief of key actors
- Enabling factors - availability of resources
- Reinforcing factors - ability to sustain appropriate sanitation and hygiene behavior in health facilities

# Main objective

- To support the Ministry of Health and Social Welfare's wider plans to improve quality of care in health facilities through an assessment of availability, quality and coverage of water supply, sanitation infrastructure, hand washing facilities and hygienic practices in HCFs with a view to generate evidence-based recommendations for policy and actions geared towards improving MCH conditions, prevention and control of WASH related infection.

# METHODOLOGY

**Study Design:** cross sectional study

- Assessment components:
  - ✓ direct observation of safe water supply, sanitation infrastructure, hand washing facilities and hygienic practices in HCFs
  - ✓ Interviews with key actors and to test HCWs knowledge on infection prevention in health care.



# FINDINGS: Identified HF-specific WASH infrastructure issues

## Inadequate clean and safe water supply

- Majority of health facilities (60%) lacked Connectivity to piped water system
- Plumbing system not in place in the majority Of health facilities
- No on-site/point of use water treatment Systems and products
- Cleaning of patients



## Inadequate sanitation

- Unsanitary latrines
- Lack of maintenance
- No sanitation infrastructure for special needs of various groups (disabled, pregnant women, elderly)
- Majority have pit latrines



## Inadequate solid waste management

- Lack of efficient and adequate incinerators
- Improper waste segregation
- Lack of awareness
- Dumping of medical waste close to the buildings
- Burning pits and chambers mostly used



## Hygiene

- Inadequate cleanliness of environment, equipment and staff (training)
- Inadequate provision of soap, towels, disinfectant, gloves, ...)
- Challenges with handwashing facilities/technologies





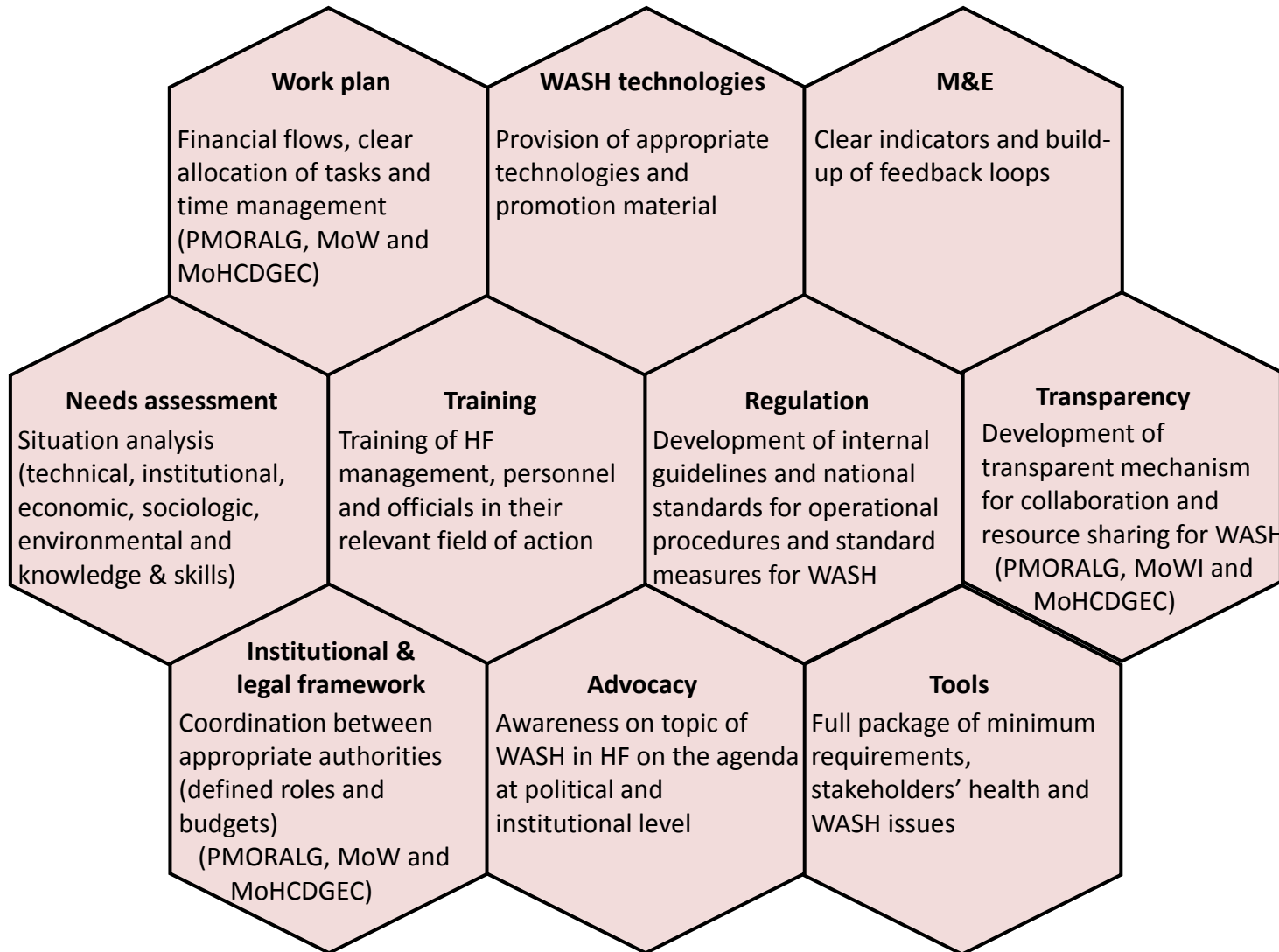
# Observed lack of regular and preventive maintenance for WASH in Health Facilities

- **Management** ↔ **Systems & Procedures**
- **Environment** ↔ **Natural & Man-made**
- **Equipment** ↔ **Design & Equipment**
- **Human Behavior**



# Summarized conclusions and recommendations

---



# Acknowledgement

- UNICEF for financially supporting this study
- Ministry of Health and Social Welfare
- MUHAS
- NIMR
- UDSM

We need safe environment



Thanks for Listening