



The European Physiotherapy Guideline for Parkinson's Disease: translation for non-English speaking countries

Josefa M. M. Domingos^{1,2} · Tamine T. C. Capato^{1,3,4} · Lorena R. S. Almeida^{5,6} · Catarina Godinho⁷ · Marlies van Nimwegen¹ · Maarten Nijkrake¹ · Nienke M. de Vries¹ · Bastiaan R. Bloem¹

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Abstract

Background The use of the European Physiotherapy Guideline for Parkinson's Disease is limited in countries where the official language is not English.

Objective To provide practical steps on how to translate the European Physiotherapy Guideline for Parkinson's Disease.

Methods We used the translation process of the Portuguese version as an example of how to define the recommended steps. A combination of a forward–backward-translation and dual-panel approach was used.

Results Ten recommended translation steps were defined: (1) authorization, (2) translation of sample chapter, (3) physiotherapy expert panel review, (4) backward translation, (5) approval by copyright holders, (6) translation of the remaining sections of the guideline, (7) review of the entire translation by expert panel, (8) review by a user panel, (9) conclude final draft, (10) publication and dissemination. Several adjustments were needed in the Portuguese version.

Conclusion The additional adjustments that were required for the Portuguese version justify the need for the detailed and multifaceted translation process that was outlined in this manuscript.

Keywords Parkinson's disease · European Physiotherapy Guideline for Parkinson's Disease · Physiotherapy · Translation · Implementation

✉ Josefa M. M. Domingos
domingosjosefa@gmail.com

¹ Department of Neurology, Donders Institute for Brain, Cognition and Behaviour, Center of Expertise for Parkinson and Movement Disorders, Radboud University Medical Center, Route 938, Room 146, Postbus 9101, 6500 HB Nijmegen, The Netherlands

² Laboratory of Motor Behavior, Sport and Health Department, Faculty of Human Kinetics, University of Lisbon, Lisbon, Portugal

³ Department of Physiotherapy and Neurology, Movement Disorders Clinic HC-FMUSP, University of São Paulo, São Paulo, Brazil

⁴ Physical Parkinson's Disease and Movement Disorders Rehabilitation Center, São Paulo, Brazil

⁵ Movement Disorders and Parkinson's Disease Clinic, Roberto Santos General Hospital, Salvador, Bahia, Brazil

⁶ Motor Behavior and Neurorehabilitation Research Group, Bahiana School of Medicine and Public Health, Salvador, Bahia, Brazil

⁷ Grupo de Patologia Médica, Nutrição e Exercício Clínico do Centro de Investigação Interdisciplinar Egas Moniz (CiiEM), Caparica, Portugal

Introduction

Parkinson's disease (PD) is a complex disorder characterized by various motor and non-motor symptoms. Even with optimal medical management, many people with PD face mounting problems in daily functioning [1]. Therefore, a variety of multidisciplinary interventions can be applied in the management of PD [2]. Of these interventions, physiotherapy is the most commonly applied and is supported by growing scientific evidence [3]. First evidence for practice recommendations for physiotherapy in PD was published in 2004 by the Royal Dutch Society for Physical Therapy (KNGF) [4]. This guideline was one of the few high-quality PD guidelines and unique in this field [5]. However, these guidelines required updating to reflect best practice and findings of new studies. Following a request from the Association of Physiotherapist in Parkinson's disease Europe (APPDE), the KNGF agreed upon a proposal of ParkinsonNet to update and adapt the guideline to the European region of the World Confederation for Physical Therapy (ER-WCPT) and the European Parkinson's Disease Association (EPDA). Twenty professional

associations of the ER-WCPT took part, as well as people with PD and their representatives. In 2014, the European Physiotherapy Guideline for Parkinson's Disease was published. This evidence-based guideline was primarily developed to support decision-taking for physiotherapy practice in PD, but it also provides information to clinicians regarding referral criteria for physiotherapy [6]. It also provides people with PD and their care information on movement-related self-management and what to expect from physiotherapy.

