

## **KEY POINT SUMMARY**

### **OBJECTIVES**

The objective of this study was to determine if visitors used an AHS placed at or near a hospital security desk, where all visitors were required to register.

#### **DESIGN IMPLICATIONS**

The authors recommend consulting a human factors engineer to identify locations for AHS dispensers. It is also important for the visual cues to be identified. The study suggests that visible and conspicuous visual cues like signage resulted in increased hand hygiene compliance among hospital visitors. The study also showed that compliance was higher with freestanding AHS dispensers than with wall-mounted ones.

# Do hospital visitors wash their hands? Assessing the use of alcohol-based hand sanitizer in a hospital lobby

Birnbach, D. J., Nevo, I., Barnes, S., Fitzpatrick, M., Rosen, L. F., Everett-Thomas, R., ... & Arheart, K. L. 2012 | *American Journal of Infection Control.* Volume 40, Issue 4, Pages 340-343

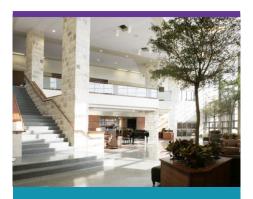
## **Key Concepts/Context**

Compliance with hand hygiene by healthcare workers is considered to be relevant to the prevention of healthcare-associated infections in hospitals and other healthcare facilities. There are no studies that indicate the significance of hand hygiene compliance (HHC) by hospital visitors, although both the World Health Organization and the Centers for Disease Control and Prevention suggest that hospital visitors can potentially carry infections from the community into hospitals. In order to examine hand hygiene compliance among hospital visitors, the use of an alcohol hand sanitizer (AHS) by visitors to a hospital was observed in this study. The two-week-long study found that even though visual cues were significant to the use of the hand sanitizers, overall compliance by hospital visitors was very low.

## **Methods**

This was an observational controlled study conducted at the main entrance of a tertiary care university hospital twice daily for two weeks. The times (once in the mid-morning and the other in the late afternoon) selected for observation were the busiest times for visitors. An AHS with signage indicating to clean hands was located on a wall near the security desk; the observation data collected from this was considered to be the baseline data. Three interventions in the form of signage, freestanding AHS, and both were also tested. During the study, 2100 visitors were observed during the baseline data collection phase, and 300 visitors were observed during each of the interventions.





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## **Findings**

The findings from the study were as follows:

- Hand hygiene compliance among visitors was very low, both before and after the introduction of the interventions.
- The observation of visitors' compliance with hand hygiene during the baseline phase revealed that only 0.52% of visitors used the wall-mounted AHS. There was an increase in compliance when additional signage was used with the wall-mounted AHS (0.67%), when a freestanding dispenser was placed (9.33%), and when signage was used with the dispenser (11.67%).
- The increase in usage of the freestanding dispenser (with and without signage) was statistically significant (P<0.001) when compared with the use of the wall-mounted AHS (with and without signage).
- Data showed that rates of hand hygiene compliance among visitors increased with visual cues/signage. The authors infer that two factors are relevant to the efficacy of visual cues – conspicuity and visibility, given that the location of the wall-mounted AHS was in an inconspicuous location.

### Limitations

The authors do not indicate that their study had any limitations. However, they do indicate that the following as possible limitations:

- Low baseline data may have been because of the inconspicuous location of the wall-mounted AHS.
- Traffic flow was not studied.

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