

Physical therapist's performance in Cerests: indicators of notification of work-related musculoskeletal disorders

Atuação do fisioterapeuta nos Centros de Referência em Saúde do Trabalhador: indicadores das notificações dos Dort

Actuación del fisioterapeuta en Centros de Referência em Saúde do Trabalho do Brasil: indicadores de las notificaciones de Dort

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ABSTRACT | This study described the role of physical therapists in Cerests (Occupational Health Reference Centers in Brazil) and estimated the number of notifications of work-related musculoskeletal disorders in the country. This study was conducted with primary data obtained from an electronic questionnaire to verify the insertion and actions performed by physical therapists in Cerests in Brazil, and with secondary data related to the notifications to SINAN between 2009 and 2013. Results: in Cerests, 71.1% had at least one physical therapist in the health team in 2015. Most physical therapists were allocated in the Southeast (37.6%) and Northeast (31.6%) regions, which were also the geographical origins of most notifications (62.3% and 26.7%, respectively). The national average insertion of these professionals in Cerests was 1.02 physical therapists per health unit. Physical therapists are present in most Cerests, and their geographical concentration corresponds to the regions with the highest proportion of cases of work-related musculoskeletal disorders. Despite the preponderance of surveillance actions in occupational health, rehabilitative actions conducted by physical therapists still coexist.

Keywords | Occupational Health; Epidemiology; Physical Therapy Modalities; Public Health Surveillance.

RESUMO | Neste trabalho, descreveu-se a atuação de fisioterapeutas nos Centros de Referência em Saúde do Trabalhador (Cerest) do Brasil e foi estimado o volume de notificações de distúrbios osteomusculares relacionados ao trabalho (Dort) no país. Este estudo foi conduzido com dados primários obtidos por questionário eletrônico para levantamento de inserção e de ações realizadas por fisioterapeutas nos Cerest do país e dados secundários relativos à casuística das notificações de Dort no Sistema de Informação de Agravos de Notificação (Sinan), entre 2009 a 2013. Foi constatado que 71,1% dos Cerest tinham pelo menos um fisioterapeuta na equipe em 2015. A maior parte desses profissionais estava alocada nas regiões Sudeste (37,6%) e Nordeste (31,6%), que também caracterizam-se como a origem geográfica da maioria das notificações de Dort (62,3% e 26,7 %, respectivamente). A média nacional de inserção de profissionais nos Cerest foi de 1,02 fisioterapeutas por unidade. Os profissionais de fisioterapia estão presentes na maioria dos Cerest, e sua concentração geográfica corresponde às regiões com maior proporção de casos de Dort. Apesar da preponderância das ações de vigilância em saúde do trabalhador, ainda coexistem ações reabilitadoras exercidas por fisioterapeutas.

Descritores | Saúde do Trabalhador; Epidemiologia; Modalidades de Fisioterapia; Vigilância em Saúde Pública.

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RESUMEN | En este trabajo, se describió la actuación de fisioterapeutas en Centros de Referência em Saúde do Trabalhador (Cerest) de Brasil y fue estimado el volumen de notificaciones de disturbios osteomusculares relacionados al trabajo (Dort) en el país. Este estudio fue conducido con datos primarios obtenidos por cuestionario electrónico para levantamiento de inserción y de acciones realizadas por fisioterapeutas en Cerest del país y datos secundarios relativos a la casuística de las notificaciones de Dort en Sistema de Informação de Agravos de Notificação (Sinan) entre 2009 a 2013. Fue constatado que 71,1% de los Cerest tenían por lo menos un fisioterapeuta en el equipo en 2015. La mayor parte de esos profesionales estuvo alocada en las regiones

Sudeste (37,6%) y Nordeste (31,6%), que también se caracterizan como el origen geográfico de la mayoría de las notificaciones de Dort (62,3% e 26,7 %, respectivamente). La media nacional de inserción de profesionales en Cerest fue de 1,02 fisioterapeutas por unidad. Los profesionales de fisioterapia están presentes en la mayoría de los Cerest y su concentración geográfica corresponde a las regiones con mayor proporción de casos de Dort. Además la preponderancia de las acciones de vigilancia en salud del trabajador, aun coexisten acciones rehabilitadoras ejercidas por fisioterapeutas.

Palabras clave | Salud del Trabajador; Epidemiología; Modalidades de Fisioterapia; Vigilancia en Salud Pública.

