



HEALTH GUIDELINES: STRATEGY FOR PROMOTION OF FUNCTIONAL CAPACITY OF VENOUS ULCER PATIENTS
ORIENTAÇÕES EM SAÚDE: ESTRATÉGIA DE PROMOÇÃO À CAPACIDADE FUNCIONAL NAS ÚLCERAS VENOSAS
ORIENTACIONES EM SALUD: ESTRATEGIAS DE PROMOCIÓN A LA CAPACIDAD FUNCIONAL EN LAS ÚLCERAS VENOSAS

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ABSTRACT

Objective: to evaluate the effectiveness of health guidelines in the home context regarding the functional capacity of older adults with venous ulcers. **Method:** quantitative, descriptive, multiple-case study conducted at the Wound Repair Outpatient Clinic and patient's homes. Data collection was done through a tool for evaluation of the health unit, the KATZ-EIAVD Scale, the TINETTI Index, and the script of guidelines to be provided to research subjects who received home visits. **Results:** the cases studied showed improvement of functional capacity after the application of health guidelines. **Conclusion:** the percentage of improvement observed indicates that nurses should consider and evaluate the needs of patients with venous ulcers to establish a care plan. **Descriptors:** Nursing care; Varicose ulcer; Home visit; Ambulatory Care; Health Care; Public Health.

RESUMO

Objetivo: avaliar a efetividade das orientações em saúde no contexto domiciliar na capacidade funcional de idosos com úlceras venosas. **Método:** estudo quantitativo, descritivo, do tipo estudo de múltiplos casos, realizado no Ambulatório de Reparo de Feridas e domicílios de pacientes. A coleta de dados ocorreu por meio de instrumento de avaliação da unidade de saúde, da Escala de KATZ-EIAVD, do Índice de TINETTI e de roteiro de orientações a serem prestadas aos sujeitos da pesquisa que receberam visita domiciliar. **Resultados:** os casos estudados apresentaram melhoras sobre a capacidade funcional após a realização de orientações em saúde. **Conclusão:** as melhoras percentuais observadas apontam que o enfermeiro na visita domiciliar deve considerar e avaliar as necessidades dos pacientes com úlcera venosa estabelecendo um plano assistencial. **Descritores:** Cuidados de Enfermagem; Úlcera Varicosa; Visita Domiciliar; Assistência Ambulatorial; Atenção à Saúde; Saúde Pública.

RESUMEN

Objetivo: evaluar la efectividad de las orientaciones en salud en el contexto domiciliario en la capacidad funcional de ancianos con úlceras venosas. **Método:** estudio cuantitativo, descriptivo, del tipo estudio de múltiples casos, realizado en el Ambulatorio de Reparo de Heridas y domicilios de pacientes. La recolección de datos fue por medio de instrumento de evaluación de la unidad de salud, de la Escala de KATZ-EIAVD, del Índice de TINETTI y de guía de orientaciones a ser prestadas a los sujetos de la investigación que recibieron visita domiciliar. **Resultados:** los casos estudiados presentaron mejoras sobre la capacidad funcional después de la realización de orientaciones en salud. **Conclusión:** las mejorías de porcentaje observadas apuntan que el enfermero en la visita domiciliar debe considerar y evaluar las necesidades de los pacientes con úlcera venosa estableciendo un plano asistencial. **Descriptores:** Atención de Enfermería; Úlcera Varicosa; Visita Domiciliar; Atención ambulatoria; Atención a la Salud; Salud Pública.

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INTRODUCTION

Venous ulcers are considered a serious public health problem due to the large number of people who are affected. The occurrences reach rates of up to 80%, and can affect from young people to the elderly.¹

Thus, venous ulcers compromise various dimensions of the individuals' life.² Nurses have the function of helping these people by offering possibilities of adaptation, developing techniques that promote adherence to the therapeutic regimen and consequently reducing the time of treatment and causing an improvement in functional capacity. The latter is influenced by external, environmental, physical or even cultural factors and thus interferes with the individual's independence³ for its repercussion on the basic and instrumental activities of daily living. Basic activities of daily living are related to self-care and survival, such as body hygiene and eating, while instrumental activities of daily living are related to the independent life of an individual in the community, going to the market and using means of transportation.⁴

In this context, as functional incapacity is defined as the restriction of the individual's ability to perform usual activities of daily living⁵, assessments of this parameter are needed because of its close link to the quality of life of individuals. Health professionals should not only focus on the pathological framework because this attitude would hinder comprehensive care and health promotion.⁶ They should rather seek instruments that provide holistic care.

