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Abstract (poster session)

Predictive model for high self-reported hand-hygiene compliance in intensive care units in Pakistan

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Objective: To identify a change in perception predicting self-reported hand hygiene (HH) compliance $\geq 60\%$ in healthcare workers (HCWs) pre- and post-implementation of the WHO hand hygiene improvement strategy (HHIS) in intensive care units (ICUs) in Pakistan. **Methods:** HH perception questionnaires were distributed to HCWs in 3 ICUs pre- and post-intervention. Composite scales were developed from items included in the pre- and post-intervention surveys and were entered in a backwards multiple logistic regression analysis to predict high self-reported HH compliance ($\geq 60\%$), while controlling for the effect of healthcare profession, service and ward. Alpha for perceptions was set at 6% level and odds ratios were standardised by the inter quartile ranges. **Results:** 97 and 77 HCWs completed the questionnaire before and after implementation respectively. Prior to the HH intervention, HCWs who perceived that HH could impact on patient safety were nearly three times more likely (adjusted odds ratio [aOR] aOR 2.9, $p=0.01$) to report high compliance levels. HCWs who did not perceive that their peers expected them to comply with HH were 90% less likely (aOR 0.1, $p=0.023$) to report high compliance in the pre-intervention survey. After the intervention HCWs who perceived the HHIS components as effective were five times more likely (aOR 5.0, $p=0.015$) to report high compliance; HCWs who perceived ABHR as a cue to HH were five times more likely (aOR 5.0, $p=0.011$) to report high compliance. **Conclusion:** All components of the WHO HHIS were found to strongly influence high self-reported compliance ($\geq 60\%$) among ICU HCWs in Pakistan. This strategy, and in particular ABHR availability and use as a cue to memory to comply, should be continued for ensuring sustainable HH improvement.