

TITLE: EVALUATION OF THE SUSCEPTIBILITY TO ANTIMICROBIANS OF *Staphylococcus* spp. ISOLATED FROM A RISK POPULATION LIVING IN A RURAL SETTLEMENT OF PONTAL DO PARANAPANEMA

AUTHORS: ALVES, MCA; GUARNIER, JVL; ROSA, RS; SOUZA, GM; NASCIMENTO, MU; CARNEIRO, LEP; PEREIRA, VC

INSTITUTION: UNIVERSIDADE DO OESTE PAULISTA, SÃO PAULO, SP (R. JOSÉ BONGIOVANI, 700 – CIDADE UNIVERSITÁRIA, 19050-920, PRESIDENTE PRUDENTE–SP, BRAZIL)

ABSTRACT:

The Pontal do Paranapanema region houses an expressive number of rural settlements, which concentrate a population of approximately 5,454 individuals, many of which are living in poor housing conditions that associated with precarious hygiene conditions make them vulnerable to multiple infectious agents. This study aims to characterize the antibiotic resistance profile presented by *Staphylococcus* spp. isolated from a risk population living in a rural settlement from Pontal do Paranapanema/SP. Clinical and epidemiological data were collected from individuals younger than 18 and older than 60 years old. The samples were collected from the nasal cavities and oropharynx by using the “Stuard” methodology, and were performed in Baird Parker agar for the selection of *Staphylococcus* spp. Besides that, they were subjected to the disk diffusion test to determine antibiotic susceptibility. The samples were collected from 73 participants, which 81.10% were underage and the other 18.90% were older than 60 years old. Overall, were collected 148 samples, in which 36.3% were positive for the growth of *Staphylococcus* spp., among them, 80% were isolated from the nasal cavities and 20% from the oropharynx. In the midst of the children analyzed in the study, 52% were colonized by *Staphylococcus* spp., 6% colonized in Oropharynx and Nasopharynx concomitantly, meanwhile in the elderly, the percentage was 36%. Among all the individuals, 12.5% were hospitalized previously and 40% used antibiotics during the last year. Regarding visits in the urban environment, the highest percentages are between the fortnightly visits with 32.5%, followed by weekly visits with 27.5%. In relation to the antibiotics analyzed, the ones that presented higher resistance were: Erythromycin with 56.56%, Penicillin 69.8% and Clarithromycin 62.26%. In addition to this data, the resistance of Oxacillin and Cefoxitin were also analyzed, in which 39.62% and 15.09% were resistant to these antibiotics, respectively, and 13.20% showed concomitant resistance. The study is important because, as this population lives in precarious conditions of hygiene and sanitization, those people are vulnerable to infections by opportunistic microorganisms, and with the obtained data it will be possible to present new information to these individuals and assist them, in order to generate a positive impact for that population.

Keywords: rural settlements, *Staphylococcus* spp., colonization, resistance, antimicrobians

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