

## Sustaining Hand Hygiene Post COVID-19 Pandemic: Don't Let Your Guard Down

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The Global pandemic of COVID -19 significantly transformed the public health awareness towards proper Hand Hygiene (HH) and Infection Prevention and Control (IPC) measures. Prior to pandemic, infectious diseases such as respiratory infections, diarrhoeal illnesses and Health care Associated Infections (HAIs) were also responsible for morbidity and mortality. As per World Health Organisation (WHO) 15 out of 100 hospitalized patients acquires at least one HAIs during their hospital stay in low and middle income countries.<sup>[1]</sup>

During COVID-19 pandemic, compliance rates to proper HH in several institutes exceeded beyond 90%, contributing to reduction of communicable diseases.<sup>[2]</sup> There has been reduction of gastrointestinal infection up to 30-48 % and respiratory infections by 16-21 % if proper hand hygiene is practiced.<sup>[3]</sup> Successful implementation of HH training and practices through comprehensive IPC programme results in reduction of HAI rates by 35-70%.<sup>[1]</sup>

There has been drop in HH compliance from 90 % to 82.6 % in post pandemic period and simultaneously an increase in HAIs from 16.79 to 18.71 per 1000 patient days. As per WHO, globally approximately one third of health care facilities lack adequate HH infrastructure at the point of care and significant gaps exists in the implementation and sustainability of HH practices in resource limited settings despite it's proven effectiveness.<sup>[4]</sup> In India, post-pandemic period challenges are further magnified by high population density, disparities in health care access and variability in IPC implementations. Consistent hand washing with soap remains suboptimal with marked socio-economic and geographic disparities.<sup>[5]</sup>

India has dual burden of infectious diseases and rising Anti-Microbial Resistance (AMR) along with gaps in adherence to IPC protocols increases vulnerability to outbreaks and decline

in HH compliance represents a public health concern.

Increased urbanisation, population mobility, trade-travel-tourism and environmental pressures continue to facilitate rapid spread of infectious diseases. The importance of HH goes beyond healthcare settings to community environment, including schools, workplaces, community toilets, city malls, street food joints, shopping complexes and public transportation system.

Multi-pronged approach is required to address these issues. Firstly government to identify lacunae in HH practices at various levels within healthcare and community settings. Secondly investment and budgetary support for water, sanitation and hygiene (WASH) infrastructures to ensure universal access to functional HH facilities. Thirdly health care institute to enforce compliance through continuous training, monitoring and feedback mechanism alongside leadership driven accountability and also Incorporate modern strategies like electronic monitoring, and localized Alcohol Based Hand Rubs (ABHR) supply to address practical compliance barriers in resource-limited settings. Fourthly public health campaigns must evolve from crisis driven messaging to long term behavioural change communication (BCC) strategies. Lastly integrating HH education into school, colleges and university curricula to establish HH as lifelong preventive practice (effective weapon) against the infectious diseases.

In conclusion, COVID-19 pandemic has demonstrated the significant and profound impact of HH on infection control. However, observed decline in compliance post pandemic period threatens to erode these achievements. Sustained commitment at individual, institutional, community, and policy making level is essential to maintain steady course. Proper HH remains one of the simplest, most cost-effective, evidence

based intervention in public health, therefore it is importance and prioritisation must continue well beyond the pandemic era.

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