

## Abstract

**Introduction:** Hand hygiene (HH) is any action of hand cleaning while maintaining good skin integrity. Proper HH prevents more than 50 % of hospital acquired infections. This study was carried out in May 2015. The aim of this study was to assess the level of implementation of WHO HH guidelines (moments of hand hygiene and hospital facilitation) among nurses working at Thika level five hospital.

**Methodology:** A descriptive cross sectional study was carried out among nurses working at Thika level five hospital in May 2015. 145 respondents were selected using systematic random sampling. Data collection tool was self-administered structured questionnaire and a standard HH checklist based on WHO guidelines. Data was analyzed using SPSS version 20 and Microsoft excel.

**Results:** All the basic hand hygiene materials were adequately provided except for single use towels. Generally, the practice of hand hygiene was well understood by 92.4% of all the respondents, however, they were poor (37.9%) at following hand washing guidelines as per WHO hand hygiene guidelines and there were few (17.1%) of the nurses who were using single use towels. The  $P < .000$  implies that we accept  $H_0$ . This implies that at 95% level of significance, there is no effective hand hygiene practices by nurses.

**Conclusions:** The results of the study suggest that the TPB (Theory of Planned Behaviour) provides a useful framework for conceptualizing HH among nurses. Nurses were poor at following WHO guidelines. They however reported hand hygiene more their actual performance. At 95% CI, the practice of hand hygiene was therefore not effective with  $H_0 = 0.000$ .

### Recommendations

The infection control department should avail single use towels, alcohol hand rubs and hand cleaning steps postures should be availed at every hand cleaning site to promote adequate following of the hand cleaning steps. In this study there were inadequate single use towels, alcohol hand rubs and hand cleaning posters at care points.