Nursing diagnoses for surgical patients at risk for deep vein thrombosis

Diagnósticos de enfermería para pacientes quirúrgicos con riesgo de trombosis venosa profunda

Diagnósticos de enfermagem para paciente cirúrgico com riscos para trombose venosa profunda

Bruno Mauricio Santos da Silva[1]
ORCID: 0000-0002-9925-4563
Ronilson Gonçalves Rocha[1]
ORCID: 0000-0003-4097-8786
Vânia Lima Coutinho[1]
ORCID: 0000-0001-9300-3697
Luciana Guimarães Assad[1]
ORCID: 0000-0003-1134-2279
Elbanir Rosângela Ferreira de Souza[1]
ORCID: 0000-0003-1134-2279

[1]Universidade do Estado do Rio de Janeiro. Rio de Janeiro, Brazil.

Corresponding author:
Bruno Mauricio Santos da Silva
E-mail:
brunomauricio.enf@outlook.com

Abstract

The aim was to survey, through the scientific literature, nursing diagnoses related to care for patients at risk of deep vein thrombosis; to identify interventions related to nursing diagnoses for patients at risk of developing the disease. This is an integrative literature review, whose databases were accessed through the Virtual Health Library, which brings together 12 databases in the health area; The PubMed portal of the US National Library of Medicine was also accessed, which includes references from the Medline database. The data search took place in October 2021, using the keywords, individually or associated with the Boolean operator AND: "venous thrombosis"; "Nursing diagnoses" AND "Venous thrombosis". Articles in Portuguese, English and Spanish were searched. According to the survey, complete articles were selected that confirmed the initial hypothesis: there are few investigations presenting nursing diagnoses for patients at risk for deep vein thrombosis. Forty-nine nursing diagnoses were identified, with "ineffective peripheral tissue perfusion" being the main one. It was concluded that further studies are needed to promote a safer practice based on scientificity, with regard to care aimed at patients at risk of deep vein thrombosis.

Descriptors: Nursing Diagnosis; Venous Thrombosis; Systematization of Nursing Care; Perioperative Nursing; Nursing Care.

Resumén

El objetivo fue relevar, a través de la literatura científica, diagnósticos de enfermería relacionados con la atención a pacientes con riesgo de trombosis venosa profunda; identificar intervenciones relacionadas con los diagnósticos de enfermería para pacientes en riesgo de desarrollar la enfermedad. Se trata de una revisión integrativa de la literatura, cuyas bases de datos se accedieron a través de la Biblioteca Virtual en Salud, que reúne 12 bases de datos del área de la salud; También se accedió al portal Pubmed de la Biblioteca Nacional de Medicina de EE. UU., que incluye referencias de la base de datos Medline. La búsqueda de datos se realizó en octubre de 2021, utilizando las palabras clave, individualmente o asociadas al operador booleano AND: "trombosis venosa"; "Diagnósticos de enfermería" Y "Trombosis venosa". Se buscaron artículos en portugués, inglés y español. De acuerdo con la encuesta, fueron seleccionados artículos completos que confirmaron la hipótesis inicial: existen pocas investigaciones que presenten diagnósticos de enfermería para pacientes con riesgo de trombosis venosa profunda. Fueron identificados 49 diagnósticos de enfermería, siendo el principal "perfusión tisular periférica ineficaz". Se concluyó que son necesarios más estudios para promover una práctica más segura y basada en la cientificidad, en lo que respecta a la atención dirigida a pacientes con riesgo de trombosis venosa profunda.

Descriptores: Diagnósticos de Enfermería; Trombosis Venosa; Sistematización de la Atención de Enfermería; Enfermería Perioperatoria; Cuidado de Enfermeíría.

