

Federal University of Rio de Janeiro State



Journal of Research Fundamental Care Online


 ISSN 2175-5361
 DOI: 10.9789/2175-5361

INTEGRATIVE REVIEW OF THE LITERATURE

A enfermagem no manejo da dor em pessoas com úlcera venosa: revisão integrativa

Nursing in the management of pain in people with venous ulcer: integrative review

Enfermería en el manejo del dolor en las personas con úlcera venosa: revisión integradora

Samilly Májore Dantas Liberato ¹, Amanda Jéssica Gomes de Souza ², Isabelle Katherinne Fernandes Costa ³, Gilson de Vasconcelos Torres ⁴, Allyne Fortes Vitor ⁵, Ana Luísa Brandão de Carvalho Lira ⁶

ABSTRACT

Objective: synthesize the knowledge produced about interventions used for pain management in people with venous ulcers. **Method:** integrative literature review performed in June 2013 in the databases PubMed, CINAHL, ISI Web of Knowledge, SCOPUS, LILACS and The Cochrane Library. For the survey of publications were used descriptors MeSH - Medical Subject Headings: "Venous ulcers", "Pain Management" and "Nursing". **Results:** seven articles were selected and these showing the interventions type like pharmacological - dressing containing ibuprofen, techniques such as music therapy, aromatherapy and laser therapy and participation in support groups. **Conclusion:** verified there is a deficit of studies on pain management, however it is suggested to implement intervention activities found to conduct a holistic and effective care. **Descriptors:** Pain management, Varicose ulcer, Nursing.

RESUMO

Objetivo: sintetizar o conhecimento produzido sobre as intervenções utilizadas para o manejo da dor em pessoas com úlcera venosa. **Método:** revisão integrativa da literatura realizada em junho de 2013 nas bases de dados PubMed, CINAHL, ISI Web of Knowledge, SCOPUS, The Cochrane Library e LILACS. Para o levantamento das publicações foram utilizados descritores do vocabulário MeSH - Medical Subject Headings: "Venous ulcers"; "Pain Management" e "Nursing". **Resultados:** foram selecionados sete artigos e estes apresentaram intervenções do tipo farmacológicas - curativos contendo ibuprofeno, técnicas como musicoterapia, aromaterapia e laserterapia e participação em grupos de apoio. **Conclusão:** verificou-se que existe um déficit de estudos sobre o manejo da dor, contudo sugere-se a implementação das atividades de intervenção encontradas para realização de uma assistência eficaz e holística. **Descritores:** Manejo da dor, Úlcera venosa, Enfermagem.

RESUMEN

Objetivo: sintetizar el conocimiento producido sobre las intervenciones utilizadas para el tratamiento del dolor en personas con úlceras venosas. **Método:** revisión integradora de la literatura realizada en junio de 2013 en las bases de datos PubMed, CINAHL, ISI Web of Knowledge, SCOPUS, LILACS y The Cochrane Library. Para la encuesta de las publicaciones fueron utilizados los descriptores de vocabulario MeSH - Medical Subject Headings: "Venous ulcers"; "Pain Management" e "Nursing". **Resultados:** siete artículos fueron encontrados que muestran las intervenciones de tipo farmacológico - vestir que contiene ibuprofeno, técnicas como la musicoterapia, aromaterapia y terapia con láser y la participación en grupos de apoyo. **Conclusión:** verifico que hay un déficit de estudios sobre el tratamiento del dolor, sin embargo, se sugiere llevar a cabo actividades de intervención se han encontrado para llevar a cabo una atención integral y eficaz. **Descriptores:** Manejo del dolor, Úlcera varicosa, Enfermería.

1 Nurse, Master in nursing graduate program in nursing /UFRN. Natal (RN), Brazil. E-mail: samillyliberato@hotmail.com 2Nurse, Master in nursing graduate program in nursing /UFRN. Natal (RN), Brazil. E-mail: amandajessicags@yahoo.com.br 3Nurse, PhD in Nursing /UFRN. Assistant Professor, Department of Nursing /UFRN. Natal (RN), Brazil. E-mail: isabellekfc@yahoo.com.br 4 Nurse, Post-doctorate in nursing. Professor, Department of Nursing /UFRN. Natal (RN), Brazil. E-mail: gilsonvtorres@hotmail.com 5 Nurse, PhD in Nursing /UFC. Assistant Professor, Department of Nursing /UFRN. Natal (RN), Brazil. E-mail: allyne@ufrnet.br 6 Nurse, PhD in Nursing /UFC. Assistant Professor, Department of Nursing /UFRN. Natal (RN), Brazil. E-mail: analuisa_brandao@yahoo.com.br

