

## HAND HYGIENIZATION BY NURSING PROFESSIONALS: A BIBLIOGRAPHIC REVIEW

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**Abstract:** Considering that the hands of healthcare professionals are the main means of spreading cross-infections, it is imperative to emphasize the importance of adequate hand hygiene in hospital practice. This crucial measure must be implemented in all assistance instances to more effectively control this problem. The study focuses on the relevance of correct hand washing, addressing its influence on the quality of care, safeguarding the patient and the well-being of the healthcare professional. To support the research, a comprehensive bibliographic review was carried out in the DeCS, BVS and Scielo databases, using keywords such as: Hand hygiene and hospital infection. 20 articles on the topic were identified, of which, after thorough analysis, 5 were selected to be part of the research. The results highlight that hand hygiene opportunities contribute significantly to the patient safety culture. However, low adherence by the nursing team to awareness campaigns is observed, associated with an increase in contaminants among professionals in this category. In this context, it becomes clear that initiatives such as continuous educational campaigns are essential to promote the practice of hand hygiene, resulting in a substantial reduction in the risk of cross-contamination.

**Keywords:** Hand hygiene, hospital infection.

## INTRODUCTION

The main focus of this study is to address the importance of correct hand washing and how it interferes with the quality of care and protection of patients and healthcare workers, as even with the improvement of hospital hygiene methods, infections continue to be one of the causes most frequent occurrence of human diseases, even in countries with an advanced healthcare system (Araújo, Alves et al., 2016).

Therefore, it must be highlighted that the main vehicle for cross-infection is the hands of healthcare professionals, making correct hand hygiene a factor of great importance in hospital operations, and which must be implemented at all levels of care, to greater control of this problem (Araújo, Alves et al., 2016).

The lack of knowledge and implementation regarding correct hand hygiene has been a major problem in the daily lives of healthcare workers, as this action becomes one of the most important in terms of preventing care against hospital infections; multidrug resistance has been responsible for thousands of deaths and the main form of prevention is hand washing and antiseptics (Brum, Silveira and et al., september/december 2015).

Annually, multidrug resistance has been responsible for thousands of deaths in hospitalized patients and hand hygiene, according to the techniques, and carrying out antiseptics with 70% alcohol, as recommended by ANVISA and the World Health Organization, is the main way to reduce infections in healthcare environments (NATIONAL HEALTH SURVEILLANCE AGENCY, 2007).

Aiming to address the issue of correct hand hygiene and its influence on cases of hospital infections, this work is justified by analyzing and discussing reasons for lack of knowledge on the part of professionals on the subject and how to make improvements to this factor that interferes both in the well-being of the patient and that of the professional involved.

## METHODOLOGY

Standing out as more efficient for the situation, the methodology of a qualitative approach with an exploratory characteristic of scientific articles was selected. In this research, 20 scientific articles were read and 5 of these respective articles were selected, which directly address the subject of hospital

