

The “Community Council of Capoeiras” promoting physical exercises for the older adults of Florianópolis – SC

“Conselho Comunitário de Capoeiras” promovendo exercício físico para idosos de Florianópolis-SC

Rodrigo de Rosso Krug¹
Moane Marchesan²
Estela Aita Monego³
Jamilé Centenaro Romitti³

ABSTRACT

This study aimed to describe the structure/development of actions to promote physical activity for older adults, offered by the Community Council of Capoeiras (CCC) in Florianópolis, State of Santa Catarina (Southern Brazil). These actions encompass physical activity (walking, resistance exercises outdoors, dancing and aerobics) and health actions (biochemistry tests, counselling and lectures). For the execution of the physical activity programs, CCC has two Physical Education teachers, whose role is to encourage, guide and monitor the physical activity practice. The participants are assessed annually, before and after participating in the programs. Investing in places like this Council is very important for today's society, as they can help to promote physical activity, stimulate healthy behaviors, and provide the older adults with physical and psychosocial well-being.

KEYWORDS

Older adults; Motor activity; Health; Promotion.

RESUMO

Este estudo objetivou descrever a estrutura/desenvolvimento das ações de promoção de atividade física para a saúde, destinadas aos idosos, oferecidas pelo Conselho Comunitário de Capoeiras (CCC), de Florianópolis, Santa Catarina (SC). Essas ações englobam atividade física (caminhada, exercícios contra resistência, dança e ginástica) e ações de saúde (exames clínicos, orientações e palestras). Para a execução dos programas de atividade física, o CCC conta com dois professores de Educação Física, que tem como função incentivar, orientar e monitorar a prática de atividade física. Os idosos são avaliados anualmente, antes e após a participação nos programas. O investimento em locais como este Conselho é muito importante para a sociedade atual, pois podem auxiliar na promoção da atividade física, estimulando comportamentos saudáveis, além de proporcionar bem estar físico e psicossocial de idosos.

PALAVRAS-CHAVE

Idosos; Atividade motora; Saúde; Promoção.

INTRODUCTION

The number of people aged 60 years and older has been increasing all over the world. This increase in life expectancy has occurred due to better health conditions, prophylaxis of diseases and the development of the pharmaceutical industry^{1,2}. In addition to this, the number of chronic diseases has grown, which implies higher costs to public health².

One of the ways of preventing and/or even treating the diseases that have emerged in this new epidemiological scenario is investing in strategies to promote physical activity, such as creating programs that aim to promote physical activity for health worldwide^{1,2,3,4}.

These actions are extremely relevant because they attempt to combat the population's sedentary lifestyle, which is worrisome because it has become increasingly prevalent and long-lasting, bringing deleterious effects to health in general⁵. Thus, the social responsibility for the older person is one of the roles of the federal, state and municipal governments. The construction of these people's citizenship is based on their participation, autonomy and integration into society⁶. Therefore, work targeted at older adults must aim at the improvement in and promotion of physical, mental and social health⁴⁻⁸.

In this sense, the *Conselho Comunitário de Capoeiras* (CCC - Community Council of Capoeiras) aims to guarantee the older adults' rights through the regular practice of physical exercises, and to increase their social inclusion in the community. CCC is a space for the production of significant knowledge related to older adults' health. It offers counselling provided by health professionals and develops activities of clinical assessment and orientation of physical exercises that encompass all the individuals, focusing on social integration.

This study aimed to describe the structure/development of actions to promote physical exercises for older individuals attending the CCC, with the purpose of stimulating other neighborhood councils and/or organizations to encourage and offer this kind of activity in their community.

KNOWING THE PLACE: A DESCRIPTION OF CCC

CCC is located in the continental region of the municipality of Florianópolis, State of Santa Catarina (Southern Brazil), more precisely in the Capoeiras neighborhood. This neighborhood is the second most populous in the municipality, with 19,323 inhabitants⁹.

