Have you cleaned your stethoscope today?
A national, multi-center study on stethoscope cleaning practices

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Introduction

- Stethoscopes are widely used in the clinical setting, the environment of which is often implicated in healthcare-associated infection (HCAI) [1].
- HCAIs are estimated to cost the NHS £1 billion every year [2].
- While the exact role of stethoscope use in HCAI is unclear, frequent contamination and organism transmission by stethoscopes has been repeatedly demonstrated, including with Methicillin Resistant Staph Aureus (MRSA) and Clostridium Difficile (C. difficile) [3,4,5].
- There is currently no consensus on optimal stethoscope cleaning methods. The minimum frequency of stethoscope cleaning is recommended by The Healthcare Infection Control Practices Advisory Committee (HICPAC) and Centers for Disease Control and Prevention (CDC) as to occur ‘when visibly soiled and on a regular basis’ [6].
- How does this translate into clinical practice? The aim of this project is to assess stethoscope cleaning practices at 4 sites across the UK.

Methods

- A questionnaire was distributed to healthcare providers at 4 large UK NHS trusts.
- Data collection happened in Grand Round to be representative of different levels of seniority and different medical specialties.
- Semi-quantitative (Likert-scales) and qualitative (free-text) data were collected regarding attitudes towards the importance of cleaning stethoscopes, current cleaning behaviours and potential solutions to increasing stethoscope cleaning.
- A total of 199 anonymised responses were collected.

Results and Analysis

- The average person surveyed had used their stethoscope 3 times that day.
- 11% of respondents have never cleaned their stethoscope.
- 92.5% of respondents felt it is clinically important to clean the stethoscope regularly.
- 76.9% of respondents felt that clean stethoscope could reduce the number of HCAIs. Reasons given were that of a lack of evidence, and that other sources of contamination were more likely to contribute towards transmission of HCAIs than stethoscopes.
- 61.3% of respondents noted that they use their stethoscope in isolation rooms. Out of those, 23% do not clean their stethoscope either before or after the consultation.

Discussion

- Our data suggest that there is a consensus among medical professionals about the importance of stethoscope cleaning (92.5% of respondents). However, current stethoscope cleaning practices are inadequate and could therefore play a role in infection spread.
- The study highlights the need for better distribution of antiseptic wipes on the ward. Future studies could look at the availability of antiseptic wipes in clinical areas and also the role of visual reminders such as posters in improving current practices.
- Nearly two thirds of clinicians use their personal stethoscopes in isolation rooms, thereby highlighting the needs for separate stethoscopes to be kept specifically by the bedside of infectious patients. This is particularly pertinent in view of previous reports demonstrating contamination of stethoscopes with C.difficile and MRSA.
- One of the reasons quoted for poor cleaning practices is the lack of supporting evidence. Thus, more research should be carried out on the topic to assess potential implication of poor stethoscope cleaning practices on HCAI burden. This would aid HICPAC and CDC in the setting of more accurate, evidence-based hygiene standards.

Limitations

- Some respondents may not use the stethoscope on a daily basis.
- Honest reporting may have been an issue.
- A separate stethoscope may not always be provided in an isolation room.
- Antiseptic wipes may not be evenly distributed throughout the hospital, thus affecting access to stethoscope cleaning equipment.

References


Factors

- How often do you clean your stethoscope?
- If you use your stethoscope in an isolation room, do you clean it?

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