Federal University of Rio de Janeiro State
Journal of Research Fundamental Care Online
ISSN 2175-5361
DOI: 10.9789/2175-5361

RESEARCH

Caracterização sociodemográfica, clínica e de saúde de pessoas com úlceras venosas atendidas na estratégia saúde da família

Sociodemographic, clinic and health characterization of people with venous ulcers attended at the family health strategy

Caracterización sociodemográfica, clinica y de salud de personas con úlceras venosas en la estrategia de salud de la familia

Sandra Maria da Solidade Gomes Simões de Oliveira Torres[1], Vera Grácia Neumann Monteiro[2], Marina de Góes Salvetti[3], Gabriela de Sousa Martins Melo[4], Gilson de Vasconcelos Torres[5], Eulália Maria Chaves Maia[6]

ABSTRACT

Objective: characterizing the sociodemographic, health and assistential aspects of people with venous ulcers treated at the Family Health Strategy (FHS) in Maceió-Alagoas and analyzing the quality of care provided. **Method:** a cross-sectional study with a quantitative approach conducted in 36 FHS units with 59 people with venous ulcers through a structured form. **Results:** people with venous ulcers treated > 1 year (69,5%), female (71,2%) and ≥ 60 years old (67,8%). Most were nonsmoker and nonalcoholic and 100.0% had two or more risk factors and pathological personal antecedents each. Had time of injury > 6 months (64,4%), pain in the ulcer / member (86,4%) and rocker ≤ 30% granulation/epithelialization (78,0%). The quality of care was poor in 57,6% and the aspects that mostly affected were the inadequacy of: professional that was accompanying/performing curative, products in the past 30 days and access to consultation with angiologist. **Conclusions:** the people with venous ulcers had low socioeconomic status, chronic diseases and unfavorable lesion characteristics contributing to chronicity of the lesions. **Descriptors:** Health services evaluation, Health care assistance, Varicose ulcer, Primary health care.

RESUMO

Objetivo: caracterizar os aspectos sociodemográficos, de saúde e assistenciais das pessoas com úlceras venosas atendidas pela Estratégia Saúde da Família (ESF) em Maceió-Alagoas. **Método:** pesquisa transversal, com abordagem quantitativa, realizada em 36 unidades da ESF com 59 pessoas com úlceras venosas por meio de formulário estruturado. **Resultados**: as pessoas com úlceras venosas estavam em tratamento > 1 ano (69,5%), eram do sexo feminino (71,2%) e ≥ 60 anos (67,8%). A maioria era não tabagista e não alcoolista, e 100,00% tinham dois ou mais fatores de risco e antecedentes pessoais patológicos, cada. Possuía tempo de lesão > 6 meses (64,4%), dor na úlcera/membro (86,4%) e leito com ≤ 30% de granulação/epitelização (78,0%). **Conclusões:** as pessoas com úlcera venosa apresentavam: baixo nível socioeconômico, doenças crônicas e características da lesão desfavoráveis contribuindo para cronicidade das lesões. **Descritores:** Avaliação de serviços de saúde, Assistência à saúde, Úlcera varicosa, Atenção primária à saúde.

RESUMEN

Objetivo: caracterizar los aspectos sociodemográficos, de salud y de asistencia de las personas con úlceras venosas atendidas por la Estrategia de Salud de la Familia en Maceió-Alagoas, y analizar la calidad de la asistencia. **Método:** es un estudio de evaluación transversal, con un enfoque cuantitativo, realizado en 36 unidades de salud con 59 personas con úlceras venosas, mediante un formulario estructurado. **Resultados:** las personas con úlceras venosas eran tratadas hace > 1 año (69,5%), eran mujeres (71,2 %) y con ≥ 60 años (67,8%). La mayoría no hacía uso de tabaco y alcohol, y 100,0% tenía dos o más factores de riesgo y antecedentes personales patológicos cada una. Tenía lesiones con tiempo de > 6 meses (64,4%), dolor en la úlcera/miembro (86,4%) y eje de balancín ≤ 30% granulación/epitelización (78,0%). La calidad de la atención fue mala en el 57,6% y los aspectos que han interferido en la inadecuación fueron: profesional de acompañamiento y que realiza curativo, productos en los últimos 30 días y consulta gratuita con angiólogo. **Conclusiones:** las personas con úlceras venosas tenían bajo nivel socioeconómico, enfermedades crónicas, características de las lesiones desfavorables y asistencia considerada mala, lo que contribuía a la cronicidad de las lesiones. **Descriptores:** Evaluación de servicios de Salud, Prestación de atención de salud, Úlcera varicosa, Atención primaria de salud.

