Limits and potentialities of educating family health workers for physical activity promotion: a participatory research

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Abstract

Progress in the last decades in the Brazilian Unified Health System, mainly with the implementation of the Family Health Strategy, has resulted in improvements in care to the population and in strengthening of actions to promote physical activity, including the incorporation of Physical Education professional in basic healthcare. Nevertheless, there are challenges to overcome, such as the development of health workers' education in accordance with the Unified Health System guiding principles. Therefore, the objective of the current study was to evaluate limits and potentialities of educating for the promotion of physical activity in the Family Health Strategy through a community-based participatory research, by constructing an education program with the health teams. The analysis of conversation and speech was applied to the data from three focus groups (two at the beginning and one after the program) and triangulation was used to combine this data with that from field notes and reflective notes written by the researcher and also by an independent observer. Five limits and potentialities were identified for physical activity promotion education: work organization and on-the-job education; the relation of the worker with physical activity; the worker point-of-view about the health-disease process and in regard to counseling about physical activity; lack of care to the health worker and the incidental learning; and the appraisal of key-elements of pedagogical strategy. Findings point to a necessity to improve the work organization and the healthcare offered to the worker themselves, to strengthen education actions to value permanent and inter-professional education and to work the conscience of the workers about practice and promotion of physical activity.

Key Words: Health education; Motor activity; Paulo Freire's pedagogy; Family Health Strategy.

Introduction

The restructuring process of the Brazilian health system, after the establishment of the Unified Health System in 1988, represented great progress regarding access to health care for a considerable portion of the Brazilian population[1]. Afterwards, the implementation of the Family Health Strategy as a new model of health organization in Brazil brought focus on efforts for primary health care, with more initiatives of health promotion based on family and community and appraisal of trans-disciplinary skills in practices and education of workers[2-3]. Even though these changes are aligned with a new paradigm of public health[1, 4], its effective implementation continues to be a challenge for the system, despite its more than 30 years of existence[1].

Taking this challenge into account, the National Policy of Permanent Health Education (NPPHE), which aims to reorganize the health education management in the Unified Health System, was defined to consolidate a new model of healthcare and work organization[5]. Permanent education is understood in the document as on-the-job learning primarily through professional praxis and problematization of technical and local knowledge about determinants of health in the action field. Moreover, NPPHE presents a pedagogic framework strongly inspired in the Paulo Freire's pedagogy[5].

At the same time, new workers have been incorporated to the primary health care[2, 6], such as community health workers (CHW) and, more

recently, the Physical Education professionals, in addition to further actions to promote health, with emphasis on physical activity (PA). One of the attributions of the Physical Education professional is to offer permanent education about PA to the health team, from strategies of counseling until abilities for organizing PA practice groups under the perspective of inter-professional education and horizontal collaboration of health action at work[7]. This perspective of professional practice demands new knowledge, beyond the biomedical, including integrality of the human being, ability to translate for the health team the social dynamic, community demands and the ability to motivate the community for promotion of collective actions[8]. However, the health team education is still primarily based on the traditional model with knowledge fragmentation, prevalence of biomedical perspective and reproduction of technical and reparatory logic[3, 9]. Seldom, health workers are trained together or mutually with reciprocal exchange of practices and knowledge[3, 10].

Despite the NPPHE progressive point-of-view and its coherence in regard to guiding principles of the Unified Health System (universality, integrality, equity and social participation), the institutional conditions of work is known to anticipate and determine the space in which the education in health can manifest its limits and potentialities[5]. A broad comprehension of education and work conditions can contribute to the effective implementation of NPPHE. Therefore, the objective of this study was to evaluate the limits and potentialities for PA education at Family Health Strategy, in order to support the education of health workers for a complete assignment of their attributions in the Brazilian primary health care.

Method

A process in which researchers and community members have jointly developedresearch actions was considered to be the best strategy to evaluate limits and potentialities of PA education in the context of the Brazilian primary health care[11-12]. For this reason, the authors have chosen to construct an education program together with the health teams to be developed within the daily routine of the Primary Healthcare Unit (PHCU) of Ermelino Matarazzo neighborhood, in the east region of the city of São Paulo. This PHCU was chosen intentionally[13-14] because of its renowned management quality and good articulation between workers in comparison to other units of the same region. There was also an intention to evaluate the construction and development of the education program where the level of implementation of the Family Health Strategy had achieved considerable progress so as to decrease the influence of organizational transition of the health model over the education program, as well as to open space for observing conjuncture and institutional limitations in the process. The research occurred between June and November of 2010.

