

Every day life of elderly with venous insufficiency, who use elastic compression socks

O cotidiano de idosos com insuficiência venosa que usam meia elástica de compressão

La vida cotidiana de las personas mayores con insuficiencia venosa que usan calcetines de compresión.

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ABSTRACT

Objective: To comprehend every day of older people with venous insufficiency, who use elastic compression socks. **Methods:** Phenomenological research that interviewed 13 elderly attended Basic Health Units in the state of Minas Gerais, between November 2017 to January 2018. The depositions were organized in categories and discussed according to the Alfred Schütz social phenomenology and theme literature. **Results:** Emerged from the interviews that make explicit the perspective of the participants regarding their everyday activities with compression elastic socks: “main symptoms of the venous insufficiency relieved”, “adversities that permeate the use of elastic compression socks” and “long term use of compression elastic socks”. **Conclusion:** For elderly people with chronic venous insufficiency, the use of elastic compression socks promotes relieve of the symptoms; however, it demands help to put them on and take them off and provokes heat sensation and discomfort in the limbs. The elderly showed the expectation to continue the long term use of the elastic sock aiming at avoiding the relapse of varicose ulcer. To validate the adversities related to the use of this compression device may help the elderly to broaden their autonomy and functional capacity, which may be compromised by venous insufficiency.

DESCRIPTORS: Compression socks. Elderly. Interpersonal relationships. Nursing. Stomatherapy. Qualitative research.

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RESUMO

Objetivo: Compreender o cotidiano de idosos com insuficiência venosa que usam meia elástica de compressão. **Métodos:** Pesquisa fenomenológica que entrevistou 13 idosos atendidos em Unidades Básicas de Saúde no estado de Minas Gerais, entre novembro de 2017 e janeiro de 2018. Os depoimentos foram organizados em categorias e discutidos segundo o referencial da fenomenologia social de Alfred Schütz e literatura temática. **Resultados:** Emergiram das entrevistas as categorias que explicitam a perspectiva dos participantes sobre seu dia a dia com a meia elástica de compressão: “alívio dos principais sintomas da insuficiência venosa”, “adversidades que permeiam o uso das meias elásticas de compressão” e “uso de meia elástica de compressão em longo prazo”. **Conclusão:** Para os idosos com insuficiência venosa crônica, o uso da meia elástica de compressão promove alívio dos sintomas, porém requer ajuda para calçar e descalçar e provoca sensação de calor e desconforto nos membros inferiores. Os idosos esboçaram a expectativa de continuar usando a meia elástica em longo prazo com vistas a controlar a recidiva de úlcera varicosa. Valorizar as adversidades relacionadas ao uso desse dispositivo de compressão poderá auxiliar esses idosos a ampliar sua autonomia e capacidade funcional comprometidas pela insuficiência venosa.

DESCRITORES: Meias de compressão. Idoso. Relações interpessoais. Enfermagem. Estomaterapia. Pesquisa qualitativa.

RESUMEN

Objetivo: Comprender la vida cotidiana de las personas mayores con insuficiencia venosa que usan calcetines de compresión. **Métodos:** Investigación fenomenológica que entrevistó a 13 adultos mayores atendidos en Unidades Básicas de Salud en el estado de Minas Gerais, entre noviembre de 2017 y enero de 2018. Las declaraciones fueron organizadas en categorías y discutidas de acuerdo con el marco de la fenomenología social y la literatura temática de Alfred Schütz. **Resultados:** De las entrevistas surgieron las categorías que explican la perspectiva de los participantes sobre su vida diaria con la calcetines de compresión: “alivio de los principales síntomas de insuficiencia venosa”, “adversidades que impregnan el uso de calcetines de compresión elásticas” y “uso de calcetines de compresión a largo plazo”. **Conclusión:** Para las personas mayores con insuficiencia venosa crónica, el uso de calcetines de compresión proporciona alivio de los síntomas, pero requiere ayuda para poner y quitar y provoca una sensación de calor e incomodidad en las extremidades inferiores. Los adultos mayores describieron la expectativa de continuar usando calcetines a largo plazo para controlar la recurrencia de la úlcera varicosa. Mejorar las adversidades relacionadas con el uso de este dispositivo de compresión puede ayudar a estos adultos mayores a aumentar su autonomía y capacidad funcional comprometida por la insuficiencia venosa.