[1]Nurse at the Municipal Health in Natal; Doctoral student of Health Sciences/ UFRN. Email: sandrasolidade@hotmail.com. [2]Nurse; Docent at the Federal University of Alagoas; Doctorate in Health Sciences/ UFRN, Brazil. Email: vnmonteiro@uol.com.br. [3]Nurse; Doctorate in Nursing; Post-Doc through the Federal University of Rio Grande do Norte. Email: mgsalvetti@hotmail.com. [4]Nurse; Doctoral student of Nursing at the Postgraduate Program in Nursing/UFRN; Scholarship student CAPES. Email: gabrielasmm@hotmail.com. [5]Nurse; Doctorate in Nursing; Professor, Department of Nursing and Postgraduate Programs in Nursing and Health Sciences/UFRN; CNPq PQ2 researcher. Email: gilsonvtorres@hotmail.com. [6]Doctorate in Psychology; Professor, at the Postgraduate Program in Health Sciences at UFRN. Email: eulalia.maia@yahoo.com.

INTRODUCTION

Ulcer is considered as any interruption in continuity solution of skin-mucosal tissue, causing changes in the anatomical structure or physiological function of the affected tissues.[1] Thus, ulcers of the lower extremities constitute a serious public health problem worldwide. The three main types of leg ulcers are venous, arterial and neuropathic.[2]

People with leg ulcers, when not assisted properly, can remain long with the injury. Chronic ulcer is a wound where there is a deficit of tissue as a result of a long lasting lesion or with a frequent recurrence.[3]

Among chronic ulcers there are those of venous origin. About 80% of leg ulcers are caused by venous disease that absorb a large amount of resources devoted to health systems.[2]

In Brazil, venous ulcers (UV) are a serious public health problem due to the large number of patients with changes in skin integrity; although there are few records of these attendances. The high number of people with ulcers contributes to encumber public spending, and interfere in quality of life.[2]

Venous ulcers arise almost exclusively from the chronic venous insufficiency due to primary varicose veins, sequel of deep thrombosis, venous valvular abnormalities or other causes that interfere with venous blood return. They are characterized by prolonged venous hypertension, due to incompetence of the valve, but can also arise as a consequence of dysfunction of the calf muscle pump of the leg.[1]

They predominantly affect women. To age 40, the ulcers equally distributes in both sexes. From the age of 65, women should depict a greater proportion than men, reaching 85 years old with a ratio of 10:1 compared to them.[3]

The repercussions of venous ulcer in the user range from the inconvenience of the wound itself, being a port of infection and may progress to tissue loss and also, depending on the service, to death. Furthermore, the pain and suffering lead to a diminished quality of life, and limit the mobility of the person, also leading to social isolation; in young people and adults who make up the workforce, prevents or reduces the wage gains, which implies generation of financial difficulties and family problems.[3]

As the etiology of these ulcers is formed by a set of factors, its treatment is complex, slow, painful, and stressful and limiting to the user; it is laborious and exhausting physically and emotionally to the health team and it is costly to the health system.[3]

The decentralization of health and its municipalization evolved from the 1990s, consolidating local systems in the current Family Health Strategy. Considered at first a program, the FHS has become a strategy for reorientation of care, guided by a policy of primary care or primary care.[4]

Thus, the FHS shall be the gateway to the Unified Health System (SUS) and seeks to assist with venous, arterial, and neuropathic ulcers, the health unit or home user.[4]

Regarding deficiency in the training of human resources, the Municipal Health Secretariat of Maceio has not stimulated the training of health professionals working in the FHS regarding the diagnosis, treatment, monitoring and prevention of venous ulcers. Some professionals have ventured on their own, to seek training to assist people with injuries, especially by the Brazilian Society of Stomatherapy (SOBEST).

