

Role of environmental cleaning in the control of multidrug resistant *Acinetobacter Baumannii* outbreaks in an intensive care unit

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ABSTRACT

Introduction: In May 2022, Multidrug-Resistant *Acinetobacter Baumannii* (MRAB) cases from Intensive Care Unit (ICU) Hospital Sungai Buloh rose from 2% to 9.3%. We describe the role of environmental cleaning in reducing the MRAB incidence in 2 months. **Materials and Methods:** The monthly incidence of MRAB per 100 admissions is obtained through lab based surveillance. The numerator is the number of new cases of MRAB in ICU which is divided by total ICU admissions and multiplied by 100. Daily cleaning audit was done by putting glo germ powder on high touch surfaces and using an ultraviolet torch light to detect signs of cleaning the next day. For the ventilator care bundle (VCB) compliance, we check the nurses' practice and documentation. After each audit, immediate feedback is given to the staff and information is shared with ICU and IPC leaders every 2 weeks. **Results:** Pre-intervention, the daily cleaning compliance of nurses and cleaners were only 68% and 38% respectively, whereas for VCB it was only 74%. Post-intervention, the daily cleaning compliance achieved 84-100% in subsequent audits, whereas there is no change in VCB compliance. The MRAB rate dropped to 1.3% after 1 month, and remained so until now. **Conclusion:** Advocating good daily cleaning compliance has successfully reduced MRAB cases in ICU.

Keywords: MRAB, acinetobacter, intensive care, audit, intervention

COVID-19 mortality rate during period of delta and omicron predominance in Malaysia: A descriptive study

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ABSTRACT

Introduction: COVID-19 was the most feared infectious disease in the last few years which caused a high number of mortalities. Hospital Sungai Buloh was the main COVID-19 referral centre since the pandemic started. A large database of COVID-19 patients was available for this study and used to describe the rate of mortality among patients who were 40 years and above; who were admitted to Hospital Sungai Buloh during periods of Delta and Omicron predominance. **Materials and Methods:** Medical records of COVID-19 patients who were admitted in Hospital Sungai Buloh during the period of Delta and Omicron predominance were reviewed retrospectively and analyzed. **Results:** Patient mortality during the period of Delta predominance from May-July 2021 (755 patients) was higher compared to the period of Omicron predominance from January-April 2022 (180 cases). Majority of the deceased patients were male (59.1%). **Conclusion:** This descriptive study serves as a baseline research for more studies in future using the same dataset. More data cleaning is required to produce more results.

Keywords: COVID-19, Mortality, Omicron, Delta