Using antibiotic point prevalence survey data to estimate healthcare-associated infection (HAI) prevalence in children: analysis of 27 countries data

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INTRODUCTION AND PURPOSE

- A European Centre for Disease Prevention and Control (ECDC) healthcare-associated infection (HAI) point prevalence survey (PPS) of 1149 hospitals in European countries found a prevalence of HAIs of 5.7% (95% confidence interval: 4.5-7.4) (1).
- No global HAI PPS has been conducted including the low and middle income (LMIC) setting.
- The aim of this study was to determine the feasibility of deriving HAI estimates from antibiotic PPS’s.
- The overall pooled HAI prevalence was 6.3% (95% CI: 5.9-6.5) (Figure 1).
- Low middle income countries (LMICs): the prevalence of HAI was 8.7% (95% CI: 8.1-9.3) (1).
- High income countries (HICs): the prevalence of HAI was 5.1% (95% CI: 4.8-5.5) (Figure 1).

RESULTS

- A total of 33,391 children were included from the GARPEC and Global-PPS surveys.
- Of these, there were 1,720 children with at least one HAI from 27 countries.
- 892 (51.9%) were male and 828 (48.1%) were female.
- Children with a wide range of clinical diagnoses were included (Table 1).
- The prevalence of HAI was 8.7% (95% CI: 8.1-9.3) in LMIC settings and 5.1% (95% CI: 4.8-5.5) in HIC settings.
- The method is considerably less resource intensive than current HAI PPSs.

CONCLUSION

- Estimates of HAI prevalence can be obtained from antibiotic PPS data.
- This method is considerably less resource intensive than current HAI PPSs.

REFERENCE


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