



Training physiotherapists in primary care: reflections on teaching-service integration

Processo de formação de fisioterapeutas na atenção básica: reflexões sobre integração ensino-serviço

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Abstract

Introduction: Teaching-service integration contributes to the quality training of healthcare professionals. **Objective:** This study aimed to analyze the relationship between practicing physiotherapists, teachers and students in physiotherapy training in primary care, from the perspective of the professionals. **Method:** This is a qualitative study that used a semi-structured interview for data collection and discourse analysis as a methodological framework to analyze the interviews. Interviewees were nineteen physiotherapists who work at basic health units (BHUs) in a large municipality in Paraná state, Brazil. **Results:** Only six of the nineteen physiotherapists receive or have received students in the workplace. Higher education institutions that offer degrees in physical therapy have yet to harness the full potential of practical physiotherapy training in primary care in the municipality studied. The professionals who received or have received students in the workplace highlighted shortcomings in teaching-service integration, such as the lack of collaboration with teachers in terms of planning and student assessment. **Conclusion:** There is a need for closer ties between managers, health care professionals, teachers and students in order to improve teaching-service

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integration and provide physiotherapy training that complies with curriculum guidelines and the principles and policies of the National Health System (SUS).

Keywords: Physiotherapy. Health Education. Primary Care. Training of Human Resources. Health Services.

Resumo

Introdução: A integração ensino-serviço contribui para a qualidade da formação de profissionais da saúde. **Objetivo:** Este estudo teve como objetivo analisar a relação entre profissionais do serviço, docentes e acadêmicos no processo de formação de fisioterapeutas no contexto da atenção básica, sob a ótica dos profissionais. **Método:** Trata-se de uma pesquisa qualitativa, que considerou a entrevista semiestruturada como instrumento de coleta de dados e análise do discurso como referencial metodológico para análise das entrevistas. Foram entrevistados dezenove fisioterapeutas que atuam em unidades básicas de saúde em município de grande porte do estado do Paraná. **Resultados:** Apenas seis dos dezenove fisioterapeutas vivenciam ou vivenciaram a convivência com estudantes em seu local de trabalho. Identificou-se que o potencial do serviço de fisioterapia na atenção básica ainda é pouco utilizado pelas instituições de ensino superior que ofertam graduação em fisioterapia no município estudado. Os profissionais que recebem ou já receberam alunos destacaram fragilidades na integração ensino-serviço, como a falta de articulação com o docente nos processos de planejamento e avaliações dos estudantes. **Conclusão:** Constatou-se a necessidade de uma aproximação maior entre gestão, profissionais, docentes e acadêmicos, para o aprimoramento da integração ensino-serviço, com vistas a ofertar uma formação em fisioterapia que atenda às diretrizes curriculares e os princípios e políticas do Sistema Único de Saúde.

Palavras-chave: Fisioterapia. Educação em Saúde. Atenção Básica. Formação de Recursos Humanos. Serviços de Saúde.

Introduction

Changes in health care based on Brazilian healthcare reforms of the 1980s reflected the need to restructure the training of professionals in the area, particularly physiotherapists [1-3].

As a universal public health system that adopts primary care (PC) as its foundation, the Brazilian National Health System (SUS) calls for a new training model in Brazilian universities to promote changes in the training and development of healthcare professionals [4]. In this context, the new healthcare training proposal has prompted greater emphasis on teaching-service integration, understood as a collaborative effort between students and teachers from graduate programs and the staff who work in healthcare facilities, including managers. The aim is to ensure quality collective and individual care, as well as quality professional training and personnel development/satisfaction [5].

The National Curriculum Guidelines (NCG) for physiotherapy programs published in 2002 [6] stipulated

a broader and more humanized approach for physiotherapists in public healthcare services, proposing operational changes. However, challenges such as familiarizing professors with the realities of the National Health System (SUS) and investigating the care models addressed in teaching environments have yet to be overcome [7].

The specific skills required for physiotherapists to work in primary care (PC) are in line with those described in the NCG, but the pedagogic frameworks of many programs need to be reviewed in order to focus on integrality and providing generalist training [8].