And deficiencies in the structural capacity, the three units that work together with urgency / emergency services are the ones that have adequate physical space, material resources and some resources for laboratory tests. No unit has special equipment or instruments to assisting the diagnosis and monitoring patients as a doppler. Most FHS' teams work in rented houses with numerous problems, including deficiencies in water supply and sanitation facilities. On the other hand, users who are treated at home, most of the time, living in substandard facilities that do not favor a good monitoring by the health care team.

Regarding accessibility disabilities to high complexity, inefficiency of complementarity exists between levels of care, particularly in reference and counter-reference, given that people with venous ulcers require assistance to more complex diagnostic setting, monitoring complications and demands required by these users. It is observed that the accessibility to a consultation with angiologist referenced by the Unified Health System (SUS) can take 3-6 months. This delay contributes to pathophysiological complications of injuries, making treatment more difficult, leading to chronicity and unnecessary hospitalizations.

The social and family context has an important relationship in maintenance and / or resolution of these lesions, with regard to family involvement and socioeconomic conditions. Users FHS have difficulties in having a family caregiver and unfavorable social and economic situation. When the family becomes involved with the treatment and prevention of ulcers, users are better maintained and have a better recovery. The economic status and lifestyle habits also interfere with regard to nutritional support, access to medicines and treatments and hygiene measures.

Given this context, this study aims to characterizing the sociodemographic, health and welfare aspects of people with venous ulcers served by the Family Health Strategy in Maceio-Alagoas.

METHOD

This is a descriptive research of cross-sectional design and with a quantitative approach.

The study place was the Family Health Strategy of the city of Maceio, Alagoas. It is the primary health network where they spend all students stage healthcare and thus also interfere in the teaching-learning process in the way of assistance to users.

The sample consisted of 59 people with venous ulcers treated at the 36 units of the Family Health Strategy in Maceio. The selection of participants consisted of a sample accessibility, based on the following inclusion criteria: be patient with venous ulcers; equal

to or over 18 years old; be serviced in the FHS; consent to participate in the study voluntarily and sign a consent form. Exclusion criteria: on request researched out the study.

According to Resolution 196/96, research projects involving human subjects must be assessed in their ethical aspects by Research Ethics Committees. Thus, the research project was evaluated by the Committee of Ethics in Research of the Federal University of Alagoas (UFAL), obtaining favorable assent (Protocol CEP/UFAL number 005.858/ 2007-96).

Data collection was performed by a team composed by the researcher and three academics with degree in nursing, previously trained through a structured form. After signing the informed consent from the participants of this study, the team conducted the collection during the three-month period (February-April 2010), by reading the charts, non-participant observation, interview and physical examination.

The collected data were transferred to a database in Microsoft Excel 2007 spreadsheet application, which after correction were exported and analyzed using the Statistical Package for Social Science (SPSS) version 15.0 Windows.

In SPSS 15.0, there were performed descriptive analyzes with absolute and relative frequencies and standard deviations, and inferential analysis with application of Chi-square (x^2) test.

RESULTS AND DISCUSSION

People with venous ulcers were treated for injuries, mostly, more than one year (69,5%). Regarding sociodemographic characteristics of people with venous ulcers (Table 1) obtained, highlights: female (71,2%), age ≥ 60 years (67,8%), single/widowed (94,9%), low education (94,9%), with no occupation (88,1%) and family income up to two minimum wages (79,7%).

