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 VD[1] ; Vivek Jawali[2]; Maretti da Silva MÂ[3]; Rajeev Nair[4]; Duarte P[5]; Álvarez Moreno C[6]; Melek Tulunay[7]; Rosales R[8]; Güldem Turan[9]; Osorio L[10]; Camacho Cosavalente L[11]; Gonul Yildirim[12]; Mojica BE[13]; Herrera Bravo MP[14]; Mayorga Espichan MJ[15] ; Chávez Gómez A[16]; Naoufel Madani[17]; Garrido Mercado P[18]; Melluso D[19]; Ozge Turhan[20]; Kemalettin Aydin[21]; Saban Esen[22]; Vianna R[23]; Rojas R[24]; Rossetti MA[25]; Villamil Gómez W[26]; Ilhan Ozgúnes[27]; John Prakash Raj[28]; Buchner Ferreira I[29]; Gilli M[30]; Rausch D[31]; Churruarín G[32]; Santoro B[33]; Garzón Agudelo J[34]; Bilgin Arda[35]; Sussmann O[36]; Beltran H[37]; Yalim Dikmen[38]; Rodriguez Calderón ME[39]; Canan Aygun[40]; Armas Ruiz A[41]; Alonso Romero A[42]

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- Haydarpasa Hospital, Istanbul, Turkey; 10- Simón Bolívar Hospital , Bogota, Colombia; 11- Víctor 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- Irapuato 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- Perón Hospital, Avellaneda, Argentina; 26- Santa María Medical Center, Sucre, Colombia; 27- Osmanganzi University, Eskisehir, Turkey; 28- Christian Medical College, Vellore, India; 29- Porto Alegre General Hospital, Porto Alegre, 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.

BACKGORUND: 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%, 1.47-1.55; P value, 0.000). Nursing staff vs. ancillary staff (AS) (36.5%); (UV: RR, 1.53; IC 95%, 1.47-1.57; P value: 0.000). Physicians vs. AS (UV: RR, 1.19; IC 95%, 1.14-1.25; P value: 0.000). Women (52.8%) vs. men (47.1%) (UV: RR, 1.12; IC 95%, 1.09 – 1.15; P value, 0.000); (LR: OR, 1.06; IC 95%, 1.02-1.10; P value, 0.001). Morning work shift (52.1%) vs. afternoon work shift (50.6%) (UV: RR, 1.03; IC 95%, 1.00-1.06; P value, 0.02); (LR: OR, 1.08; IC 95%, 1.06-1.11; 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 (UV: RR, 1.01; IC 95%, 0.98-1.04; P value, 0.624). Superficial contact (50%) 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.

Presenting Author's name: Victor D. Rosenthal,
Address: Arengreen 1366, Buenos Aires (1405), Argentina. Phone: 54-11-4432-7740; Fax: 54-11-44585-2803;
Email: victor_rosenthal@fibertel.com.ar.