The global implementation of the European Physiotherapy Guideline for Parkinson's Disease is envisioned to ensure equal access for all people with PD to good quality and specialized care. To optimize implementation in non-English speaking countries, the Guideline Development Group (GDD) strongly recommended translation and adaptation of this Guideline as a first step. Currently, there are six translated versions of the Guideline: English, Portuguese, German, Dutch, Czech and Finnish version, that are freely available for downloading at <https://www.parkinsonnet.info/euguideline>.

Defining practical standardized steps to know how to do the translation and adaptation is critical as more countries seek to do it. There are two commonly used approaches for translation and cross-cultural adaptation processes, namely forward–backward (FB) translation and dual-panel (DP) [7]. In the FB approach, translations into the target language are produced by an independent translator, followed by back translation to the source language by another translator. Differences in the forward- and back-translated versions are typically reconciled after each step. On the other hand, the DP approach is based on a consensus translation produced by a panel of people, native to the target language, together with a representative of the copyright holders of the original document. This is followed by review of the translation by a second panel (users) [8–11]. Even though, translation studies have introduced these different methods to facilitate valid translations and adaptations of surveys and documents for cross-cultural use, there is limited agreement on which type of translation should be used [7]. The aim of this paper was to define and provide practical steps on how to translate the European Physiotherapy Guideline for Parkinson's Disease to help guide future translations.

Methods

The definition of the steps for the translation of the guidelines was based on the use of information and expertise from a variety of sources, namely (1) our results from a detailed example (Portuguese version), (2) copyright holder input and experience with other ongoing translations, and (3) review of information available regarding protocols commonly used in translation process of multi survey instruments and

multicenter research [11, 12]. All information sources were carefully assessed.

Respectively, the Portuguese translation process was carefully described into four phases and registered as follows:

Phase I—authorization

An authorization to use and adapt the European Physiotherapy Guideline for Parkinson's Disease was requested from the copyright holders. To assure quality, conceptual equivalency and transparency of translation, the involvement of the copyright holders and, if available, a member of the GDG whose mother language equals the language for the translation was recommended.

Phase II—translation and adaptation process

The Portuguese version of the European Physiotherapy Guideline for Parkinson's Disease was based on combining the FB and DP approaches [6]. The process was led by an expert physiotherapy panel (PT panel: TC, JD and LA), consisting of three physiotherapists, Portuguese native speakers, experienced in reading and writing English and experts in PD, who work in Movement Disorders Centers at Public Hospitals and in Specialized Private Clinics. The PT panel included one physiotherapist (JD) who was a member of the original Guideline Development Group, whose mother language is Portuguese and was also English bilingual.

Initially, an official Portuguese translator, experienced in translating texts from English to Portuguese (FB) and health terminology, was asked to produce a first draft version of a sample chapter of the Guideline (chapter four, 'Physiotherapy in Parkinson disease') with a FB approach. Based on the differences between the English and Portuguese languages, some specific instructions were discussed beforehand with the translator regarding, for example, general grammar aspects, avoiding long sentences with many clauses, the use of jargon, use of conceptual rather than literal translations, as well as the use of more acceptable and general terms. These specific initial indications were perceived by PT panel and translator as useful to potentially reduce the number of adjustments and time needed after.

When finished, the first draft version was then revised by an expert panel and combined into one version taking conceptual problems into consideration, and assessing clear language and correct use of terminology. This version was then back-translated into English by another independent translator [6]. The copyright holders of the Guideline then assessed and approved the back-translated version of this specific chapter.

After these initial FB steps, the official Portuguese translator produced a first draft of the entire Portuguese version of the guideline. The expert PT panel then assessed all the

material independently, looking for inadequate expressions/concepts of the translation, as well as any discrepancies between the English and the Portuguese versions of the guideline. The panel also checked for clear language, spelling, grammar, writing style, consistency, understanding, correct use of terminology and guideline message. Discrepancies were discussed as many times as needed and solved by the expert PT panel and copyright holders via Skype calls and email exchanges.