Resumo

Objetivou-se levantar, através da literatura científica, os diagnósticos de enfermagem referentes ao cuidado para pacientes sob risco de trombose venosa profunda; identificar as intervenções relacionadas aos diagnósticos de enfermagem para pacientes sob risco de desenvolver a doença. Trata-se de revisão integrativa da literatura, cujas bases de dados acessadas foram através da Biblioteca Virtual em Saúde, que reúne 12 bases de dados da área de saúde; sendo também acessado o portal Pubmed da Biblioteca Nacional de Medicina dos Estados Unidos que inclui referências da base Medline. A busca dos dados ocorreu em outubro de 2021, utilizando as palavras-chave, individualmente ou associadas com o operador booleano *AND*: "trombose venosa"; "Diagnósticos de enfermagem" *AND* "Trombose venosa". Foram pesquisados artigos nas línguas portuguesa, inglesa e espanhola. De acordo com o levantamento, foram selecionados artigos completos que confirmaram a hipótese inicial: existem poucas investigações apresentando os diagnósticos de enfermagem para pacientes que apresentam riscos para trombose venosa profunda. Foram identificados 49 diagnósticos de enfermagem, sendo a "perfusão tissular periférica ineficaz" o principal deles. Concluiu-se que são necessários novos estudos para a promoção de uma prática mais segura e pautada na cientificidade, com relação aos cuidados voltados a pacientes sob risco de trombose venosa profunda.

Descritores: Diagnósticos de Enfermagem; Trombose Venosa; Sistematização da assistência de enfermagem; Enfermagem Perioperatória; Cuidados de Enfermagem.

Introduction

Venous thromboembolism is the name given to a vascular disease in which a thrombus forms in the blood vessels. It covers deep vein thrombosis and its main complication is pulmonary thromboembolism. It is the third leading cause of cardiovascular mortality in the world, after myocardial infarction and stroke[1-3].

In Brazil, more than 280,000 deaths occurred in the period between 2015 and 2017 due to cardiovascular diseases, with 121,763 cases of hospitalizations for phlebitis, thrombophlebitis, embolism and venous thrombosis with a cost of around 73 million reais[4].

Currently, there are guidelines and international consensus for the prophylaxis of venous thromboembolism, resulting from clinical studies of recommendation A, that is, with a high level of evidence. These consensuses and guidelines have in common at least 24 risk factors for the occurrence of VTE, prevailing factors more common to the female gender and that, if associated with hospital admission, significantly increase the chances of occurrence of the disease[5-8].

The systematization of nursing care (SAE) is conceptualized as "a method of providing care to obtain satisfactory results in the implementation of care, with the objective of reducing complications during treatment in order to facilitate the adaptation and recovery of the patient"[9].

The Federal Nursing Council, through Resolution No. 358/2009, recommends that nursing care should be carried out in a systematic way, implementing the nursing process (NP) in all public or private environments, where the professional nursing care of the patient takes place[10].

The NP phases are divided into Nursing history (which includes anamnesis and physical examination); nursing diagnosis; Nursing planning; Nursing implementation; Evaluation of nursing care, following, respectively, this order[10].

In the surgical environment, the "Systematization of perioperative nursing care" occurs, a model in which the promotion and interaction of care occurs in the pre, trans and postoperative periods, providing planning and control in each phase of the development of operative care[11].

The nursing diagnosis is "a judgment about a human response to health conditions/life processes, or a vulnerability of an individual, a family, a group or a community". Nurses perform the diagnosis of health problems, risk states and willingness to promote health[12].

Systems called taxonomies are used to perform the nursing diagnosis; one of these taxonomies was developed by the North American Association of Nursing Diagnoses (NANDA-international), which was adopted by the North American Nurses Association as the official methodology for the taxonomy of diagnostics for the United States of America since the 1980s[13].

The NANDA taxonomy is composed of domains, classes and diagnoses, in which the domains are the categories, currently totaling 13. Nursing diagnoses in the NANDA taxonomy are divided into real diagnoses and risk diagnoses, each of which has a structure in the NANDA taxonomy its elaboration, the first is done through the title followed by the related factor and finalized with the defining characteristic, the risk diagnoses are composed only by the title and related factor[12].

Expanding discussions on this topic can help Nursing and its professionals, promoting the development of a more scientific, safe and in-depth clinical and surgical practice in relation to nursing diagnosis aimed at the care of patients with venous thromboembolism in the in-hospital setting. .

The motivation for the development of the study was based on searches in databases, at which time it was confirmed the scarcity of scientific studies involving the theme "nursing diagnoses for deep vein thrombosis", a clinical condition is responsible for a high incidence of comorbidities and deaths worldwide.

The general objective of this study is to survey, through the scientific literature, nursing diagnoses related to care for patients at risk of deep vein thrombosis; the specific objective being to identify interventions related to nursing diagnoses for patients at risk of developing the disease. The study hypothesis was that there are few investigations presenting nursing diagnoses for patients at risk for deep vein thrombosis, leading to the following question: what are the nursing diagnoses for patients at risk of deep vein thrombosis present in the current literature?

