Special Section
Innovative curriculum experiences in Physical Activity and health

RBAFS Revista Brasileira de Atividade Física & Saúde
SOCIEDADE BRASILEIRA DE ATIVIDADE FÍSICA & SAÚDE

rbafs.org.br

The experience of a training course for physical activity promotion at the primary health care setting

A experiência de curso de capacitação para promoção da atividade física na atenção primária à saúde

AUTHOR'S

Luiz Guilherme Grossi Porto[1]
Lucas Ugliara[1]
Rafael Rodrigues da Cunha[1]
Marco Antonio Caetano Junior[1]
Rodrigo Souza Celes[1]
Amilton Vieira[1]

1 University of Brasília, Graduate Program of the Faculty of Physical Education, Brasília, Federal District, Brazil.

CORRESPONDING

Luiz Guilherme Grossi Porto
luizggporto@gmail.com
University of Brasília - Faculty of Physical Education, Darcy Ribeiro University Campus, L4 Norte, s/n, Brasilia, Distrito Federal, Brazil.
Zip code: 70910-900.

DOI

10.12820/rbafs.27e0262

ABSTRACT

Evidence demonstrates the importance of physical activity (PA) promotion strategies in primary health care (PHC) as well as the lack of professional qualification in this area. We aimed to report the experience of a basic training course to conduct group classes in a pilot study of the Program *Brasil em Movimento* from Brazilian Ministry of Health (PBM). The course covered eight topics within 22 hours delivered remotely. In 21 days of publicity, 630 people signed up, with an average of 439 views for each class. Students evaluated the course positively (95%) and would recommend it (93%). We observed that: 1- the number of subscribers and off-line classes views demonstrate the existence of a demand for this type of qualification; 2- the remote course offering was adequate to reach professionals from all regions of Brazil; 3- offering this type of training seems essential, given the background heterogeneity of the target audience.

Keywords: Primary health care; Professional training in health; Curriculum; Education, continuing; Health human resource training.

RESUMO

Evidências demonstram a importância de estratégias de promoção da atividade física no contexto da atenção primária à saúde (APS) e a carência de qualificação profissional específica nesta área. Objetivou-se relatar a experiência de um curso básico de capacitação para condução de aulas coletivas junto ao estudo piloto do Programa Brasil em Movimento, do Ministério da Saúde (PBM). O curso abrangeu oito temas com carga de 22 horas oferecidas remotamente. Em 21 dias de divulgação inscreveram-se 630 pessoas, com média de 439 visualizações das aulas. Os discentes avaliaram o curso positivamente (95%) e o recomendariam (93%). Observou-se que: 1- o número de inscritos e de visualizações das aulas indicam interesse por este tipo de qualificação; 2- a oferta do curso de modo remoto foi adequada para atingir interessados de todas regiões do Brasil; 3- a oferta desse tipo de capacitação parece ser fundamental, frente à heterogeneidade de formação do público alvo.

Palavras-chave: *Atenção básica à saúde; Formação profissional em saúde; Currículo; Educação continuada; Capacitação de recursos humanos em saúde.*

Introduction

For many years, the Brazilian literature has paid attention to physical activity (PA) promotion strategies in the context of primary health care (PHC), especially after the launch of the National Health Promotion Policy in 2006 and the Strategic Action Plan to Tackle Non-Communicable Chronic Diseases (NCD) in Brazil 2011-2022[1,2]. The Ministry of Health (MH) has been developing several actions aimed at promoting PA in PHC in the Unified Health System (SUS). The creation, in 2008, of the Family Health Support Center (NASF) and the *Academia da Saúde* Program, in 2011[2,3], stand out.

Recently, the Ministry of Health's PHC Secretariat, through the General Coordination of Physical Activity Promotion and Intersectoral Actions (CGPROFI), launched two initiatives to promote PA linked to PHC: the Physical Activity Guidelines for the Brazilian Population, in partnership with the Federal University of Pelotas and researchers from all regions of the country[4]; and the Pilot Study of the *Brasil em Movimento Program* (PBM), in preparation with the University of Brasília (UnB). The main objective of the PBM, conceived for PHC, is to increase the offer of PA practices guided by Physical Education professionals (PE) in public spaces through an application for smartphones.

