USE OF THE THEORY OF KOLCABA COMFORT IN THE IMPLEMENTATION OF THE NURSING PROCESS: INTEGRATIVE REVIEW

USO DE LA TEORÍA DEL CONFORT DE KOLCABA EN LA IMPLEMENTACIÓN DEL PROCEDIMIENTO DE ENFERMADO: REVISIÓN INTEGRATIVA

USO DA TEORIA DO CONFORTO DE KOLCABA NA IMPLEMENTAÇÃO DO PROCESSO DE ENFERMAGEM: REVISÃO INTEGRATIVA

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ABSTRACT

Objective: To analyze the scientific evidence about the use of Kolcaba comfort theory in the implementation of the nursing process. Method: It is an integrative review, with studies between 2000 and 2017, with researches done in the databases of CINAHL, LILACS, PubMed, SCOPUS and Web of Science, obeying six correlated steps. Results: There were 16 articles from which emerged four thematic categories: nursing process in the context of the health of the child, the adult, the woman and the elderly. It was observed that the use of comfort theory enabled nurses to comply with phases of the nursing process. Conclusion: It is concluded that the theory of comfort is a theoretical reference that bases the nursing process and enhances comfort as a result of nursing care.

Descriptors: Nursing Theory; Nursing Process; Patient Comfort.

RESUMO


RESUMEN

Objetivo: Analizar las evidencias científicas acerca del uso de la teoría del conforto de Kolcaba en la implementación del proceso de enfermería. Método: Se trata de una revisión integrativa, con estudios entre 2000 y 2017, con investigaciones realizadas en los bancos de datos de CINAHL, LILACS, PubMed, SCOPUS y Web Of Science, obedeciendo seis etapas correlacionadas. Resultados: Se encontraron 16 artículos en los que emergieron cuatro categorías temáticas: proceso de enefermería en el contexto de la salud de la infancia, el adulto, la mujer y el anciano. Se observó que el uso de la teoría del conforto permitió a las enfermeras cumplir con fases del proceso de enfermería. Conclusión: Se concluye que la teoría del conforto es un referencial teórico que fundamenta el proceso de enfermería y potencia el conforto como resultado de la asistencia de enfermería. Descriptores: Teoría de Enfermería; Proceso de Enfermería; Conforto del Paciente.

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Descriptores: Teoría de Enfermería; Proceso de Enfermería; Comodidad del Paciente.

INTRODUCTION

The Systematization of Nursing Assistance (SNA) provides elements for the organization and management of care, which makes possible the implementation of the Nursing Process (PN). The PN is a methodological instrument that requires incorporation of perspectives of nursing theories to make the results of the operation operational.

Nursing theories establish the basis of scientific knowledge to systematize knowledge and organize care, which establishes subsidies for a professional practice based on evidence. It can be understood as a specific and concrete set of concepts and propositions to explain, describe, predict or characterize phenomena of interest to the nursing discipline.

In practice, a theoretical support gap is found to determine the care, essentially for the operationalization of the PN with a focus on promoting comfort, as emphasized in Katharine Kolcaba's theory.

Comfort is considered as a basic need of the human person, an essential result of nursing, universally desirable, relevant in several professional taxonomies and nursing theories.

In Kolcaba's theory comfort is emphasized as an immediate experience, strengthened by a sense of relief, tranquility and transcendence, considering the physical, psychospiritual, sociocultural and environmental context.

Through the above, it is considered relevant to contextualize and analyze Kolcaba comfort theory, in order to know its applicability in the implementation of the PN.

In order to recognize the importance of the theoretical foundation as a science, organization and quality of assistance, the objective of this research is to analyze scientific articles published on the world stage about the use of
Kolcaba comfort theory in the implementation of PN.

This study aims to foster the practice of evidence-based nursing, as well as provide support for adequate planning of the PN.

**METHODOLOGY**

It is an integrative review (RI) of the literature, which summarizes the available studies on a given topic and conducts the practice based on scientific knowledge. Its purpose is to generate knowledge about a problem and determine if its application is feasible in practice. This method allows the synthesis of multiple published studies, very useful for nurses who are in clinical practice and wish to perform nursing assistance based on scientific evidence.

For the construction of this RI, a methodological path was followed that contemplated six stages: 1) Identification of the theme and selection of the research question; 2) Establishment of inclusion and exclusion criteria; 3) Identification of pre-selected and selected articles; 4) Categorization of articles; 5) Construction of the analysis of results; and 6) Presentation of the synthesis of knowledge.

The first stage of RI consisted in identifying the theme and selecting the guiding question, which was: What is the scientific production about the application of Kolcaba comfort theory in the implementation of the PN?