DESCRIPTORES: Calcetines de compresión. Personas mayores. Relaciones interpersonales. Enfermería. Estomaterapia. Investigación cualitativa.

INTRODUCTION

Venous insufficiency is a common disease in the population. Its incidence varies from 1% to 10% in the world population, increasing with the aging process, being responsible for high costs to society regarding medical and surgical treatment, mainly affecting work productivity due to pain and incapacity provided by this illness¹. The development of venous insufficiency has been associated with multiple predisponent factors, such as age, gender, pregnancy, heredity, body habits, and lifestyle. Among the non-changing factors that increase the possibility of developing varicose veins, sex and age stand out².

Venous insufficiency is defined as the result of incompetence of valves from the superficial and deep venous system, present in the limbs. If not treated properly, it may lead to complications which include edema, upcoming of varicose ulcer and deep venous thrombosis, among other signs and symptoms³. Since the

aging of the population is progressive, the development of actions that aim to amplify the treatment's efficiency and the reduction of complications from this illness has become essential.

The treatment of venous insufficiency involves the usage of surgical and conservative measurements. Among the conservative measurements are listed pharmacotherapy, changes in the lifestyle (weight loss, systematic execution of the physical exercise, the elevation of the limbs, rehabilitation of the knee and avoiding to stay seated or up for extended periods), besides compressive therapy³.

Compressive therapy may be classified according to the pressure on the inferior limbs: light (< 20 mmHg), moderate (≥ 20–40 mmHg), strong (≥ 40–60 mmHg) and very strong (> 60 mmHg). The classification of compression socks differs among the countries⁴. In Brazil, for instance, compression socks are found with pressures varying from 15 to 50 mmHg, which can be indicated, according to the degree of compression,

for prophylaxis and also treatment and prevention of relapse of varicose ulcer⁵. When correctly indicated, compression socks reduce edema, pain and improves the hemodynamic parameters in patients with venous insufficiency, regardless of the type or compression⁶.

Study that evaluated the quality of life of individuals with chronic venous disease, users and non-users of elastic socks showed that the use of these socks presented as an effective therapy, improving the quality of life, mainly regarding varicosity, with gain in general life quality and in functional and emotional aspects when compared to individuals who did not use these therapeutic device⁷.

Functional capacity is a vital health predictor when considering elderly people, and its decline characterizes the loss of abilities to execute daily activities, which, progressively, may trigger off the development of postural instability, immobility, among others⁸.

Considering the benefits of daily use of elastic compression socks by elderly people with venous insufficiency and the positive impact of this use to the maintenance of functional capacity, it is relevant to comprehend the experience of this population group regarding the therapeutic use of this device. This opportunity of focusing on the daily intersubjectivity of elderly who experience the use of elastic compression socks meets the proposals of the World Health Organization (WHO), which aims to the relevance of health care centered in elderly people, based on their needs and preferences⁹.

Regarding this subject, the present study was guided by the following questions: how is every day of elderly people with venous insufficiency who use elastic compressive socks? What are their expectations regarding the use of this device?

OBJECTIVE

To comprehend every day of elderly people with venous insufficiency that use elastic compression socks.

METHODS

A qualitative study of the phenomenological approach from the investigation performed in the scientific initiation program by a public university, located in

the countryside of Minas Gerais state. The Alfred Schütz¹⁰ social phenomenology theoretic-methodological reference was adopted to substantiate the comprehension of everyday elderly people with venous insufficiency regarding the use of elastic socks.

It is assumed that, in everyday life, human beings have consciousness substantially similar and live together, influencing, and being influenced by practical situations in social life. In this sense, intersubjectivity is a precondition of daily life, being the experience lived from human meanings. One interprets the world according to his/her biographic situation and collection of previous experiences. This collection is used to the meaning of daily activities. For existential reasons: “reasons for” which orient future actions, and “reasons why”, regarding the explanations after the event¹⁰, the human being directs the action in social reality. In this study, the action refers to the conduct of elderly people with venous insufficiency regarding the use of elastic socks in everyday life.

