

Pain impairs the practice of regular physical activities in the perception of longevous women*

A dor dificulta a prática de atividade física regular na percepção de idosas longevas

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ABSTRACT

BACKGROUND AND OBJECTIVES: The number of people aged 80 years or above is increasing worldwide. Considering that most such longevous people are physically inactive, and that this is a major risk for the appearance of different diseases and body pains, the regular practice of physical activities may favor the health of such population. So, this study aimed at evaluating pain perception as a barrier for the practice of regular physical activities by physically inactive longevous women.

METHODS: This is a descriptive-qualitative research involving 30 physically inactive longevous women, participating in the Familiarity Groups for elderly people from Florianópolis, SC, who participated in five focus groups according to the sanitation division of the city (Center, East, South, North and Continent). Data were treated by content analysis.

RESULTS: Inactive women have reported pain in lower and upper limbs, lumbar and/or cervical region and in body in general as factors preventing their practice of regular physical activities.

CONCLUSION: The understanding of such pains may help the planning of interventions with longevous people, contributing for actions fostering behavioral changes toward adopting an active lifestyle, which may contribute for a better functional capacity, health conditions and independence of longevous people.

Keywords: Barriers, Elderly aged 80 years or above, Facilitators, Motor activity, Pain.

RESUMO

JUSTIFICATIVA E OBJETIVOS: A faixa etária de pessoas com 80 ou mais anos de idade é a que mais vem aumentando no mundo. Tendo em vista que estes idosos longevos em sua maioria são inativos fisicamente, e isto é um dos principais fatores de ris-

co para o surgimento de diversas doenças e de dores corporais, a prática regular de atividades físicas pode favorecer a saúde destes idosos. Sendo assim, esta pesquisa objetivou analisar as percepções da dor como uma barreira para a prática de atividades físicas regulares por idosas longevas inativas fisicamente.

MÉTODOS: Trata-se de pesquisa descritiva-qualitativa, envolvendo 30 idosas longevas inativas fisicamente frequentadoras dos Grupos de Convivência para idosos de Florianópolis-SC, que participaram de cinco grupos focais, de acordo com a divisão sanitária do município (Centro, Leste, Sul, Norte e Continente). Os dados foram tratados pela análise de conteúdo.

RESULTADOS: As idosas inativas evidenciaram dores nos membros inferiores, superiores, na região lombar e ou cervical e no corpo em geral como fatores que as impedem de praticarem atividades físicas regularmente.

CONCLUSÃO: O conhecimento dessas dores pode auxiliar no planejamento de intervenções com pessoas longevas, contribuindo para ações que fomentem modificações de comportamentos para a adoção de um estilo de vida ativo, o que poderá contribuir para uma melhor capacidade funcional, condições de saúde e independência do idoso longo.

Descritores: Atividade motora, Barreiras, Dor, Facilitadores, Idosos com idade igual ou superior a 80 anos.

INTRODUCTION

The number of people with 80 years of age or above is increasing the most worldwide. These people are called longevous elderly and have a high prevalence of morbidities, incapacities and body pains¹, in addition to progressive loss of functional skills and decreased physical capacity, thus tending to have increased risk for physical inactivity².

Physical inactivity is a major risk factor for several diseases and leads to more functional incapacity, loss of quality of life (QL), increased obesity, mortality and body pains^{3,4}. Physical inactivity may be influenced by several factors, being body pain one of them^{5,6}.

Body pain may interfere with QL of the elderly, influencing depression, physical and functional incapacity, dependence, social withdrawal, sexuality, changes in family dynamics, economic imbalance, hopelessness and feeling of death, in addition to causing fatigue, appetite problems, sleep disorders, constipation, nausea, difficulties of concentration and to perform daily activities⁷⁻⁹.

Although the practice of daily activities might not interrupt the biological process of ageing, it may minimize the biopsychosocial

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effects of age, among them prevention and treatment of chronic diseases² and improvement of body pains^{10,11}.

So, this study aimed at evaluating pain perceptions as a barrier for the practice of regular physical activities by physically inactive longevous elderly women.

