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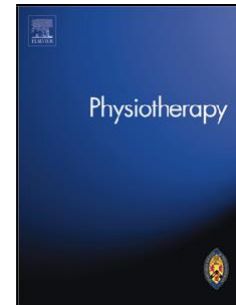
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Is keep/refer decision making an integral part of national guidelines for the physiotherapy profession within Europe? A review.

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Keywords: *Keep/refer decision making ability, physiotherapy, national competency guidelines.*

Abstract

Background: Keep/refer decision as the ability to independently determine whether a patient's condition is suitable for physiotherapy management (keep) or not (refer), is regarded as an core element in the World Confederation of Physical Therapists' (WCPT) Guideline for Standards of Physical Therapy Practice. However, it is currently unknown how individual European countries have implemented this in their national guidelines.

Objectives: To determine if keep/refer decision making abilities are an integral part of national guidelines for the physiotherapy profession of member countries of the European Network of Physiotherapy in Higher Education (ENPHE).

Data Sources: A review was performed including medical databases, the grey literature and personal correspondence with professional ENPHE member associations. To gain the information of interest, all eligible documents were reviewed.

Results: 11 national guidelines for the physiotherapy profession could be obtained. Two additional member associations use European guidelines as their national ones. Despite the fact that in the WCPT guidelines keep/refer decision making abilities are clearly described as a core element, there exists huge inconsistency as to how various European (with direct and non direct access systems) countries have included them in their national guidelines.

Conclusion: Despite the fact that most ENPHE member countries deem a close collaboration between health care professionals important and that physiotherapists should know the limitation of their expertise, keep/refer decision making abilities as explicitly stated in the WCPT guidelines were not included in the majority of guidelines that were reviewed.

Keywords: *Keep/refer decision making ability, physiotherapy, national competency guidelines.*

Introduction

Patients can consult a physiotherapist in two ways: In a direct access system, patients can refer themselves to physiotherapeutic services without the need for prior examination by a medical professional. On the other hand, in a non direct access system, patients can consult a physiotherapist only after having seen a medical professional [1]. While proponents of a direct access system argue with the benefit of an overall reduction of health care costs [1,2], opponents fear that physiotherapists might fail to recognise various significant (sometimes life threatening) medical pathologies with possible negative consequences for the patient's health [3]. However, independent from how patients have access to physiotherapy, the physiotherapist is required to independently examine the patient and make a decision on, whether or not the patient is suitable for physiotherapeutic management [4]. Despite the low prevalence of serious conditions affecting the neuro-musculoskeletal system [5] , existing literature provides strong evidence that physiotherapists are capable of contributing to patient's safety by recognizing the presence of a wide range of systemic diseases and various pathologies which require (further) medical management [2, 3, 6] Goodman and Snyder [7] give sensible reasons, why all physiotherapists should be capable of making an independent and proper keep/refer decision:

“1) Clients may obtain a signed prescription for physical therapy based on similar past complaints of musculoskeletal symptoms without direct physician contact.

- 2) Medical specialization: Medical specialists may fail to recognize underlying systemic disease.
- 3) Disease progression: Early signs and symptoms are difficult to recognize, or symptoms may not be present at the time of medical examination.
- 4) Patient/client disclosure: Client discloses information previously unknown or undisclosed to the physician.
- 5) Client does not report symptoms or concerns to the physician because of forgetfulness, fear, or embarrassment.”

In a recent review, Boissonnault and Ross [6] extracted 78 published case reports and case series from the literature where multiple screening strategies performed by physiotherapists and subsequent referral for further medical evaluation finally led to the diagnosis of a wide range of different pathologies (such as metastatic cancer, infection, spinal fracture, various visceral diseases) as underlying cause(s) of the patients' complaints. Of those 78 cases, 58 patients (74,4 %) were examined by a medical professional before they were sent for physiotherapeutic management. Only a small proportion of patients consulted a physiotherapist without prior consultation of a medical professional [6]. This review highlights that the ability to autonomously decide (using proper screening strategies) whether a patient's condition is suitable for physiotherapeutic intervention (keep), or not (refer) is not solely important for physiotherapists who work in a direct access system, but for all physiotherapists [6].

