



# Revista Prevenção de Infecção e Saúde

The Official Journal of the Human Exposome and Infectious Diseases Network

ORIGINAL ARTICLE

DOI: <https://doi.org/10.26694/repis.v6i0.10657>

## Adherence to “Zero Adornment” in a university hospital: an extension project report

Adesão ao “Adorno Zero” em um hospital universitário: relato de um projeto de extensão

Adherencia a “Adorno Cero” en un hospital universitario: informe de un proyecto de extensión

André Felipe de Castro Pereira Chaves<sup>1</sup>, Isadora Vieira Barros de Araújo<sup>1</sup>, Leticia Viana dos Santos<sup>1</sup>, Mateus Ibiapina Vaz de Sousa Cruz<sup>1</sup>, Telma Vieira Lima<sup>2</sup>, Odinéa Maria Amorim Batista<sup>1</sup>

### How to cite this article:

Chaves AFCP, de Araújo IVB, dos Santos LV, Cruz MIVS, Lima TV, Batista OMA. Adherence to “Zero Adornment” in a university hospital: an extension project report. Rev Pre Infec e Saúde [Internet]. 2020;6:10657. Available from: <https://revistas.ufpi.br/index.php/nupcis/article/view/> DOI: <https://doi.org/10.26694/repis.v6i0.10657>

<sup>1</sup> Federal University of Piauí, Department of Nursing, Teresina, Piauí, Brazil.

<sup>2</sup> Federal University of Piauí, Hospital Infection Control Commission at the University Hospital of the Federal University of Piauí, Teresina, Piauí, Brazil.

### ABSTRACT

**Introduction:** The spread of microorganisms, such as viruses and bacteria, has influenced the morbidity and mortality of people around the world and in healthcare environments. The use of ornaments by health professionals in the workplace is not permitted according to rules that regulate the safety and health of workers in health services. The objective was to report the experience of practicing an activity to raise awareness about the internal policy of “Zero Adornment”. **Outline:** This is a descriptive study, through an experience report of extensionists from the undergraduate nursing course who participated in an activity to raise awareness of adherence to the practice of “Zero Adornment” in a University Hospital in a northeastern capital Brazilian. **Results:** The dynamics of adherence to “Zero Adornment” contributed in a very important way to build the knowledge of students participating in the extension, in the perspective of preventing cross-infection and, consequently, to the safety of the entire hospital community. **Implications:** From this experience it was possible to detect the importance of the need to carry out educational actions related to patient safety, incorporating safe conduct in daily practice, since graduation, involving teachers, students and the health team, in an integral way.

### DESCRIPTORS

Patient Safety; Cross Infection; Health Promotion; Nursing.

### Corresponding author:

Odinéia Maria Amorim Batista  
Address: Campus Universitário Ministro  
Petrônio Portella, Bloco SG 12, Bairro Ininga  
CEP: 64049-550 – Teresina, Piauí, Brazil  
Telephone: +55 (86) 3215-5558  
E-mail: [oenf@ufpi.edu.br](mailto:oenf@ufpi.edu.br)

Submitted: 2020-05-21

Accepted: 2020-09-21

## INTRODUCTION

The spread of microorganisms, such as viruses and bacteria, has influenced the morbidity and mortality of people in healthcare environments worldwide.

In the context of health services, one of the main goals of patient safety is the reduction of Infections Related to Health Care (IRAS). These infections are acquired during the care of a patient on the premises of the hospital or other health services, and these infectious agents were not present or during the incubation period at the time of the client’s admission.<sup>1</sup> This contamination can affect patients, in any type of environment, who receive care and can appear after discharge.<sup>2</sup>

Currently, the importance of infection prevention and control measures deserves even greater emphasis, given the current pandemic scenario caused by the new coronavirus. The protocols and guidelines established by the health services must guarantee good practices, in order to reduce the contagion of respiratory pathogens, including the new coronavirus (SARS-CoV-2).<sup>3</sup>

The person-to-person transmission route of the new coronavirus (SARS-CoV-2) occurs through respiratory droplets (expelled during speech, coughing or sneezing) and through direct contact with infected people, or indirectly, through the hands, contaminated objects or surfaces, similar to how other respiratory pathogens spread. Thus, care related to virus control must be implemented even before direct assistance to the individual.<sup>3</sup>

Hands are the main route of transmission of germs and microorganisms, and cleaning them correctly is the most important measure to prevent the development of diseases.<sup>4</sup> For this hygiene to be effective, in addition to the steps and the duration used, it is necessary to remove adornments such as rings, bracelets and watches, since it is proven that the use of these objects makes it difficult to remove germs.<sup>5</sup>

The use of ornaments and objects that are difficult to clean makes it difficult to clean hands and body surfaces properly and may be responsible for transferring agents that cause infection from one object to another, to surfaces, to the hands of the professional and the patient. Adornments are considered: wedding rings, rings, bracelets, wristwatches, necklaces, earrings, brooches, exposed piercings, badges hanging with cord and ties.<sup>6</sup>

Thus, the use of ornaments by health professionals in the workplace is not allowed according to NR 32, which contains the rules that regulate the safety and health of workers in health services.

