

TITLE: PRELIMINARY EVALUATION OF THE FREQUENCY OF *Acinetobacter baumannii* ISOLATE AT THE BUCAL AND NASAL CAVITY FROM UNIVERSITY STUDENTS.

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ABSTRACT:

Acinetobacter baumannii is a coccobacillus, non-fermenter glucose, negative oxidase, found in the environment, soil and water. It has also often been isolated in the hospital environment, colonizing or causing infections in critical patients, due to its prolonged ability to survive on abiotic surfaces, resisting dehydration and disinfectants. In addition, due to its outstanding resistance to antimicrobial therapy, it has been declared by the World Health Organization as the number one critical priority pathogen in a list of pathogens in urgent need of new treatment solutions. However, the participation of this species in the microbiota of healthy individuals is poorly reported, still controversial and lacking in studies. Thus, the present study aimed to investigate the presence of *A. baumannii* in samples collected from the oral cavity and nasal mucosa of individuals from the community. The sample group included health academics from two public and private universities in the city of Maringá - Paraná, over 18 years old, excluding smokers and pregnant women. The samples were obtained by swab friction in the oral mucosa and in the nasal vestibule and were isolated in MacConkey agar, from which non-fermentative colonies of lactose were selected, with morphological characteristics of the genus *Acinetobacter* and primarily identified by biochemical tests of oxidation, negative motility and growth at 44°C, with the identification of the species *A. baumannii*. Posteriorly, the samples identity were confirmed by BD Phoenix™ Automated Microbiology System. Until the moment, 90 students have been sampled, 83.3% (75/90) of Dentistry course and 16.7% (15/90) of the Biomedicine course. Preliminary results showed the presence of *A. baumannii* in 11.1% (10/90) of the sampled individuals, considering both sites, being detected in 4.4% (4/90) of oral samples and 5.6% (6/90) from nasal specimens and, in only 1.1% (1/90) of the individuals, presented the concomitant bacteria at both sites. Thus, our preliminary results suggest that the microorganism is present in the buccal and nasal sites and, therefore, that community individuals may also be a potential reservoir for *A. baumannii*.

Keywords: *Acinetobacter baumannii*, community, hospital environment, oral cavity, nasal mucosa, resistance.