







Handout Date: 10 May, 2022

# Clean hands, safe hospitals: a call for action to improve hand hygiene practices in tertiary hospitals in Sierra Leone

Kamara, G.N.; Sevalie, S.; Molleh, B.; Koroma, Z.; Kallon, C.; Maruta, A.; Kamara, I.F.; Kanu, J.S.; Campbell, J.S.O.; Shewade, H.D.; et al. Hand Hygiene Compliance at Two Tertiary Hospitals in Freetown, Sierra Leone, in 2021: A Cross-Sectional Study. Int. J. Environ. Res. Public Health 2022, 19, 2978. https://www.mdpi.com/1660 -4601/19/5/2978

Contact: gladysnanillak14@gmail.com +232 78240852

## **Key Messages**

- An assessment of two tertiary hospitals in Freetown, Sierra Leone, revealed that compliance with hand hygiene practices was suboptimal (<50% instead of the expected 100%).</li>
- Hand hygiene was especially poor for patient protective opportunities (before touching patients) compared with selfprotective opportunities (after touching patients).
- The National Infection Prevention and Control Unit in Sierra Leone, should increase awareness and provide more training and resources to find innovative ways to improve hand hygiene practices.
- The National Infection Prevention and Control Unit should widely disseminate national standards for hand hygiene compliance and take actions on the outcomes of quarterly monitoring and evaluation if health facilities and /or individuals fall below the standards.

### What is the problem and why is it important?

- Unclean hands have been implicated in the transmission of microorganisms responsible for healthcare-associated infections.
- There is growing evidence that improved hand hygiene practices using soap and water or alcohol-based hand rub can reduce healthcare-associated infections.
- At the time of this study, there was no published information about compliance with hand hygiene practices in Sierra Leone.
   Therefore, this study provides new data on the state of hand hygiene practices in some of the major hospitals in Sierra Leone.

#### How did we measure it?

- Using the World Health Organization hand hygiene observation tool, Infection Prevention and Control Link Personnel in different departments of the two hospitals quietly observed and recorded hand hygiene practices in other health care workers over a period of 10-15 minutes.
- This was done without the healthcare workers being made aware of this observation so that they would not alter behaviour.
- These observations were carried out daily between June and August 2021.

Health care workers did not implement hand hygiene actions in over half of the hand hygiene opportunities that presented themselves

Patient protection through clean hands is key in health facilities. The National Infection Prevention and Control Unit must take leadership in this regard and ensure that the health sector "walks the talk" in promoting good hand hygiene practices in the country

#### What did we find?

- Of 10,461 opportunities observed, hand hygiene actions were performed in <50% using either soap and water or alcohol-based hand-rub.
- Hand hygiene compliance was much higher after contact or exposure to patients [called self-protective actions] (65%) compared with before patient contact and before medical or nursing procedures [called patient protective actions] (27%).

# **Implications**

- Hand hygiene compliance is sub-optimal. It appeared that healthcare
  workers inadvertently cared more about their own safety than that
  of the patients. Recommendations for action include the following:
  - Increase awareness about hand hygiene compliance, especially for patient protective actions.
  - Ensure uninterrupted provision of hand washing materials and alcohol-based hand rub for healthcare facilities
  - Implement innovative ways to improve hand hygiene practices such as constructive competition between health facilities.
  - Widely disseminate national standards for hand hygiene compliance and take actions on the outcomes of quarterly monitoring and evaluation if health facilities and /or healthcare workers fall below expected standards.