

Policy Brief

Exploring the Escape Plan - Hand Hygiene in Healthcare Facilities

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INTRODUCTION

Bunty's refrain of "dhote jao" (keep washing) from the 2013 Lifebuoy advertisement garnered cult status in 2020, as the world began to embrace hand hygiene as one of their primary strategies to survive the pandemic, on the recommendation of the World Health Organization [WHO]. Since hospitals are the primary battleground against the virus, it is imperative to prioritise hygiene here and improve efficient management. This will also help achieve goal 3 of Sustainable Development Goals that aims to "Ensure healthy lives and promote well-being for all at all ages." (United Nations n.d.).

A patient's disease interacts with the hospital staff, attendees, and other visitors in hospitals. If necessary precautions are not taken, these exchanges could lead to Healthcare-associated Infections [HCAI], which can develop either as a direct result of healthcare interventions such as medical or surgical treatment or from being in contact with a healthcare setting (National Health Service n.d.).

A WHO study indicates that at any given time, the prevalence of HCAs varies between 5.7% to 19.1% in low and middle-income countries and between 3.5% to 12% in developed countries (World Health Organization n.d.). Infections acquired in medical facilities are thus a major global health problem. Another survey, involving data from 54 low-and-middle-income countries and representing 66,101 facilities, shows that 38% of healthcare facilities do not have an improved water source, and 35% do not have water and soap for handwashing (World Health Organization 2015). This lack of infrastructure compromises the ability to provide basic hand hygiene amenities to all the parties at a healthcare facility. Therefore, it becomes vital to minimise such avoidable infections for all parties. Unsafe and unhygienic patient care can even crumble any public health infrastructure.

OVERVIEW AND ASSESSMENT OF CURRENT GUIDELINES

Hands are our foremost means of interacting with the physical world. Therefore, hand hygiene is one of the key methods to prevent HCAs (Mathai et al., 2010). Against the backdrop of prevention and control measures against COVID-19 and other infections, it is essential to understand the various guidelines in India for healthcare facilities, specifically concerning hand hygiene, as these are high-risk settings.

The Clinical Establishments (Registration and Regulation) Act (2010), was enacted by the Union Government to "provide for registration and regulation of all clinical establishments in the country with a view to prescribe the minimum standards and facilities and services provided by them". This Act applies to clinical establishments in both public and private sectors, except those run by the Armed Forces. The minimum standards notified under the Act, for Level

1A hospitals requires that it shall have the 24-hour provision of potable water for drinking and hand hygiene. Further, it mandates that a functional handwash basin shall be provided for a general ward of 12 patients (Ministry of Health and Family Welfare n.d.).

Indian Public Health Standards (Government of India 2012) are a set of uniform standards intended to improve the quality of healthcare delivery in the country for sub-centres, primary health centres, community health centres, sub-district/divisional hospitals, and district hospitals. These guidelines are expected to “act as the main drivers for continuous quality improvement and serve as the benchmark for assessing the functional status of health facilities” (ibid.). While these standards vary based on the type of facility, the following services are listed as essential services in a district hospital: water supply (plumbing), sanitation, handwashing facilities in all OPD clinics, wards, emergency, ICU and OT areas, compliance to correct method of hand hygiene by healthcare workers, promotion of hand hygiene, and practice of universal precautions by healthcare workers. Additionally, with respect to patient amenities, potable drinking water, functional and clean toilets with running water and flush, dedicated disabled-friendly toilets with running water facility and flush are considered essential as well. Under the desirable services category, providing locally-made hand rub solutions in critical care areas like ICU, nursery, burns ward, etc., is recommended to ensure hand hygiene by healthcare workers.

The infrastructure requirements are as follows:

Fitments	Hospitals for inpatient wards for males and females	Hospitals with outpatient wards for males & females
Toilet suite (1 water-closet + 1 wash basin + 1 shower)	Private room upto 4 persons	For upto 4 patients
Washbasins	Two for up to 24 persons; add one for every additional 24 beds	One for every 100 persons

National Guidelines for Infection Prevention and Control in Healthcare Facilities (Government of India 2020) list detailed hand hygiene protocols for the health-care personnel to follow. Further, the policy for visitors and attendants suggests that they should clean their hands before entering and leaving the room. An alcohol-based hand rub should be available at the entrance of the facility/unit/ward, along with a poster displaying instructions for using the hand rub. Attendants should be taught to practice hand hygiene before and after touching the patient, and at the same time patients must also be informed about hand hygiene practices in the wards.

During the COVID-19 pandemic, Guidelines for Setting up Isolation Facility/Ward (Government of India n.d.) were created. It mentions the formation of IPC

[Infection, Prevention, and Control] committees to monitor hand hygiene practices of healthcare workers and to ensure adequate hand hygiene by patients, caregivers, and visitors. Though the guidelines recognise hand hygiene as a component in healthcare facilities, there is inadequate emphasis on it as they do not address certain crucial elements concerning hand hygiene infrastructure.

