



OBJN  
Online Brazilian Journal of Nursing

ENGLISH

Federal Fluminense University

AURORA DE AFONSO COSTA  
NURSING SCHOOL



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Introductory Note



## Gloves, an educational technology assisting the adherence of nursing professionals to contact precautions: a methodological study

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### ABSTRACT

This is a dissertation project that is part of the Professional Master's Program in Assisting Nursing of Fluminense Federal University. **Aim:** To propose an educational technology in a CD-ROM (video) format, aiming to encourage nursing professionals to adhere to contact precautions, with a focus on gloves. **Method:** This is a methodological study, which adopts a quantitative-qualitative approach, that is done in four steps: designing a CD-ROM, validation of the media, selection of the target audience and adequacy of the media. The data collection was done through interviews and the use of evaluation instruments. The sample consisted of nursing professionals and expert judges. Subjects are nursing professionals from medical and surgical clinics of a College Hospital in the state of Rio de Janeiro. Expected results: this research is in progress. It is expected to contribute to improving the assistance provided and a higher adherence to contact precautions on the part of nursing teams.

**Descriptors:** Nursing Team; Cross Infection; Gloves Cirurgical; Educational Technology; Nursing

## **PROBLEM SITUATION AND ITS SIGNIFICANCE**

Hospital infection is considered a public health issue worldwide, and it promotes high levels of morbi-mortality, an increase in hospitalization periods, and of costs to the users of the health system. These factors bring some repercussions to the client, his/her family and the community, generating personal, social, economic and spiritual costs<sup>(1)</sup>.

It is known that the hospital environment is favorable to the transmission of infectious agents. Thus, some recommendations are fundamental to the control and prevention of these conditions, such as the education of professionals and the escalating use of human resources; a culture of surveillance; the implementation of contact isolation for patients who are colonized/infected by resisting microorganisms, and the use of Individual Protection Equipment (IPE); personal hygiene; the disinfection of surfaces; the restriction of the use of agents; maintaining a data bank with the identification of colonized patients; and the education of the patients<sup>(2,3)</sup>.

Gloves are part of the IPE and have, as a basic objective, the protection of health professionals against biological risk. In the 1980s, the Centers for Disease Control and Prevention introduced the concept of Universal Precautions, today referred to as Standard Precautions. Since the epidemic involving the Human Immunodeficiency Virus (HIV) and the Acquired Immunodeficiency Syndrome (AIDS), there is an increase in the use of these materials<sup>(1,2)</sup>.

Other researchers have shown the some degree of failure to adhere or not to conform to the wearing of gloves by members of health teams, even when they are made available by the institution or when they acknowledge the directives of the authorities<sup>(1,2)</sup>.

It is an imperative intervention on the part of the caring services and the prevention of the worsening in health conditions generated by the lack of the use of gloves. Hence, it is also necessary to propose actions, among them, the use of multimedia educational technologies, which will assist the use of IPE. Furthermore, this technology must be developed based on the necessary information and needs and on interactions with health professionals, specifically, in this case, with nurses.

Based on this prerogative, this study aims to contribute by developing an educational technology that helps in adherence with regard to contact precautions.

## **GUIDING QUESTIONS**

Which aspects are preponderant and meaningful when it comes to validating an educational technology aimed at encouraging the adherence on the part of nursing professionals to contact precautions, especially in terms of the use of gloves?

## **AIM**

To propose an educational technology in a CD-ROM format, aimed at encouraging the adherence of nursing professionals to contact precautions, especially in terms of the use of gloves.

## **METHOD**

This is a methodological piece of research which adopts a quantitative-qualitative approach, to be performed in a hospital in the Brazilian state of Rio de Janeiro. The theoretical

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Padilha JMFO, Sá SPC. Gloves, an educational technology assisting the adherence of nursing professionals to contact precautions: a methodological study. *Online braz j nurs* [Internet]. 2013 Oct [cited year month day]; 12 Suppl: 767-69. Available from: <http://www.objnursing.uff.br/index.php/nursing/article/view/4518>

proceedings that will be used are presented in the theoretical elaboration of measuring instruments. The development and validation of the educational technology in a CD-ROM (video) format as a strategy to encourage the use of gloves will consist of four steps. The first step will be based on the creation of the CD-ROM, a construction based on interviews with 20 nursing professionals, in terms of the needs and understandings mentioned above, carried out between October and December 2013. The subjects included match the following criteria: nursing professionals of the hospital under consideration, working in medical and surgical clinics, described in detail in this study, who are either day-shift staff and/or on day and night-shift staff. The criteria for exclusion are professionals who are on vacation or on leave during the period of data collection. During the second step, the educational technology will be validated with the use of two validation instruments based on a Likert scale. One instrument will be responded to by 10 judges who have a recognized expertise in terms of the technology used, and the other by nine nursing professionals from medical and surgical clinics. The professionals, different from those who took part in the first step, will evaluate each section of the instrument, by selecting the following possibilities: completely adequate (CA); partially adequate (PA); or inadequate (I). The items will be considered as valid if they achieve a 70% approval rate or more. During the third step, the target audience will be selected from professionals from the medical and surgical clinics, who are different from those who took part in the first two steps. The same instrument as was used in step two will be used to evaluate the CD-ROM. The fourth step will consist of a consideration of the adequacy of the educational technology involved after the analysis of all the previous steps. The analysis of

the first stage will be done through the transcription and categorization of the data, based on content analysis. This exercise will support the construction of the CD-ROM. During the second and third steps, the instruments will be analyzed based on descriptive statistics. In this stage, the items will be considered as valid if they achieve 70% or more. In the fourth step of the analysis, the items that did not achieve 70% in terms of approval will be adjusted.

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### Project data

Dissertation Project of the Professional Master Program in Assisting Nursing at Fluminense Federal University, approved by the Ethics in Research Committee of this same University, under protocol #394.757, on Sept 6<sup>th</sup> 2013.

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**Received:** 29/08/2013

**Revised:** 09/09/2013

**Approved:** 10/09/2013