New survey illustrates challenges associated with healthcare environmental hygiene in facilities worldwide

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A global, pilot study published today in the American Journal of Infection Control (AJIC), provides the first, quantified overview of the strengths and challenges associated with healthcare environmental hygiene (HEH) practices in healthcare facilities (HCFs) around the world. Study researchers will use the findings to further enhance an in-development self-assessment tool that will help facilities benchmark and improve their HEH.

"We were surprised to find that 98 percent of the facilities participating in our survey were majorly lacking in one or more of the World Health Organization's multimodal improvement strategies for infection prevention and control practices," said Alexandra Peters, Ph.D., Can, University of Geneva, and first author on the published study. "This survey suggests that challenges with key components of HEH, including staff education and training, workplace culture, and access to adequate products and equipment, remain ubiquitous regardless of geography or income level. These results reinforce the need for a self-assessment tool to help HCFs worldwide identify HEH challenges and necessary resources."

HEH is an important component of infection prevention and control (IPC) that comprises the cleaning of all surfaces in hospital rooms. It is reliant on multiple factors, including adequate cleaning products and supplies; best practices-based protocols; training, education and quality control; and the institutional safety climate. Departments responsible for HEH face numerous challenges, including limited budgets, an unstable workforce, and a lack of access to safe and effective products.

Under the direction of Prof. Didier Pittet of the University of Geneva Hospitals and Faculty of Medicine, Dr. Peters and several colleagues designed a pilot study to evaluate the strengths and challenges in HEH programs around the world and across resource levels. The study also evaluated a preliminary version of the Healthcare Environmental Hygiene Self-Assessment Framework (HEHSAF), a 39-question tool designed by global experts to help facilities' HEH programs evaluate their current strengths and challenges and their improvement over time. Researchers sent the preliminary HEHSAF to 743 HCFs between April and June 2021; 51 HCFs from 35 countries ultimately participated in the study.

Overall, 98% (50 out of 51) of participating HCFs lacked in some or all of the five components of the multimodal IPC improvement strategy, independent of income level. Other key findings include:

- 71% of respondents felt that their facility gave enough importance to HEH and 47% felt that the budget allocated for cleaning
and disinfection was adequate.

- 67% of HCFs reported that necessary HEH products and supplies were always available, 27% said they were sometimes available and 6% said they were never or rarely available. Among the 90% of HCFs that reported HEH equipment and supplies were available, 16% could still not perform adequate sterilization because equipment was not in good working condition.
- Just over 50% of HCFs reported that their protocols were based on best practices and updated regularly.
- Only 22% of HCFs provided or required (if staff was outsourced) comprehensive formal HEH training upon hiring; 28% did not provide or require any formal training at all.

"This study highlights environmental hygiene needs that are similar to those we identified more than 25 years ago for hand hygiene promotion at the time we introduced alcohol-based hand gels in hospitals," said Prof. Pittet, senior author of the study published today.

"These findings provide the global IPC community with a baseline for HEH assessment, and should encourage focus, improvement, and investment in HEH globally to reduce healthcare-associated infections and their implications," said Linda Dickey, RN, MPH, CIC, FAPIC, and 2022 APIC president. "The final HEHSAF will be an invaluable tool to support this effort."