Table 1 - Health and demographic characterization of people with venous ulcers, according to time of VU' treatment. Maceio/AL, 2011

SOCIODEMOGRAPHIC AND HEALTH CHARACTERIZATION		VU TREATMENT TIME						Chi-square (x^2)
		≤ 1 year		> 1 year		Total		
		n	%	n	%	n	%	
Gender	Male	6	10,2	11	18,6	17	28,8	0,612
	Female	12	20,3	30	50,8	42	71,2	
Age	<= 59 years old	6	10,2	13	22	19	32,2	0,902
	≥ 60	12	20,3	28	47,5	40	67,8	
Marital status	Single/Widower	17	28,8	39	66,1	56	94,9	1,000*
	Married	1	1,7	2	3,4	3	5,1	
Schooling	Until elementary school	17	28,8	39	66,1	56	94,9	1,000*
	High school/Higher education	1	1,7	2	3,4	3	5,1	
Occupation	Yes	3	5,1	4	6,8	7	11,9	0,664*

	No	15	25,4	37	62,7	52	88,1	
Family income	Until 2 MW	16	27,1	31	52,5	47	79,7	0,311*
	> 2 MW	2	3,4	10	16,9	12	20,3	
Smoking	Yes	4	6,8	8	13,6	12	20,3	1,000*
	No	14	23,7	33	55,9	47	79,7	
Alcoholism	Yes	1	1,7	4	6,8	5	8,5	1,000*
	No	17	28,8	37	62,7	54	91,5	
Risk factors	≥ 2 factors	18	30,5	41	69,5	59	100	-
Pathological personal history	≥ 2 records	18	30,5	41	69,5	59	100	-
Total		**18**	**30,5**	**41**	**69,5**	**59**	**100**	

* Fischer exact test

It is observed from the table that the sociodemographic variables were present mostly in the VU treatment time of > 1 year, showing a tendency to chronicity of the injury, although this study did not show statistically significant differences.

Regarding characterization of health (Table 1) predominated nonsmokers (79,7%), nonalcoholic (91,5%), ≥ 2 risk factors for VU (100,0%) and ≥ 2 personal pathological antecedents (100,0%). Risk factors for venous ulcer were considered family history of venous disease, varicose veins, phlebitis, deep vein thrombosis, venous surgery, or leg, obesity, pregnancy and standing position fracture. As pathological personal background were considered diabetes, heart disease, neurological disease, hypertension and stroke.

Risk factors and pathological personal antecedents were more present in people with treatment > 1 year, which helps to prolong the time of the injury, although no significance was found.

Concerning the clinical characterization of venous leg ulcers (Table 2), there were highlighted: the time of VU > 6 months (64,4%), pain in the VU and in the limb (86,4%), altered perilesional skin (89 8%), the condition of the raised edge (52,5%), VU rocker with ≤ 30% granulation/epithelialization (78,0%), small amounts of exudate (67,8%), VU small area (84,7%), absence of infection (72,9%), VU location of zone 2, in the distal half of the leg or ankle (76,3%) and in zone 1 and 3, proximal half of the foot and leg (23,7%) and recurrence (79,7%).

Table 2 - Clinical characterization of venous ulcers according to the time of treatment. Maceio/AL, 2011.

CLINICAL CHARACTERIZATION OF VU		VU TREATMENT TIME						Chi-square (x^2)
		≤ 1 year		> 1 year		Total		
		n	%	n	%	n	%	
Time of VU	> 6 months	4	6,8	34	57,6	38	64,4	0,000*
	≤ 6 months	14	23,7	7	11,9	21	35,6	
Pain in VU/limb	Present	18	30,5	33	55,9	51	86,4	0,043*
	Absent	0	0	8	13,6	8	13,6	
Perilesional skin	Affected	16	27,1	37	62,7	53	89,8	1,000*
	Non-affected	2	3,4	4	6,8	6	10,2	
Perilesional	High	9	15,3	22	37,3	31	52,5	0,796

