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THE USE OF TECHNOLOGY IN INTRAVENOUS THERAPIES IN CRITICAL PATIENTS: A DESCRIPTIVE STUDY

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ABSTRACT

This is a study of qualitative approach, to be developed in an Intensive Care Unit (ICU) of a large University Hospital in the state of Rio de Janeiro. The subject of this study is the nursing team that works directly with the care of critical patients in need of central continuous intravenous therapy (IV therapy). **Objectives:** Identify the technologies developed for health usage during the central continuous IV therapy in the ICU, verify the usage of these technologies by the nursing team in the care of the central continuous IV therapy placed in the patients hospitalized in the ICU and discuss the facilities and the difficulties of the usage of these technologies during the central continuous IV therapy. It is intended to allow the Nursing professional to determinate priorities during his/her practice, reduce waste, avoid unnecessary work and empower quality in care.
Descriptors: Intravenous infusion, Parenteral infusion, Adverse effects.

SITUATION-PROBLEM AND ITS SIGNIFICANCE

In the history of intravenous therapy (IV therapy), in the 17th Century, Cristopher Wren introduced opium in the venous network through a feather of a bird, permitting immediate repercussion. Since then, the technology and the research allowed de development of products and equipments specifically designed for the parenteral administration of solutions and drugs(1). Nowadays we are presented to a series of new technologies, from intravenous catheters, accessories with security devices, to last generation infusion pumps, considered as health technology, according to the Collegiate Decision Resolution (RDC, in Portuguese) Number 2 set by the Brazilian National Health Surveillance Agency (ANVISA, in Portuguese). The IV therapy is worldwide considered

as an important therapy resource, as it is indicated for the majority of the hospitalized patients, mostly representing as the basic condition for their treatments[2]. In order to have a quality IV therapy without any mistakes in infusion, it is fundamental that there are qualified human resources and in sufficient number, adequate physical space, financial resources, appropriate tools, technologies and equipments and interdisciplinary workforce[3]. However, despite all the improvement related to the incorporation of new technologies into the IV therapy, throughout our professional career, we observe that some nursing teams that have those technologies available to them, which can facilitate them and their patients during the procedures of the therapy, are not used, or when used, it is improperly handled. Together with this study, it is intended to permit the nursing professional to self-establish priorities during the practice, minimize waste with cost-reduction, avoid the occurrence of unnecessary work, and especially, to empower the quality in care as a premise, and not as a job-related consequence.

GUIDING QUESTIONS

What are the healthcare technologies available in Intensive Care Units (ICUs) used to IV therapy? How does the nursing team use these technologies during the patient's healthcare? What are the readiness and the difficulties found while handling these technologies?

OBJECTIVES

Identify the technologies developed for health usage during the central continuous IV therapy in the ICU, verify the usage of these technologies by the nursing team in the care of the central continuous IV therapy placed in the patients hospitalized in the ICU and discuss the facilities and the difficulties of the usage of these technologies during the central continuous IV therapy.

THEORETICAL-METHODOLOGICAL APPROACH

This is a study of qualitative approach, to be developed in an Intensive Care Unit (ICU) of a large University Hospital in the state of Rio de Janeiro. The subject of this study is the nursing team that works directly with the care of critical patients in need of central continuous intravenous therapy (IV therapy). A semi-structured interview will be used as a data-collection method, as well as an individual observation. The observation will occur following a observational itinerary, in distinctive work shifts, with interviews being placed in the sector, as to objectify the register of how the nursing

team uses the technologies during the central continuous IV therapies. The treatment of data obtained will be done after the analysis of categorical-thematic content. This study was approved by the Ethics in Research Committee of the referred hospital and will follow all ethical and legal principles related to the research in human beings.

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