

Original Article

Performance of Physical Education Professionals from the Academia da Cidade Program in Primary Health Care in Recife

Atuação dos profissionais de Educação Física do Programa Academia da Cidade na Atenção Básica à Saúde do Recife

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Abstract

This cross-sectional, descriptive, quantitative study aimed to analyze the performance of physical education professionals from the Academia da Cidade Program (ACP) in Primary Health Care (PHC) in Recife, Brazil. The study included 104 professionals who worked in ACP centers in the city of Recife. Data were collected using a self-administered questionnaire. We also assessed variables related to participants' sociodemographic and professional profile, their performance in the ACP, out-of-center activities, and cooperation with PHC. Data were stored and organized using the EpiData software version 3.1 and then analyzed using SPSS version 10.0. Most professionals were female (61.5%), aged 30 to 39 years old (76.9%) and had not served any public health internships during their initial training (71.2%). As for their performance in PHC, most professionals carried out out-of-center activities in the community (77.3%), but these activities were not implemented in conjunction with the Family Health Units (68.3%) nor with the Family Health Support Centers (75.7%). Of those who implemented joint activities, 81.8% of participants built dialogue with community health agents. Furthermore, 57.7% stated that users' referral to Family Health Units occurred in an informal manner. We conclude that the performance of physical education professionals of the ACP in PHC in Recife has been made effective through the implementation of out-of-center activities; however, these activities are not integrated with existing PHC strategies.

Keywords

Physical Activity; Professional Practice; Primary Health Care.

Resumo

O objetivo do presente estudo foi analisar a atuação dos profissionais de Educação Física do Programa Academia da Cidade (PAC) na Atenção Básica à Saúde (ABS) do Recife. Trata-se de estudo transversal, descritivo e de abordagem quantitativa, que foi realizado com 104 profissionais que atuavam nos polos do PAC no Recife. Para a coleta de dados, utilizou-se um questionário autoaplicado e foram mensuradas variáveis relacionadas ao perfil sociodemográfico e profissional, à atuação no PAC, às atividades extrapolado e à articulação com a ABS. A tabulação dos dados foi efetuada no programa EpiData v. 3.1 e para análise dos dados foi utilizado o software SPSS v. 10.0. A maioria dos profissionais era do sexo feminino (61,5%), na faixa etária de 30 a 39 anos (76,9%) e não vivenciou estágio em saúde pública durante a formação inicial (71,2%). Quanto à atuação na ABS, a maioria dos profissionais desenvolvia ação extrapolado na comunidade (77,3%), mas não desenvolvia ação conjunta com as unidades de saúde da família (68,3%) e nem com os núcleos de apoio à saúde da família (75,7%). Dentre os que realizavam, 81,8% afirmaram estabelecer diálogo com o agente comunitário de saúde. Em relação ao encaminhamento dos usuários para as unidades de saúde da família, 57,7% informaram que realizava de maneira informal. Conclui-se que a atuação dos profissionais de Educação Física do PAC na ABS do Recife foi efetivada pelo desenvolvimento das atividades extrapolado, porém, realizada ainda de forma desarticulada das principais estratégias da ABS.

Palavras-chave

Atividade física; Prática profissional; Atenção primária à saúde.

Introduction

The Academia da Cidade Program (ACP) was first introduced in Recife in 2002 and is regulated by Municipal Decree Number 19.808 (of April 3rd, 2003), Municipal Decree Number 22.345 (October 18th, 2006),

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and Ordinance Number 122 (of September 28th, 2006)¹. The ACP is a health promotion strategy designed to promote leisure-time physical activity and the adoption of healthy lifestyle behaviors among the citizens of Recife¹. The program was developed in redesigned public spaces called “centers” and all activities are supervised by physical education professionals (PEP)¹.

The ACP was commended by the publication of the National Policy on Health Promotion (NPHP) in 2006², as it complies with its principles and guidelines. Conversely, in order to meet the NPHP guidelines, health promotion interventions in daily primary health care (PHS) services must be incorporated through intrasectorial and intersectorial actions³.

In order to do so, in 2009 the ACP expanded its actions beyond its centers, with the goal of propagating the program’s interventions by systematically implementing integrated activities in PHC. These activities are called out-of-center activities¹ PEP implement the interventions at the center (3 hours/day) and at out-of-center sites (3 hours/day). The latter are referred to as “community” and are implemented within the area of the center, together with the Family Health Units (FHU) and other PHC services, and at the Centers for Psychosocial Support (CPSS)¹.

