

**Title: SETTLEMENT IN METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS IN PATIENTS OF INTENSIVE CARE UNITS TEACHING HOSPITAL OF MINAS GERAIS**

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**Abstract:**

One of the most worrying problems of public health in Brazil and worldwide are the Infections Related to Health Care (IRAS), which are those acquired during caring. In the hospital environment, especially in Intensive Care Units (UTI's), the emergence of multi-resistant bacteria has been progressive and major threat, so the spread of methicillin-resistant *Staphylococcus aureus* (MRSA) is becoming a major challenge. Due to the increasing number of these infections it is necessary the presence of trained and aware professionals about the importance of hand hygiene. The aim of the study was to identify the prevalence of MRSA in epidemiological surveillance cultures of nasal swab samples from hospitalized patients. This is a retrospective descriptive cross-sectional study which analyzed the results of nasal swab cultures collected weekly for inpatients in UTI's adult, pediatric and neonatal of a Hospital of Minas Gerais Education in the period January-July 2014 in recorded in the hospital's microbiology lab books. This study was approved by the Research Ethics Committee opinion of the number 948 342. 461 nasal swab samples were analyzed, with 388 from 73 adult UTI and the UTI and pediatric, 44 (9.5%) samples were positive for MRSA, 40 (10%) of adult ICU and 4 (5.5 %) of neonatal and pediatric ICU. The prevalence of MRSA-colonized patients in this study experienced similar value to other work, thus showing the importance of the implementation of decolonization through baths with chlorhexidine 4% and applying mupirocin ointment (nasal, axillary and inguinal). Hospitalized patients colonized by MRSA are the main reservoir and source of spread, which reinforces the importance of microbiology laboratory service, the need for epidemiological surveillance cultures and decolonization for anticipating or investigation of outbreaks of infection in a hospital.

**Keywords:** Methicillin-resistant *Staphylococcus aureus*, epidemiology, surveillance