Abstract:

Alcohol and triclosan are commonly used in hand gels antiseptic preparations. Both substances have different mechanisms for preventing microorganism growth. The activity of alcohol and triclosan in a dosage form can be inactivated or increased by organic material.

The objective of this research is to evaluate the effectiveness of hand gels antiseptic preparations which are widely used in the market. Four different products of hand gels antiseptic preparations which contain ethanol or triclosan as active ingredients were selected (each two products for different active ingredient). The effectiveness of these antiseptic preparations were evaluated by Replica method. In this method 0.5 mL gel was spread over the hand palm, after 60 seconds contact, the thumb fingerprint was slightly tap to the nutrient agar media. The media was incubated at 37±0.5°C for 24 hours, and then the colonies were counted. The results showed that triclosan gel preparation could eliminate microorganism up to 89%, while the ethanol gel preparation up to 46%.