INTRODUCTION

Work-related musculoskeletal disorders (WMSDs) are a disabling problem of high relevance for public health in the scenario of occupational morbidity, representing in 2011 the second most frequent reason for granting sickness benefits in Brazil, according to the Social Security¹. These disorders are directly related to work and associated with occupational factors that are risks to occupational health², which demands increasing attention for the implementation of practices that ensure the well-being of these individuals.

The mandatory notification of WMSDs to the SINAN (Notifiable Diseases Information System) is linked with the occupational health surveillance strategy of the National Network of Integral Attention in Occupational Health (RENAST). This process started in 2004 and it allows for continuous estimates of these disorders detection, aiming to structure the knowledge about risk factors and their economic and social impacts³.

Thus, the Occupational Health Reference Center (Cerest) develops health surveillance actions, according to the healthcare model for health promotion, prevention and protection, seeking an intersectoral organization among the areas that cover and affect the occupational health. By learning about people's living conditions, and the environment and conditions of access to health services and actions, it is possible to improve the quality of information about the cases of disorders, such as WMSDs, aiming to provide a better planning of strategies at all healthcare levels⁴⁻⁶.

Today, the traditional concept of health, based on the clinical-care model, is no longer able to efficiently fulfill the health demands of the population⁷. Physical therapy, whose training is still focused on the individual and curative model, faces the clinical conception as a structural limitation, which is often insufficient for occupation health actions.

In this context, a physical therapist, as a player in the consolidation process of surveillance actions has the challenge to understand the comprehensiveness of his skills, the knowledge of the epidemiological profile of the disorders affecting the workers, and then, add new elements for the analysis of WMSDs, allowing better conditions for the development of integral health actions.

The principles of SUS (Unified Health System) incorporated into professional practice can provide a critical look at the demands of notification coverage in these services^{2,8}. Considering the insufficient number of studies on physical therapists' work in the field of occupational health, this study aimed to describe the insertion and actions of physical therapists in Cerests in Brazil and estimate the number of notifications of WMSDs in Brazil from 2009 to 2013.

METHODOLOGY

This is a descriptive exploratory study that used both locations and individuals as observation units, considering all physical therapists linked with Cerest teams in the country. This study included Cerests that started operating until January 2013.

In an attempt to fulfill the objective of this study, data collection was organized in two stages. First, primary data were collected through an electronic form sent to the institutional email of each Cerest to evaluate the physical therapist distribution in Cerests across the country and describe the action in the surveillance context. The questions were related to Cerest unit identification, number of municipalities covered, team members, professionals involved in WMSD notification process of the unit, as well as the characteristics of physical therapist insertion: number of physical therapists in the team; activities conducted and adoption of the International Classification of Functioning (ICF).

Each unit was contacted from January to May 2015, using an electronic mail created especially for this study, from the invitation to participate in this study to sending the questionnaire and the informed consent form (ICF). After agreeing to participate, the form was sent to the respondent, to be filled preferably by the Cerest coordinator or physical therapist, or another team member designated by the coordinator. For Cerests that did not answer the questionnaire, the contact was by phone, previously scheduled for a specific day and time and with the consent of the participant after presenting the ICF.

Next, to learn about the scenario of WMSD notifications in the country, SINAN database was analyzed, granted by the Ministry of Health to the CCVISAT (Collaborating Center for the Surveillance of Workplace Accidents and Diseases) of the Integrated Program of Environmental and Occupational Health (PISAT/Instituto de Saúde Coletiva/UFBA). The frequency of WMSD notifications in Brazil was obtained in the period from 2009 to 2013.

For data analysis, absolute and relative frequencies were calculated for the description of the variables of interest using Statistical Package for the Social Sciences, version 20. The physical therapist/CEREST ratio was also evaluated, considering the number of physical therapists per CEREST in a certain region of the country.

Data were organized as maps, which were produced with Adobe Photoshop CC, version 14. Charts and tables were also produced in Microsoft Excel, version 2013. This study was approved by the Research Ethics Committee of the Instituto de Ciências da Saúde da Universidade Federal da Bahia (ICS/UFBA) on December 23, 2014, protocol no. 926.102.

RESULTS

Of all 210 Cerests in the country, 12 were excluded because they were not operating until 2013, leading to 198 eligible Cerests. In total, 162 Cerests (81.8%) accepted to participate and answered the form. Most of them (n=118) filled out the electronic form sent by email, and the remaining ones (n=44) answered by telephone contact. Non-respondents were those who refused (n=11) or who could not be contacted after all attempts (n=19).

