Addressing the Enabling Environment: Systems Analysis and Change

WASH in HCF
Global Learning Event
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Dr. Por Ir
National Institute of Public Health
Lindsay Denny
Emory University
CAMBODIA

A lower-middle income country

GNI per capita = USD1,070 (2015)
A pluralistic health care system

• A geo-demographic (health district) based **public sector:**
  – 1,141 health centers (HCs)
  – 99 referral hospitals (RHs)

• A fast growing & loosely regulated **private sector:**
  – Private for-profit
  – Private not-for-profit
Advocacy on WASH in HCF

Working Group on WASH in HCF:
• Ministry of Health
• WHO-Cambodia
• WaterAid
• Emory University

Purpose:
1. Determine the gaps in WASH infrastructure and resources
2. Prioritize facility improvements
3. Integrate WASH into new and existing policies
4. Train facility staff on WASH as it relates to IPC
5. Familiarize the health sector with WASH and identify champions
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WASH Training for Clinicians & Cleaners

1. Hand Hygiene
2. Medical Equipment Processing
3. Environmental Cleaning
4. Healthcare Waste Management
Training Overview

**Purpose**: To train hospital staff on WASH in collaboration with the MOH, using the existing national IPC curriculum as a starting point.

**Target Audience**: Doctors, Nurses & Midwives, Cleaners

**Facilitation**: Initial training on-site by Emory and MOH, supported hospital Infection Control Committees (ICC). Refresher trainings by ICC.

**Process**:
1. Literature Review
2. WASH/IPC Expert Panel
3. Training Needs Assessment (TNA) on KAP
4. Curriculum Development
5. Training
6. Evaluation and follow-up coaching
The Situation

• 66% of clinicians and 86% of cleaners had never been trained on IPC or WASH.

• Through the TNA, determined all topics needed to be included in the training:
  – Healthcare waste management knowledge was highest (90%)
  – Equipment processing was the lowest (68%)

• Hand hygiene compliance was poor
  – 36% at Hospitals
  – 11% at Health Centers

• Certain attitudes were particularly concerning
Outcomes

• Over 300 staff members were trained at 10 hospitals.

• From pre to post-training assessments, knowledge & attitudes increased by 24%.

• At the three-month evaluation, hospitals scored an average of 71% and hand hygiene compliance was 51%.
  – Coaching and monitoring tools were left with the hospitals.
  – 2nd evaluation underway at six-months post-training. Hospitals need to reach at least 80% to be considered a “Clean Hospital 2017”.
  – Competition amongst the 10 facilities.
Lessons Learned

• Addressing WASH through IPC is an effective way to **begin the conversation** about WASH within the facility.
• There’s a need for specific trainings based on the **roles & responsibilities** of staff.
• There are critical gaps in the pre-service curriculum for certain staff (example: midwives and equipment processing).
• On-site training allows for **tailored hands-on training** with the equipment that is used.
• Auxiliary staff such as cleaners were **eager to participate** in trainings on WASH and felt empowered by the trainings.
• A group or person at the facility **responsible for monitoring** is key for sustained behavior change.
WASH Assessment Outline

• Rationale and objectives
• Methods
• Results
• Lessons learned
• Next steps
Rationale & objective

• A situation analysis of WASH in HCFs in 2015 found: No reliable national M&E mechanism, lack of assessment tools and data & available data suggesting poor WASH in HCFs.

• An assessment of WASH in HCFs conducted in 5 provinces in Cambodia – a first and large scale assessment using national standard tools adapted from JMP and locally available tools

• Objective: To provide information and evidence to help improvement WASH in HCFs in the 5 study provinces and secondarily:
  – Collect baseline data for the two national indicators for WASH in HCFs
  – Further test and improve the national standard tools, and
  – Provide useful feedback for JMP on the global WASH core indicators
Methods

• Sampling: 101 (out of 202) HCs in the five provinces selected using SRS method + all 16 RHs

• Data collection: Oct-Nov 2016
  – Basic WASH related services, including water supply, water and sanitation facilities, general cleanliness and hygiene, and health care waste management
  – Staff interviews + observation through facility walkthrough, using national standard tools (questionnaire and checklist)

• Data analysis: descriptive and compute core indictors with disaggregation by service ladder
RESULTS
Water supply
% of health facilities having:

- Water from an improved source available on premises: 90% (HC), 94% (RH)
- Water from an improved source available off premises: 2% (HC), 0% (RH)
- Water from an unimproved source: 6% (HC), 6% (RH)
## Water supply

% of health facilities having:

<table>
<thead>
<tr>
<th></th>
<th>HC (n=101)</th>
<th>RH (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enough water whole year for all purposes</td>
<td>48%</td>
<td>56%</td>
</tr>
<tr>
<td>Enough water whole year for general purposes, not drinking</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>Enough water sometimes (seasonal) even only for general purposes</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>Never enough water</td>
<td>4%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Sanitation facilities

Frequency distribution of toilets/latrines at:

- Health centers
  
  ![Histogram for Health centers]

