Received on: 03/25/2017

Revised on: 07/11/2017

Accepted on: 09/08/2017



DOI: 10.5020/18061230.2017.6316

PHYSICAL EDUCATOR'S PERFORMANCE IN THE UNIFIED HEALTH SYSTEM: A SYSTEMATIC REVIEW

Atuação do profissional de educação física no sistema único de saúde: revisão sistemática Actuación del profesional de educación física en el sistema único de salud: revisión sistemática

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ABSTRACT

Objective: To describe and analyze types of professional practice of physical educators in the Unified Health System (Sistema Único de Saúde – SUS). **Methods:** Systematic literature review carried out on Google Scholar and Scielo. Publications from 2005 to 2016 were selected using the following descriptors: Unified Health System, Exercise and Physical Education. **Results:** A total of 85 studies were found, but only 12 met the inclusion criteria and were included in this review. Few studies (n=4) address the professional practice of Physical Educators in the SUS, which is primarily targeted at older people and curative treatments. **Conclusion:** Considering that Physical Educators' participation in the SUS is restricted to only some types of professional practice, there is a need to increase in a considerable way its comprehensiveness and spectrum so that they can intervene in different population groups and significantly contribute to health promotion.

Descriptors: Public Health; Motor Activity; Primary Health Care; Health Services Administration; Health Management.

RESUMO

Objetivo: Descrever e analisar os tipos de atuação do profissional de Educação Física no Sistema Único de Saúde (SUS). Métodos: Trata-se de um estudo de revisão sistemática da literatura realizado nos bancos de dados Google Acadêmico e Scielo. Foram analisadas publicações entre os anos de 2005 e 2016 por meio dos descritores: Sistema Único de Saúde, Atividade Física e Educação Física. Resultados: Foram encontrados inicialmente 85 artigos, dos quais somente 12 se enquadraram nos critérios de inclusão e entraram nesta revisão. Poucos estudos (n=4) documentam a atuação do profissional de Educação Física no SUS, a qual está voltada prioritariamente à população idosa e realizada de forma curativa. Conclusão: Considerando que o profissional de Educação Física no SUS tem sua participação restrita a apenas alguns tipos de atuação, ela necessita aumentar em abrangência e espectro de forma considerável, de modo a intervir em diferentes grupos populacionais e contribuir significativamente com a promoção da saúde.

Descritores: Saúde Pública; Atividade Motora; Atenção Primária à Saúde; Administração de Serviços de Saúde; Gestão em Saúde.

RESUMEN

Objetivo: Describir y analizar los tipos de actuación del profesional de Educación Física del Sistema Único de Salud (SUS). Métodos: Se trata de un estudio de revisión sistemática de la literatura realizado en los bancos de datos del Google Académico y Scielo. Fueron analizadas las publicaciones entre 2005 y 2016 a través de los descriptores: Sistema Único de Salud, Actividad Física y Educación Física. Resultados: A principio se encontraron 85 artículos de los cuales solamente 12 se encuadraron en los criterios de inclusión y entraron para la revisión. Pocos estudios (n=4) documentan la actuación del profesional de la Educación Física en el SUS la cual está dirigida prioritariamente para la población mayor y realizada de manera curativa. Conclusión: Considerando que el profesional de Educación Física del SUS tiene su participación restricta a solamente algunos tipos de actuación, hay la necesidad del aumento de su utilización y espectro de manera considerable para intervenir en distintos grupos de población y contribuir de manera significativa para la promoción de la salud.

Descriptores: Salud Pública; Actividad Motora; Atención Primaria de Salud; Administración de los Servicios de Salud; Gestión en Salud.



INTRODUCTION

The National Health Promotion Policy ($Politica\ Nacional\ de\ Promoção\ da\ Saúde-PNPS$) approved the institutionalization of health promotion in Brazil's National Health System, which is called the Unified Health System ($Sistema\ Unico\ de\ Saúde-SUS$). This process presented concepts and the praxis of the daily life of SUS and the importance of the analysis of the health situation and its circumstances in Brazil for the election of priorities and targeting of sanitary actions. Through this epidemiological approach, priority thematic areas were chosen for the implementation of the PNPS. Of these priorities, the induction of physical activity/body practice and the importance of active living should be highlighted as protective factors in health⁽¹⁾.

Ordinance No. 2608, of December 28, 2005, presented by the PNPS, allocates resources to the federated states for investments in local projects and encourages the practice of physical activity to reduce sedentary behaviors, since they can cause cardiovascular and metabolic diseases⁽²⁾.

Over the last decades, there have been many changes in the health-disease process of the Brazilian society, and there is now an accelerated increase in morbidity and mortality rates caused by noncommunicable diseases⁽¹⁾. The industrialization process has led to significant changes in morbidity and mortality pattern worldwide. Because of that, there has been an increase in diseases caused by hypokinesia⁽²⁾. The reduction of regular physical activity is a primary and independent risk factor for many health problems in the population, particularly for cardiovascular and metabolic diseases⁽³⁾. Despite the evidence on the health benefits of regular physical activity and the implementation of Ordinance 2608, the literature has discussed and reported poor levels of physical activity in the population, which are far from the recommended by the SUS proposal⁽²⁾.

