

Department, Hung Vuong Hospital, Ho Chi Minh City, Vietnam; Hang Phan, Vice President, Hung Vuong Hospital, Ho Chi Minh City, Vietnam

**Objectives:** During the COVID-19 surge, our hospital was overloaded due to the increasingly high volume of patients and lack of resources, which resulted in difficulties in complying with infection control and prevention (IPC) practices. In this study, we estimated healthcare-associated infection (HAI) incidence and relevant factors among COVID-19 patients in Hung Vuong hospital. **Methods:** This study included all SARS-CoV-2-positive adult patients hospitalized between September 1 and October 31, 2021. The Centers for Disease Control and Prevention definition of HAI in the acute-care setting was used. **Results:** Among 773 patients, 21 (2.72%) developed 26 separate HAIs. The cumulative days of hospitalization were 5,607. The incidence of HAI among COVID-19 patients was 4.64 per 1,000 days of hospitalization. The most frequent HAI was clinically defined pneumonia (46.2%), for which the ventilator-associated pneumonia (VAP) rate was 41.9 per 1,000 ventilator days. Among 21 positive cultures, the most frequently isolated microorganisms were *pseudomonas aeruginosa*, *Klebsiella pneumoniae*, and *escherichia coli*. HAIs were significantly associated with the number of central-line days (OR, 1.74; 95% CI, 1.33–2.78), the number of indwelling urinary catheter days (OR, 1.46; 95% CI, 1.05–2.03), the length of administration days (OR, 1.25; 95% CI, 1.07–1.45), antibiotics use prior to HAIs (OR, 0.01; 95% CI, 0.01–0.21), and the number of nasal cannula days (OR, 0.62; 95% CI, 0.44–0.85). **Conclusions:** COVID-19 makes patients more vulnerable and may require more invasive procedures, increasing the infection risk by opportunistic pathogens like gram-negative Enterobacteriaceae. Hence, fundamental IPC recommendations should be strongly implemented.

*Antimicrobial Stewardship & Healthcare Epidemiology* 2023;3(Suppl. S1):s6–s7  
doi:10.1017/ash.2023.21

**Subject Category:** COVID-19

**Abstract Number:** SG-APUSIC1201

**Knowledge and awareness of healthcare workers in a residential care home regarding the use of personal protective equipment (PPE) during the COVID-19 pandemic: A pilot study**

Cho Yan Chung, Education University of Hong Kong, Hong Kong, China; Chau Ho Yin, Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, China; Chu Hoi Fung, Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, China; Chung Cho Yan, Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, China; Fong Long Kit, Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, China; Foo Siu Fung, Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, China; Ho Tsz Yan, Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, China; Or Pui Lai Peggy, Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, China; Ching Tai Yin Patricia, WHO Collaboration Centre for Infectious Disease Epidemiology and Control, School of Public Health, The University of Hong Kong, Hong Kong, China

**Background:** According to the World Health Organization (WHO), as of April 9, 2022, there had been 494,587,638 confirmed COVID-19 cases and 6,170,283 deaths reported worldwide. In Hong Kong, in recent outbreak, ~55% of confirmed cases were residential care home (RCH) residents and >800 staff were infected. In 2016, ~15% of people aged ≥80 years were living in residential care homes. **Objectives:** To assess healthcare worker (HCW) knowledge level and attitudes about PPE use in residential care homes. **Methods:** This cross-sectional study, included participants who worked in the residential care homes, registered as healthcare workers (HCWs). HCWs who were part-time staff or worked <3 months in the residential care home were excluded. Ethical review approval from the faculty research committee of the university was obtained in January 2022. The Knowledge, Attitude, Practical (KAP) questionnaire was adapted. The questionnaire has 33 items pertaining to knowledge, attitude, and

practice regarding PPE. **Results:** In total, 50 questionnaires were received; 32 respondents (64%) were female and 18 (36%) were male. Nearly half of the participants had completed a high diploma course, and 32% had graduated from secondary school. Using ANOVA, there were no significant differences of education level of participants or participant knowledge level of PPE [ $F(2,47) = .181$ ;  $P = .835$ ], attitudes [ $F(2,47) = 1.995$ ;  $P = .147$ ] and practice [ $F(2,47) = .459$ ;  $P = .635$ ]. The Pearson correlation was used to measure the relationship between knowledge level and PPE practices. Our results indicated a significant difference and moderate correlation between knowledge level and PPE practice among HCWs. **Conclusions:** Knowledge level does not directly affect HCW practice regarding PPE. PPE practice skills have been influenced by various factors during the pandemic situation, such as availability of PPE, manpower, workload, and communication.

*Antimicrobial Stewardship & Healthcare Epidemiology* 2023;3(Suppl. S1):s7  
doi:10.1017/ash.2023.22

**Subject Category:** COVID-19

**Abstract Number:** SG-APUSIC1062

**The role of active surveillance in the primary-care setting during a pandemic in Singapore**

Chau Chain Yan, Singapore National University Polyclinics, Singapore; Giselle Li, Singapore National University Polyclinics, Singapore; Lim Min Wei, Singapore National University Polyclinics, Singapore

**Objectives:** In response to the COVID-19 pandemic, primary care swiftly transformed and re-established patient flow in clinics to red, orange, and green zones based on a set of screening criteria. To further manage the influx of suspected COVID-19 patients and their needs safely, a list of surveillance audit criteria was developed to ensure good infection control standards. **Methods:** The infection control team prepared the surveillance audit criteria based on recommended CDC/WHO guidelines for pandemic preparedness. These criteria were contextualized to the primary-care polyclinic setting. The surveillance audit criteria were grouped according to their category: screening, triage, early recognition and source control, inventory management of personal protective equipment (PPE), infection control measures in the red zone, precautionary measures during collection of nasopharyngeal swabs and environmental cleaning and disinfection for premises in the red, orange, and green zones, respectively. The infection control liaison nurses in each polyclinic were trained to use the checklist to ensure consistency in interpretation of the criteria. **Results:** Surveillance audits were conducted biweekly in the first 3 months then monthly once the compliance rate was steady at 90%–100% for all categories. The overall average compliance rate since commencing in March 2020 for all polyclinics was sustained at 90%–100%. Common findings included inappropriate use of PPE (eg, self-contamination during removal of gown or wrong sequence of doffing), inadequate ventilation, and inadequate cleaning processes. All findings were corrected immediately, and staff education was provided. **Conclusions:** Primary care plays an important role during a pandemic. It is essential that both patients and healthcare workers in the primary care setting are protected from infection risk during a pandemic. Having a good surveillance audit process helps ensure that primary care services can continue for the general population. Surveillance is an essential component of the health system's response to a pandemic.

*Antimicrobial Stewardship & Healthcare Epidemiology* 2023;3(Suppl. S1):s7  
doi:10.1017/ash.2023.23

**Subject Category:** COVID-19

**Abstract Number:** SG-APUSIC1089

**Environmental screening of SARS CoV-2 to support an outbreak investigation in Sardjito Hospital, Yogyakarta, Indonesia**

Khairul Bariyah, Sardjito Hospital, Yogyakarta, Indonesia; Andaru Dahesihdewi, Sardjito Hospital, Yogyakarta, Indonesia; Yunika Puspa Dewi, Sardjito Hospital, Yogyakarta, Indonesia; Raeni Nursanti, Sardjito Hospital, Yogyakarta, Indonesia

**Objectives:** Many healthcare workers and patients in intensive care units of Sardjito Hospital, a referral and academic hospital in Yogyakarta,