METHODS

This descriptive qualitative study is part of the research called "Longevous elderly: lifestyle and perception of the practice of physical exercises and leisure habits". Data were collected in 2010 and 2011.

Participated in this study 30 women aged 80 years or above, all physically inactive, that is, not practicing any type of physical activity during leisure. These elderly women participated in at least one of the 102 Familiarity Groups for the Elderly, registered in the City Hall of Florianópolis-SC, and were intentionally selected. We decided to study longevous elderly women due to the predominance of this gender in the familiarity groups for the elderly, especially in this age group.

Participants were distributed in five focus groups, according to the sanitation regions of the city (Center, East, South, North and Continent). Groups were constituted as follows: Center Focus Group (n = 6), East Focus Group (n = 4), South Focus Group (n = 6), North Focus Group (n = 8) and Continent Focus Group (n = 6).

Research tools were a diagnostic card with 23 open and closed questions about sociodemographic and health conditions, and the focus group technique, which is a kind of group interview based on communication and interaction by topics to be explored, and may address a specific theme or group to deeply understand the behavior of a certain group. Focus groups try to collect information which may provide the understanding of perceptions, beliefs and attitudes toward a theme, products or services.

Focus group discussions were oriented by a guide applied as semi-structured interview, prepared to meet the objectives of the study. Focus group technique was applied in a non directive way and in groups. The guide used for the focus group technique was: 1- May pain may prevent you from practicing regular physical activities? 2- Where do you feel such pains? 3- May pain encourage you to practice regular physical activities? 4- May regular physical activities improve and/or decrease body pains?

The first contact to collect data was with the City Hall of Florianópolis-SC, where the Elderly Management supplied us with the database with the identification of the operating site and the telephones of the coordinators of the Familiarity Groups for the Elderly. Then the coordinators of the familiarity groups for the elderly were contacted.

The next stage was to identify how many longevous elderly people were registered in such groups to invite them to participate in the study and explain its objectives. People were contacted in the group they participated, where the invitation was made to participate in the research and date and time were scheduled. After accepting to participate in the research, they have signed the Free and Informed Consent Term (FICT) in two copies, remaining

one with the researcher and the other with the participant.

It is important to mention the difficulty of the researchers to obtain the desired number of longevous elderly women for this research because they used different justifications not to participate. So, the movement of longevous elderly women in this day was total responsibility of the researchers, both for going to the focus group technique site and returning to their homes. The contact for data collection schedule and movement of longevous elderly women was made by telephone.

Before applying the focus group technique, researchers were trained in three stages: development of the guide for the technique, how to apply and analysis.

To interpret information obtained by the focus group technique, the content analysis was used, which is a technique interpreting communications to have a description of messages content, which allows the inference of knowledge related to conditions of production/reception of these messages. This technique has three stages:

Pre-analysis: involving the first contacts with documents of analysis, the formulation of objectives, the definition of procedures to be followed and the formal preparation of the material; exploration of material: corresponding to the categorization, definition of context and registration units, among others; and treatment and interpretation of results obtained, which is the stage where data are refined to become significant¹².

This research was carried out according to the ethical principles of Resolution 196 of the National Health Council.

Data from the diagnostic card (sociodemographic characteristics and health conditions of longevous elderly women) were analyzed by descriptive statistics, through mean and simple frequency with the SPSS 17.0 program.

This study was approved by the Committee of Ethics Involving Human Beings of the University of the State of Santa Catarina, process 149/2010.

RESULTS

Longevous elderly women had mean age of 84.9 ± 4.12 years, in majority they were widows (86.7%), with incomplete basic education (80.1%), lived with escorts (63.3%), were catholic (96.7%), Caucasian (96.7%), retired and/or pensioners (96.7%), had at least one disease diagnosed by the physician (90%) and made regular use of drugs (90%). In addition, 20% received from one to three minimum wages and 46.7% considered their health as regular.

Results of this study have shown by the focus group technique that physically inactive longevous elderly women feel pain which impairs the practice of regular physical activities. Such pains are shown in Figure 1.