Regular physical activity has been associated with better health and quality of life. In recent years, the importance of maintaining an active lifestyle for the health of the general population has been highlighted^(3,4), and, despite the increasing number of initiatives, programs and campaigns for a more active lifestyle⁽²⁾ and the recognition of the importance of physical activity in health promotion and disease prevention, the prevalence of exposure to low levels of physical activity is high and seems to affect people of all ages^(3,4).

The inclusion of the Physical Educator in Primary Health Care Centers of SUS was established in 200 as physical activity and body practices were considered priorities by the Ministry of Health in order to reduce the risks posed by a sedentary lifestyle⁽¹⁾. Health promotion can be defined as the process of empowering the subjects and the community to act towards the improvement of their quality of life and health, including a greater participation of the subjects in the control of this process⁽¹⁾. It is considered one of the main elements of primary health care, in which the role of health professionals is based on promoting actions/interventions aimed at inducing habit changes and improvements in the living conditions of the population.

The objective of the present study was to describe and analyze types of professional practice of Physical Educators in the Unified Health System ($Sistema\ Unico\ de\ Saúde-SUS$).

METHODS

This is a systematic review of the literature carried out on Google Scholarand Scielo databases. The period of publication of the articles selected was from 2005 to 2016, since the inclusion of the Physical Educator in the SUS was established in 2005.

The descriptors used were: Unified Health System, Physical Activity and Physical Education. The review included: a) clinical, case and randomized studies, as well as review studies related to the professional performance of Physical Educators in SUS; b) studies published in Portuguese (both databases and language were defined based on the study object). Articles with incomplete or poor information and irrelevant methodological criteria were excluded.

Initially, articles were selected based on the criteria described above. After the selection, the titles, abstracts and full texts were analyzed. The studies were organized in charts with the purpose of systematization. Finally, a critical analysis of the content was performed considering the scientific merit of each study and potential similarities or conflicts between them. This process was carried out by two researchers independently.

RESULTS

The searches on Google Scholar and Scielo databases yielded 85 publications on the subject. However, only 12 studies were included in the present analysis after filtering the search by applying the inclusion criteria.

Figure 1 represents the flow chart of the selection of the studies. The findings found in the studies were divided into two thematic axes: 1- Benefits of physical activity aimed at improving the quality of life of users of the Unified Health System; 2 - Professional performance of Physical Educators in the SUS.

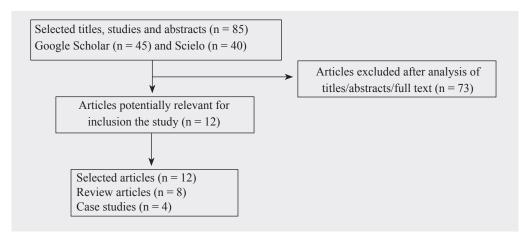


Figure 1 - Flow chart of the selection of the articles found.

DISCUSSION

Benefits of physical activity aimed at improving the quality of life of users of the Unified Health System

Although the studies describe Physical Education as an integral part of the multidisciplinary team in the health field, its practice is still not well consolidated and defined in the SUS⁽⁵⁾, particularly because the specific demand for the performance of Physical Educators is still not well defined and the health teams of the primary health care centers still ignore the potential performance of Physical Educators in disease prevention, health promotion, health care or rehabilitation. There are many uncertainties and much ignorance about the performance of these professionals. In addition, in some places where there is demand, Physical Education is restricted only to issues involving aesthetics, weight loss or "combating" chronic diseases, such as hypertension and diabetes mellitus⁽⁵⁾.

The aforementioned issues are relevant and need attention, but they are the only ones. The benefits of physical activity are beyond the limits imposed by the lack of knowledge about its potentiality. It is an intervention that aims to contribute to the quality of life of the patient, with a positive impact on family and community relations and on disease prevention and health rehabilitation⁽⁶⁾.

Physical activity is one of the main factors favoring a healthy lifestyle, and it can act in the prevention or rehabilitation of many diseases⁽⁷⁾. It is understood as any bodily movement produced by the skeletal muscles that results in energy expenditure above the expected levels of rest and involves a multifaceted behavior in which variables such as choice of physical activities (there are many exercise options, sports modalities, games, fights, dances and gymnastics), the order in which they will be performed, duration (time), frequency (number of times), intensity, oxygen consumption and heart rate should be considered. Physical activity can also be a means of energy expenditure (EE), regardless of the activity performed. Given the several control variables that must be monitored and taken into account during the appropriate prescription of physical activity, no one is better prepared to prescribe it than the Physical Educator⁽⁸⁾.