INTRODUCTION

The venous ulcer (VU), more severe manifestation of chronic venous disease, is a leg injury, characterized by destruction of skin layers, such as epidermis and dermis, and can reach deeper tissues.¹ It is estimated at 0.3% to its prevalence in the adult population.²

This chronic wound is usually quite painful, one of the reasons that causes their permanent character results in a functional limitation and move away from the individual of their routine activities, such as work, and thus to provoke their early retirement despite being in production phase.^{3,4}

In this sense, the pain may produce a negative effect on the individual both physically and emotionally, psychologically and socially⁵. In addition, for many patients the pain means and thus VU worsens their quality of life.⁶

On the presence of pain in research conducted with people with VU in Rio Grande do Norte was observed that she was present in 95% of surveyed, 70 percent of them being with injury time greater than or equal to 6 months and 25% with VU time less than 6 months.⁷ Many of the patients with VU support pain and suffering, often silent, due to the lack of effective and tolerable treatment.⁸

Given this, the nurse should pay attention not only to the injury itself, but having the ability to perform a holistic approach in order to contemplate the human being in its fullness, especially because it is a specifically human being fragile, impacted biopsicosocialmente.⁹

Furthermore, the presence or absence of pain is an important indicator of quality of life, so special attention should be given to this signal in order to promote better assistance to the individual.

In this context, the pain management is an essential part in the effective management of the wound and, therefore, nurses need to acquire knowledge about the type of pain associated with venous ulcer, as well as the main interventions used in management and so provide, in a timely manner, resolutions, and individualized care.⁵

In order to achieve good planning care when individual has nursing process and rankings. Concerning this need well described, it considered the intervention "pain management" in the "Nursing Interventions Classification (NIC)." Stands out, but there's still demand for complement it with other activities.¹⁰

Plus, with the technological advances in the area of care to individuals with wounds, obtained a rise about the products and methods used by it relating to nurses, the need arose to the quest for a better technical and scientific preparation befitting the new trends and perspectives.⁹

In this context, this review aims to synthesize the knowledge produced about nursing interventions used for the management of pain in people with venous ulcer.

METHOD

It is an integrative review of literature, which allows gathering and synthesizing results from previous searches on a bounded topic or question, systematic manner, contributing to the deepening of knowledge about a particular area, with a view to making more accessible the results of scientific research.¹¹

For planning and systematization of this review, before his execution, was elaborated a protocol review, to be followed by the researchers, containing: theme of the review, goal, guiding question, search strategies, databases, adopted in the search descriptors, intersections of descriptors, criteria for inclusion and exclusion, strategies for data collection of studies, strategies for critical assessment and strategy for the synthesis of the data.

For the realization of this study have been obeyed the steps the following: elaboration of exposed question guiding, establishment of the objectives of the review and criteria for inclusion and exclusion of articles; definition of the information to be extracted from the research; selection of articles in the literature; analysis of the results; discussion of the findings and presentation of the review.¹²

As a way to conduct this review formulated the following guiding question: which knowledge has produced on nursing interventions for the management of pain in people with venous ulcer?

The search for the publications held in June 2013 in the databases PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), ISI Web of Knowledge, SCOPUS, The Cochrane Library and Latin American Literature and Caribbean Health Sciences (LILACS).

For the lifting of non-descriptors were used publications controlled vocabulary MeSH- Medical Subject Headings in English: "Venous ulcers," "Pain Management" and "Nursing." The option for non-descriptors monitored in view of the difficulty in finding publications for the purpose of this study. The intersection of these keywords occurred through the AND Boolean operator.

For the proper refinement of articles defined a sample, according to the following inclusion criteria: scientific articles available in full and free in the above-mentioned databases and responding to guiding issue proposal. Studies excluded in editorial format, letter to the editor or review of the literature.

Fits elucidate which appreciated all the period provided by each database since it was not established temporal delimitation for selection of articles.

The procedure of electronic search in the databases mentioned preceded by two researchers independently following protocol drawn up and the same sequence of databases, from reading the title and summary of the articles. As a next step, the researchers conducted

a consensus meeting in order to define which of the pre-selected articles would be extracted for consideration in its entirety.

After reading the full articles previously selected articles were identified that composed the final sample of this integrative review.