Methodology

This is an integrative review study to obtain information and approach the theme defined for the research, encouraging discussions related to the investigation.

For the development of the integrative literature review, the following steps were followed: 1- identification of the theme and selection of the research question; 2- establishment of inclusion and exclusion criteria for studies, description of the review methodology and databases; 3- categorization of studies; 4- evaluation of studies included in the integrative review; 5- interpretation of results; 6- presentation of the review and synthesis of knowledge.

The platform used to carry out the research was the Virtual Health Library (VHL), which integrates several sources of health information and promotes the democratization and expansion of access to scientific and technical information on health in Latin America and the Caribbean. Developed and operated by BIREME in 3 languages (English, Portuguese and Spanish) and which allows performing simple and advanced searches with filtering resources, exporting results and interoperating with DeCS/MeSH. It brings together 12 healthcare databases: LILACS, MEDLINE, ADOLEC, BBO, BDENF, HISA, LEYES, MEDCARIB, REPIDISCA, PAHO, WHOLIS and DISASTERS.

The US National Library of Medicine PubMed portal was also accessed, which includes references from the MedLine database. The data search took place in October 2021, using the keywords, individually or associated with the Boolean operator AND: "venous thrombosis"; "Nursing diagnoses" AND "Venous thrombosis".

Articles in Portuguese, English and Spanish were searched. The criteria defined for the inclusion of articles in

the study were complete articles, available in their entirety, written in Portuguese, English and Spanish, and published in the last 10 years. As an exclusion criterion, duplicate articles were removed, in addition to all material that did not address nursing diagnosis in people at risk of developing venous thrombosis.
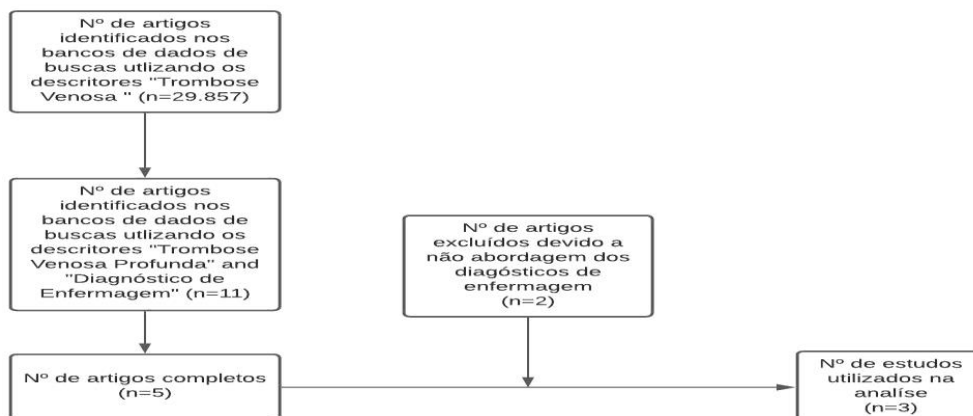
In the first stage of the search, 29,857 articles were identified using the descriptor "venous thrombosis"; then the descriptors "venous thrombosis" AND "nursing diagnosis" were used, resulting in 11 articles. Of these articles, those with full texts totaled 05. Based on these

criteria, the studies were divided and read in their entirety, being arranged in synoptic tables to facilitate the distribution of information and subsequent analysis.

After reading the articles obtained, those that did not approach the theme were removed from the research, as they did not meet the inclusion/exclusion criteria, resulting in the final selection of 3 articles for analysis.

The following flowchart allows a better visualization and understanding of the steps of the search and analysis process.

Figure 1. Flowchart of search and selection of studies. Rio de Janeiro, RJ, Brazil, 2021

After collecting the material, the selected productions were analyzed under the light of Bardin[14], in order to create thematic categories for data analysis. According to Bardin[14], content analysis is a set of methodological instruments in constant improvement, which is applied to extremely diversified discourses (contents and continents). Therefore, content analysis is configured as a set of communication analysis techniques that make use of systematic and objective procedures for describing the content of messages.

Among the analysis steps, the first, called pre-analysis, is where the preparatory operations for the analysis itself are developed. It consists of a process of choosing documents or defining the corpus of analysis; formulation of hypotheses and analysis objectives; elaboration of indicators that support the final interpretation.

