

Short Communication

## Prevalence of Meticilin - resistant *Staphylococcus aureus* isolated from hand and nasal of hospital health worker

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### Abstract

**Background and Objective:** Methicillin-resistant *Staphylococcus aureus* is a common pathogen responsible for health-care-related infections. This study was done to determine the prevalence of Meticilin - resistant *Staphylococcus* isolated from hand and nasal of hospital health worker.

**Methods:** This descriptive study was conducted on 148 health workers in teaching hospitals in Sari, northern Iran during 2011-12. Samples were collected from fingers and noses and were cultured on mannitol salt agar immediately. Suspected colonies were identified using Gram staining, catalase and coagulase tests. Susceptibility testing was performed by disk diffusion method. Methicillin resistant strains were determined using micro dilution broth method.

**Results:** *Staphylococcus aureus* was observed in 24 (16.2%) of individuals. 9.5% of population was resistant to Methicillin. The high portions of *Staphylococcus aureus* carrier were in the operation room, angiography and internal pediatric ward health worker. Methicillin *Staphylococcus aureus* resistant were more common in nasal samples of the operation room personal and angiography ward health worker. All strains were sensitive to Vancomycin and Chloramphenicol and resistant to Penicillin and Amoxicillin.

**Conclusion:** In this study the prevalence of the *Staphylococcus aureus* in teaching hospitals health worker was low while *Staphylococcus aureus* resistant to methicillin was higher than other reports in Iran.

**Keywords:** *Staphylococcus aureus*, Methicillin, Health worker

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