By computerized searching in PubMed database, 50 studies found, but none selected for this review. From the research in the database CINAHL, 249 studies were located, being 6 included in this review. On ISI Web of Knowledge, 13 publications submitted, but none selected for the study. In SCOPUS were located 59 articles, selected for the sample final 1. The database The Cochrane Library presented 12 articles in the section of clinical trials, but none selected for this review. In the case of the LILACS, the intersection of descriptors found no scientific paper.

Figure 1, below, presents the flowchart for the selection process of the articles that were part of the final sample of this review.

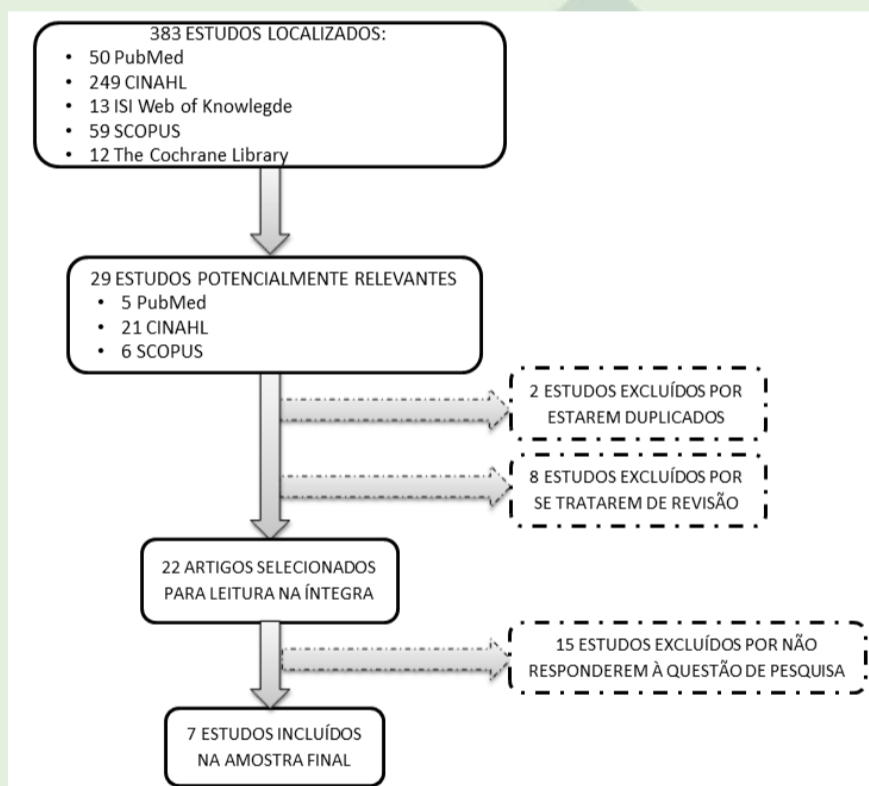


Figure 1. Representative selection process flowchart articles.

After thorough reading each of the selected articles, filled in a structured form containing following variables: authors, year of publication, goals, type of study and main results.

The main results identified were analyzed and grouped into categories according to the activities set out in the intervention of pain control proposed by the "*Nursing Interventions Classification*" (NIC).¹⁰

RESULTS AND DISCUSSION

Table 1 below sets out the characteristics of the studies, author/year, objectives, and type of study.

Table 1. Distribution articles by author/year, goals, type of study and level of evidence. Brazil, Natal/RN; 2012.

Author/Year	Goals	Type of study	NIC Category
Sibbald RG, Coutts P, M, Woo Fierheller k. (2007)13	Evaluate the effects of a foam dressing with continuous release of ibuprofen in relation to local practice about the pain of people with leg ulcers.	Randomized clinical trial	Offer the person ideal relief of pain, with the use of prescription painkillers.
Jorgensen B, Friis GJ, Gottrup f. (2006)14	Evaluate the curative effect of "Biatains-Ibu" in reducing pain and quality of life.	Double-blind crossover clinical trial	
Flanagan M, Vogensen H, Haase l. (2006)15	Describe the experience of patients treated with the bandage "Biatains-Ibu."	Prospective case series	
Gottrup F, Jorgensen B, Karlsmark T, Sibbald RG, Rimdeika R, Harding K et al. (2008)16	Investigate whether foam dressings with continuous release of ibuprofen relieve venous ulcer pain without affecting the cure, humidity, and security.	Randomize clinical trial	
Kane FMA, Brodie EE, the Coull, Coyne L, Howd the, Milne A, et al. (2004)17	Evaluate the effect of aromatherapy and music therapy in reducing pain during dressing change.	Clinical trial without randomization	Teach the use of non-pharmacological techniques before, after and, if possible, during painful activities; before the pain occurs or increase; and along with other measures of pain relief.
Karimi L, Miller CN, Donohue LA, Nunn RJ, W McGuinness, Czech THE et al. (2012)18	Investigate the effectiveness of the use of low intensity laser therapy to control pain in patients with chronic wounds and leg.	Randomize clinical trial	
Edwards H, Courtney M, Finlayson K, Lindsay and Lewis C, Chang A, et al. (2005)19	Determine the effectiveness of a community care model of nursing on cure rates, levels of pain and quality of life of patients with Chronic Venous ulcers.	Randomize clinical trial	Consider the referral of the patient, the family, and the persons significant to support groups and other resources when appropriate.

