Original article

NURSING PROCESS IN THE CARE OF PATIENTS WITH SURGICAL WOUNDS HEALING BY SECONDARY INTENTION

Hélio Galdino Júnior[1], Anaclara Ferreira Veiga Tipple[2], Brunna Rodrigues de Lima[3], Maria Márcia Bachion[2]

ABSTRACT: Objective: To analyze nursing records regarding the inclusion of nursing process steps in the medical records of patients with wounds. Method: Cross-sectional study that uses documentary analysis carried out in a teaching hospital, in the state of Goiás, from March to June 2016. The sample consisted of 180 patient care record cards from individuals with wounds. The records were classified according to the stages of the nursing process. A checklist was used in the characterization of the wounds, and the characteristics observed were compared to the information included in the records. Frequency and percentage statistics were used in descriptive analysis. Results: It was found that 91.6% of the patient care record cards contained information about the stage of data collection. The stages of nursing diagnosis, planning, implementation and care assessment were poorly reported. Conclusion: Weaknesses were detected in the documentation of the nursing process of patients with wounds, which may compromise their safety, the assessment of care and future research.
DESCRIPTORS: Bandages; Nursing; Wounds and injuries; Nursing processes; Nursing records.

PROCESSO DE ENFERMAGEM NA ASSISTÊNCIA A PACIENTES COM FERIDAS EM CICATRIZAÇÃO POR SEGUNDA INTENÇÃO

RESUMO: Objetivo: analisar registros de enfermagem quanto à presença das etapas do processo de enfermagem em prontuários de pacientes com feridas. Método: estudo transversal, de análise documental, realizado em um Hospital Escola, em estado de Goiás, de março a junho de 2016. A amostra constituiu-se de 180 blocos de registros de atendimentos a pessoas com feridas. Os registros foram classificados em relação às etapas do processo de enfermagem. Características das feridas foram observadas mediante *checklist* e comparadas com o teor dos registros. Foi utilizada na análise descritiva frequências simples e percentuais. Resultados: 91,6% dos blocos de registros continham elementos da etapa da coleta de dados. As etapas de diagnóstico de enfermagem, planejamento, implementação e avaliação da assistência foram pouco contempladas. Conclusão: há fragilidades no registro das etapas do processo de enfermagem na assistência ao paciente com feridas, que podem comprometer sua segurança, a avaliação do atendimento e pesquisas futuras.
DESCRITORES: Bandagens; Enfermagem; Ferimentos e lesões; Processos de enfermagem; Registros de enfermagem.

PROCESO DE ENFERMERÍA EN LA ATENCIÓN DE PACIENTES CON LESIONES EN CICATRIZACIÓN EN SEGUNDA INSTANCIA

RESUMEN: Objetivo: Analizar registros de enfermería buscando las etapas del proceso de enfermería en historias clínicas de pacientes con lesiones. Método: Estudio transversal de análisis documental realizado en Hospital Escuela de Goiás, de marzo a junio de 2016. Muestra constituida por 180 blocs de registros de atención a personas con lesiones. Registros clasificados respecto de las etapas del proceso de enfermería. Características de las lesiones observadas acorde *checklist* y comparadas con el contenido de los registros. En el análisis descriptivo se aplicaron frecuencias simples y porcentuales. Resultados: El 91,6% de los blocs de registros incluían etapas de la colecta de datos. Las etapas de diagnóstico de enfermería, planificación, implementación y evaluación de la atención fueron poco contempladas. Conclusión: Existen debilidades en el registro de las etapas del proceso de enfermería en la atención al paciente con lesiones, que podrían comprometer su seguridad, la evaluación de la atención e investigaciones futuras.
DESCRIPTORES: Vendajes; Enfermería; Heridas y Lesiones; Proceso de Enfermería; Registros de Enfermería.

[1]Nurse. PhD in Tropical Medicine and Public Health. Professor of Nursing at Universidade Federal de Goiás. Goiânia, GO, Brazil.
[2]Nurse. PhD in Nursing. Professor of Nursing at Universidade Federal de Goiás. Goiânia, GO, Brazil.
[3]Nurse. Attending a Nurse Residency Program of the State Department of Health of Goiás. Goiânia, GO, Brazil.

Corresponding author:
Hélio Galdino Júnior
Universidade Federal de Goiás
Rd. 227 Qd 68, S/N - 74605-080 - Goiânia, GO, Brasil
E-mail: heliogjr@yahoo.com.br

Received: 25/10/2017
Finalized: 22/08/2018

http://dx.doi.org/10.5380/ce.v23i4.56022

INTRODUCTION

Nursing care should be systematized through the nursing process (NP), with the objective of favoring efficient and individualized care [1]. When incorporated as a structuring axis of clinical practice, the NP contributes to the promotion, prevention, recovery and rehabilitation of individual, family and community health [2]. Its use must be formally recorded and involves a summary of the data collected, nursing diagnoses, the proposed interventions, and the results achieved [1].

