Learning Note: Improving water, sanitation and hygiene in primary care health facilities during the COVID-19 pandemic in Indonesia

CONTEXT

Improved water, sanitation, hygiene (WASH) and health care waste management services in health care facilities (HCFs) are pivotal to ensure infection prevention and control (IPC) practices. Availability, accessibility, acceptability of WASH services in HCF is a fundamental aspect to assure the human right and dignity of patients, visitors, and health workers.

Poor WASH services lead to increased health risks. Indonesia accounts for the eighth largest number of neonatal deaths in the world, which is estimated to be 12.4 deaths per 1,000 live birth (in 2019, childmortality.org). One of the leading causes is sepsis, accounting for 12% and 21% of mortality of 0–6 days and 7–28 days age groups (quoted in Odagiri, et al. 2018) which could be reduced by cleaner birth environment. Further, the COVID-19 pandemic has highlighted the importance of WASH in HCFs. In the absence of WASH service, the prevention and control of COVID-19 virus will not succeed.

The Government of Indonesia has committed to improving WASH in HCFs, as demonstrated by its pledge to increase investments in policy, infrastructure and capacity building at the 2020 World Health Assembly. Along with strong national leadership and coordination, good data is crucial to direct resources and actions.

Existing data reveals government has made substantial progress in improving WASH services in health care over the last decade. The national Healthcare Facilities Survey (Riset Fasilitas Kesehatan or Rifaskes) monitors the availability and adequacy of WASH in HCFs including hospitals, Puskesmas, clinics, as well as government-owned pharmacies. The 2011 Risfaskes reported that 38% community health centres (Puskesmas) surveyed did not have 24-hour availability of water services. In the most recent survey from 2019, this percentage was reduced to 15%.

Despite the existing efforts from the government, there is still a need to build capacity and sustain WASH programs in HCFs settings, particularly in Primary Health Care Centres (Puskesmas) which are the first level health delivery centre. Through the UNICEF/WHO Water and Sanitation for Health Facility Improvement Tools (WASH FIT) approach, UNICEF and WHO have joined together to assist the government in strengthening WASH in Puskesmas.

This note profiles learning from an effort to improve essential WASH services in Puskesmas during the COVID-19 Pandemic through the WASH FIT implementation. We present the approach to adopt the tool in Indonesia, key lessons learned and recommendations to inform the WASH FIT implementation and scaling-up strategies.
In 2020, during the COVID-19 pandemic, UNICEF, in coordination with the Ministry of Health (MoH) and WHO, piloted the WASH FIT. WASH FIT is a risk-based management approach to improve quality of care through the assessment of seven domains in HCFs, namely water, sanitation, hand hygiene, waste management, environmental cleaning and disinfection, energy and power, and management. In collaboration with MoH and WHO, UNICEF and partners piloted the approach in five provinces –Papua; Nusa Tenggara Timur–NTT; Nusa Tenggara Barat – NTB; Aceh; and Makassar City in Sulawesi Selatan. This pilot was built on UNICEF’s previous initiative to develop WASH in Puskesmas profiles. The WASH FIT was piloted in 185 Puskesmas providing inpatient and/or outpatient services. The objectives of the pilot were to: 1) develop an improved and contextualized version of the WASH FIT for Indonesia; 2) formulate policy recommendations for the Ministry of Health on the use of WASH FIT; and 3) generate evidence for scaling-up.

Gender, disability and social inclusion WASH FIT implementation

Gender-responsive and socially-inclusive WASH in HCF is crucial for quality of care and patient safety. Women are the main users of health services and the primary caregivers for family members, and they have unique needs around the time of pregnancy and childbirth. Therefore, the burden of poor WASH in HCF falls disproportionately on women. In addition, vulnerable groups such as people with disability, people who only speak minority languages, children and elderly might be facing physical and social barriers when accessing WASH in HCF. When the specific needs of women and vulnerable groups are not addressed, the risk of healthcare associated infections and risk of injury might increase. Finally, this may also reduce healthcare services utilization. Considering the above, WASH FIT was designed to include indicators on gender and disability, among others safe and clean maternity wards, and disability-friendly toilets.
KEY STEPS IN THE WASH FIT INITIATIVES

