



Infection Prevention and Control in Sierra Leone: Need for a Quantum Leap Forwards

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'Every infection prevented is an antibiotic treatment avoided, and possibly a death averted'

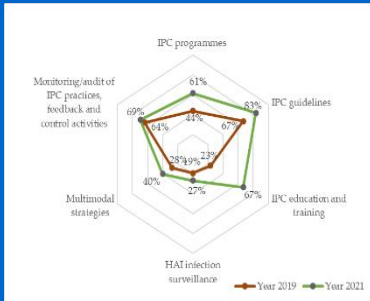
Effective IPC programme is key for preventing hospital-acquired infections

Key Messages

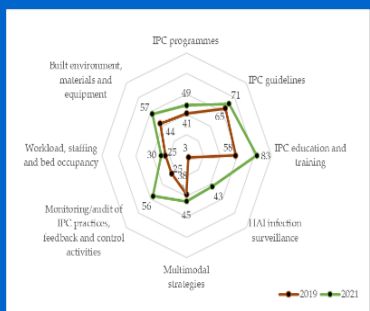
- This first country-wide assessment of Infection Prevention and Control (IPC) performance of the national IPC unit and health facilities showed that minimal progress was made between 2019 and 2021, the IPC standards were below the desired minimum.
- To improve IPC performance, there is an urgent need to provide,
 1. *A dedicated budget for IPC* at all levels
 2. *Expert mentorship and time* to IPC staff at health facilities to adapt and implement the national IPC guidelines
 3. *Adequate number of healthcare workers and hygiene infrastructure* for health facilities (safe and sufficient water, adequate numbers of functional toilet facilities, facilities for sterilization, waste disposal, and personal protective equipment)
 4. *Access to microbiological laboratories and surveillance of health care associated infections (HAI)*, which is key for evidence-based IPC programme implementation

What is the problem and why is it important?

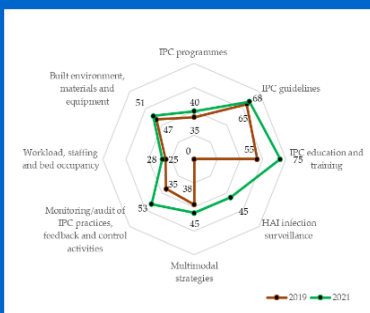
- IPC is a practical solution to safeguard patients and health workers, and reduces 70% of HAI which can result in prolonged hospital stays, increased antibiotic resistance, long term disability and death.
- In Sierra Leone, IPC is particularly relevant as Ebola virus disease (EVD) and other haemorrhagic fevers are endemic, and there is now COVID-19. In 2014-16, there were about 221 preventable health worker deaths due to EVD, largely due to inadequate IPC practices.
- Recognizing the importance of IPC, World Health Organization (WHO) set minimum IPC standards and developed checklists to assess performance of IPC program at national and health facility levels.



IPC performance scores at the national IPC unit in the six core components during 2019 and 2021 in Sierra Leone.



IPC performance scores at the four regional hospitals in the eight core components in Sierra Leone during 2019 and 2021



IPC performance scores at the eight district hospitals in the eight core components in Sierra Leone during 2019 and 2021

How did we measure it?

- In 2019 (pre-COVID) and 2021 (COVID-19 era), we carried out assessments of the national IPC programme unit, four regional and eight district hospitals using standardized WHO IPC performance assessment checklists.
- IPC performance scores were graded as inadequate = 0–25%; basic = 25.1–50%; intermediate = 50.1–75%; and advanced = 75.1–100%.

What did we find?

- Overall performance improved from ‘basic’ to ‘intermediate’ at the national IPC unit (41% in 2019 to 58% in 2021) and at regional hospitals (37% in 2019 to 54% in 2021) but remained ‘basic’ at district hospitals (37% in 2019 to 50% in 2021).
- Priority gaps at the national IPC unit included, lack of: a dedicated IPC budget, HAI surveillance and collaboration with other health programmes for effective implementation of IPC.
- Priority gaps at the hospitals (regional and district) included, lack of: a senior facility leadership commitment and dedicated budget, expertise in IPC to develop guidelines, adequate health workforce and infrastructure to practice IPC activities optimally

Implications

- Although improvement in the IPC performance scores at both national and facility level, it is not sufficient to ensure safety of patients and health care workers from HAIs.
- To improve IPC performance, we address the Ministry of Health to implement the following:
 1. Dedicated budget for IPC at national and facility levels.
 2. Expert mentorship and dedicated time to IPC staff at health facilities to adapt and implement IPC guidelines.
 3. Adequate number of healthcare workers and hygiene infrastructure at health facilities (safe and sufficient water, adequate numbers of functional toilet facilities, facilities for sterilization, waste disposal and PPE)
 4. Access to microbiological laboratories and establishing HAI surveillance, which is key for evidence-based IPC programme implementation
- In the end, this will be worthwhile and cost saving investment as it will strengthen the health system resilience for current and future outbreaks, while keeping patients and health workers safe.