Home visits represent an instrument through which it is possible for the health team to restore holistic care, providing the construction of a therapeutic project adjusted to the specificities of the patient⁷, meeting their demands. As a member of this team, nurses must know the reality of individuals and set as a goal to aid patients to recover and to have a normal life. In this way, guidelines in the home context help the search for adaptive means that lead patients to overcome their clinical condition, resulting in the improvement of functional capacity and quality of life.⁸

This is a relevant study for primary care nurses who work with patients with chronic venous ulcers because home visits represent an instrument capable of helping patients by means of health guidelines and health promotion through creation, adaptation and transformation in the way of providing care, looking for better health conditions for the elderly assisted⁹ and allowing the resumption of

activities that were limited or completely prevented, such as activities of daily living. Home visits favor gerontological care in view of the fact that this kind of ulcers has a high incidence rate in the elderly.¹⁰ Therefore, by qualifying the autonomous and competent care directed to this public¹¹, we also bring contributions to the practice of care.

OBJECTIVE

- To evaluate the effectiveness of health guidelines in the home context on the functional capacity of elderly patients with venous ulcers.

METHOD

This is a quantitative, multiple-case study developed in two research fields: the Wound Repair Ambulatory of the Antônio Pedro Hospital (HUAP) located in Niterói/RJ and the homes of patients assisted in the outpatient clinic. Data collection took place from February to June 2014, as a result of outpatient demand.

The study had 16 participants. The inclusion criteria were: elderly patients with venous ulcers in one or both lower limbs, who presented cognitive conditions to follow the guidelines recommended during the study period, specially because the sector provides care for patients with cognitive deficit, and elderly patients who gave consent to voluntarily participate in the research. The exclusion criteria were: elderly patients with arterial ulcers; diabetic foot; lack of adherence to the proposed care guidelines, and the non-attendance to scheduled appointments.

The protocol adopted was a home visit for the application of dressings followed by health guidelines aimed at the prevention and treatment of venous ulcers, including the following items: wound cleaning, dressing, food and nutrients necessary for healing, elastic and inelastic compression therapies, use of elastic socks to prevent relapse and elevation of the lower limbs to improve venous return.

The guidelines were based on recommendations of scientific books on the prevention and treatment of venous ulcers, and the wound cleaning guidelines were designed to inform the participants about the importance of cleaning the wound by removing residues from the previous wound coverage and excess of exudate - which decreases the proliferation of microorganisms making the environment of the lesion favorable to healing - and raising awareness

about the task of removing fragments of necrotic tissue, which should only be performed by qualified professionals.

Regarding the application of dressings, patients were explained that the covers used on the lesion have the function of absorbing the exudate and keeping the bed wet. They also were informed that each treatment has a specific function and that the treatment is not standardized for all people with wounds; the choice is made after evaluation of the appearance and location of the wound, patient's requirements and choice, and the diversity and characteristics of the products available for the procedure. Regarding the foods and nutrients required for healing, the guidance was that the nutritional status influences the tissue repair due to the amount of proteins, minerals and calories demanded during the process, being necessary the intake of vitamins A, B₆, C and K, protein, collagen, albumin, zinc, iron and calories.

The guidelines on elastic therapy were based on the fact that this should be performed by a trained professional since the technique requires training, as the effectiveness of the method is related to the correct compression, and that the inelastic compressive therapy consists of a dressing that uses the Unna Boot to aid venous return, where a dressing is placed in direct contact with the ulcer bed that must present granulation tissue and absence of signs of infection, and that the dressing must be changed from 05 to 07 days.

Guidelines for the use of elastic stockings to prevent relapses were provided with the aim of preventing the development and avoiding recurrence of venous ulcers in normal legs, which should be used throughout the day and removed at night. The participants were also advised on contraindications to the use of these socks. With regard to elevation of the lower limbs to improve venous return, the participants were explained why elevation of the lower limbs reduces edema.

The participants in this case study were reassessed 15 days after the home visit, and the data were collected with the following tools: the instrument of the Health Unit for assessment of clients with venous ulcers prepared based on sociodemographic data, records on treatment and number of recurrences of the patients; the Independence in Activities of Daily Living index (KATZ index - EIAVD); the balance and

gait evaluation scale (TINETTI Index); and the script developed for registration of the guidelines to be provided to the subjects receiving a home visit.

The results were analyzed through simple descriptive statistics and presented in the form of tables and graphs. The observed data were expressed through frequency (n) and percentage (%) values in the case of categorical data and by means, standard deviations, medians, minimum and maximum values for numerical data.

The development of the study complied with Resolution nº 466 of December 12, 2012, of the National Health Council/Ministry of Health, which, through its legal powers, establishes guidelines and norms that regulate research involving human beings. The research was approved by the Ethics and Research Committee of the Antônio Pedro University Hospital (HUAP) under Opinion nº 506,332.

