Theoretical and practical knowledge of the nurse on Nursing Process and Systematization of nursing
Conhecimento teórico-prático do Enfermeiro sobre Processo de Enfermagem e Sistematização de Enfermagem
Conocimiento teórico-práctico del Enfermero del Proceso de Enfermería y Sistematización de Enfermería

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ABSTRACT

The objective of this study was to identify the theoretical and practical knowledge of nurses on the Systematization of Nursing Care and Nursing Process in a public teaching hospital in São Paulo - Brazil.

We conducted a descriptive exploratory study, qualitative and quantitative approach with 164 nurses. It was found that 57% of nurses reported that the workload prevents the use of the Systematization of Nursing Care and Nursing process, 38% say that the forms are inadequate for the work unit and 29 % report that the lack of credibility method, with elements that prevent proper development of the activity. So for these nurses both Systematization of nursing care as the Nursing Process has the same meaning.

In conclusion it was identified among nurses of the institution using Systematization of nursing care and the Nursing Process as without distinction working methods, which contributes to the conceptual knowledge of differences.

Keywords: Nursing; Education; Nursing Process

RESUMO

Objetivou-se com este estudo identificar o conhecimento teórico-prático dos enfermeiros sobre Sistematização da Assistência de Enfermagem e Processo de Enfermagem em um hospital público do interior de São Paulo.
Realizou-se um estudo exploratório-descritivo, de abordagem quali-quantitativa com 164 enfermeiros.

Verificou-se que 57% dos enfermeiros relataram que a carga de trabalho impede a utilização da Sistematização da Assistência de Enfermagem e processo de Enfermagem, 38% afirmam que os impressos são inadequados para a unidade de trabalho e 29% relatam que a falta de credibilidade do método, sendo elementos que impedem o desenvolvimento adequado da atividade. Para estes enfermeiros tanto a Sistematização da Assistência de Enfermagem como o Processo de Enfermagem têm um mesmo significado conceitual.

Concluindo identificou-se entre os enfermeiros desta instituição utilizam SAE e PE como métodos de trabalho sem distinção, o que contribui para as divergências de conhecimento conceitual.

Palavras-chave: Enfermagem; Educação; Processos de Enfermagem

RESUMEN

El objetivo de este estudio fue identificar el conocimiento teórico-práctico de los enfermeros en la Sistematización de la Asistencia de Enfermería y el Proceso de Enfermería en un hospital público docente, en São Paulo - Brasil.

Se realizó un estudio exploratorio-descriptivo, de enfoque cuali-cuantitativo con 164 enfermeros. Se encontró que el 57% reportó que la carga de trabajo impide el uso de la Sistematización de los Cuidados de Enfermería y Proceso de Enfermería, el 38 % dice que los impresos son inadecuados para la unidad de trabajo y el 29 % indica la falta de credibilidad del método, siendo elementos que impiden un desarrollo adecuado de la actividad. Para estos enfermeros tanto la Sistematización de los Cuidados de Enfermería como el Proceso de Enfermería tiene el mismo significado conceptual.

En conclusión, se identificó que los enfermeros de la institución utilizan SAE y PE como métodos de trabajo sin distinción, lo que contribuye a las divergencias del conocimiento conceptual.

Palabras clave: Enfermería; Educación; Proceso de enfermería.

INTRODUCTION

The dichotomy existent in the practice and literature of the Systematization of Nursing Care (SAE) and Nursing Process (NP) instigates scientific curiosity\(^1\text{-}^3\).

The SAE is responsible for the organization of the nursing work process regards its methods, staff, and instruments. The registration is the primary characteristic of this systematization, together with the intellectual process developed by the nurse that encompasses the NP\(^1\).

The NP is a specific professional activity that demands multiple interrelated actions substantiated on the technical-scientific knowledge and historical-cultural values of the nurse practitioner. Activities inherent and exclusive of this profession are considered part of the NP, such as actions and interventions (Planning and Implementation of Nursing) based on the judgment of specific human needs (Nursing Diagnostics) aiming to reach results (Nursing Results)\(^2\).