Regarding the care to people with wounds, data collection should include the investigation of intrinsic and extrinsic factors that may delay the healing process, the characteristics of the wound, wound classification regarding the potential for contamination, signs of infection, characteristics of wound bed and of the edges of the wound, and also the amount and aspect of wound exudate[3]. All these factors must be documented to support the therapeutic decision making that will lead to the selection of the most adequate intervention and will allow the assessment of the results[4].

The lack of proper documentation may have implications for the quality of care and safety of patients with wounds. A study conducted in hospitals in Sweden assessed the impact of a systematic record of wounds regarding the healing time and antimicrobial use, and the results showed that the follow up of the injuries reduced the mean healing time from 146 days to 63 days, and the indication of antimicrobial use decreased from 70% to 23% of the cases [5].

A recent integrative literature review revealed the lack of studies on nursing documentation in the treatment of people with surgical wounds (6). Also, there are few studies on the documentation of wounds of different etiologies, and these studies reported inadequate documentation worldwide [7-10].

In Brazil, there are few studies on nursing documentation in the care of patients with wounds, especially regarding the reliability of the records or the implementation of the stages of the nursing process. Knowledge production has predominantly focused on products used for dressings [11-12]

The present study aimed to analyze the nursing records regarding the inclusion of the nursing process stages in the medical records of patients with surgical wounds healing by secondary intention, as well as to analyze the quality of the records regarding the presence of indispensable items in the progress of the wounds and the adequacy of nursing diagnoses and prescriptions.

METHOD

A cross-sectional, descriptive, quantitative, observational and documentary study conducted in a teaching hospital in the state of Goiás.

The study population consisted of patients hospitalized in Medical and Surgical units, from March to June 2016, and their respective medical records.

The following inclusion criteria were established: patients with surgical wounds healing by secondary intention that were likely to stay in hospital for a minimum of 15 days (a 15-day period was chosen to allow for time for the progress in the stages of wound healing, as well as for the implementation of all the stages of the nursing process). Patients under 18 years old were excluded from the study.

The convenience sample consisted of twelve patients with wounds and their nursing records in the respective medical records. Each group of records completed in 24 hours was considered one record card. Thus, after 15 days, 180 record cards related to the care provided to the 12 patients included in the study were examined.

Data collection instruments

- Wound characterization protocol

It is a checklist instrument elaborated according to Pakorná and Leaper [10], based on the following

parameters: wound etiology, length, size, depth, site, condition of wound edges and periwound skin, wound bed aspect, signs and symptoms of inflammation/infection, level of contamination, characteristics of the exudate, odor, comorbidities and pain. The instrument was evaluated by two specialists in dermatological nursing with clinical experience of more than five years of in the area and submitted to a pilot field test to verify its suitability to the objectives of this study.

- Classification chart of patients records according to the stages of the nursing process.

A chart with five columns was drawn, one for each stage of the nursing process. The records were transcribed in full and their content was mapped in this chart, according to the steps of the nursing process.

The record of patient admission performed by the nurses was considered the first stage of the process (data collection). Notes in the field for prescriptions were classified as pertaining to the planning stage. Records related to checking of nursing prescription and/or record of the procedure were classified as related to the stage of implementation of care. Records related to the progress in the stages of wound healing were classified as belonging to the assessment stage.

- Instrument for recording the adequacy analysis of nursing diagnoses (ND) related to the presence of the wound.

It is a form with spaces for transcribing the nursing diagnoses (ND) established and the indication of their accuracy and the justification for the decision made. This analysis was carried out by a field researcher and validated by another researcher with expertise in the elaboration of ND. For the analysis, diagnosis accuracy was considered according to the defining characteristics and definitions of NANDA-I [13].

- Instrument for recording the analysis of nursing prescriptions

It is a panel of analysis of each prescription as to its content, completeness and suitability of the proposed treatment to the characteristics of the wound. For this analysis, the characteristics of the wounds obtained from the records of the field researcher (wound characterization protocol) and from pictures taken were considered, and the assessment of diagnostic accuracy was performed by two researchers with clinical experience in the treatment of wounds.

- Nursing assessment analysis form

The characteristics of the wounds, contained in nursing documentation with patients' progress, and the records of the dressing procedures were classified in the assessment stage. Patients' records were compared with data obtained by the researcher in field observation (collected on days 0, 7 and 15 and recorded in the instrument for characterization of wounds) and analyzed for the presence or absence of the information.