Despite the evidence on the benefits of PA for health[5] and the MH initiatives in the last 15-20 years to incorporate PA in PHC, there seems to be a time mismatch in the training of human resources in this area. Internationally, the actions are also recent. The World Health Organization (WHO) Global Strategy on Diet, PA and Health dates from 2004[6].

The NASFs, funded by the MH from 2008 to 2019, and sequentially incorporated into a new APS funding model (Previne Brasil), provide for the participation of the PA professional. As an example, the Political Pedagogical Project (PPP) of the Bachelor's Degree in PE at UnB, a partner institution in the execution of the PBM, which provides for the performance of graduates in "health centers", was approved in 2011 and had its first graduating class graduated in 2015. There is an interval of ±7 years between the demand of NASFs and the professional performance of the first graduates of this curriculum. A study that evaluated PE curricula from 61 Brazilian institutions found the absence of disciplines that addressed public/collective health content[6]. In this context, Loch[8] sought to sensitize other PE courses to the importance of these topics in the training of undergraduates, based on the experience at the State University of Londrina[8]. A systematic review of these themes in PE curricula concluded that, when present, they seem insufficient[9]. It is observed that this context reinforces the existence of this temporal gap.

Thus, the coordination of the PBM pilot study (CEP-FS-UnB – report nº 4.523.253), responsible for constituting a team of PE professionals to work on the project, offered the "Basic training course for conducting collective classes at the PBM pilot program". Therefore, the objective was to describe the stages of elaboration and execution of this course.

Course structure

The course was planned based on the proposal of the PBM, which is based on the free offer of guided PA for the population. The pilot study is expected to offer ± 4800 classes, over 12 weeks, at different times, in 12 public spaces in the Brazilian Federal District, three in each socioeconomic group of the 2018 District Sample Household Survey. There will be body awareness gymnastics, gymnastics conditioning, dances, combat sports, and adventure sports classes, designed to be inclusive and attractive to adults of different age groups and physical/clinical conditions. Due to the Covid-19 pandemic, some modalities, such as contact and/or ball sports have been withdrawn.

Assuming heterogeneity in the training of interested parties and the above definitions, a leveling course was planned aiming at offering PAs in the context of the pilot project, free of charge, on the Research Laboratory in Strength Training at FEF-UnB Youtube channel. Faced with the Covid-19 pandemic, it was decided to go for a remote offer, a fact that made possible to expand it to the whole country. Considering the contents, feasibility and demands of the project, a workload of 22 hours was defined, spread over two weekends, with synchronous classes on Fridays at night and on Saturdays between 8 am and 6 pm.

The course was divided into eight themes: 1) project presentation (1h); 2) structure and functioning of the SUS, with focus on PHC – actions/projects to promote PA in the MH (3h); 3) PA recommendations for Health (2h); 4) pre-participation risk stratification (2h); 5) elaboration of a lesson plan/reports (2h); 6) PA, aging and chronic diseases (4h); 7) first aid in PA (4h) and 8) preparation of classes using body weight (4h). Some themes were specific of the pilot study (1 and 5) and the others are of general interest in promoting PA in PHC, considering the epidemiological profile of Brazilian capitals, with high rates of physical inactivity and health risk factors[10].

The course was advertised on social networks and Regional Council of Physical Education (CREF-7) direct mail for a short period (21 days), due to the initial schedule of the study. Sixty-two percent of respondents reported having learned about the course through Instagram.

Demand profile

The course had 630 enrolled students (50.5% female), 3.5% from the North, 23.5% from the Northeast, 47.6% from the Midwest, 18.6% from the Southeast, 6.5% from the South and 0.3% from abroad. Of the total, 95.6% were from the PE area, 4.1% from physiotherapy and the others were distributed among dietetics and nutrition, nursing, medicine, collective health and others. Moreover, 12.9% of the participants had never worked in the area, 43.8% had up to four years of experience, and the others ≥4 years. Seven applicants (1.1%) reported having graduated at a technical level, 20.2% had their undergraduate course in progress by then, 24.2% had complete undergraduate courses (college degree) and the others reported graduate courses in progress or concluded.