Figure 1 shows that longevous elderly women from all regions have perceived body pain as a barrier for the regular practice of physical activities, except elderly women from the East Focus Group.

Another study result is that, according to Center, East, South and Continent Focus Groups, the regular practice of physical activities decreases body pain. North Focal Group was the only group not reporting such finding.

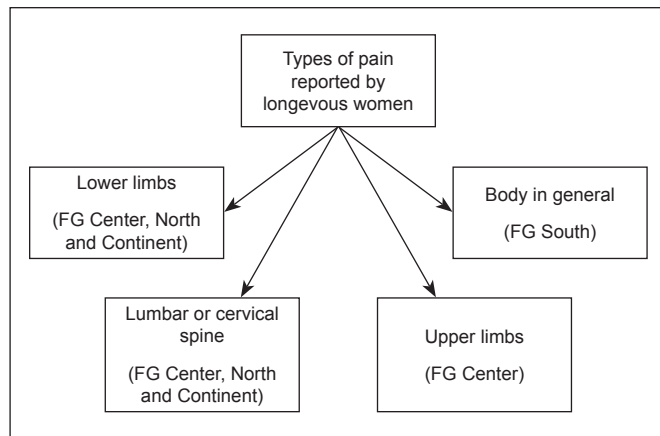


Figure 1 – Pains which impair the practice of physical activities by physically inactive longevous elderly women, according to focus groups. Florianópolis/SC, 2013.

FG = Focus Group.

DISCUSSION

Pain is expressed by a sensation added to a reaction. The sensation is measured by the peripheral and central nervous system and the reaction represents the subjective experience of the individual⁹. So, perceiving pain is a difficult and very subjective task, where many elderly people do not report pain for considering it a normal consequence of ageing^{8,13}.

This study is in line with the literature which suggests that from 35% of the Brazilian population referring chronic pain, 75% believe that it impairs daily life activities and consider that pain limits leisure, social and family physical activities¹³.

Lower limbs pain

Longevous elderly women studied said that having lower limbs pain (LLLL) impairs the regular practice of physical activities. They said: *“It is from this hip here until the knee, wow (...) if I had not this pain I could prosper a lot”*. *“The only thing bothering me a bit (...) is that my legs also, pain in the legs (...)”*. *“(...) upward I am ok, but the problem is downward, in the legs, but thank God I am ok, only problems with the legs (...), legs are bad (...) pain in the legs, people, is horrible”*. *“I would like to be more active (...) but I cannot (...) I have also pain in legs and feet”*. *“Legs bother me. And I also have pain in the knee, the ankle”*. *“Due to arthritis I have foot pain and practice no exercise”*. *“I started walking during gymnastics in Guadalupe, but then there was a pain below this foot, the teacher would always ask for me, I have not participated for two or three months now (...)”*. *“Pain impairs the practice of more exercises, more things. Because I wanted, so to say, walk more, practice more gymnastics, walk, but I cannot because my feet do not help (...)”*.

A study⁹ explains that LLLL pain is very frequent in the elderly. A study investigating 40 elderly people from the state of Goiás has shown that 24% of them feel pain in this part of the body¹⁴. Another research carried out in Cruzaltense/RS with 48 elderly people above 60 years of age has shown that 40.7% of the studied elderly have also reported pain in this region⁸.

Authors³ studying 232 elderly municipal servers of Londrina, have noticed that 21.7% of those reporting multiple pains have given priority to lower limbs pain as the most uncomfortable.

Upper limbs pain

From the statements *“I feel pain in the arm, sometimes when I lay down I am forced to pick my hand and raise it because I cannot bring the arm, I have to pick the arm and bring because it hurts a lot”*. *“My God, only taking painkillers, my arms hurt a lot”*, it can be observed that upper limbs pain (UULL) was also reported by physically inactive longevous elderly women as a barrier for the practice of physical activities.