All field observations were made by the same researcher, who was trained by one of the dermatological nursing experts that also assessed the abovementioned instrument.

Data collection procedure

After assessment of eligibility criteria and after the free and informed consent was obtained, a systematic assessment of the wound was performed. During 15 days, the nursing records were collected in the patients' medical records and transcribed in full. Each patient was observed on site during dressing changes, on the first, seventh and fifteenth days of the study. At those moments, the clinical characteristics and pictures of wounds were recorded with the use of a tablet camera.

All duly signed nurses' notes related to the wound formed a set of daily records that were considered as days of note taking and classified according to the stages of the Nursing Process (NP). After the classification of the records at each stage of the nursing process, the reliability and accuracy of the nursing diagnoses recorded, the relevance of the prescriptions and the items considered in the progress in the stages of wound healing were examined.

As an auxiliary resource for the analysis of the relevance of the prescriptions and trustworthiness of the data recorded by the nursing team of the hospital where the study was conducted, the pictures taken were processed by the Mobile Wound Analyzer (MOWA) software, which determines the wound area, type of tissue and tissue percentage.

The data was analyzed using the Statistical Package for Social Sciences (SPSS), version 17.0, for Windows, and basic descriptive statistics was used in data presentation.

The study complied with the national guidelines for research involving human beings, and the project was approved by the Research Ethics Committee of Hospital das Clínicas of Universidade Federal de Goiás, under protocol no. 544.337/ 2014.

RESULTS

A total of 180 patient care record cards obtained from the medical records of 12 patients with open wounds, treated during a 15-day stay in the Medical and Surgical units were analyzed.

On patient admission to the hospital, data collection was recorded by nurses in 11 patient medical records (91.6%). The wound site was described in nine (75%) and the description of the wound was found in only two (4%) records. The parameters related to wound progress time, etiology, classification of contamination potential, conditions of the edges of the wound, types of tissue in the wound bed and wound measurement were not detected in the admission records of patients with wounds.

Of the 180 patient care record cards, two (1.1%) included nursing diagnoses related to the presence of the wound (Chart 1).

Chart 1 – Assessment of the nursing diagnoses included in the records of patients with wounds Goiânia, GO, Brazil, 2016

Nursing diagnosis found	Assessment of diagnosis accuracy	Diagnosis according to NANDA 2015 taxonomy	Reason for diagnosis inaccuracy
Impaired skin integrity	Inaccurate	Impaired tissue integrity related to mechanical factors (pressure) and impaired physical mobility, evidenced by destroyed tissue.	Deep involvement of underlying tissue (this was a stage IV pressure ulcer). The related factors and defining characteristics were not stated.
Impaired tissue integrity	Inaccurate	Impaired tissue integrity related to mechanical factors (surgical drainage), evidenced by injured tissue.	Correct designation (title), but absence of related factors and defining characteristics.

In 166 (92.2%) patient care record cards there were notes related to the planning stage of nursing care, expressed through daily prescriptions for dressing changes. It was found that 156 (93.9%) of them were incomplete, as one or more elements for the understanding and clarity of the prescription were missing (Figure 1).

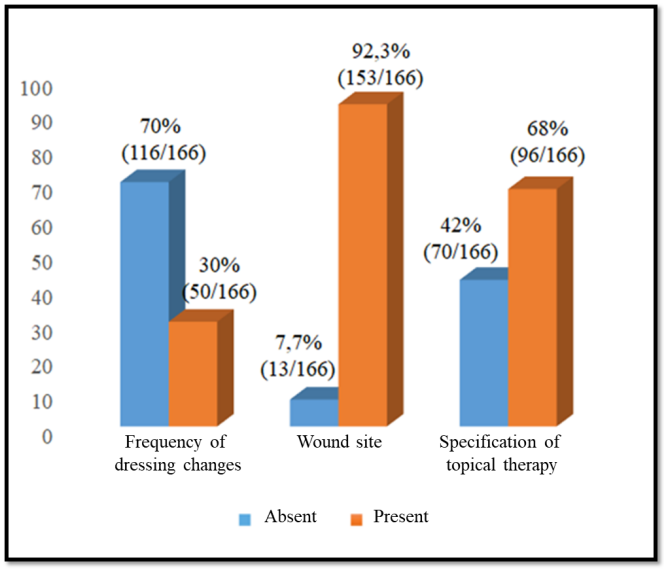

Figure 1 –Components of nursing prescriptions related to dressings in patients with surgical wounds healing by secondary intention in a teaching hospital. Goiânia, GO, Brazil, 2016

As for the products prescribed, essential fatty acids (EFA) were found in 53.6% (89/166), collagenase in 22.3% (37/166), silver-containing hydrofiber dressing in 19.3% (32/166) and papain in 4.8% (8/166) of the prescriptions. The suitability of the prescribed product according to the characteristics of the wounds is shown in figure 2A.