Through programmed individual or collective guidelines, people can increase their levels of physical activity and obtain several physical, mental and social benefits, such as increased resistance, muscular strength, cardiorespiratory capacity, joint flexibility, balance, coordination, weight loss and psychological well-being, in addition to preventing chronic degenerative diseases⁽⁹⁾.

Professional performance of Physical Educators in the SUS.

Only four scientific articles effectively relate physical education, physical activity, SUS and possible interventions carried out with users. Based on the scientific articles selected in the present review, there is a lack of papers on the performance of Physical Educators and their interventions in the SUS. The objectives of each paper, the interventions and the benefits to the population involved will be presented below.

One study⁽⁶⁾ aimed to broaden the discussion about the importance of physical activity in the third age through Physical Education and health promotion. The project aimed to ensure a better quality of life to the participants. Physical activity was offered in the Family Health Program (*Programa Saúde da Família – PSF*) through the Action and Health project in Guanambi, Bahia. The activities were performed twice a week and twice a day, with each session lasting two hours. Physical activities included recreation, sports initiation, games, massages, stretching, group activities, and specific aerobic exercises such as walking and low impact gymnastics. There were also some strength activities, which consisted of circuit exercises with thera

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bands, dumbbells (pet bottles) and sticks. The project also involved physical assessment and body composition analysis. It is known that guided physical activities can contribute to an improvement in the quality of life of practitioners⁽⁷⁻⁹⁾. The results of the project confirm such findings, since there was improvement of this aspect and health in the population served. There were also changes in the participants' lifestyle, social awareness and self-esteem and in the fight against stress. In addition, the participants' mobility improved.

Another study⁽⁹⁾ conducted with older people (n=542) in the municipality of Feira de Santana, Bahia, analyzed the frequency of and the factors associated with insufficient leisure time physical activity among older people living in urban areas of a municipality in Northeastern Brazil. The instrument used to collect data made it possible to obtain sociodemographic information (gender, age, marital status, education and income), information on diseases (obesity, hypertension, diabetes, heart diseases, among others) and information on participation in and time dedicated to leisure activity, relating it to the practice of physical activity⁽⁹⁾. It is known that hypokinesia contributes to the development of chronic degenerative diseases, which are the biggest cause of death in the world. Thus, it is necessary for health professionals to focus their attention on the prevention of these diseases^(1,7) and to guide the population effectively, especially older people.

It is also important to emphasize that health promotion is one of the strategies for the organization of the management of the SUS. Regular physical activity is effective and has a low cost. These conditions favor its use in health promotion and control of determinants of health conditions in specific population groups⁽¹⁾.

A study⁽¹⁰⁾ of 29 postmenopausal women aged 48 to 79 years served by the SUS in the Family Health Care Centers (*Unidade da Saúde da Família – USF*) of the municipalities of Marília and Echaporã, São Paulo, submitted to a 6-month physical activity program two to five times a week for 30 to 50 minutes analyzed the association between habitual physical activity and overall cognition in women. Aging is understood as a biological process that occurs in humans that cannot yet be reversed and that is related to the individual's genetics, chronic degenerative diseases and lifestyle^(4,10-12).

Aging is also related to the cognitive process, which is understood as the set of neurological factors and functions responsible for an individual's ability to make decisions and act wisely in daily life. It is common to notice cognitive losses in older people, including: forgetfulness of recent events, decreased attention and agility, difficulties in calculation, loss of reasoning ability, and slowing down of motor activities⁽¹⁰⁾. It is estimated that 60% of menopausal women present with a decline in memory due to physiological and age-related changes⁽¹³⁾, with physical inactivity being a significant modifiable risk factor for cerebrovascular diseases and cognitive function in older people⁽¹⁰⁾. Therefore, guided regular physical activity and systematized exercises can stimulate the cognitive function of practitioners⁽⁴⁾. Therefore, such project offered to the participants stretching, walking and localized gymnastics activities. The results of the study, in addition to the findings of the literature, suggest that physical exercise programs carried out in USF can effectively reduce the decline in the cognitive function of postmenopausal women⁽¹⁰⁾.

Another study⁽⁵⁾ aimed to present the duties and performance of Physical Educators in multidisciplinary health residency programs and the difficulties experienced. The project was carried out with undergraduate students of the Federal University of Rio Grande do Sul (*Universidade Federal do Rio Grande do Sul – UFRGS*) enrolled in the Integrated Multidisciplinary Hospital Care Residency Program, with emphasis on Adult Cardiometabolic Health Care (*Residência Integrada Multiprofissional Hospitalar, com ênfase na Atenção à Saúde Cardiometabólica do Adulto – RIMHAS*) and in the Multidisciplinary Family Health Residency Program (*Residência Multiprofissional em Saúde da Família – RMSF*), which are supervised by the Multidisciplinary Residency Commission (*Comissão das Residências Multiprofissionais – COREMU*), since the program presents competence and actions within the SUS⁽⁵⁾.

