

## MICROBIOLOGICAL EVALUATION OF MATS IN CLINICAL SCHOOL IN THE CITY OF UBA-MG

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### ABSTRACT:

Health services aims to help at the prevention and treatment of diseases, which concern humans, are the physiotherapy sessions among them. It is necessary clean place and free of pathogens to insure the most successful therapy that might bring harm to the patient and the physiotherapists. Thereunto, it is so much important the cleaning maintenance and sterilization of stretchers, mattresses, and all objects used during the procedures. Among fomites, the mattress has direct contact with the patient's skin, therefore it has a high potential to keep and spread pathogens. This way, the routine of cleaning and sterilization of mattresses is an important evidence to eliminate microorganisms. Ethanol 70% (v/v) has action against many types of microorganisms, between them *Staphylococcus aureus*. The objective of this study is to perform microbiological analysis of stretchers used in physiotherapy care of a Clinical School of the city of Ubá-MG. It was collected samples at four stretchers sterilized before and after with 70% ethanol (v/v). The material was placed in Petri dishes containing blood agar. After the incubation period, the bacterial colonies with perceptible growth were submitted to analysis to detect the presence of *S. aureus*. It was pointed a bacterial growth in all litters before sterilization. After its execution, two stretchers showed growth of bacteria that were characterized as Gram-positive Cocci and gram-negative bacilli. The isolated colonies showed a yellow color, dry consistency, opaque density, beta-hemolytic, catalase and coagulase positive and ability to grow in agar mannitol, which indicates the presence of *S. aureus*. This showed resistance against 58% of the evaluated antimicrobials. Surfaces may represent a potential source of pathogenic microorganisms, which can be explained by inefficient hygiene methods. Ethanol 70% (v/v) was not fully effective, which implies the need for validation of aseptic process and training of staff responsible for its execution. It is important to note that other pathogens may be present in stretchers. Thus, it is essential to perform the cleaning and sterilization of utensils and equipment used in the care and treatment of patients to avoid the spread of many infections.

**Keywords:** sterilization, health care, *Staphylococcus aureus*

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