Phase III—feedback from people with Parkinson’s disease, physiotherapists and physicians

A user panel consisting of three people with PD, three physiotherapists and two physicians were consulted and asked to provide feedback to the main document and the respective parts for people with PD and physicians. They were recruited from three clinics: the Movement Disorders Clinic—Department of Neurology—Faculty of Medicine from the University of São Paulo (HC FMUSP, São Paulo, Brazil), Private Clinic PHYSICAL (São Paulo, Brazil), Roberto Santos General Hospital (Bahia, Brazil) and movement disorder clinic (Lisbon, Portugal). There were no complaints of irregularities in the items or difficulties understanding the materials. Overall, there was positive general consensus regarding its understanding and ease to read.

Phase IV—publication

When all reviewers agreed upon a final version of the Portuguese version of the European Physiotherapy Guideline for Parkinson’s Disease, it was published in a printed book format [13] and in a pdf format at <https://www.parkinsonnet.info/euguideline> and <https://www.abneuro.org.br>. The entire process took approximately 8 months. The additional parts of the guidelines with information for people with PD [14] and the other with information for physicians [15] were also translated and published.

Results

Based on the results of the detailed Portuguese translation process, and copyright holders’ input and experience, ten practical steps on how to translate and adapt the European Physiotherapy Guideline for Parkinson’s Disease were officially defined and recommended to help guide future translations (Table 1).

The Portuguese translated version was successfully launched and served as a base for the definition of recommended steps. To ensure translation trustworthiness, several decisions and adjustments had to be made. For example, some words and expressions that were not found to be

understandable to either Brazil or Portugal were adjusted. As such, there was a need to include in the final version some words in both European and Brazilian Portuguese to make the reading friendly and understandable to both [i.e., the word “treadmill” was translated to *passadeira* (European Portuguese) and *esteira* (Brazilian Portuguese), and appeared in the guideline as “*passadeira/esteira*”]. Also, to contemplate respective populations and cultural issues, some of daily activities used as examples were removed, such as shuffling snow, since they were not commonly applicable neither in Brazil nor in Portugal. Additionally, some of the measurement and assessment tools recommended by the Guideline Development Group were already previously validated into Portuguese. These tools were displayed in the guideline in their published version on a specific chapter with their respective references taken from the Brazilian Academy of Neurology recommendations [16]. Tools which had not been validated into Portuguese were only translated following the same process as the entire Guideline (i.e., the Modified Parkinson Activity Scale and the New Freezing of Gait Questionnaire). Importantly, reference was made that these scales were not yet validated into Portuguese and should only be used until the new validated versions are published. Of notice, there was a need to consult other materials such as books and published papers in PD that had been translated in Portuguese to assure consistence with previous translated expressions. As such, the terminology from the Portuguese version of the International Classification of Function (ICF) was used throughout the guideline [17].

Discussion

Based upon information from our detailed example, combined with copyright holders’ input, and information available regarding translation processes, ten steps were recommended on how to translate and adapt the European Physiotherapy Guideline for Parkinson’s Disease. These steps are needed to facilitate the validity and appropriateness of future translations. The multifaceted procedure outlined here represents a step forward in the international dissemination effort of evidence-based guidelines in PD (in this case for physiotherapy, but the method appears readily able to also be of benefit for other professional guidelines as well).

Defining these recommended steps is underscored by three primary reasons. First, the European Physiotherapy Guideline for Parkinson’s Disease is becoming a key tool in clinical settings to provide practical help to ensure high-quality and specialized physiotherapy care for people with PD. It is expected to potentially help reduce inadequate delivery of allied health care and increase appropriate referral to physiotherapy. Second, to facilitate further global implementation and dissemination of the guidelines,

Table 1 Ten practical recommended steps for a trustworthy translation and adaptation process of the guideline