The RIMHAS develops practical activities in different fields of the UFRGS Teaching Hospital, where the Physical Education students are responsible for developing the service for the care of cardiometabolic patients and engage in theoretical activities with the focus on the preparation of the emergency, medical and surgical services. In the second program, which takes place at the Integrated Diabetes Center and Physical Rehabilitation Center, the students carry out laboratory consultations that include physical assessment, therapy and health education with the purpose of collecting information from patients⁽⁵⁾. The program was developed based on the need to insert students in the SUS and prepare them for the practice through traditional lessons and discussion groups⁽⁵⁾.

By analyzing the program, one can say that the types of activities performed were divided into two years: the first year consists of an "immersion" in a Family Health Strategy (*Estratégia Saúde da Família – ESF*) team. In the second year, the resident continues to work in the Family Health Care Center (*Unidade Básica de Saúde da Família – UBSF*) and in other services, such as the Psychosocial Care Center (*Centro de Atendimento Psicossocial – CAPS*), the Family Health Support Centers (*Núcleos de Apoio à Saúde da Família – NASF*), and the Health Management and Surveillance⁽⁵⁾. The study demonstrated that the experience of a joint work between academic training of Physical Educators and the SUS contribute to the dialogue between the individuals working in multidisciplinary residency programs⁽⁵⁾. The program presented herein is in line with the PNPS in the SUS, as it is concerned with the health situation of individuals and extends the concept of health to health professionals, emphasizing the induction of physical activities/body practices. However, it is necessary to improve the training of Physical Educators in this context⁽¹⁾.

The information from the four case studies presented in this section are summarized in Chart I.

Of the four case studies selected, three had been carried out with older people or people over 48 years old. All the studies were aimed at helping to improve some existing pathological condition. The last study discussed was the only one concerned with the training and preparation of Physical Educators and aimed at complementing the training of professionals to work effectively in the SUS. Importantly, the present review did not find SUS-based programs aimed at health promotion in children; therefore, it is also necessary that health professionals work towards the prevention of diseases and create healthy habits in this period of life⁽¹⁴⁾.

Physical Education teachers/researchers have been increasingly seeking to acquire knowledge about public health⁽¹⁵⁾ and trying to present other types of Physical Education performances and programs (Chart I).

Chart I - Professional performance of Physical Educators in the Unified Health System (Sistema Único de Saúde – SUS)

Author/year	Objective	Method	Main results/findings
Corrêa et al. 2014 ⁽⁵⁾	To present the duties and the performance of Physical Educators in multidisciplinary residency programs and the difficulties experienced.	Synthesis of the data on Physical Educators engaged in graduate studies.	Multidisciplinary residency programs allow the Physical Educator to provide both primary and secondary health care.
Rodrigues, Costa and Barros, 2010 ⁽⁶⁾	To broaden the discussion about the importance of physical activity in the third age through Physical Education and health promotion, emphasizing the possible contributions.	Two hours of physical activity (2 times/week) carried out with older people in the Family Health Program (<i>Programa Saúde da Família – PSF</i>). The activities included recreation, games, massages, stretching, group activities, walking, gymnastics, circuit exercises with thera band, dumbbells and sticks. The project also involved physical assessment and body composition analysis.	Improvement of health conditions, changes in lifestyle, greater social awareness, increased self-esteem, lower vulnerability to diseases, stress relief and better mobility, culminating in the non-drug therapy of chronic diseases in the older population.
Rocha et al. 2013 ⁽⁹⁾	To analyze the factors associated with insufficient leisure time physical activity in older people.	562 older people answered a questionnaire addressing s o c i o d e m o g r a p h i c information, self-reported diseases and participation in leisure physical activities (self-perception of the type and intensity of the activity).	Only 18.3% of the participants were physically active in leisure time. There was a high frequency of physically inactive individuals in leisure time, especially low-income people and older people. There is a need to implement public health policies in the SUS to provide spaces for active leisure practice by older people.
Ramos and Chagas, 2015 ⁽¹⁰⁾	To analyze the association between habitual physical activity and overall cognition in postmenopausal women.	29 women participating in exercise programs in Family Health Care Centers answered the short form of the International Physical Activity Questionnaire (IPAQ) and the Mini Mental State Examination (MMSE).	A higher volume of moderate-intensity or vigorous-intensity physical activity can contribute to a better cognition in postmenopausal women.