Preventing HAIs involves several segments, such as quality management and resources to guarantee the work structure, attention to hygiene, training of health professionals and personnel, constant knowledge of the changes in infectious agents that lead to the increasing risk of infection, associated advances in medical care and increasingly vulnerable patients. And, just as importantly, the cooperation and help of patients and their families and friends.<sup>7</sup>

In view of this, this study aimed to report the experience of practicing an activity to raise awareness about the “Zero Adornment” policy.

## METHOD

This is a descriptive study, of the experience report of extensionists from the Undergraduate Nursing Course in an activity to raise awareness of adherence to the practice of “Zero Adornment” in a University Hospital in a capital of northeastern Brazil, promoted jointly with the Health Surveillance and Patient Safety sector and the Hospital Infection Control Commission (HICC), with a view to preventing the cross-spread of infections and promoting patient safety.

The awareness-raising activity took place on September 17, 2019, the International Day for Patient

Safety and was included within the action of World Patient Safety Day, promoted by the University Hospital of the Federal University of Piauí (HU-UFPI).

The students who participated in this action are extension workers in the extension project of the Nursing Department of the Federal University of Piauí (UFPI) entitled “Surveillance of Risk and Protection Factors for Infection Related to Health Care through the Search and Notification of Cases”.

This institution is a public and teaching hospital, opened nine years ago. Offers services in 32 medical specialties, has 190 hospital beds, 15 ICU and ten operating rooms. It is a reference in terms of high and medium complexity services in Piauí, with emphasis on Cardiac Surgery, Hemodynamics, Traumatology, Orthopedics, Oral and Maxillofacial, Enteral and Parenteral Nutrition and Oncology, with the implementation of the High Complexity Unit in Oncology (Unacon) in 2016.<sup>8</sup>

In teaching, it has 17 medical residences, 6 multiprofessionals and 28 academic leagues. Students from 15 undergraduate courses at UFPI develop academic activities at the hospital, in addition to internships in different areas of knowledge, such as engineering and nutrition. In 2016 alone, 67 research projects were developed within the hospital.<sup>8</sup>

The blitz took place in three strategic sectors of the university hospital: Intensive Care Unit-ICU, outpatient and hospitalization reception, from 6:40 am to 7:40 am, on the morning shift, and from 6:40 pm to 7:40 pm, on the night shift. The students were organized in pairs and accompanied by HICC staff. The activity, named “Zero Adornment”, consisted of the approach and guidance on the importance of adhering to this practice by professionals who circulated in the sectors where the authors of the intervention were located. The strategy was to use the shift change schedules in order to address a greater number of employees.

The target audience was 208 professionals, being: 41 nurses, 9 pharmacists, 11 physiotherapists,

11 doctors, 102 nursing technicians and 34 professionals from other categories.

At the time of the approach, it was explained about the International Patient Safety Day, its goals, with a focus on goal 5, which values reducing the risk of infection associated with health care.

In addition, a plastic container was made available in order to sensitize professionals to adhere to the practice of removing and accommodating their ornaments (rings, earrings, clips, necklaces, watches, among others) before entering each of the three sectors of execution of this activity. After joining, each professional who participated in the dynamic received a sticker, proving that it had fulfilled the purpose of the activity, and was in accordance with the institution’s new rule. The sticker read the following phrase: “I enjoy safe care”.

## RESULTS

The practice contributed to building the knowledge of the students who participated in the extension project activity, about the importance of involvement and contribution in preventing infection. The alert for adherence to the “Zero Adornment” policy contributes to the improvement of the safety of the patient, workers and companions and, consequently, in the prevention of cross-infection, as the safe practice of health care is linked to a perspective of satisfactory results.