The scientific field presents different comprehensions when defining SAE and NP\(^4\text{-}^7\). SAE is defined as the registered planning of assistance or even an instrument to manage and optimize the nursing assistance in a safe, dynamic and efficient way\(^5\). The NP, in turn, is defined as a specific job that requires a series of dynamic and correlated actions or, in other words, is the adoption of a pre-established 'way of
NP is one of the great pillars of SAE, and nowadays SAE became known as a synonymous of NP.

Papers on the perception of nurses regards SAE and NP are scarce, divergent, and outdated. The variation of terminologies found is a notable variable in this conflicting context, seeing that they can be mentioned in variable forms such as Systematization of Assistance, Methodology of Assistance, Assistance Planning, Care Process, Methodology of Care, Assistance Process, Nursing Consultation, Nursing Attention Process, and Nursing Process.

In a study, considering SAE and NP as synonymous, the nurses’ perception regards this activity is extremely diverse, putting it as an instrument of assistance qualification, service organizer, and even professional and institutional qualifier. However, it is also observed the difficulty in the utilization of SAE/NP, being them a bureaucratic and difficultly operationalized activity, with also an overload of work and deviations of functions. Thus, nurses’ perception can be summarized in the idea that while SAE/NP is an essential instrument to their activities, it needs to be reworded so it can be better operationalized and fully applied.

Studies show that nurses should not only know SAE and NP, but also apply them in their work in order to improve assistance quality and autonomy. However, its proven that the majority of professionals lack the knowledge regards these methodologies, and therefore use them incorrectly, incompletely or don’t use them at all.

The problematic that guided this study was the conceptual dichotomy between the Systematization of Nursing Care (SAE) and the Nursing Process (NP) that exists amongst nursing professionals lacking clarity of these concepts in their daily care practice.

The main objective of this research was to identify the theoretical and practical knowledge of nurses about SAE and NP in a public teaching hospital in the inner state of Sao Paulo, Brazil.

METHODS

This is an exploratory descriptive study that uses a quantitative approach.

This study was conducted with assistance and administrative nurses of a teaching Hospital at the State University of Campinas (UNICAMP). A total of 164 out of 427 nurses participated in this study, being them divided in three work shifts (morning, afternoon and overnight). Some nurses declined to participate, and there were also staff on vacation or away.

To collect data, we used a self-applicable questionnaire. The first part of the questionnaire was design to collect demographical data of each participant. The second part was composed of questions regards how to use SAE and NP in their daily work, what are the difficulties in using it, and what is the meaning of SAE and NP for them. The questionnaire was collected back exactly one week after it had been delivered to each participant. Together with the fully answered questionnaire the nurses gave back the informed consent properly signed.
The answers were categorized regards the work organization and the assistance organization present in the implementation of SAE and NP.

All nurses that worked at the institution in question, and agreed to participate by signing the informed consent were included in this work.

To participate in this study, the nurses should be regularly enrolled and acting in assistance activities at this hospital during the data collection period.

To accomplish the proposed objectives, the subjective answers were categorized in similar concepts what allowed us to perform a descriptive analysis in an Excel® worksheet.

The data was collected from July 1st 2013 to October 1st 2013. This research was approved by the Research Ethics Committee of the Med School at the State University of Campinas (UNICAMP), under the following protocol number 320983.

RESULTS

Table 1 characterizes the demographics of the nurses participating in this study by age, sex, time of experience, job role, employment link, work shift, time working at the hospital, workload, and work unit complexity. By analyzing this data, it is possible to correlate the variables time of experience and job role with the knowledge regards SAE and NP, seeing that these concepts are recent in their professional practices.

All the nurses from the Hospital in question were invited to participate in this study, and 164 accepted. They are divided in three work shifts, morning, afternoon and overnight (Table 1). The participation of these nurses represent an acceptance rate of 38.40%. No participants were excluded from the non-conventional probabilistic sample, seeing that all of those participating answered properly to the questionnaire.