The integration between the ACP and other services within the health care network (HCN) requires redefining the work processes of the professionals who work in them. This is done with the aim of prioritizing the autonomy of and interaction between professionals, the community, and the family, and to ensure cooperation between different PHC services^{4,6}.

Some studies indicate that PEP who work in PHC value multidisciplinary networking and consider it important; however, they identify difficulties and weaknesses in the system, from initial training to the work process^{7,8}. In this sense, it becomes necessary that these professionals receive appropriate initial training and ongoing re-training, based on curricula that address the demands of public health⁹. This would make possible the establishment of appropriate relationships between all HCN actors, and overcome the problem of fragmented performance that still exists in public health practice⁶.

The ACP has been receiving recognition and been assessed with regard to the perception of users and non-users¹⁰, adherence¹¹, professionals’ conceptions¹² and program effectiveness¹³. However, since the program has expanded its actions beyond its centers through the implementation of out-of-center activities, further studies need to investigate the performance of ACP professionals in PHC, and their cooperation with other services of the health care network. Thus, the aim of this study was to investigate the performance of PEP from the ACP in PHC in Recife.

Methods

This cross-sectional, descriptive, quantitative study analyzed data from a larger project named “Insertion of the Academia da Cidade Program in Primary Health Care in Recife: perception of professionals from primary health care and the Academia da Cidade Program”, conducted in 2015 to investigate the insertion of the ACP in PHC.

The study was conducted in 39 of the 41 currently existing ACP sites in Recife, which are distributed through all eight districts. The sites Centro Médico Ermírio de Moraes and Polo Experimental da Universidade de Pernambuco were excluded from the study because the work process in these sites differs from that of other ACP sites, both with regard to the enrollment of users and the activities performed at the sites.

The study population was composed of all PEP who worked at the 39 sites, except those who were part of the research team of this study, those who were

members of the management team of the ACP and those who were on a leave of absence, sick leave or vacation. Thus, 64 out of 182 professionals who work in the ACP met the exclusion criteria and did not participate in the study. This resulted in 118 eligible subjects for participation.

Data were collected from June to August 2015 through visits scheduled during districtwide meetings, training meetings and at the professionals' working sites. Subjects who could not be contacted after four attempts were considered as lost. The data collection team was composed of ten postgraduate students of Physical Activity and Public Health from the University of Pernambuco, who had been properly trained to collect data.

The data were collected using a self-administered questionnaire, which contained objective questions based on studies¹⁴ assessing programs and interventions for the promotion of physical activity in PHC and according to the reality of the ACP. The questionnaire contained ten sections: sociodemographic and professional data; performance in the ACP; out-of-center activities; physical structure; equipments, materials, cleaning and safety; districtwide meeting; training meeting; level of satisfaction; absenteeism; social control; and coordination with primary health care. All the variables analyzed in this study are described in Chart 1.

Sociodemographic variables and professional profile
<ul style="list-style-type: none"> - Sex (male, female) - Age (measured on an interval scale and categorized as: 20-29 years, 30-39 years, 40-49 years and 50-59 years) - Educational level (undergraduate degree, specialization, residency, Master's degree) - Type of undergraduate degree (teaching degree, licenciatura, bacharelado, licenciatura e bacharelado) - Studied the subject of public health at undergraduate level (yes, no) - Served an internship in public health during undergraduate training (yes, no)
Section "Performance in the ACP"
<ul style="list-style-type: none"> - Training to work in the ACP (yes, no) - Length of time working in the ACP (measured on an interval scale and categorized as: -4 years, 5-7 years, 8-10 years, 11-13 years)
Section "Out-of-center activities"
<ul style="list-style-type: none"> - Implementation of out-of-center activities (yes, no) - How the referral to out-of-center activities occurred (management team decision, personal decision) - Location of out-of-center activities (community, CPSS, shelter)
Cooperation with PHC
<ul style="list-style-type: none"> - Level of knowledge about PHC policies (very low, low, intermediate, high, very high) - Level of knowledge about health care services in their working area (very low, low, intermediate, high, very high) - Activities implemented in conjunction with FHU professionals (yes, no) - Frequency of activities implemented in conjunction with FHU professionals (rarely, sometimes, almost always, always) - Activities implemented in conjunction with FHSC professionals (yes, no) - Frequency of activities implemented in conjunction with FHSC professionals (rarely, sometimes, almost always, always) - Activities implemented with other health care services in their working area (yes, no) - Frequency with which ACP professionals were invited by FHU professionals to create an ITP (never, rarely, sometimes, almost always, always) - FHU professionals with whom you talk and work together to implement integrated activities (none: yes, no; physician: yes, no; nurse: yes, no; dentist: yes, no; nurse technician: yes, no; CHW: yes, no; others: yes, no) - Referral from the ACP to the FHU with a referral letter (yes, no) - Referral from the ACP to the FHU without a referral letter (yes, no) - Referral from the FHU to the ACP with a referral letter (yes, no) - Referral from the FHU to the ACP without a referral letter (yes, no) - Participation in meetings of FHUs in their working area (yes, no) - Importance of integrating PEP from the ACP in PHC in Recife (not important, not really important, important, very important) - How ACP performance in PHC in Recife is rated (very bad, bad, moderate, good, very good)