The literature shows^{3,4,8,9} that some elderly report pain in the arms, forearms, wrist and hands, but in a lower scale as compared to lower limbs and spinal pain. In the study¹⁴ there has been 4% predominance of UULL pain. In an investigation⁸ with 48 elderly people from Cruzaltense/RS, this result was slightly higher, with 14.8%. In the research with 172 elderly people, UULL pain was mentioned by 11.05% of them¹⁵.

Lumbar and/or cervical spine pain

Lumbar and/or cervical spine pain was also reported by longevous elderly women as a barrier for the practice of physical activities. They stated: *“(...) I feel the spine a lot, it hurts a lot, I am unable to do anything”* *“(...) I feel pain, when exercising it is worse because you cannot even breathe, chest and back hurt, (...) it seems that it chokes you, it is impossible (...) yes, it is impossible”*. *“(...) I do my house work (...) but sweep the floor, I spend two three days without sweeping because I feel the spine a lot (...) to get a broom for me it is a poison (...) or to pick the hoe to remove the grass from the leaves and oh my God, imagine exercising, it is impossible”*.

Lumbar pain is very common among the elderly and 60% to 90% of people have suffered or suffer pain in this site⁴. Spinal pain was the most predominant (48%) in a different study¹⁴, as well as in the research⁸ where the prevalence of spinal pain was also the highest (44%) among studied elderly people (n = 48) from Cruzaltense/RS. In addition to the ageing process, physical inactivity or low physical activity level may increase lumbar pain scores⁴ and people who do not practice physical activities have a higher chance of developing pain in this region^{3,7,8}. Such statements justify the findings of this study, because longevous elderly women have reported that lumbar pain impairs the practice of physical activities. In this sense, a study¹¹ explains that more physically active individuals have lower scores of lumbar pain.

Pain in body in general

Pain in body in general was another barrier mentioned by physically inactive longevous elderly women, according to the following statements: *“Zizi, she has no pain at all. She practices really because she likes it. It is easier to practice without body pain (...)”*. Human ageing is related to the presence of different chronic diseases, such as locomotor system diseases, hernias, coronary failure, osteoarthritis, rheumatoid arthritis, peripheral neuropathies, which may induce pain^{8,9,15}. So pain is one of the commonest problems of the elderly population and may be considered a major health problem^{3,7,8,11}.

Approximately 25% to 80% of people above 60 years of age have some body pain¹³. Elderly people have twice as much pain symptoms than younger people⁹.

A study¹⁴ with the elderly participating in the Family Health program has observed that 62.5% (n = 25) had some body pain. Authors⁸ have asked all elderly (n = 48) of a city of Rio Grande do Sul about body pain. Data have shown that 56.25% of the sample referred pain for more than six months.

A study¹⁵ with a population of 172 elderly has observed the presence of pain in 107 individuals (62.21%). The same research has observed that pain was present in 58% of the elderly aged between 60 and 69 years, and in longevous elderly pain prevalence was 100%.

A different study⁵ states that body pain is a common barrier reported by the elderly for not practicing regular physical exercises. A qualitative research⁶ with 14 elderly practicing physical activity for at least 12 months, in the Botanic Garden Park and in the "Elderly in Movement" program, both in Curitiba, has shown that the presence of body pain impairs the regular practice of physical activities for some elderly people.

Physical activity decreases body pains

Longevous elderly women studied have reported that the practice of physical activities may decrease body pain symptoms. The following was reported: *"I practiced exercises, (...) rascal (...) then my God you become stiff and can no longer, you miss it, everything hurts, legs, back (...)". "If you move a lot you do not feel pain". "If we come to the exercise with pain, we return home healthy (...)".*

Avoid pain is a basic human need¹⁴ and some studies^{2,5,11} state that the regular practice of physical activities may decrease body pain in the elderly. A study¹⁰ have asked 11 elderly, participating of a walking group for the best age, about the benefits of walking for their health and, among several benefits mentioned, one was decreased body pain.

Physical activities decrease pain through the release of endorphins, which increase tolerance to pain⁴. So, it is paramount that elderly people engage in some type of physical activity and practice it regularly^{2,10,11}.