Of the total Cerests, 71.7% had at least one physical therapist in the team. Most physical therapists in Cerests were allocated in the Southeast (37.7%) and Northeast (31.6%) regions, respectively. The South region presented 13.2% of all physical therapists in the country, while the North and Central West regions had the lowest percentages of physical therapist insertion, and these regions had more Cerests with no physical therapist, that is, for each of these regions, only 8.8% of physical therapists were located there (Figure 1). When analyzing the average insertion of physical therapists, the physical therapist/Cerest ratio was estimated at 1.02 nationwide, reaching 0.83 physical therapist in the North region, while the lowest ratio was in the South region (0.55).

National Cerests' teams mostly comprised a physician (13.9%), followed by nurses (13.9%), professionals of technical level (12.3%), and physical therapists (11.9%) (Graph 1). Of all Cerests with physical therapists, 63.7% had 1 physical therapist and 30.1% had 2 physical therapists in their teams.

Among the activities performed by these physical therapists, actions related to occupational health surveillance were present in more than 50.0% of all Cerests; however, although the surveillance proposal is considered in most actions, many Cerests (42.6%) reported clinical care and rehabilitation activities as part of their role in the team (Table 1).

The ICF was also evaluated in the work context of the teams. Most physical therapists inserted in Cerests (63.6%) reported prior knowledge of the ICF. However, 82.7% reported that they did not use it to support the care model to WMSDs in the establishment of a causal nexus, diagnosis or notification, and 79.8% of Cerests reported absence of prior participation of the team in ICF discussions or training (Table 2).

