**Risk Factor of *Methicillin Resistant Staphylococcus aureus (MRSA)* Colonization at Surgical Ward RSUD Dr. Soetomo Surabaya**

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# *ABSTRACT*

This study was conducted as descriptive observational analytic cross sectional study and the sample size is taken by purposive sampling technique. Of all patients admitted and then discharged from the surgical wards at Dr. Soetomo Hospital Surabaya were included in this study. Subjects were collected as the inclusion and exclusion criteria for this study. Clinical specimen of MRSA colonization was taken by nose swab, throat swab and wound swabs were put in phenyl mannitol broth, incubated 370C overnight on the next day were subcultured on chromogenic Brilliance MRSA 2 Agar. The specific colony of coarse blue colony color was suspected of MRSA, then subcultured on Mannitol Salt Agar (MSA) plate, incubated 370C overnight. For confirmation *S.aureus* colonies which grown yellow. The further laboratory examinations were then followed such as Staphyrex coagulase testing catalase testing. The patients data were extracted from medical record by using case report form (CRF). The study was start Mei 2015 until July 2015, and has been collected 143 patients admitted and then discharged from the hospital. The total 143 patients, 9 patients (6,3%) have been identified as patients with MRSA when admission, which MRSA isolates 7 from nose, 2 from throat swab and 1 from wound swab. 10 patients (7,0%) have been identified as patients with MRSA when discharge, which MRSA isolates 7 from nose, 4 from throat swab and 1 from wound swab. Prior hospitalization associated with the incidence of MRSA colonization in patients before admission, but not a risk factor. Surgical intervention, antibiotic use, length of hospitalization and the presence of comorbidities not related to the incidence of MRSA colonization in patients when discharge at surgical wards Dr Soetomo Hospital Surabaya.Contact with patients are knowing being a risk factor and spreading MRSA at surgical wards Dr Soetomo Hospital Surabaya. Surgical intervention, antibiotic use, comorbid disease and prior hospitalization are not risk factor for MRSA colonization at surgical wards Dr Soetomo Hospital Surabaya.

***Keyword* :** *MRSA, colonization, surgical, Dr Soetomo Hospital*

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