In the second stage, the exploration or coding of the material is carried out, which consists of the process through which the raw data are systematically transformed and aggregated into units, which allow an exact description of the characteristics relevant to the content expressed in the text.

The third stage consists of processing the results, inference and interpretation, seeking to highlight the information provided by the analysis, through diagrams, figures, models, etc.

Results

Among the selected articles, it was found that they come from Brazil. As for the year of publication, 1 was from the year 2018, 1 was from the year 2017 and 1 was from the year 2011. All belonging to the BDENF database. The Synoptic Chart 1 allows you to identify characteristics of the selected articles, such as the title of the article, the authors, the database in which it is found, the name of the journal, the year of publication and its classification by Qualis CAPES, released in 2017.

Chart 2, on the other hand, aims to specify which diagnoses were found in the articles included in the research, being divided in a way that facilitates their reading and understanding, covering 4 topics, such as article title, taxonomy, domain or basic human need affected and nursing diagnosis.

Chart 1. Articles found in the search, according to inclusion/exclusion criteria. Rio de Janeiro, RJ, Brazil, 2021

Article title	Authors	Data base	Journal	Year	Qualis Capes
Diagnósticos de enfermagem entre usuários de anticoagulante oral acompanhados em ambulatório	FREITAS, D; RIBEIRO, K; OLIVEIRA, J. L. C.; MATOS, F. G. O. A; CARVALHO, A. R. S.; ROSS, C.	BDENF	Revista Baiana de Enfermagem	2017	B2

Identificação do diagnóstico e proposta de intervenção de enfermagem para pacientes com trombose venosa profunda	SANTANA, C. Q. C.; SANTOS, C. L. O.	BDENF	Revista de Enfermagem UFPE	2011	B2
Subconjunto terminológico CIPE para pacientes com tromboembolismo venoso associado a câncer	VIDIGAL, P. D; GARCIA, T. R; SANTOS, M. L. S. C; CAMACHO, A. C. L. F; SOUTO, M. D; BORGES, G. G; FULY, P. S. C.	BDENF	Acta Paulista de Enfermagem	2018	A2

Chart 2. Nursing diagnoses identified in the articles under analysis. Rio de Janeiro, RJ, Brazil, 2021

Article title	Taxonomy	Domain / Basic Human Need Affected	Nursing Diagnosis
Diagnósticos de enfermagem entre usuários de anticoagulante oral acompanhados em ambulatório	NANDA I Taxonomy	1) Health promotion (Domain 1) 2) Nutrition (Domain 2). 3) Activity/Rest (Domain 4). 4) Activity/Rest (Domain 4). 5) Security/Protection (Domain 5).	1) Ineffective health self-control. 2) Imbalanced nutrition: more than what the body needs. 3) Risk of bleeding. 4) Ineffective peripheral tissue perfusion. 5) Ineffective health self-control.
Identificação do diagnóstico e proposta de intervenção de enfermagem para pacientes com trombose venosa profunda	NANDA I Taxonomy II	1) Nutrition (Domain 2). 2) Nutrition (Domain 2). 3) Activity/Rest (Domain 4). 4) Activity/Rest (Domain 4) 5) Security/Protection (Domain 11). Comfort (Domain 12).	1) Imbalanced nutrition: less than body needs. 2) Excessive fluid volume. 3) Ineffective peripheral tissue perfusion. 4) Fatigue. 5) Risk for impaired skin integrity. 6) Acute pain.
Subconjunto terminológico CIPE para pacientes com tromboembolismo venoso associado a câncer	ICNP®	1) Oxygenation. 2) Oxygenation. 3) Oxygenation. 4) Oxygenation. 5) Hydration. 6) Hydration. 7) Skin-mucosal integrity. 8) Skin-mucosal integrity. 9) Skin-mucosal integrity. 10) Physical integrity. 11) Regulation: thermal. 12) Regulation: neurological. 13) Regulation: immunological. 14) Regulation: Vascular. 15) Regulation: Vascular. 16) Regulation: Vascular. 17) Regulation: Vascular. 18) Regulation: Vascular. 19) Regulation: Vascular. 20) Regulation: Vascular. 21) Regulation: Vascular. 22) Regulation: Vascular. 23) Locomotion. 24) Perception: tactile. 25) Perception: painful. 26) Perception: painful. 27) Perception: painful. 28) Perception: painful. 29) Therapeutics. 30) Security. 31) Security. 32) Learning (health education). 33) Acceptance. 34) Self-realization. 35) Participation. 36) Participation. 37) Participation.	1) Dyspnea. 2) Impaired respiratory system function. 3) Low blood oxygen saturation. 4) Cough. 5) Unilateral peripheral edema. 6) Chronic peripheral edema. 7) Impaired skin integrity. 8) Venous ulcer. 9) Inflammation. 10) Risk of medication side effect. 11) Fever. 12) Risk of falling. 13) Risk of infection. 14) Impaired peripheral tissue perfusion. 15) Impaired vascular process. 16) Tachycardia. 17) Impaired vascular system. 18) Altered blood pressure. 19) Risk of impaired cardiac function. 20) Bleeding through the nose. 21) Risk of bleeding. 22) Risk of deep vein thrombosis. 23) Impaired gait. 24) High peripheral sensory perception. 25) Acute pain. 26) Sharp pain in chest. 27) Chronic pain. 28) Musculoskeletal pain. 29) Impaired ability to manage the drug regimen. 30) Fear. 31) Anxiety. 32) Low knowledge of therapeutic regimen. 33) Impaired adaptation. 34) Negative quality of life. 35) Non-adherence to the therapeutic regimen. 36) Absent family support. 37) Caregiver's ability to perform care impaired.