In the second stage, inclusion criteria were stipulated: studies that addressed the use of Kolcaba comfort theory in the implementation of the nursing process; that were available in full under the modality of scientific article; published between 2000 and 2017, in Portuguese, English and Spanish. According to the exclusion criteria, repeated articles were excluded, from reviews and those who, after reading in full, did not respond to the research question.

The third stage consisted in identifying the pre-selected articles during data collection. The search was carried out during the months of April and May of 2017, in the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Latin American and Caribbean Literature in Health Sciences (LILACS), United Station National Library of Medicine (PubMed), SciVerse Scopus (SCOPUS) and Web Of Science.

The choice of databases was due to the quantitative indexing of health articles, as well as nursing related topics. The following descriptors were used in health sciences: nursing theory, nursing process and patient comfort, in the Portuguese, English and Spanish...
languages according to the database, using the Boolean operators AND and OR for crossing, as presented in Table 1.


<table>
<thead>
<tr>
<th>Descriptors</th>
<th>CINA</th>
<th>HL</th>
<th>Lilac</th>
<th>PubMed</th>
<th>Scopus</th>
<th>US</th>
<th>Web of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teoria de enfermagem/Nursing theor/Teoría de enfermería OR Processo de enfermagem/Nursing Process/Proceso de Enfermería</td>
<td>7502</td>
<td>734</td>
<td>6086</td>
<td>5129</td>
<td>856</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conforto do paciente/Patient comfort/Comodidade del paciente OR Processo de enfermagem/Nursing Process/Proceso de Enfermería</td>
<td>2079</td>
<td>324</td>
<td>3390</td>
<td>4506</td>
<td>2545</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teoria de enfermagem/Nursing theory/Teoría de enfermeira AND Conforto del paciente/Patient comfort/Comodidade del paciente</td>
<td>20</td>
<td>8</td>
<td>102</td>
<td>95</td>
<td>72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors, 2017.

After the search procedure the pre-selected publications were located based on the reading of the title and abstract. After reading in full the publications previously selected (n = 41), the final sample of articles was defined (n = 16).

The fourth stage of the integrative review consisted of categorizing the selected articles. The data extraction was carried out by means of a semi-structured script prepared by the authors. The script was not validated, but allowed the extraction of information from the selected studies, such as: article title, authors, year of publication, language, publication journal, objective, methodology, population and study scenario, results and conclusions.

The 5th stage was focused on the construction of the results analysis. We chose to perform simple descriptive analysis presenting them in categories. The 6th stage consisted in presenting the synthesis of knowledge, which was presented in the next topics of this RI.

Because it was an RI, it was not necessary to request approval from the Ethics Committee to carry out the study.

RESULTS AND DISCUSSION

In this RI were analyzed 16 original articles that met the inclusion criteria previously established. Among the studies, 12.5% (2) were published in
2000, 6.2% (1) in 2002, one in 2004, one in 2005, one in 2012, 25% (4) in 2014, two in 2015, 18.7% (3) in 2016 and one in 2017. Regarding the origin of the studies, 56.2% (9) were published in English and in international journals, and 43.7% (7) in the Portuguese language, as shown in table 2.