Study	Type of production/year	Study design	Objective	Methodology	Main results
	Article, 2022	Cross-sectional study. Cross-sectional studies are those in which cause and effect can be analyzed simultaneously and allow knowing whether there is a relationship between exposure and the condition studied.	The objective was to analyze the adherence of health professionals to the hand hygiene technique in a Coronary Care Unit	The research was carried out in the Coronary Care Unit of a tertiary level University Hospital. Data collection took place during the day and night.	A total of 498 hand hygiene opportunities were identified, with 190 actions carried out, resulting in 38.2% adherence, considering all participants evaluated in this study. Concerning the professional category, there was greater adherence to hand hygiene among physiotherapy professionals, followed by nurses.
	Article, 2021	Analytical cross-sectional study, carried out in a medium-sized public hospital with high patient turnover and medium and high complexity care, located in a municipality on the coastal lowlands of Rio de Janeiro.	This study aimed to analyze bacterial growth in samples collected from the hands of healthcare professionals after hygiene and soap.	The following inclusion criteria were adopted: health team professionals. Data collection was aimed at characterizing the participating professionals and capturing samples for microbiological analysis.	Most 67 (91.8%) of the samples collected from the hands of healthcare professionals, after hand hygiene with soap and water, showed bacterial growth in a chromogenic medium. It is noteworthy that in 100% of the samples with bacterial growth, more than one type of chromogenic colony was found.
	Article, 2015		Raise awareness among academics in the third period of the nursing at ``Universidade Estadual de Santa Catarina`` (UDESC) about the importance of carrying out the respective techniques responsibly and in accordance with the recommended standards.	The activity was carried out in the microbiology laboratory of the UDESC nursing course with students enrolled in the Semiology and Serniotechnics disciplines. Hand hygiene protocols were followed.	The results of the activities demonstrated that carelessness in the rigor of hand hygiene techniques and the use of adornments contribute to increasing the risk of infections in healthcare environments.
	Article, 2019	This is a descriptive bibliographic study, an integrative review type	Identify the strategies used by health organizations to promote adherence to hand hygiene among the multidisciplinary team	A protocol with six phases was used in the process of searching for RII.: 1) elaboration of the research question; 2) literature search;3) data collection;4) critical analysis of included studies; 5) discussion of results and 6) presentation of the review.	It appears that the HH theme is complex, multi-causal and requires articulation between management policies and scientific knowledge in the construction of a HH program for safe assistance in health organizations. The findings discussed here are made available to the scientific community, managers and infection control professionals, as they are evidence about the components that form a multifaceted, multi-mode strategy for improving HH.
	Article, 2016	Descriptive, cross-sectional study, with a quantitative approach carried out with four nurses and six nursing students, who were randomly selected.	Identify the number of colony-forming units on the hands of nursing team members before and after washing them with soap and water and antiseptic.	referred to was a public hospital institution located in the municipality of Montes Claros/MG. For data collection, Petri dishes containing standard counting agar (PCA), sterilized swabs, tubes with sterilized saline solution and overhead projector pen.	Using soap and water can reduce the microbial population of hands up to 88.2% and that the application of antiseptic products, in special use of alcohol-based agents, can intensify the reduction microbial up to 97%, although the sampling of this research had limited, the results indicate the need for greater care, attention and adherence by healthcare professionals, health, especially the nursing team and the sanitization of hands.

infections resulting from poor hand hygiene considering the most current scientific articles. Presenting an overview of hospital infections resulting from incorrect hand hygiene. The literature search was carried out in several electronic databases, including DeCS and VHL, and using the following search terms: hand washing and hospital infections, such keywords led us to the most important scientific articles on this subject

## RESULTS AND DISCUSSION

From the analysis of the articles cited, the low adherence of health professionals to complying with the standard regarding hand washing was noted, with the area of physiotherapy, followed by nursing, being the biggest compliers. Furthermore, an increase in bacteria was identified on the hands of professionals after washing their hands, a result of the lack of commitment to the correct hygiene of the professionals' main work instrument. Furthermore, it can be seen that, through laboratory analysis, the use of alcohol was significantly more effective than the use of soap and water.

Therefore, the need for actions to encourage this personal cleanliness is evident, as carelessness in the rigor of hand hygiene techniques and the use of adornments contribute to increasing the risks of infections in healthcare environments. Hand hygiene is a fundamental part of clinical procedures

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and, as evidenced above, is not being properly carried out. This irresponsibility brings risks to patients, who, as they need hospital care, are fragile and susceptible to infections, and also brings risks to public health, since with the large flow of patients daily, it therefore threatens good health. portion of the population.

## CONCLUSION

This work endeavored to unravel and gather truthful and valid information on the topic of hand hygiene by nursing professionals. From this point of research, it was identified that the Brazilian health system faces a hygienic crisis, as professionals, for the most part, trivialize and renounce hand washing, and also, for the most part, when they wash, they do not respect the correct procedure and end up proliferating existing bacteria, instead of fighting them, assist them.

Furthermore, a lack of integration and stimulation between management policies and scientific knowledge can also be identified in the formulation of a human resources management program to guarantee safe assistance in health organizations. Furthermore, it was found that the use of alcohol was more efficient in eliminating bacteria than soap and water, essential information for professionals, as poor hygiene contributes to the risk of infection in the healthcare sector.