Of the prescriptions considered inadequate, it was found the application of Essential Fatty Acids (EFA) on wounds with necrotic tissue and the indication of collagenase (product with debriding action) for a wound with granulation tissue (Figure 2B).

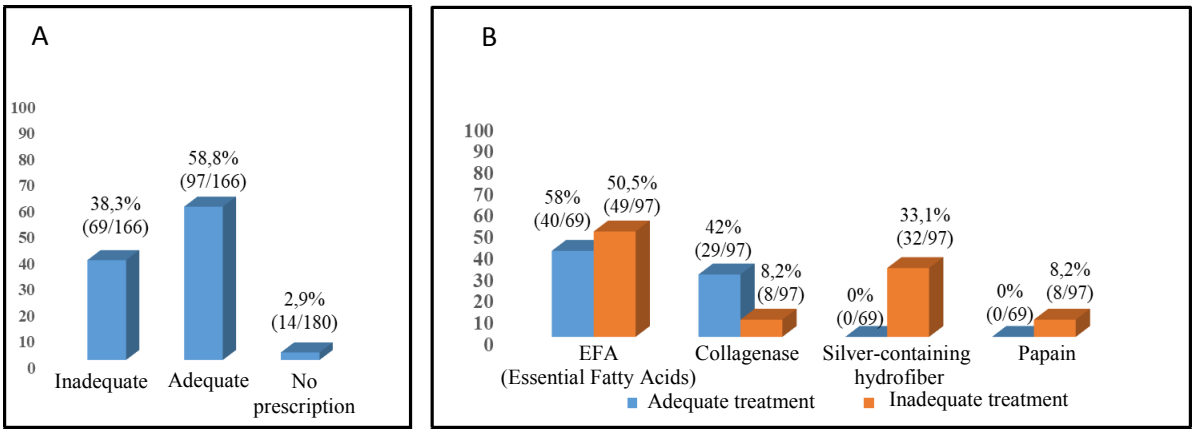

Figure 2 – Nursing prescriptions for patients with surgical wounds healing by secondary intention admitted to a teaching hospital. In A, adequacy of the prescription to the characteristics of the wound. In B, suitability of the type of product prescribed. Goiânia, GO, Brazil, 2016

Regarding the nursing care implementation stage, it was found that 119 (71.6%) prescriptions of dressings were checked. In 16 (9.6%) records, besides the check, there was a report of the accomplishment of the procedure.

Regarding the assessment of care, it was found that in 169 (93.9%) patient care record cards there were notes related to wound progress, though all of them were incomplete. Figure 3 shows the percentages of items present and absent in the records of patients with wounds.

