RISK OF CONTAMINATION OF EQUIPMENT AND MATERIALS: A PROPOSAL OF
NURSING DIAGNOSIS
RISCO PARA CONTAMINAÇÃO DE ARTIGOS E MATERIAIS: UMA PROPOSTA DE DIAGNÓSTICO
DE ENFERMAGEM
RIESGO DE CONTAMINACIÓN DE LOS ARTÍCULOS Y MATERIALES: UNA PROPUESTA PARA EL
DIAGNÓSTICO DE ENFERMERÍA

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ABSTRACT
Objective: to validate in form and content the proposed diagnostic ‘Risk of contamination of equipment and materials’. Method: this is a study with quantitative nature, which is comprised of two phases: at the first, we will identify, in the literature, the constituent elements for the formulation of the proposed diagnostic, risk factors, relevance of titles, concepts and disposal in domains, according to the NANDA-I classification. The second phase will consist of the analysis of the content prepared in phase I, by the specialists. The sample will be comprised of nurses selected by predetermined criteria, adapted in accordance with the recommendations of Fehring. Data collection will be conducted through a questionnaire. The data will be subjected to the descriptive and inferential statistical analysis. This project was submitted to the appreciation of the ERC from the Hospital Universitário Antônio Pedro, under CAAE nº 04960612.5.0000.5243. Expected results: it aims the validation of a nursing diagnosis relevant to the work process of the nursing professional at the Sterilized Material Center. Descriptors: Nursing Process; Sterilization; Nursing Diagnosis.

RESUMO
Objetivo: validar em forma e conteúdo a proposta diagnóstica ‘Risco para contaminação de artigos e materiais’. Método: estudo de natureza quantitativa, composto de duas fases: na primeira, serão identificados na literatura os elementos constituintes para formulação da proposta diagnóstica, os fatores de risco, a pertinência de títulos, conceitos e a disposição em domínios, conforme a classificação NANDA-I. A segunda fase consistirá na análise do conteúdo elaborado na fase I, pelos especialistas. A amostra será composta por enfermeiros selecionados através de critérios preestabelecidos, adaptados segundo recomendações de Fehring. A coleta de dados será realizada por meio de questionário. Os dados serão submetidos à análise estatística descritiva e inferencial. Projeto submetido à apreciação do CEP do Hospital Universitário Antônio Pedro, sob CAAE nº 04960612.5.0000.5243. Resultados esperados: validação de um diagnóstico de enfermagem pertinente ao processo de trabalho do enfermeiro no Centro de Material e Esterilização. Descritores: Processos de Enfermagem; Esterilização; Diagnóstico de Enfermagem.

RESUMEN
Objetivo: validar la forma y el contenido de la propuesta de diagnóstico ‘Riesgo de contaminación de artículos y materiales’. Método: Estudio cuantitativo, que consiste en dos fases: la primera se identifica en la literatura los componentes de la formulación de la propuesta diagnóstica, los factores de riesgo, la relevancia de los títulos y los conceptos de diseño en campos como la clasificación NANDA-I. La segunda fase comprende el análisis, de este contenido preparado en la Fase I, por los expertos. La muestra constará de las enfermeras seleccionadas por criterios predeterminados adaptados de recomendaciones de Fehring. La recolección de datos se llevará a cabo a través de un cuestionario. Los datos se analizarán a través de estadística descriptiva e inferencial. Proyecto presentado a Antonio del CEP Hospital Pedro Universidad. CAAE: 04960612.5.0000.5243. Resultados esperados: validación de un diagnóstico de enfermería pertinentes para el proceso de trabajo de enfermería en el Centro de Material y Esterilización. Descriptores: Proceso de Enfermería; Esterilización; Nursing Diagnosis.

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NOTE PREVIEW
INTRODUCTION

One of the main steps of the Nursing Care Systematization (NCS) is the nursing diagnosis (ND), since this contributes to the identification of phenomena concerning the nurses’ performance and leads to the formulation of nursing interventions.1

In the classification of the NANDA - International (NANDA-I), a ND refers to the answers to health problems and life processes, whether actual or potential, and would be the basis for selection and favoring of interventions and results achievement.2 3

One ND can be classified into four categories: real, health promotion, welfare or risk. The risk diagnosis relies on risk factors that contribute to increased vulnerability and describes answers that could be developed, individually or collectively.2

It could be said that the idea of diagnosing in nursing arose by means of the Florence Nightingale herself, when she identified factors that were related to health problems presented by the sick people. So, when these factors were taken off, positive results started to emerge. This was one of the first ways of systematizing the care: when diagnosing, intervening and getting results.1

The absence of a common standardized language in the practice of the nursing professional at the Sterilized Material Center (SMC) would be an obstacle to an indirect care of systematized nursing and with quality.

