CONSTRUCTION AND VALIDATION OF INSTRUMENT FOR ASSISTANCE IN SAFE HEART SURGERY

ABSTRACT
Objective: to construct and validate an instrument, in the checklist format, for use in cardiac surgery.
Method: quantitative research, methodological type, focusing on the development, evaluation and improvement of tools and methodological strategies, from an integrative review that will allow to know the instruments used in cardiac surgeries to support the direct observation and, consequently the construction of a new checklist for such a procedure. Expected results: construction and validation of an instrument, in a checklist format, keeping the primitive structure, - organized by items, that assists the health team in the surgical environment, in performing safe cardiac procedures.

RESUMO
Objetivo: construir e validar um instrumento, no formato checklist, para a utilização em cirurgia cardíaca.
Método: pesquisa quantitativa, tipo metodológica, com foco no desenvolvimento, na avaliação e no aperfeiçoamento de instrumentos e estratégias metodológicas, a partir de revisão integrativa que permitirá conhecer os instrumentos utilizados em cirurgias cardíacas para respaldar a observação direta e, em consequência, a construção de um novo checklist voltado para tal procedimento. Resultados esperados: construção e validação de um instrumento, em formato checklist, mantendo a estrutura primitiva, organizada por itens, que auxílie a equipe de saúde, no ambiente cirúrgico, na realização de procedimentos cardíacos seguros.

RESUMEN
Objetivo: construir y validar un instrumento, en el formato checklist, para uso en cirugía cardíaca. Método: investigación cuantitativa, tipo metodológica, con foco en el desarrollo, en la evaluación y en el aperfeccionamiento de instrumentos y estrategias metodológicas, a partir de revisión integrativa que permitirá conocer los instrumentos utilizados en cirugías cardíacas para respaldar la observación directa y, en consecuencia, la construcción de un nuevo checklist voltada para tal procedimento. Resultados esperados: construcción y validación de un instrumento en formato checklist, manteniendo la estructura primitiva, organizada por ítems, que ayuden el equipo de salud, en el ambiente quirúrgico en la realización de procedimientos cardíacos seguros.

NOTE PREVIEW ARTICLE

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RESUMO

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RESUMEN

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Método: investigación cuantitativa, tipo metodológica, con foco en el desarrollo, en la evaluación y en el aperfeccionamiento de instrumentos y estrategias metodológicas, a partir de revisión integrativa que permitirá conocer los instrumentos utilizados en cirugías cardíacas para respaldar la observación directa y, en consecuencia, la construcción de un nuevo checklist voltada para tal procedimento. Resultados esperados: construcción y validación de un instrumento en formato checklist, manteniendo la estructura primitiva, organizada por ítems, que ayuden el equipo de salud, en el ambiente quirúrgico en la realización de procedimientos cardíacos seguros. Descriptores: Lista de Control; Seguridad del Paciente; Centro de Enfermería Quirúrgica.

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INTRODUCTION

The surgical center is one of the environments with innumerable cases of adverse hospitalization events. Its cause is multifactorial and attributed to the complexity of procedures, interaction of interdisciplinary teams and work under pressure, presenting itself as the sector that is most likely to offer most of them can be avoided.1

Between October 2007 and September 2008, eight hospitals from the Canada, India, Jordan, New Zealand, Philippines, Tanzania, United Kingdom and USA countries, due to the high rate of annual deaths due to errors in health care, participated in a program called “Safe Surgery Saves Lives,” which was introduced by the World Health Organization (WHO).2 The program was implemented with a surgical checklist of 19 items, known as a safe surgery checklist.3

This checklist has been used in all surgical procedures, regardless of their degree of complexity, of any hospital in the world, whose objective is to help surgical teams systematically follow critical safety steps.4

The literature assures that, in medical practice, safety checklists are designed to identify in advance a potential error that results in harm to the patient. These, in turn, ensure that procedures are followed, eliminating dependence on human memory, and providing a standardized framework for communication among team members.5

Studies have pointed out that many important safety checks for the cardiac environment have been omitted, making the staff feel that filling the checklist is not necessary since it adds nothing to the safety of the cardiac patient.6

Daily practice shows that, although the checklist already used includes general risk factors, they often do not include specific factors for cardiac surgeries, such as: equipment; use of extracorporeal circulation; pre-procedure confirmations, when compared to the primitive list.

