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ANALYSIS OF NURSING EVOLUTIONS CONTEXTUALIZED IN THE NURSING PROCESS

ANÁLISE DAS EVOLUÇÕES DE ENFERMAGEM CONTEXTUALIZADAS NO PROCESSO DE ENFERMAGEM

ANÁLISIS DE LAS EVOLUCIONES DE ENFERMERÍA CONTEXTUALIZADAS EN EL PROCESO DE ENFERMERÍA

*Leticia Bottcher Dias¹, Erika Christiane Marocco Duran²***ABSTRACT**

Objective: to evaluate the records of the Nursing evolutions of the hospitalization unit in Cardiology and Coronary Intensive Care Unit contextualized in the Nursing process. **Method:** this is a quantitative, exploratory and descriptive study, through a systematized reading of medical records. 150 Nursing evolutions were read using a digital script for tabulation, and later statistical analysis of the data. The data were presented through descriptive statistics. **Results:** it is noteworthy that among the Nursing diagnoses identified, 42.45% were not presented as identifiable data in Nursing evolutions; the evolution of the nursing diagnosis remained unchanged in 87.83% of the cases and the most used diagnosis was the risk of infection. **Conclusion:** it is concluded that the Nursing evolutions have not been carried out in a manner consistent with the choice and evolution of the Nursing diagnosis and the care plan. It is considered that nurses should appropriate nursing diagnoses using them in their practice in order to provide quality care and not just comply with legislation. **Descriptors:** Nursing Research; Nursing Process; Nursing Assessment; Nursing Diagnosis; Nursing Records; Nursing Care.

RESUMO

Objetivo: avaliar os registros das evoluções de Enfermagem da unidade de internação em Cardiologia e Unidade de Terapia Intensiva Coronariana contextualizadas no processo de Enfermagem. **Método:** trata-se de estudo quantitativo, exploratório e descritivo, por meio de uma leitura sistematizada de prontuários. Foram lidas 150 evoluções de Enfermagem utilizando-se roteiro digital para a tabulação, e posterior análise estatística dos dados. Apresentaram-se os dados por meio de estatística descritiva. **Resultados:** ressalta-se que, dentre os diagnósticos de Enfermagem identificados, 42,45% não foram apresentados sob a forma de dados identificáveis nas evoluções de Enfermagem; a evolução do diagnóstico de Enfermagem manteve-se inalterada em 87,83% dos casos e o diagnóstico mais utilizado foi o de risco de infecção. **Conclusão:** conclui-se que as evoluções de Enfermagem não têm sido realizadas de maneira coerente com a escolha e a evolução do diagnóstico de Enfermagem e o plano de cuidados. Considera-se que os enfermeiros devem se apropriar dos diagnósticos de Enfermagem utilizando-os, em sua prática, a fim de proporcionar a assistência de qualidade e não apenas cumprir a legislação. **Descritores:** Pesquisa em Enfermagem; Processo de Enfermagem; Avaliação em Enfermagem; Diagnóstico de Enfermagem; Registros de Enfermagem; Cuidados de Enfermagem.

RESUMEN

Objetivo: evaluar los registros de las evoluciones de Enfermería de la unidad de internación en Cardiología y Unidad de Terapia Intensiva Coronaria contextualizadas en el proceso de Enfermería. **Método:** se trata de estudio cuantitativo, exploratorio y descriptivo, por medio de una lectura sistematizada de prontuarios. Se leyeron 150 evoluciones de Enfermería utilizando guion digital para la tabulación, y posterior análisis estadístico de los datos. Se presentaron los datos por medio de estadística descriptiva. **Resultados:** se resalta que, entre los diagnósticos de Enfermería identificados, el 42,45% no fueron presentados bajo la forma de datos identificables en las evoluciones de Enfermería; la evolución del diagnóstico de Enfermería se mantuvo inalterada en el 87,83% de los casos y el diagnóstico más utilizado fue el de riesgo de infección. **Conclusión:** se concluye que las evoluciones de Enfermería no se han realizado de manera coherente con la elección y la evolución del diagnóstico de Enfermería y el plan de cuidados. Se considera que los enfermeros deben apropiarse de los diagnósticos de enfermería utilizando en su práctica, a fin de proporcionar la asistencia de calidad y no sólo cumplir la legislación. **Descritores:** Investigación en Enfermería; Proceso de Enfermería; Evaluación en Enfermería; Diagnóstico de Enfermería; Registros de Enfermería; Atención de Enfermería.