Ministry of Health and Education initiatives such as the Labor Education Program for Health (PET-Saúde) play an important role in restructuring professional training for the SUS [9,10] and provide an opportunity to implement the principle of the indivisibility of teaching, research and outreach and ensure a more effective interrelationship between the different fields of

healthcare practice and the university [11]. However, it remains a challenge to ensure that undergraduate courses operate based on curricula aligned with the demands and specificities of the SUS, particularly in terms of PC [12].

Evidence suggests that physiotherapy training still focuses on curative care [1,3]. Decontextualized knowledge and segmented courses in professional training make it difficult to achieve a broader view of the health-disease process and teamwork skills, resulting in less effective care. This demonstrates the need for an interdisciplinary approach and interprofessional intervention in healthcare issues [13,14]. It is vital to reflect on physiotherapy training in Brazil not only from a teaching perspective, but also in terms of the population's ability to access these professionals, the caliber of graduates and, in turn, the care model provided [15].

Physical therapists evaluate and examine human movement and all its potential in a biopsychosocial approach to individual and collective health, and their involvement in PC can contribute to ensuring comprehensive care under the current healthcare system and improving its effectiveness [16,17].

In light of the current training challenges, this study aimed to understand the relationship between practicing physiotherapists, teachers and students in the physiotherapy training process in the context of primary care.

Method

This is a qualitative study with discourse analysis approach.

A questionnaire was applied to outline the profile of physical therapists working in primary care in a large municipality (Londrina, Paraná state, Brazil) in terms of the following: time since graduation, type of degree, time working in PC, working permanently at one Basic Health Unit (BHU) or rotating between services, and receiving students at the facility. Nineteen physical therapists were selected by convenience for a semi-structured interview at the relevant healthcare facilities, scheduled via a cellphone application, to minimize interference in their work routine. The researcher conducted one-to-one interviews with each participant in the physiotherapy room at the BHU, or any other available space to ensure a calm setting with no interruptions.

In qualitative research, interviewing is a scientific tool that allows researchers to collect information on a specific topic and compile pertinent data on the phenomenon under study [18, 19]. In semi-structured interviewing, the use of a script facilitates the approach and ensures that the assumptions will be covered in the conversation [18].

The interviews were conducted between August and October 2017, and recorded on a Sony IC recorder and Samsung smartphone to safeguard against losing the material. The conversations were transcribed by the researcher, who undertook to preserve all its characteristics. After transcription, the interviewees' statements were coded to ensure confidentiality. The material was examined by discourse analysis, in two stages: individual or ideographic analysis and general or nomothetic approach [19].

The main objective was to provide an overview of the production conditions and capture the meaning of the text in order to understand the principles of text organization and how meaning is produced [18]. The results were systematized under the teaching-service integration analysis category.

The study complied with the ethical guidelines of Resolution 466/2012, which regulates research involving human beings, and was approved by the Research Ethics Committee of the State University of Londrina under protocol number CAAE 67961917.0.0000.5231 and report 2.125.777 of June 19, 2017. Participants were advised of the study objectives, given the opportunity to ask questions, and provided written informed consent after agreeing to participate. The recorded interviews were erased after checking to ensure that transcriptions contained a detailed account of the conversations. The Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was applied to check for the presence of the criteria described during the method [20].

Results

The average age of the nineteen physical therapists interviewed was 36.78 years, with a mean time since graduation of 14.05 years. Most had graduated from the State University of Londrina (UEL) and had worked in primary care for an average of 8.1 years, varying between 3 and 20 years. They either rotated between two or three BHUs over a five-day week or worked at only one for 30 hours a week, depending on the size of the

facility. All the physiotherapists had completed a specialty; five via a residency, five with a Master's degree, two with a Doctorate and one who was studying for a Doctorate. Only six interviewees reported receiving students during their work routine at BHUs.

The participants were asked whether they viewed BHUs as a training environment and all but two reported that they did.

'I do yes, but there's still room for improvement, ... because they (students) are not used to working in a team' (F13).

'What's it like now? ...In terms of training on health promotion for groups, yes. But I don't think it's beneficial for a student to do an internship with me and just stay in the office examining patients' (F14).

When asked about their participation in planning and assessing student activities at the BHUs, the interviewees reported little involvement, revealing a certain distance between teachers and physiotherapists at the facilities.