The number of listeners in the synchronous sessions ranged from 50-120 people. Until July-2021, the classes had an average of 439 views, ranging from 302 to 660 accesses. The quantity and proportion of offline views demonstrates that making the course available asynchronously was a wise strategy to expand the scope of the proposal, despite not allowing teacher-student interaction nor enabling the assessment of the intended qualification. The course had a support team of four volunteer undergraduate students who helped with registration, organization of virtual environments, classes, and email interactions in order to clarify doubts in an agile way.

Participant evaluation

Among the participants, 113 sought certification (18%) that required a performance of ≥70% in a test. Only 42 participants (37.2%) responded to the course evaluation. Both the assessment and the test were applied via Microsoft Forms. The evaluation was based on Likert scale (excellent, good, average, fair, poor), considering "good" and "excellent" as positive responses. Thus, ≥95% of the participants considered as positive: infrastructure and logistics, organization of the virtual environment, applicability and usefulness of training and quality of teachers. The overall grade was 98.0 and 93% of the participants would recommend the course. Both student self-assessment and organizational support had positive assessments of ≥88%. The only items with "fair" or "poor" responses were "carrying out the course assessment on time", "establishing a study time" and "seeking support" (≤4.1%). Low participation in the assessment imposes limitations on interpretation, especially considering that non-respondents may differ from respondents. This low percentage is attributed to the fact that it was not mandatory and the possibility for students to express themselves through offline support, as discussed below. Figure 1 describes the evaluation regarding the teaching resources used.

The students received offline support via Google Classroom, which was used for sending communications and teaching materials, in addition to direct communication via the YouTube channel chat in synchronous activities. The comments were cataloged and identified according to the frequency of occurrence. Two aspects of these records deserve to be highlighted: 1) satisfaction with the opportunity, reinforced by the need for this type of training due to the scarcity of supply in regions far from urban centers and/or capitals; 2) demonstrations of concern with the possible ways of offering activities by the PBM, especially regarding the ways of evaluating the intensity/safety of practices and the concern with potential barriers to participation.

General considerations

In addition to the mismatch among the evidence generation, the emergence of new demands for promoting PA in PHC and professional training, it is essential to analyze the need for continuing education, as proposed here. Note, for example, that the second edition of the Physical Activity Guidelines for Americans highlights new benefits incorporated in the 2018 edition, expanding on evidence from the 2008 edition, such as positive effects on mental health and the elimination of

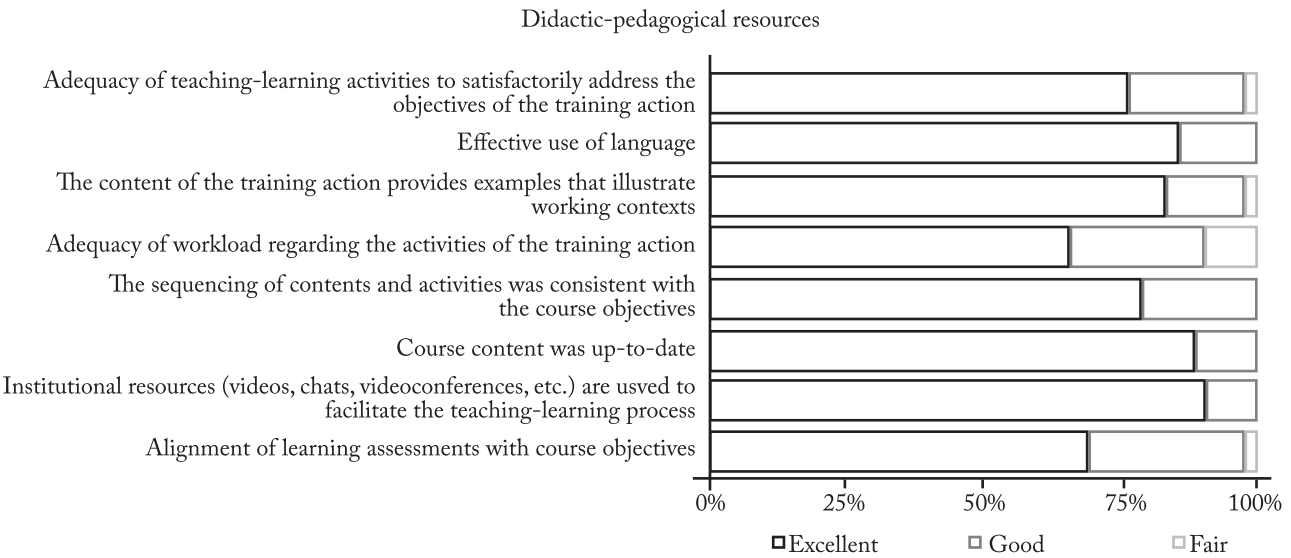

Figure 1 – Description of responses regarding the evaluation of the teaching resources used