By correlating the nursing work at the SMC with the one developed by Florence Nightingale, we can identify similarities, such as the indirect care positively influencing over the direct care.

The SMC nursing team works to offer subsidies for that the direct care to the patient can be conducted in the best way, thus controlling the infection related to the health procedures. Its care is not directly connected to the patient, but it can be configured in an indirect care, by directly acting in preventing infections.

Florence Nightingale identified the importance of the indirect care to the patient, by means of acting on the environment and, this factor influences over the direct care, through the reduction of mortality and infection rates.

Thus, the nurse must act in a systematized way; in this regard, it becomes necessary to identify the problems/phenomena of its area of operation and, hence, safe interventions will be formulated.

It should be highlighted the existing gap on the proposed thematic, thus, the development of a ND and its validation would contribute for the application in the practical scenario of the SMC, both for doing research and conducting teaching in the area, in order to allow the pupils to understand the nurse’s role at the SMC, since it is considered that the developed work in this sector would be directly linked to the prevention of infections related to the health care, and that its non-compliance would generate sanitary violations, thus justifying the relevance of performing this study.4 5

By approaching the current public policy in Brazil, the development of a ND that would systematize the care provided by nurses at the SMC emerges at a time in which the work developed there has been gaining visibility on the part of regulator and supervisory bodies, including questionings on what would be the ideal professional to be responsible for such activity; as set out in the resolutions aimed at regulating the duties and activities of professionals at the SMC.5 6

In this context, the design of a specific ND for the phenomenon with regard to work, performance and professional practice of nurse at the SMC would be relevant in contributing to the visibility of the nursing care systematization provided by these professionals, which in turn, could offer the patients of the health institution an indirect quality care, since any ND requires a nursing intervention.

The validation of a ND produces scientific and technical knowledge, which is necessary for understanding answers to specific phenomena, by making possible its use, both in the setting of the clinical practice, as also to bring important implications for teaching and research.3

OBJECTIVE

- To validate in form and content the proposed diagnostic ‘Risk of contamination of equipment and materials’.

SPECIFIC OBJECTIVES

- To identify the diagnostic proposal from the integrative literature review;
- To identify the risk factors, as well as the relevance of titles, concepts and disposal in domains, according to the NANDA-I classification, through the analysis by experts.
METHOD

This is a quantitative research, with content validation of ND, to be held in two phases:

Phase 1 - Concept analysis and integrative review;
Phase 2 - Content validation by specialists.7,8

At the first phase, there will be an integrative literature review, which will serve as a theoretical support to substantiate the phenomenon related to the nurse’s action within the SMC for safety and protection of the patient, by providing scientific support for the definition of diagnosis concept and its risk factors. Thus, one could define titles, concepts, and determine the risk factors of the ND and its disposal in domains. We will cover the six steps of the integrative literature review: establishment of the hypothesis/research question; literature search; categorization of studies; assessment of the studies included in the review; interpretation of the results and presentation of the review.9

For the sample identification that will compose the analysis, we will conduct a search in the following databases: Latin American and Caribbean Health Sciences (LILACS), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Scientific Electronic Library Online (SciELO), Medical Literature Analysis and Retrieval System online (MEDLINE) and Dedalus, the Bibliographic Database from the Universidade de São Paulo/USP.

The inclusion criteria will be: articles indexed in the aforementioned databases, without defined period, in Portuguese, English and Spanish, as well as articles that address the work process at the SMC.

The summaries presented at scientific meetings, notes to the editor, in addition to unpublished theses and dissertations will be excluded.