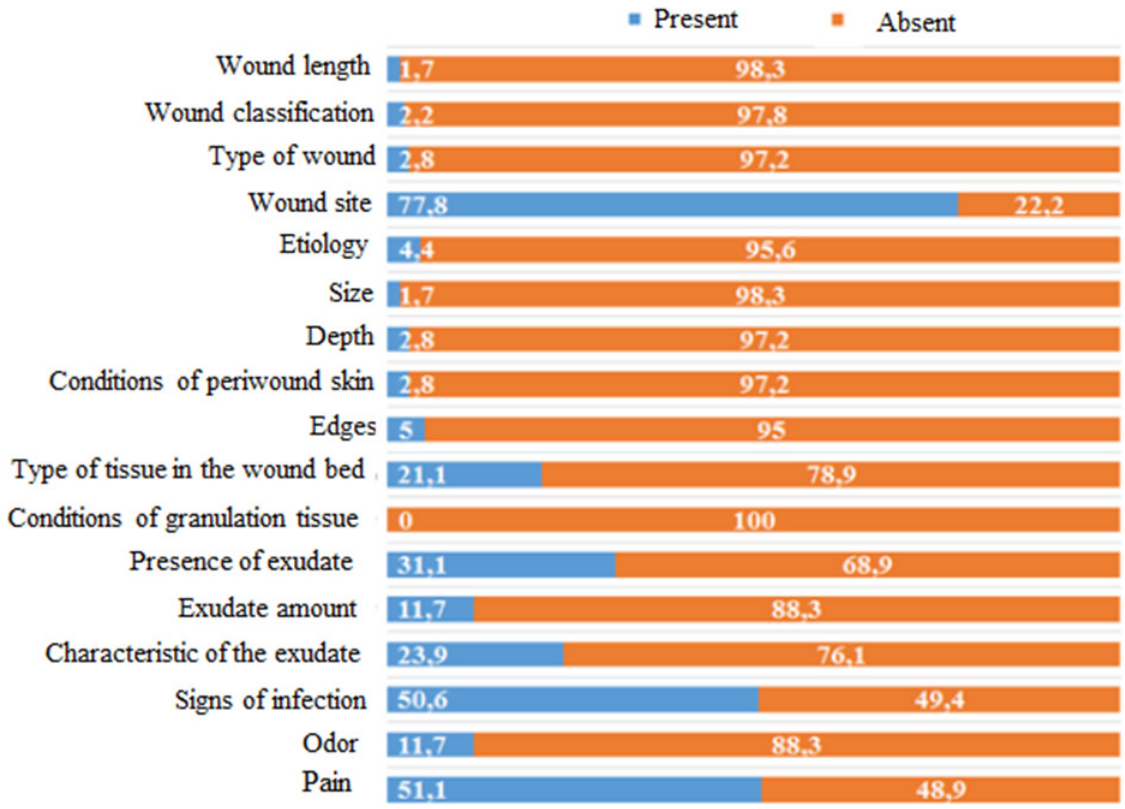

Figure 3 –Distribution of the items relevant for the documentation of the progress of wounds in the records of the nursing care to patients with wounds in a teaching hospital. Goiânia, GO, Brazil, 2016

DISCUSSION

The treatment of wounds aims to accelerate healing[14], and nurses have autonomy for assessment and intervention in this regard [15], being responsible for structuring their actions in the NP, as well as for documenting this process[1].

The present study found that the NP is not effectively performed in all its stages of care to patients with wounds and that documentation of nursing work is insufficient and incomplete, notably in the stages of data collection and nursing diagnoses. An integrative review of studies from Australia, the United Kingdom and the United States [6] showed that the assessment and documentation of surgical wounds is insufficient and few studies were conducted on the subject. Thus, further research on this subject is recommended.

In Brazil, there are few studies on the documentation performed by the nursing team regarding the care delivered to patients with wounds [8,16], and studies investigating such documentation according to the stages of the NP in care to these patients are even more scarce.

Although such documentation is mandatory, according to the legislation that regulates professional practice in Brazil [1], and despite the consensus among professionals about the importance of the NP[17], some studies revealed the existence of obstacles to the implementation of the NP, and health professionals report some difficulties in carrying out the referred process, with emphasis to work overload, understaffing, lack of time and lack of theoretical knowledge [18-19].

Studies demonstrated the scarce nursing documentation in different aspects of care [7,20]. Regarding wound care, a research in an Intensive Care Unit revealed that 65% of the wound records did not include the type of tissue, 85% lacked the type of exudate, 100% had no wound measurement and 80% had no record of the characteristics of the edges of the wound and wound bed [8].

Nurses at a hospital in Nigeria were interviewed about the documentation of care to patients in wound

treatment. It was found that they had poor knowledge and little practice on this specific activity[9]. On the other hand, knowledge of clinical nursing, involvement of management and availability of time for such documentation activities can be facilitating factors for appropriate documentation of the NP[21].

Special attention should be paid to data collection, a key step of the NP that serves as a basis for the subsequent steps of the process and is aimed to investigate the patients' needs [22]. This initial stage was deficient: the nursing professionals recorded superficial and incomplete information that will hardly provide evidence to support the other stages of the NP. This phenomenon appears to be global: in developed countries such as Australia, the United Kingdom and the United States, a study showed that the documentation of the care delivered to patients with wounds upon their admission to hospital was poor[6].

A study on the documentation of care to patients with acute wounds who underwent surgery in Australia found that more than 50% of the patients had no records regarding the characteristics of the edges of the wounds, exudate, and wound bed, and less than 5% of the documents included information on wound size [7]. There was scarce information on the wound bed tissue and the type of exudate in a study in the Czech Republic [10]. It should be stressed that the characteristics of the wound bed and the exudate are the main guiding parameters for the choice of topical therapy [3,14].

Data collection has been found to be insufficient, and this is sometimes due to the inability of the nursing professional, or nonuse of tools essential for data collection such as physical examination and patient interview. The study showed that the percentage of documentation of physical examination ranged from 14.5% to 40.6% [22]. Regarding the stages of the NP, another study showed that data collection was the most documented stage. However, the documented data was insufficient, since only 4.2% of it contained information about physical examination [16].

The nursing diagnosis (ND) is the expression of the clinical judgment of the nurse. According to other studies, this stage is the most complex of all. It is also the most difficult to perform and the most neglected by health professionals [16,23]. Similar results regarding lack of documentation of the ND in medical records were found in another study, in which the ND was found in only one of the records assessed [16].