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INTRODUCTION

It is known that Nursing scientificity has led to the need for a variety of actions based on scientific methodology to perform care for the human being subsidized by the Nursing Process. The NP is considered a tool that directs the Nursing care and increases the clinical reasoning of the nurse aiming at the assistance to the human being. It is composed of five stages: historical, Nursing Diagnosis (ND), planning, implementation and evaluation or evolution.¹ In the health institutions, it is mandatory for the nurse to perform the Systematization of Nursing Care (SNC) documenting the phases of the NP.¹⁻³

It should be added that, during the course of the care, it is the responsibility of the entire Nursing team to prepare records of the activities performed and to the nurse, the clinical comparison of the patient of the last 24 hours. It is observed that the Nursing team only notes vital signs, routine items and summarized observations, with simple, incomplete, illegible and repetitive contents, which, consequently, leaves the evolution also incomplete and of no clinical importance.⁴

It is reported that, in this way, there will be incompleteness in the evaluation or evolution of Nursing conceptualized as: deliberate, systematic and continuous process of verification of changes in the responses of the person, family or human collectivity at a given moment in the health-disease process, to determine if the actions or nursing interventions reached the expected result; and verification of the need for changes or adaptations in the NP stages.¹

At this stage, the synthesis of the identified evidence is provided, being a daily report of the changes and an overall assessment of the care plan.⁴

The evolution is performed by the nurse, subsidized by a new physical examination, by notes, patient responses, team communications and test results, so that better strategies can be adopted for the next 24 hours. It should be centered on the ND's and can lead to a change of the same as the needs.⁴

Care should be selected in the daily evaluation by nurses to be maintained, those to be modified and those that can be finalized, once the results have already been achieved.⁴ It should be emphasized that when care is not noted, legally, the same was not performed and, if this happens, the nurse cannot evaluate the patient's response to it.⁵

It has been shown that the performance of many roles, restricted time and inadequate working conditions contribute to increase the distance between the nurse and the patient and, consequently, the NDs and the Nursing evolutions that may not follow her.^{2,6}

Models of evolution are proposed, but institutions have hardly any application. It is emphasized that in addition to a descriptive approach usually performed, the nurse should evaluate the evolution of NDs according to the institution's protocol; are generally scored as unchanged (U), improved (I), worsened (W) and resolved (R). Some principles should be considered for writing in the patient's medical record, namely, purpose, description and interpretation of data, avoid generalizations and vague terms, clear and concise, readable, in ink, without erasure and written grammatically and phonetically correct.⁴

However, in clinical practice, there are divergences in the execution of the Nursing evolution, since they do not fit the patient's frame, do not approach Nursing care and are not focused on ND.

It is indicated, through some measures addressed in studies, that, for the improvement in NP, teacher training, the uniform approach, the training of professionals to use instruments for the practice, the greater return to students about the deepening the reflection on theories, the discussion about ND and the articulation of the theoretical with the practice, diminishing the detachment and the mismatch between the academy and institutions.^{4,6-7}

OBJECTIVE

- To evaluate the records of the Nursing evolutions of the hospitalization unit in Cardiology and Coronary Intensive Care Unit contextualized in the Nursing process.

METHOD

It is a quantitative, exploratory and descriptive study. Medical records were used, since they provide Nursing records and are documents that have not undergone scientific treatment, bringing the results of reality closer.⁸

The data was collected in a non-intensive care ward - Cardiology - and in an intensive care unit - Coronary Unit, both units of a teaching hospital in the interior of São Paulo / SP, Brazil, through a systematized reading of medical records of inpatients focusing on the evolution of the Nursing dissertation and on the evolution of the ND's in the period of February 2017.