Prior to the beginning of pedagogical activities, joint meetings were performed with the researchers, city management representatives (Ermelino Matarazzo health regional coordination) and the management of the PHCU. Since part of the health management in São Paulo was given by the public sector to some private partners, we also invited to these joint meetings those involved in the management of the PHCU, i.e., representatives of the Santa Marcelina Health Center Social Organization (responsible for managing PHCU's services and operational expenditures) as well as representatives of the Social Organization of Social Service of Civil Construction of São Paulo (responsible for management of services rendered from part of the workers who work at the PHCU of the hereby study). Aside from that, previous meetings were performed with the workers of the PHCU to present and to discuss the research. It is important to emphasize that, by the time of the study, the education process of the health teams in the region was originally structured around the doctor and the nurse, who informed the remaining workers about knowledge acquired in external courses, mostly offered by the private partners. Adding to the fact that the health team was not educated together neither in the workplace, these courses were mainly preconceived without their participation and with a vertical pedagogic organization, unlike the recommendations of the NPPHE.

Subjects and ethical aspects

The Ethics Committee of Health Secretariat of the City of São Paulo approved this study (process n. 0122.0.162.207-09). The individuals

were informed about the research procedures, and voluntarily accepted to take part and signed the Informed Consent Form. As the interest of this study was to analyze the viability and obstacles for educating altogether the health team, 44 workers of the five family health teams acting at the PHCU were recruited (5 doctors, 5 nurses, 10 auxiliary nurses and 24 CHW's). Among them, three were on vacation, one was under notice, and another refused to take part in the study. Therefore, the course was developed with a total of 39 participants.

Education program about physical activity

The education program was developed in six meetings of one hour and a half (nine hours in total) in the PHCU during working hours between July and October of 2010, in moments previously scheduled with the managers. In spite of the fact that the education program was integrated to the official calendar of health teams for the period, workers were not formally obliged to participate in the meetings. The teacher of the education program was the one of the researchers himself (THS). Since the intention was to develop an education programin accordance with NPPHE, the whole course was inspired by the teaching-learning philosophy of Freire. Freire's pedagogy favors the construction of horizontal education among workers, since it is strongly based on mutual learning concepts through dialog and collaboration[15]. Furthermore, it promotes integration between native and technical knowledge, empowering the dialog between CHW / auxiliary nurses and doctors / nurses, rupturing with the current vertical logic of on-the-job education[16]. Accordingly, these characteristics of Freire's pedagogy can also contribute to improve the quality of health care and counseling by suggesting that the way professionals learn exerts influence in the way they teach their patients[3, 17].

The course was organized around five generating themes: the PA point-of-view ('pleasure and duty'); PA recommendations and guidelines ('what can and cannot be done', 'who can and cannot do'); Challenges to PA in the daily life of mother/wife/health worker; Family, community, care-taking and being cared for; and Counseling about PA. The intention was, after each meeting, to problematize the themes taking from the minimal thematic universe of workers and discussing ways to overcome them based on their own experiences and the community's, considering the role of PA in the life of people. Every meeting, except the first one, started with recapitulation of previous talks and experiences, followed by discussion of the new theme and practical experiences about the same theme. To incite collective construction, most of teaching materials and practical experiences of the course were elaborated together with the participants during the meetings.

Data collection

This study had two focus groups prior to the beginning and one after the end of the education program aimed to gather information to construct the course together with the health workers through the indication of obstacles and possibilities to improve permanent, horizontal and collaborative education. Aside from this, the whole research process was registered in field and reflexive notes, mainly the meetings of the education program, which were also described by an independent observer.