Freitas, Carvalho and Mendes, 2013 ⁽¹⁴⁾	To relate the theoretical/methodological concept of the Expanded Clinic to aspects of professional training in Physical Education and the health work.	Reflexive	Professional training lacks discussion on the intervention and is predominantly based on a biological perspective. The Expanded Clinic can be an alternative, since it allows communication with other professions and guided actions through horizontal relationships, bringing the professional, the health service and the SUS users together.
Martinez and Bacheladenski, 2009 ⁽¹⁵⁾	To reflect on the insertion of Physical Education teachers in the Family Health Support Centers (Núcelos de Apoio à Saúde da Família – NASF) and in the Multidisciplinary Family Health Residency Program (Programa de Residência Multiproffisional em Saúde da Família – PRMSF)	Reflexive	The Multidisciplinary Family Health Residency Program can be an alternative for political-educational training and criticism of Physical Education about the work in the SUS, since the current training prioritizes the action focused on individual work and private space. Further the work in the NASF requires the understanding of the health-disease-care process of communities.
Mendes and Carvalho, 2015 ⁽¹⁶⁾	To plan and try body practices carried out with users and supported by health professionals and the service.	Qualitative	Body practices supported by the health professionals contributed to broadening users' view of body work aimed at fostering autonomy and care.
Guarda et al. 2014 ⁽¹⁷⁾	To analyze the potential contributions of Physical Educators to the SUS based on political aspects and legislation.	Analysis of the Brazilian health legislation (Federal Constitution): laws, ministerial ordinances and resolutions of the national health and education councils.	Since the creation of SUS, there has been a gradual incorporation of Physical Educators. These professionals can contribute to the elaboration of actions to encourage physical activities, assist in health promotion and disease prevention and control strategies. In addition, they can be part of multidisciplinary teams and contribute to tackling the sedentary lifestyle and improving the living conditions of society.
Mendes et al. 2014 ⁽¹⁸⁾	To identify and analyze the activities carried out by Physical Educators in public health services.	Focus group of eleven professionals.	The professionals enter the health services with insufficient knowledge of their job, since they do not use the knowledge acquired during undergraduate studies at work. The professionals believe that work experience or graduate studies are necessary for an adequate performance in the SUS. Alternative teaching models, instead of the hegemonic biological model, should be proposed and should include critical reflection on reality and new definitions of health, society and individual.

Fraga, Carvalho and Gomes, 2012 ⁽¹⁹⁾	To monitor and analyze the processes of composition and articulation between teaching, service and community with a view to forming a network of knowledge and practices that respond to the challenges of health education committed to the defense and consolidation of the Unified Health System.	Qualitative	There is a poor inclusion of Physical Education students and professionals in the SUS compared with other health professionals. Researchers and study and research groups have shown interest in participating in public health debates in order to improve the inclusion of public health and intervention training based on the SUS principles in these spaces.
Santos et al. 2011 ⁽²⁰⁾	To emphasize the importance of the Education through Work in Health Settings Program (Programa de Educação pelo Trabalho para a Saúde — PET-Saúde) as complementary training of Physical Educators working in the SUS.	Field journal	The curricula of most Physical Education undergraduate courses are poor with regard to Public Health and Collective Health. <i>PET-Saúde</i> is a way of stimulating and expanding the training for work in the SUS, favoring interdisciplinarity and comprehensive care.
Becker, Gonçalves and Reis, (2016) ⁽²¹⁾	To synthesize the available evidence on physical activity promotion programs in the SUS.	Literature review	Community programs and counseling are the main actions to promote physical activity in the SUS, especially in the adult population (≥ 18 years old).

Two studies^(14,16) presented the "Expanded Clinic" program, which is a form of intervention focused on the concrete subject and his/her concrete existence, acknowledging that disease is part of the existence. The program, which effectively proposes the aspects of disease care and fosters health promotion can be developed in health clinics (private), in primary health care centers, and in the SUS. A study⁽¹⁷⁾ presents three programs: the Family Health Support Center (*Núcleo de Apoio à Saúde da Família – NASF*), which is composed of a team of professionals from different fields of knowledge who work together with the professionals of the Family Health teams^(14,15,17,18); the Health Gym Program (*Programa Academia da Saúde – PAS*), which consists of centers that provide patients with health care focused on health promotion based on the aspects of care. The activities are carried out in physical spaces with adequate equipment and are supervised by qualified professionals who seek to promote health and healthy lifestyles in the population⁽¹⁷⁾; and, finally, the Family Health Strategy (*Estratégia Saúde da Família – ESF*) program, which aims to develop guidelines for primary health care to improve the resolution of the patient's condition and the impact on the health status of the population^(17,20).

Another study⁽¹⁸⁾ presented the Psychosocial Care Centers (*Centros de Atenção Psicossocial – CAPS*), a multidisciplinary program (composed of physicians, nurses, psychologists, social workers, occupational therapists, Physical Educators, among others) that provides daily care to people with mental disorders. The Health Gym program and Multidisciplinary Health Residency programs were also presented. Such programs also provide mental health care, primary health care and older people's health care. The Health Gym Program aims to promote the health of its participants through care management and physical activity. It is important to point out that the activities are proposed by Physical Educators⁽¹⁸⁾.