Discussion

The diagnoses presented totaled 47, with 10 referring to the NANDA taxonomy, with repetitions occurring between the two articles[13,15] for the diagnosis "Ineffective peripheral tissue perfusion", being a classic diagnosis for patients with venous thromboembolism, considering that, with the presence of the thrombus, there is a decrease in the flow in the area where it is present.

Another diagnosis identified in these patients was the risk of impaired skin integrity[15], this is due to venous

hypertension, usually resulting in venous ulcers, since the occurrence of these ulcers is already well described and established in the literature as a result of venous flow obstruction.

Two diagnoses had, by the authors[13,15], the generation of controversy, which concerns "imbalanced nutrition". It was found that one[13] of the studies identified a contribution greater than the body needs, while the other[14] followed to the opposite side, being identified a contribution smaller than the corporal need.

Other diagnoses presented were related to "ineffective health self-control"; "risk of bleeding"; "excessive fluid volume"; "fatigue and sharp pain"[1315].

One of the articles brought as a taxonomy the International Classification for Nursing Practice (ICNP®) and in this it was possible to detect the presence of 37 nursing diagnoses. The most frequent affected basic human need was related to "vascular regulation", in which 9 diagnoses were obtained: impaired peripheral tissue perfusion; impaired vascular process; tachycardia; impaired vascular system; altered blood pressure; risk of impaired cardiac function; nasal bleeding; risk of bleeding; risk of deep vein thrombosis[16].

Following the understanding that the Systematization of Nursing Care (SAE), including the nursing diagnosis, is a methodological instrument that, in addition to providing and guiding nursing care, offers the necessary conditions for the organization of nurses' work, it was possible to perform the grouping of information, taking into account three categories of analysis, discussed below.

Systematization of Nursing Care – envisioning best practices in patient care with or at risk of deep vein thrombosis

Considering the search and selection strategies of articles, according to the inclusion/exclusion criteria in this study, it was possible to perceive the lack of research focused on SAE for patients with deep vein thrombosis or at risk of developing this clinical condition.

In this sense, it is necessary to reflect on the bases of nursing care as a scientific practice in health care environments, since nurses are also responsible for producing science when investigating objects that are part of their daily lives when managing, caring for and researching the needs of patients, seeking to increasingly improve its practices and promote the science of nursing.

Nursing diagnoses for surgical patients with venous thromboembolism or at risk of developing it are not adequately disseminated, and it can be inferred that this was one of the limitations of the study, as only three articles involving the investigated object were located in the analyzed databases.

In this sense, it is worth emphasizing that "nursing assessments provide the starting point for determining nursing diagnoses. It is critical that a recognized nursing assessment framework be used in practice to identify problems, risks and patient outcomes"[12].

Evidence-based nursing practice is able to identify the approach to care more efficiently and economically, and

for the establishment of this practice it is necessary to develop a standardized language[16].