situation	Low	9	15,3	19	32,2	28	47,5	
Varicose ulcer rockers (granulation and/or epithelialization)	≤ 30%	13	22	33	55,9	46	78	0,481
	> 70%	5	8,5	8	13,6	13	22	
Amount of exudate	Middle/high	6	10,2	13	22	19	32,2	0,902
	Low	12	20,3	28	47,5	40	67,8	
Surface of VU	Middle/large	0	0	9	15,3	9	15,3	0,046*
	small	18	30,5	32	54,2	50	84,7	
Infection	Present	8	13,6	8	13,6	16	27,1	0,047
	Absent	10	16,9	33	55,9	43	72,9	
Place of VU	Zone 2	14	23,7	31	52,5	45	76,3	1,000*
	Zones 1 e 3	4	6,8	10	16,9	14	23,7	
Recurrence	Yes	7	11,9	40	67,8	47	79,7	0
	No	11	18,6	1	1,7	12	20,3	
Total		**18**	**30,5**	**41**	**69,5**	**59**	**100**	

* Fischer exact test

When analyzing the clinical characterization of venous ulcers compared to treatment time, some variables showed statistically significant difference when compared with treatment > 1 year: time of VU > 6 months (p-value < 0,001), pain in the VU and in the limb (p-value = 0,043) and recurrence (p-value <0,001). Such aspects hindered wound healing and can contribute to the chronicity of the ulcers.

This study found a ratio of 2,5:1 between women and men affected by VU, which is close to other researches, which bring the ratio of 3:1, indicating a greater tendency of women to developing VU.[5-7]

Regarding age, it was found the variation of 41 years old, with a minimum age of 39 and maximum of 80 years old, averaging 64, despite the heterogeneity of the sample was predominantly elderly (≥ 60 years old). Corroborating to these findings, a study shows that most cases of VU happens in the age group above 60.[8]

This is because, over the years, the metabolic processes decrease, the skin becomes less elastic due to the reduction of collagen and vascularity becomes more turbulent, causing the healing is slower in aged people.[9-10] This fact is consistent with the data presented in this study, since it was found that, of patients aged 60 years old or over (67,8%), most (47,5%) have chronic injuries, with more than 1 year of VU treatment, indicating the difficulty of healing in patients in this age group.

Regarding the level of education, low education predominated (94,9%). Macedo in his research found similar data, on which stood out among the researched a low level of education .[6] This finding is cause for concern to health professionals, because it can directly affect the understanding and assimilation of relevant their health care, especially injuries, as well as changing attitudes and behaviors at home and in the development of health awareness, in addition, not understanding these precautions may result in non-adherence to prescribed treatment.

With regard to occupation, in the FHS study found similar data, where 90,5% of patients with VU lacked occupation.[11] Besides occupation, another factor to be considered in

the planning of patient care with VU is your level socioeconomic. This study found that the prevalence of low income patients (79,7%) and treatment duration> 1 year (52,5%). In line with other studies that suggest to the low socioeconomic status of users with UV and the difficulty of realization of actions and adherence to treatment in these patients, leading to chronicity of their injuries.[11-12]

Harrison points out that there is evidence that low socioeconomic status negatively influences healthy behavior in the home environment, access to health services, health care and access to material resources.[13] Household income is an important aspect in the planning of actions, as it determines the living conditions of this population, often making it difficult to implement actions, prolonging treatment and chronicity of lesions.[6]

With regard to health characteristics, several studies have reported that healthy lifestyle habits, such as not smoking, sleeping at least six hours, having a balanced diet, do not drink alcohol and take control of underlying diseases and risk factors, contribute positively to the healing of venous ulcers.[10-11, 13-14]

Corroborating this study, research conducted in a referral hospital for treatment to people with VU identified risk factors such as family history of venous disease; history (proven or suspected) of DVT; prior venous surgery or other sources; activities for long periods of standing or sitting; pregnancy; diabetes; heart disease; chronic venous insufficiency; hypertension and stroke.[15] Margolis identified chronic diseases such as hypertension (38,9%), lung disease (16,7%) and diabetes mellitus (11,1%).[6]

As to the time of VU, studies have demonstrated similar results with percentages ranging from 65,0% to 75,0% for VU-arisen for more than 6 months. This characterization reflects an apparent chronicity of wounds and lack of response capacity of health services.[11,14]

