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Preview Notes

Dry eye syndrome in an intensive care unit: a cross-sectional study

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ABSTRACT

Aim: To evaluate the NANDA-International Nursing diagnosis of "risk for dry eye" in patients admitted to the Intensive Care Unit (ICU). **Method**: This is a cross-sectional study to be conducted in an adult ICU in a university hospital in Rio Grande do Norte state. For data collection the instrument to be used will be divided into two parts. The first refers to the research variables related to sociodemographic and clinical data, while the second will deal with the risk factors of the nursing diagnosis under study. For data analysis the Statistical Package for Social Sciences will be used for calculating the Kappa coefficient, frequency, distribution center measures and their variability, chi-square or Fisher and the prevalence ratio. This study was approved by the Ethics Committee of the Federal University of Rio Grande do Norte.

Descriptors: Nursing; Nursing Process; Nursing Diagnosis; Dry Eye Syndromes; Intensive Care Units.

SITUATION AND ITS SIGNIFICANCE

A nursing diagnosis (ND) is defined as the clinical judgment made by nursing staff with regard to the responses of the patients, their family or the community about health issues or real/potential vital processes. In this context, the "risk for dry eye" ND is understood as an eye vulnerability/discomfort or damage to the cornea and conjunctiva due to the reduced quantity or quality of tears to moisturize the eye, which may compromise its health[1].

The implementation of specific actions directed to this ND is seen as relevant to an understanding that dry eye can lead to consequences such as ulceration or perforation of the cornea, and cause potential harm to the patients, with subsequent reduction of their quality of life. A study showed an incidence of 59.4% of ocular lesions associated with dry eye syndrome[2].

Patients in Intensive Care Units (ICU) are at increased risk of developing dry eye syndrome, due to serious medical conditions that may require mechanical ventilation and sedation as methods of life support. A consequence of this is that they are likely to lose their natural mechanisms for eye protection[3].

GUIDING QUESTIONS

How prevalent is the ND of dry eye syndrome and its risk factors in ICU patients? Is there a relationship between the clinical and sociodemographic variables associated with dry eye syndrome ND and its risk factors in ICU patients?

GOALS

Main

To assess the NANDA-International taxonomy "risk for dry eye" ND in ICU patients.

Specific

To identify the prevalence of dry eye syndrome ND and its risk factors in ICU patients;
To identify the ratio of dry eye syndrome risk factors in ICU patients;
To correlate the clinical and sociodemographic variables with dry eye syndrome ND in patients admitted to the ICU and associated risk factors.

METHOD

This is a cross-sectional study which adopts a quantitative approach to be carried out in an adult 19-bed ICU of a main university hospital of the Rio Grande do Norte state. The sample size calculation for a finite population will be established after conducting a pilot study with 30 patients. After application of the formula, there will be a 20% addition to the sample to take into account any possible losses, and finally the final sample number will be defined. As determined, patients must meet the following inclusion criteria: being admitted to the ICU of the hospital; being 18 years old or more and not having any eye damage at the time of data collection. Exclusion criteria established will be as follows: patients undergoing emergency situations with risk of death during data collection.

Data collection will take place in the first half of 2016 with the use of an instrument divided into two parts: the first is designed

to ascertain the research variables related to socio-demographic and clinical data, while the second will relate to the risk factors regarding the "risk for dry eye" ND described in the taxonomy II of NANDA-International[1]. The researcher will identify whether or not the factors described are present in the research subjects, as well as making a brief general and specific physical examination of the eye.

For each participant analyzed, a spreadsheet and a summary of their current and previous nursing history will be created. This will contain details of the presence or absence of risk factors, as well as complementary data, in order to describe aspects of each factor. The inference regarding the presence of dry eye syndrome ND in the patients involved will be made by a couple of diagnostician nurses with experience in diagnostic judgment and in ICU.

For data analysis purposes the Statistical Package for Social Sciences (SPSS) temporary version 20.0 will be used. Kappa coefficient will be used to describe and test the range of agreement in the classification of the diagnostician nurses. For descriptive analysis, the frequencies, distribution center measures, and their variability will be considered. For associative measures of categorical data, chi-square or Fisher's exact test will be used. The magnitude of the association will be verified by the prevalence ratio, at a 95% significance level. In all tests, a significance level of 5% (α=0.05) will be adopted.

This study was approved by the Ethics Research Committee of the Federal University of Rio Grande do Norte (UFRN) under number 918 510, according to the resolution 466/12 of the National Health Council.

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