This Council was founded in April 1984 and it is registered in the Municipal Government of Florianópolis and in the Government of the State of Santa Catarina. Little by little, the Council consolidated itself and in 2006 the first physical activity programs were introduced, through a partnership with the municipality's Social Work Department and with Serviço Social do Comércio (SESC - Social Service of Commerce) (programs Viver Ativo (Living Actively) and Caminhada Orientada (Guided Walk)).

Today, its outdoor premises include one walking track (length: 384 meters), two football fields, one synthetic grass court, one sand court, one bocce court and the Health Club.

In the indoor space, which is called Multiuse, there are the administrative room, two rooms for parties, one gym room, the cafeteria, one conviviality

space and the informatics room, where many projects are developed for children, adults and older individuals.

The Multiuse building was constructed by the municipal government, while the park was built through a partnership among the community, the municipal government and CCC's own resources. The Council's financial resources originate from the rent of the field, courts and rooms for parties and are converted into didactic materials, food and the maintenance of the Council's premises. Florianópolis' municipal government helps with the cost of the teachers' salaries.

Two Physical Education teachers work at CCC during 20 hours per week. They are accredited to the Regional Council of Physical Education and were hired after their curriculum was analyzed and they were interviewed by the Council's manager and president.

Physical exercise programs for older adults

The main objective of the physical exercise programs developed for the older adults registered in the CCC is to improve their quality of life and physical fitness, and to provide autonomy and social inclusion for community dwellers.

To achieve this, the Council has two different physical exercise programs. One is composed of dancing and aerobics and the other comprises walking and resistance exercises. The dancing and aerobics program has two groups with approximately 50 students in each and the walking and resistance exercises program has more than 100 registered students. One CCC teacher is responsible for the dancing and aerobics groups and the other is in charge of the walking and resistance exercises group.

To participate in the programs, the individual must be registered in CCC and await the call for enrollment. Subsequently, he/she must present the medical certificate with the authorization to practice physical exercises and a proof of address. Approximately 200 places are offered during the year. Since the beginning of the program, more than 1,500 older adults have practiced the available physical activities.

On the first day, the participants must answer the anamnesis and the Physical Activity Readiness Questionnaire (PAR-Q), which contain questions focusing on the identification of health problems¹⁰, as many of them present posture problems, articular lesions, pains and chronic diseases^{2,5}, factors that must be considered in the prescription/orientation of physical exercises¹. If the participant answers "yes" in one or more questions, he/she is oriented to see a doctor before beginning the physical activity program, but he/she is not excluded from it.

The frequency of the walking and resistance exercises group is twice a week and each class lasts approximately 60 minutes. First, there is stretching for upper limbs, trunk and lower limbs (approximately five minutes). Then, walking begins, in a moderate to high intensity (approximately 30 minutes), according to the Borg Rating of Perceived Exertion Scale, which is widely used in training evaluation due to its easy application and low cost¹¹.

Walking is practiced by many older persons because it is accessible, easy to execute and presents low risk of lesions. When it is practiced on a regular basis, following the training principles, walking can improve functional capac-

ity, reduce blood pressure, control weight and contribute to the individual's psychological and social status^{8,12}.

After walking, the participants practice resistance exercises in the machines of the Health Club (approximately 20 minutes). They perform between eight and ten exercises for the major muscle groups, with four series of 20 repetitions each and intervals of 30 seconds between the series and one minute between each exercise. The resistance exercises focus on the major muscle groups of the human body: one for the pectoral muscles, two for the erector spinae, dorsal and serratus, two for the quadriceps, one for the hip and one for the deltoid muscle. The number of series/repetitions varies according to each person's biological individuality and fitness. It is recommended that the movements' speed is low to moderate, with an interval between the series.

Many Brazilian cities have been installing, in parks and squares, resistance exercise machines (Health Clubs). These Clubs are stimulated by the Ministry of Health (Directive no. 719 of April 7, 2011), with the aim of contributing to the promotion of the population's health based on the implementation of centers with infrastructure and qualified personnel to provide counselling in corporal practices, leisure time physical activity, and healthy lifestyles¹³.

