Analysis of nursing care records in the post-anesthetic recovery room

ABSTRACT | Objective: to analyze the method of nursing registration performed in the medical record of patients admitted to the Post-Anesthetic Recovery Room of a General Hospital in the far North of Brazil. Method: Descriptive study, documentary type with a quantitative approach. Results: Of the 24 medical records analyzed, 91.66% had a care systematization form partially filled in and 8.33% did not contain the form or note of vital parameters. With legal and ethical identification, 91.67% of the medical records and 87.5% used only recognized abbreviations. 41.67% of the records were illegible and 91.67% had blank lines. Conclusion: The medical record instrument used in the operating room by nurses proved to be limited and incomplete, not complying with the Cofen guide for postoperative registration or with the recommendations of SOBECC and the Brazilian Association of Surgical/Anesthetic Recovery Nurses, showing fragility in the nursing care provided.

Keywords: Surgery Center; Post-Anesthetic Recovery; Nursing Records; Nurse; Nursing Care.

INTRODUCTION

Postoperative complications are widely discussed and their incidence varies according to individual factors, age, associated comorbidities, lifestyle and clinical situation at the time of surgery, in addition to issues related to the surgical process, such as surgery duration, use of cardiopulmonary bypass, anesthetic agents used and complications in the transoperative period. (2)

Nurses working in this sector have scientific knowledge and skills to recognize changes, plan and implement specific care capable of preventing possible highly complex complications resulting from surgical-anesthetic procedures, as well as ensuring better survival and safety for the client during this period. (1,3) Thus, the post-anesthetic...
recovery period requires constant vigilance from the nursing staff\(^1\) and monitoring vital signs, regaining the level of consciousness and reducing the risk of post-surgical complications until stabilization and transfer/discharge.\(^4\)

The care provided by the team must be recorded in a medical record, whether manual or electronic, in a clear and precise manner, showing the real clinical condition of the client, interventions and other conducts carried out by health professionals. It is up to the professionals to record all the information so that there is no failure in care or damage to the client, as each information noted will indicate an action taken as provided for in the Code of Ethics for Nursing Professionals.\(^5\)

Nursing Evolution is one of the components of the Nursing Process that seeks the development of systematic, interrelated practice, organized on the basis of pre-established steps, and which enables the provision of individualized care to the client. It is a deliberate, systematic and continuous practice of verifying changes in the client’s responses at a given moment in the health-disease process.\(^6\)

The study aimed to analyze the method of nursing registration performed in the medical record of patients admitted to the Post-Anesthetic Recovery Room of a General Hospital in the far North of Brazil.

**METHOD**

This is a descriptive study, with documentary analysis of secondary data, carried out at the PARR of the Surgical Center unit of a hospital in the far North of Brazil. Understood as a large hospital, a reference in the Unified Health System, it has six operating rooms. The surgical center has a team of 12 nurses, 35 technicians and 13 nursing assistants. This team works in the operating rooms and four beds in the PARR.

For the development of the research, the study by Pereira\(^7\) and collaborators (2018), which aimed to assess the quality of nursing records in postoperative care at three reference units in the state of Pernambuco.

The study included patients of both biological sexes, who underwent a surgical procedure and who were admitted to the PARR during the study period. Exclusion criteria include: medical records of indigenous patients; of international migrants; under 18 years old; individuals with mental disorders; discharged clients or those who refused to participate in the survey.

The medical records surveyed were used as a source of secondary data and the study sample was obtained through convenience sampling.\(^8\) It is noteworthy that all research participants were instructed and informed about their participation by signing the consent form in duplicate.

Data collection took place in the daytime period of July 2019, with the exception of weekends. Data were collected through individualized and detailed analysis of the medical records of each selected client regarding vital signs (blood pressure, respiratory rate and body temperature), oxygen saturation, muscle strength, application of the Aldrete and Kroulik scale, Evolution of Nursing and intercurrences in the PARR. The information was recorded in an instrument designed specifically for this study.

For data analysis, the recommendations of the Brazilian Association of Nurses of the Surgical Center, Anesthetic Recovery and Material and Sterilization Center (SOBECC - Associação Brasileira de Enfermeiros de Centro Cirúrgico) and the Recommendations Guide were followed for nursing records in the medical records of the Federal Council of Nursing in the items 9.56 (Immediate postoperative period, p.39) and 9.57 (mediate postoperative period, p.40), considering the distribution of factors related to the quality of records.

