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Caregivers' Perceptions of Patients as Reminders to Improve Hand Hygiene

Hand hygiene is widely regarded as the most important measure to prevent health care-associated infections and limit the spread of antimicrobial resistance,^{1,2} but health care worker (HCW) compliance remains low.² Successful strategies to improve compliance result from a combination of multiple components, including system change, training, and education of HCWs; observation and performance feedback; reminders in the workplace; and the institution of a safety climate.^{2,3} A promising, albeit less explored, avenue is to encourage patients to remind HCWs to perform hand hygiene before caring for them.⁴ This strategy has been recommended by a large number of organizations and authorities worldwide, including the World Health Organization² and the US Centers for Disease Control and Prevention.⁵ However, very little is known about HCWs' views of such programs.⁴ We surveyed a sample of HCWs to investigate the degree to which

they wish to be reminded by patients to perform hand hygiene and to identify sociodemographic variables and beliefs influencing their views.

Methods. We conducted a cross-sectional study in 2009 to assess HCWs' perceptions of a hypothetical patient participation program to improve staff compliance with hand hygiene at the University of Geneva Hospitals (HUG), Geneva, Switzerland. An anonymous, confidential survey was sent to the home address of 700 randomly selected HCWs. Attitudes and beliefs were assessed using a Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). We evaluated also the level of acceptance of wearing a badge to invite patients to ask about hand hygiene, previously suggested to be a powerful patient incentive.⁶ Variables associated with support of patient inquiry were assessed through univariate and multivariate logistic regression. Answers were dichotomized to simplify reporting. We performed a forward stepwise logistic regression procedure introducing one by one all covariates using $P < .05$ for entry. We presented a parsimonious model including all covariates significantly associated with support of patient inquiry to improve hand hygiene. All tests were 2-sided, and $P < .05$ indicated statistical significance.

Results. Of the 277 respondents (response rate, 41.4%), 44% were physicians, and 56% were nurses; 65% had more than 10 years' work experience. Only 3% had been asked by a patient whether they had cleansed their hands before being cared for in the previous month. Although 74% believed that patients could help to prevent health care-associated infections, 29% of respondents did not support the idea of being reminded by patients to perform hand hygiene, 27% believed that such an inquiry is not part of the patients' role, and 37% would not consent to wear a badge inviting patients to ask about hand hygiene. Seventy respondents (26%) considered that inviting patients to inquire about staff hand hygiene would be too time consuming, 17% believed that patient inquiry would be upsetting, and 27% felt that it would be humiliating. Forty-four percent admitted to a feeling of guilt if patients discovered that they omitted hand hygiene, and 43% would be ashamed to disclose that they forgot to cleanse their hands. Forty-six percent feared that acknowledging omission could stir patient anger, and 26% believed that it would make them seem inept. Interestingly, 18% feared that admitting their omission to perform hand hygiene could lead to legal action.

By multivariate analysis (**Table**), endorsement of patient inquiry was independently associated with the beliefs that patients can help prevent medical errors and that patient inquiry can improve HCWs' hand hygiene behavior. By contrast, endorsement was inversely associated with the belief that omitting hand hygiene is inconsequential, the perception that patient inquiry would be humiliating to HCWs, and that such a strategy would call into question their competency.

Table. Factors Associated With Endorsement of Patient Participation to Improve Hand Hygiene (Multivariate Analysis)

Belief/Perception	Endorsement of Patient Participation to Improve Staff Hand Hygiene	
	AOR (95% CI)	P Value
Patient participation should be promoted to prevent medical errors	8.4 (3.2-22.1)	<.001
Patient participation would improve staff hand hygiene compliance	6.4 (2.4-16.8)	<.001
Hand hygiene omission is inconsequential	0.1 (0.02-0.5)	.006
Patient inquiry would be humiliating	0.3 (0.1-0.8)	.02
Patient inquiry would question their professional aptitude	0.4 (0.2-1.0)	.05

Abbreviation: AOR, adjusted odds ratio.

Comment. This survey indicates that a nonnegligible proportion of HCWs do not endorse the concept of inviting patients to ask about hand hygiene, a finding reported by other studies.^{7,8} The relatively low rate of endorsement is partly explained by the negative feelings associated with disclosing omission. Similar to their tendency not to disclose minor medical errors,⁹ HCWs may prefer to keep patients in relative ignorance regarding appropriate hand hygiene behavior to avoid delicate situations.⁴ Support from HCWs is central to the success of patient participation endeavors,^{4,6} and failure to enlist their open support may undermine the outcome of such programs.

Our study has some limitations. Our response rate was low, and both participation and desirability bias may be present. Our study was conducted in a single center with a longstanding experience in hand hygiene promotion (although without any patient participation component),³ and our results might not be fully generalizable to other settings. Caregivers' reactions to real-life patient inquiry should be addressed further.

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Hepatitis B Screening in a US Academic Primary Care Practice

Chronic hepatitis B virus (HBV) infection is a major cause of cirrhosis, liver failure, and hepatocellular carcinoma globally, with its highest burden in Asia.^{1,2} In the United States, up to 2 million persons have chronic HBV infection, of whom

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more than 50% are of Asian ancestry.^{1,3} In Asian Americans, HBV testing has been shown to be cost-effective.⁴ The Centers for Disease Control and Prevention recommends HBV screening in persons born in Asia in addition to their US-born children who were not vaccinated as infants.⁵