



Using an iterative process of information, training and feedback to improve hand hygiene compliance (HHC)

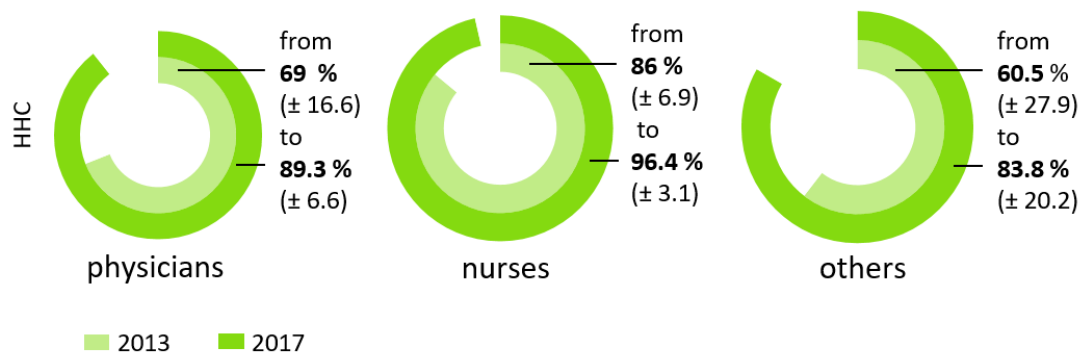
Interventional study

WHAT WAS INVESTIGATED?

The study investigated whether an ongoing programme of information and training, coupled with a feedback system, is able to improve hand hygiene compliance (HHC) among healthcare professionals.

WHAT WAS THE RESULT?

Overall increase of HHC from 82% in 2013 to 94 % in 2017



A continuous process including training, observation as well as feedback is important to increase awareness concerning hand hygiene behaviours and to maintain and improve hand hygiene compliance in clinical settings.



BACKGROUND

Healthcare-associated infections (HAIs) continue to pose a high risk to patient safety. They are a major problem for healthcare systems worldwide with a vast economic impact. A number of HAIs could be prevented by following the WHO “Five Moments for Hand Hygiene”. Hygienic hand disinfection with alcohol-based hand rub is one of the most effective measures to prevent infections and therefore reduce the burden of HAIs.

GOAL

The aim of the study was to investigate whether an iterative information and training process, coupled with a feedback system for medical staff and respective management improves hand hygiene compliance (HHC).

DESIGN AND METHODS

The study period was from 2013 to 2017, during which time the information and training programme was implemented among 6,009 healthcare professionals. Amongst others, it consisted of:

- Information and training tools (e. g., posters on hand hygiene, leaflets, training videos, workshops)
- Increase in the number of dispensers for patients and visitors
- Newsletter with relevant hygiene information twice a year
- Yearly Action Day for hand hygiene to inform about current trends and experiences

Hygiene experts conducted compliance measurements, which were documented in an online tool. Results of the observation were immediately reflected to the observed healthcare professionals. In addition, the department management received a HHC-report to raise awareness.

Overall compliance rates per healthcare professional and according to the WHO 5 Moments were estimated.

RESULTS

Training of 6,009 healthcare professionals and 19,295 observed hand hygiene (HH) moments resulted in a significant increase in HH compliance rates across all healthcare professional groups as well as for all 5 Moments for HH.

Mean HHC rate improved from $81.9 \pm 5.2\%$ in 2013 to $94.0 \pm 3.6\%$ in 2017.

All 5 Moments for Hand Hygiene showed an increase over the study period. The highest increase with 20.5% was observed for Moment 2 (before aseptic tasks), while the lowest increase was observed for Moment 4 (after patient contact) with 5.9%. The increase in compliance with all 5 Moments for Hand Hygiene is shown in table 1.

Increase in compliance with all 5 Moments for Hand Hygiene

	Increase
Before patient contact	16.9%
Before aseptic tasks	20.5%
After body fluid exposure risk	7.6%
After patient contact	5.9%
After contact with the patient surroundings	12.7%

Table 1: HHC increase with all 5 Moments for Hand Hygiene

CONCLUSION

HHC of healthcare professionals can be improved by continuous information, education and observation of hand hygiene. Repetitive direct observations are needed in order to change habitual processes in clinical settings.

