Title: SANITATION ASSESSMENT HELD IN 3D REUSABLE GLASSES AT CINEMA HALLS IN SALVADOR, BAHIA

Authors: Felix E.R.S.; Ferreira, R.A.

Institution: Bahia School of Medicine and Public Health (Av Silveira Martins, No. 3386, Cabula, 41150-100 - Salvador - BA.)

Abstract:

The microorganisms are present in many objects of our daily life, exposing us directly to contamination. Some of these offer the growth of various microbial species that can proliferate from the waste and greases that acquired during handling and interact, adhere to the surfaces available to the man carrying infections such as bacterial conjunctivitis, by *Streptococci, Staphylococci* and *Gonococci*, etc. The reuse of glasses for movies in three dimensions (3D) between the public at the cinemas has become a widely discussed topic in the world, considering the potential flow of opportunistic pathogenic microorganisms and derived from the reuse of this accessory. The cleaning done by them has left doubts, according to the health surveillance. This project is the result of partnership between the course of Bahia School of Biomedicine and the Health Surveillance in Salvador, that intends to develop a research on the cleaning / disinfection in 3D glasses used at the cinemas in Salvador, Bahia, considering the study of the microbiota present in surface of said accessory. So far we analyzed 195 random microbiological samples captured on the surface of 3D glasses in cinemas Salvador in batches of these sanitized accessories and recently used by the public. Swabs were used with a sterile Stuart to collect samples in the internal face of the lens and bridge in sanitized glasses and not cared for. In the laboratory, the microorganisms were captured and sown directly into blood Agar plates, and Sabouraud Agar to check for bacterial and fungi. Samples were considered qualitatively for the presence / absence of microorganisms, whose absolute and relative frequencies were statistically analyzed and compared to the 5% significance level. Of the 195 samples partially analyzed, 59.6% were positive for contamination, both for sanitized glasses and newly used. Of these, 37.5% had occurrence for *coagulase-negative Staphylococcus*, 5.8% for *S. aureus, K. pneumoniae* 5.8%, 3.8% *A. lowfii, Pseudomonas pseudoalcaligenes* 1.9%, 1.9% *Corynebacterium sp., Streptococcus sp* 1% and the 1.9% remaining was distributed proportionally among microorganisms such as *Enterobacter aerogenes, Micrococcus sp.*, and *B. cepacia Complex B mallei*. The Coagulase-negative *Staphylococcus*, present in most samples, corresponding to a type of low virulence, and common bacteria on the skin surface of the person being transmitted by direct contact or via objects; may take action in cases of pathogenic invasive surgery or injury to the skin. On the other hand bacteria such as *K. pneumoniae* and *S. aureus* which are pathogenic and may cause infections from simple as serious infections such as pneumonia. Studies are still ongoing, whose collection and analysis should also consider the evaluation of the efficiency of manual and mechanized cleaning employed by cinemas Salvador.

Keywords: micro-organisms; glasses; cinema; Salvador.