Following will presented the main results of the study categorized as relationship with the activities set out in the intervention "pain management" proposed by the "Nursing Interventions Classification (NIC)".¹⁰

Offer the person ideal relief of pain, with the use of prescription painkillers.

Although pain is a significant problem in patients with chronic wounds, as perceived by two of these studies that often patients are insufficiently treated, do not respond well to

systemic analgesics or are reluctant to take more drugs. According to such interventions, an ideal product for the treatment of pain must be able to provide fast and long-lasting relief, be relatively non-traumatic, safe, and low cost. Local and systemic effects should be minimal.¹³⁻¹⁴

Three clinical trials and a series of cases have addressed this activity, all with curative application containing ibuprofen, an anti-inflammatory analgesic action.¹³⁻¹⁶

Specifically in one of them, held in a center of healing of wounds, 10 patients with leg ulceration venous etiology were included in a clinical trial. The study included a period of pre-treatment with two dressings placebos, i.e. no ibuprofen (Biatain-pre), a period of five dressings containing ibuprofen (Biatains-Ibu) and a post-treatment period with two dressings placebos (Biatain-post).¹⁴

The bandage "Biatains-Ibu" consists of a hydrophilic polyurethane soft foam containing ibuprofen (ibuprofen concentration: 0.5 mg/cm²) as an integral part of the array. The foam linked to a semi-permeable polyurethane film.¹⁴

Treatment with Biatains-Ibu correlated with a decrease in pain intensity score of 7 in the pretreatment period to about 2.5 ($p \leq 0.0001$). It is important to note that ibuprofen not detected in serum samples of patients in the study.¹⁴ this information is advantageous especially for patients at risk of developing side effects arising from systemic analgesia or already suffering gastric effects due to polypharmacy.

Post-treatment pain levels were higher than those observed during the active treatment and the mean score of pain intensity increased to 4, being this difference statistically significant ($p \leq 0.005$).¹⁴

This phenomenon also observed in one of the selected investigations, in what considered a case series of 10 patients with painful ulcers treated with Biatains-Ibu for a period of two weeks. The pain was significantly reduced ($p = 0.003$) in eight of the ten participants during the treatment period, but that the same proportion of patients experienced increased pain when active treatment was discontinued.¹⁵

Another study that was part of this review found that, in addition to decrease chronic pain levels between changes of dressings and acute pain levels in Exchange for dressing, using the Biatains-Ibu was associated with increased healthy granulation tissue, decreased perilesional erythema and excellent ability to raise exudate.¹³

The fourth study framed in this category in addition to confirm the advantages of foam dressing with Ibuprofen for the treatment of persistent chronic pain injury investigated the occurrence of adverse events during the completion of the study.¹⁶

In the group treated with foam dressing with Ibuprofen, skin reactions observed in four patients: one had hives and eczema, one just had eczema, and two had pustules. In the control group, four patients had reactions: two with eczema and two with pustules. In this way, the study concluded that most of these events had no relationship with the ulcer, nor with the dressing. Adds up that were not reported serious device-related events in this study.¹⁶

In addition to the pain-related results, two of the four articles that constitute the sample of this category, made mention of the improvement in patients' quality of life, a presentation of quantitative data¹⁶ and one by means of qualitative data.¹⁵

Teach the use of non-pharmacological techniques before, after and, if possible, during painful activities; before the pain occurs or increase; and along with other measures of pain relief.

When considering multidimensional feature pain, the need to perform a proper management to control the symptom, often not mitigated only with conventional therapy, has pointed to a greater interest in alternative therapies, complementary and non-pharmacological.²⁰

Among the total of articles included in this category, two set out to examine the use of non-pharmacological therapies for pain relief in people with venous ulcers.