CHART 1 –Variables analyzed to investigate the performance of physical education professionals from the ACP in PHC in Recife, Brazil, 2015.

ACP – Academia da Cidade Program; PHC – Primary Health Care; FHU – Family Health Unit; FHSC – Family Health Support Center; ITP – Individual Therapeutic Project.

Data were stored and organized using the EpiData software, version 3.1. All data were analyzed using the statistical program SPSS (Statistical Package for Social Sciences, version 10.0). The results are presented in absolute and relative frequencies.

The research project to which this study is connected was approved by the Ethics Committee on Human Research of the University of Pernambuco – CAAE: 45622215.8.0000.5192. All participation was voluntary and informed consent was obtained.

Results

Of 118 eligible subjects for participation, 2 refused and 12 were considered as lost. The main reasons for the loss of participants included lack of time and absence at the time of data collection after four failed attempts at contacting the subject.

The final sample consisted of 104 PEP from the ACP. The majority were female (61.5%), aged 30-39 years (76.9%), had an undergraduate teaching degree (96.1%), had not studied the subject of public health at undergraduate level (85.6%) nor pursued an internship in this field (72.5%). Conversely, most participants (67.3%) had a specialization degree in the field of Physical Education – Table 1.

Most participants reported not having been trained to work in the ACP (73.1%) and had been participating in the program for 2 years or longer (77.7%). Most participants reported carrying out out-of-center activities (84.6%), and that they had been referred to out-of-center activities by the management team (51.2%) and that the “community” (77.3%) was the place where their interventions took place. More than half of participants (67.3%) reported having intermediate knowledge about PHC policies and services (FHU, CPSS, community centers, neighborhood associations) in the area where they work – Table 1.

TABLE 1 – Description of sociodemographic variables and professional profile, performance in the ACP, out-of-center activities and level of knowledge of physical education professionals from the ACP about other health care services in their working area, Recife, Brazil, 2015.

Variables	n	%
Sex		
Female	64	61.5
Male	40	38.5
Age group		
20-29 years	4	3.8
30-39 years	80	76.9
40-49 years	18	17.4
50-59 years	2	1.9
Educational level		
Undergraduate	27	25.9
Specialization	70	67.3
Residency	1	1.0
Master's degree	6	5.8
Type of undergraduate degree		
Teaching degree	99	96.1
Undergraduate degree	2	1.9
Bachelor's degree	1	1.0
Undergraduate and bachelor's degree	1	1.0

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Variables	n	%
Subject of public health at undergraduate level		
Yes	15	14.4
No	89	85.6
Internship in public health during undergraduate training		
Yes	28	27.5
No	74	72.5
Training to work in the ACP		
Yes	28	26.9
No	76	73.1
Length of time working in the ACP		
2 to 4 years	41	39.8
5 to 7 years	39	37.9
8 to 10 years	17	16.5
11 to 13 years	6	5.8
Implementation of out-of-center activities		
Yes	88	84.6
No	16	15.4
How the referral to out-of-center activities occurred		
Management team decision	44	51.2
Personal decision	42	48.8
Location of out-of-center activities		
Community	68	77.3
CPSS	19	21.6
Shelter	1	1.1
Level of knowledge about PHC policies		
Very low	0	0.0
Low	24	23.1
Intermediate	70	67.3
High	10	9.6
Very high	0	0.0
Level of knowledge about other health care services in their working area		
Very low	1	1.0
Low	25	24.0
Intermediate	70	67.3
High	8	7.7
Very high	0	0.0

ACP – Academia da Cidade Program; CPSS – Center for Psychosocial Support PHC – Primary Health Care.