1. National training of the trainer (ToT) program on WASH FIT
In November 2020, the ToT was led by WHO and MoH, with participants and resource persons including UNICEF and Food for the Hungry Indonesia. The training covered the WASH FIT methodology including assessment, WASH technical aspects, advocacy and action plan development. In addition, WHO explained ways to enhance climate resilience in HCF to mitigate for climate change-related disasters that may impact service delivery. In the national ToT, WHO dedicated a session specifically to sensitize participants on the importance of gender, disability and social inclusion considerations in WASH in HCF. Guided by the facilitators, participants had the opportunity to conduct a virtual WASH FIT assessment of and draft improvement plans for a Puskesmas. Participants were also encouraged to invite users of HCF, especially vulnerable groups, to be part of WASH FIT assessment. WHO trained the participants to develop WASH improvement plan with gender and social inclusion considerations.

2. Sub-national training on the WASH FIT
Following the national training, UNICEF and WHO held coordination meetings with the Provincial Health Office, District Health Office and other partners as well as three days orientation workshops on the WASH FIT concept and methodology to highlight the benefits of performing such an assessment. In the workshops, technical knowledge and standards were presented and UNICEF and WHO led a discussion on how to adapt the indicators to the local context.

UNICEF and partners then rolled out the WASH FIT training at sub-national level in Aceh, Papua, East Nusa Tenggara, West Nusa Tenggara and Makassar. In a subnational training on WASH FIT for two districts in East Nusa Tenggara, WHO also supported participants in reviewing WASH FIT indicators from gender and social inclusion perspectives.

3. Implementing the WASH FIT Approach
The process involves assembling a WASH FIT team that comprises of provincial and districts/municipalities health officers, local professional associations, academia. A good practice appeared in in East Nusa Tenggara where the representatives from the vulnerable group were involved in the WASH FIT team. In the future the WASH FIT team can be established at the Puskesmas level, involving relevant stakeholders and the community.

Following an inspection of the facility, the WASH FIT assessment is then performed, based on the seven domains (water, sanitation, health care waste, hand hygiene, cleaning & disinfection, environmental hygiene and overall management). The WASH FIT assessment involves scoring indicators using a three-level system (meets, partially meets, or does not meet the required standard). The enumerators collected the data on paper-based forms before the results are inputted into an Excel sheet for analysis. On average it takes one day to complete the assessment in one Puskesmas.

4. Workshops on WASH FIT
UNICEF and partners presented and validated the findings of the WASH FIT assessment in workshops with key stakeholders including the head of Puskesmas, sanitarians, health personnel, technical directors, public officials and community health associations. The areas for improvement are prioritised in a progressive improvement plan. WHO and UNICEF provided guidance on how to prioritize the findings as well as considered for securing the funding required.

5. Action plan implementation
Following the assessment, Puskesmas go on to develop action plans to improve WASH in the HCF. The improvement plan includes short, medium and long term plans. UNICEF and WHO guided the local government and Puskesmas to produce detailed costed plans. The facility can then be re-assessed every year.
**RESULTS**

The pilot has demonstrated that the WASH FIT assessment has the potential to enhance current levels of WASH in HCF. The data and analysis have provided insight into how to improve WASH in HCF and equipped decision makers with evidence of how WASH in HCF design and implementation may best be tailored to existing Ministry of Health guidance, policies and programming. Follow-up after the assessment has helped ensure necessary actions are taken based on the assessment.

<table>
<thead>
<tr>
<th>Location</th>
<th>ACEH</th>
<th>NTT</th>
<th>NTB</th>
<th>PAPUA</th>
<th>SOUTH SULAWESI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (Aceh Selatan and Pidie districts)</td>
<td>2 (Kupang city and Kupan district)</td>
<td>2 (Mataram City East Lombok Regency)</td>
<td>4 (Jayapura city; Membramo Tengah and Keerom regency; Merauke district)</td>
<td>1 (Makassar city)</td>
<td></td>
</tr>
<tr>
<td>No of facilities</td>
<td>50</td>
<td>18</td>
<td>22</td>
<td>48</td>
<td>47</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>District Health Office (DHO), Provincial Health Office (PHO), Env Health Division, Puskesmas sanitarians</td>
<td>DHO, PHO and WASH working group, Env Health Division, Puskesmas sanitary</td>
<td>DHO, PHO and WASH working group, Env Health Division, Puskesmas sanitary</td>
<td>PHO, DHO, PUPR, Bappeda, Puskesmas and WHO</td>
<td>DHO, Puskesmas staff</td>
</tr>
<tr>
<td>Type of assessment</td>
<td>Peer assessment between Puskesmas</td>
<td>UNICEF partner selected enumerator from Pokja AMPL, PHO, DHO, Poltekes, etc</td>
<td>Enumerators recruited</td>
<td>A combination of staff from PHO, DHO and implementing partners</td>
<td>Volunteers supervised by the DHO</td>
</tr>
<tr>
<td>Noteworthy points</td>
<td>WhatsApp group created to share learning to the assessment team Infographic/ one page summary prepared for each Puskesmas</td>
<td>The representative from the vulnerable group involved in the WASH FIT team</td>
<td>NA</td>
<td>Implemented as part of a COVID-19 response</td>
<td>UNICEF providing follow up support on 20 action plans for Puskesmas</td>
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Medical gloves disposal in a hospital
FINDINGS FROM THE WASHFIT ASSESSMENT

