

Hand Hygiene Compliance in Argentina, Brazil, Colombia, India, Mexico, Morocco, Peru and Turkey

Findings of the International Nosocomial Infection Control Consortium (INICC).

Víctor D. Rosenthal¹, Reinaldo Salomao², Hakan Leblebicioglu³, Özay A.Akan⁴, Martha Sobreira Oropesa⁵, Yesim Cetinkaya Sardan⁶, Asu Özgültekin⁷, Rédouane Abouqal⁸, Gorki Grinberg⁹, İftihar Koksall¹⁰, Murali Chakravarthy¹¹, Alex Castañeda Sabogal¹², María Eugenia Rodríguez Calderón¹³, Carlos Álvarez Moreno¹⁴, Gaye Usluer¹⁵, Silvia Forciniti¹⁶, Alberto Armas Ruiz¹⁷, Daniel Sztokhamer¹⁸, Luisa C. Soroka¹⁹, Sercan Ulusoy²⁰, Irma Pérez Serrato²¹, Héctor Torres Hernández²², Narda Olarte²³, Simone Nouer²⁴, Ata N. Yalcin²⁵.

¹Medical College of Buenos Aires, Buenos Aires, Argentina, ²Hospital Santa Marcelina, Sao Pablo, Brazil, ³Ondokuz Mayıs University Medical School, Samsun, Turkey, ⁴Ankara University School of Medicine İbni-Sina Hospital, Ankara, Turkey, ⁵Hospital de la Mujer, Mexico, Mexico, ⁶Hacettepe University School of Medicine, Ankara, Turkey, ⁷Haydarpaşa Hospital, Istanbul, Turkey, ⁸Ibn Sina- Medical ICU, Rabat, Morocco, ⁹Hospital General Porto Alegre, Porto Alegre, Brazil, ¹⁰Karadeniz Technical University School of Medicine, Trabzon, Turkey, ¹¹Wockhardt Hospital & Heart Institute, Bangalore, India, ¹²Hospital Victor Lazarte Echegaray - Essalud, Trujillo, Peru, ¹³Hospital La Victoria, Bogota, Colombia, ¹⁴Hospital Universitario San Ignacio, Universidad Pontificia Javeriana, Bogota, Colombia, ¹⁵Osmangazi University, Eskisehir, Turkey, ¹⁶Hospital Interzonal General de Agudos Pedro Fiorito, Buenos Aires, Argentina, ¹⁷Centro Médico la Raza, Mexico, Mexico, ¹⁸Clínica Estrada, Buenos Aires, Argentina, ¹⁹Hospital Interzonal General de Agudos Evita, Buenos Aires, Argentina, ²⁰Ege University Medical Faculty, Izmir, Turkey, ²¹Hospital General de la Celaya, Celaya, Mexico, ²²Hospital General de Irapuato, Irapuato, Mexico, ²³Hospital El Tunal ESE, Colombia, Bogota, ²⁴Hospital Universitario Clementino Fraga Filho, Rio de Janeiro, Brazil, ²⁵Akdeniz University, Antalya, Turkey.

BACKGORUND: Many peer-reviewed studies show that HHC significantly reduces hospital infections and mortality rates. Our objective was to evaluate the HHC so as to find differences between groups and activities.

METHODS: One health care worker per intensive care unit (ICU) observed the HHC of health care workers (HCW) before patient contact at 50 ICUs and filled in a specially designed form table with the information he/she obtained. We analyzed the differences using Chi square test.

RESULTS: From 08/98 to 11/05 (7 years and 3 months) we observed 62,626 patient contacts.

The overall HHC rate before patient contact was 50.9%.

Nursing staff (NS) (55.2%) vs. physicians (PH) (44.2%) (RR, 1.25; IC 95%, 1.21-1.29; P value: 0.0000);

NS (55.2%) vs. ancillary staff (AS) (39.7%) (RR, 1.11; IC 95%, 1.07-1.16; P value: 0.0000);

PH (44.2%) vs. AS (39.7%) (RR, 1.11; IC 95%, 1.07-1.16; P value: 0.0000).

Women (52.9%) vs. men (45.5%) (RR, 1.19; IC 95%, 1.16-1.22; P value, 0.0000);

Morning work shift (MWS) (52.4%) vs. afternoon work shift (AWS) (49.3%) (RR, 1.06; IC 95%, 1.04-1.09; P value, 0.0000);

MWS (52.4%) vs. night work shift (NWS) (50.9%) (RR, 1.03; IC 95%, 1.00 – 1.06; P value, 0.0521);

AWS (49.3%) vs. NWS (50.9%) (RR, 1.03; IC 95%, 1.00-1.06; P value, 0.0453).

Superficial contact (49.7%) vs. invasive contact (53.5%) (RR, 1.08; IC 95%, 1.05-1.10; P value, 0.0000).

Adult ICUs (50.2%) vs. Pediatric ICUs (55.7%) (RR, 1.11; IC 95%, 0.98-1.25 P value, 0.0890);

Adult ICUs (50.2%) vs. Neonatal ICUs (64.1%) (RR, 1.28; IC 95%, 1.22-1.34 P value, 0.0000);

Pediatric ICUs (55.7%) vs. Neonatal ICUs (64.1%) (RR, 1.15; IC 95%, 1.01-1.31 P value, 0.0319);

CONCLUSION: At the INICC hospitals members, NS over PH, NS over AS, MS over AS, MWS over AWS, NWS over AWS, Invasive contact over Superficial contact, Neonatal ICUs over Adult ICUs and Neonatal ICUs over Pediatric ICUs are associated with significant HHC.