A fourth study⁽²⁰⁾ presented three other programs/concepts: a) the Education through Work in Health Settings Program ($Programa\ de\ Educação\ pelo\ Trabalho\ para\ a\ Saúde\ - PET$), a federal government initiative that seeks to bring universities (students and professors), health services (health professionals) and users together in order to problematize health education and improve the quality of care and health care; b) Primary Health Care ($Atenção\ Primária\ à\ Saúde\ - APS$), which aims to reorganize health care through health promotion and disease prevention actions in general within the SUS; and c) the Family

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Health Program (*Programa Saúde da Família – PSF*), which is now called the Family Health Strategy (*Estratégia Saúde da Família – ESF*).

With regard to the types of performance discussed in the articles, some studies^(16-18,20,22) presented two types of Physical Educators' performance: the "traditional class", which is focused on practical activities, and the "discussion groups", which recognize collective spaces as places for critical reflection, production of subjectivity and formation of subjects. Finally, the focus group technique, presented by one study⁽¹⁸⁾, is targeted at a small number of subjects, which contributes to faster and more focused discussions. This technique aims to identify and raise awareness of a theme through the human tendency to form opinions and change attitudes when interacting with other people. Finally, a study suggests that community programs and counseling programs are the main actions aimed at promoting physical activity in the adult population within the SUS⁽²¹⁾.

The health professionals enrolled in the aforementioned programs generally work in primary health care centers, squares, parks, schools, universities, and other places. There are different professionals in these programs, such as nurses, Physical Educators, physiotherapists, physicians, nutritionists, psychologists and occupational therapists. The programs are generally maintained by the federal, state, or municipal government and, in some cases, are developed through a university extension project. The programs maintained by public organizations usually recruit professionals through civil service entrance examinations, temporary recruitment services or political indication.

There are several other types of actions that could be developed by Physical Educators in the SUS in addition to those already mentioned, such as: territorialization; creation and distribution of materials with dates, times and description of the activities carried out in the community focused on health and quality of life; home visits; discussion of community problems through participation in local and municipal health council meetings; modification of environmental aspects to favor physical activity, seeking better safety and lighting conditions, expansion of green fields, and resolution of the aesthetic problems of the region, such as the presence of garbage in public spaces and the quality of sidewalks; recycling of materials for practical activities; promotion of events in schools, squares, parks and health facilities; and efforts to encourage the community to participate in events organized by other institutions. All these actions should be developed by all Physical Educators who work in the context of the SUS, since these are primary actions that could help improve the service provided to the users^(22,23).

The Physical Educator, along with the other members of the health teams, should get to know the place where they will work. Thus, local needs must be taken into account through the characterization of the epidemiological situation. In this context, territorialization⁽²²⁾ can be understood as a tool that assists in the evaluation of the Health Professional, since it aims at understanding the current health-disease process of the local population, pointing out the biological, psychological and social variables that demonstrate the need for actions that can help professionals understand and intervene in the problems that are affecting the territory⁽²²⁾.

Through territorialization, Physical Educators can make home visits, schedule meetings with the community and discuss the current problems of individuals individually or collectively. These meetings allow a better understanding of the health and disease of the population and relevant discussions, such as the need to raise the population's awareness of the importance of preserving the environment (parks, forests and squares) and the relevance of these spaces in the practice of physical activity and sports activities⁽²¹⁾. Finally, through territorialization, the Physical Educator will have access to essential elements that need to be discussed with other professionals and the local community.

There is a study⁽²³⁾ that classifies health services into two main groups: 1) the direct provision of health care to people (in clinics, health centers and hospitals); and 2) actions carried out in the environment in order to control factors that have harmful effects on health. Seeking better quality of life is the challenge of people who abandon their sedentary lifestyle. Thus, carrying out practical activities in the nature or outdoors, in places such as parks and squares, can contribute to the motivation of these new practitioners of physical activity. To do so, the place where the activity will be carried should present good aesthetics and be suitable for use by the population. This entire organization can be developed by both Physical Educators and the community, generating a work of preservation and awareness^(22,23).

Another study⁽²⁴⁾ presents the benefits of preservation and individuals' awareness when working in the environment. In a class held in a park (hiking), the authors observed motivation, cooperation, joy and socialization among students and teachers. Thus, it is understood that the practice of physical activity outdoors provides the community with an opportunity to take care of health (main objective); additionally, it promotes an educational work that provides a moment with nature and increases teachers/students awareness of issues such as improvements in the safety of the place, preservation of the space, and cleaning and quality of sidewalks and benches. Through these attitudes, students and teachers seek improvements of health conditions in conjunction with natural aspects^(23,24). The Physical Educator can also develop this kind of work in schools, a fundamental place to raise awareness.