One of the studies assessed the effect of aromatherapy and music therapy on pain of patients with vascular ulcers during dressing change. In one of the five groups has been used aromatherapy with essential oil of lemon, in the second group was employed the lavender essential oil, the third group listened to relaxing music, the fourth group received music therapy through music from the patient's preference and in the control group was conducted the usual procedure of dressing without any additional intervention.¹⁷

The research found that although none of these therapies has reduced pain intensity during the exchange of the bandage, aromatherapy with lavender essential oil and music therapy with the patient's preferred music has caused decrease in pain in the period immediately after the exchange of the bandage. It should be noted that the lack of statistically significant results may have elapsed from the small number of sample (n = 5).¹⁷

Even with no statistically significant results, the study was important to elucidate that these therapies are useful tools, easy to use, cheap and without known adverse effects that must further researched to achieve greater applicability.

In the case of the second investigation, concerned therapy was low-intensity laser applied to patients with chronic wounds and leg. A computer program, in three groups, randomized study participants, the group that received the "Polylaser Trion™" (a hand), the group that received the "Photonic 500 Acumed™" (a scanning laser), and the control group. The data showed a significant decline in intensity of the pain, but no significant differences between the groups.¹⁸

The low-intensity laser (LBI) emits radiations without destructive potential and with therapeutic effects on the tissues. The success of the effect on pain explained by the increased levels of beta-endorphins, inhibition of nociceptors and control signals of mediators of pain, decreased edema, increased blood supply and reduced inflammation.²¹⁻²³

Authors of various specialties and in different situations have shown the effectiveness of this therapy in reducing pain symptoms of various diseases^{24, 25, 26}, configuring the so as another tool in the arsenal of the professionals of the health area.

Consider the referral of the patient, the family, and the persons significant to support groups and other resources when appropriate.

Live with the condition of being in possession of a VU brings numerous changes in the lives of individuals and, consequently, on their relatives.²⁷ the impact of pain involves a series of psychological processes that end up making an impact on confidence to carry out the daily tasks, the well-being and maintenance of social and recreational activities. These feelings manifest themselves by a feeling of isolation and loss of identity, which reinforces the perception that their lives have changed irreversibly.²⁸

In this context, the communitarian therapy (CT) configures itself as a practice of therapeutic effect for a group of people with a common interest: the relief of their suffering and the search for well-being. Through an informal organization of face-to-face contact, the communitarian therapy aims at health promotion through the appreciation of the life experiences of the participants, building solidarity links, the restoration of self-esteem and expanding the perception of problems and possibilities for resolution from the local skills and experience of other participants.²⁹

From this, integrative review was identified an article that sought to determine the effectiveness of a new model of community nursing care over cure rates, levels of pain, quality of life, and functional capacity in patients with Chronic Venous ulcers.

The study was carried out in Australia and provided to participants in the intervention group, in addition to conventional therapy, a model of attention based on social interaction, advice, and support on the ulcer, guidance on preventive care and the establishment of goals to help in the management of social and functional activities, through weekly meetings "Leg Club".¹⁹

The data demonstrated that the intervention group reduced significantly the items: amount of pain experienced ($p = 0.001$), degree of the pain affects the mood ($p = 0.004$), degree of the pain affects sleep ($p = 0.003$) and degree of the pain affects the work ($p = 0.026$). It was observed a significant decrease in the size of the ulcer of the intervention group compared with the control group ($p = 0.004$).¹⁹

He adds that the collective treatment provided was essential to promote the desestigmatização of the disease and encourage the exchange of information and educational opportunities between clients and professionals.

Thus, this category was important to elucidate that the pain control should be a concern of the professional nurse, however it is vital people with Ulcus Cruris assistance based on a holistic model of care, with the objective of social reintegration of patients with as much of a normal life conditions, i.e. live with quality and health.³⁰

CONCLUSION

From the studies found related interventions found with three activities laid down in IAS¹⁰ the first of these was "offer the ideal relief person pain, with use of painkillers", highlights the use of wound dressing containing ibuprofen (Biatains-ibul) that has been shown to have a direct relation with the decrease in pain intensity and, Furthermore, with increased granulation tissue healthy, decrease perilesional Erythema, exudate mobilization capacity, as well as the improvement in patients' quality of life.