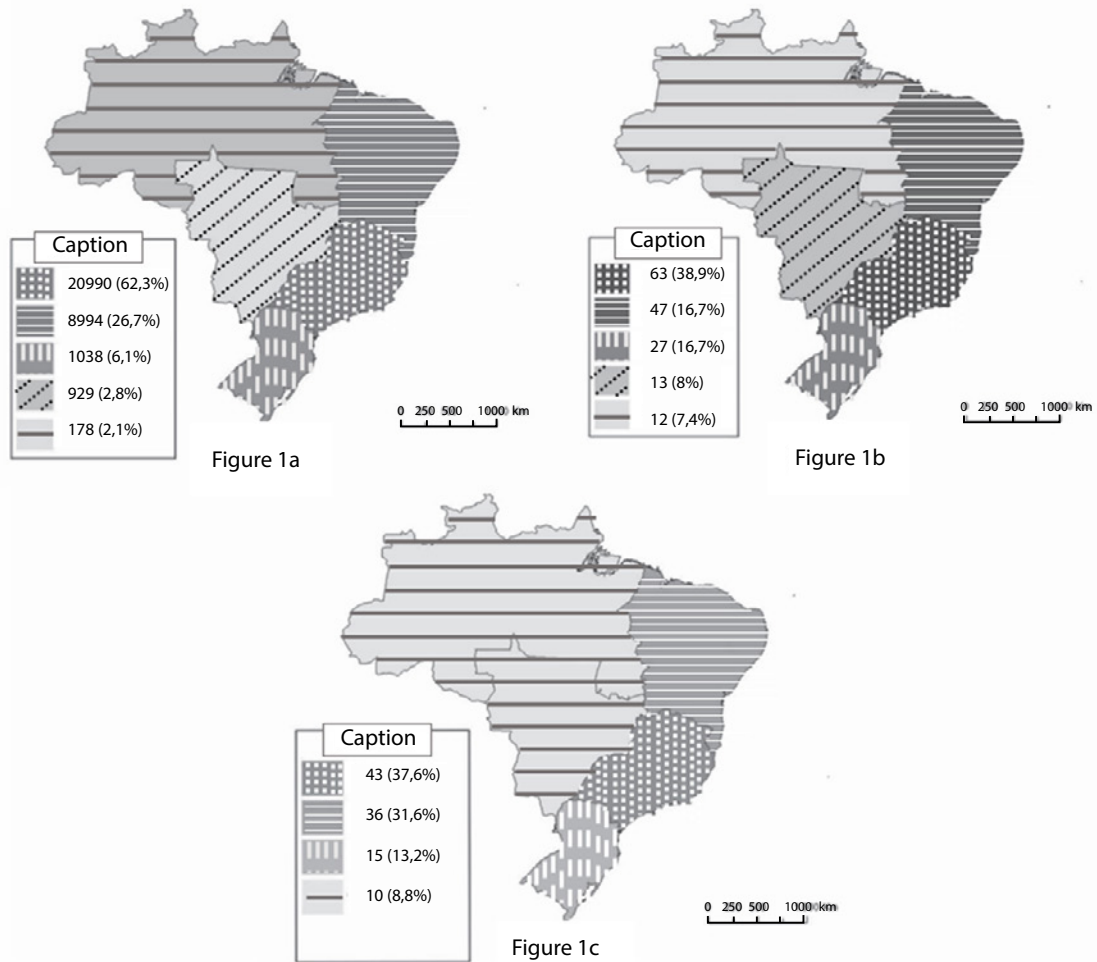
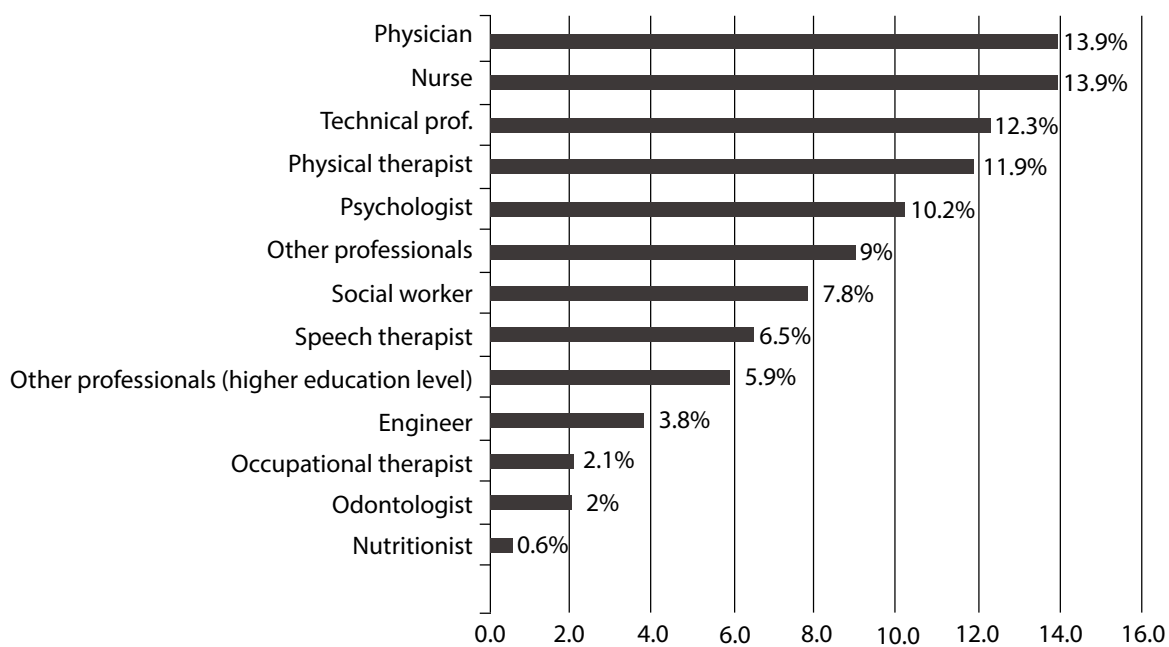


Figure 1. Geographical distribution of notifications of work-related musculoskeletal disorders from 2009 to 2013 (1a), implementation of Cerests (1b) and distribution of physical therapists in Brazil (1c) by region in 2015



Graph 1. Percentage of professionals inserted in Cerests of the country in 2015

Table 1. Characteristics of the work of physical therapists inserted in Cerests of the country in 2015

Characteristics	n	(%)
Admission		
Yes	74	64.9
No	40	35.1
Health education		
Yes	107	93.9
No	7	6.1
Workplace inspection		
Yes	98	86.0
No	16	14.0
Occupational disorder notification		
Yes	85	74.6
No	29	25.4
Clinical and rehabilitation care		
Yes	49	42.6
No	65	56.5
Training		
Yes	99	86.8
No	15	13.2

Table 2. Presence of ICF in surveillance practice of Cerests in Brazil in 2015

Characteristics	n	(%)
Knowledge of what ICF is		
Yes	103	63.6
No	59	36.4
Use of ICF as a tool for WMSD classification		
Yes	18	17.3
No	86	82.7
Discussion or training on ICF among the team		
Yes	21	20.2
No	83	79.8

Most cases of WMSD notifications in the country in the studied period also presented a high expression in the Southeast region (62.3%), followed by the Northeast region (26.7%). They were also significant in the concentration of Cerests: 38.9% in the Southeast region and 29% in the Northeast region (Figure 1). However, of all Cerests evaluated, 16.5% reported that they did not produce the mandatory notification of WMSDs.