There are several issues in the literature that can be addressed by the Physical Educator. For instance, the articulation between individuals and the environment addressing themes such as environment, temperature and Physical Education classes;

Physical Education, leisure and environment; Health and environment; Adventure sports and environment. In addition, some authors^(25,26) argue that it is extremely important to bring Physical Education, environment and school together, since they are themes that are singly gaining significant importance in the academic society for being constantly updated and transformed. In schools, Physical Educators can work with recyclable materials and show the students and the community the importance of recycling and or transforming materials that are often irregularly disposed in the environment during physical activity into something useful⁽²⁷⁾. They can show that it is possible to give a new destination to the materials through their adaptation as didactic resources.

The SUS was created and put into practice in the late 1980s, and its main principles are universality, comprehensiveness and equity^(14,19). Some policies have enabled Physical Educators to work in primary health care services, such as the National Health Promotion Policy (*Política Nacional de Promoção da Saúde – PNPS*), the National Policy on Integrative and Complementary Practices (*Política Nacional de Práticas Integrativas e Complementares – PNPIC*), the Family Health Support Centers (*Núcleos de Apoio de Saúde à Família – NASF*), the Health Gym Program⁽¹⁴⁾, and the Multidisciplinary Health Residency Programs (Mental Health, Primary Care and Older People's Health)⁽¹⁸⁾. Despite the increasing number of opportunities for Physical Educators in the SUS, their participation is still in its initial phase⁽¹⁷⁾, and factors such as the absence of public health subjects in undergraduate Physical Education courses can contribute to the maintenance of this phase⁽²⁸⁾.

In addition to increasing the participation of Physical Educators in the SUS, it is necessary to create more effective strategies to change the sedentary behavior of the population in this context of professional practice⁽¹⁷⁾. Strategies should be developed to improve interventions based on differentiated methods, which should focus on the process and the subjects rather than on what is traditionally proposed, i.e., the focus on "disease". In addition, values such as affection, acceptance and other subjective contents should constitute the basis of professional practice⁽¹⁴⁾. However, few studies have tried these different methodological approaches to propose Physical Education activities in the SUS. Importantly, strategies should also be developed in the school environment to encourage changes and, possibly, the maintenance of a more physically active future so as to prevent health problems⁽¹⁷⁾, which is different from what has been documented and performed in the SUS. In this context, interventions in schools by Physical Educators of the SUS can potentially result in public health benefits.

The records and papers on the performance of Physical Educators in the SUS show that their performance is primarily aimed at remedying the effects of a sedentary life. Most interventions are targeted at older people and consist of curative interventions. The potential of physical activity as a preventive factor for non-communicable diseases and as a promoter of higher quality of life should be better explored. Studies carried out with children have not been found. Importantly, disease prevention and health promotion activities should be carried out in this age group. Finally, despite the increasing performance of Physical Educators in the context of the SUS, these professionals will still have to work hard to reinvent their strategies and integrate new knowledge to their technical/biological knowledge by approaching the Human Sciences and Public Health and making physical activity practice meaningful for the Brazilian communities.

CONCLUSION

Through this systematic review, it is possible to conclude that the participation of Physical Educators in the SUS is limited to only some types of performance. In this regard, the scope and spectrum of such participation needs to improve considerably so that they can intervene in different population groups and contribute significantly to the promotion of health.

REFERENCES

- 1. Malta DC, Castro AM, Gosch CS, Cruz DKA, Bressan A, Nogueira JD, et al. A Política Nacional de Promoção da Saúde e a agenda da atividade física no contexto do SUS. Epidemiol Serv Saúde 2009;18(1):79-86.
- 2. Hallal PC, Tenório MCM, Tassitano RM, Reis SR, Carvalho YM, Cruz KA, et al. Avaliação do programa de promoção da atividade física Academia da Cidade de Recife, Pernambuco, Brasil: percepções de usuários e não-usuários. Cad Saúde Pública. 2010;26(1):70-8.
- 3. Mendonça BCA, Toscano JJO, Oliveira ACC. Do diagnóstico à ação: experiências em promoção da atividade física programa Academia da Cidade Aracaju: promovendo saúde por meio da atividade física. Rev Bras Ativ Fís Saúde. 2009;14(3):211-6.
- 4. Groppo HS, Nascimento CMC, Stella F, Gobbi S, Oliani MM. Efeitos de um programa de atividade física sobre os sintomas depressivos e a qualidade de vida de idosos com demência de Alzheimer. Rev Bras Educ Fís Esporte. 2012;26(4):543-51.
- 5. Corrêa LQ, Valério MP, Teixeira AO, Guerreiro LF, Silveira DF, Machado PT, et al. A atuação da educação física nas residências multiprofissionais em saúde. Rev Bras Promoção Saúde. 2014;27(4):428-33.