There were evolutions performed by nurses of all shifts giving preference to continue with the same patients while they were hospitalized.

It is emphasized that, in the Intensive Care Unit, the NDs were performed as a checklist already with the ND's, FR's and CD's ready to be marked. In the ward, there were the titles of the most frequent ND's with the blank space for the filling of CD's and FR's.

During the reading of the dissertation part of the evolution, the annotation in digital script was followed following the approach and with the addition of criteria such as circulatory and pain complaints.⁴ Its daily performance was evaluated, identifying the frequency of ND's, in addition to its evolution

and coherence with the dissertative record of evolution.

The criteria for the script score in Figure 1 are presented.

Evolution criteria	Criteria used
Physical exam	When he pointed out that the nurse was with the patient and did not use only other records. Ex: auscultation, palpation.
Level of Awareness	When I described the level of consciousness. Ex: wakeful, awake, confused.
Circulatory	When describing the hemodynamic status of the patient. Ex: stable hemodynamic measures of blood pressure, pulses, perfusion, edema.
Ventilatory	When describing the patient's respiratory system. Ex: eupneic, vesicular murmurs, adventitious sounds, mechanical ventilation.
Procedures / Care	When describing care that was being provided to the patient. Ex: medications (vasoactive drugs, antibiotics), dressings, aids.
Psychosocial	When describing subjective aspects of the patient, he cited companions and visits.
GI and Food	When describing about the patient's diet, the acceptance or condition of the abdomen. Ex: fasting, good food acceptance, hydro-aircraft noise present.
Hydration	When describing the patient's hydration level or the water balance.
Urinary Eliminations	When describing whether micturition was present, the presence of the bladder catheter or the urinary output in 24 hours.
Fecal Eliminations	When describing the evacuation present or not.
Sleep and Rest	When describing whether the patient was at rest, it was reported that he was not rested.
Vital signs	When describing the delta of at least one vital sign or oxygen saturation.
Endovenous Devices	When describing the patient's intravenous devices. Ex: peripheral venous access, central venous catheter.
Pain complaints	When describing the patient's complaints. Ex: complain of pain.
Exams	When describing the waiting or the accomplishment of some examination. Ex: awaits cardiac catheterization, in the immediate postoperative catheterization, underwent x-ray examination.

Figure 1. Scoring criteria in the script. Campinas (SP), Brazil, 2017.

The NDs were counted and analyzed along with their evolutions (unchanged, worsened, improved, onset). All NDs were recorded along with the FR's and CD's pointed out by the nurse.^{3,9}

The evolution of Nursing was analyzed according to its coherence with Nursing NDs.

Those who had more than half of their CD's and FR's contemplated in the nurse's dissertation evolution were considered to be fit. Those who had less than half contemplated were considered moderately fit and those who did not have any CD or FR cited were considered not suitable.

The daily evolution of the patient and the evolution of NDs were considered separately, since some nurses performed only the dissertative evolution.

The ND's per patient were recorded only once, considering all those that were listed by the nurse, regardless of the number of days used. In the evolution of ND, we analyzed all the days analyzed.

The data was recorded in digital spreadsheet analyzing them by descriptive statistics.⁸

Regarding the ethical aspects of this research, the determinations of the National Health Council (Resolution 466/2012) were respected and this was approved by the Research Ethics Committee (REC) of the State University of Campinas under registration number 61585816.0.0000.5404.⁹

RESULTS

There were 85 days of evolution (dissertative evolution and ND) of 13 patients admitted to the Cardiology ward and 65 days of progression of four patients hospitalized in

the intensive care ward - Coronary Unit, totaling 17 patients and 150 evolutions.

The dissertation part of the evolution of Nursing in the Cardiology ward was carried out in the 85 days collected, in its entirety. It is seen as to the evolution of NDs, that there was absence of only one day. In the intensive care ward, of the 65 days collected, the dissertation part was not performed in two days and the evolution of the ND in seven days. The analysis of the total number of days that did not carry out the changes was taken, totaling 85 in the ward and 63 in the intensive care ward.