The NP has its importance, as this is one of the elements of the SAE and through which it is possible to develop a scientific method at work for the management of care by nurses[12]. It appears, therefore, when dealing with the clinical condition venous thromboembolism (VTE), when related to nursing care, that there is a need to expand investigations on this topic.

The lack of studies that deal with this theme (VTE and SAE) has impacts on nursing care and further studies can contribute to promoting its growth and autonomy as a profession and science. Thus, facilitating interventions and care aimed at patients with or at risk of VTE, providing even better quality of life and promotion of self-care.

The use of nursing diagnoses for patients at risk of VTE - the language that standardizes conduct and favors the continuity of care

Nursing diagnoses are titles given to human reactions that require nurses to act in order for health care to occur. They favor effective communication between members of the nursing team and, therefore, constitute an important requirement for nursing[12]. Its use is even strategic to standardize and allow continuity of care for patients at risk of VTE.

In the articles under analysis, several diagnoses were found for this group of people. In one of the articles, the focus involved patients who used oral anticoagulants. In it, the diagnosis of bleeding risk was presented, considering that the use of these drugs has the function of reducing the aggregation of platelets and, therefore, in cases of injury, coagulation is impaired[13].

Another diagnosis is related to the risk of infection, as in this case it is related to the need to carry out numerous venous blood collections to verify the International Standardized Ratio Examination (INR), in which it is possible to see how the patient's blood clotting rates are[13].

The diagnosis of "imbalanced nutrition greater than needs" was also identified, however the article did not present the reason for this increase in food intake, but stressed that, together with this, weight gain occurs, which can establish obesity, a comorbidity, which compromises the anticoagulant effect. It also says that this factor emphasizes the strengthening of the nurse's role of educator, because through actions such as these, they help in the person's understanding of the need for a healthy diet and the reduction of body weight.

The article[13] still presents the diagnosis of ineffective peripheral tissue perfusion, a very common diagnosis for these people, considering that the formation of a clot in the blood vessels causes a decrease in the endothelial lumen and, consequently, there is a decrease in blood flow in the affected region.

The last diagnosis presented by Freitas was that of ineffective health self-control, and in his research it was possible to observe that 20% of the population studied stopped using oral anticoagulants of their own volition, as a

consequence of these patients not seeing the protection that these drugs provide. offered[13].

In Santana's study[15] it was possible to verify that there was no deepening of the reasons for the nursing diagnoses present there. Differently from Freitas13, in this article, 4 other nursing diagnoses were presented and one of them was Risk for impaired skin integrity, assuming that this diagnosis is due to the nature of venous thromboembolism, in which there is a decrease in blood flow due to the thrombus, there is also a decrease in nutrients and oxygen in the affected region, conditions that favor cell death and the appearance of venous lesions.

The diagnosis of acute pain presented in the study by Santana[15] can be justified due to the presence of edema that commonly occurs in these patients, this edema in turn can increase the pressure of nervous structures responsible for the painful sensation.

Other diagnoses found in the study by Santana[15] were excessive fluid volume related to the decrease in albumin rate in the body that was detected in the exams to which the study patient was submitted and the diagnosis of fatigue related to the patient's depression.

All diagnoses presented allow better practices in the care provided to patients at risk of VTE, becoming an essential language for nurses to care for and promote continuity of care for these patients.

The nurse as a promoter of fundamental care for the patient with deep vein thrombosis

All articles analyzed addressed the role of nurses in caring for people with or at risk of deep vein thrombosis. According to Freitas[13], the nursing professional in its history positions its management in the feasibility of rational care strategies.

Santana[15] states that the quality of care should be based on planning their actions, on coherent care, on implementation of care and evaluation of results. Within this line of thought is the NP, which is part of the SAE, systematically bringing the assistance provided. According to Freitas[13], the NP enables the development of a scientific method in care management.

Nurses play an important role in patient guidance and education regarding their treatment and the prevention of deep vein thrombosis, promoting the empowerment of people regarding their health situation, also aiming at optimizing treatment adherence. The articles that composed this study approached this role as something fundamental.

Another intervention that appeared in the analyzed articles was care related to poor tissue perfusion, with the nurse's need to assess tissue perfusion daily, especially in the lower limbs, early identification of signs and symptoms of complications, also encouraging the patient to perform actions that improve venous return such as leg elevation and ambulation. Santana[15] says that these cares also help in the prevention of wounds.