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- 6. Rodrigues ZM, Costa DS, Barros JB. Educação Física e Promoção da Saúde: Contribuição para o SUS. In: IV Congresso Centro-Oeste de Ciências do Esporte e I Congresso Distrital de Ciências do Esporte; 2010 Set 22-25; Brasília; 2015.
- Guedes DP, Almeida FN, Tolentino JM Neto, Maia MFM, Tolentino TM. Baixo peso corporal/magreza, sobrepeso e obesidade de crianças e adolescentes de uma região brasileira de baixo desenvolvimento econômico. Rev Paul Pediatr. 2013;31(4):437-43.
- 8. Cafruni CB, Valadão RCD, Mello ED. Como Avaliar a Atividade Física? Rev Bras Ciênc Saúde. 2012;10(33):61-71.
- 9. Rocha SV, Almeida MMG, Araújo TM, Santos LB, Rodrigues WKM. Fatores associados à atividade física insuficiente no lazer entre idosos. Rev Bras Med Esporte. 2013;19(3):191-5.
- 10. Ramos LHN, Chagas EFB. Associação entre atividade física habitual e cognição global em mulheres pós-menopausa usuárias do SUS. Rev Bras Ciênc Mov. 2015;23(2):14-21.
- 11. Barros KD, Oliveira AAB, Oliveira A Filho. A influência do treinamento com pesos em mulheres acima de 50 anos. Acta Sci Health Sci. 2011;33(1):43-50.
- 12. Ueno DT, Gobbi S, Teixeira CVL, Sebastião E, Prado AKG, Costa JRL, et al. Efeitos de três modalidades de atividade física na capacidade funcional de idosos. Rev Bras Educ Fís Esporte. 2012;26(2):273-81.
- 13. Rossato LC, Contreira, Corazza ST. Análise do tempo de reação e do estado cognitivo em idosas praticantes de atividades físicas. Fisioter Pesqui. 2011;18(1):54-9.
- 14. Freitas FF, Carvalho YM, Mendes VM. Educação física e saúde: aproximações com a clínica ampliada. Rev Bras Ciênc Esporte. 2013;35(3):639-56.
- 15. Martinez JFN, Bacheladenski M. Educação física e saúde coletiva: possibilidades de inserção e formação profissional no/para o SUS. In: XVI Congresso Brasileiro de Ciências do Esporte e III Congresso Internacional de Ciências do Esporte; 2009 Set 20-25; Salvador; 2015.
- 16. Mendes VM, Carvalho YM. Sem começo e sem fim... com as práticas corporais e a Clínica Ampliada. Interface Comun Saúde Educ. 2015;19(54):603-13.
- 17. Guarda FB, Silva RN, Araújo JL Júnior, Santana PR. Incorporação e contribuições dos profissionais de educação física ao Sistema Único de Saúde do Brasil. Tem Act Saúde Colet. 2014;8(3):185-96.
- 18. Mendes MFM, Moraes M, Andrade SC, Rocha CMF. Educação Física e a rede de saúde pública: dilemas, possibilidades e desafios entre a formação e a intervenção. Motrivivência. 2014;26(43):133-49.
- 19. Fraga AB, Carvalho YM, Gomes IM. Políticas de formação em educação física e saúde coletiva. Trab Educ Saúde. 2012;10(3):367-86.
- 20. Santos ALB, Maia JP Neto, Souza FCV, Oliveira BN, Rui EM, Sá MEG. Educação Física e o PET-Saúde: Uma Estratégia Complementar na Formação para o SUS. Sanare. 2011;10(2):75-8.
- 21. Becker LA, Gonçalves PB, Reis RS. Programas da promoção da atividade física no Sistema Único de Saúde brasileiro: revisão sistemática. Rev Bras Ativ Fís Saúde. 2016;21(2):110-22.
- 22. Mafra MRP, Chaves MMN. O Processo de territorialização e atenção à saúde no Programa Saúde da Família. Fam Saúde Desenv. 2004;6(2):127-33.
- 23. Toscano JJO. Academia de ginástica: um serviço de saúde latente. Rev Bras Ciênc Mov. 2001;9(1):40-2.
- 24. Bento LCM, Ribeiro RD. Educação física e meio ambiente: nas trilhas do ecoturismo-um estudo de caso do município de Indianópolis, MG. Em Extensão. 2010;9(1):183-94.
- 25. Rodrigues LH, Darido SC. Educação física escolar e meio ambiente: reflexões e aplicações pedagógicas. Lect Educ Fís Deportes. 2006;11(100):1-1.
- 26. Oliveira WF, Alvim MPB. Educação física e educação ambiental: como trabalhar no âmbito escolar? Movimentum. 2009;4(2):1-17.
- 27. Rodrigue BSB, Santos TM, Silva GG, Gonçalves JB, Souza RP, Maciel RG. A importância da utilização de materiais recicláveis como material didático nas oficinas do jogo no ensino fundamental. In: 8º Fórum de Ensino, Pesquisa, Extensão e Gestão; 2014 Set 24-27; Montes Claros; 2015.

28. Anjos TC, Duarte ACGO. A educação física e a estratégia de saúde da família: formação e atuação profissional. Physis (Rio de J). 2009;19(4):1127-44.

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