With regard to activities implemented in conjunction with other PHC professionals, most ACP teachers reported never having worked with FHU (68.3%) or FHSC professionals (75.7%) nor with any community centers or neighborhood associations in their working area (87.1%). Likewise, most participants said that they did not participate in meetings of the FHU in their working area (93.1%) and that they had “never” been invited (86.0%) by their local FHU team to participate in the creation of an Individual Therapeutic Project (ITP, Projeto Terapêutico Singular) for FHU users – Table 2.

TABLE 2 – Description of activities implemented in conjunction between physical education professionals and other primary health care services in their working area, Recife, Brazil, 2015.

Variables	n	%
Activities implemented in conjunction with FHU professionals		
Yes	33	31.7
No	71	68.3
Frequency of activities implemented in conjunction with FHU professionals		
Rarely	5	15.2
Sometimes	15	45.4
Almost always	12	36.4
Always	1	3.0
Activities implemented in conjunction with FHSC professionals		
Yes	25	24.3
No	78	75.7
Frequency of activities implemented in conjunction with FHSC professionals		
Rarely	9	36.0
Sometimes	8	32.0
Almost always	6	24.0
Always	2	8.0
Health care services in their working area		
Yes	13	12.9
No	88	87.1
Participation in FHU meetings		
Yes	7	6.9
No	95	93.1
Frequency with which ACP professionals were invited by FHU professionals to create an ITP		
Never	86	86.0
Rarely	9	9.0
Sometimes	5	5.0
Almost always	0	0.0
Always	0	0.0

ACP – Academia da Cidade Program; PHC – Primary Health Care; ITP – Individual Therapeutic Project.

Community health workers (CHW) were reported as the FHU workers with whom PEP from the ACP most talked and worked together to implement integrated activities (81.8%) – Table 3.

TABLE 3 – Description of FHU professionals with whom the physical education professionals from the ACP talk and work together to implement integrated activities, Recife, Brazil, 2015.

Variables	n	%
None Professional		
Yes	1	3.0
No	32	97.0
Physician		
Yes	15	45.5
No	18	54.5
Nurse		
Yes	15	45.5
No	18	54.5
Dentist		

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Variables	n	%
Yes	9	27.3
No	24	72.7
Nurse technician		
Yes	10	30.3
No	23	69.7
CHW		
Yes	27	81.8
No	6	18.2
Others		
Yes	8	75.8
No	25	24.2

ACP– Academia da Cidade Program; FHU– Family Health Unit; CHW– Community Health Worker.

Most professionals (58.3%) stated that users' referral to FHU occurred in an informal manner, without a referral letter, and that users were not referred from the FHU to the ACP, neither in a formal manner, with referral letter (94.2%), nor in an informal manner (67.6%) – Table 4.

TABLE 4 – Description of referral practices between physical education professionals from the ACP and FHU professionals, Recife, Brazil, 2015.

Variables	n	%
Referred the user to another service with a referral letter		
Yes	16	15.5
No	87	84.5
Referred the user without a referral letter		
Yes	60	58.3
No	43	41.7
User was referred to the ACP center with a referral letter		
Yes	6	5.8
No	97	94.2
User was referred to the ACP center without a referral letter		
Yes	33	32.4
No	69	67.6

ACP– Academia da Cidade Program; FHU– Family Health Unit.

When asked about the importance of integrating PEP from the ACP in PHC, 69.2% of respondents answered that it was “very important”, 27.9% considered it “important” and 1.9% thought it was “not really important”. Lastly, 42.3% of respondents rated ACP performance in PHC as “good”; 22.1% as “very good”; 29.8% as “moderate”; 3.8% as “bad”; and 19% as “very bad”.

Discussion

We found that most PEP working in the ACP had not served any public health internships during their initial training, nor had received any specific training to work in the program. Most participants do not implement activities in conjunction with PHC teams (FHU and FHSC). But when they do implement joint activities, these are done through dialogue with CHW. ACP referral to FHU, when made at all, occurred in an informal manner. Nevertheless, ACP professionals rated their

performance in PHC in Recife as “very important” and “good”.

With regard to the profile of ACP professionals, our findings are in line with other studies that found a predominance of young and female workers¹⁵⁻¹⁷. With regard to their initial training, we found that ACP professionals had not studied the subject of public health at undergraduate level nor had served public health internships. These results are consistent with prior research^{15,18}. This shows that undergraduate physical education courses still offer a reduced number of subjects and internships in public health.

Anjos & Duarte⁹ analyzed the curriculum of undergraduate physical education courses and found that the subjects offered in these courses had a curative and therapeutic focus and that no internships were offered in the field of PHC. This evidences a disparity between training and the actual demand of health care services, which will have as a consequence the decontextualized performance of professionals.