Resistance exercises contribute to increase or maintain moderate levels of strength and muscle power, improving the older person's functional capacity. This kind of exercise helps them to be independent in the performance of the activities of daily living (carrying loads, climbing up and down stairs, rising from a chair, lying on the bed, etc.). Furthermore, they improve individuals' health conditions and quality of life¹⁴.

At the end, stretching exercises are performed for all the muscle groups (approximately five minutes).

The dancing and aerobics classes also occur twice a week. In these classes, the participants perform stretching and warm-up exercises, dancing (approximately 30 minutes) and aerobics focusing on the major muscle groups (three series of 12-15 repetitions for approximately 30 minutes). At the end of the class, relaxation exercises are performed (approximately five minutes).

Activities like gymnastics are capable of promoting the functional fitness of older individuals, as shown by the study carried out by Ribeiro et al.¹⁵, conducted with 14 older women who attended the Health Care Centers of Florianópolis and practiced gymnastics three times a week during one hour.

Before and after the practice of physical exercises (in all the groups), the participants' blood pressure and heart rate are measured, for the teachers' control and the students' information.

The teachers are also instructed, by the CCC manager and president, to encourage the participants to practice physical activities on the other days of the week. The teachers explain the steps so that they are able to exercise without the instructor's support.

The older adults who do not intend to participate in the monitored groups can practice physical activities using the outdoor spaces, even if they are not registered in CCC.

Figure 1 describes the logical functioning model of the physical exercise program.

