



Nasal Carriage of Staphylococci in Medical Personnel, Sanitary Workers and Non-Medical Personnel

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SUMMARY. In hospitals, the most important reservoirs of staphylococci are either infected or colonized patients, while hospital personnel can also serve as reservoirs, they may harbor the organism for longer periods and serves as a link for transmission. The effect of clinical exposure on prevalence and antimicrobial susceptibility is determined by comparing data collected from medical personnel (MP), sanitary workers (SW) and non-medical personnel (NMP). Nasal swabs were randomly taken from medical, non medical and sanitary workers, cultured on 5 % sheep blood agar. The isolates were analyzed by using standard microbiological methods. The sensitivity of isolates was carried out by Kirby Bauer disk diffusion technique. The study revealed high rate of *S. aureus* colonization, while low rate of coagulase negative staphylococci colonization in medical personnel (60 %, 32 %) and sanitary workers (59 %, 36 %) as compared to non-medical personnel (28 %, 68 %) (control group), suggesting that exposure to hospital isolates may alter the colonization profile. The *S. aureus* strains isolated from medical staff compared with NMP isolates were significantly more resistant to amikacin ($p = 0.047$), while there was non-significant ($p > 0.05$) difference in susceptibility profile against oxacillin, ciprofloxacin, fusidic acid, penicillin and doxycycline. Our study revealed that the clinical exposure might have an effect on nasal carriage and anti-microbial susceptibility of *S. aureus*.

KEY WORDS: Clinical exposure, Medical personnel, Non-medical personnel, Sanitary workers, Nasal carriage, Antibiotic susceptibility.

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