With good reason, the WCPT Guidelines for Standards of Physical Therapy Practice [8] state that “where the examination, diagnostic process, or any change in status reveals findings outside the scope of knowledge, experience, and/or expertise of the physiotherapist, the

patient/client shall be so informed and referred to the appropriate professional“ [8]. Furthermore, the European Core Standards of Physiotherapy Practice [9] clearly demand that every physiotherapist should be capable of carrying out “a risk assessment prior to each treatment for every patient“ [9]; and a close collaboration with other health professionals is desirable in order to provide effective patient management [9]. In this context, the European Core Standards of Physiotherapy Practice [9] directly refer to the WCPT Declaration of Principle [10] where it says that “ when the diagnosis is not clear or the required intervention/treatment is beyond the capacity of the physical therapist, the physical therapist shall inform the patient/client and provide assistance to facilitate a referral to other qualified persons. Furthermore, the physical therapist will consult with the referring medical practitioner if the treatment programme or a continuation of the programme are not in accord with the judgement of the physical therapist“. In addition, it is explicitly suggested that all member organisations should try to fulfill all aspects described in the standards in order to provide the physiotherapist with the knowledge necessary as “part of their professional responsibility” [8].

Despite the fact that the professional guidelines published by the WCPT [8, 10] and its European branch [9] clearly deem keep/refer decision making abilities to be important, it is not clear whether this is also reflected in individual national guidelines for the physiotherapy profession of various European countries that are also member associations of the European Network of Physiotherapy in Higher Education (ENPHE).

Therefore, a review was conducted in order to analyse if and in how far keep/refer decision making abilities are an integral part of all professional physiotherapy guidelines of ENPHE member associations. In addition, it was considered to be important if European countries with a direct access system to physiotherapy are more likely to have keep/refer decision

making abilities included in their guidelines than European countries with a non direct access system where patients require a referral by a medical professional.

Methods

Search

In order to collect national guidelines of ENPHE member countries, medical databases (Medline, Web of Science, CINHAL, Proquest and EMBASE) were initially searched using the terms “national guidelines“, “standards of practice“, “competency guidelines“ or “professional profile“. These terms were used in combination with either physiotherapy or physical therapy together with the country of interest. Furthermore, the grey literature (via Google, YAHOO and BING) was also searched using the same search terms. At the same time, 25 national physiotherapy associations of ENPHE member countries were contacted (via e-mail) [11] several times between 23/12/15 and 19/02/16 with a formal request to send us their national guidelines (preferably an English language version if one existed). If ,however, no English or German version was available, Google translater was used to translate the documents into English. An email to the European branch of the WCPT (ER-WCPT) was sent to request if there existed a definitive European collection of the professional guidelines of all the individual European countries.

Eligibility criteria

For our review, we targeted documents which serve as national guidelines for the physiotherapy profession of all 29 ENPHE member countries.

Results of the search

Analysis of the documents

A summary of the relevant passages of the individual documents can be found in *Table 1*. We looked for text passages that describe the physiotherapists' professional obligation to make an accurate and independent decision to either keep or refer a patient to a medical professional. If, however, keep/refer decision making abilities were not explicitly mentioned, we also looked for text passages that demanded close collaboration with the referring medical/other health care professionals and/or feedback in the case of any unusual events that might occur during the examination and/or develop during the course of the therapy. In order to see whether a country has a direct or non direct access system to physiotherapy service, we used the information provided on the official homepage of the WCPT.