People with or at risk of developing venous thrombosis may need to use anticoagulants, which increases the risk of bleeding, in view of this, nurses need to design their care in the orientation regarding the use of these drugs

correctly, instruct about products that may interfere with the anticoagulant and in relation to the prevention of falls, cuts, injuries and other factors that can trigger a hemorrhagic reaction[13,15].

Another important nursing care is to evaluate and verify the signs of bleeding in the integumentary, intestinal, urinary and respiratory systems, acting quickly in order to avoid more serious complications[13,15,16].

Cautions regarding the risk of infection appeared in the articles[13,15], which addressed the need to train the team on the need for hand and environmental hygiene, use of precautionary techniques and ensure compliance with asepsis when collecting biological material or administering medication.

In relation to unbalanced nutrition, two articles presented the role of nursing for this diagnosis. The educational action was pointed out as care, requiring an approach in relation to weight control and improvement of eating habits[13,15].

Pain is common in patients with venous thrombosis, the care presented was to assess pain, administer analgesics and guide the adoption of actions that improve venous return, such as venous return with elevation of the lower limbs and ambulation[15,16].

Other nursing care such as chest elevation to improve dyspnea, monitoring of respiratory status and vital signs, physical examination, offering emotional and social support, protecting the patient's autonomy and guiding the family as to its importance for therapeutic success[15].

Conclusion

With the development of this research, three categories of analysis emerged, which highlighted the need for an applied terminology for nursing care, as well as the benefits of its implementation. In addition to allowing the identification of the diagnoses that appeared the most in the research and the reason for their applications. It was also possible to perceive the importance of the nurse's role in relation to the patient with deep vein thrombosis or at risk of presenting it during hospitalization, punctuating the actions that cannot fail to be carried out in order to achieve success in care, as well as its continuity.

In this context, the great need for nursing diagnoses and interventions in care and recovery for patients at risk of venous thrombosis was evidenced. However, the number of articles that address nursing diagnoses in the literature was scarce, despite being a topic of great importance.

Although the legislation of the Federal Nursing Council highlights the mandatory use of diagnoses since 2009, its applicability in health care settings is still not perceived, especially in inpatient units, where the problem is established and puts the lives of inpatients at risk.

One of the limitations of the study was the small amount of works present in the literature that address the topic.

It was concluded that the research objectives were achieved, understanding that it is necessary to increase the number of scientific productions related to nursing

diagnoses for patients with deep vein thrombosis or who are at risk of having it.

It became evident, in this study, that from the nursing diagnoses it is possible to promote a safer practice, based on scientificity and capable of improving the flow of information about venous thromboembolism, as well as the strategies to face the problem, favoring in this way, the generation of evidence for the promotion of care in clinical and surgical hospitalization units.