It is noteworthy that the study was submitted to the Research Ethics Committee of the Federal University of Raima as it is a research involving human beings, in compliance with Resolution No. 466 of 2012 of the National Health Council - Ministry of Health. Approved under Opinion No. 3.232.779 - CAAE: 09111619.9.0000.5302

**RESULTS**

Information was collected from 24 medical records, in which it was possible to identify that the nurses adopted their own registration instrument, called Systematization of Nursing Care in the Perioperative (SAEP - Sistematização da Assistência de Enfermagem no Perioperatório). An adaptation of the systematization form of the Cooperative of Urgency and Emergency Nurses of the state of Amazonas, prepared in 2005.

The results will be presented in two parts: I) Analysis of the SRPA monitoring records (Table 1) and the evaluation of factors related to the quality of the SRPA records (Table 2), below.

I) Analysis of SRPA monitoring records

The monitoring records performed by the PARR nursing staff were represented in four categories in Table 1. The first category (I) Physical examination, consisting of the parameters: Blood Pressure (BP), Heart Rate (HR), Respiratory Rate (RR), Oxygen Saturation (SaO2), Temperature and Muscle Strength.

The second category (II) monitoring activity in time, constituted by the parameters: Blood Pressure (BP), Heart Rate (HR), Respiratory Rate (RR), Oxygen Saturation (SaO2), Temperature and Muscle Strength.

The third category (III) clinical conditions by the parameters: evolution and complications, and the fourth and last category (IV) SOBECC parameters constituted by the parameters of the care performed. It is noteworthy that none of the categories analyzed were fully registered in the medical record.

In the evaluation of the parameters related to the performance of the phy-
As for the registration of the date and time of the patient’s reception at the PARR, 91.67% did not take notes; 58.33% of the records did not inform the patient’s general condition (level of consciousness, presence of skin lesions, vital signs); in 70.83% of the records had erasures; 91.67% had blank lines or spaces in the record field; 91.17% of the records were registered only by pen; the use of corrective was identified in 12.5%; in 58.33% of the notations were legible; no terms were found in any record that give a connotation of value (good, bad, a lot, a little); only 12.5% of non-recommended abbreviations; 54.17% did not inform the date and time of discharge from the PARR; in 91.67% of the records, the signature and identification of the professional with Coren were found.

It was also found that the SAEP instrument used by the surgical center of the hospital surveyed meets item 9.56 regarding information regarding the date and time of admission of the patient to the PARR and item 9.57 regarding the date and time of return to the unit of the Guide of recommendations for the nursing records in the COFEN medical record in items 9.56 (Immediate post-operative) and 9.57 (mediate post-operative).

**DISCUSSION**

Regarding the analysis of the monitoring records of the PARR, a sur-
A survey applied to nurses at a hospital in Florianópolis-SC, showed that professionals recognize the need and importance of monitoring and recording vital signs, however, the results showed differences in speech of professionals. Some of the justifications for the low sufficiency of records are: difficulties in carrying out nursing notes continuously during the working day; the work overload; the lack of inputs and the lack of appreciation by the team regarding nursing care situations, not being checked or answered in the form of notes.

It is necessary for the Nurse to perform the physical examination with registration and observation of possible changes both at the time of admission and at the patient's discharge from the PARR. The non-performance, or partial/incomplete performance of such procedures, at any time, makes the evolution of nursing fragile.

It is important to emphasize that the correct dimensioning of the nursing team, as well as the presence and permanent training of the Nurse in the sector, impacts on the quality and safety of customer care, and that the records of clinical parameters, as well as the continuity of care are essential for safe evolution.

The observation of the client followed by registration must occur with a certain frequency, as is the case with the Aldrete and Kroulik Scale. This scale consists of parameters that tend to assess the level of consciousness, oxygen saturation, muscle activity, breathing and circulation, so that its assessment should be recorded throughout the patient's stay in the PARR.

Considering the SOBECC recommendations these signals must be checked and recorded every 15 minutes for the first hour, every 30 minutes for the second hour, and every hour from the third hour onwards to be considered complete. However, the present study found that 91.67% (22) of the records in the medical record were incomplete.

In addition to the clinical conditions, any and all complications with the client in the postoperative period should be noted, however 100% (24) of the complications were not recorded in the medical record, making it impossible to infer whether they occurred or not. Among the possible complications to be observed by the nurse in the postoperative period, hemorrhages, respiratory failure and surgical wound infections stand out.

In a study carried out with 350 patients, they identified a statistically significant association between the type of anesthesia and the occurrence of complications, with a prevalence of 74.0% of immediate postoperative complications, especially pain in the surgical site, 56.9%.