The research had the scenery the Basic Health Units from a city of Minas Gerais. In this city, the Central of Appointment Scheduling to refer patients to the medical specialties. Each health unit has one administrative agent and one computer that enable online access to the Central of scheduling. The referral in physical forms is done by the health professionals and is filed by the agent until the scheduling with the specialist is performed.

The survey of possible participants in the research was performed in the Central of Appointment Scheduling, through a search engine in the referral files of patients to the angiology service of the city. With this information, researchers got in contact through the telephone with those people and questioned them regarding the use of elastic socks. At this opportunity, the invitation to participate in the study, explaining the purpose and ethical aspects, was performed.

The inclusion criteria were established: age equal or superior to 60 years old, both gender, with a diagnosis of venous insufficiency and indication to use elastic compression socks, regardless the clinical stage of the disease and the medicament therapy associated to it. Elderly people who although had the prescription of elastic socks but did not use them at the time of the research were not included in the study.

Depositions were performed between November 2017 up to January 2018, after formal authorization through

the Free and Informed Consent Form. Depositions were collected through the phenomenological interview guided by the following questions: Tell me about your day with the elastic compression socks. What is your expectation regarding the use of elastic socks, considering your varicose veins problem? Personal and social-economical information was included, as well as the time regarding the use of this compression device.

Participants were individually addressed, in a reserved room in the health services or at their homes, according to their choice. Interviews had a duration of 40 minutes, and the audio was recorded with a Smartphone, with the permission of the interviewed.

The number of participants was not previously defined. The interviews were finished when the content of the depositions was considered enough regarding the purpose of the study. According to qualitative research principles, it was possible to deepen the comprehension of the studied object with the necessary scope¹¹.

Thirteen interviews were performed, all included in the study. To guarantee the anonymity of the participants, depositions were identified with the letter “E”, initial of the word interview in Portuguese, followed by the number correspondent to its numeric occurrence (E1 to E13).

The organization and categorization of the material was performed according to the theoretic-methodological assuming adopted in a study fundamented by social phenomenology¹²: careful reading of each deposition in order to understand the way elderly people with venous insufficiency experience the use of compression elastic socks in everyday; grouping of significant aspects from the depositions for the composition of theme categories; analysis and thematic; analysis and discussion of these categories regarding Alfred Schütz social phenomenology, and other referential related to the theme.

The study respected the formal demands regarding national and international research with human being standards. The research ethics committee approved the research according to the number 2.056.709/2017.

RESULTS AND DISCUSSION

The research was composed of 13 elderly people, with ages between 60 and 89 years, mostly represented by feminine gender, incomplete elementary school,

retired and with a family income of one minimum wage. The time of using the socks varied from 10 to 41 years.

Every day of elderly people with venous insufficiency, regarding the use of elastic compression socks, was translated into the following theme categories: “relieve of main symptoms of venous insufficiency”, “adversities that permeate the use of elastic compression socks” and “long term use of elastic compression socks”. The first two categories explain the “reasons why” (actions lived in the past and the present) and the last one “reasons for” (expectations regarding the continued use of this device).

Relieve of the main symptoms of venous insufficiency

When reflecting about the use of elastic compression socks, elderly people related noticing improvement of the symptoms of venous insufficiency: edema and pain relieve in inferior limbs and remission of varicose ulcer, allowing the development of everyday activities.

“With the socks, it hurts less, and I have more stability on the legs to walk and do things. The wound is getting better after I started using the socks.” (E1)

“My legs do not get swollen because I am wearing socks. The socks do not let my legs hurt and does not harm me in nothing [...] because there is nobody to do my job, I have to do it.” (E3)

“I felt good with the socks. It seems that the legs are lighter, squishing the veins and even the injury on the leg is healed [...] I am free to my things.” (E5)

“It improved, the legs used to get swollen, red, and hurt a lot. After I started using the socks, the pain was relieved. Before I had to position to stay, now I can walk.” (E7)

The positive experience regarding the use of elastic compression socks is noticed when the elderly start is identifying the improvement of the chronic venous insufficiency symptoms and minimally return to his/her daily activities. Health professionals, including nurses, must value this experience, aiming at extending the use of this compressive therapy among elderly.

