

INFECTION PREVENTION AND CONTROL MULTIMODAL STRATEGY INTERVENTION IN THE CONTEXT OF EBOLA VIRUS DISEASE OUTBREAK: RESULTS FROM DRC RESPONSE-2018-2020

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The use of Infection Prevention and Control (IPC) ring approach is a multimodal strategy that is effective to increase IPC standards during Ebola Virus Disease outbreaks

BACKGROUND

Ebola Virus Disease (EVD) is transmitted through:

- direct contact with infected body fluids
- indirect contact with contaminated objects and surfaces

From 2018-2020 the 20th EVD outbreak occurred in Democratic Republic of Congo (DRC) with international response lead by WHO

Objective: to describe the results of infection prevention and control (IPC) ring approach used during the EVD outbreak response in North-Kivu and Ituri provinces, and its impact on IPC standards in health facilities (HFs)

METHODS

- ✓ Descriptive an analytic study of a quality improvement process.
- ✓ Data collected from July 2018 to May 2020
- ✓ **Intervention:** a multimodal strategy denominated as *IPC ring approach* aimed at improving IPC standards whenever an EVD case was detected.

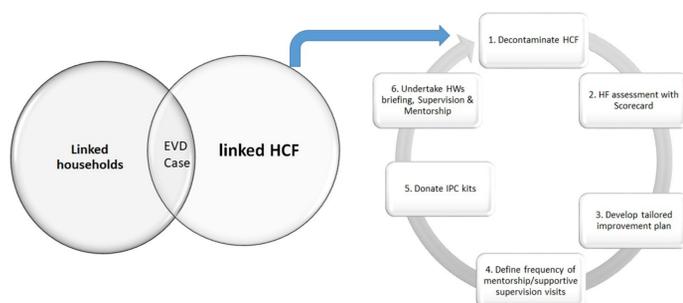


Figure 1. Scheme representation of IPC ring approach

- ✓ Assessment tool (*scorecard*) composed of 12 components was used to evaluate HFs within the catchment area
- ✓ HFs categorized according to:
 - ✓ type of ownership (private versus public)
 - ✓ bed capacity: *category 1* >39 beds; *category 2*: 20-39 beds; *category 3*: 5-19 beds; *category 4*: 0-4 beds

RESULTS

- 12,472 assessment performed
- 2,164 final simple of HFs evaluated at least once
- The overall IPC score was 56.0%

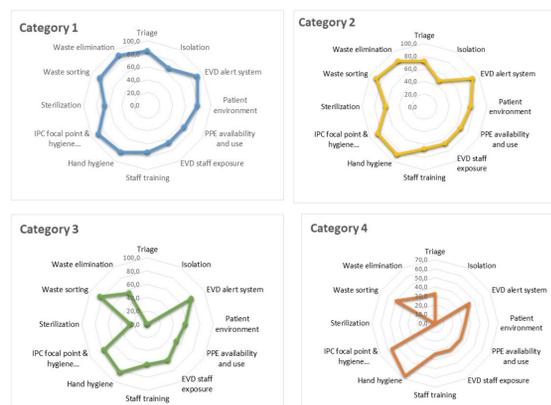


Figure 2. IPC score according to the HFs category (1, 2, 3 and 4) and the components evaluated

- 2,136 HFs assessed at least twice:
 - Overall score in the first assessment: 48.1%
 - Overall score in the final assessment: 59.2% ($p < 0.001$)

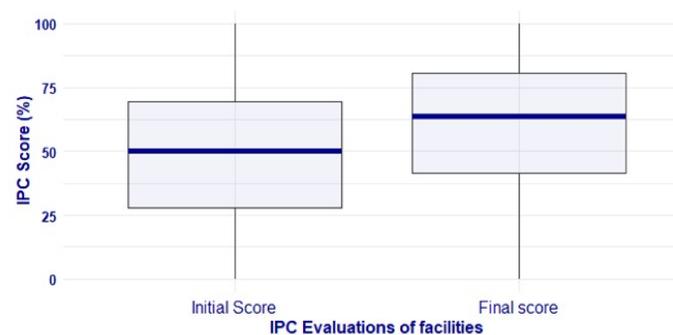


Figure 3. Results of the IPC scores assessment of HFs according to the initial scores and final scores

- HFs with at least one non-governmental organization (NGO) partner had significantly higher scores in all IPC components: 18.7 mean difference (95% CI difference 16.9 - 20.5; $p < 0.001$)
- HFs that were either private owned, category three and four or did not have the support of a NGO had significant increases in IPC scores compared to other HFs.

RESULTS

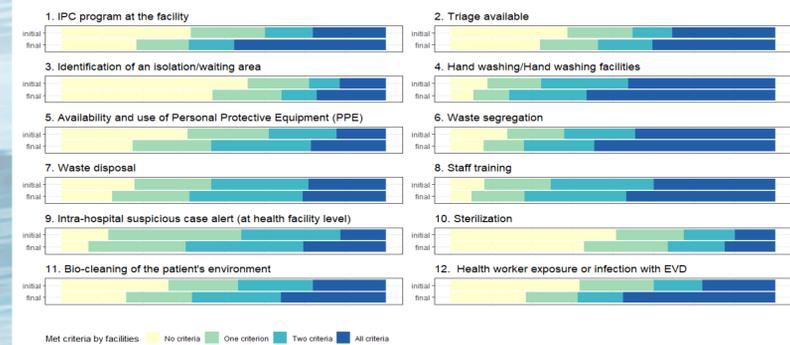


Figure 4. Results of the IPC scores assessment of HFs by the initial scores and final scores and the component assessed

- HFs increased the number of criteria being met in the final evaluation compared to the first one.

CONCLUSIONS

- Using the IPC ring approach provided an effective quality improvement during the EVD outbreak response in DRC.
- The impact of the IPC ring approach was higher in HFs with lower initial scores.

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MORE INFORMATION / REFERENCES

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