The understanding that HAIs are a public health problem makes health systems seek to develop effective actions for their prevention and control. These actions are also related to changing the behavior of professionals who work, directly or indirectly, in health care. Thus, professional training is of great relevance to performance in health.<sup>9</sup>

The teaching of prevention and control of HAIs has been pointed out by national and international studies as an area of great weaknesses related to the knowledge of health professionals on this topic, which reflects in the care practice and there is a great lack of preparation of the teams regarding the

use of necessary measures in relation to these infections. It is observed that the teaching of this area needs to be rethought and restructured in order to establish professional skills of nurses that are learned from the beginning of professional training.<sup>10</sup>

Health education is a tool that provides an interaction between health promotion and the dissemination of knowledge. Its performance goes beyond collective work, extending to improving the quality of service to the public.<sup>11</sup> Here, then, is the importance of using health education strategies that can collaborate with the prevention of nosocomial infection. The entry of students in activities of this kind favors the early spirit of an educator and advisor of health practices, untying the image of professionals only to the technical part of care.

The participation of undergraduate students in the health field in educational activities is very important, since the act of healing, treating and educating are complementary and need a mutual negotiation so that the objectives are achieved and capable of transforming a certain reality, improving the health indicators and determinants. Infection and cross-contamination are damages that need to be avoided, as these can complicate the patient’s prognosis and, consequently, time, hospitalization and increased public spending.

Therefore, the extension workers reported that the importance of the experience lived with the activity of raising awareness among professionals and students for the adherence of the “Zero Adornment” policy in the university hospital, contributes to the improvement of the hospital accreditation rates while strengthening patient safety policy.

These discussions about essential measures for patient safety deserve to be increasingly promoted in academic training.<sup>12</sup> The educational action favored the empowerment of the students, since they were assigned an activity that expanded their knowledge and expanded the notion of the professional’s performance within a hospital institution. It is understood, therefore, that, more than treating, it is

important to create the necessary means for the development of health.

It is understood that the hospital’s CCIH is committed to implementing measures that act in the prevention and control of nosocomial infections and this objective is achieved through the support of undergraduate students in the extension project, who work in the development of educational actions. In this way, it is possible to perceive the importance of this moment in addition to a health education activity, but also as a tool for the optimization of new practices by service workers.

The alert for adherence to the “Zero Adornment” policy contributes to the improvement of the safety of the patient, workers and companions and, consequently, in the prevention of cross-infection, as the safe practice of health care is linked to a perspective of satisfactory results.

## DISCUSSION

The prevention of HAIs is a complex multifactorial process that requires substantial efforts and diligence to achieve positive results.<sup>13</sup> Currently, there is a series of scientific evidence, clinical guidelines and government regulations that establish practices for the containment of care-related infections, which, although not sufficient for their eradication, contribute to identifying when and how they occur and, thus, building actions in care practice.<sup>14-15</sup>

The behavior of health professionals directly influences the transmission of nosocomial infections, as incorrect practices act as a vehicle for transporting pathogenic microorganisms to the patient.<sup>16-17</sup> Despite the legislation, the contamination of health professionals involving biological material from patients is a reality, especially in the application of percutaneous or subcutaneous medications and the handling of needles.<sup>18-19</sup>

The estimate is that, in developed countries, for every 100 patients, 7 patients will develop infection in the health service. When we go to

developing countries, the estimate increases to 10 customers. Each year on the European continent, there are 4 million people with care-related infections, of which approximately 37,000 people die, generating a loss of seven billion euros. In the USA, cases reach two million, causing 80,000 deaths per year, with an impact of 4.5 to 5.7 million dollars on health.<sup>20</sup> Although not all cases of HAIs are preventable, there is data in the literature in which the definition and application of an effective control and prevention program contributes to its reduction by up to 85%. Therefore, the execution of surveillance in the hospital environment has been the most used form as a preventive measure.<sup>21</sup>

A study carried out in six Intensive Care Units of two university hospitals in Pernambuco revealed that, after being asked if they used adornments during working hours, health professionals had a very critical percentage. Where, among the interviewees, 33.3% from hospital A and 46.7% from hospital B answered that they “always” use the engagement ring during working hours. In view of the need for short, ringless nails for better removal of microbial flora during hand washing, as otherwise a microbial load will be retained in these locations, the numbers of professionals who maintain adornments while providing assistance demonstrate a disturbing potential.<sup>22</sup>

In a recent study conducted at a public hospital in Joinville, Santa Catarina, it was found that many professionals at the institution were unaware of the new standard and, consequently, did not follow the guidelines contained therein. Therefore, these professionals put their health and the health of their patients at risk.<sup>23</sup>

The professionals approached in the activity that used adornments showed that they were mostly aware of the new regulations and that they did not compromise their work because, before coming into contact with patients, they kept their props in appropriate places, such as cabinets or in the bag itself, inferring that these professionals were up to

date on the issue of new guidelines that came into force.

One difficulty that the students experienced was in the matter of organization. As the activity progressed, more people approached and thus a small agglomeration was formed, making the actions proposed by the students difficult, such as the explanation of the action, the signing of the professionals on the participation list and the delivery of the plastic container for everyone. However, it was possible to get around with the help of the supervisors of the action locations, who helped in divisions of a row, dividing the extension officers who explained orally about the theme to the action public.

