

## Frequency of Vancomycin Resistance Genes (vanA,vanB) in *Staphylococcus aureus* Isolated From Personals of Jahrom Hospitals

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**Background & Objectives:** *Staphylococcus aureus* is a frequent cause of infections in both the community and hospital. Multidrug resistant strains are spreading in hospital by personals that have contact with infected patients. The aim of this study was determination of prevalence of nasal carriage of vancomycin-resistant *Staphylococcus aureus* (VRSA) among personals at from Jahrom hospitals personals.

**Methods:** This cross-sectional study was conducted from July to April 2011-2012. Nasal swabs were taken from 417 randomly selected from health care and health service workers of Jahrom (Motahhari, Pymanieh) hospitals. After identification of *Staphylococcus aureus* by biochemical and microbiological tests, all *S. aureus* isolates were examined for the existence of the vanA and vanB gene by total DNA extraction and PCR.

**Results:** *Staphylococcus aureus* were carried by 45 of personals (11%) in their noses. The results of PCR were as follow: 28 cases (62%) vanA positive, 29 cases (64%) vanB positive. In 18 cases (40%) both vanA and vanB were positive.

**Conclusion:** The results showed that the frequency of vancomycin resistance genes (vanA,vanB) is very high in *Staphylococcus aureus* strains isolated from the personals of these hospitals, so it should be controlled, Managed and treatment of the personals to prevention of development and spread of vancomycin-resistant *Staphylococcus aureus* (VRSA).

**Keywords:** *Staphylococcus aureus*; Carriers; Hospital Personnel; Vancomycin Resistance