A study performed in the Netherlands revealed that adults and elderly that use compression elastic socks after complications of venous insufficiency showed more willing to face the discomfort coming from this device to reduce the risk of further complications in the future. The benefits of the compressive therapy were expressed face to face, the positive experience with the elastic socks, and the importance of individualized information to the patients, respecting each one's singularity¹³.

The positive experience with the use of elastic compression socks, highlighted by the relieve of the main symptoms of venous insufficiency, allows elderly people to develop or to maintain functional capacity for their well-being. Well-being is singular, permeated by individual aspirations, including feelings of fulfillment, satisfaction, and joy⁹.

Since longevity is getting higher, it is fundamental that health teams foment actions regarding health promotion, such as walks and healthy eating, which may contribute to vascular health. Besides that, they should act in the prevention of complications of venous insufficiency (varicose ulcer, phlebitis, thrombosis), with the incentive of health care that includes the use of elastic compression socks. Such actions may, in the long term, promote greater independence for daily activities and quality of life.

In this sense, health professionals, especially nurses, must pay careful attention to hosting and attendance of the elderly in the primary stage of health care. This stage has the responsibility for the coordination of care in the Health Care Network, acting in the referral center and specialized services¹⁴.

The strengthening of the bond between primary care and angiology service may align the counter referral flux, enabling the treatment's continuity and, consequently, the effective support regarding compressive therapy. The bond is established through the construction of relationships starting in the hosting, accountability and mutual trust between professionals and elderly, and represents a therapeutic resource that may impact the compliance regarding the orientation given by the professionals¹⁵.

Adversities that permeate the use of elastic compression socks

Elderly people revealed that to put on and to take elastic socks off are hindering factors regarding this

modality of compressive therapy. The participants mentioned the need for help from family members in order to perform this action.

"To put on, the sock is tight. I need help. I hate the sock, to be pretty honest, I think it is hard to put on." (E10)

"My daughter is the one that puts the sock on me. I cannot put it on, it is too tough, I cannot put it on." (E11)

The difficulty in putting the socks on and taking them off has also been described in other studies^{16,17}. This finding draws attention. Once when receiving the prescription to use the compression sock, it would be important that the health professional evaluated the functional capacity of the elderly to know his/her skill to put the socks on and to take them off.

It is known that aging may provoke loss of visual capacity, limit the functioning of the joints, and chronic diseases may worsen these capacities. These are of great importance so the elderly can have the ability to put this compressive device on. This way, the systematization of nursing care may aid the elderly and their families.

Data gathering through nursing history and tests of functional capacity may be useful for the nurses to trace their interventions aiming to help the elderly in the activity of putting the socks on and taking them off, including indicating ways to help. In case of noticing that the elderly person has functional limitations that complicate the use of compressive socks, the professional must search, in his/her social network, family members that may assist, in order to maintain the compressive therapy.

Research that described the perception of surgical patients with a mean age of 63 years regarding thrombosis prevention showed that these patients did not see clarity in the orientation regarding the use of elastic compression socks, few mentioned that would continue to use them after discharge and they were not quite sure for how long they would use them¹⁷. These data corroborate the importance of providing the necessary information, however broad information, regarding the proper use of this device.

A revision study regarding health promotion, chronic condition and aging pointed out that the nurse has a crucial part before elderly and family since the nurse develops educative actions, which favors the interaction with the chronic disease. These professionals must be well-prepared

to assist the elderly and families in chronic condition¹⁸. It is also a necessary investment in technological researches in order to improve the type of material used for the confection of the elastic compression socks. It is also necessary that health professionals be aware of the available options in terms of design, structure, color and compression degree 19, in order to offer suggestions that facilitate the use and maintenance of elastic socks.

In Germany, a study compared the use of plain socks with another called Na SoftFit, composed by silicone thread in the superior part, designed to maintain in its position without exerting extra pressure. The results showed that this type of sock was well-tolerated by the patients, favoring the compliance, once it was easy to put it on and take it off, providing less sensation of pain to compression²⁰. In the United Kingdom, the research discussed the use of Neo-slip® – ainer of low friction that helps the usage of compression socks – showed that this resource was effectively adopted by an orthopedic center, gaining positive feedback by health professionals as well as patients²¹.