In view of these considerations, it is noticeable that the acceptance of professionals for educational activities at work is great, so the articulation of knowledge from different areas of multidisciplinary knowledge and disciplines favors the continuous integrality of the health care service, contributing to the updating of practices focused on the safe care of patients.

## IMPLICATIONS

The “Zero Adornment” policy proved to be another practice adopted by the University Hospital to prevent and control cross-infection and IRAS. The activity carried out by extension workers and HIC employees was an active strategy for the dissemination of this practice in different areas of the hospital, reinforcing the importance of this adherence by professionals and students who maintain direct contact with patients.

The activity played a significant role for extension students, as it made it possible to carry out health education in the hospital, enriching their experience and expanding the vision of the nurse’s performance to other areas, not only for direct assistance to patients.

From this experience, it was possible to detect the importance of the need to carry out actions

related to patient safety, incorporating safe behaviors in daily practice, with responsibility, since graduation, involving teachers, students and the health team.

## RESUMO

**Introdução:** A disseminação de microrganismos, tais como vírus e bactérias, têm influenciado na morbimortalidade de pessoas em todo o mundo e em ambientes de assistência à saúde. O uso de adornos por profissionais de saúde no local de trabalho não é permitido conforme normas que regulamentam a segurança e a saúde dos trabalhadores nos serviços de saúde. Objetivou-se relatar a experiência da prática de uma atividade de sensibilização sobre a política interna de “Adorno Zero”. **Delineamento:** Trata-se de um estudo descritivo, por meio de um relato de experiência de extensionistas do curso de graduação em Enfermagem que participaram de uma atividade para sensibilização da adesão a prática de “Adorno Zero” em um Hospital Universitário de uma capital do nordeste brasileiro. **Resultados:** A dinâmica de adesão ao “Adorno Zero” contribuiu de forma muito importante para construção do conhecimento dos alunos participantes da extensão, na perspectiva da prevenção de infecção cruzada e, conseqüentemente, à segurança de toda comunidade hospitalar. **Implicações:** A partir dessa experiência foi possível detectar a importância da necessidade de realizar ações de educação relacionadas à segurança do paciente, incorporando condutas seguras na prática diária, desde a graduação, envolvendo docente, aluno e equipe de saúde, de maneira integral.

## DESCRITORES

Segurança do Paciente; Infecção Hospitalar; Promoção da Saúde; Enfermagem.

## RESUMEN

**Introducción:** La propagación de microorganismos, como virus y bacterias, ha influido en la morbilidad y mortalidad de personas en todo el mundo y en entornos sanitarios. El uso de adornos por parte de los profesionales de la salud en el lugar de trabajo no está permitido según las normas que regulan la seguridad y salud de los trabajadores en los servicios de salud. El objetivo fue dar a conocer la experiencia de la práctica de una actividad de sensibilización sobre la política interna de “Adorno Cero”. **Delineamiento:** Se trata de un estudio descriptivo, a través de un relato de experiencia de extensionistas de la carrera de licenciatura en enfermería que participaron en una actividad de sensibilización sobre la adherencia a la práctica de “Adorno Cero” en un Hospital Universitario de una capital del noreste de Brasil. **Resultados:** La dinámica de adhesión a “Adorno Cero” contribuyó de manera muy importante a construir el conocimiento de los estudiantes participantes en la extensión, en la perspectiva de prevenir la infección cruzada y, en consecuencia, a la seguridad de toda la comunidad hospitalaria. **Implicaciones:** A partir de esta experiencia se pudo detectar la importancia de la necesidad de realizar acciones educativas relacionadas con la seguridad del paciente, incorporando la conducta segura en la práctica diaria, desde la graduación, involucrando a los docentes, estudiantes y el equipo de salud, de manera integral.

## DESCRIPTORES

Seguridad del Paciente; Infección Hospitalaria; Promoción de la Salud; Enfermería.

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#### **COLLABORATIONS**

AFCPC, IVBA, LVS, MIVSC and TVL: Contributions to work conception, outline, to data collection, analysis and interpretation, and article writing. FEDA: Contributions to work critical review. OMAB: Contributions to work conception, outline and critical review. All the authors agree and take responsibility for the content of this manuscript version to be published.

#### **ACKNOWLEDGMENTS**

Not applicable.

#### **AVAILABILITY OF DATA**

Not applicable.

#### **FUNDING SOURCE**

Own funding.

#### **CONFLICTS OF INTEREST**

There are no conflicts of interest to declare.