'The way that teaching institutions work is not in line with protocols for the city. They still have a long way to go and find it difficult to adjust to change' (F12).

'In my experience the physical therapy courses are still a little disjointed. Nursing students do 6 months of practical experience so they can form a bond with patients. ... physiotherapy students only do a month and a half (F13).

'Working with the students is fine, but it's superficial because they're with a teacher; I don't give them any guidance, instructions or training at all, I just let them know I'm available if they have any questions' (F17).

The physical therapists who interned at BHUs during their course highlighted the training potential of this practice, which in many cases ultimately motivated them to work in primary care settings. The curriculum of physical therapists with less time since graduation involved a supervised internship in public health, while those who graduated earlier gained practical experience through outreach projects.

'My supervised internship was in collective health, with a focus on health promotion ... we would go to a BHU, meet with the team there and work with groups of patients, give talks, help patients in the waiting room' (F14).

'In the first year of my course I had a collective health project that I really enjoyed because it was multiprofessional ... and was involved in it throughout my course... I think it motivated me to do a multiprofessional residency in health and then a civil service examination to work in NASFs (Family Health Support Centers' (F15).

The most common activity performed by students at BHUs was home visits. Eligible patients are identified by Community Health Agents and their contact information is passed on to the supervising teachers. These visits are very well received because having a health-care professional visit them at home makes patients feel cared for. However, *'this practice doesn't reflect the reality of physical therapy in the context of primary care'* (F17).

Participants also highlighted the important role that physiotherapy plays within NASFs in relation to other categories that make up the healthcare team. *'Physiotherapy just seems to be more structured than the other professional categories, you know? I'm not sure if that's because our field is so broad that patients have more confidence in it; and our work gives results, it really does'* (F5).

The physical therapists who receive or have received students at their facility found the experience enjoyable.

'I really enjoy it. Because it's a chance for them to do something different from just seeing patients ... and to see the person as a whole' (F3).

'We only received students for a year, and it was great' (F19).

One of the interviewees reported having received training as a preceptor for the SUS, but had yet to receive students at her BHU: *'Not physiotherapy students. Because we work with the PET- Saúde program which already indicates certain healthcare professionals; I'm not registered with the program, so they wouldn't refer students to me (F10).'*

Discussion

The advent of the SUS combined with discussions on a broader concept of health have driven the need for a change in focus in the work of healthcare professionals [21]. The inclusion of physical therapists in PC is still ongoing and was strengthened by the implementation of Family Health Support Centers (NASFs) from 2008, via Ministry of Health Ordinance no. 154 [22]. Many of those who currently work in primary care were not trained for this level. Professional training is in need of a gradual shift in focus from a curative/rehabilitative approach to a promotional/preventive framework, which is vital to implementing a new care model that includes transformative and continuing education for graduates [3,16,17].

The physiotherapists interviewed were considered satisfactorily qualified to work as preceptors alongside teachers from higher education institutions. The full potential of teaching-service integration has yet to be harnessed in the municipality and more students could be given practical experience in BHUs in Londrina. According to data from the National Registry for Higher Education Courses and Institutions (e-MEC), Londrina had 860 unfilled places for in-person physiotherapy courses in 2017 [23] across six different institutions, one state-run and the other five private. The low presence of students in public health services a major barrier to teaching-service integration [24].

One of the interviewees reported he/was qualified to work as a preceptor in the SUS but had never received any students. No information was provided regarding PET-Saúde, a policy that guides professional education in the field of health with a view to meeting the needs of the population and strengthening areas strategic to the SUS, demonstrating the importance of interprofessional collaboration and teaching-service-community integration. The practices promoted by PET-Saúde contribute to changing healthcare training processes, with the public health services as an arena for shared knowledge and practices [9,10].

It is imperative to intervene in production processes by creating different devices that directly affect what is produced in meetings between teachers, students, healthcare professionals and users in order to create a micropolitical dynamic that paves the way for other production processes related to training and how care is provided [25]. The PET-Saúde program is helpful in this regard, but should not be the only strategy adopted

in the necessary transformation of health education and training.