Pain in patients with venous ulcers has been a frequent feature, performing worse at night, causing limited mobility of the affected lower limb, disrupting sleep and being described by many patients as the factor with the greatest impact on their quality of life.[15] Other studies showed percentages ranging from 66,6% to 86,5% over the ulcer pain or in the limb.[6, 11,14]

In addition to pain, researches showed the importance of describing the characteristics of the lesions, such as: depth, shape, edge, fabric bed, and exudate and perform measurement of the area during treatment. These aspects are relevant in poor wound healing and usually present as unfavorable in this study.[9]

Lucas and Costa also report that the edges are usually flat, attached to the rocker and irregular; but, due to the presence of edema, may appear thick.[13] A study reports the clinical characteristics of VU, such as: shallow and painful wound, with tissue of granulating and fibrin, varicosites presence, and edema and dermatitis.[16]

França features VU as irregular wounds, painful in varying intensities, with well-defined edges, rockers where, hardly, presents necrotic tissue and feature commonly yellowish exudate.[5]

The absence of signs of infection noted in this study was confirmed by other research, with data ranging from 67,6% to 72,5%.[11, 14]

Data from this study confirm the location of more evidence in the scientific literature[2, 13], zone 2, which comprises the malleolar region and distal half of the leg.

Torres and Nobrega also corroborate the present study with regard to the high number of patients with recurrent lesions, this being one of the most important problems in assisting the individual with VU. One of the main reasons for relapses is not collaboration and patient compliance in relation to preventive measures, such as the use of compression stockings and the rest, considered essential to the process of health education as measures to strengthen the guidance, as necessary.[11, 13, 17]

CONCLUSION

People with venous ulcers were treated for more than 1 year, most were female, aged 60 or over, low schooling, occupation, and family income of up to two minimum wages.

Regarding the characterization of health, there predominated nonsmokers and nonalcoholics. Risk factors and pathological personal antecedents were more present in people aged more than one year treatment, helping to prolong the time of injury.

Regarding clinical aspects of venous ulcers, stood out time VU exceeding six months, pain in the VU and limb, as amended perilesional skin condition of the high edge of the bed with VU least 30% granulation/epithelization amount of exudate and small area without infection and location in the distal half of the leg or ankle and relapse.

These results denote the need to rethink the current assistance strategy developed in the Family Health Strategy of the municipality of Maceio/Alagoas, as well as the urgency in the discussion, creation and implementation of protocol assistance to synthesize the care people with venous ulcers, to improve the evolution of these lesions and improving the quality of life of these people.

REFERENCES

1. Brasil. Manual de condutas para úlceras neurotróficas e traumáticas. Brasília: Ministério da Saúde; 2002.

2. Abbade LPF, Lastória S. Abordagem de pacientes com úlcera da perna de etiologia venosa. An Bras Dermatol [periódico na internet]. 2006 [acesso em 2013 Dec 11];81(6):509-22. Disponível em: http://www.scielo.br/pdf/abd/v81n6/v81n06a02.pdf

3. Silva MC, Cabral ALS, Barros Jr N, Castro AA, Santos MERC. Diagnóstico e tratamento da Doença Venosa Crônica. Br J Diabetes Vasc Dis [periódico na internet]. 2005 [acesso em 2013 Dec 11];4(3):185-94. Disponível em: http://www.jvascbr.com.br/Arquivo_1.pdf

4. Almeida PF, Fausto MCR, Giovanella L. Fortalecimento da atenção primária à saúde: estratégia para potencializar a coordenação dos cuidados. Rev. Panam. Salud Publica [periódico na internet]. 2011 [acesso em 2013 Dec 11];29(2):84-95. Disponível em: http://www.scielosp.org/pdf/rpsp/v29n2/a03v29n2.pdf

5. França LHG, Tavares V. Insuficiência venosa crônica: uma atualização. Br J Diabetes Vasc Dis [periódico na internet]. 2003 [acesso em 2013 Dec 11];2(4):318-28. Disponível em: http://www.jvascbr.com.br/03-02-04/03-02-04-318/03-02-04-318.pdf

6. Macedo EAB, Oliveira AKA, Melo GSM, Nobrega WG, Costa IKF, Dantas DV et al. Caracterização sócio-demográfica dos pacientes com úlcera venosa atendidos em um hospital universitário. Rev enferm UFPE. 2010;4(esp):1863-67.