In order to assess WASH conditions across WASH domains, WASH FIT results were categorized based on levels of achievements as measured by the scoring system in each domain. Each domain was grouped into three categories, namely “Good” (score more than 75), “Fair” (score between 50 and 75) and “Poor” (score less than 50). The overall assessment results demonstrated that substantial challenges were observed in the Sanitation domain, where just 31% of Puskesmas reached “Good” category. Similarly, low levels of “Good” category were observed in Medical Waste (38%) and Management domain (38%). In combining all domains, just half of Puskesmas reached “Good” category.

Looking at specific issues associated with the sanitation domain, lack of Gender Equality and Social Inclusion (GESI) consideration is found to be major issues in many HCFs (i.e. no toilet facilities meeting menstrual hygiene management needs and facilities for people with disabilities).

A snapshot of WASH FIT assessment results in piloting primary healthcenters (n = 185)

<table>
<thead>
<tr>
<th>WASH FIT ASSESSMENT DOMAINS</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER</td>
<td>38%</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>SANITATION</td>
<td></td>
<td></td>
<td>31%</td>
</tr>
<tr>
<td>MEDICAL WASTE</td>
<td></td>
<td></td>
<td>38%</td>
</tr>
<tr>
<td>HYGIENE AND ENVIRONMENT</td>
<td>47%</td>
<td></td>
<td>47%</td>
</tr>
<tr>
<td>ENERGY</td>
<td>5%</td>
<td></td>
<td>94%</td>
</tr>
<tr>
<td>MANAGEMENT</td>
<td>43%</td>
<td></td>
<td>38%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>43%</td>
<td></td>
<td>50%</td>
</tr>
</tbody>
</table>

Dissemination of WASH FIT assessment results and a discussion with key local government stakeholders in Makassar, South Sulawesi.
SUCCESSFUL ELEMENTS OF THE PILOTING

At the national level, the pilot has demonstrated the importance of having up-to-date access to comprehensive WASH data in order to prioritize and direct resources to address WASH gaps in HCF. The national ToT program promoted the use of WASH FIT and highlighted the importance of climate resilience and ensuring that facilities are gender-responsive and accessible to vulnerable groups.

Following the WASH FIT ToT (2020) Government set targets on WASH in Puskesmas, such as:

1. Developing policy, roadmap and guideline on WASH in Puskesmas
2. Building national capacity at the provincial, district and Puskesmas level
3. Scale up and implementation of WASH in Puskesmas using WASH FIT approach
4. Strengthening monitoring data on WASH implementation at the Puskesmas

The ToT program also inspired other development partners to pilot this approach in other districts. To date, WHO has provided technical assistance to other 7 districts of Manggarai, Sumbawa, Lampung, Lampung, Palu, Mentawai island and Banten.

At the provincial, regency/city and district level, commitment (political, technical and financial) facilitated the initiation and implementation of WASH FIT. In part this was a result of the orientation provided by WHO and UNICEF at province and district level prior to the assessment, which built the capacity of enumerators and included officers from the Ministry of Health. Local government acceptance of the WASH FIT approach including assessment tools were positive. As WASH FIT is a comprehensive yet flexible approach, this allows local government to set their own vision, priority and targets of WASH in HCFs.