The second activity was to Teach the use of non-pharmacological techniques before, after and, if possible, during painful activities; before the pain occurs or increase; and along

with other measures of pain relief. For this activity was added two one of them studies assessed the effect of aromatherapy and music therapy on pain and found that listen decreased pain in the period immediately after the exchange of the dressing, while the second assessed the effect of so on pain, this, too, showed a significant decline in intensity of pain.

The third and last activity referred to consider the forwarding of patient, the family, and the persons significant to support groups and other resources when appropriate. In this activity he met a model of attention based on social interaction, advice and support on the ulcer, guidance on preventive care and the establishment of goals to help in the management of social and functional activities, through weekly meetings "Leg Club", the participation of these groups VU significantly reduced the pain and your degree to affect the mood, sleep and work.

Through this review, it was noted the shortage of studies on the management of pain in people with *Ulcus Cruris*, even being noted the impact of pain on daily life of these and, mainly, in the healing of wounds.

Pain control is essential in the management of venous ulcers, because it is a signal that will reach the patients in its completeness and causes this requires a complete and holistic assistance. It therefore proposed implementing these intervention activities, as well as conducting new research on pain management in order to strengthen the evidence in this area.

REFERENCES

1. Oliveira BGRB, Nogueira GA, Carvalho MR, Abreu AM. Caracterização dos pacientes com úlcera venosa acompanhados no Ambulatório de Reparo de Feridas. *Rev Eletr. Enf [periódico na Internet]*. 2012 [acesso em 2013 jun. 26];14(1): [aproximadamente 8 p.]. Disponível em: http://www.fen.ufg.br/fen_revista/v14/n1/pdf/v14n1a18.pdf
2. Leal J, Mansilha A. Como avaliar o impacto da doença venosa crónica na qualidade de vida. *Angiol Cir. Vasc. [periódico na Internet]*. 2010 [acesso em 2013 jun. 26] ; 6(4): [aproximadamente 14 p.]. Disponível em: http://www.scielo.gpeari.mctes.pt/scielo.php?script=sci_arttext&pid=S1646-706X2010000400003&lng=pt.
3. Silva FAA, Freitas CHA, Jorge MSB, Moreira TMM, Alcântara MCM. Enfermagem em estomaterapia: cuidados clínicos ao portador de úlcera venosa. *Rev bras. enferm [periódico na Internet]*. 2009 [acesso em 2013 jun. 26] ; 62(6): [aproximadamente 4 p.]. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672009000600014&lng=pt.
4. Mata VE, Porto F, Firmino F. Time and cost´s procedury: ulcers vasculogenics curative´s. *J res fundam care online [periódico na Internet]*. 2011 [acesso em 2013 jun. 26]; 3(1): [aproximadamente 9 p.]. Disponível em: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/1209/pdf_359