In our study, we also detected nursing diagnoses that lacked information about the defining factors and characteristics. The incomplete description of nursing diagnoses was also observed in a rehabilitation unit of Distrito Federal, where, of the 25 records assessed, 48% had incomplete information about the nursing diagnoses. In that setting, a nursing care systematization committee developed permanent education actions, which may explain the higher rates of documentation of this stage of the process [24]. Continuing education programs were found to be effective in improving the quality of diagnoses and their documentation [25]. Therefore, we can infer that investments are still needed in continuing education to improve this stage of the NP in the care of patients with wounds.

Since the prescriptions were incomplete, that is, they omitted the wound site, the times of dressing change and the product or dressing cover to be used on the wounds and also omitted the prescription of products incompatible with the characteristics of the wound bed, it follows that another challenge to be faced in continuing education actions is the record of nursing prescriptions and therapeutic decision-making in the selection of the most appropriate treatment.

A study conducted in a university hospital in the inland of São Paulo found that in 80% of the records there were no nursing prescriptions [26], contrasting with the present study that identified 166 nursing prescriptions in 180 patient care record cards, which demonstrates that nursing professionals record, though incompletely, the prescriptions of wound dressings.

Nurses must perform a complete assessment of the wounds, since their characteristics will guide the selection of the treatment [3,14]. Therefore, these health professionals must have proper technical and scientific knowledge to be able to choose the best therapeutic option for each patient. Studies have identified that nurses have scarce knowledge about the assessment and treatment of wounds [27-28], which may jeopardize the NP in the initial stages. Inadequate treatment can lead to the development of infections, slow the healing process, increase length of hospital stay, imply the use of multiple antimicrobial therapies, impair patient safety, reduce the quality of life of individuals, and increase care costs[29].

Regarding the documentation of the stage of implementation of care, we found that many prescriptions were not checked and the progress in the stages of wound healing was superficial and incomplete regarding information about the proposed treatment and wound healing. Undocumented care is considered nonexistent, leading to ethical lawsuits and making it impossible to assess the nursing care provided [16].

The site of the wound and the presence of pain were the most frequently recorded information. However, description of the exudate, type of tissue in the wound bed, signs of infection and odor, which are essential parameters for the choice of the appropriate treatment and follow-up of its effectiveness were not often included in the documentation [3,14]. The following parameters: characteristics of the exudate, type of tissue and signs of infection were also insufficiently reported by nurses in other study settings [27]. It should be emphasized that the purpose of the records is to ensure continuity of care and patient safety, and it is also a predictive factor of effective communication among health professionals[1].

A recent study aimed to map the terms referring to the treatment of wounds investigated 190 medical records of patients with wounds and had to exclude 109 patients records from the study due to lack of nursing documentation related to the wounds [30], indicating that there is much to be done to increase the quality of documentation of the NP stages concerning the care to patients with wounds.

The relatively small number of patients included in the sample and the lack of randomization or sample calculation are some limitations of the present study. However, the observation period can minimize these biases.

CONCLUSIONS

The present study showed that the Nursing Process (NP) related to care to patients with surgical wounds healing by secondary intention has been poorly documented. Data collection does not contain the items required to support the subsequent stages of the NP; the documentation of the ND is practically non-existent; prescriptions are mostly incomplete and the indication of the dressing to be used on the wounds was inadequate in many cases. The implementation of care is seldom recorded by the nursing team. The assessment stage does not contemplate the progress of the treatment, and the parameters used are not sufficient to the monitoring of the results achieved by the treatment.

The scarce use and inadequate documentation of the NP may jeopardize the future development of nursing knowledge and the formation of a professional identity.

These findings reinforce the urgent need for investment in the training of professionals and in the improvement of the quality of nursing team training, as well as improvement in the organizational structure of the units, with the implementation of protocols for assessment and treatment of wounds, management actions more focused on the quality of the records and identification and overcoming of the barriers found, which may be similar to those in other care settings.

REFERENCES

1. Conselho Federal de Enfermagem. Resolução n. 358, de 15 de outubro de 2009. Dispõe sobre a Sistematização da Assistência de Enfermagem - SAE - nas Instituições de Saúde Brasileiras. Brasília: COFEN; 2009.

2. Maria MA, Quadros FAA, Grassi MFO. Sistematização da assistência de enfermagem em serviços de urgência e emergência: viabilidade de implantação. Rev Bras Enferm [Internet]. 2012 [acesso em 2017 ago 12]; 65(2). [Disponível em: http://dx.doi.org/10.1590/S0034-71672012000200015 .