The participants of the current research also mentioned as difficulting factors the hot sensation and discomfort caused by the compression of lower members.

“When I started using the socks, it was a problem! It squeezed me a lot, and I felt a burning sensation. I remembered talking to the doctor and saying: “Ah, no, this is not fit to wear.” (E4)

“With the sock, my leg itches a lot, that is why I do not like to wear them.” (E9)

“With all this heat, I do not wear socks. I cannot stand them; it is too hot. It seems that when it is hot, the socks squeeze more.” (E13)

These results are corroborated by a study performed in Turkey with adults that were prescribed the use of elastic compression socks for the control of venous insufficiency. They mentioned the heat sensation and discomfort when using the device. As an alternative to overcome these problems and enhance the compliance to compressive therapy, the authors highlighted the importance of nurses in the awareness regarding the benefits of regular use of the elastic socks associated to changes in the life style²².

In the present investigation, the patients considered that the use of elastic compression socks makes daily activities

difficult and influences negatively in the delay to commuting to work, due to the time necessary to put them on.

“I hate to use the socks, my experience is bad, takes my freedom away to do the cleaning in my house because, being with the socks, I need to put some boots on. It is tiring to stay with the socks, so I leave many things undone by being with the socks.” (E2)

“The problem is taking a shower. So, I took a shower and lay down a little, for 15 minutes, with the legs up, to then put the socks on. This causes the delay to go to work.” (E13)

The phenomenological study highlighted the difficulty in the use of the prescribed compressive therapy due to everyday issues of the feminine world, especially when women were housewives. The participants reported the difficulties regarding everyday elementary needs, such as perform their hygiene and wearing clothes and shoes, which had to be adapted to meet the care demanded by the compressive therapy¹⁶.

If, on the one hand, the use of elastic compressive socks may prevent, in the long run, the complications of venous insufficiency and contribute to the maintenance of the elderly’s functional capacity, mainly regarding mobility, on the other hand, this public realizes that the elastic socks interfere in daily activities, difficulting their achievement – hygiene, work, and domestic activities. However, the health professional must ponder together with the patients the risks of compressive therapy and discuss strategies with the elderly that enable the use of the socks with daily activities.

The patients mentioned the difficulty in maintaining the use of elastic compressive socks due to their high cost.

“I had much trouble to buy the socks due to the price. I bought it in a bazaar. When I take them off to wash them, I only have them, so I stay without, I need to buy another.” (E8)

“Five years ago, they were R\$ 60,00. I thought they were costly; that is why I did not buy them. Then, my niece bought them for me, and I like them.” (E12).

A study developed in the Netherlands mentioned that the elevated cost of elastic compression socks did not influence the preference of patients since the device and home assistance for the use of the socks are subsidized in that country¹³. Such a program could be adopted in Brazil,

considering the limited social–economical conditions of the participants in the present study, which would enable not only the acquisition of the device but also encourage its use.

Use of the elastic compression socks in the long run

Although there are adversities pointed out by the participants regarding the use of elastic compressive socks, the participants also mentioned the expectation to use this device in the long run, with the purpose to control the main symptoms of the chronic condition, such as pain in the lower member, varicose veins and relapse of varicose ulcer, aiming at maintaining daily activities.

“The care and the socks will be my company until I die. If I do not wear the sock, it is risky the wound to open again [...] many things I left undone. I want to go out at night, walk, go to church, take care of my backyard.” (E1)

“Ah, I will have to use these socks for the rest of my life. It is a dream to stop wearing. I’ll never stop because I know that if I do, the wound might open. I am using the socks frequently, so I can continue resolving my things: washing, ironing, cooking, getting out of the car [...] without the socks, it’s trouble, I have to wear them anyway.” (E2)

“I intend to use the socks, to see if I do not feel pain, to see if I do not have any problems with veins than I already do [...] with socks I will walk the whole day without pain in the legs.” (E6)

“I do not know, I will continue to use the socks, and I will see, I hope it gets better. The varicose veins are difficult to get better; they do not. With the socks, I do not feel pain; I can walk and do my stuff.” (E7)

It is essential to mention that the use of compressive elastic socks is not always easy for the elderly, mostly the high compression ones, which can impact the continuity of the compressive therapy in the long run. For the elderly to maintain the use of the elastic socks, the health professionals must adequate the level of compression of the device to the capacity of the elderly to stand it. The literature points out that it is preferable to use compressive therapy with a low degree of compression than not to use at all⁴.