Abrahão and Merhy [26] reflect on pedagogical practices that include other possible links to training, which affect the field of meanings in the everyday activities of training, whereby the stakeholders (teacher-student-user-healthcare professional) seek new meanings for what they undergo. The authors propose a training system in which production is centered on combining different areas of knowledge and learning that and on the experience of students, who become pivotal in the problematization of their own training. They identify two aspects of teaching and learning in the field of training: (1) one linked to the certainty that exposing students to scientific knowledge will result in training and learning; (2) and the other related to a pedagogical practice that promotes the emergence of new knowledge and collaboration, which students and teachers experience during problematization [26].

There are a wide range of perspectives in the training of healthcare professionals, including reflecting on and transforming the teaching/work interface, that is, relationships between education and health services [26]. At the State University of Londrina, training in several fields of healthcare incorporates Teaching, Service and Community Interaction Practices, which are curriculum modules aimed at enabling students to gain practical experience at Family Health Units in order to understand the determinants in the health-disease process [27]. A powerful strategy in ensuring quality training in family health is to bring students, teachers, healthcare professionals and SUS users closer together to combine different perspectives of the health-disease-care process.

Within the scope of physiotherapy training, it is important to rethink the determinants and conditioning factors of the health-disease-care process throughout the health production chain, from promotion and prevention to treatment and rehabilitation [2,7]. The availability of a course or curriculum module within BHUs indicates an effort to ensure that training surpasses the biomedical model, which is based on the integrality of care; however, it is important to strengthen the relationship between these healthcare facilities and educational institutions.

According to the definition of teaching-service integration [5], this practice should be a collaborative process between students and professors from health-related courses and the staff at healthcare services, including

managers. However, analysis of the answers provided by interviewees indicated that this is not the case.

This dichotomy between theory and practice is described in the literature [7,28]. Healthcare professionals have highlighted the potential of teaching-service-community integration to change current practices, with the understanding that universities cannot replace health services, but rather give students the opportunity to pause and reflect. This allows them to rethink how they relate to and perceive the problems of users and the concepts of health, care and teamwork, in addition to favoring learning and contact with new tools/work methods [28]. The obstacles identified reflect the difficulties faced by undergraduate courses in terms of improving collaboration between teaching and healthcare services and diversifying professional practices. In order to overcome this issue, a collective movement is needed to encourage dialogue and greater integration between managers of higher education institutions, healthcare services and courses, that is, ensuring effective teaching-service integration [24]. Issues regarding specialties and their relationship with the public health system as well as collaboration between different areas of knowledge from a comprehensive care standpoint are areas for improvement in health-related training. As such, there is a need for dialogue among the different stakeholders concerning the relationship between health education and the SUS in order to improve professional training in the country [7]. Practical scenarios need to be expanded and better qualified, a complex yet vital task in reorganizing health practices by training human resources who are aware of their role in consolidating the SUS [29].

Interprofessional relationship difficulties stymie work in primary care. These relationships provide an opportunity for planning, operationalizing and joint assessment, which could contribute to the adoption of more integrative practices [30]. In the Brazilian context, individual training predominates, whereas the ideal would be interprofessional training with shared knowledge and interaction between students and/or professionals from different areas [13]. Decontextualized knowledge and segmented courses in professional training make it difficult to achieve a broader view of the health-disease process and teamwork skills, resulting in less effective care. This demonstrates the need for an interdisciplinary approach and interprofessional intervention in healthcare issues [14].

The training process of healthcare professionals in general, not only physiotherapists, reveals gaps in both

undergraduate and graduate health programs in terms of content on working in the SUS, where key issues such as team work, bonding with patients, coordinating care and matrix support are rarely studied in depth [31]. Another training gap identified in the literature is the lack of active teaching-learning methodologies. These methods, based on the premise that the participation of others is a heuristic need, should promote recreating knowledge within a more challenging scope, whereby educators and students must be prepared to rethink their own views and break from the traditional paradigm on both an individual and collective level [32].

With regard to training for the SUS, the subjectivity of health care is not yet part of pedagogical projects. It is important to include relational skills, denominated soft technologies, in physiotherapy training. Soft technologies are defined by relational connections inherent to healthcare professionals, such as bonding with and welcoming patients, and are guided by intentionality linked to the field of care [33]. The authors consider three types of technology used by healthcare professionals: hard technology, represented by machinery, organizational norms and structures, soft-hard technology, consisting of technical knowledge and how workers apply it, and the soft technology mentioned above. The curative approach of the biomedical training model encompasses only hard and soft-hard technologies and is still prioritized in the work process, which hampers the potential of its subjective dimension in terms of (re) shaping a model that caters to health needs and is based on the integrality of care [34].

