The prevalence of occupational injuries among the practice and attitude of healthcare workers towards stethoscope cleaning: a patient safety quality improvement project

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Background Healthcare-associated infections constitute a major health concern for hospitalized patients. Contaminated stethoscopes may be a potential source for the spread of microorganisms. The aim of this study was to determine the current attitude and rate of stethoscope cleaning as well as the level of contamination of stethoscopes, followed by the implementation of a patient safety quality improvement project.

Methods A prospective study was performed at King Abdulaziz University Hospital. Our study ran through four main phases. In the first phase, healthcare workers (HCWs) were observed throughout the medical wards to determine their attitudes towards stethoscope cleaning. During the second phase, random stethoscope swabs were taken for culture to determine their contamination rate; afterwards, a questionnaire was distributed among the HCWs to identify stethoscope cleaning barriers. In the third phase, an awareness day was scheduled to demonstrate the importance of stethoscope cleaning, and cleaning materials were made accessible. In the fourth phase, we estimated the impact and effectiveness of the intervention by observation of HCWs. Descriptive statistics were applied. All data were analyzed using Microsoft Excel sheets.

Results In the observational phase, only 16.7% of 155 HCWs cleaned their stethoscopes regularly. Among the 39 stethoscope sterile swabs processed, the mean growth on blood agar was 245 colony-forming units (CFUs; ±64). In the post-intervention observational phase, 65 HCWs were observed, of whom 70.1% cleaned their stethoscopes (p<0.01).

Conclusion Most HCWs do not clean their stethoscopes between patient encounters. Raising awareness and providing appropriate cleaning materials are effective interventions to increase the rate of stethoscope cleaning among HCWs.