**Table 2 - List of articles included in the study (E).** Rio de Janeiro, Brazil, 2017.

<table>
<thead>
<tr>
<th>E</th>
<th>Title / Author</th>
<th>Language Year</th>
<th>Newspaper</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Alternative and complementary therapies for labor and birth: an application of Kolcaba's theory of holistic comfort.(^{14}) Koehn ML</td>
<td>English 2000</td>
<td>Holist Nurs Pract</td>
</tr>
<tr>
<td>4</td>
<td>Practical application of comfort theory in the perianesthesia setting.(^{16}) Wilson L, Kolcaba K</td>
<td>English 2004</td>
<td>J Perianesth Nurs</td>
</tr>
<tr>
<td>6</td>
<td>Contribuição do cuidado clínico de enfermagem para o conforto psicoespiritual de mulheres infarto agudo do miocárdio (IAM).(^{18}) Ponte KMA, Silva LF, Aragão AEA, Guedes MVC, Zagonel IPS</td>
<td>Portuguese 2012</td>
<td>Esc. Anna Nery</td>
</tr>
<tr>
<td>7</td>
<td>Cuidados de enfermagem a uma puérpera fundamentados na teoria do conforto.(^{19}) Barbosa EMG, Oliveira FDM, Guedes MVC, Monteiro ARM, Rodrigues DP, Silva LF, Fialho AVM.</td>
<td>Portuguese 2014</td>
<td>Rev Min Enferm.</td>
</tr>
<tr>
<td>8</td>
<td>A practical application of Katharine Kolcaba's comfort theory to cardiac patients.(^{20}) Krinsky R, Murillo I, Johnson J.</td>
<td>English 2014</td>
<td>Appl Nurs Res</td>
</tr>
<tr>
<td>10</td>
<td>Cuidados de enfermagem a mulheres com infarto do miocárdio: promoção do conforto sociocultural pela pesquisa-cuidado.(^{22}) Ponte KMA, Silva LF.</td>
<td>Portuguese 2014</td>
<td>Rev enferm UERJ</td>
</tr>
<tr>
<td>11</td>
<td>Cuidado clínico de enfermagem para conforto de mulheres com IAM.(^{23}) Ponte KMA, Silva LF, Aragão AEA, Guedes MVC, Zagonel IPS</td>
<td>Portuguese 2014</td>
<td>Texto Contexto Enferm</td>
</tr>
<tr>
<td>12</td>
<td>Processo de enfermagem no conforto do paciente com insuficiência cardíaca (IC) no domicílio.(^{24}) Freire da Silva FV, Rabelo ACS, Silva LF.</td>
<td>Portuguese 2015</td>
<td>Aquichan LILACS</td>
</tr>
<tr>
<td>13</td>
<td>The Effect of Nursing Care Based on Comfort Theory on Women’s Postpartum Comfort Levels After Caesarean Sections.(^{25}) Aksoy Derya Y, Pasinlioglu T.</td>
<td>English 2015</td>
<td>Int J Nurs Knowl</td>
</tr>
<tr>
<td>14</td>
<td>Utilidade da teoria do conforto para o cuidado clínico de enfermagem à puérpera: análise crítica.(^{26}) Lima JVF, Guedes MVC, Silva LF, Freitas MC, Fialho AVM</td>
<td>Portuguese 2016</td>
<td>Rev Gaúcha Enferm</td>
</tr>
<tr>
<td>15</td>
<td>Epilepsy monitoring - The patients' views: A qualitative study based on Kolcaba's Comfort Theory.(^{27}) Egger-Rainer A, Trinka E, Höfler J, Dieplinger AM</td>
<td>English 2017</td>
<td>Epilepsy Behav</td>
</tr>
</tbody>
</table>
The sample was composed of international and national productions, validating a strong global influence of comfort promotion as a result of nursing care.

Regarding the approach of the selected studies, 87.5% (14) were qualitative and 12.5% (2) were quantitative (a controlled clinical trial and a quasi-experimental study). Among the qualitative researches, five were case studies, five descriptive studies, three research-care studies and one theoretical reflective study.

The study population comprised the elderly, children, puerpera, women in labor, women diagnosed with acute myocardial infarction (AMI), adult patients with heart failure, acute coronary syndrome (ACS), and epilepsy.

The analysis of the articles allowed to compose the following thematic categories, represented by: nursing process in the context of the health of the child, the adult, the woman and the elderly.

The first thematic category called "nursing process in the context of child health" consisted of two articles (E5 and E9). In this category the application of comfort theory by nurses to promote child health was evidenced.

Kolcaba and DiMarco\textsuperscript{17} reported the use of the taxonomic comfort structure (STC) as an instrument for data collection and the development of a questionnaire to assess child comfort in the hospital setting. Maechuk\textsuperscript{21} described in her study the use of STC by nurses and midwives for implementation of PN in the care of newborns in palliative care.

In the second category "women's health nursing process", seven articles (E2, E6, E7, E10, E11, E13 and E14) were classified. In this category, the application of comfort theory in the systematization of nursing care to women was identified.

Koehn\textsuperscript{14} addressed the use of comfort theory as a guide for nurses in the implementation of care based on alternative and complementary therapies (music therapy, acupuncture, aromatherapy, hydromassage and massage therapy) in the care of women in labor and their newborn children.

Aksoy Derya and Pasinlioglu\textsuperscript{25} developed a booklet that was used as a
reference for training nurses on the implementation of PN in the care of women in the postpartum period.

