Hand Hygiene Compliance (HHC) at the Hospitals members of the International Nosocomial Infection Control Consortium (INICC) in Argentina, Brazil, Colombia, India, Mexico, Morocco, Peru, and Turkey.

Rosenthal VD1; Vivek Jawali2; Maretti da Silva MA3; Rajeev Nair4; Duarte P5; Álvarez Moreno C6; Melek Tulunay7; Rosales R8; Güldem Turan9; Osorio L10; Camacho Cosavallete I11; Gonul Yildirim12; Mojica BE13; Herrera Bravo MP14; Mayorga Espichan MJ15; Chávez Gómez A16; Naoufel Madani17; Garrido Mercado P18; Melluso D19; Ozge Turhan20; Kemalettin Aydın21; Saban Esen22; Vianna R23; Rojas R24; Rossetti MA25; Villamil Gómez W26; Ilhan Ozgunes27; John Prakash Raj28; Buchner Ferreira I29; Gilli M30; Rausch D31; Churruarin G32; Santoro B33; Garzón Agudelo J34; Bilgin Arda35; Sussmann O36; Beltran H37; Yalim Dikmen38; Rodriguez Calderón ME39; Canan Aygun40; Armas Ruiz A41; Alonso Romero A42

1- Bernal and Colegiales Medical center, Buenos Aires, Argentina; 2- Wockhardt Hospital & Heart Institute, Bangalore, India; 3- Santa Marcelina Hospital, Sao Paulo, Brazil; 4- Escorts Heart Institute, New Delhi, India; 5- México General Hospital, Mexico DF, México; 6- San Ignacio University Hospital, Bogota, Colombia; 7- Ankara University School of Medicine, Ankara, Turkey; 8- INEN Medical Center, Lima, Perú; 9- Haydarpaşa Hospital, Istanbul, Turkey; 10- Simón Bolívar Hospital, Bogota, Colombia; 11- Victor Lazarte Hospital, Trujillo, Perú; 12- Hacettepe University, Ankara, Turkey; 13- Nueva Medical Center, Bogota, Colombia; 14- de la Mujer Hospital, Mexico DF, México; 15- San Pablo Medical Center, Lima, Perú; 16- Irubapato Hospital, Irapuato, México; 17- Ibn Sina Hospital, Rabat, Marruecos; 18- de la Sabana Medical Center, Sucre, Colombia; 19- Estrada Medical Center, Buenos Aires, Argentina; 20- Akdeniz University, Antalya, Turkey; 21- Karadeniz Technical University, Trabzon, Turkey; 22- Ondokuz Mayis University Medical School, Samsun, Turkey; 23- Clementino Fraga Filho University Hospital, Rio de Janeiro, Brazil; 24- Secretary of Health, Guanajuato, México; 25- Pertón Hospital, Avellaneda, Argentina; 26- Santa María Medical Center, Sucre, Colombia; 27- Osmangazi University, Eskisehir, Turkey; 28- Christian Medical College, Vellore, India; 29- Porto Aleggire General Hospital, Porto Aleggire, Brazil; 30- Fiorito Hospital, Buenos Aires, Argentina; 31- Britanico Medical Center, Rosario, Argentina; 32- Modelo Medical Center, Lanús, Argentina; 33- Evita Hospital, Buenos Aires, Argentina; 34- Videlmédica Hospital, Bogota, Colombia; 35- Ege University, Izmir, Turkey; 36- Palermo Medical Center, Bogota, Colombia; 37- del Olaya Medical Center, Bogota, Colombia; 38- Istanbul University Cerrahpasa, Istanbul, Turkey; 39- La Victoria Hospital, Bogota, Colombia; 40- Ondokuz Mayis, Samsun, Turkey; 41- La Raza Medical Center, DF, Mexico; 42- Secretary of Health, Bogota, Colombia.

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

METHODS: One health care worker per intensive care unit (ICU) observed the hand hygiene compliance of health care workers before patient contact at 48 ICUs from 8 countries and filled in a specially designed form table with the information he/she obtained. We analyzed the differences using uni-variate (UV) analysis and multivariate analysis applying logistic regression (LR).

RESULTS: From July 1998 to June 2005 (8 years) we observed sixty thousand and fifty five (60,055) patient contacts. The overall hand hygiene compliance rate before patient contact was 51.2% (30,760 / 60,055). Nursing staff (55.8%) vs. physicians (43.4%) (UV: RR, 1.28; IC 95%, 1.25-1.33; P value: 0.000); (LR: OR, 1.51; IC 95%, 1.47-1.57; P value: 0.000). Nursing staff vs. ancillary staff (AS) (55.8%) vs. physicians (43.4%) (UV: RR, 1.28; IC 95%, 1.25-1.33; P value: 0.000); (LR: OR, 1.51; IC 95%, 1.47-1.55; P value: 0.000). Morning work shift vs. night work shift (50.2%) (UV: RR, 1.04; IC 95%, 1.01-1.07; P value, 0.01). Afternoon work shift vs. night work shift (50.1%) vs. invasive contact (53.9%) (UV: RR, 1.29; IC 95%, 1.26-1.32; P value, 0.000); (LR: OR, 1.16; IC 95%, 1.12-1.21; P value, 0.000).

CONCLUSION: At the INICC hospitals members of these 8 countries, nurses over physicians, women over men, morning over afternoon work shift, and invasive contact over superficial contact are associated with significant hand hygiene compliance.