7. Azevedo DM, Lucena LA, Holanda CSM. O controle social enquanto instrumento para a qualidade da assistência na estratégia de saúde da família. R. pesq. cuid. fundam. Online [periódico na internet]. 2012 out./dez [acesso em 2013 Dec 11]; 4(4):2953-65. Disponível em:http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/2011/pdf_637

8. Azoubel R, Torres GV, Silva LWS, Gomes FV, Reis LA. Efeitos da terapia física descongestiva na cicatrização de úlceras venosas. Rev Esc Enferm USP [periódico na internet]. 2010 [acesso em 2013 Dec 11];44(4):1085-92. Disponível em: http://www.scielo.br/pdf/reeusp/v44n4/33.pdf

9. Maffei FHA. Doenças vasculares periféricas. Rio de janeiro: Medsi; 2002.

10. Bergonse FN, Rivitti EA. Avaliação da circulação arterial pela medida do índice tornozelo/braço em doentes de úlcera venosa crônica. An Bras Dermatol [periódicos na internet]. 2006 [Acesso em 2013 Dec 11];81(2):131-5. Disponível em: http://www.scielo.br/pdf/abd/v81n2/v81n02a03.pdf

11. Torres GV, Costa IKF, Dantas DV, Dias TYAF, Nunes JP, Deodato OON et al. Elderly people with venous ulcers treated in primary and tertiary levels: sociodemographics characterization, of health and assistance. Rev Enferm UFPE. 2009;3(4):222-30.

12. Nóbrega WG, Melo GSM, Costa IKF, Dantas DV, Macedo EAB, Torres GV. Changes in patients' quality of life with venous ulcers treated at the outpatient clinic of a university hospital. Rev enferm UFPE. 2011;5(2):1005-6.

13. Harrison MB, Graham ID, Lorimer K, Friedberg E, Pierscianowski T, Brandys T. Leg- ulcer care in the community, before and after implementation of an evidence-based service. CMAJ. 2005:122(11):1447-52

14. Deodato OON, Torres GV. Avaliação da assistência prestada aos portadores de úlceras venosas atendidos no Hospital Universitário Onofre Lopes em Natal/RN: consideração de alguns aspectos. FIEP Bulletin. 2008;78(esp):465-478.

15. Vas J, Modesto M, Mendez C, Perea-Milla E, Aguilar I, Carrasco-Lozano JM et al. Effectiveness of acupuncture, special dressings and simple, low-adherence dressings for healing venous leg ulcers in primary healthcare: study protocol for a cluster- randomized open-labeled trial. BMC Complement Altern Med. 2008;8:29-35.

16. Martins DA, Souza AM. O perfil dos clientes portadores de úlcera varicosa cadastrados em programas de saúde pública. Cogitare Enferm [periódico na internet]. 2007 [acesso em 2013 Dec 11];3(12):353-7. Disponível em: http://ojs.c3sl.ufpr.br/ojs2/index.php/cogitare/article/viewFile/10032/6891

17. Johnson S. Compression hosiery in the prevention and treatment of venous leg ulcers. J Tissue Viability [periódico na internet]. 2002 [acesso em 2013 Dec 11];12(2):67-74. Disponível em: http://www.worldwidewounds.com/2002/september/Johnson/orig/original.pdf

Received on: 01/08/2014
Required for review: No
Approved on: 01/12/2014
Published on: 20/12/2014

Contact of the corresponding author:
Sandra Maria da Solidade Gomes Simões de Oliveira Torres
Natal - RN- Brasil
Email: sandrasolidade@hotmail.com