The participants of focal groups, prior to the course, were divided according to the professional category; one of them was compound of seven CHWs and two auxiliary nurses and the other, of six nurses and four doctors. This division is believed to favor the discussion about limits and potentiality of on-the-job education, since the point-of-view of the traditional educators (doctors and nurses) and educated (CHWs and auxiliary nurses) can be separately analyzed. The focus group after the course counted on the participation of individuals who were present for at least one of the meetings. The focus groups took place at the PHCU, in a private room, and in a conveniently scheduled time for the participants, lasting 45 to 60 minutes. The moderator of the focus group was an experienced researcher (MV), who conducted the data collection based on a guide-book with open questions and topics divided into three main parts. The first one consisted to the presentation of study objectives to the group and guarantees in regard to secrecy about the information obtained. The second part was to stimulate discussion about their memories of PA in childhood and adolescence and physical education at school. The mediator tried to go beyond the answers with other questions, avoiding guiding the answers or setting value judgments. The third and last part was to investigate the workers' point-of-view in regard to PA, how they manage these practices in their daily lives, their different approaches in regard to these practices in their community and at work, the differences between current and previous PA, and the influence of all these aspects when counseling the user about PA. The selection of the participants and

the operationalization of two focus groups were in accordance with considerations proposed in literature regarding number and division of participants as well as focus group's duration, location and conduction[13-14].

Data analysis

The focus groups were registered and recorded and, at the end of each interview, a handwritten record of important information and a full audio record were obtained. The audio record was transcribed considering false beginnings, repetitions, fulfilled pauses ("term"), and temporal aspects, such as overlapping speeches, silences and parallel conversations, to analyze it based on the method of conversation and speech analysis[18]. This kind of analysis favored the data exploration based on categories that emerged from the conversation between the focus groups' participants (and not the researcher's a priori definition), aside from being "a step toward a more reflective research, enabling researchers to consider the kind of situation they have created, the guidelines for the participants to deal with it, and their own roles in this situation as researchers", in the words of Myers[18] (p.273). The use of the conversation and speech analysis implies not to establish "a priori" categories, but considers the interaction that happened in focus group both among health workers and also between them and the researchers. This aspect of the analysis is fundamental, because there were researchers involved both in the focus group and the course meetings. Considering that the focus of the research was to investigate limits and potentialities of education in accordance with NPPHE, indication of obstacles and possibilities to improve permanent, horizontal and collaborative education was pursued in the statements of the participants. These obstacles and possibilities found in the focus groups were compared through triangulation with the researcher's field notes and reflective notes and with the report of the independent observer of the course meeting. Triangulation is a strategy of analyzing qualitative data commonly applied when a variety of data collection techniques are used on the investigation process[19]. Furthermore, the analysis was extended to the focus group after the education program so as to also include them in the process of finding interpretation.

Results

Subjects

The subjects of the study were compound mainly by CHWs (56.4%), women (95%), with average age of 41 years old (38-45), married (66.7%). The subjects presented an average experience-time in profession of seven years, of that 4.5 years working at the PHCU of the present study. Out of the 39 subjects, 31 were present in at least one of the meetings of the education program (79.5%). The doctors, nurses and auxiliary nurses were not present in most of the meetings. During the four months of the meetings, there was a high turnover in the health teams (one doctor, one auxiliary nurse and three CHAs left the PHCU). More details about the results of the course can be seen in another publication[20].

Work organization and current structure of on-the-job education

Failures in work organization were present in the subject speeches in all of the moments of the research. The pressure to meet the goals of the PHCU together with the work overload, were referred by most of the absent workers as reasons for not participating. Indeed, doctors, nurses and auxiliary nurses were seen working during the time of the course and participants of the meetings often asked for the professor/researcher to fill in forms and update reports at the same time they were taking part in the activities. The management positioned ambiguously during this process: they contributed to the course by setting the agenda, organizing the place and joining researchers and workers, but also subsequently requested the workers to leave the meetings, mainly because of work demands, which compromised the conjoint education of the team.

The previous on-the-job education developed in the PHCU, which was structured based on transfer of contents from doctors and nurses to the rest of the health teams, also seems to have influenced the presence and attitude of these workers in the course. In the meetings that had the presence of a doctor or a nurse, the change in the pedagogical stance of the non-graduated workers was clear. Previously empathic and communicative, they remained quiet and attentive to the graduated worker's considerations. It is interesting to observe the

appraisal of the technical knowledge from the whole team, including the non-graduated workers over the native knowledge characteristic of the CHWs.