the requirement of at least 10 continuous minutes[11]. It should be noted that the volume and speed of scientific production alone endorse the need for continuing education in this area.

A study that evaluated the knowledge of the three professional categories that work the most in the primary health care network highlights the need to continually update PHC professionals[12]. A similar recommendation was made in a study that evaluated the knowledge of PE professionals regarding the relationship between sedentary lifestyle and morbidities[13]. The experience of this course reinforces these recommendations. Thus, based on this report and the other evidence here discussed, there is a demand from professionals to improve the promotion of PA in PHC and that a better qualification can be achieved through different mechanisms, including initiatives such as the one reported here, aiming at continuous updating of those who work with PA in PHC. In all cases, it is important to consider the interventions of the PE professional in the SUS in an expanded and intersectoral way. The expressive number of people interested in the course, in the short period of dissemination, the participation of different Brazilian regions, the participants' reports regarding the scarcity of this type of offer, especially in regions far from large centers (≅75% of those enrolled outside the southern /southeast regions) support the systematics of the course object of this report. It is important to note that the dissemination of the course by CREF7 has possibly influenced the disproportionate participation of the different national regions.

Two aspects that are beyond the scope of this article deserve further reflection: 1) expanded evaluation of the PBM proposal; 2) assessment of the limitations of the comprehensive offer in remote format, which was defined by sanitary reasons, but which does not replace the face-to-face model.

Thus, it is understood that: 1 - the number of enrolled students in the short period of promotion and the number of views of the recorded classes indicate the existence of demand for this type of qualification, regardless of certification; 2 – offering it remotely, both synchronously and asynchronously, proved to be adequate; and 3 - the experience in classes, with online feedback and support outside of class hours, reinforce the importance of this type of course in face of the academic background heterogeneity of the target audience, many showing gaps in basic knowledge in the eight topics of the course for acting in the promotion of PA in the context of PHC, as mentioned above regarding the students' concern in the way of defining the intensities of the practices.

In this scenario, it is worth recalling a study that estimated that a 10% reduction in physical inactivity worldwide would result in ±533 thousand lives saved per year[14]. It seems legitimate to admit that a better professional qualification for the promotion of PA in PHC would increase the chances of success in this goal. It is noteworthy that strengthening NASFs would likely have a greater impact than any training course alone. Data from an evaluation study of the National Program for Access and Quality Improvement in Primary Care (PMAQ) indicate that the NASFs have an important contribution to the promotion of PA in the context of PHC[15]. Thus, it is important that the PBM incorporates, when implemented, integration with other public policies to promote PA.

The description of the experience of this course must be interpreted in light of its inherent limitations, such as the impossibility of assessing whether the 72% of participants who did not seek certification achieved the intended training. On the other hand, it is understood that this fact is also important data to be shared in an experience report in an area as sensitive as the training of human resources to work with the promotion of PA in PHC, aiming to subsidize future actions that also aim to improve professional qualification.

Conflict of interest

The authors declare that they provided a technical-professional service for the elaboration and evaluation of the pilot study of the *Brasil em Movimento* program by the Ministry of Health.

Funding

Ugliara L is a PhD student supported by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Código de Financiamento 001. This publication was supported by Edital PPGEF n. 09/2021 - FEF – UnB.

Authors' contribution

Ugliara L, Cunha RR, Caetano Junior MA, Celes RS, Vieira A contributed to the collection and systematization of information in Google Classroom and videos, in addition to the preparation and review of the manuscript. Ugliara L also contributed to the elaboration of the results/figure. Porto LGG contributed to the design, preparation, writing and review of the manuscript. Porto LGG and Vieira A performed the final review of the manuscript. All authors approved the final version submitted.