Given this scenario, it is evident that the health teams have the challenge of being instrumental in adding new technologies to the profession, with a view to systematizing their care and technical scientific basis of knowledge.7 8 9 10 Thus, finding means to support their practice is the responsibility of each professional and technology is an innovative tool to develop care for patients. This study aims to address gaps in the traditional list, making it clear who should respond to each section and what surgical phase should occur.

OBJECTIVES

- To build and validate an instrument, in the checklist format for the use in cardiac surgery.
- To conduct a survey of checklist requirements for cardiac surgeries.
- To develop an instrument, in the checklist format for use in cardiac surgery, in a three-phase format, identifying who should be directed to the questions.

METHOD

It is a quantitative research, methodological type, focused on the development, evaluation and improvement of methodological tools and strategies.11

This type of study has, as a purpose, to elaborate, validate and evaluate the instruments and techniques of research, aiming at the elaboration of a reliable instrument that can be used later by other researchers.12

It is proposed to construct an instrument, in the form of a checklist, for use in cardiac surgery, focusing on patient safety. In order to do so, the necessary requirements will be identified for the construction of a checklist to support the surgical team (nurse, surgeon and anesthesiologist), using an association of methods, namely: integrative review, direct observation and then the Delphi Method.

The data collection, from an integrative review, will allow to know the instruments already used in cardiac surgeries to base the direct observation and, consequently, the construction of a new checklist for this procedure.

The search for scientific productions in this area will be performed through the LILACS and CINAHL databases, and the Scielo and PubMed libraries, based on search strategies composed of controlled descriptors and aided by the use of Boolean operators. It is intended, therefore, to broaden the scope of the research, minimizing possible biases in this stage of the review.

The direct observation will be performed in two reference hospitals, which perform cardiac surgeries in Maceió / AL. This will be done in two phases: the first will only be the observation of the instrument used in the hospitals in which data collection will take place, then a new checklist will be constructed containing checklist items taken from the literature and items that are covered in the checklist of hospitals. These data will
be subsequently listed as questions, for the development of a new checklist that will be used in direct observation in the operating room.

Then, the Cronbach Alpha Coefficient, will be calculated to verify the internal consistency of the instrument, where the values are distributed on a scale of zero to one, and will be considered valid when reaching 0.7.13

The Delphi method, through judges, will be used to validate the checklist used in the operating room. The judges will be the health professionals involved in the cardiac surgery procedure: nurse, anesthesiologist and surgeon.

In order to analyze content validity, the Content Validity Index (CVI) will be used to measure the proportion of participants who are in agreement on the items in the checklist, allowing to analyze each one individually and also as a whole.

The score of the index will be calculated by means of the sum of agreement of the items that are marked by "3" or "4" by the participants. Items that score "1" or "2" will be reviewed to be rewritten and used.

For the organization, tabulation and analysis of the data, will be used, initially, Excel 2010. The instruments answered should be typed in a spreadsheet, being double typed. The data will undergo descriptive statistical treatment.

The database used to extract the data will be structured to allow its analysis according to the statistical software Statistical Package for the Social Sciences, SPSS 20.0. The information will be presented in the form of tables, with frequency distributions and variability.

EXPECTED RESULTS

It is intended to provide an instrument in a checklist format, keeping the primitive structure, organized by items, which assists the health team, in the surgical environment, in performing safe cardiac procedures, making clear who should respond to each section and in which surgical phase should minimize potential errors.

REFERENCES

Construction and validation of instrument for...