Conscious of the difficulties for a possible replication of the education program, researchers decided for simple, low-cost and accessible materials, without using any audio-visual resources. The costs with materials per participant was R$ 7.52. This could be understood as the only additional investment to perform the course, considering that the workers already had scheduled in their workload time for education superior to the time spent with the course and that there was used only physical spaces in idle periods.

The workers' point-of-view about PA and the difficulties they faced to perform PA

Overall, PA was predominantly understood as a programmed activity, performed in the leisure time, as an obligation or useful task, related, above all, for aesthetics and cures purposes. It is interesting to observe, for example, that some PA present in daily actions, such as house cleaning, walking for domiciliary visits and dancing in a party were not recognized as such, either for not being a programmed activity, or for not being finalistic PA with an aesthetic or curative purpose.

The difficulties to add PA in the triple journey of many female health workers (mothers, housewives and health workers) were frequently referred specifically in the speeches of CHWs. Aside from normal work demands, CHWs are demanded by the community where they live in several other places and moments of their lives. Reflexes of this uninterrupted journey were present in several episodes described by them, such as in the frustrated attempt of a CHW to start water aerobics ("I was practically an assistant, I went just once"; CHW # 2), or in the conflict of another CHW when relating her difficulty to practice leisure-time daily walking in the same area she lives and works ("the work demand (off-duty) is such that it is impossible for one to feel good after walking"; CHW # 8).

The workers' point-of-view about the determining model of the health-disease process and about the practice and promotion of the PA

People attended by the health workers (health users) were described in several opportunities as "indifferent lazy people", "destitute", "people who work hard", "people without time" ("We say they should practice physical activities, but they only want to stay watching TV. They may take the whole tray of cake and eat till the end!"; CHW # 6). Those were the same words that the course participants (mainly CHWs) used to describe themselves. Similarly, the model of determination of the health-disease process centered in the speech of individual responsibility, which prevailed in the workers' speeches, served to explain both the health condition of the health users and of the workers themselves. In spite of similarities in the users' and workers' points-of-view and in their understanding of how their health is processed, the course participants did not make an immediate relation between their condition and that of the users, also in regard to social determinants of PA practice. Consequently, the researchers decided to unveil this contradiction as one of the transversal themes of all the meetings of the course.

The course participants' report about the dynamic of counseling seemed to indicate the prevalence of a counseling based on reproduction of pre-established communication and not a dialog-and-listening process with the health user, even between the CHWs, who theoretically would be the most capable workers to dialog with the community due to their knowledge about their community and neighbors ("Even if I don't practice physical activity, I show them that I do!"; CHW # 10). This impression was confirmed throughout the meetings through their speech. Additionally, the incoherencies in counseling, and contradictions between the worker communication and their everyday practices, were issues that strongly appeared throughout the period of the research "In theory, ten! In practice, zero [physical activity]; Nurse # 2).

Finally, the view of the workers about PA seems to have influenced the decision about which health user should deal with the theme, mainly between doctors and nurses. Counseling about PA was avoided for more social-vulnerability users, since this 'obligation' was understood as secondary by them compared to their difficult life reality ("They are so destitute, with so many problems, that we feel bad to say that they should practice physical activity."; Doctor # 1).

The lack of care to the health workers and the incidental learning

The care issue (to take care of yourself, take care of other people and be cared for) revealed the

lack of structure for the basic healthcare workers to take care of their own health. These contexts, in addition to the full-time caretaker role played by several workers, not only at work, but also in the community and family environment, seemed to have led them to a limit situation of denial to external care. At the beginning of the education program, workers were uncomfortable for being cared of at the same time that they saw themselves as the only responsible person for their own health. The problematization of this reality throughout the meetings, through PA practical experiences and periods of listening and discussing, resulted in the course to be seen by the participants as a refuge of welcome and attention to health and contributed for decreasing the existing tension between the opportunities offered to the users to those offered to the workers[20].

