## LETTERS TO THE EDITOR

## Can We Expect Patients to Question Health Care Workers' Hand Hygiene Compliance?

To the Editor—Hand hygiene (HH) is one of the most effective means of tackling healthcare-associated infections. However, rates of compliance remain less than optimal. Empowering patients to speak with their health care worker (HCW) about HH is another potential means of improving HH compliance and has specifically been included in World Health Organization guidelines.

Factors affecting patient engagement in an empowerment program are not well studied. Our hypothesis was that certain characteristics, such as HCW seniority, sex, and profession, make patients more or less inclined to question them.

The aim of this pilot program was twofold: first, to determine whether the simple intervention of giving patients a brochure that gave them permission to ask HCWs to clean their hands was an effective means of patient empowerment, and second, to explore which characteristics of HCWs affect patients' willingness to ask them to clean their hands.

We conducted a 4-week prospective pilot program involving the distribution of a brochure that invited patients to ask their HCW whether they had cleaned their hands. A follow-up interview was conducted, and the key measure was whether, after reading the brochure, patients would be willing to ask HCWs to clean their hands. In addition, patients were shown photographs of 4 doctors of differing sex and seniority and were asked which of these doctors they would ask to clean their hands. A senior doctor was defined as a doctor with over 20 years of clinical experience. Patients were asked identical questions about nurses of different sex and seniority.

The program was conducted in 7 wards (medical and surgical) in an Australian tertiary care hospital with a strong HH program. All new patients admitted to the selected wards received the brochure but did not receive a follow-up interview if they were unable to read or understand it.

Analysis was conducted using Stata software, version 11 (Stata). Comparisons were made using Student t test and  $\chi^2$  test where appropriate, with statistical significance set at P < .05. Risk ratios (RRs) with 95% confidence intervals (CIs) were also calculated for patient responses. Binary variable using the mean age (56 years) was used for age-related calculations.

Forty-six patients were included in the final study (27 male and 19 female patients). The mean age was 56 years (range, 21–83 years). After reading the brochure, all patients believed that they should have a role in their own safety and that HH played a part in this. Forty-three (93.5%) believed that they should be involved in improving HH in the hospital.

Figure 1 displays the percentage of patients who would ask each type of HCW to clean their hands. Patients were sig-

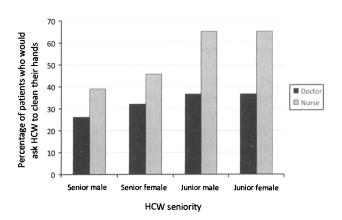


FIGURE 1. Percentage of patients who would ask each type of health care worker (HCW) to clean their hands.

nificantly less willing to ask a doctor to clean their hands than to ask a nurse (RR, 0.61; 95% CI, 0.41–0.93; P=.02). Patients claimed that they would ask their doctor to clean their hands 43% of the time, although there was no difference in willingness to ask based on seniority or sex. Patients claimed that they would ask nurses to clean their hands 67% of the time, and although there was no difference in willingness to ask based on sex, patients were more willing to ask a junior nurse than to ask a senior nurse (RR, 0.65; 95% CI, 0.43–0.97; P=.04). Patients younger than 56 years were 3.5 times more likely (95% CI, 1.03–11.92; P=.04) to ask a doctor to clean their hands and 4.5 times more likely to ask a male HCW to clean their hands (95% CI, 1.07–17.30; P=.03), compared with patients older than 56 years.

The results from our program demonstrate that, even with education, patient are willing to confront their HCW less than half the time and are particularly reluctant to confront their doctors. The reluctance of patients to ask physicians, compared with nurses, has been demonstrated in previous studies, 4-6 with 20% of patients in one inpatient survey stating they did not want doctors to think they were questioning their professional ability. Younger patients were significantly more likely to ask a HCW to clean their hands, compared with older patients, which may reflect generational attitudes and practices. In particular, patient age may affect attitudes towards the HCW-patient interaction.

Our program demonstrated a substantial difference between patient intent and patient action. Although all patients acknowledged that HH plays a part in their own safety and most wanted a role in preserving it, this did not translate into a willingness to question HCWs. Our findings are similar to those of a study that found that, although 71% of patients believed that they should be involved in helping improve HH, only 38% would do anything if they noticed that a HCW had not cleaned their hands.<sup>7</sup>

The main limitation of our study was the small sample size. Patients were excluded from the program because of language, poor literacy, poor eyesight, and cognitive impairment, which are important considerations for the design of future programs. Limitations aside, this study represents a real-time snapshot of the wards of a busy urban tertiary care hospital.

The French proverb that states "a doctor is often more to be feared than the disease" is relevant, because doctors consistently have the lowest HH compliance of all HCWs, and this represents a real threat to patient safety. However, patients fear questioning their doctors. Similar patient empowerment programs have shown success in increasing HH compliance, which suggests that patient empowerment could be harnessed on an increased scale to improve compliance of HCWs. Our program has demonstrated that future research should specifically address the patient-doctor relationship and ways to facilitate open communication. Future programs must specifically target age and culturally appropriate interventions that translate patient intent into action.

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Impact of the Change in Surveillance Definitions on the Rates of Urinary Tract Infection in Intensive Care Units: 1988 versus 2009 Definitions

To the Editor—Urinary tract infection (UTI) is the most common type of healthcare-associated infection, accounting for more than 20%-30% of infections in acute care hospitals.<sup>1,2</sup> Since 1988, the US Centers for Disease Control and Prevention (CDC) has categorized healthcare-associated UTI as symptomatic UTI (SUTI) or asymptomatic bacteriuria (ASB). This categorization was not changed in the 2004 National Nosocomial Infections Surveillance definitions and the 2008 National Healthcare Safety Network (NHSN) definitions.3,4 These surveillance definitions for UTI were revised by the CDC/NHSN in 2009. There were 2 major changes: (1) the category ASB UTI was removed and substituted with the category asymptomatic bacteremic UTI (ABUTI) and (2) the length of time that an indwelling catheter had to be present prior to the onset of catheter-associated UTI (CAUTI) was shortened from 7 to 2 days. To our knowledge, however, the impact of these changes has not been prospectively evaluated. Therefore, using the 1988 and 2009 definitions of UTI we prospectively assessed and compared the rates of UTIs among patients admitted to a medical intensive care unit (MICU) and a surgical intensive care unit (SICU).

This study was performed in Seoul, Republic of Korea, at