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Published by the US Centers for Disease Control and Prevention. All patients hospitalized for COVID-19 were enrolled in this assessment of HAI risks, pathogens, and outcomes. Results: Among 1,454 sampled patients, 391 patients had 423 HAIs (27.1%). The highest proportion occurred in ICUs, with 422 HAI patients (34.1%). Pneumonia (n = 331, 78.3%) and bloodstream infections (n = 55, 13.1%) were the most common HAIs. Multidrug-resistant (MDR) bacteria, such as Klebsiella pneumonia (27.9%) and Acinetobacter baumannii (25.3%), were the most commonly isolated organisms. Ventilators and central venous catheters were independently associated with HAIs. Regarding the mortality rates, 55% of deaths occurred in intensive care units. Patients with HAIs (70.3%) were twice as likely to die compared to patients without HAIs (38.8%). HAIs leading to septic shock almost tripled mortality. Guidelines and procedures to prevent and control HAIs caused by MDR bacteria as well as training and monitoring on aseptic-compliant techniques during invasive clinical procedures are needed.

Subject Category: Healthcare-Associated Infection (HAI) Surveillance
Abstract Number: SG-APSIC1100

Healthcare-associated infections in COVID-19 patients in Vietnam: Are we able to respond better?
Thu Truong Anh, Bach Mai Hospital, Hanoi, Vietnam; Dao Xuan Co, Bach Mai Hospital, Hanoi, Vietnam; Do Ngoc Son, Bach Mai Hospital, Hanoi, Vietnam; Pham The Thach, Bach Mai Hospital, Hanoi, Vietnam; Luong Quoc Chinh, Bach Mai Hospital, Hanoi, Vietnam; Huynh Xuan Nghiem, Hung Yen Hospital, Ho Chi Minh, Vietnam; Nguyen Dai Vinh, Hoa Vang District Medical Center, Danang, Vietnam; Truong Thai Phuong, Bach Mai Hospital, Hanoi, Vietnam; Pham Hong Nhung, Bach Mai Hospital, Hanoi, Vietnam; Le Duc Nhan, Da Nang Hospital, Danang, Vietnam; Tran Thi Dung, Bach Mai Hospital, Hanoi, Vietnam; Tran Thi Nga, Bach Mai Hospital, Hanoi, Vietnam; Nguyen Quang Tuan, Bach Mai Hospital, Hanoi, Vietnam

Objectives: Studies have revealed that a relatively high incidence of severe infection and mortality in COVID-19 patients is attributed to healthcare-associated infections (HAIs). We implemented a study in 2 field hospitals dedicated to COVID-19 treatment in Da Nang, Vietnam (July–August 2020), and Ho Chi Minh City, Vietnam (August–October 2021), to identify pathogens, risk factors, and outcomes associated with HAIs.

Methods: We applied a prospective study tool to estimate HAI incidence among 1,454 patients. HAIs are diagnosed and ascertained using surveillance criteria established by the US Centers for Disease Control and Prevention. All patients hospitalized for COVID-19 for at least 2 days were enrolled in this assessment of HAI risks, pathogens, and outcomes. Results: Among 1,454 sampled patients, 391 patients had 423 HAIs (27.1%). The highest proportion occurred in ICUs, with 422 HAI patients (34.1%). Pneumonia (n = 331, 78.3%) and bloodstream infections (n = 55, 13.1%) were the most common HAIs. Multidrug-resistant (MDR) bacteria, such as Klebsiella pneumonia (27.9%) and Acinetobacter baumannii (25.3%), were the most commonly isolated organisms. Ventilators and central venous catheters were independently associated with HAIs. Regarding the mortality rates, 55% of deaths occurred in intensive care units. Patients with HAIs (70.3%) were twice as likely to die compared to patients without HAIs (38.8%). HAIs leading to septic shock almost tripled mortality. Guidelines and procedures to prevent and control HAIs caused by MDR bacteria as well as training and monitoring on aseptic-compliant techniques during invasive clinical procedures are needed.

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The role of infection control activities on healthcare-associated infections during 2017–2021 at intensive care units in Cho Ray Hospital
Dung Tien Phan, Cho Ray Hospital, Ho Chi Minh City, Vietnam; Phan Tien Dung, Cho Ray Hospital, Ho Chi Minh City, Vietnam; Le Thi Ven, Cho Ray Hospital, Ho Chi Minh City, Vietnam; Nguyen Anh Ly, Cho Ray Hospital, Ho Chi Minh City, Vietnam; Tran Thi My, Cho Ray Hospital, Ho Chi Minh City, Vietnam; Tran Thi Thuy, Cho Ray Hospital, Ho Chi Minh City, Vietnam

Objectives: Healthcare-associated infections (HAIs) are one of the greatest challenges and concerns in Vietnam and around the world. Many studies have shown that HAIs may result in an increase in hospital length of stay, antibiotic use, multidrug-resistant organism (MDROs) infections, treatment costs, and mortality. Therefore, in the past 5 years, the Department of Infection Control of Cho Ray Hospital has carried out many infection and prevention control (IPC) activities to reduce the rates of HAIs and MDRO infection. We evaluated IPC activities and results achieved in these efforts at Cho Ray Hospital during 2017–2021. Methods: We described the implemented IPC activities and retrospectively collected data from HAIs surveillance reports during 2017–2021 for 3 intensive care units (ICUs): ICU-B, ICU-D, and the NICU. Results: In the past 5 years, we implemented synchronous IPC activities, including promoting hand hygiene training and surveillance, environmental cleaning surveillance, carrying out improvement projects such as a ventilator-associated pneumonia (VAP) prevention bundle, an MDRO prevention bundle, and an environmental cleaning quality improvement project. Many positive results were achieved, although a slight increase in the HAI incidence occurred in 2021 due to the COVID-19 pandemic. Overall, the hand hygiene compliance rate increased from 49.7% to 83.8%. The rate of HAIs per 1,000 patient days decreased from 3.4 to 2.4. The VAP rate fell from 30.5 to 17.2 per 1,000 patient days, and the central-line–associated bloodstream infection (CLABSI) rate decreased gradually from 5.4 to 2.4 per 1,000 patient days. The catheter-associated urinary tract infection (CAUTI) rate decreased from 2.9 to 0.9 per 1,000 patient days, and the MDRO infection rate decreased significantly from 32.7 to 11.3 per 1,000 patient days. Conclusions: The synchronous implementation of HAI prevention bundles promoting hand hygiene and environmental...