5. Roden A, Sturman E. Assessment and management of patients with wound-related pain. *Nurs Stand* [periódico na Internet]. 2009 [acesso em 2013 jun. 26]; 23(45): [aproximadamente 11 p.]. Disponível em: <http://nursingstandard.rcnpublishing.co.uk/archive/article-assessment-and-management-of-patients-with-wound-related-pain>.
6. Nunes JP, Vieira D, Nóbrega WG, Farias TYA, Torres GV. Venous ulcers in patients treated at family health units in Natal, Brazil: prevalence and sociodemographic and health characterization. *FIEP Bull.* 2008;78(1): [aproximadamente 3 p.].
7. Costa, IKF. Qualidade de vida de pessoas com úlcera venosa: associação dos aspectos sociodemográficos, de saúde, assistência e clínicos da lesão [dissertação]. Natal(RN): Universidade Federal do Rio Grande do Norte, Departamento de Enfermagem; 2011.
8. Coutts P, Woo KY, Bourque S. Treating patients with painful chronic wounds. *Nurs Stand* [periódico na Internet]. 2008 [acesso em 2013 jun. 26]; 23(10): [aproximadamente 4 p.]. Disponível em: <http://nursingstandard.rcnpublishing.co.uk/archive/article-treating-patients-with-painful-chronic-wounds>
9. Ferreira AM, Bogamil DDD, Tormena PC. O enfermeiro e o tratamento de feridas: em busca da autonomia do cuidado. *Arq. ciênc. saúde* [periódico na Internet]. 2008 [acesso em 2013 jun. 26]; 15(3): [aproximadamente 3 p.]. Disponível em: http://www.cienciasdasaude.famerp.br/racs_ol/vol-15-3/IDN269.pdf.
10. Bulechek G, Butcher HK, Dochterman JM. Classificação das intervenções de enfermagem (NIC). 5 Ed. Rio de Janeiro(RJ): Elsevier; 2010.
11. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. *Texto Contexto Enferm* [periódico na Internet]. 2008 [acesso em 01 jul 2013]; 17(4): [aproximadamente 7 p.]. Disponível em: <http://www.scielo.br/pdf/tce/v17n4/18.pdf>
12. Souza MT, Silva MD, Carvalho R. Revisão integrativa: o que é e como fazer. *Einstein* [periódico na Internet]. 2010 [acesso em 01 jul 2013];8(1 Pt 1): [aproximadamente 6 p.]. Disponível em: http://apps.einstein.br/revista/arquivos/PDF/1134-Einsteinv8n1_p102-106_port.pdf
13. Sibbald RG, Coutts P, Fierheller M, Woo K. A pilot (real-life) randomized clinical evaluation of a pain-relieving foam dressing: (ibuprofen foam versus local best practice). *Int Wound J* [periódico na Internet]. 2007 [acesso em 15 junho 2013];4(Suppl. 1): [aproximadamente 8 p.]. Disponível em: <http://onlinelibrary.wiley.com/doi/10.1111/j.1742-481X.2007.00308.x/pdf>
14. Jorgensen B, Friis GJ, Gottrup F. Pain and quality of life for patients with venous leg ulcers: proof of concept of the efficacy of Biatains-lbu, a new pain reducing wound dressing. *Wound Repair Regen* [periódico na Internet]. 2006 [acesso em 15 jun. 2013];14(3): [aproximadamente 7 p.]. Disponível em: <http://onlinelibrary.wiley.com/doi/10.1111/j.1743-6109.2006.00116.x/pdf>
15. Flanagan M, Vogensen H, Haase L. Case series investigating the experience of pain in patients with chronic venous leg ulcers treated with a foam dressing releasing ibuprofen. *World Wide Wounds* [periódico na Internet]. 2006 [acesso em 15 jun. 2013]. Disponível em: <http://www.worldwidewounds.com/2006/april/Flanagan/Ibuprofen-Foam-Dressing.html>
16. Gottrup F, Jorgensen B, Karlsmark T, Sibbald RG, Rimdeika R, Harding K et al. Reducing wound pain in venous leg ulcers with Biatain lbu: a randomized, controlled double-blind clinical investigation on the performance and safety. *Wound Repair Regen* [periódico na Internet]. 2008 [acesso em 15 jun. 2013];16(5): [aproximadamente 11 p.]. Disponível em: <http://onlinelibrary.wiley.com/doi/10.1111/j.1524-475X.2008.00412.x/pdf>