Another important incidental learning for the researchers was the consequences of the practical experiences of PA on users of the PHCU and other workers of the unit (administrative, cleaning and safety personnel). Some experiences done in public, such as plays and games, were followed by several people with interest and joy. Other experiences were performed in the classroom, such as dances and massages, and had a very positive impact not only on health workers participating in the respective meeting, but also in the rest of the workers of the PHCU, given that most of them recurrently asked for new similar meetings in which they could also participate. Strong speeches of CHWs about the care condition are presented below:

> If we stay there the whole day with a broom, cloth , you never stop, because this work never ends, it never does end, so you have to take that time, you have to say 'no, I'll go out, I'm going to dance with my husband, or I'm going to have my nails done or my hair cut…', otherwise you become a slave of the house, of the husband, of the children, grandchildren, and everyone, people dominate you. You cannot bend yourself, cannot bend and bend, because, when you realize, you're on the floor, you've became a floor cloth (CHW # 5).

> We think so much about other people, how are we going to think about ourselves? In a lecture he presented here, we discovered that a lot of people don't like to be cared for, there was massage and some people don't even let them touch (CHW # 2).

Appraisal of key-elements of Freire's pedagogical proposal (dialog, empathy, horizontality and praxis)

The course participants reported dialog and horizontality as one of the main positive aspects of the course, especially CHWs and auxiliary nurses, who felt the recognition and appraisal of their knowledge by the other participants. Throughout the meetings, speeches commonly highlighted the course as an important moment to reflect and exchange experiences, capable to contribute to transform everyday practices of the job. The empathy of the professor and the spontaneity of the meetings were also continuously emphasized. Some CHWs' and auxiliary nurses' reports by the end of the course were:

> This course is different, it makes us think, we think about things we never thought of before (CHW # 9).

> It [the course] stirs with people's psychological (CHW # 1).

> His course was spontaneous because of the experiences. It was awesome, mainly because of that part of the massage (CHW # 3).

> It was interesting, we laughed a lot. It was a very nice course. I'm sorry that I've lost this day [dance experience] because I had to go out with the doctor (CHW # 13).

> It was an experience exchange. Not only he brought something for us, but we also gave him something… to see possibilities. Sometimes, we can see things differently, but it passes by because we never worry about this. And we never stop to think about it (CHW # 11).

Discussion

Five limits and potentialities were identified for the PA education course at the Family Health Strategy, in the context of the East region of the city of São Paulo: organization of work and on-the-job education; relationship of workers with PA; workers' point-of-view about health-disease

process and about counseling; lack of care to the health workers; and the appraisal of key-elements of pedagogical strategy. Although these aspects have emerged in a context with specific characteristics of management of services and health education, we believe that these limits and potentialities are common to several other urban regions of Brazil, given the predominance of the old model of health education and work organization[5]. This is, to our knowledge, the first study developed to investigate the inter-professional PA education process in basic healthcare, contributing to decrease the shortage of studies about inter-professional education in scientific literature[7, 21]. It will be discussed hereinafter how researchers and administrators can use these findings to improve PA education in order to consolidate PA promotion in primary healthcare.

Implications for educating health teams

Key-elements of Freire's pedagogy were very welcomed by the participants of the PA education program, which indicates paths for PA education and reinforces the NPPHE success to have used it as one of its main theoretical frameworks. It was possible to construct an education program, through dialog and praxis[17], in which the participants could share different professional backgrounds, broadening critical knowledge about PA in its different dimensions. The participants' appraisal of their pedagogical praxis seems to be a reflection of what Freire[17] (p.83) mentions as "a kind of historic-politic-social psychoanalysis that results in the elimination of the undue guilt" and is an indication of a broader vision of participants both about practice and promotion of PA and about the education experience they had.

The participants' conscience about practice and promotion of PA was similar to those found in most of the researches that consider PA counseling in basic healthcare[21], limited to the curative, preventive and aesthetic aspect. Construction of autonomy for practicing and promoting PA encompasses to construct with the subjects possibilities of re-appropriation, starting from their gestures[22]. Therefore, to retell how to deal with PA involves the deconstruction of PA view as something mandatory, programmed and necessarily useful. The inclusion of PA experiences served not only as material for critical discussion about PA practice and promotion but also as a place for the workers to look after their own health and care. This inclusion seems to be a promising strategy to integrate solutions for education challenges found in the research. With this strategy, it would be possible to, simultaneously, promote the insertion of PA practice in the daily life of the workers, improving unfavorable health conditions of primary health workers[23], and decrease the contradiction between their practice and counseling. The 'embodiment' of the word[17] and the experience of a horizontal education would help to rupture with a prescribed vertical logic in counseling reported by the participants, and can favor the approximation between health team and users.

