

**00527 Nurses' Knowledge, Perception and Practices in Prevention and Transmission of Methicillin-resistant Staphylococcus Aureus in an Acute-care Setting: A Cross-sectional Descriptive Study.**

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**Aims:** Methicillin-resistant Staphylococcus aureus (MRSA) nosocomial infection is a growing concern in acute care settings in Singapore. MRSA leads to increased direct cost for hospital services and higher mortality rate.

The rate of nosocomial MRSA is influenced by health care providers' level of compliance to standard precautions. This study aimed to investigate perceptions, knowledge (in prevention and management of MRSA) and barriers that affect compliance with standard precautions among acute care nurses.

**Methodology:** The study was carried out in MRSA cohort wards, general wards, specialist outpatient clinics, acute care clinic and radiology departments in a general hospital in Singapore.

A cross sectional, descriptive survey was conducted. A convenient sample of nurses who performed direct care, and who have previously managed MRSA patients were recruited. A validated questionnaire was used to elicit data on demographics, knowledge, perceptions on MRSA prevention and self-reported practice adherence.

**Result:** Two hundred and seventy one nurses responded to the survey. There were 249 (92%) nurses who strongly agreed that preventive behaviours reduced MRSA transmission. Only 129 (47.6%) nurses were aware that MRSA can live on surfaces for days and 113 (41.7%) knew that alcohol rubs are the most effective hand hygiene method for killing MRSA. However, only 169 (62.4%) agree that they have received meaningful education regarding MRSA. The findings showed that there was no statistically significant difference in the participants' perception, knowledge and practices amongst staff with different years of working experience.

**Conclusion:** This study found gaps in knowledge, and the misperceptions of MRSA transmission. It is important to close these gaps and improve adherence to infection control practices. The results suggested for a need to address the barriers, improve educational interventions and effective infection control programs, so that the nurses could adequately manage and prevent transmission of MRSA.