The table 1 shows the content found in the Nursing evolutions in both wards.

Table 1. Content found in the Nursing evolutions of the Cardiology and Intensive Care Units of a public teaching hospital in the interior of the State of São Paulo. Campinas (SP), Brazil, 2017.

Content found in the evolutions of Nursing	ICU		INFIRMARY	
	n	%	n	%
Ventilatory	63	100.00	69	81.18
Level of awareness	62	98.41	85	100.00
Procedures/Care	60	95.24	72	84.71
Urinary eliminations	59	93.65	65	76.47
Physical exams	58	92.06	51	60.00
Circulatory	58	92.06	59	69.41
GI and food	54	85.71	74	87.06
Fecal eliminations	39	61.90	53	62.35
Vital signs	27	42.86	6	7.06
EV devices	26	41.27	39	45.88
Sleep and rest	23	36.51	9	10.59
Hydration	12	19.05	14	16.47
Exams	12	19.05	10	11.76
Pain complaints	8	12.70	29	34.12
Psychosocial	0	0.00	2	2.35
Total	63	100.00	85	100.00

Table 2. Major Nursing Diagnoses, related or risk factors and defining characteristics used by nurses in the Cardiology and Intensive Care Units of a public teaching hospital in the interior of the State of São Paulo. Campinas (SP), Brazil, 2017.

Variables	n	%
ND - Risk of infection	14	82.35
FR - Increased exposure to pathogens	8	47.06
FR - Invasive Procedures	13	76.47
ND - Deficit of Self Care for Bath	6	35.29
FR - Pain	3	17.65
CD - Inability to Access the Bathroom	3	17.65
CD - Inability to Wash the Body	3	17.65
CD - Inability to Dry the Body	3	17.65
ND - Impaired Spontaneous Ventilation	4	23.53
FR - Fatigue Accessory Musculature	3	17.65
CD - O2 Saturation Decreased	3	17.65
ND - Ineffective Airway Clearance	3	17.65
FR - Presence of Artificial Airway	2	11.76
FR - Secretions Retained	2	11.76
CD - Dyspnoea	2	11.76
ND - Aspiration Risk	4	23.53
FR - Probe Feeding	3	17.65
FR - Presence of Probe	2	11.76
ND - Impaired Skin Integrity Risk	7	41.18
FR - Extremes of age	4	23.53
FR - Mechanical Factors	4	23.53
FR - Immobilization	6	35.29
ND - Impaired Skin Integrity	7	41.18
FR - Extremes of age	4	23.53
FR - Mechanical Factors	4	23.53
FR - Immobilization	6	35.29
CD - Invasion of Body Structures	4	23.53
CD - Skin Surface Disruption	4	23.53
ND - Impaired Physical Mobility	6	35.29
FR - Prescribed Restriction of Movements	4	23.53
CD - Restriction of Movements	5	29.41
ND - Unbalanced Nutrition: Less Than Body Needs	3	17.65
FR - Impaired Ingestion Capacity	1	5.88
FR - Absorbed Absorption Capacity	1	5.88
CD - Fasting	1	5.88
CD - Inadequate reporting of ingestion	1	5.88
DE - Acute pain	8	47.06
FR - Injurious agents	6	35.29
CD - Verbal report of pain	8	47.06
ND - Decreased Cardiac Output	6	35.29
FR - Change in contractility	4	23.53
CD - Tiredness	3	17.65
CD - Dyspnoea	3	17.65
ND - Bleeding Risk	3	17.65
FR - Use of anticoagulants	2	11.76
ND - Decreased Cardiac Tissue Perfusion Risk	4	23.53
FR - DM, SAH, Coronary Injury	2	11.76
FR - Low Fraction Ejection	2	11.76
ND - Risk of Falls	8	47.06
FR - Weakness of MMII	3	17.65
FR - Age greater than 65 years	4	23.53

The main ND's / FR's / CD's used in the patients are described in Table 2.

It can be seen that, of the NDs shown, three appear exclusively in the intensive care ward: impaired spontaneous ventilation, ineffective airway clearance and unbalanced nutrition - less than bodily needs; three others

appeared in the ward: risk of bleeding, risk of reduced cardiac tissue perfusion and risk of falls.