CONCLUSION

After the application of the focus group technique, it was observed that inactive longevous elderly women have reported that pain in LLLL and UULL, in lumbar and/or cervical spine and in the body in general would impair the regular practice of physical

activities, being this, then, considered a barrier for this practice by part of this elderly population.

We hope that our results may contribute for new contextualizations/reflections about pain as a determining factor for the regular practice of physical activities by part of the population aged 80 years or above. So, when planning interventionist strategies for longevous people, it is important to remain with actions fostering behavioral changes for the adoption of an active lifestyle, which may contribute for a better functional capacity, health conditions and independence of longevous elderly people. Difficulties found to carry out this research are related to few reference studies about pain and longevous people and the movement of the elderly in data collection days.

So, further studies are needed with programs involving longevous elderly people, especially qualitative studies, because they promote more interaction with participants bringing the meaning of the experiences lived by the elderly with regard to pain, which is so common in this age group.

REFERENCES

1. Instituto Brasileiro de Geografia e Estatística. Síntese de indicadores sociais – Uma análise das condições de vida da população brasileira. Rio de Janeiro: IBGE, 2010. Disponível em: <http://www.ibge.gov.br/cidadesat/topwindow.htm?1> acesso em: 26 de junho de 2011.
2. American College of Sports Medicine. Exercise and Physical Activity for Older Adults. Med Scien Sports Exerc. 2009;41(7):1510-30.
3. Dellarozza MSG, Pimenta CAM, Matsuo T. Prevalência e caracterização da dor crônica em idosos não institucionalizados. Cad Saúde Pública. 2007;23(5):1151-60.
4. Marras W. Occupational low back disorder causation and control. Ergonomics. 2000;43(7):880-902.
5. Souza DL, Vendruscolo R. Fatores determinantes para a continuidade da participação de idosos em programas de atividade física: a experiência dos participantes do projeto "Sem Fronteiras". Rev Bras Educ Fis Esporte. 2010;24(1):95-105.
6. Eiras SB, Silva WHA, Souza DL et al. Fatores de adesão e manutenção da prática de atividades físicas por parte de idosos. Rev Bras Cienc Esporte. 2010;31(2):75-89.
7. Santos FC, Souza PMR, Castro LAHM, et al. Pain amplification syndrome in the elderly: Case report an literature review. Rev Dor. 2012;13(2):175-82.
8. Celich KLS, Galon C. Dor crônica em idosos e a sua influencia nas atividades da vida diária e convivência social. Rev Bras Geriatr Gerontol. 2009;12(3):345-59.
9. Thomas E, Peat G, Harris L, et al. The prevalence of pain and pain interference in a general population of older adults: Cross sectional findings from the North Staffordshire Osteoarthritis Project (NorSTOP). Pain. 2004;110(1-2):361-8.
10. Krug RR, Marchesan M, Conceição JCR, et al. Contribuições da caminhada como atividade física de lazer para idosos. Licere. 2011;14(4):1-28.
11. Gioda FR, Mazo GZ, Silva AH, et al. Dor lombar: relação entre sexo e estrato etário em idosos praticantes de atividades físicas. Fit Perf J. 2010;9(1):46-51.
12. Bardin L. Análise de Conteúdo. Lisboa, Portugal; Edições 70, LDA; 2009.
13. Teixeira MJ, Teixeira WGJ, Santos FPS. Epidemiologia clínica da dor músculo-esquelética. Rev Med. 2001;80(Ed Esp pt 1):1-21.
14. Lacerda PF, Godoy LF, Cobiánchi MG, et al. Estudo da ocorrência de "dor crônica" em idosos de uma comunidade atendida pelo programa Saúde da Família em Goiânia. Rev Eletrônica de Enf. 2005;7(1):29-40.
15. Dellarozza MSG, Furuya RK, Cabrera MAS, et al. Caracterização da dor crônica e métodos analgésicos utilizados por idosos da comunidade. Rev Assoc Med Bras. 2008;54(1):36-41.