LOGICAL MODEL OF THE PHYSICAL EXERCISE PROGRAMS FOR OLDER ADULTS REGISTERED IN CCC – FLORIANÓPOLIS/SC

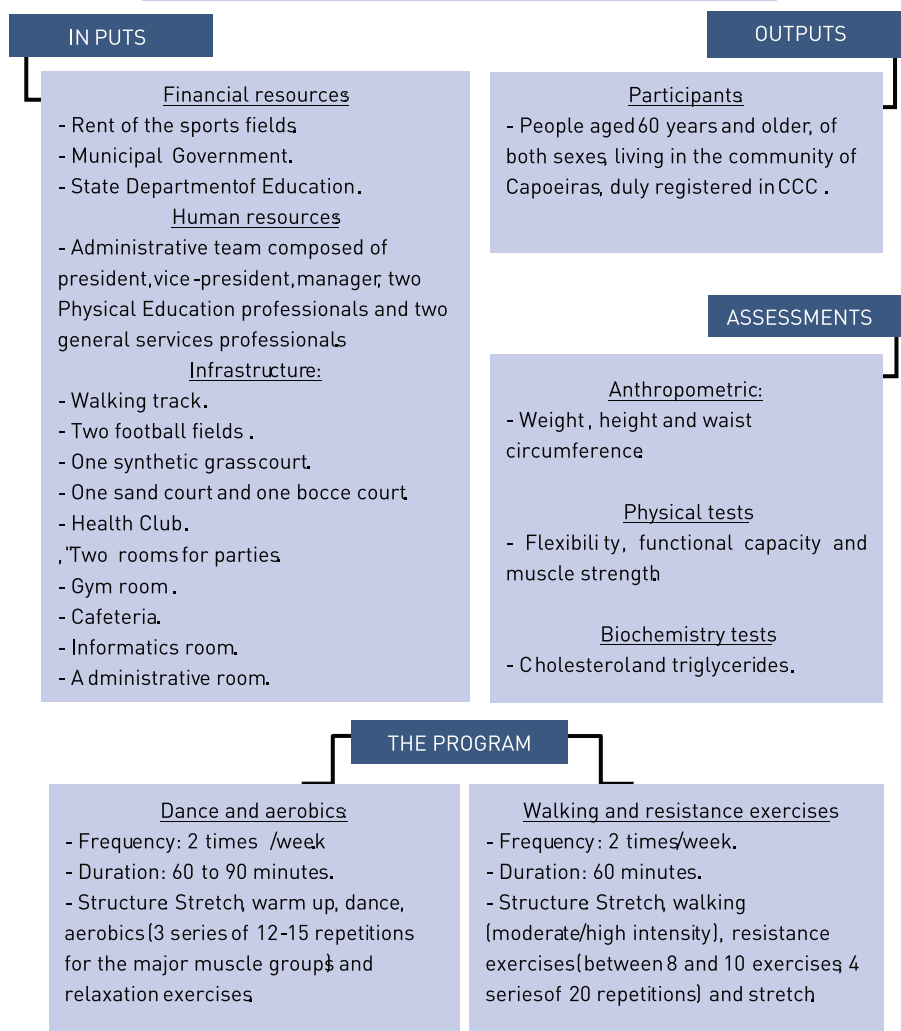


FIGURE 1 – Logical model of the physical exercises for older adults offered by CCC.

Assessments

Anthropometric measurements (weight, height and waist circumference) and physical tests (flexibility, functional capacity and muscular strength) are carried out in the beginning and in the end of each year. In addition, biochemistry tests are offered free (cholesterol and triglycerides), as well as nutritional counseling and lectures on health.

Physical tests of muscle strength (number of repetitions of getting up and sitting on a chair in 30 seconds without the help of the upper limbs) and flexibility (sit and reach for the lower limbs and flexion of the forearm for the upper limbs) are based on the protocol proposed by Rikli and Jones¹⁶. Functional capacity is measured by means of the Katz Index¹⁷ (Activities of Daily Living – ADL) and of Lawton’s Scale of Instrumental Activities of Daily Living (IADL)¹⁸.

The biochemistry tests are performed only when there is a partnership between CCC and other institutions. In the last assessment, the biochemistry tests were offered free by a research project of the Sports Center of *Uni-*

versidade Federal de Santa Catarina – UFSC. These tests were conducted by Master's and doctoral students from the Postgraduate Program in Physical Education, by means of portable devices that automatically read cholesterol and triglycerides levels.

The results of the physical and biochemistry tests are provided for the participants after the end of the individual collection. The reference values are shown and a visit to the doctor is suggested if the biochemical data present a risk behavior to their health.

Nutritionists invited by the CCC teachers provide nutritional counselling by means of lectures, distribution of folders and direct contact with the participants.

Biochemistry tests and physical assessments can aid the planning of physical exercise classes, as they aim to describe the participants' characteristics and needs^{1,7}. Furthermore, counseling on health, regular practice of physical activities and nutrition should always be emphasized by health professionals^{1,4,7}.

CONCLUSION

The Council has been contributing to the active and healthy aging of older adults from Capoeiras for more than 10 years, aiming at the health promotion and social inclusion of these people in the community.

In addition to offering a place for the practice of physical activities to the entire community of the neighborhood and region, CCC has physical education teachers and offers programs of physical and educational activities to the community-residing older adults.

Although the Council provides strategies that aim to improve the older adults' quality of life and health, it still needs to enhance the assessments that are performed, so that there is a better monitoring of the programs' target population.

Thus, we believe that the Council has been complying with its social and ethical commitment, respecting and guaranteeing the older person's rights and offering healthy environments that support the idea of this population's social integration.

We suggest that other entities, councils, universities, authorities and local executives should offer different activities targeted at the older adults' health, aiming to provide care for this population in Brazil, in order to improve their health and quality of life.

Authors' contribution

Rodrigo de Rosso Krug, Moane Marchesan, Estela Aita Monego and Jamile Centenaro Romitti contributed to the whole process that involved the study: its formulation, writing and the final approval of the manuscript.

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CORRESPONDING AUTHOR**RODRIGO DE ROSSO KRUG.**

Rua Douglas Seabra Levier 163,
apartamento 306, bloco F. CEP.: 88040-
410. Telefone 48 88522338. .
E-mail: rodkrug@bol.com.br

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