In Turkey, an investigation with 219 people evaluated the level of comfort and effectiveness of elastic compression socks regarding three different degrees of compression and compliance. Results showed that, regarding comfort, 79.5% of the people were of group III – moderate compression, at the level of the knee – and 52.1% were of group II – low compression, at the level of the thighs – declared that they feel discomfort when wearing the socks. Most of the users of low compression socks, at the level of the knee (group I), mentioned a high level of satisfaction and did not mention discomfort²³.

In order to guarantee the intent of the participants to continue the use of the elastic compressive socks in the long run and also to maintain the capacity to fulfill daily activities, it is crucial for primary care health professionals to identify the difficulties presented by the elderly when using the elastic compressive socks, aiming at searching allowances for the viabilization of necessary resources when considering elderly people with this chronic condition.

It is essential to mention that this intent is directly related to the appreciation of the intersubjective relationship between the professional and the elderly, who need to use this compression device. According to the Alfred Schütz’s social phenomenology, the daily world is cultural and intersubjective and, that is why, even in distinct biographic situations, man comprehends and is comprehended through the social relationships which one establishes¹⁰. In this sense, the established interactions between the health professionals and the elderly regarding compressive therapy may be more significant for both than the technology itself, regarding control of venous insufficiency.

The face to face relationships between nurses and elderly people with venous insufficiency that use elastic compressive socks may favor the broaden the body of knowledge¹⁰ for both, providing a shared care plan, which may result in the more frequent use of this compression device. From this perspective, the construction of this care plan needs to contemplate the knowledge about physiopathology of this chronic disease, the co-responsibility of care and the appreciation of the experience of the persons with venous insufficiency who uses elastic compression socks. This care plan must have as a purpose the maintenance of the functional capacity of the elderly, minimizing his/her difficulties and helping him/her to face the execution of daily activities when using the elastic compression socks.

Since this is a qualitative study, performed in a specific geographic and public space, the results of the present study should not be generalized. However, it add scientific evidences

over the questions involved in the use of elastic compression socks by elderly people, which may contribute to positively impact the assistance to this public, as well as to foment teaching and research in nursing. Por se tratar de um estudo qualitativo realizado em um espaço geográfico e público específico, os resultados da presente investigação não podem ser generalizados. Contudo, somam evidências científicas sobre as questões envolvidas no uso de meias elásticas de compressão por pessoas idosas, o que poderá contribuir para impactar positivamente a assistência a esse público, assim como fomentar o ensino e a pesquisa em enfermagem.

The understanding of every day of elderly people regarding the use of elastic compression socks may help the actions of the health team, especially the stomatotherapy nurse, to value the adversities related to the use of this device, in order to help elderly to broaden autonomy and functional capacity compromised by venous insufficiency.

CONCLUSION

According to the participants, the use of elastic compression socks promotes relieve of the main symptoms

of venous insufficiency, allowing the development of daily activities. However, adversities that interfere in the functional capacity of these people, such as heat sensation, discomfort in lower member, and need of assistance to put the socks on and to take them off were mentioned. Elderly showed the expectation to continue the use of the elastic sock in the long run in order to prevent the relapse of varicose ulcer.

Researches that involve the development of new technologies to upgrade materials for the confection of elastic compression socks should be stimulated, in order to facilitate the use of this device and overcome the daily adversities which permeate its use, especially among elderly.

AUTHORS CONTRIBUTION

Conceptualization Silva MH and Ribeiro DK; Metodologia, Silva MH and Ribeiro DK; Investigation, Jesus R; Machado RET; Ribeiro DK and Silva MH; Writing – First version Silva MH; Ribeiro DK; Jesus RR and Jesus MCP; Writing - Revision & Editing Silva MH; Jesus MCP and Merighi MAB; Grant acquisition Ribeiro DK; Supervision Merighi MAB.

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