Steps	Tips
Step 1 Request authorization to translate guideline	Contact copyright holders to request authorization https://www.parkinsonnet.info/euguideline
Step 2 First translation of a sample chapter by official translator	Use preferable official translator experienced in translating texts from English and in health terminology Giving initial indications to the official translator before beginning may be helpful (i.e., avoiding long sentences with many clauses, the use of jargon, use of more acceptable and general terms)
Step 3 Review of first draft of a sample chapter by PT panel	Create a PT panel composed of three physiotherapist native speakers, experienced in English and experts in Parkinson disease Check for clear language; correct use of terminology; overall message of the guideline
Step 4 Back translation to English	Preferably, back-translated into English should be done with another independent official translator
Step 5 Review and approval of back translation by copyrighters	Integrate copyright holders of the guideline to assess the back translation of the sample chapter
Step 6 Translation of the remaining guideline by the official translator	The tools which are previously validated to the target language should be displayed in their published versions The tools which have not been validated into target language should be translated following the same process as the whole guideline but replaced as soon as validated
Step 7 Review by PT panel with continuous discussion with copyrighters	Check for spelling, grammar, style, understanding consistency and adjustments for cultural issues Consult other published Parkinson disease-related papers/documents translated recently to the targeted language to assure consistence with previous official translated expressions
Step 8 Review by native speaking physiotherapist, clinicians and people with Parkinson	Assess understanding, irregularities and ease of use of each part of the guidelines respectively
Step 9 Finalize pre-final draft of the translated version	
Step 10 Publish and disseminate final official translated version of the guideline	Publish pdf document on ParkinsonNet website https://www.parkinsonnet.info/euguideline and other local professional websites

recommended steps are critical to standardize procedures and help guide other non-English speaking countries that decide to translate the European Physiotherapy Guideline. Health researchers have only recently begun to identify best practices for the translation and assessment of translations of survey instruments into other languages [7]. Current standards for translation procedures are lacking and few researchers report their methods of translation [8–10]. Third, valid translations will also facilitate the comparison of results of the international implementation process ongoing in different countries and cultures. This is important given the number of ParkinsonNet initiatives all over the world that aim to improve the degree to which health professionals integrate care, and their requirement for thorough evaluations and international comparison.

Although issues in the translations of guidelines are likely to vary by country, the Portuguese experience showed that it is both feasible and useful to incorporate contextual and cultural considerations. Importantly, it shows that it is possible to follow a rigorous methodological translation and adaptation process that is achievable with a minimal time frame of 8 months.

We identified several important factors that facilitated the overall Portuguese translation process that merit discussion and sharing. First, using a PT panel that consisted of researchers that were native speakers of the target language, proficient in the writing and reading of the source language and experienced in Parkinson-related clinical practice within their health services. Additionally, one member of this panel was a member of the initial guideline development group and was also bilingual. Second, the copyright holders were highly involved in the whole process and were always available to clarify any issues that arose. Third, costs with the translation was based on a volunteer-run initiative of the expert physiotherapy panel and endorsed by the Academia Brasileira de Neurologia (ABN), PHYSICAL, Associação Brasileira de Fisioterapia Neurofuncional (ABRAFIN) and by the Sociedade Portuguesa Doenças do Movimento (SPD-Mov). This is important because the guidelines will continue to be updated, therefore, overly complex or expensive translation processes should be avoided. Some countries may not have the resources to translate the whole Guideline. In this case, ‘expertise-based suggestions’ for partial translations should be discussed with the copyright holders.

ParkinsonNet and the APPDE continue to provide collaborative support towards education related to the implementation and translation of this guideline. All future translations should be easier to undertake and the process should be done as accurately as possible following the practical recommendations that have been proposed in this paper.

Conclusion

The European Physiotherapy Guideline for Parkinson's Disease is a key instrument in physiotherapy care for Parkinson's. However, its use in countries where the official language is not English has been limited. Translations and cross-cultural adaptation are needed to be applied in other countries, cultures and languages. The multifaceted procedure outlined here represents a step forward in the international dissemination effort of evidence-based guidelines in PD (in this case for physiotherapy, but the method appears readily able to also be of benefit for other professional guidelines as well).

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Compliance with ethical standards

Conflicts of interest The authors declare that they have no conflict of interest.

Ethics approval This research does not contain any studies with human participants or animals performed by any of the authors.

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