The ND's Risk of Impaired Skin Integrity and Impaired Skin Integrity were identified in five cases and separated into two cases.

It is reported that the agreement of ND, FR and CD with the evolution is presented in

table 4 and the analysis of the evolution of Nursing, in table 4.

Table 3. Concordance of ND's, FR's, CD's with the evolution in the infirmary of Cardiology and Intensive Care Unit of a public teaching hospital in the interior of the State of São Paulo. Campinas (SP), Brazil, 2017.

Concordance ND, FR, CD with evolution	ICU		INFIRMARY	
	n	%	n	%
Consistent	119	33.52%	88	32.12%
Moderately Consistent	59	16.62%	90	32.85%
Not Consistent	177	49.86%	96	35.04%
Total	355	100.00%	274	100.00%

Table 4. Evolution of NDs in the Cardiology and Intensive Care Units of a public teaching hospital in the interior of the State of São Paulo. Campinas, 2017.

Evolution of ND	ICU		INFIRMARY	
	n	%	n	%
Unaltered	301	84.79%	249	90.88%
Beginning	17	4.79%	6	2.19%
Improves	22	6.20%	18	6.57%
Worsens	11	3.10%	0	0.00%
Resolved	4	1.13%	1	0.36%
Total	355	100.00%	274	100.00%

It is inferred that in the infirmary the only improved or resolved ND was that of acute pain, while in intensive care, others appear, including acute pain. It was seen in the intensive care unit, the most diagnosed as improved was Acute Pain (50%), as worsened was Unbalanced Nutrition: less than the body needs (36.36%) and as resolved were Impaired Slow Ventilation, Ineffective airway clearance, Impaired physical mobility and Acute pain (each with 25%).

Signature and stamp failures were found in 52 of the evolutions, in addition to the fact that the letter was not completely legible.

DISCUSSION

It is necessary to treat and evolve daily, following the guidelines of regulatory agencies, the critical problems. The low number of unrealized evolutions indicates the concern of the nurses in the care of patients and in compliance with the resolution COFEN 358/2009.¹⁰

It was obtained as results, in a Brazilian study, that 94.6 to 99.6% of the nurses performed the physical examination. In the present study, there is a similar percentage in the ICU (92.06%), however, a different data in the ward (60.00%). The work process of the nurse in the infirmary is differed in flow and assistance and, thus, the nurse justifies its distance from the patient. The difficulties described in a study about NP show the lack of time and the lack of theoretical knowledge as obstacles to a quality Nursing evolution.¹¹

It was verified that a little identified item in both places was the psychosocial one showing that the nurses still remain focused on the biological, subjugating other important aspects in the assistance of the patient as a whole. It has been shown in studies that there is a high prevalence of anxiety and depression symptoms in patients with heart disease, however, it has been observed that nurses do not appropriate, diagnose and assist in the treatment of these symptoms and move away from both the patient and his family.¹² It was also identified the difficulty of Nursing in expanding their care, including the emotional and spiritual needs of the patient.¹³

Nursing Diagnostics are seen as insomnia and anxiety in other studies with heart disease, but these were not found in this study, which confirms the distance of the nurses from this subject.¹⁴

It is complemented that the ND most used in Nursing evolutions (82.35%) was the Risk of Infection. This is considered to be a non-specific diagnosis and usually has, as results and interventions, hospital routines, such as cleaning the patient unit, precaution and disinfection of device connections. It is shown the realization of ND's as a legal obligation and not as a critical reasoning developed by the nurse.

It is noted that the second most indicated ND was Acute Pain, however, it is observed that it is described in less than half of the explanatory evolutions. It is shown in 12.7% in the ICU and 34.12% in the infirmary, which

creates a gap between what the nurse evaluates for effective clinical reasoning and what evaluates since it belongs to the checklist.

The use of the checklist for the selection of NDs is questioned since they are, for the most part, ND's that remain unchanged for days of evolution of the patient's condition. Again, it shows that the clinical reasoning for the follow-up of the case and care is outdated or that there is accommodation in relation to the ND's ready.