DISCUSSION

This study analyzed the current scenario of insertion of physical therapists in Cerests across the country

and the incorporation of surveillance actions into the practices of these professionals. A higher percentage of physical therapists and a higher concentration of Cerests were found in the Southeast and Northeast regions, respectively. These two regions also concentrated higher estimates of WMSD notification. However, three out of ten Cerests do not have a physical therapist in the team.

The insertion of physical therapists in Cerests across the country reflects the broad perception of the field of action of physical therapy in the scope of surveillance within the SUS. The adaptation of physical therapy's action to the consolidation of integral actions, based on the appreciation of health prevention-promotion and risk control, has been often considered in academic contexts, due to changes in curricular structures in higher education courses⁹.

However, the fields of physical therapy are still used in the treatment of kinetic disorders that have already been set, justified by the historicity of the profession, which aimed to socially reintegrate debilitated individuals, while strongly supported by an academic training restricted to clinical/therapeutic perspectives¹⁰.

There is evidence that Cerest professionals may find it difficult to understand the level of complexity of the healthcare environment they are inserted, indicated by the lack of understanding of Cerest's proposal in SUS organization and the lack of differentiation between Renast and Cerest, besides the dilemmas about the prioritization of care or surveillance actions in daily work¹¹. Then, improvements are required, since training, for professionals who do not have the practice to act according to the logic of the actions for occupational health vigilance¹².

The intervention of physical therapy in collective health is still a new fact^{2,8,9,11,13}. However, the healthcare model in force in the country requires a broad view of the functional health of the population, one that relates the social dimension by admitting the legitimacy of investigation of non-biological factors, such as productive work relations and characteristics of territorialization, which directly influence the complexity of diseases and occupational health¹⁴.

The theoretical model that establishes ICF on the dimensions of structure-function and activity-social participation also proposes changes in the evaluation of functioning¹⁵. Then, this model offers possibilities to expand the professional approach to the spheres of disability in the field of occupational health. In this aspect, the assessment of WMSDs can be easier in any context, in addition to the therapeutic approach.

The social sphere of work incorporates into the physical therapy approach the reflection of WMSD impact on occupational health. Thus, a number of actions is foreseen to cover not only WMSD notification, treatment and rehabilitation of the worker, but also organizational, sociocultural and territorial factors, to strengthen possible methods to control this disorder.

Regarding the implementation of Cerests in Brazil, an increase in the number of Cerests can be observed over the years, totaling 210 units in the country today¹⁶. The literature does not have sufficient studies on the implementation of Cerests and the health surveillance process, but it has discussions about the progress and challenges of surveillance actions in the field of occupational health. This study reinforces the importance of Cerest as an articulator of surveillance actions in the network that involves different levels of occupational health.

The higher concentration of doctors and nurses among the professionals in the units can be explained by the regulation that defines the presence of these professionals in the team composition, along with nursing assistants¹⁷. Although physical therapy is the third most frequent profession in Cerests, the distribution of physical therapists is not homogeneous, reflecting the need for a greater incentive to incorporate a larger number of professionals. There is also a lack of other professional categories to achieve a proper team composition that reflects the interdisciplinary investigation of disorders involving mandatory notification in occupational health, taking into account the epidemiological situation of each territory.

In this perspective, a new scenario can be observed for mandatory notification of occupational health problems. The incorporation of sentinel units into basic healthcare indicates the role assumed by these units in expanding the scope of professionals with a view to disorder notification, thus increasing the number of notified cases¹⁸.

The highest expressions of WMSD cases observed in the Southeast and Northeast regions reflect the progress in the notification process, directing a greater demand for notifications to control health risks. The notification profile in the country is more related to the formal employment bonds, due to the fact that they have better access to labor rights and social security issues; it also affects workers from the various fields, with a prevalence of banking, metallurgical and industrial (assembly) workers, whose workplace favors the occurrence of functional disorders^{19,20}.

CONCLUSION

Although physical therapists are present in most Cerests in Brazil and their geographical concentrations are in regions with the highest proportion of WMSD cases, the challenges are evident for the insertion of physical therapists in occupational health surveillance. The insertion of physical therapists in Cerests or healthcare units should be conditioned to the actions to ensure social viability of the SUS proposal, in addition to the therapeutic arsenal. In addition, the formulation of strategies that favor the increase of quality and quantity of notifications should be encouraged to obtain health information that increasingly correspond to the epidemiological demands.

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