According to the Centers for Disease Control and Prevention (CDC), one in 31 patients in an acute care center will contract an infection associated with their medical stay. These healthcare-associated infections (HAIs) often require prolonged treatment, compromise patient outcomes, and increase the length and cost of the hospital stay. Hand hygiene is a crucial step in restricting the spread of disease and infection within the healthcare setting. Hand hygiene performed with an alcohol-based hand rub is both the first choice and most commonly used hand hygiene method in the hospital setting. Although hand hygiene is a key procedure to limit the spread of HAIs, most healthcare workers comply with hand hygiene guidelines less than half of the time. Reasons for healthcare workers not complying with hand hygiene guidelines can include busy work environment, lack of access to appropriate product, and skin irritation. The COVID-19 pandemic has reinforced the importance of proper hand hygiene in limiting the spread of infection. COVID-19 has caused healthcare facilities to enact stringent hand hygiene practices, including the frequent use of an alcohol-based hand rub, as well as masks and other personal protective equipment. In 2009, more rigorous hand hygiene practices were also implemented to combat the H1N1 pandemic in Chile. Interestingly, Labarca et al. found that hand hygiene rates improved with training during the H1N1 pandemic, but declined to previous rates after the pandemic ended. Taken together, a decline in hand hygiene rates across or after a pandemic could have negative implications for HAIs.

This research project explores how the COVID-19 pandemic may have influenced the rates of hand hygiene compliance in an acute care setting.

Deidentified hand hygiene data will be obtained from a local acute care setting. Changes in hand hygiene rates due to COVID-19 were determined by comparing hand hygiene rates in months prior to the COVID-19 pandemic (May 2019 – Jan. 2020) with rates during the COVID-19 pandemic (May 2020 – Jul. 2021). Data from February 2020-April 2020 were omitted from the analysis due to variably of the adjustment period at the beginning of the pandemic.

Hand hygiene is imperative in the healthcare setting, as it reduces spread of infection. Hand hygiene protects patients, healthcare workers, family members, and other hospital staff. The COVID-19 pandemic brought to light the importance of reducing the spread of disease and protecting others and oneself from illness. Through the course of the pandemic, the importance of hand hygiene was illuminated. However, the COVID-19 pandemic also put the healthcare system under immense stress, with increased patient loads, lack of equipment, and increased overall emotional distress of staff. These competing influences could have resulted in both increases or decreases in hand hygiene. Examining the effects of major environmental change on the practices of healthcare workers can bring further understanding of the stresses and responses of working in healthcare.

Our data show a statistically significant increase in hand hygiene compliance of physicians through the course of the pandemic. More research should be performed to assess hand hygiene compliance as the COVID-19 pandemic has continued. Furthermore, questionnaires and surveys could be distributed to learn more about healthcare worker’s response to the COVID-19 pandemic.

References