Acknowledgements

The authors would like to thank the Secretariat of Primary Health Care of the Ministry of Health and Diogo Vilela Ferreira, from the Military Fire Brigade of the Federal District and the Graduate Program of the Faculty of Physical Education of the University of Brasília.

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. Becker L, Gonçalves P, Reis R. Programas de promoção da atividade física no Sistema Único de Saúde brasileiro: revisão sistemática. Rev Bras Ativ Fís Saúde. 2016;21(2):110–22.
3. Silva PSC. Physical Education Professionals in the Unified Health System: an analysis of the brazilian registry of health institutions between 2013 and 2017. Rev Bras Ativ Fís Saúde. 2018;23:1–8.
4. Ministério da Saúde, Brasil. Secretaria de Atenção Primária à Saúde. Departamento de Promoção da Saúde. Guia de Atividade Física para a população brasileira: Brasil. 2021; Disponível em http://bvsms.saude.gov.br/bvs/publicacoes/guia_atividade_fisica_populacao_brasileira.pdf [2021 agosto].
5. WHO - World Health Organization. WHO guidelines on physical activity and sedentary behaviour. Geneva: World Health Organization; 2020; disponível em https://www.who.int/publications/i/item/9789240015128 [2022 janeiro]
6. WHO - World Health Organization. Global Strategy on Diet, Physical Activity and Health. Switzerland. 2004; disponível em https://www.who.int/publications/i/item/9241592222 [2021 agosto]
7. Costa LC, Junior CAFL, Costa EC, Feitosa MC, Aguiar JB, Gurgel LA. Formação profissional e produtividade em saúde coletiva do profissional de educação física. Rev Bras Ativ Fís Saúde. 2012;17(2):107–13.
8. Loch M. Abordando Saúde Coletiva no curso de bacharelado em Educação Física: Relato de experiência. Rev Bras Ativ Fís Saúde. 2016;21(3):285–90.
9. Silva VT, Nicoes CR, Knuth AG. Saúde coletiva e saúde pública no currículo dos cursos de educação física: uma revisão sistemática. Pensar a Prática. 2021;24:e61062.
10. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Análise em Saúde e Vigilância de Doenças. Vigitel - Vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico. Brasil. 2020; Disponível em https://www.saude.gov.br/images/pdf/2020/April/27/vigitel-brasil-2019-vigilancia-fatores-risco.pdf [2021 Agosto]
11. 2018 Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Scientific Report. Department of Health and Human Services. United States of America. 2018; Disponível em https://health.gov/sites/default/files/2019-09/PAG_Advisory_Committee_Report.pdf [2021 julho]
12. Borges T, Barros F, Mielke G, Parra D, Siqueira F, Hallal P. Conhecimento de profissionais que atuam em Unidades Básicas de Saúde no Brasil sobre a associação entre inatividade física e morbidades. Rev Bras Ativ Fís Saúde. 2017;22(5):450–6.
13. Rombaldi AJ, Borges TT, Canabarro LK, Corrêa LQ, Neutzling MB. Conhecimento de professores de educação física sobre fatores de risco para doenças crônicas de uma cidade do sul do Brasil. Rev Bras Cineantropom Desempenho Hum. 2012;14:61–72.
14. Lee I-M, Shiroma EJ, Lobelo F, Puska P, Blair SN, Katzmarzyk PT. Impact of Physical Inactivity on the World's Major Non-Communicable Diseases. Lancet. 2012;380(9838):219–29.
15. Seus TLC, Silveira DS, Tomasi E, Thumé E, Facchini LA, Siqueira FV. Family Health Support Center: health promotion, physical activity, and chronic diseases in Brazil - national PMAQ survey 2013. Epidemiol Serv Saúde. 2019;28 (2):e2018308.

Received: 03/09/2021
Approved: 10/05/2022

Quote this article as:

Porto LGG, Ugliara L, Cunha RR, Caetano Junior MA, Celes RS, Vieira A. The experience of a training course for physical activity promotion at the primary health care setting. Rev Bras Ativ Fís Saúde. 2022;27:e0262. DOI: 10.12820/rbafs.27e0262