  Mean = 2.81
  Std. Dev. = 1.339
  N = 101

- Referral hospital OPD
  
  ![Histogram for Referral hospital OPD]

  Mean = 3.12
  Std. Dev. = 1.258
  N = 16

All were improved toilets/latrines located on premises, but only 86% were functioning (usable) at the time of survey.
Sanitation facilities

% of health facilities having improved and usable toilets:

- At least 1: 100% (HC), 100% (RH OPD)
- At least 2: 86% (HC), 94% (RH OPD)
- At least 3: 36% (HC), 63% (RH OPD)
- At least 4: 16% (HC), 44% (RH OPD)
### Sanitation facilities

% of health facilities having:

<table>
<thead>
<tr>
<th>Feature</th>
<th>HC (n=101)</th>
<th>RH OPD (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separate toilets for men and women/girls</td>
<td>9%</td>
<td>19%</td>
</tr>
<tr>
<td>A toilet with menstrual hygiene facilities</td>
<td>1%</td>
<td>0</td>
</tr>
<tr>
<td>Separate toilets for health staff and clients</td>
<td>72%</td>
<td>88%</td>
</tr>
<tr>
<td>A toilet meeting the needs of people with reduced mobility</td>
<td>11%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Sanitation facilities

% of health facilities having at least:

- 3 improved usable toilets meeting all needs of specific group
- 3 improved usable toilets + 1 for staff & 1 meeting the needs of people with reduced mobility
- 3 improved usable toilets but not meeting or meeting some of the needs

Bar chart showing:
- 0% for HC and 0% for RH OPD
- 4% for HC and 6% for RH OPD
- 63% for RH OPD
- 36% for HC
Hand hygiene
% of health facilities having functional hand hygiene:

- At all critical points of care and within 5m of toilets: 2% (HC) 6% (RH)
- At OPD & delivery rooms/areas and within 5m of toilets: 14% (HC) 19% (RH)
- At OPD & delivery rooms/areas only: 49% (HC) 56% (RH)
### Waste management

% of health facilities having:

<table>
<thead>
<tr>
<th>Description</th>
<th>HC (n=101)</th>
<th>RH OPD (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One set of bins at consultation room/area</td>
<td>16%</td>
<td>25%</td>
</tr>
<tr>
<td>Waste is safely segregated in consultation room/area</td>
<td>12%</td>
<td>25%</td>
</tr>
<tr>
<td>Infectious waste is treated/disposed of safely</td>
<td>64%</td>
<td>56%</td>
</tr>
<tr>
<td>Sharps waste is treated/disposed of safely</td>
<td>75%</td>
<td>69%</td>
</tr>
<tr>
<td>Infectious &amp; sharps waste is treated/disposed of safely</td>
<td>52%</td>
<td>38%</td>
</tr>
<tr>
<td>A functional placenta pit</td>
<td>66%</td>
<td>88%</td>
</tr>
</tbody>
</table>
Waste management
% of health facilities where:

- Waste is safely segregated in consultation area & infectious/sharps wastes are treated/disposed of safely: 90% (HC), 88% (RH)
- Waste is safely segregated in consultation area but infectious/sharps wastes are NOT treated/disposed of safely: 10% (HC), 13% (RH)
- Waste is not segregated in consultation area or treated/disposed of safely: 0% (HC), 25% (RH)
Lessons learned

• This study provides useful information and evidence for further improvement of WASH in HCFs
  – Results were presented to health leaders from the 5 study provinces at their workshop to develop action plans for improvement of WASH in HCFs

• The results can be used as a baseline data for national indicators for WASH in HCFs

• Some challenges:
  – Absence of national norms/standards on WASH in HCFs to guide the development the national assessment tools;
  – Difficulty in applying the JPM global indicators;
  – Difficult in data collection & analysis in complex settings (RHs), addressing seasonal bias (e.g. water supply);
  – Financial sustainability
Lessons learned

• The current national standard tools require further improvement to address the above challenges and to be applicable to all settings, including inpatient care and private facilities

• The JMP global indicators/tools for monitoring WASH in HCFs are helpful to guide country assessment of WASH in HCFs, but require further specification and contextualization, e.g.:
  – Issues of definitions:
    • For sanitation: what is the exact no. of toilets required to meet all needs of specific groups - 3, 4 or 5? How about limited service ladder?
    • Hand hygiene: There are many critical points of care and toilets varying across types of facilities, which ones to be included for basic and limited service ladder?
    • Health care waste management: 3 bins are not the standard in consultation area; does not capture delivery room (for placenta waste management)
  – Other issues: not for inpatient settings, focusing on WASH means and facilities rather than practices (e.g. hand hygiene)
Next steps

• Further dissemination of the findings to key stakeholders for further actions to improve WASH in Cambodia

• Develop national norms/standards for WASH in HCFs (taking into account the country context and global norms/standards),

• Review the assessment tools, applying the national norms/standards and JPM global tools for monitoring WASH in HCFs

• Institutionalize the assessment of WASH in HCFs and link it with the national HMIS and national program monitoring
Thank you!