

Hand Hygiene - From Policy To Practice

Adherence to good hand hygiene (HH) practices is the cornerstone for preventing healthcare-associated infections (HAI) and protecting healthcare personnel ourselves facing both endemic and emerging infectious diseases. Through sustained efforts and performance of annual HH program since 2004 National Taiwan University Hospital (NTUH) was accredited of “2011 Asia Pacific Hand Hygiene Excellence Award” among 108 hospitals in this region. This experience has been applied in Taiwan to bundle cares to preventing HAI and combating antimicrobial resistance.

Implementation of a hand hygiene program reduces preventable healthcare-associated infections and is cost effective

Hospital-wide HH program, with particular emphasis on using an alcohol-based hand rub, was implemented in April 2004 at NTUH. We observed 8,420 opportunities for HH during April 2004 to Dec 2007. Compliance (before and after patient contact) improved from 43.3% in April 2004 to 95.6% in 2007, and was closely correlated with increased consumption of the alcohol-based hand rub. The disease severity score (Charlson comorbidity index) increased during the intervention period. Nevertheless, we observed an 8.9% decrease in HAIs and a decline in the occurrence of bloodstream, methicillin-resistant *Staphylococcus aureus*, extensively drug-resistant *Acinetobacter baumannii*, and intensive care unit infections. The net benefit of the HHP was US\$5,289,364, and the benefit-cost ratio was 23.7 with a 3% discount rate.

Starting small and using smart strategy with incremental target

Key success factors include the continuation of support from superintendents and awareness of our healthcare workers. We provide alcohol-based hand rub hospital-wide (particularly at the point of care) and balance between accessibility versus fire safety and patient safety. We customize “My Five Moments” and put posters or reminders at the healthcare zone as well as at the public area. We have annual hospital-level lectures for staff. We also encouraged HH ambassadors (role model nearby) to conduct unit-level quality improvement program, provide skill-based education and accreditation. NTUH, one of three Centers of Excellence for Hand Hygiene Promotion in Taiwan, has shared experiences with others via lectures, workshops and Patient Safety Summit in a 2-year country-wide HH accreditation program. We emphasize the importance of top-down leadership and bottom-up efforts to achieve the institutional safety climate.

World Hand Hygiene Day: increase the awareness of the public

The government and hospitals show their commitment on World Hand Hygiene Day (May 5). We design a series of activities to increase in the awareness of the public through the media and the web, and the engagement of the activity. A stress-free, “to see is to believe” program was designed for the public on May 5, 2011 and implemented for staff in May 2012. The visitors attending World Hand Hygiene Day activity and our staff enjoyed this activity very much. Thus we applied this activity to promote HH awareness and skills in senior high schools, kindergartens, patient and their family.

5C: Care, Cooperation, Creativity, Consistency and Continuation

In order to further improve the HH compliance rate and sustain the effects of annual program, we emphasize integrating HH into workflow and avoid unnecessary HH; optimization of procedures to decrease HH opportunities; taking care of hand skin by proper use of hand lotion; appropriate selection of HH methods, more alcohol-based hand rub, and less hand washing.

For more details

- NTUH Hand Hygiene web at <http://www.ntuh.gov.tw/ifc/hhc>
- Effectiveness and Limitations of Hand Hygiene Promotion on Decreasing Healthcare–Associated Infections. PLoS One 2011;6: e27163.
- Compliance of Health Care Workers with Hand Hygiene Practices: Independent Advantages of Overt and Covert Observers. PLoS One 2013;8:e53746.
- Patient empowerment in a hand hygiene program: differing points of view between patients/family members and healthcare workers in Asian culture. Am J Infect Control. 2013;41:979-83.
- Medical students' perceptions of their role as covert observers of hand hygiene. Am J Infect Control. 2014;42:231-4.