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ABSTRACT

Title of Abstract : Description of Airborne Microbial Counts in Operating Rooms at

Hospitals in East Kalimantan, 2024

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Background: Air quality in operating rooms is a crucial factor in preventing postoperative infections (operating Site Infections). One of the main indicators for assessing air quality is the airborne bacterial count, which indicates the number of microorganisms in the air (CFU/m³).

Objective: This study aims to describe the airborne bacterial count in operating rooms across several hospitals in East Kalimantan in 2024.

Research Methods/ Implementation Methods: descriptive design

Results: Based on the measurements, 100% of empty operating rooms, 80% of operating rooms in use, and 75% of ultraclean operating rooms did not meet the required standards. Hospital F (IKN) recorded the highest airborne bacterial count at 477 CFU/m³, while the lowest was found at Hospital D (Kutai Kertanegara) with 5 CFU/m³.

Conclusion/Lesson Learned: The results showed that most operating rooms did not meet the air quality standards as stipulated in the Indonesian Ministry of Health Regulation No. 2 of 2023.

Keyword: airborne bacterial count, operating room, air quality, hospital, East Kalimantan