RESULTS

Table 1 provides the sociodemographic and clinical characteristics of the study participants in frequency (n), percentage (%) values and age was expressed as mean ± standard deviation (SD).

Table 1.Sociodemographic and clinical characteristics of study participants.Niterói, Niterói (RJ), Brazil, 2014.			
Characteristics	Categories	Participants (n = 16)	
		n	%
Sex	female	10	62.5
	male	6	37.5
Age (years) *		60.1 ± 9.7	
Ethnic group	white	5	31.3
	black	9	56.3
	brown	2	12.5
Schooling	Functional illiterate	1	6.3
	Elementary school	9	56.3
	Secondary school	5	31.3
	Superior education	1	6.3
Marital Status	single	3	18.8
	married	6	37.5
	divorced	3	18.8
	widow/widower	4	25.0
City	Niterói	8	50.0
	São Gonçalo	6	37.5
	Itaboraí	2	12.5
Source of income	retired	11	68.8
	pensioner	3	18.8
	employee	2	12.5
Family Income	1 to 2 MW	16	100
	2 to 4 MW	0	0.0
	> 4 MW	0	0.0
Treatment Time	6 m to 1 year	4	25.0
	1 to 5 years	1	6.3
	> 5 years	11	68.8
Nº of recurrences	never	5	31.3
	1 to 4	7	43.8
	5 or +	4	25.0

* expressed as mean ± SD

Table 2 provides the frequency (n) and percentage (%) of the questions in the KATZ

scales before and after the application of the study protocol.

Table 2.KATZ index - EIAVD before and after application of the study protocol.Niterói, Rio de Janeiro (RJ), Brazil, 2014.

Area	Options	Before n (%)	After n (%)
Bathing	No assistance, goes in and out of the shower without help.	n = 16 (100%)	n = 16 (100%)
	Assistance to wash only a single part of the body (back or legs).	n = 0 (0%)	n = 0 (0%)
	Needs help withbathing more than one part of thebody.	n = 0 (0%)	n = 0 (0%)
	Requires assistance in total bathing	n = 0 (0%)	n = 0 (0%)
	Gets ressed completely without assistance (get clothes from closets and drawers and puts on clothes, including underwear and outer garments, such as use of fasteners, braces and brackets).	n = 15 (93.7%)	n = 15 (93.7%)
Clothing	Gets dressed without assistance, getting help only for tying shoes.	n = 0 (0%)	n = 0 (0%)
	Needs help with dressing self and taking out pieces from the closet.	n = 1 (6.3%)	n = 1 (6.3%)

Toileting	Needs to become completely dressed.	n = 0 (0%)	n = 0 (0%)
	Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	n = 16 (100%)	n = 16 (100%)
	Does not perform physiological disposal in the bathroom.	n = 0 (0%)	n = 0 (0%)
	Needs help transferring to the toilet, cleaning self and getting dressed, or uses bedpan or commode only at night.	n = 0 (0%)	n = 0 (0%)
Transferring	Moves in and out of bed as well as sits and stands unassisted without assistance of a cane and walker.	n = 13 (81.3%)	n = 14 (87.5%)
	Needs help in moving from bed or sitting and standing from the chair.	n = 3 (18.7%)	n = 2 (12.5%)
	Does not get out of bed.	n = 0 (0%)	n = 0 (0%)
Continence	Exercises complete self-control over urination and defecation.	n = 10 (62.5%)	n = 12 (75%)
	Occurrence of occasional "accidents".	n = 6 (37.5%)	n = 2 (12.5%)
	Supervision in the sphincter control catheter is used, or is incontinent.	n = 0 (0%)	n = 0 (0%)
	Feeds without assistance.	n = 16 (100%)	n = 16 (100%)
Feeding	Feds without assistance, except to cut meat or to put butter in the bread.	n = 0 (0%)	n = 0 (0%)
	Feeds with assistance, or needs partial or total help with feeding or requires parenteral feeding.	n = 0 (0%)	n = 0 (0%)

Tables 3 and 4 present the data collected in the TINETTI Index on the balance and gait scales before and after the application of the study protocol, providing frequency (n) and percent (%) values.

Table 3. TINETTI balance assessment tool before and after application of the study protocol.Niterói, Rio de Janeiro (RJ), Brazil, 2014.

