

Strengthening water, sanitation, and hygiene services in health establishments: An urgent priority of WHO

Sir,

Worldwide, the provision of adequate water, sanitation, and hygiene (WASH) services has been acknowledged as an integral element of the basic health services.^[1] In fact, by ensuring the provision of WASH in health care facilities, it not only assists in preventing nosocomial infections among patients, relatives, and staff but also maintains the dignity of vulnerable populations such as pregnant females and differently-abled persons.^[2,3] However, the findings of a recently released report based on the estimates across 54 low- and middle-income nations suggest that almost 38%, 35%, and 19% of health care facilities were devoid of water supply and sanitation (presence of latrines or toilets within the facility), and had no soap/water to enable the practice of hand-washing.^[1] Further, it was observed that the water supply was worst in the African region while sanitation services were the poorest in the American region.^[1]

Moreover, with regard to deficiencies in WASH services in health facilities, the findings of various epidemiological studies have revealed alarming concerns such as millions of hospital-acquired infections, newborns being the most affected group; high risk of sepsis in low-resource settings; and poor or delayed health-seeking behavior by pregnant females and thus, high rates of home deliveries.^[2-4] In fact, a major proportion of women preferred antenatal care as well as deliveries (key interventions to reduce maternal/fetal deaths) in hospitals where WASH services were better.^[5]

In addition, various other health initiatives essentially require improved WASH services in health establishments, namely, improvement of the quality of care at birth, elimination of childhood pneumonia/diarrhea for control of cholera, promotion of safe and nature-friendly disposal of health care waste, shifting to a clean source of power so that continuous supply of electricity can be ensured in health care facilities, strengthening of infection control practices, ensuring universal health coverage for all sections of society and for staff by training them in healthy WASH practices,

and finally to fulfill the human right to water and sanitation services.^[1,2,6]

Acknowledging the importance of WASH practices in health establishments, policy makers, national and international concerned stakeholders, and the World Health Organization (WHO) have prioritized the issue and thus, a target for attaining universal basic coverage of WASH in health care facilities by the year 2030 has been set.^[1] However, at the same time multiple challenges have been identified such as limited political will, absence of well-funded and periodically reviewed policies on WASH in health establishments in almost 75% of the nations, wide disparity in WASH facilities within a nation depending on the urban/rural area or type of health establishment, availability of limited data with regard to types and quality of services in health care facilities, and lack of uniform definitions/indicators to comprehensively assess or compare the WASH indicators of countries.^[1,3,6]

In order to effectively address the global concern of defective WASH services in health care facilities, there is a great need to understand the extent of the problem and the areas that require attention.^[6] In addition, policy makers should enhance their level of commitment, allocate proportionate funding, and even frame comprehensive policies (with clearly defined standards, targets, and roles of different stakeholders).^[1,2] Further, interventions such as the training of persons operating WASH infrastructure, educating the staff and patients on the need and benefits of properly using WASH services, and sensitizing health care providers to motivate patients and their relatives to continue the practice of hand-washing even after discharge from hospitals can play a defining role.^[1,6] In addition, measures such as developing a complete set of indicators to enable a thorough assessment as well as comparison between nations, encouraging operational research to understand the association between WASH services in health care facilities and health outcomes, and devising an effective monitoring mechanism to measure the progress and implement corrective measures if needed, can further enhance the benefits of other proposed interventions.^[1,6] In fact, innovative approaches for monitoring WASH activities (in Sierra Leone — Facility assessment combined with color-coded cards) and motivating people (in Vietnam — Clean toilet contest, etc.) have been implemented and encouraging results have been obtained.^[1,7]

To conclude, for improving WASH services in health care facilities globally, there is an indispensable need to identify the deficient areas and then plan and

implement need-based measures in consultation with the local governments and support of WHO.

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Conflicts of interest

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REFERENCES

- World Health Organization, United Nations' Children's Fund. Water, Sanitation and Hygiene in Health Care Facilities — Status in Low- and Middle-Income Countries and Way Forward. Geneva: WHO Press; 2015. p. 1-13.
- Allegranzi B, Bagheri Nejad S, Combescure C, Graafmans W, Attar H, Donaldson L, *et al.* Burden of endemic health-care-associated infection in developing countries: Systematic review and meta-analysis. *Lancet* 2011;377:228-41.
- Velleman Y, Mason E, Graham W, Benova L, Chopra M, Campbell OM, *et al.* From joint thinking to joint action: A call to action on improving water, sanitation, and hygiene for maternal and newborn Health. *PLoS Med* 2014;11:e1001771.
- Oza S, Lawn JE, Hogan DR, Mathers C, Cousens SN. Neonatal cause-of-death estimates for the early and late neonatal periods for 194 countries: 2000-2013. *Bull World Health Organ* 2015;93:19-28.
- Russo ET, Sheth A, Menom M, Wannemuehler K, Weinger M, Kudzala AC, *et al.* Water treatment and hand washing behaviors among non-pregnant friends and relatives of participants in an antenatal hygiene promotion program in Malawi. *Am J Trop Med Hyg* 2012;86:860-5.
- World Health Organization, UN-Water. UN-Water global analysis and assessment of sanitation and drinking-water (GLAAS) 2014 report — Investing in water and sanitation: Increasing access, reducing in inequalities. Geneva: WHO Press; 2014. p. 2-5.
- World Health Organization. Viet Nam: Closer to Bringing Drinking Water and Sanitation to All; 2015. Available from: <http://who.int/features/2015/viet-nam-water-sanitation/en/>. [Last accessed on 2015 Jul 05].

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