Santos & Benedetti¹⁹ found that o internships effectively contributed to professional growth and improved care delivery to the general population, which would not only favor the integration but also improve the performance of PEP in PHC.

Despite having had limited training to work in PHC, most PEP in this study reported having intermediate knowledge about PHC policies and health care services provided in their working area. this could be due to the continuing education strategies that are systematically implemented by the ACP management team. This finding could also be explained by the daily work routine of these PEP, who carry out out-of-center activities in the community where they work.

We found that most PEP from the ACP do not implement activities in conjunction with the FHU, nor with the FHSC or with other health care services in their working area. Moreover, only a few respondents participated in FHU meetings and had been invited to participate in the development of ITPs for FHU users.

The lack of integration between ACP and PHC professionals found in this study corroborates the findings of other studies that investigated the work process of PEP from similar programs who worked in the FHSC^{15,7}. These findings evidence a fragmented health care system that organizes itself through a set of isolated health care settings that do not communicate with one another²⁰. This is not consistent with national policy guidelines of PHC, the National Policy on Health Promotion (NPHP) and the ACP, which presuppose a joint and continuous work in the context of PHC, in order to successfully achieve its goals^{1,3,6}.

A study conducted with coordinators of physical activity programs financed by the Ministry of Health found that among the main difficulties experienced by coordinators were the lack of partnerships and little intrasectorial and intersectorial cooperation, which were reported by 13.1% of participants²¹.

Teamwork provides an opportunity to exchange experiences and develop collective work practices⁷. Thus, there is a need to implement functional health systems that integrate different HCN actors, in order to ensure users' access to activities and services that will solve their health problems and optimize the available resources²².

One important result that has to do with the cooperation between ACP and FHU professionals and needs to be highlighted here is the fact that the former seem to recognize CHWs as the main disseminators of the activities implemented in the program, due to the activities and bonds that CHWs create with health care users. Thus, there is a successful partnership between them, as seen in other studies conducted in other Brazilian regions^{23,24}.

Another point that needs to be highlighted is that in Recife users' referral from the ACP to the FHU and vice-versa still represents a challenge. The lack of communication about users between professionals evidences the fragmentation of the HCN²². In a qualitative and quantitative study¹², PEP from the ACP rated interdisciplinary work and users' referral as important to the program. According to the data obtained in this study, users' referral to FHU occurred mostly in an informal manner. Mendes²⁰ explains that care lines propose a therapeutic path for users in the network; they do not only work by means of established protocols, but also through the recognition that service managers can act together to reorganize the work process and facilitate users' access to the units and services they need.

The perception that PEP from the ACP have about the importance of their insertion in PHC may reflect their daily professional practice, which proves the benefits of physical activity to the health of the assisted population, both through activities implemented at the center and through out-of-center activities. In addition, the program is recognized as a successful experience, which served as a basis for the implementation of the Academia da Saúde Program at national level²⁵. Other studies^{7,18,26} have found similar results with regard to the insertion of PEP in PHC. According to them, this insertion represented a paradigm shift, reinforced the need for changes in the training, professional development and contribution to health services.

Further research may elucidate the main difficulties and barriers to network participation, especially with regard to the participation of ACP professionals or "similar others" in PHC, so that the common goal of delivering care to users can be achieved in the best possible way.

As this study is a cross-sectional study, it does not provide data to assess the state of affairs of interventions implemented in PHC, but, on the other hand, due to the goals of this research, it addresses the need to do so. Since this is one of the first studies to deal with out-of-center activities of the ACP, its findings contribute to the field of study of networking processes and may help visualize the strengths and weaknesses of such performances in PHC, in addition to serving as a basis for further studies.

Barriers to the implementation of activities in an integrated manner with PHC are not exclusive to the ACP. Developing actions related to physical activity in the context of the Unified Health System requires collective efforts, an ongoing dialogue between users, professionals, managers and the scientific community. The ACP management team, which is mainly composed of PEP, has been making significant efforts to provide continuous training opportunities for workers.

We conclude that the performance of PEP of the ACP in PHC in Recife has been made effective through the implementation of out-of-center activities; however, these activities are not integrated with existing PHC strategies (FHU and FHSC). This was confirmed by a lack of joint activities and by the lack of communication between services during the referral process of users.

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Authors' contributions

All the authors participated in project design or data analysis and interpretation, in drafting this manuscript and critically reviewing its intellectual content, and approved the final version to be published.

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