References

1. Araújo, WEC; Barbosa, AM. Eficácia e segurança de anticoagulantes orais diretos comparados à anticoagulação tradicional com heparina e varfarina para tratamento de tromboembolismo pulmonar e trombose venosa profunda. Revista Cientifica da Escola de Saúde Pública de Goiás. Goiás [internet]. 2020. [Acesso em 2020 out 06]; 6(2) Disponível em http://www.revista.esap.go.gov.br/index.php/resap/article/view/219
2. Piedade, AD. et al. Análise econômica do tratamento de tromboembolismo venoso com rivaroxabana em comparação com enoxaparina seguida de farfarina sob a perspectiva do sistema de saúde suplementar brasileiro. Jornal Brasileiro de Economia da Saúde. Brasil [internet] 2017. [Acesso em 2020 out 06]; 9(1):09-121. Disponível em http://docs.bvsalud.org/biblioref/2017/05/833572/doi-1021115_jbesv9n1p109-121.pdf
3. Fernandes, CJCS. et al. Os novos anticoagulantes no tratamento do tromboembolismo venoso. Jornal Brasileiro de Pneumologia. São Paulo [Internet] 2016. [Acesso em 2020 Out 06] 42(2):146-154. Disponível em https://www.scielo.br/pdf/jbpneu/v42n2/pt_1806-3713-jbpneu-42-02-00146.pdf
4. Brasil, Ministério da Saúde. Banco de dados do Sistema Único de Saúde-DATASUS. Disponível em < http://www.datasus.gov.br>
5. Batista, DBS. et al. Rastreamento de riscos e profilaxia de tromboembolismo venoso em unidades de internação: um estudo observacional. Research, Society and development. Vargem Grande Paulista [Internet] 2020. [Acesso em 2020 out 21] 9(7). Disponível em https://rsdjournal.org/index.php/rsd/article/view/4995
6. Anderson FAJ, Spencer FA. Risk factors for venous thromboembolism. Circulation. America Heart Journal: Circulation. Dallas [Internet] 2003. [Acesso em 2020 Out 06] 107(23):9-16. Disponível em https://doi.org/10.1161/01.CIR.0000078469.07362.E6
7. Academia Brasileira de Neurologia, Associação de Medicina Intensiva Brasileira, Federação Brasileira das Associações de Ginecologia e Obstetrícia, Sociedade Brasileira de Angiologia e de Cirurgia Vascular, Sociedade Brasileira de Cancerologia, Sociedade Brasileira de Cardiologia, Sociedade Brasileira de Reumatologia. Tromboembolismo venoso: profilaxia em pacientes clínicos – parte III. Revista da Associação Médica Brasileira. São Paulo [Internet] 2009. [Acesso em 2020 out 21] 55(5):363-381. Disponível em https://www.scielo.br/scielo.php?pid=S0104-42302009000400006&script=sci_arttext
8. Rocha, RG. Prevenção de riscos de tromboembolismo venoso: estratégias para redução da morbimortalidade. Tese de doutorado, Universidade do Estado do Rio de Janeiro. Rio de Janeiro. [Internet] 2014. [Acesso em 2020 out 21]. Disponível em https://bdtd.ibict.br/vufind/Record/UERJ_4b7d2cadc0787c69daf7b2c081b2c073
9. Silva, EGC; et al. O conhecimento do enfermeiro sobre a sistematização da assistência de enfermagem: da teoria à prática. Revista da Escola de Enfermagem da USP-REEUSP. São Paulo [Internet] 2011. [Acesso em 2020 out 21] 45(6. Disponível em https://www.scielo.br/j/reeusp/a/ddQxzyWyJjkNGZzSfrn7Dfz/?lang=pt
10. BRASIL. Conselho Federal de Enfermagem. Resolução COFEN nº358/2009, de 15 de outubro de 2009. Dispõe sobre a Sistematização da Assistência de Enfermagem e a implementação do Processo de Enfermagem em ambientes, públicos ou privados, em que ocorre o cuidado profissional de Enfermagem, e dá outras providências. Rio de Janeiro, COFEn; 2009. In: Conselho Federal de Enfermagem [Internet]. 2009 Brasília; Disponível em: <http://www.cofen.gov.br/resoluocofen-3582009_4384.html>
11. Fengler FC; Medeiros; C.R.G; Sistematização da assistência de enfermagem no período perioperatório: análise de registros. Revista SOBECC. São Paulo. [Internet] 2020. [Acesso em 2020 Out 21] 25(1):50-57 Disponível em https://revista.sobecc.org.br/sobecc/article/view/517
12. North American Nursing Diagnosis Association International. Diagnósticos de enfermagem da NANDA: Definições e classificações 2018 – 2020. 11. ed. Porto Alegre (RS): Artmed; 2018.
13. Freitas D, et al. Diagnósticos de enfermagem entre usuários de anticoagulante oral acompanhados em ambulatório. Revista baiana de enfermagem. Bahia. [Internet] 2017. [Acesso em 2020 out 11] 31(3). Disponível em https://portalseer.ufba.br/index.php/enfermagem/article/viewFile/20356/15074
14. Bardin, L. Análise de conteúdo. São Paulo: Edições 70; 2011.
15. Santana CQC; Santos CLO. Identificação do diagnóstico e proposta de intervenção de enfermagem para paciente com trombose venosa profunda. Revista de Enfermagem UFPE online. Pernambuco. [Internet] 2011. [Acesso em 2020 Out 21] 5(9):2254-59. Disponível em https://periodicos.ufpe.br/revistas/revistaenfermagem/index.php/revista/article/view/1904/pdf_697
16. Vidigal PD; et al. Subconjunto terminológico CIPE para pacientes com tromboembolismo venoso associado a câncer. Acta Paulista de Enfermagem. São Paulo. [Internet] 2018. [Acesso em 2020 Out 21] 31(4). Disponível em https://doi.org/10.1590/1982-0194201800054