This point is reinforced, since the only ND evolved with improved or resolved in the ward was that of acute pain and in the intensive unit the numbers confirmed this. It is shown that, due to the ND checklist, the hospital presents the complete ND construction, which is a counterpoint to other studies that point out only 5.2% of the ND's written in full.¹¹

Results were also found that the nurses use few objective data, such as the results of arterial blood gas analysis, in the ND, and the heart rate and respiratory rate in the ND. It is considered that the knowledge of the patient's overview through the results of examinations, oxygenation and vital parameters are nurses' functions and a capacity that he must develop, however, which has been seen less in practice.¹⁵

It is emphasized that all the ND's that were pointed out by the nurses are present in the checklist of the infirmary or ICU. It is stated that the checklists are distinct and the ND's that appear in only one of the locations are present in only one of the checklists. It is questioned whether the use of checklists, even though it represents a tool for clinical reasoning, is not limiting this cognitive aspect.

The NDs risk of impaired skin integrity and impaired skin integrity appeared together at 71.43%, which corresponds to five times. This indicates that it has been common practice in nurses to use both diagnoses at the same time. It is seen in its definitions, the diagnosis of Impaired skin integrity shows the epidermis and / or dermis altered and that of risk shows the vulnerability to alteration in the epidermis and / or dermis.³

It is verified that their definitions are different, however, almost all the risk factors are transformed into related factors and the nursing team's action in the diagnosis of Impaired Skin Integrity already covers the nursing actions that are performed at the moment of risk. They show that in studies the operational definitions of these ND's and CD's / FR's need to be clearer, contributing to their use with greater accuracy.¹⁶

The quality of care is assessed by the evaluation of Nursing records. It was identified that 90.88% of the evolutions of ND in the ward and 84.79% in the ICU remained unchanged and, considering that the evolution evaluates the results achieved, it is questionable whether these were actually evaluated in the evolution.^{11, 17}

It can be noticed that the data that the nurse evaluates at the moment of its evolution are not the same ones that it evaluates in the ND. It is seen that these two moments should be part of the same reasoning, which was not evidenced in most of the evolutions considered unreliable in both places: 49.86% in the ICU and 35.04% in the ward.

The need for an increase in the teaching of clinical reasoning and in the NP in the process of training of nurses and in continuing education in their clinical practice was evidenced, so that the identification of the human response that the patient, family or community is accurate and provides a more appropriate and quality care plan.¹⁸ It is emphasized that new pedagogies are needed to engage students and increasingly evidence-based practices.²⁰⁻²

It is imperative that nursing professors favor the unified clinical reasoning with the students, showing the importance of data that support the evaluation of FRs and CD's that belong to the evolution of dissertative Nursing.²¹⁻² It also discusses the need for studies to respect of the evolution of Nursing considering the technological advances that have occurred in the health sector.²³

This study was limited due to the scarce time for data collection and analysis after approval by the ethics committee and the need to focus on a specialty of care, in this case Cardiology. New comprehensive studies are encouraged to analyze what has been explored by nurses in the evolution of Nursing.

CONCLUSION

It was considered that the evolution of nursing is private to the nurse and has been practically practiced in its entirety. It is considered that nursing evolutions have not been performed in a manner consistent with the choice and evolution of the nursing diagnosis and the care plan. Difficulties in identifying the data that guide the identification of the components of the statement of ND are observed. It is inferred that the checklists play an opposite role, depending on the conduct of the care, since they sometimes limit the clinical reasoning of

the nurse, or favor it, and must be rethought in some realities.

It is recommended that the evolution of NDs needs to be something actually used and not just compliance with legislation. Keeping the diagnosis unchanged, from the beginning to the end of hospitalization, questions the quality of the care provided.

It is cautioned that nurses should take ownership of the cognitive process of identifying NDs by using them in their practice to provide quality care as well as improving records. New research must be carried out to share experiences that have successfully used and taught the realization of Nursing evolutions actually inserted in the process.

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