At the facility level, Puskesmas leadership has implemented the WASH FIT assessment and developed action plans for the improvement of WASH services. In this way, WASH FIT can serve as a tool for helping Puskesmas meet WASH-related national standards. Since the assessment, Puskesmas are starting to make incremental WASH improvements such as maintenance, repairs or upgrades to existing infrastructure. The WASH FIT tool can also help staff prioritize WASH improvements when resources are limited. Certain improvements, such as lighting or gender-separate latrines are much more feasible in the short term, than those require large investments such as installation of wastewater treatment systems. Heads of Puskesmas seem eager to perform the WASH FIT assessment regularly and maintain consistent monitoring efforts. Facilitation of peer assessments between the Puskesmas allows the partners to learn from the experiences in the other facilities.
CHALLENGES IN THE PILOTING

The main challenges encountered in the piloting of WASH FIT assessment include the following:

- At the national level, Indonesia has national quality improvement tools for HCF. For instance, the national Healthcare Facility Survey (Rifaskes) is a means to incrementally improve and sustain WASH infrastructure and track progress. The Ministry of Health has a web-based monitoring system on health infrastructures, facilities and equipment called ASPAK (Aplikasi Sarana Prasarana dan Alat Kesehatan), which also includes certain WASH indicators. The comparative advantages of the WASH FIT and synergy with other tools/approaches needs to be further clarified. Moreover, the process for implementing the WASH FIT alongside existing quality and monitoring improvement tools requires streamlining to help HCF meet national standards. The timing of the pilot WASH FIT assessment must also be aligned with the annual budgetary process to influence the budget available for HCF improvements.

- At the provincial, regency/city and district level, in some instances, the low capacity or lack of priority to WASH in HCF/WASH FIT assessment makes it necessary to strengthen the commitment of the Health Office to ensure that the facility assessment will be followed by necessary infrastructure improvements and budget actions for WASH and IPC.

- At the facility level, although the head of the Puskesmas was typically involved in the planning and designing stage of the pilot, other staff lacked a basic understanding of the WASH FIT process as well as general knowledge on WASH and waste management or how to apply the tool in their own HCF. Lack of familiarity with the tool can lead to resistance in accepting and acting on the results. Puskesmas generally had limited resources with only budget enough to cover the costs associated with maintenance and consumables, rather than more costly infrastructure improvements. Infrastructure improvements are further constrained by space, financing and recurring costs. Puskesmas with few staff have particular constraints in implementing action plans.

- With the tool, enumerators unfamiliar with WASH often struggled with categories and definitions, potentially affecting the reliability of the data collected. This required additional attention to fixing and cleaning the data. Using a RAG (red-amber-green) rating can be counter-productive and undermine confidence in the tool: a red rating can lead to resistance among heads of the Puskesmas in accepting the results or fear the reaction from senior managers. There was a missed opportunity to capture the enumerators valuable observations on the Puskesmas in the pilot assessment.
**RECOMMENDATIONS**

With these challenges in mind, the following recommendations are made to improve the implementation of the WASH FIT, and the efficacy of WASH in HCF efforts. Immediate recommended actions include:

- **At the national level**, use existing national policies and guidelines to contextualise the WASH FIT assessment for Indonesia, ensuring it aligns with the different level of HCFs, national WASH and health programming, budgeting efforts and tools (such as the Ministry of Health’s ASPAK application; and the National Healthcare Facilities Survey, Riset Fasilitas Kesehatan). Develop accompanying guidance to support those implementing the contextualised tool. Involve relevant ministries (including Ministry of Environmental and Forestry, and Ministry of Public Work and Housing) and local government planner (Bappeda) to advocate more effective and appropriate financial allocation for WASH in HCF at the local level, using the WASH in HCF investment needs analysis (Ministry of Health). Include the WASH FIT implementation as part of key strategies in the national WASH in HCF roadmap.

- **At the provincial, regency/city and district level**, increase the involvement and training of the local government (including District Health Offices and head of Puskesmas) in the WASH FIT assessment process, which will help build trust in the process and increase ownership/uptake of the findings and ensure Puskesmas follow up on their action plans. Develop training modules and build capacities of Bappeda, Public Works and Housing, District Health Office, and Environmental office on WASH in HCF with emphasis on gender and disability inclusion, climate resilience and emergency preparedness.

- **At the facility level**, after adapting the assessment to the national contexts, further ensure that the categories/questions reflect the level of care provided in the Puskesmas. Enable Puskesmas staff and health facility users to participate in the planning and WASH FIT assessment, especially women, older people and persons with a disability, which will help to ensure that all understand the process and become more invested in improving the status of WASH in their health centres.

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**References**


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