Barbosa et al\textsuperscript{19}, Aksoy Derya and Pasinlioglu\textsuperscript{25} demonstrated in their studies the application of the comfort theory in the systematized nursing care given to the puerperae. In these studies, some nursing diagnoses stratified by comfort dimensions were mentioned, such as:

- **Physical context**: risk of bleeding; severe pain, nausea; risk of infection; risk of impaired skin integrity; risk of vascular trauma; urinary retention; risk of constipation; provision for improved nutrition; volume of liquids deficient; sleep deprivation; fatigue; impaired physical mobility; provision for health control improvement; and ineffective breastfeeding.\textsuperscript{19,25}

- **Psycho-spiritual context**: anxiety; risk of loneliness; low situational self-esteem; body image disorder; caregiver role tension; dysfunctional family processes; and sexual dysfunction.\textsuperscript{19,25}

- **Socio-cultural context**: poor knowledge.\textsuperscript{19,25}

- **Environmental context**: impaired comfort.\textsuperscript{19,25}

Ponte et al\textsuperscript{18,22-23} published three Brazilian articles cutting her doctoral thesis, which addressed the interaction of the research-care method and the application of comfort theory to hospitalized women. The author analyzed the contribution of technology-mediated nursing care to the promotion of physical, psycho-spiritual, sociocultural and environmental comfort offered to nine women with a medical diagnosis of AMI.

Lima et al\textsuperscript{26} evaluated the application of the concept of comfort theory for the implementation of PN in the promotion of puerperal comfort in the hospital environment.

In the third thematic category "nursing process in the context of adult health", six articles (E3, E4, E8, E12, E15 and E16) were correlated. In this category, comfort was observed as a result of nursing care offered to adult patients.

Kolcaba and Wilson\textsuperscript{15-16} and Bergström et al\textsuperscript{28} discussed in their studies the use of STC in the pre and peri-anesthetic context, and the elaboration of a questionnaire to assess the comfort of patients in the preanesthetic period.

Krinsky et al\textsuperscript{20} and Freire da Silva et al\textsuperscript{24} described the use of comfort theory in the implementation of PE to promote
comfort to patients with heart disease. Egger-Rainer et al. demonstrated the application of the comfort theory of care to inpatients in an epilepsy monitoring unit.

In the fourth thematic category "nursing process in the context of the health of the elderly" was stratified an article (E1). In this category the application of the comfort theory in the promotion of elderly health was evidenced. Panno et al. addressed the application of a geriatric care model based on the principles of comfort theory for the clinical management of elderly patients with orthopedic problems.

It can be observed in all thematic categories that the use of comfort theory enabled nurses to comply with the first phase of the PN, data collection or nursing history. This fact favored a structured data collection aimed at identifying the patients' unsatisfactory needs and discomforts. The collection of data based on a nursing theory provides concrete support for the execution of the other stages of the PN.1-2

The articles related to the thematic category "nursing process in the context of women's health" were the ones that presented enhancements of compliance with the second stage of the PN, with the formulation of nursing diagnoses. When evidence-based, nursing diagnoses are primordial elements to obtain better results and target nursing interventions.1-3

Some of the proposals for activities for nursing interventions related to the promotion of physical, environmental, psycho-spiritual and sociocultural comfort were evidenced in the articles analyzed. This fact corroborates with the propositions of the theoretical study, when affirming that when interventions are performed in a consistent way they can promote or facilitate health search behaviors.7

We also observed the authors' commitment to the development of questionnaires and scales for the measurement of patient comfort. Such practice may be related to the search for the implementation of the theoretical proposition and its practical correlation through guiding instruments of assistance. In addition, during the academic training, the use of the instruments facilitates the teaching and learning process, which can be an excellent tool in the consolidation of nursing care to promote comfort.

The use of comfort theory in the implementation of PN, besides structuring care, raises the level of care provided, strengthens nurse-patient-family relationships and favors the development of health-seeking
behaviors, and can improve institutional outcomes.$^{13-28}$ Thus, it is expected that this study may contribute to the development of research aimed at promoting comfort as the core of the nurse's care, both for interventions with a focus on comfort and for the evaluation of individual and institutional outcomes, employing the as an indicator of quality of care.

As a contribution to clinical practice, the findings of this IR supported the indication of the use of comfort theory for the implementation of PN, aiming as a result of nursing the promotion of patient comfort in the physical, psychospiritual, environmental and sociocultural contexts.

**CONCLUSION**

The results of this study were limited by the scarcity of research that presented the application of the theory throughout all stages of the PN, as well as the predominance of descriptive studies and case reports, which influenced the search for findings with a high level of evidence that could be used for transposition in clinical practice.

RI ratified the contributions of Kolcaba's comfort theory to the implementation of PN in different populations and is used to promote the health of children, adults, especially women, and the health of the elderly.

The production of knowledge promulgated the use of comfort theory in the implementation of the PN, seeing the increasing interest of holistic comfort as a result of nursing, with a proposal to improve the quality of care through the use of a nursing theory.

The theory of comfort was presented as a theoretical reference that invigorates nursing as a science, besides encouraging the interaction, autonomy and valuation of the patient's needs, based on the promotion of comfort, with a consequent improvement in the quality of life.

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