In general, students are given theoretical content on the SUS at the start of their undergraduate course and a supervised internship at the end. Even so, research shows that students are equipped to work in primary care and the SUS after completing a supervised internship [4]. The literature describes a successful experiment in a joint pedagogical project developed by teachers and physiotherapists from a public university and Family Health teams, based on a new framework for interns. Students were placed in educational, care, management and social participation initiatives as part of a team that provided a reference in carrying out all the activities needed to ensure they developed the skills required for this level of care. Initial results confirmed the positive impacts of the experience, with improvements in interprofessional practices and integration between students, patients and family members, contributing to more effective care and changing the team's perspective regarding the possibilities of physical therapy in PC [35].

Home visits are an established practice in primary care. The tools required for everyday operations in NASFs, described in Primary Care Guide no. 39 of 2014, consider home visits to be one of the stipulated activities of physiotherapists. The remaining elements described in the NASF guide are: matrix meetings with the PC team, one-to-one and group sessions with patients, space to develop supporting material and meetings between NASF staff [31]. As such, home visits should not be the only form of contact students have with primary care.

Student participation in BHUs enhances their training by broadening their understanding of the health-disease process and its different care possibilities. Successful training in BHUs depends on the proactive attitude, engagement and creativity of students, the bond that teachers establish with the field and the openness and willingness of those who work alongside the students at these facilities [30].

The activities performed in BHUs as part of graduate health programs provide teaching-learning opportunities in a setting where students can experience the realities of the population's health needs, enriching the training process [30]. National Curriculum Guidelines (NCG) stipulate that physiotherapists should be "generalist, humanist, critical and reflective", equipped with the general competences common to all health programs as well as the specialist skills required for their particular field, and that the key content covered encompass social, human, biological, biotechnological and physiotherapy knowledge [6]. This description is not specific to this professional category, but can be found in the NCGs of all healthcare professions, indicating that there is in fact a certain vision regarding what should be taught. However, in order to adhere fully to SUS principles and guidelines, all the stakeholders should be trained based on the same vision.

Although physiotherapy as a profession has grown at this level of care, emphasis on collective health and PC in student training needs to improve since the major benefits of this shift in focus have been observed in practice. Although the specific skills required for physiotherapists to work in primary care (PC) are in line with those described for the category in the NCG, the pedagogic frameworks of many programs need to be reviewed in order to focus on the integrality of care.

Interviewees also reported different scenarios regarding interaction between students and other members of family health or NASF teams. Whereas in some health units the team did not provide opportunities to share knowledge, in others students were allowed even

closer patient interaction than the physical therapists at the facility. This leads us to believe that there is no established teaching-service integration standard for physiotherapy training in the municipality, which is influenced by the higher education institutions in question, BHUs and their teams, and the physical therapists at the facilities.

Study of the SUS and its different territories as well as practical experiences in interdisciplinary teams in PC should be standard for students. This will enable them to view themselves as future SUS professionals, a vital step in the success of NASFs [11]. The process of working in primary care, involving the Family Health Strategy (FHS) and NASFs, could be transformed by strategies that provide learning experiences and teamwork opportunities for all stakeholders with a view to improving training in the labor market [35]. To that end, teaching-service integration has the potential to promote changes in professional practices within a dynamic context of constant dialogue and construction [28]. The SUS is an interprofessional system and in order to strengthen this practice, it is important to recognize the complexity and scope of health and disease, the diversity of the health-care network and the relevance of collaboration between professionals and health services [36].

Conclusion

The findings of this study demonstrate shortcomings in teaching-service integration for physiotherapy training in the municipality analyzed. The professionals interviewed were qualified to work as preceptors at their facilities, but this potential has not been fully utilized by higher education institutions. There is a need for greater collaboration between managers, healthcare professionals and teachers in order to improve teaching-service integration and interprofessional education, and provide physiotherapy training that complies with national curriculum guidelines as well as SUS principles and policies.

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