Table 1. Distribution of nurses regards Age, Sex, Time of Experience, Job Role, Employment Link, Work Shift, Time Working at the Hospital, Workload, and Work Unit Complexity. Campinas, SP, Brazil, 2013.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Categories</th>
<th>University Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30</td>
<td>35</td>
<td>21%</td>
</tr>
<tr>
<td>31-40</td>
<td>63</td>
<td>38%</td>
</tr>
<tr>
<td>41-50</td>
<td>38</td>
<td>23%</td>
</tr>
<tr>
<td>51-60</td>
<td>18</td>
<td>11%</td>
</tr>
<tr>
<td>60+</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>NA*</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>108</td>
<td>66%</td>
</tr>
<tr>
<td>Male</td>
<td>14</td>
<td>9%</td>
</tr>
<tr>
<td>NA*</td>
<td>42</td>
<td>26%</td>
</tr>
<tr>
<td>Time of Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 10</td>
<td>85</td>
<td>52%</td>
</tr>
<tr>
<td>11 - 20</td>
<td>46</td>
<td>28%</td>
</tr>
<tr>
<td>21 - 30</td>
<td>29</td>
<td>18%</td>
</tr>
<tr>
<td>NA*</td>
<td>4</td>
<td>2%</td>
</tr>
</tbody>
</table>
It was found that 55% (n=91) of nurses prescribe and execute from four to six nursing interventions each day, 40% (n=66) from one to three, 4% (n=6) from seven to ten interventions, and 1% (n=2) didn't answer. Besides the availability of courses, offered by the continued education team of the hospital, related to the theme, 76% (n=124) nurses reported never being part of any course related to NP/SAE, only 16% (n=26) participated in courses related, and 9% (n=14) didn't answer.

When questioned about the method used in their daily work, NP or SAE, 55% (n=87) answered that they used both, 38% (n=61) only used SAE, 7% (n=11) only used NP. Table 2 is showing the difficulties reported by the nurses regards the development of SAE and NP. In this question they were able to choose more than one item from the questionnaire (Table 2).

**Table 2.** Difficulties reported by the nurses regards the application of SAE and NP. Campinas, SP, Brazil, 2013.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exacerbated work load prevents the use</td>
<td>93</td>
<td>33%</td>
</tr>
<tr>
<td>Little contact with this content in academic education</td>
<td>31</td>
<td>11%</td>
</tr>
<tr>
<td>Low credibility of the method</td>
<td>48</td>
<td>17%</td>
</tr>
<tr>
<td>Always did a good job without using it</td>
<td>7</td>
<td>2%</td>
</tr>
</tbody>
</table>
### Inadequate forms for unit needs

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate forms for unit needs</td>
<td>63</td>
<td>23%</td>
</tr>
<tr>
<td>Doesn’t agree with the obligation to use it</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>Doesn’t have</td>
<td>8</td>
<td>3%</td>
</tr>
<tr>
<td>Other reasons</td>
<td>29</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>283</td>
<td>100%</td>
</tr>
</tbody>
</table>

Some answers given in the item ‘Other reasons’ (Table 2) were the importance of the nursing staff in the development of SAE/NP, as a crucial factor in the success or failure of established interventions; the history of nursing as an implicative factor of the realization of this activity, seeing its complexity, time spent, and amount of information that needs to be collected; The development of the operationalization of activities related to SAE/NP; The lack of standardization in the communication between professionals hinders the development and continuity of the work proposed and the validity of the standardization NANDA/NIC/NOC to the Brazilian reality, since it is an international system.

There were some nurses that didn’t report any difficulty related to the application of SAE/NP, and the informatization of SAE/NP was cited as a solution to the development of this activity in an adequate manner.

As to the knowledge about the concept of SAE and NP, the nurses’ answers were categorized in Assistance organization and Work organization. The first one applies to any response that mention SAE/NP as an organizer of direct assistance to the patient. The second one to responses that consider SAE/NP as an activity that regulates work in an extended manner, encompassing the organization of staff, distribution of tasks, resource organizations, and other activities not necessarily directly related to the patient (Table 3).