17. Kane FMA, Brodie EE, Coull A, Coyne L, Howd A, Milne A et al. The analgesic effect of odor and music upon dressing change. *British Journal of Nursing* [periódico na Internet]. 2004 [acesso em 15 jun. 2013];13(19): [aproximadamente 7 p.]. Disponível em: <http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=83ea05ce-5b6d-4bdc-a677-89b6a6b7daf8%40sessionmgr12&vid=2&hid=10>
18. Karimi L, Miller CN, Donohue LA, Nunn RJ, McGuinness W, Czech THE et al. Resolving chronic wound pain using low intensity laser therapy (LILT): a proof of concept study. *Wound Practice and Research* [periódico na Internet]. 2012 [acesso em 15 jun. 2013];20(3): [aproximadamente 11 p.]. Disponível em: <http://search.informit.com.au/documentSummary;dn=057988362570394;res=IELHEA>
19. Edwards H, Courtney M, Finlayson K, Lindsay E, Lewis C, and Chang A, et al. Chronic venous leg ulcers: effect of a community nursing intervention on pain and healing. *Nurs Stand* [periódico na Internet]. 2005 [acesso em 15 jun. 2013];19(52): [aproximadamente 8 p.]. Disponível em: <http://nursingstandard.rcnpublishing.co.uk/archive/article-chronic-venous-leg-ulcers-effect-of-a-community-nursing-intervention-on-pain-and-healing>
20. Barnes PM, Bloom B, Nahin RL. Complementary and Alternative Medicine Use Among Adults and Children: United States, 2007. *Natl Health Stat Report*. 2008; 10 ;(12):1-23.
21. Cepera F, Angelieri F, Bommarito S, Siqueira AF. Efeito do laser de baixa intensidade na expansão rápida da maxila. *Ortodontia SPO* [periódico na Internet]. 2008 [acesso em 20 jun. 2013];41(3): [aproximadamente 5 p.]. Disponível em: http://www.ortodontiaspo.com.br/PDF_V41_03/ortodivulgacao/v41_n3_ortodivulgacao01.pdf
22. Cunha LA, Firoozmand LM, Silva AP, Esteves SA, Oliveira W. Efficacy of low-level laser therapy in the treatment of temporomandibular disorder. *Int Dent J* [periódico na Internet]. 2008 [acesso em 20 jun. 2013];58(4): [aproximadamente 5 p.]. Disponível em: <http://www.dominiquemarie.net/Turkey-TMJ-Uludag-Bursa-Medical-School.pdf>
23. Rocha Junior AM, Vieira B.J, Andrade LCF, Monteiro A. Effects of low-level laser therapy on the progress of wound healing in humans: the contribution of in vitro and in vivo experimental studies. *J Vasc. Bras.* [periódico na Internet]. 2007 [acesso em 20 jun. 2013];6(3): [aproximadamente 9 p.]. Disponível em: <http://www.scielo.br/pdf/jyb/v6n3/v6n3a09.pdf>
24. Gonçalves AS, Filipini R, Posso MBS. Dor mamilar durante a amamentação: ação analgésica do laser de baixa intensidade. *Rev Dor* [periódico na Internet]. 2009 [acesso em 20 jun. 2013];10(2): [aproximadamente 5 p.]. Disponível em: http://www.dor.org.br/revistador/Dor/2009/volume_10/n%C3%BAmero_2/pdf/Volume_10_n_2_pags_125-129.pdf
25. Laureano Filho JR, Camargo I, Barbosa A, Maurette PE. A influência do laser de baixa intensidade na redução de edema, dor e trismo no pós-operatório de cirurgia de terceiros molares inferiores inclusos: Estudo piloto. *Rev Venez. Cir. Buco-Maxilofac* [periódico na Internet]. 2012 [acesso em 22 jun. 2013];2(1): [aproximadamente 7 p.]. Disponível em: http://www.revistabucomaxilofacial.com/v2n1/v2n1_4.pdf
26. Pinto NC, Pereira MHC, Stolf NAG, Chavantes MC. Laser de baixa intensidade em deiscência aguda de safenectomia: proposta terapêutica. *Rev Bras. Cir. Cardiovasc* [periódico na Internet]. 2009 [acesso em 23 jun. 2013];24(1): [aproximadamente 4 p.]. Disponível em: <http://www.scielo.br/pdf/rbccv/v24n1/v24n1a17.pdf>
27. Albuquerque ER, Alves EF. Análise da produção bibliográfica sobre qualidade de vida de portadores de feridas crônicas. *Rev saúde e pesq.* [periódico na Internet]. 2011 [acesso em 25 jun.

- 2013];4(2): [aproximadamente 6 p.]. Disponível em:
<http://www.cesumar.br/pesquisa/periodicos/index.php/saudpesq/article/view/1560/1270>
28. Mudge EJ, Meaume S, Woo K, Sibbald RG, Price PE. Patients experience of wound-related pain an international perspective. EWMA journal [periódico na Internet]. 2008 [acesso em 24 jun. 2013];8(2): [aproximadamente 10 p.]. Disponível em:
http://ewma.org/fileadmin/user_upload/EWMA/
29. Andrade LOM, Barreto ICHC, Barreto AP, Oliveira MV. O SUS e a Terapia Comunitária. Fortaleza: UFC, 2008. Disponível em: <http://pt.scribd.com/doc/94366124/O-SUS-E-A-Terapia-comunitaria>
30. Santos RFFN, Porfírio GJM, Pitta GBB. A diferença na qualidade de vida de pacientes com doença venosa crônica leve e grave. J vasc. Bras. [periódico na Internet]. 2009 [acesso em 21 jun. 2013];8(2): [aproximadamente 5 p.]. Disponível em:
<http://www.scielo.br/pdf/jvb/v8n2/a08v8n2.pdf>

Received on: 09/10/2013
Required for review: No
Approved on: 31/07/2014
Published on: 03/04/2016

Contact of the corresponding author:
Amanda Jéssica Gomes de Souza. Avenida Senador Salgado Filho, s/n -
Lagoa Nova - Departamento de Enfermagem da Universidade Federal do
Rio Grande do Norte - UFRN, Caixa Postal nº 1524, Campos Universitário
Lagoa Nova, CEP 59078-970, Natal, RN, Brasil.
Email: amandajessicags@yahoo.com.br