Domain	Response	Before n (%)	After n (%)
1. Sitting balance	Leans or slides	n=4 (25%)	n=0 (0%)
	Steady	n=12 (75%)	n=16 (100%)
2. Rising	Unable	n=0 (0%)	n=0 (0%)
	Uses arms	n=13(81.3%)	n=11(68.8%)
	Without use of arms	n=3 (18.7%)	n=5 (31.2%)
3. Attempts to raise	Unable	n=0 (0%)	n=0 (0%)
	More than one attempt	n=8 (50%)	n=4(25%)
	Only one attempt	n=8 (50%)	n=12(75%)
4. Immediate standing balance (first 5 seconds)	Unsteady	n=8 (50%)	n=3 (18.7%)
	Steady but uses support	n=2 (12.5%)	n=4 (25%)
	Steady without support	n=6 (37.5%)	n=9 (56.3%)
5. Standing balance	Unsteady	n=2 (12.5%)	n=1 (6.2%)
	Support or support base or swing > 12 cm	n=5 (31.2%)	n=5 (31.2%)
	No support and narrow base	n=9 (56.2%)	n=10 (62.5%)
6. Nudged	Begins to fall	n=3 (18.7%)	n=3 (18.7%)
	Staggers, grabs, catches self (arms)	n=2 (12.5%)	n=2 (12.5%)
7. Eyes closed (same position as item 6)	Steady	n=11(68.7%)	n=11 (68.7%)
	Unsteady	n=6 (37.5%)	n=2 (12.5%)
	Steady	n=10(67.5%)	n=14 (87.5%)
8. Turning 360 degrees	Discontinuous steps	n=3 (18.7%)	n=2 (12.5%)
	Continuous steps	n=13(81.3%)	n=14 (87.5%)
	Unsteady (grabs, staggers)	n=4 (25%)	n=2 (12.5%)
	Steady (balanced)	n=12 (75%)	n=14 (87.5%)
9. Sitting down	Unsafe (misjudged distance, falls into chair)	n=2 (12.5%)	n=1 (6.3%)
	Uses arms or not a smooth motion	n=8 (50%)	n=7 (43.7%)
	Safe, smooth motion	n=6 (37.5%)	n=8 (50%)

Table 4.TINETTI gait assessment tool before and after application of the study protocol.Niterói, Rio de Janeiro (RJ), Brazil, 2014.

Domain	Response	Before n (%)	After n (%)
1. Initiation of gait	Hesitancy or multiple attempts to start	n=8 (50%)	n=3 (18.7%)
	No hesitancy	n=8 (50%)	n=13 (81.3%)
2. Step length andheight	a) Right foot		
	- does not pass left stance foot with step	n=1 (6.3%)	n=1 (6.3%)
	- passes left stance foot	n=15 (93.7%)	n=15 (93.7%)
	- does not clear floor completelywith step	n=2 (12.50%)	n=2 (12.50%)
	- completely clears floor	n=14 (87.50%)	n=14 (87.50%)
	b) Left foot		
	- does not pass right stancefoot with step	n= 1 (6.3%)	n= 1(6.3%)
	- passes right stance foot	N=15 (93.7%)	N=15 (93.7%)
	- does not clear floor completely with step	N= 0 (18.7%)	N= 0 (12.5%)
	- completely clears floor	n=13 (81.2%)	n=14 (87.5%)
3. Step symmetry	Right and left step length not equal	n=3 (18.7%)	n=3 (18.7%)
	Right and left step length appear equal	n=13 (81.2%)	n=13 (81.2%)
4. Step continuity	Stopping or discontinuity between steps	n=3 (18.7%)	n=4 (25%)
	Continuous steps	n=13 (81.2%)	n=12 (75%)
5. Path	Clear deviation	n=1 (6.2%)	n=0 (0%)
	Mild/moderate deviation or uses walking aid	n=6 (37.5%)	n=7 (43.7%)
	Straight without walking aid	n=9 (56.2%)	n=9 (56.2%)
6. Trunk	Marked sway or uses walking aid	n=2 (12.5%)	n=0 (0%)
	No sway but flexion of knees or back, or spreadsarms out while walking	n=4 (25%)	n=6 (37.5%)
	No sway, no flexion, no use of arms, and no use ofwalking aid	n=10 (62.5%)	n=10 (62.5%)
7. Walking stance	Heels apart	n=16 (100%)	n=16 (100%)
	Heels almost touching while walking	n=0 (0%)	n=0 (0%)

DISCUSSION

The values of the characterization of the sociodemographic variables showed that the majority of the participants of the research were women, corresponding to a percentage of 62.5%. Thus, there was a predominance of women with this pathological condition. This public has been found to be three-fold more likely to develop venous ulcers than men.⁷ This predisposing fact is explained by pregnancy and the effects of female hormones.¹²

