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Prospective Study To Evaluate Hand Washing Compliance At Two Indian Hospitals of New Delhi and Bangalore. Behaviour Comparison Between Different Stratum

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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. At three Intensive care units of two Indian Hospitals, we measured the handwashing compliance before contact with patients. Our objective was to evaluate the hand washing compliance to find differences between groups and activities.

METHODS:

One health care worker per hospital observed and filled in a specially designed form table the hand washing compliance of physicians, nursing staff and ancillary staff (AS) before patient contact in 3 intensive care units from 2 Indian hospitals. We analyzed the differences using uni-variate (UV) analysis.

RESULTS:

From July 2004 to November 2004, we observed 588 patient contacts. The hand washing compliance overall rate before patient contact was 74.8% (440/588). Women 77.7% (349/449) vs. men 65.5% (91/139) (RR: 1.19; IC 95% 0.94 – 1.50, P value: 0.1442). Nursing staff 78.0% (329/422) vs. physicians 74.1% (100/135) (RR: 1.05; IC 95% 0.84 – 1.32, P value: 0.6541). Nursing staff 78.0% (329/422) vs. AS 35.5% (11/31) (RR: 2.20; IC 95% 1.20 – 4.01, P value: 0.0084). Physicians 74.1% (100/135) vs. AS 35.5% (11/31) (RR: 2.09; IC 95% 1.12 – 3.89, P value: 0.0178). Morning work shift 82.0% (168/205) vs. afternoon work 69.8% (155/222) (RR: 1.17; IC 95% 0.94 – 1.46, P value: 0.1498). Morning work shift 82.0% (168/205) vs. night work 72.8% (117/161) (RR: 1.13; IC 95% 0.89 – 1.43, P value: 0.03179). Afternoon work shift 69.8% (155/222) vs. night work 72.8% (117/161) (RR: 0.96; IC 95% 0.76 – 1.22, P value: 0.01438). Superficial contact 71.5% (258/361) vs. invasive contact 80.2% (182/227) (RR: 1.12; IC 95% 0.93 – 1.36, P value: 0.2346).

CONCLUSION:

At these Indian hospitals, nursing staff over ancillary staff and physicians over ancillary staff, are associated with significant hand washing compliance.