

Hand Hygiene Reduces Health Care-Associated Infection

From epidemiological data to efficient interventions

Many health care associated infections, especially in orthopedic and trauma units, are related with methicillin resistant *Staphylococcus aureus* (MRSA). MRSA infection or colonization contributed to an increased length of hospital stay; and a significant proportion of the positive patients still carried MRSA on discharge, increasing the risk of community dissemination. Data show the importance of diagnosing MRSA in hospital and emphasize that understanding its epidemiology is crucial to secure a decrease in the incidence of MRSA. Since hand hygiene is an essential component of control of MRSA spread, epidemiological data should be used to reinforce hand hygiene in health centers.



Health care professionals provide information to their colleagues and patients on the appropriate method for hand hygiene, based on the WHO Multimodal Hand Hygiene Improvement Strategy. "Hand hygiene contributes to a significant, measurable reduction in the burden of disease attributable to health care-associated infections" said Dr Dueñas, president of the Committee of Infection Control in the Hospital de Niños.

To address this problem, a two-pronged initiative was developed based on AMR surveillance, and AMR containment.

In regards to **AMR Surveillance**, El Salvador is part of the Latin American Antimicrobial Resistance Surveillance Network, funded primarily by USAID, and provides data on hospital isolates of *S. aureus*. Of the 21 countries part of the Network, 14 notified hospital isolates of *S. aureus* in 2007. The total number of isolates of *S. aureus* notified was of 23,338. The percentage of strains with resistance to methicillin notified by each country was between 27 and 72%. El Salvador reported more than 50% of the *S. aureus* isolated at hospitals as methicillin resistant. The high percentage of methicillin resistance reported has important implications for the election of the prophylaxis and adequate treatment of hospital infections in which *S. aureus* can be implied.

In regards to **AMR containment**, as the general strategy for preventing resistant strains spread in hospitals deals with educating professionals about appropriate containment measures, including hand hygiene, a specific training course was developed in the Hospital de Niños Benjamin Bloom, San Salvador. More than 247 people were trained, including health care providers, patients and other community members. Specific training materials and brochures were designed and the activity is linked with the Patient Safety Alliance 1st Challenge: "Clean care is safer care". A significant impact in decreasing the prevalence of MRSA is expected by the Control Infections Committee of the Hospital Bloom.