The mean age was 60.1 years, which is in line with the fact that ageing brings more susceptibility to injuries because of changes

in physiological systems, including reduction of epidermal thickness and dermal elasticity, among others.¹³ As for the ethnic group, 56.3% of the participants declared to be black. Findings of other studies also showed a predominance of the black ethnic group.¹⁴⁻¹⁵

With regard to schooling, 56.3% of the participants had complete primary education. This information is extremely relevant, because level of education can interfere with the understanding of the pathology, the care process and the adherence to treatment-related interventions.¹⁶

Regarding marital status, 37.5% of the group was married. This fact is extremely relevant because companions can help venous

ulcer patients in the difficulties they have to face during their activities of daily living.¹⁷ However, a study indicates that some people with venous ulcers do not receive the protection of their relatives during the treatment, but rather suffer with family crises, abandonment on the part of companions, and present depression.¹⁰

Regarding the city of residence, 50% of the participants in this study of multiple cases reside in Niterói, followed by those living in São Gonçalo (37.5%) and Itaboraí with 12.5%. In view of the above, it is extremely important that nurse assess the degree of difficulty that these patients have to move around, because patients may not reside in the neighborhood where they receive care and as they have venous ulcers, their mobility is essentially impaired.¹⁷

The source of income of the participants of this study comes mostly from retirement (68.8%). As a matter of fact, as venous ulcers interfere with locomotion they cause several limitations. These individuals have to reorganize activities of their daily life¹⁸ as well working life which is also affected by the presence of the lesion, causing them to leave their jobs and become unemployed¹⁵ and seek early retirements¹⁹, affecting the family income.

The income of the participants of this study was one to two minimum wages on average. The predominant profile of low-income patients was already expected due to the fact that patients were treated in a public health service, corroborating with other research.¹⁷ However, this result generates concern because the ulcer together with the need for care causes an impact on the financial situation of the family. Therefore, those individuals living with a low income have difficulty implementing health-promoting actions, which can increase the time of treatment and cause the chronicity of the lesions.²⁰

The research data also showed that 68.8% of the cases studied had the ulcers for more than five years, which is expected because of factors that impair healing, such as age, poor circulation and precarious nutritional status.⁷

Regarding the number of recurrences, approximately 43.8% of the participants presented one to four relapses. This indicates high recurrence rates, which may reach 70% of the cases⁷, reinforcing the importance of nurses to offer venous ulcers patient the conditions and knowledge to receive care and also to promote self-care.

The KATZ-EIAVD and the TINETTI Indexes made it possible to measure how health guidelines influenced the functional capacity of the multiple cases studied. The findings of the KATZ-EIAVD index show that in the areas of bathing (100%), clothing (93.7%), toileting (100%) and feeding (100%), the participants had a good response before the guidelines, with values that remained unchanged after reassessments.

As for transferring, 81.3% of the participants were able to lie down and get out of bed, as well as sit and stand without the aid of objects such as cane and walker. After the reassessment, the participants presented an improvement of 6.2%.

The evaluation of continence indicates that 62.5% of the participants had complete sphincter control, and in the reassessment, the percentage increased to 75%, showing an improvement of 12.5%.

The results found in the evaluation of the KATZ-EIAVD index demonstrate that the participants of the study have an excellent independence in the activities of daily living. The same is true in other studies.¹⁴⁻²¹

The TINETTI Index assessed the functional capacity in relation to balance and gait, since the pain present in venous ulcer patients causes physical limitations²⁰ that may hinder daily activities.

After the guiding instructions given in home visits, the participants were assessed and showed an improvement in the following items: sitting balance, raising, standing up, immediate standing balance, standing balance, closed eyes, rotating 360°, sitting, beginning of walk, step length and height, path, and trunk; while in the domains nudged, step symmetry and walking stance, there was no percentage change after intervention.

The findings of the TINETTI Index indicate that patients with venous ulcers present changes in balance and gait, causing multiple limitations that can lead people who present this pathological condition to depend on others, as well as to difficulties in social relationships.¹⁸ In this sense, it is important that health professionals evaluate the functional capacity of these individuals because their difficulty to walk hampers their physical capacity and quality of life.²²⁻²³

The study presented as a limitation for its accomplishment the lack of receptivity and fear on the part of some participants, since many do not reside in safe places, which could endanger the safety of the professional

visiting them. Another limitation is that the research was developed with resources of the researchers and they used public transport means to the patient's homes, which made it impossible to make several visits during the day due to the delay in the transportation, due poor conditions of the roads, as well as the long distances traveled to the destination. Another limitation concerns the restricted number of articles on national and international databases that would contribute to the discussion of the proposed objective. This emphasizes the importance of developing new studies related to the functional capacity of venous ulcer patients, due to the high incidence and prevalence of the pathology in question, increasing the amount of material for researchers, professionals and students in the health area.