**Table 3. Knowledge of nurses regards SAE and NP. Campinas, SP, Brazil, 2013.**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Categories</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assistance Organization</td>
<td>97</td>
<td>59%</td>
</tr>
<tr>
<td></td>
<td>Work Organization</td>
<td>18</td>
<td>11%</td>
</tr>
<tr>
<td>Nursing Process (NP)</td>
<td>NA1*</td>
<td>19</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>NP = SAE</td>
<td>18</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>NA2*</td>
<td>12</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Assistance Organization</td>
<td>100</td>
<td>61%</td>
</tr>
<tr>
<td></td>
<td>Work Organization</td>
<td>12</td>
<td>7%</td>
</tr>
<tr>
<td>Systematization of Nursing Care (SAE)</td>
<td>NA1*</td>
<td>22</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>NP = SAE</td>
<td>18</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>NA2*</td>
<td>12</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>164</td>
<td>100%</td>
</tr>
</tbody>
</table>

*NA1= No Answer for this question
*NA2=No Answer for both questions
The Assistance Organization category stood out in both questions, being it more present (61%, n=100) in the question regarding SAE. However, as to the Work Organization, the higher representation is related to the question regarding NP with 11% (n=18). There were nurses that didn’t answer one of the questions, being it 12% (n=19) to the NP question, and 14% (n=22) to SAE one. There were also participants that didn’t answer both questions, 7% (n=12).

In the other hand, 11% (n=18) of the nurses answered that NP and SAE were about the same subject, and therefore considered them as synonymous.

**DISCUSSION**

From the nurses that participated in this research 5% (n=8) are supervisors, and 50% (n=4) of them categorized NP as an organizing tool for direct patient care, while 25% (n=2) considered it as a work organizer tool. When questioned about SAE, 63% (n=5) of supervisors considered it as an assistance organizer, 13% (n=1) didn’t answer this question, and no one considered SAE as a work organizer activity. 13% (n=1) of supervisors considered NP similar to SAE, and 13% (n=1) didn’t answer any of the questions.

A theme that is tightly related to issues about the perceptions regards NP and SAE are the difficulties in implementation and execution of these work methods. This study showed that the main difficulty is the extensive workload that prevents the use of NP/SAE (33%, n=93), followed by the presence of inadequate forms for unit’s needs (23%, n=63), and the low credibility of the method (17%, n=48). These findings corroborate with another study that reports SAE/NP as a bureaucratic method tightly related to the overload of work\(^6\,\text{12-13}\).

The forms are important seeing that they standardize and give legal support to nursing activities\(^14\), however, if they do not fit the needs of each unit they end up becoming an obstacle in the application of SAE/ NP. The low credibility of the method, on the other hand, is the result of multiple factors that demotivates the execution of SAE/NP, such as the gap between theory and practice, and political and institutional questions related to nursing\(^14\). These situations impact all the multi professional team, harming the development, application, and continuity of activities.

It was shown that 55% of the nurses used SAE and NP as work methods without distinguishing them, what contributes to divergences of conceptual knowledge about both.

This conflict of information can interfere in the quality of care, once proper knowledge is the tool that gives nurses security in the decision-making process related to the patient, the health team, and for administrative activities of the unit. Therefore, it assures the professional that he/she is acting in the most correct and appropriate way\(^14\,\text{16}\).

It was verified that the emphasis given to SAE/NP in the formation of 19% of the nurses was scanty. We believe that it is up to the formation institution the responsibility to prepare nursing professionals with a scientific, organized and systematized approach. However, there are several difficulties in this process, such as reality of institutions, where assistance methodologies are not used making the educational
performance difficulty; Unprepared professors seeing that they, during their formation, didn’t have the opportunity to develop skills related to NP\textsuperscript{(17)}.

It was observed that the informatization of NP/SAE was reported as a solution to adversities found in its application. The implementation of a nursing electronic system aims to improve documentation, encourage nurses to embrace SAE, improve diagnostic accuracy, and reach the obtained results along with the patients\textsuperscript{(18)}.

The perceptions about SAE/NP presented by the nurses were similar to published studies\textsuperscript{(19-21)}.

