compliance to preutilization cleaning of computers. **Methods:** We conducted a pilot study to determine the median relative light unit (RLU) value reflective of preutilization cleaning of the computers. We identified values of <250, 250–500, and >500 RLU to reflect cleaned, probably cleaned, and not cleaned computers, respectively. Subsequently, we conducted a cross-sectional study of the computers in the inpatient wards in Tan Tock Seng Hospital and National Centre for Infectious Diseases. Using 3M Clean-Trace ATP swabs, we tested 5 computers in each ward: 2 computers on wheels, 2 from the nursing station, and 1 at the patients' room entrance. All analyses were conducted using STATA version 15 software. **Results:** Between October 4 and 10, 2021, we collected 219 samples from 219 computers. Among them, 44 (20.1%) were cleaned, 49 (22.4%) were probably cleaned, and 126 (57.5%) computers were not cleaned. Higher compliance to computer cleaning was observed in COVID-19 wards [85 ATP samples; cleaned, 37 (43.5%); probably cleaned, 26 (30.6%); not cleaned, 22 (25.9%)] compared with non–COVID-19 wards [134 ATP samples; cleaned, 7 (5.2%); probably cleaned, 23 (17.2%); not cleaned, 104 (77.6%)] ($P < .01$). No significant difference was observed in compliance with cleaning computers between the ICU [30 ATP samples; cleaned, 7 (23.3%); probably cleaned, 4 (13.3%); not cleaned, 19 (63.3%)] and general wards [189 ATP samples; cleaned, 37 (19.6%); probably cleaned, 45 (23.8%); not cleaned, 107 (56.6%)] ($P = .47$). **Conclusions:** ATP swab tests can be used as a surrogate marker to assess compliance to pre-utilization cleaning of computers. Enhanced awareness of environmental hygiene may explain the higher compliance to computer cleaning observed in COVID-19 wards.

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Microbiological analysis concerning antimicrobial effect of atomized ionless hypochlorous acid water in a hospital environment

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Objectives: We evaluated the disinfecting efficacy of atomized ionless hypochlorous acid water (CLFine) against pathogenic microorganisms in an isolation room. **Methods:** The study was conducted in an isolation room of Kurume University Hospital. CLFine with available chlorine concentrations of 40 ppm and 300 ppm as test substances and purified water as control were atomized with an ultrasonic atomizer (CLmistL). The 40 ppm and 300 ppm of CLFine were atomized at the atmospheric available chlorine concentrations of ~0.03 ppm and 0.1~0.2 ppm, respectively, and purified water was atomized in the same manner as CLFine. Petri dishes with *Staphylococcus aureus, Bacillus cereus* spores, *Bacillus subtilis* spores and *Aspergillus ruber* were allocated in the room, then CLFine or purified water was atomized. Sampling was performed at 3 and 5 hours after the start of atomization, and the bacterial counts were measured. The study was carried out either with air conditioning turned "on" or "off" because atmospherically available chlorine concentration is affected by ventilation. **Results:** When the air conditioning was turned on, purified water showed a slight reduction of bacterial counts by 0.9 log or less at 5 hours after the atomization. When CLFine was used, 40 ppm greatly reduced the counts of *Staphylococcus aureus* by 5.1~5.4 logs reduction at 5 hours after the atomization, but no distinctive efficacy was observed against other microorganisms. On the other hand, 300 ppm caused a significant reduction of the bacterial counts for all the microorganisms at 5 hours after the atomization ($P < .001$ vs purified water). The same results were observed in the environment with the air conditioning turned off. **Conclusions:** Our data suggest that CLFine effectively disinfects pathogenic microorganisms and can contribute to maintaining the hygienic environment of hospital rooms. This study was funded as contracted research by NIPRO Corporation with the approval of the ethics committee (study no. 21229).

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Contamination of the geriatric medicine outpatient rehabilitation gym environment and the effectiveness of our current disinfection methods with patient hand hygiene practices

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Objectives: To quantify the microorganism burden of rehabilitation gym equipment surfaces as well as to assess the effectiveness of patient's practice of hand hygiene and our current disinfection methods to reduce burden and transmission of microorganisms during rehabilitation sessions. **Methods:** A prospective study of environmental contamination using microbiology culture in Khoo Teck Puat Hospital Geriatric Medicine Outpatient Rehabilitation Gym. **Results:** For both the control and intervention group, the total aerobic bacterial count on the gym equipment after patient use is significant and increase up to 360 CFU per swab. In the control and intervention groups, the total aerobic bacterial counts on the gym equipment before patients' use were negligible (<10 CFU per swab). The total aerobic bacterial count of the equipment remained negligible (<10 CFU per swab) after patient use and immediate disinfection. We detected discrepancies between the results of the total aerobic bacterial count after patient use between the control and intervention groups. **Conclusions:** Outpatient rehabilitation gyms are potential reservoirs of microorganisms, which may further contribute to the transmission of healthcare-associated pathogens. In this study, an intervention in which cleaning equipment was wiped with alcohol wipes was effective in reducing microorganism transmission in the rehabilitation gym environment and should be considered as part of our infection control strategy. The additional step of involving our patients in using hand rub before the start of their therapy sessions can provide additional benefit in reducing microorganism transmission only if patients adhere to the World Health Organization (WHO) recommended 7 steps of proper hand rub. Good patient education on hand hygiene is equally as important as that for healthcare professionals to control environmental contamination.

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Transcriptome meta-analysis revealed concordant molecular signatures between acne skin and PM2.5-treated in vitro skin models

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Objectives: Cohort and epidemiology studies have previously revealed potential associations between air pollution exposure and acne vulgaris. However, the molecular mechanisms that drive these associations are not currently well understood. In this study, we compared the molecular signatures of acne and PM2.5-exposed skin to infer whether common underlying biological mechanisms exist. **Methods:** Acne microarray data sets were downloaded from GEO. RMAExpress was used for microarray normalization, and TMeV was used to identify differential expressed genes (DEGs). A random-effects model in MetaVolcanoR was used to determine fold changes and P values. DEGs of PM2.5-exposed skin-cell models were obtained from the literature. DEGs were compared using GeneOverlap and