3. Leaper DJ, Schultz G, Carville K, Fletcher J, Swanson T, Drake R. Extending the TIME concept: what have we learned in the past 10 years? Int Wound J [Internet]. 2012 [acesso em 2017 set 02]; 9(2). Disponível em: http://dx.doi.org/10.1111/j.1742-481X.2012.01097.x.

4. Logan G. Clinical judgment and decision-making in wound assessment and management: is experience enought? Br J Community Nurs [Internet]. 2015 [acesso em 2017 set 05]; 20(3). Disponível em: http://dx.doi.org/10.12968/bjcn.2015.20.Sup3.S21.

5. Öien RF, Forssell HW. Ulcer healing time and antibiotic treatment before and after the introduction of the Registry of Ulcer Treatment: an improvement project in a national quality registry in Sweden. BMJ Open [Internet]. 2012 [acesso em 2017 set 9]; 3. Disponível em:http://dx.doi.org/10.1136/bmjopen-2013-003091.

6. Ding S, Lin F, Gillespie BM. Surgical wound assessment and documentation of nurses: an integrative review. J Wound Care [Internet]. 2016 [acesso em 2017 out 11]; 25(5). Disponível em: http://dx.doi.org/10.12968/jowc.2016.25.5.232.

7. Gartlan J, Smith A, Clennett S, Walshe D, Tomlinson-Smith A, Boas L, Robinson A. An audit of the adequacy of acute wound care documentation of surgical inpatients. J Clin Nurs [Internet]. 2010 [acesso em 2017 set 09]; 19(15). Disponível em:http://dx.doi.org/10.1111/j.1365-2702.2010.03265.x.

8. Gardona RGB, Ferracioli MM, Salomé GM, Pereira MTJ. Avaliação da qualidade dos registros dos curativos em prontuários realizados pela enfermagem. Rev Bras Cir Plást [Internet]. 2013 [acesso em 2017 set 25]; 28(4). Disponível em: http://www.rbcp.org.br/details/1460/avaliacao-da-qualidade-dos-registros-dos-curativos-em-prontuarios-realizados-pela-enfermagem.

9. Osemi OM, Adejumo PO. Nurses reported practice and knowledge of wound assessment, assessment tools and documentation in a selected hospital in Lagos, Nigeria. Afr J Med Sci [Internet]. 2014 [acesso em 2017 ago 13]; 43(2). Disponível em: https://www.ncbi.nlm.nih.gov/pubmed/25474991.

10. Pokorná A, Leaper D. Assessment and documentation of non-healing, chronic wounds in patient health care facilities in the Czech Republic: an evaluation study. Int Wound J [Internet]. 2015 [acesso em 2017 ago 12]; 12(2). Disponível em: http://dx.doi.org/10.1111/iwj.12372.

11. Pereira AL, Bachion MM. Tratamento de feridas: análise da produção científica publicada na Revista Brasileira de Enfermagem de 1970-2003. Rev Bras Enferm [Internet]. 2005 [acesso em 2018 abr. 06]; 58(2). Disponível em: http://www.scielo.br/pdf/reben/v58n2/a16.

12. Brito KKG de, Sousa MJ de, Sousa ATO de, Meneses LB de A, Santos SHO dos, Soares MJGO. Feridas crônicas: abordagem da enfermagem na produção científica da pós-graduação. Rev Enferm UFPE [Internet]. 2013 [acesso em 2018 abr 06]; 7(2). Disponível em: https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/10250.

13. Herdman TH, Kamitsuru S. Diagnósticos de enfermagem da NANDA: definições e classificação 2015-2017. In: Diagnósticos de enfermagem da Nanda: definições e classificação 2015-2017. 2015. p. 468-468.

14. Jones CM, Rothermel AT, Mackay DR.Evidence-Based Medicine: Wound Management. Plast Reconstr Surg [Internet]. 2017 [acesso em 2017 out 08]; 140(1). Disponível em: http://dx.doi.org/10.1097/PRS.0000000000003486.

15. Conselho Federal de Enfermagem. Resolução n. 501, de 09 de dezembro de 2015. Regulamenta a competência da equipe de enfermagem no cuidado de feridas e dá outras providencias. Brasília: COFEN; 2015.

16. Silva TG, Santos RM, Crispim LDMC, Almeida LMWS. Conteúdo dos registros de enfermagem em hospitais: contribuições para o desenvolvimento do processo de enfermagem. Enferm Foco [Internet]. 2016 [acesso em 2017 jul 15]; 7(1). Disponível em: http://revista.portalcofen.gov.br/index.php/enfermagem/article/view/679/293.