The Brazilian primary health care counts with multi-professional health teams and an education policy that values permanent and inter-professional education (NPPHE), aspects recommended by the World Health Organization[24]. However, both work organization and structure for educating workers do not contribute for trans-disciplinary action and permanent education to satisfactorily occur. The proposal of mutual and horizontal learning among the participants brought back, for example, some education structure contradictions, above all the lack of effective places for doctors, nurses, auxiliary nurses and CHWs to learn with each other, anticipating the way to act within the community. Accordingly, it would be interesting to think in a decentralized structure of permanent education that integrated the health team[24], but also that could take advantage of other workers who compose the primary healthcare in Brazil, like Physical Education professionals[6]. Another key point would be the adequacy of the Brazilian curriculum of universities and technical courses to prepare health workers for this new reality of on-the-job acting and learning. Such reformulation have already been occurring in several areas of Brazil[4] and worldwide[25].

Implications for the research

The collective construction of an education program about PA at Family Health Strategy demonstrated to be achievable, especially among CHW, with benefits of knowledge for health workers not only in relation to counseling but also to their own practice of PA. Furthermore, the program presented a low cost per participant. The identification of limits and potentialities for the success of an education based on NPPHE indicate paths for the research, both for constructing strategies to overcome limiting factors and for taking better advantage of potentialities observed in this study.

Another aspect would be a better evaluation of the influence of the outsourced model of management in the education structure of teams in the precariousness of work relationships[26-27]. Accordingly, it would be interesting to extend this experience of PA education to other workers to verify the validity of these findings in different context of the Brazilian basic healthcare and worldwide.

The reorganization of the basic healthcare and the development of policies and strategies of health education were intended to improve health conditions of the population. Consequently, the main question, still to be answered, would be to which extent the limits and potentialities identified in this study exerted influence on the effects of PA education programs over the health of the population assisted, considering the principles of the Family Health Strategy and the NPPHE.

Resumo

Limites e potencialidades da educação dos trabalhadores de saúde da família para promoção da atividade física: uma pesquisa participativa

O progresso do Sistema Único de Saúde brasileiro nas últimas décadas, principalmente com a implementação da Estratégia de Saúde da Família, resultou em melhorias no atendimento à população e no fortalecimento de ações para promover a atividade física, incluindo a incorporação do profissional de Educação Física nos cuidados básicos de saúde. No entanto, existem desafios a serem superados, tais como o desenvolvimento da educação dos trabalhadores da área da saúde de acordo com os princípios orientadores do Sistema Único de Saúde. Desta forma, o objetivo desse estudo foi avaliar os limites e as potencialidades da educação para a promoção da atividade física na Estratégia Saúde da Família por meio de uma pesquisa participativa baseada na comunidade, através da construção de um programa educativo com as equipes de saúde. As análises da conversação e da fala foram aplicadas aos dados de três grupos focais (dois no início e um após o programa) e a triangulação foi usada para combinar esses dados com os dados de notas de campo e notas reflexivas escritas pelo pesquisador e também por um observador independente. Cinco limites e potencialidades foram identificados para a educação da promoção da atividade física: organização do trabalho e educação no trabalho; relação do profissional com a atividade física; ponto de vista profissional sobre o processo saúde-doença, no que se refere ao aconselhamento sobre atividade física; falta de cuidados para o profissional de saúde e o aprendizado incidental; e a avaliação dos elementos-chave da estratégia pedagógica. Os resultados apontam para a necessidade de melhorar a organização do trabalho e a saúde oferecida aos próprios profissionais, de fortalecer ações de educação para valorizar a educação permanente e interprofissional e de trabalhar a conscientização dos profissionais sobre a prática e promoção da atividade física.

Palavras-chave: Educação em saúde; Atividade motora; Pedagogia de Paulo Freire; Estratégia Saúde da Família.

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