The main contribution of this study to the field of scientific research in venous ulcers and nursing was to investigate the repercussion of health guidelines in the home context regarding the treatment and prevention of venous ulcers on the functional capacity of patients. This is important because of the inability to self care and sensory and physical mobility losses cause a functional decline and dependence in activities of daily living, as well as negative repercussions on work and leisure. Impaired functional capacity has a significant impact on the quality of life and increases the burden of the family and the health system, in addition to generating problems for the patient.²⁴

Regarding advances in the area of knowledge, these involve the production and improvement of nursing care based on the prevention of damages from venous ulcers, through the development and adoption of new technical interventions in nursing and health care, that is, home visits. This tool provides a link between the patient and the caregiver²⁵, and allows nurses to promote procedures that are beneficial to monitoring and improving the patients' functional capacity.¹⁶

CONCLUSION

This study showed the importance of health guidelines by evaluating their effectiveness on the functional capacity of elderly patients with venous ulcers when provided in the home context.

The KATZ and TINETTI indexes indicate that nurses in the home visit should consider and evaluate the needs of users, their families and the environment in which they live with the objective to establish a plan of

care aimed at recovery and/or rehabilitation, reducing wound healing time, preventing relapses and ensuring patient comfort. Thus, nursing guidelines can not be focused only on skin care, medication administration and dressings. The actions should be humanized, sensitive and comprehensive, providing significant improvements in the quality of life of venous ulcer patients who through the guidelines get to know better their illness, presuming the clinical picture to collaborate in conducts aimed at their recovery.

Thus, by showing that the gerontological care provided to venous ulcer patients can contribute to the qualification of care and consequently improve functional capacity through health guidelines, we emphasize the need to develop studies and strategies of care to be implemented by gerontologists who perform home visits to patients affected by venous ulcers.

REFERENCES

1. Sant'Ana SMSC, Bachion MM, Santos QR, Nunes CAB, Malaquias SG, Oliveira BGRB. Venous ulcers: clinical characterization and treatment in users treated in outpatient facilities. Rev Bras Enferm [Internet]. 2012 July/Aug [cited 2017 Sept 21]; 65(4): 637-44. Available from: <http://www.scielo.br/pdf/reben/v65n4/a13v65n4.pdf> DOI: <http://dx.doi.org/10.1590/S0034-71672012000400013>
2. Figueiredo ML, Zuffi FB. Care for people with venous ulcers: the perception of nurses in the family health strategy. Enferm Glob [Internet]. 2012 Oct [cited 2017 Sept 21]; 11(4): 147-58. Available from: http://scielo.isciii.es/pdf/eg/v11n28/pt_docencia4.pdf DOI: <http://www.dx.doi.org/10.5935/1415-2762.20130009>
3. Maeshiro FL, Lopes MCBT, Okuno MFP, Camapanharo CRV, Batista REA. Functional capacity and severity of trauma in the elderly. Acta Paul Enferm [Internet]. 2013 Oct [cited 2017 Sept 22]; 26(4): 389-94. Available from: http://www.scielo.br/pdf/apv/v26n4/en_v26n4a14.pdf DOI: <http://dx.doi.org/10.1590/S0103-21002013000400014>
4. Fialho CB, Lima-Costa MF, Giacomini KC, Filho AIL. Disability and use of health services by the elderly in greater metropolitan Belo Horizonte, Minas Gerais State, Brazil: a population-based study. Cad Saúde Pública [Internet]. 2014 Mar [cited 2017 Sept 22]; 30(3): 599-610. Available from:

- <http://www.scielo.br/pdf/csp/v30n3/0102-311X-csp-30-3-0599.pdf> DOI: <http://dx.doi.org/10.1590/0102-311X00090913>
5. Ferreira MSM, Pereira MG. The moderator role of family type in the relationship between functional disability and quality of life in patients with chronic low back pain. *Ciênc Saúde Coletiva* [Internet]. 2016 Jan [cited 2017 Sept 23]; 21(1): 303-9. Available from: <http://www.scielosp.org/pdf/csc/v21n1/1413-8123-csc-21-01-0303.pdf> DOI: <http://dx.doi.org/10.1590/1413-81232015211.01012015>
6. Reis DB, Peres GA, Zuffi FB, Ferreira LA, Poggetto, MTD. Care for people with venous ulcers: the perception of nurses in the family health strategy. *REME Rev Min Enferm* [Internet]. 2013 Nov [cited 2017 Sept 23]; 17(1): 107-111. Available from: <http://www.reme.org.br/artigo/detalhes/582> DOI: <http://www.dx.doi.org/10.5935/1415-2762.20130009>
7. Oliveira SB, Soares DA, Pires OS. Prevalence of venous ulcers and associated factors among adults of a health center in Vitória da Conquista- BA. *Rev Pesqui Cuid Fundamen* [Internet]. 2015 July/Sept [cited 2017 Sept 24]; 7(3): 2659-69. Available from: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/3743/pdf_1600 DOI: [10.9789/2175-5361.2015.v7i3.2659-2669](https://doi.org/10.9789/2175-5361.2015.v7i3.2659-2669)
8. Joaquim FLJ, Camacho ACLF, Silva RMCRA, Louredo DS, Valente GSC, Santos RC. Reflection about the nurses' service at home in venous ulcers treatment. *Rev Enf UFPE* [Internet]. 2016 July/Sept [cited 2017 Sept 24]; 10(2): 664-8. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/7999/pdf_9646 DOI: <https://doi.org/10.5205/1981-8963-v11i12a23292p5432-5438-2017>
9. Gallassi CV, Ramos DFH, Kinjo JY, Souto BGA. Home care in primary health care: na operational synthesis. *ABCS Health Sci* [Internet]. 2014 Apr [cited 2017 Sept 25]; 39(3): 177-85. Available from: <http://www.portalnepas.org.br/abcshs/article/download/653/652> DOI: <http://dx.doi.org/10.7322/abcshs.v39i3.653>
10. Joaquim FL, Camacho ACLF, Sabóia VM, Santos RC, Santos LSFS, Nogueira GA. Impact of home visits on the functional capacity of patients with venous ulcers. *Rev Bras Enferm* [Internet]. 2016 May/June [cited 2017 Sept 25]; 69(3): 439-47. Available from: http://www.scielo.br/pdf/reben/v69n3/en_0034-7167-reben-69-03-0468.pdf DOI:

- <http://dx.doi.org/10.1590/0034-7167.2016690308i>
11. Alvarez AM, Reiners AAO, Polaro SHI, Gonçalves LHT, Caldas CP, Unicovsky MAR, et al. Scientific Department of Gerontological Nursing of the Brazilian Nursing Association. *Rev Bras Enferm* [Internet]. 2013 Sept [cited 2017 Sept 26]; 66(esp): 177-81. Available from: <http://www.scielo.br/pdf/reben/v66nspe/v66nspea23.pdf> DOI: <http://dx.doi.org/10.1590/S0034-71672013000700023>
12. Torres GV, Costa IKF, Medeiros RKS, Oliveira AKA, Souza AJG, Mendes FRP. The characterization of persons with venous ulcer in Brazil and Portugal: comparative study. *Enferm Glob* [Internet]. 2013 Oct [cited 2017 Sept 26]; 12(4): 75-87. Available from: http://scielo.isciii.es/pdf/eg/v12n32/pt_clinica5.pdf
13. Oliveira BGRB, Nogueira GA, Carvalho MR, Abreu AM. The characterization of patients with venous ulcer followed at the outpatient wound repair clinic. *Rev Eletrônica Enferm* [Internet]. 2012 Jan/Mar [cited 2017 Sept 27]; 14(1): 156-63. Available from: https://www.fen.ufg.br/fen_revista/v14/n1/pdf/v14n1a18.pdf DOI: <https://doi.org/10.5216/ree.v14i1.10322>
14. Camacho ACLF, Santos RC, Joaquim FL, Abreu CPM. Evaluation of functional capacity in care of tissue injuries of adults and elderly patients. *Rev Pesqui Cuid Fundamen* [Internet]. 2014 Jan/Mar [cited 2017 Sept 27]; 6(1): 17-26. Available from: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/2651/pdf_1038 DOI: [10.9789/2175-5361.2014v6n1p17](https://doi.org/10.9789/2175-5361.2014v6n1p17)
15. Thomas DR. Managing venous stasis disease and ulcer. *Clin Geriatr Med* [Internet]. 2013 Apr [cited 2017 Sept 28]; 29(2): 415-24. Available from: <http://www.sciencedirect.com/science/article/pii/S0749069013000074> DOI: <https://doi.org/10.1016/j.cger.2013.01.006>
16. Souza DMST, Borges FR, Juliano Y, Veiga DF, Ferreira LM. Quality of life and self-esteem of patients with chronic ulcers. *Acta Paul Enferm* [Internet]. 2013 June [cited 2017 Sept 28]; 26(3): 283-8. Available from: http://www.scielo.br/pdf/ape/v26n3/en_13.pdf DOI: <http://dx.doi.org/10.1590/S0103-21002013000300013>
17. Medeiros ABA, Frazão CMFQ, Fernandes MICD, Andriola IC, Lopes MVO, Lira ALBC. Association of socioeconomic and clinical factors and tissue integrity outcome of patients with ulcers. *Rev Gaúch Enferm* [Internet]. 2016 Mar [cited 2017 Sept 29];

Duffrayer KM, Joaquim FL, Camacho ACLF.