The category ‘Work Organization’ was an expression created in this study based on the answers obtained by the nurses. It is defined as the attention to the needs of a work environment, and other activities that don’t necessarily includes direct patient care. The ‘Assistance Organization’, in the other hand, was also an expression created here, and it is exclusively related to the direct patient care, planning of actions directed to the patient, the search for a better way to assist them, among others. However, The ‘Work Organization’ appears in a much smaller position when compared to the ‘Assistance Organization’ in both question in which nurses clarified their perceptions regards SAE and NP.

In a study with the purpose of understanding the experience of nurses, from an adult intensive care unit, regards the development of SAE, showed that they had limited knowledge about patient’s clinic condition and SAE itself. They concluded that it is necessary to initiate discussion groups about clinical cases and SAE, contributing, then, to the strengthening and appreciation of knowledge from the health team\textsuperscript{(12)}.

In another study, with the objective to comprehend the implementation of NP in the daily work of nurses acting in Psychosocial Care Centers (in Campinas, SP, Brazil), three thematic categories emerged, being the nursing process understood as assistance systematization, the difference of the nursing process in the distinct tools used in mental health, and the dichotomy between body and mind. They concluded that NP is performed as the completion of a data collection instrument, bringing difficulty in the incorporation of the concept of integrality, and in the establishment of the therapeutic interpersonal relationship, needed to the elaboration of the nursing process\textsuperscript{(19)}.

The lack of knowledge regards SAE and NP leads to a disarticulation between theory and practice, what causes ideological conflicts that harm the understanding of the nursing practice, along with the planning of activities, the teaching of nursing theories (giving a teaching hospital environment), and, in a broad way, the development of all nursing activities\textsuperscript{(17-20)}.

In this context, the Systematization of Nursing Care (SAE) shows up as a solid conceptual structure that promotes the continuity and quality of nursing care. The SAE is a set of activities that aims to professionalize patient care by using work instruments that support decision making regards the execution of scientific, holistic, and constant care, seeing that the NP is a work method fundamentally required to the realization of SAE\textsuperscript{(13)}.

The lack of knowledge about SAE/NP hinders the work process of a nursing professional as well as the overload and the deficits of material and human resources
do. This also involves subjective elements of the people responsible for the use of SAE. It is necessary for them to believe and defend the SAE, directly influencing the will to fight for its consolidation and to establish a nursing field with technical-scientific knowledge\textsuperscript{(16)}.

It was verified that the knowledge about SAE brought out a better nursing care, that can lead for the nursing work to be recognized. The SAE is a work restricted to the nurse that commands the activities of the work team. Regarding to NP it was identified the theory about the work process. Thus, the meaning of SAE/NP to the nurses was directed to a methodological instrument that favors the dynamics of care, and organizes the necessary conditions to the work performance\textsuperscript{(6,12)}.

The SAE and the NP show, in the literature, different approaches. Among them are the search for a better way to assist a client, correlate activities with patient’s needs, instrument to get to know the patient and organize the treatment, and instrument to improve the quality of nursing care. However, other studies report the disarticulation of nursing theories in their applications, where SAE/NP didn’t become universal, even in university hospitals\textsuperscript{(14)}.

The SAE and NP are instruments that proportionate higher quality assistance, better efficacy, autonomy, and scientificity to the job. These findings corroborate with other papers\textsuperscript{(8,12)}, giving credit to the professional and institution, creating a quality nursing care that can be recognized.

CONCLUSION

We conclude that the nurses, from the institution used in this research, have theoretical and practical knowledge about SAE and NP, however, there is divergence seeing that they consider SAE and NP as fundamental tools to assistance organization, and report the use of both methods in their daily work.

It was also found that there are more challenges than ‘open doors’ in the operationalization of SAE and NP, such as the appropriate implementation of these methods, creation of specific digitalized forms, the lack of human resources in nursing, administration of time between nursing assistance and management, and the lack of specific knowledge needed.

It is possible to conclude and reassure that the Systematization of Nursing Care (SAE) and the Nursing Process (NP) improve the quality of care, promote autonomy, and allow the unification of language. They also represent the own knowledge of the nurse that should be assumed, developed, consolidated, and appreciated.

We hope that this research makes nursing more consistent, being it fundamental that we overcome the historical dichotomy that distances ideas from actions, encompassing SAE and NP in its essence.

REFERENCES


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