Throughout the above mentioned documents, there is a nearly singular focus on hand hygiene of healthcare workers to minimise HCAs. While healthcare workers' compliance is highly critical to reducing the burden of HCAs, it is equally important to address the infection spread from patient to patient and patient to healthcare workers/visitors (Centers for Disease Control and Prevention n.d.). Guidelines such as National guidelines by Government of India (2020) for Infection Prevention and Control in Healthcare facilities and Guidelines for Setting up Isolation Facility/Ward, where hand hygiene practices of patients and visitors get a brief mention, do not explore it in more detail.

Moreover, there is little recognition of the importance of running water and soap alongside alcohol-based hand rubs for patients and visitors. The minimum standards fixed for water supply and the number of washbasins is rarely fulfilled in reality as these facilities are usually nominal and non-functional. The availability of soaps, alcohol-based hand rubs and sanitiser dispensers within easy accessibility for those other than the healthcare staff is overlooked. An assessment of 343 healthcare facilities in India (WaterAid 2018) reported that the handwashing stations are poorly equipped with soap and instructions for handwashing. Further, even though the hygiene amenities may be available in these facilities, their adequacy, accessibility, functionality, and quality are unsatisfactory. In contrast, a place for washing hands was available in 97% of households as per the National Family Health Survey [NFHS-4], 2015-16. It was also noted in this survey that soap and water were observed in 60% of the handwashing locations, while only 16% had water. In households where handwashing was observed, only 9% did not have water, soap, or another cleansing agent (International Institute for Population Sciences and ICF 2017).

The National Sample Survey [NSS] 76th Round (Government of India 2019) has also conducted a study on drinking water, sanitation, hygiene, and housing conditions in India in 2018. It reported that 35.8% of household members washed their hands with soap before eating, and 74.1% washed their hands after defecation. Another Indian household survey (WaterAid 2020) concludes that many individuals altered their handwashing practices during the pandemic. However, they lacked knowledge of COVID-19 appropriate handwashing protocols such as handwashing after contact with a sick person, after contact with commonly used surfaces and objects, and handwashing after sneezing. This makes it evident that detailed instructions for handwashing in the hospital premises for the benefit of patients and visitors must be taken into serious consideration while drafting guidelines for healthcare settings. Though the guidelines address the accessibility of handwashing stations for disabled persons, even the presence of prescribed infrastructure has failed to achieve the in-

tended objective. In addition to this, user experience of hand washing stations is entirely neglected within hospitals, for instance, accessible infrastructure to children is absent.

The guidelines for setting up isolation wards during the pandemic overlook the significance of handwashing facilities and sanitiser dispensers in the line of sight. Ensuring hand hygiene compliance by patients, caregivers, and visitors is limited to the isolation wards and not the rest of the hospital. Further, design nudges for handwashing stations, which have emerged against the backdrop of COVID-19 (United Nations Children's Fund 2020), that limit cross-contamination between users while also increasing the attractiveness and ease of use, have been ignored.

RECOMMENDATIONS

Altogether, the existing guidelines on hand hygiene in healthcare facilities are fragmented, making it vital to bring all the elements of hand hygiene together. The situation can be vastly improved by adopting a comprehensive hand hygiene policy which accounts for the following factors: basic hand hygiene services, associated water services, hand hygiene supplies in line of sight depending on the size of the hospital, promotional activities, and accessibility of handwashing stations to people with limited mobility and vision, as well as children. The scope of possible design changes in the infrastructure and behavioural interventions to increase hand hygiene compliance alongside detailed feedback mechanisms from all stakeholders in a hospital space must also be included.

This development of a comprehensive hand hygiene policy in healthcare facilities bearing in mind the patients, caregivers and visitors alongside the healthcare staff is imperative to ensure implementation and monitoring in a coordinated manner such that it contributes to an overall safer public health infrastructure. Currently, India does not have any reporting system on the HCAI levels or hand hygiene infrastructure in healthcare facilities. The availability of this data will demonstrate the state of India's hand hygiene in hospitals and enable it to accelerate hand hygiene progress and rise up to emerging challenges such as the COVID-19 pandemic.

INDICATORS

Basic hygiene services



Functional taps



Soap



Alcohol-based hand rub



Hand washing station near toilets (<5m)

Hand hygiene promotion



Near hand washing station



In hospital



Activities to promote hand hygiene

Accessibility of hand washing stations



To people with limited mobility



To children

Hand hygiene supplies



Sanitizer dispensers in line of sight

Improved water sources



Piped/protected/packaged resources

Water continuity

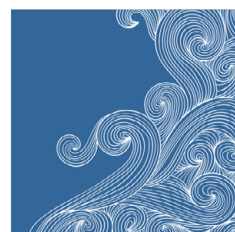


24*7 water supply

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