Health guidelines: strategy for promotion...

37(1): 1:9. Available from: http://www.scielo.br/pdf/rgenf/v37n1/en_0102-6933-rgenf-37-1-1983-144720160154105.pdf

DOI:

<http://dx.doi.org/10.1590/1983-1447.2016.01.54105>

18. Dias TYAF, Costa IKF, Melo MDM, Torres SMSGO, Maia EMC, Torres GV. Quality of life assessment of patients with and without venous ulcer. *Rev Latinoam Enferm* [Internet]. 2014 July/Aug [cited 2017 Sept 30]; 22(4): 576-81. Available from: <http://www.scielo.br/pdf/rlae/v22n4/0104-1169-rlae-22-04-00576.pdf>

DOI:

[10.1590/0104-1169.3304.2454](http://dx.doi.org/10.1590/0104-1169.3304.2454)

19. Budó MLD, Durgante VL, Rizzatti, SJS, Silva DC, Leal TC. Sociodemographic and health characterization of people with venous ulcers in outpatient clinic care. *Rev Enferm UFPE* [Internet]. 2013 Mar [cited 2017 Oct 01] 7(3): 731-37. Available from:

http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/3926/pdf_2163 DOI: <https://doi.org/10.5205/1981-8963-v7i3a10286p731-737-2013>

20. Costa LM, Higino WJF, Leal FJ, Couto RC. Clinical and socio-demographic profile of patients with venous disease treated in health centers of Maceió (AL), Brazil. *J Vasc Bras* [Internet]. 2012 Jan [cited 2017 Oct 01] 11(2): 108-113. Available from:

http://www.scielo.br/pdf/jvb/v11n2/en_v11n2a07.pdf

DOI:

<http://dx.doi.org/10.1590/S1677-54492012000200007>

21. Evangelista EA, Oliveira VC, Cruz GECP, Carvalho L, Alvarenga, MAS. Instrumentalization of the Katz index among the elderly population of a family health strategy unit. *Rev Enferm UFPE* [Internet]. 2013 Aug [cited 2017 Oct 02]; 7(8): 5150-6. Available from:

http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/4100/pdf_3177 DOI: <https://doi.org/10.5205/1981-8963-v7i8a11787p5150-5156-2013>

22. Salomé GM, Ferreira LM. Quality of life in patients with venous ulcers treated with Unna's boot compressive therapy. *Rev Bras Cir Plást* [Internet]. 2012 June [cited 2017 Oct 03]; 27(3): 466-71. Available from:

http://www.scielo.br/pdf/rbcp/v27n3/en_24.pdf DOI: <http://dx.doi.org/10.1590/S1983-51752012000300024>

23. Araújo RO, Silva DC, Souto RQ, Pergola-Marconato AM, Costa IKF, Torres GV-. Impact of varicose ulcers on the quality of life of persons receiving primary care. *Aquichan* [Internet]. 2016 Dec [cited 2017 Oct

04];16(1):56-66. Available from: <http://www.scielo.org.co/pdf/aqui/v16n1/v16n1a07.pdf> DOI: [10.5294/aqui.2016.16.1.7](https://doi.org/10.5294/aqui.2016.16.1.7)

24. Camacho ACLF, Santos RC, Joaquim FL, Louredo DS, Morais IM, Silva EA. Comparative study about the functional capacity of adult and elderly patients with venous ulcers. *Rev Pesqui Cuid Fundamen* [Internet]. 2015 Jan/Mar [cited 2017 Oct 05]; 7(1): 1954-66. Available from:

http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/3505/pdf_1434 DOI: [10.9789/2175-5361.2015.v7i1.1954-1966](https://doi.org/10.9789/2175-5361.2015.v7i1.1954-1966)

25. Kebian LVA, Acioli S. Home visits by family health strategy nurses and community health agents. *Rev Eletrônica Enferm* [Internet]. 2014 Jan/Mar [cited 2017 Oct 05];16(1) 161-9. Available from:

<http://w.fen.ufg.br/revista/v16/n1/pdf/v16n1a19.pdf> DOI: <https://doi.org/10.5216/ree.v16i1.20260>

Submission: 2017/12/15

Accepted: 2018/05/12

Publishing: 2018/07/01

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