17. Santos MGPS, Medeiros MMR, Gomes FQC, Enders BC. Percepção de enfermeiros sobre o processo de enfermagem: uma integração de estudos qualitativos. Rev Rene [Internet]. 2012 [acesso em 2017 set 09]; 13(3). Disponível em: http://www.redalyc.org/pdf/3240/324027982025.pdf.

18. Nery IS, Santos AG, Sampaio MRFB. Dificuldades para a implantação da assistência de enfermagem em maternidades. Enferm Foco [Internet]. 2013 [acesso em 2017 ago 12]; 4(1). Disponível em: http://revista.portalcofen.gov.br/index.php/enfermagem/article/view/494/184.

19. Souza LP, Vasconcellos C, Parra AV. Processo de enfermagem: dificuldades enfrentadas pelos enfermeiros de um hospital público de grande porte na Amazônia, Brasil. Braz. J Surg Clin Res [Internet]. 2015 [acesso em 2017 set 09]; 10(1). Disponível em: http://dx.doi.org/10.1590/s0104-12902016160600.

20. Wang N, Hailey D, Yu P. Quality of nursing documentation and approaches to its evaluation: a mixed-method systematic review. Adv Nursing [Internet]. 2011 [acesso em 2017 set 08]; 67(9). Disponível em:http://dx.doi.org/10.1111/j.1365-2648.2011.05634.x.

21. Pereira RB, Coelho MA, Bachion MM. Information technologies and nursing process records: case study at a neonatal ICU. Rev Eletr Enferm [Internet]. 2016 [acesso em 2017 set 12]; 18. Disponível em: http://dx.doi.org/10.5216/ree.v18.35135.

22. Costa SP, Paz AA, Souza EN. Avaliação dos registros de enfermagem quanto ao exame físico. Rev Gaúcha Enferm [Internet]. 2010 [acesso em 2017 set 09]; 31(1). Disponível em: https://doi.org/10.1590/S1983-14472010000100009.

23. Silva EGC, Oliveira VC, Neves GBC, Guimarães TMR. O conhecimento do enfermeiro sobre a Sistematização da Assistência de enfermagem: da teoria à prática. Rev Esc Enferm USP [Internet]. 2011 [acesso em 2017 ago 10]; 45(6). Disponível em: http://www.redalyc.org/pdf/3610/361033332015.pdf.

24. Neves RS, Shimizu HE. Análise da implementação da Sistematização da Assistência de Enfermagem em uma unidade de reabilitação. Rev Bras Enferm [Internet]. 2010 [acesso em 2017 set 02]; 63(2). Disponível em: http://www.scielo.br/pdf/reben/v63n2/09.

25. Müller-staub M, Needham I, Odenbreit M, Lavin MA, Van Achterberg T. Improved quality of nursing documentation: results ofa nursing diagnoses, interventions, and outcomes implementation study.Int J NursTerminol [Internet]. 2007 [acesso em 2017 ago 03]; 18(1). Disponível em: http://dx.doi.org/10.1111/j.1744-618X.2007.00043.x.

26. Guedes GG, Trevisan DD, Stancato K. Auditoria de prescrições de enfermagem de um hospital de ensino paulista: avaliação da qualidade da assistência. Rev Adm Saúde [Internet]. 2013 [acesso em 2017 ago 12]; 15(59). Disponível em:http://www.cqh.org.br/portal/pag/anexos/baixar.php?p_ndoc=689&p_nanexo=%20398

27. Moreira RAN, Queiroz TA, Araújo MFM, Araújo TM, Caetano JÁ. Condutas de enfermeiros no tratamento de feridas numa unidade de terapia intensiva. Rev Rene [Internet]. 2010 [acesso em 2017 set 09]; 10(3). Disponível em: http://dx.doi.org/10.15253/rev%20rene.v10i3.4819.

28. Salome GM. Avaliando lesões: práticas e conhecimentos dos enfermeiros que prestam assistência ao indivíduo com ferida. Saúde Coletiva [Internet]. 2009 [acesso em 2017 ago 23]; 6(35). Disponível em: http://www.redalyc.org/pdf/842/84212201006.pdf.

29. Adderley UJ, Thompson C. Community nurses' judgement for the management of venous leg ulceration: A judgement analysis. Int J Nurs Stud [Internet]. 2015 [acesso em 2017 ago 08]; 52(6). Disponível em:http://dx.doi.org/10.1016/j.ijnurstu.2014.09.004.

30. Oliveira FP, Oliveira BGRB, Santana RF, Silva BP, Candido JSC. Classificações de intervenções e resultados de enfermagem em pacientes com feridas: mapeamento cruzado. Rev Gaúcha Enferm [Internet]. 2016 [acesso em 2017 set 16]; 37(2). Disponível em: http://dx.doi.org/10.1590/1983-1447.2016.02.55033.