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<table>
<thead>
<tr>
<th>Expert Definition</th>
<th>Score</th>
<th>Adaptation of the Fehring Model</th>
<th>Score</th>
</tr>
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<td>Master in Nursing</td>
<td>4,0</td>
<td>Master in Nursing</td>
<td>4,0</td>
</tr>
<tr>
<td>Master in Nursing with relevant content for the diagnosis of interest</td>
<td>1,0</td>
<td>Master in Nursing with dissertation related to the SMC, HICS and/or nursing diagnosis</td>
<td>1,0</td>
</tr>
<tr>
<td>Publication of research on diagnostic data or relevant content</td>
<td>2,0</td>
<td>Publication of research on diagnosis, SMC, SC and/or HICS</td>
<td>2,0</td>
</tr>
<tr>
<td>Publication of article on diagnostic in a referential journal</td>
<td>2,0</td>
<td>Publication of article on diagnosis, SMC, SC and/or HICS</td>
<td>2,0</td>
</tr>
<tr>
<td>Doctorate thesis on diagnosis</td>
<td>2,0</td>
<td>PhD in Nursing</td>
<td>2,0</td>
</tr>
<tr>
<td>Current clinical practice of at least 1 year of duration in relevant area for the diagnosis of interest</td>
<td>1,0</td>
<td>Clinical practice of at least 1 year in SMC, SC, HICS or teaching</td>
<td>1,0</td>
</tr>
<tr>
<td>Certification of clinical practice in relevant area for the diagnosis of interest</td>
<td>2,0</td>
<td>Specialization in SC, SMC, PAR or Certification of specialist from the SOBEEC</td>
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</tr>
</tbody>
</table>

Figure 1. Definition of the adapted expert from the Fehring model. Niterói / RJ, 2012.

The terms to be used in the search will be: nursing, sterilization and work, which were previously researched in the Medical Subject Headings, MeSH, from the Virtual Health Library (VHL).

The second phase of this study will be conducted through contact by e-mail with nurses.

We opted for the communication by means of the World Wide Web, since it has become an indispensable research source, due to its huge collection, available for consultation and because of its extreme ease of access.10

At this stage, the aim will be the appreciation and evaluation of the construct by specialists or experts, with basis on a tool generated from the results of the previous stage and constructed in accordance with the NANDA-I structure, plus the operational definition of each risk factor.11

The sample will be comprised of nurses that meet the definition of expert adapted from the Fehring model. This adaptation of the Fehring model took place because of the need to specify certain criteria, so that the sample permits the inclusion of a greater number of specialists with knowledge on the proposed thematic.

The clinical experience and the theoretical knowledge will be extremely important. Thus, two groups of specialists will be used: one group comprised of nurses with clinical practice for at least five years and another group of nurses who are specialized in diagnosis.11

A specific score will be associated to each criterion, so that the nurse who reaches a minimum score of five points will selected as a specialist.
The sample will be comprised of at least 32 nurses, by considering an acceptable sampling error of 10%, a confidence level of 99% and the proportion of specialists of 95% for the validation of the diagnosis.11

By considering the thematic and the definition criteria for expert, we will establish contact with nurses from the list of e-mail addresses of the researcher itself and from the e-mail addresses contained in the articles selected for composing the integrative review, through the advanced search by using the Lattes Platform, as well as the “snowball sampling”, which would be the selection of subjects by means of indication or recommendation of previous subjects.12

In possession of the proper completed instrument, the data will be stored in a spreadsheet that will be generated by Microsoft Office Excel® application (2010).

We will conduct a quantitative analysis with regard to the relevance of the diagnosis and its suitability of the definition of its respective titles, by applying descriptive statistics (distribution of frequencies).

The averages by weight will be obtained by the sum of the weights assigned to each answer, divided by the total of answers.7

Ethical considerations

This is a dissertation project, from the Professional Master Program in Assisstential Nursing - Programa de Mestrado Profissional em Enfermagem Assistencial (MPEA), from the Universidade Federal Fluminense (UFF). In accordance with the Resolution 196/96, from the National Health Council - Conselho Nacional de Saúde (CNS), this project was submitted to the appreciation of the Ethics Research Committee - Comitê de Ética em Pesquisa (CEP), from the Hospital Universitário Antônio Pedro, for approval regarding the ethical implications of researches involving human beings, under CAAE nº 04960612.5.0000.5243.

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REFERENCES

Santos TR, Alves FP, Coutinho BG et al.