In addition, information about the presence of catheter, probes, location and appearance of the dressing, characteristics around the surgical site, changing aspects of secretions, urinary output and the presence of lesions must be observed, described and re-

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<td>Pen only registration</td>
<td>22</td>
<td>91.17</td>
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<td>Use of concealer</td>
<td>3</td>
<td>12.5</td>
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<td>Date and time of discharge from the SRPA</td>
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Source: Research data, 2019.
corded in the medical record at the time of admission of each client until the moment of the client's discharge, as well as all the information pertinent to their health and recovery.\(^\text{(14)}\) This also includes observing physical aspects regarding the expression of pain, administering medications according to prescription and informing the patient about their condition and length of stay in the PARR.\(^\text{(15)}\)

Also in Table 1, the care performed according to the SOBECC parameters includes guidance to the patient and his family; listen to their complaints; assessment of mental status with the aid of rating scales; control the temperature of the environment in order to prevent dysregulation in body temperature and ensure that the patient is covered and in an adequate position; that is, to monitor them frequently and listen to their complaints and requests, showing attention and professional responsibility.\(^\text{(11)}\)

Care with the positioning of the patient in bed requires attention due to several factors, which include being a client in the post-anesthetic period, having an operative wound and being able to change vital signs due to the influence of positioning, that is, situations can be aggravated due to poor positioning and non-compliance with protective measures such as the use of cushions, elevation of the grid, positioning of the bed.\(^\text{(15)}\)

According to the instrument used by the nursing team in this study, data regarding the client’s clinical condition and the care provided should have been recorded. However, 91.67% (22) of the analyzed records were incomplete and 8.33% (2) were not registered. Some difficulties that prevent the implementation of quality care in the postoperative period were pointed out by nurses in a study carried out in an urgent and emergency hospital in Fortaleza-CE. Among the reasons mentioned were the significant demand from patients, shortage of materials, lack of training for the team and difficulties in carrying out the SAEP.\(^\text{(16)}\)

The records held by nursing are essential parts for the communication of the health team, for the understanding of the client’s clinical condition and for the implementation of nursing care through the systematization of nursing care and the Nursing Process. These are the records based on data collection that allow the Nurse to carry out diagnoses and nursing care.\(^\text{(7)}\)

A case report study, the result of the observation of the PARR and the importance of the performance of the Nursing team carried out in the Surgical Center of a Hospital in the Center-South of Sergipe, showed that nursing diagnoses are necessary for the systematization of care, emphasizing the importance of nursing at that time.\(^\text{(11)}\)

Some of the most prevalent nursing diagnoses include: I) Risk of aspiration related to reduced level of consciousness, which requires monitoring the level of consciousness, cough reflex, nausea, ability to swallow and position the client in a 45-degree position; II) Risk of body temperature imbalance related to sedation that requires monitoring signs and symptoms of hypothermia and hyperthermia; and III) Risk of electrolyte imbalance related to nausea and vomiting, which requires checking the patient’s hydration conditions (edema, mucous membranes, heart rate and pulse rate).\(^\text{(11)}\)

Regarding the assessment of factors related to the quality of the records of the PARR (Table 2), the parameter "date and time of admission of the client to the PARR" proved to be extremely fragile, being identified in only 8.33% (2) of the records. The time of discharge of the PARR client was found in 45.83% (11) of the records. This difference can be explained by the fact that the PARR discharge is linked to the anesthetist's assessment and the client's score with a value greater than or equal to 09 in the assessment of the Aldrete and Kroulik scale, being later sent to the unit with the date and time of departure from the Surgery Center.\(^\text{(11)}\)

Item 9,56 of the Recommendations Guide for Nursing Records in Cofen's Medical Records provides for the necessary data for recording in the immediate postoperative period. Recording the date and time of the patient’s admission to the PARR is part of this data and is of fundamental importance, as it materializes or affirms the patient’s departure from the operating room, discarding any doubts about the end of the surgical procedure. Likewise, item 9,57 highlights the date and time of the patient’s return to the hospital of origin.

Still in the immediate postoperative period, 41.67% \(^\text{(10)}\) of the records show that the clients were evaluated as to the level of consciousness in the PARR by the Nurse. The level of consciousness (alert, drowsy, confused or unconscious) is a very relevant parameter, as it enables the nursing team to alert the patient to the level of need for care for the patient, in addition to serving as a tool for monitoring their clinical evolution , demonstrating stability or changes that lead the Nurse to decision making.\(^\text{(15)}\)

The instrument also meets item 9,56 regarding the presence of catheters, drains, probes, infusion (note regarding the use of an infusion pump); dressings, tractions, immobilizations and vital signs and item 9,57 regarding the anatomical location and appearance of the surgical dressing; vital signs and venous access. It is believed that professional planning, with recording of information right after the end of each procedure or conduct, reduces the occurrence of failures and favors the professional/client binomial.

