

Effect of Education and Performance Feedback on Handwashing in a Mexican  
Public Hospital of Mexico City

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**Background:**

Patients admitted to hospitals are at risk of acquiring nosocomial infections. Many peer-reviewed studies show that handwashing (HW) significantly reduces hospital infections and mortality rates. Our objective was to evaluate the effects of education and performance feedback on handwashing compliance before contact with patients in one Intensive care Unit in a Public Hospital in Mexico City. We performed an observational study of health care workers (HCW) to measure the effect of education alone plus performance feed-back.

**Methods:**

Two ICUs, one of New born and one of Adults, at one public hospital was studied for adherence to a handwashing protocol. The observed healthcare workers included physicians, nursing personnel, and ancillary staff. Following initial observations to establish baseline rates of HW (phase 1), we evaluated the effect of education plus performance feed-back (phase 2).

**Results:**

The Phase one was from October 2003 to March 2004, and phase two from April 2004 to June 2004. We observed 1595 patient contacts in New Born ICU, 1070 during phase one, and 525 during phase two. We observed 1535 patient contacts at Adult Intensive care unit, 952 during phase one, and 583 during phase two. During phase one, the baseline rate of handwashing before contact with patients was 46.35% (496/1070) at New Born ICU, and 38.76% (369/952) at adult ICU. During phase two, with education and performance feedback, handwashing at New born ICU increased to 69.71% (366/525) (RR 1.50; 95% CI 1.31 – 1.72; P value: 0.0000). And at adult ICU Handwashing increased to 63.63% (371/583) (RR 1.64; 95% CI 1.42 – 1.90; P value: 0.0000). Comparing HW after intervention, during phase two we did not find significant difference comparing new born and adult ICU 69.71% (366/525) vs 63.63% (371/583) respectively (RR:1.10, 95% CI:0.95 – 1.27, P value:0.2154).

**Conclusions:**

In this study, HW policies, education, and performance feedback of the HCW significantly improve worker adherence to the handwashing protocol.