It is noteworthy that the evolution of qualified nursing is a duty provided for by Cofen Resolution n.514 of 2016, exclusive to the Nurse, and it will only be considered complete when it gathers past and current information from
the client that enables the assessment of the clinical condition. After performing the care provided, it is necessary to inform in the medical record the full name of the professional who provided the care, added to the professional’s identification number with the registration of the Regional Nursing Council (COREN), in compliance with the precepts of the Code of Ethics Nursing Professional. (5)

Analyzing the medical records, 91.67% (22) had adequate identification, showing that nurses legally and ethically fulfill their responsibility, making the record regarding the assistance provided valid. It is noteworthy that the use or not of the stamp is optional in view of the proper filling of data. However, 29.17% (07) of records were found with erasures, 12.5% (03) with corrective use and 41.67% (10) were not legible, in addition to 12.5% (03) with abbreviations unrecognized and in 91.67% of the analyzed records, blank lines and spaces were found. In none of the medical records were terms found that had a connotation of value in relation to the client’s condition.

Similarly, in a study carried out at a university hospital in the state of Minas Gerais, of the 71 medical records that were analyzed, 57.74% (41) had erasures, showing weakness in the records. (17) These findings are in line with important rules established by Cofen resolution n.514 of 2016, which state that nursing records must not contain erasures, do not use a corrector, use only abbreviations recommended by law and accepted by the institution, in addition to be readable, contain no white space and be recorded only by the pen. The existence of erasures is unacceptable, as it represents a violation of information and places the data under suspicion of legitimacy, being judicially disregarded, as well as the blank spaces in the medical record, as they allow the subsequent addition of untrue information. (18, 19)

Erasure errors, illegibility, incomprehensible writings, blank spaces mentioned above, may seem outdated if you consider the current existence of electronic medical records. This technology in healthcare brought innovation to the hospital environment and provides ease, practicality, security and agility in accessing information, in addition to supporting that changes can be made without any erasures, when considering the dynamics of the client’s clinical status. It also contributes to multi-professional communication and to the quality of care by offering an integrated service, with clear information, while at the same time bringing data confidentiality and reliability. However, the implementation of this technology requires the training and commitment of professionals. (20)

It is noteworthy, as a favorable point, that 100% (22) of the analyzed records that contained the SAEP instrument for recording nursing care were recorded in pen. Technical Opinion No. 12 of 2017 of the Regional Nursing Council of Mato Grosso do Sul emphasizes the mandatory use of a pen when making the records and also emphasizes that the colors used must be blue and/or black for professionals who work during the day shift, and red for those who work at night. This is due to the fact of differentiating the notes in certain shifts, making it possible to identify the shift period and the professional who performed the record, if necessary. (21)

In addition, another favorable point is that 87.5% (21) of the records used only recognized abbreviations and only 12.5% (3) had incomplete words that caused difficulty in understanding the records. Certainly, legible records directly imply the understanding of the client’s clinical condition, whether or not there were complications, what interventions and other care performed by the team.

Thus, this research identified that the instrument used by the nursing team in the surgical center studied is incomplete, not meeting all the recommendations of items 9.56 and 9.57 of the Guide for recommendations for
Contributions to Nursing

It is expected that the study can contribute to sensitize and make nursing professionals aware of the need to complete the records, parameters and nursing care in the medical record, in order to legally support the care provided by nursing professionals to clients; in addition to favoring the quality and efficiency of care when offered in a structured and systematic way, ensuring the well-being and safety of the client.

CONCLUSION

The study allowed us to analyze the way in which the PARR nursing team performs care records. It was observed that the lack or incompleteness of records represents an obstacle to be overcome in order to comply with COFEN Resolution No. 514 of 2016. As a way to contribute to the researched sector, a model instrument was made available to the sector coordinator that met items 9.56 and 9.57 of the Guide for recommendations for nursing records in the medical record, aiming to qualify the nursing records carried out in the PARR, thus favoring, not only to the customer, but also to the service and the professional.

It is suggested that this study be explored, with emphasis on the importance of making effective records of post-operative customer care, so that the nurse and hospital managers, despite the limiting factors and challenges encountered in practice, understand that the record containing the evolution of nursing is part of the care provided, at the same time that it qualifies it.

References

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