Results of the literature search and return rate of personal correspondence

No national guidelines for the physiotherapy profession were found in the medical databases. The grey literature was therefore searched and the national guidelines from the United Kingdom (UK) [12], Ireland [13], the Netherlands [14] and Austria [15, 16, 17] were found. Subsequently, an email was sent to the remaining 25 physiotherapy associations from ENPHE member countries and to the official email address as listed on the ER-WCPT website and answers were received from Belgium [18], Denmark [19], Germany [20], Italy [21], Lithuania [22], Norway [23], Switzerland [24], Slovenia [9], Malta, Sweden and the Czech Republic [25]. Sweden and Malta ,however, responded that they (currently) do not have national guidelines for the physiotherapy profession. Slovenia directly translated the ER-WCPT guidelines [9] into Slovenian and sent us the English version. The Czech Republic uses the European Physiotherapy Service Standards [25] and sent us the English document. The Norwegian physiotherapy association informed us that they do not have any professional guidelines. Instead, they sent us the ' Framework for the Norwegian Physiotherapy Education [23]' which we reviewed and included into our analysis. The national guidelines from

Switzerland [24] refer to the ‘Berufsordnung des Schweizer Physiotherapie Verbandes’ [26] and its ethical guidelines for additional information. We therefore searched the grey literature and found the document which was subsequently included into our analysis. Unfortunately, we did not receive a response from the remaining 14 ENPHE member associations (Bulgaria, Croatia, Estonia, Finland, France, Greece, Iceland, Latvia, Lebanon, Montenegro, Poland, Portugal, Spain and Turkey). In addition, we did not receive a reply to our formal request to the ER-WCPT.

Translation of the documents

Belgium, Italy, Denmark and Norway do not have an English version of their guidelines. We therefore translated the documents using Google Translator. The national guidelines from Austria, Germany and Switzerland needed no translation since the lead author is from Austria and fluent in German.

Results of individual guidelines

The results in *Table 1* reveal that even among those countries that generally mention keep/refer decision making abilities in their national guidelines (Denmark, Belgium, the Netherlands, UK, Italy, Ireland), there is no clear consensus where the patient needs to be referred to or who should be consulted. Denmark, Belgium, the Netherlands, the United Kingdom and Italy use the more general term ‘health care professional/provider’ to where the patient shall be referred, whereas Germany and Switzerland (even though these two countries do not explicitly mention the keep/refer decision making process) require their physiotherapists to contact the referring medical professional. Ireland very clearly distinguishes between ‘graduate entry level physiotherapists’ and ‘senior physiotherapists’ or

‘clinical specialists‘. Again, however, Ireland does not mention a medical professional who should be consulted but (only) talks about a ‘higher level of authority‘.

In the case of Austria, keep/refer decision making abilities do not appear to play a vital role in the ‚Berufsprofil‘. This document contains one paragraph that describes the physiotherapist’s professional responsibility to determine if the referral by the medical professional is suitable from the perspective of the physiotherapy profession, or not [15]. It further says that this responsibility is especially important in the case of changes in the patient’s health status [15], but a clear description of the keep/refer decision making process is missing. However, in a more recent paper describing the future role of physiotherapists as part of a primary health care system [17], physiotherapists are required to screen their patients whether there exists an indication for movement based intervention (physiotherapy), or not. Again, this document demands a close collaboration with other ‘health care professionals‘ but there is no further definition on which health care professionals (medical professionals, psychologists, pharmacists) should be included in such a interdisciplinary collaboration.

Interestingly, even though it is undeniable that medical professionals have the appropriate educational background and diagnostic resources to, in the last instance, rule in/out serious medical conditions, only Germany [20] and Switzerland [26] very clearly mention that this specific professional group should be contacted. Others [12, 13, 14, 17, 18, 19, 21] use more general terms such as ‘health care providers‘, ‘(health care) professionals‘ or even ‘higher level of authority‘. On the other hand, Germany and Switzerland do not directly require its physiotherapists to make an independent keep/refer decision but solely to contact the referring medical professional while countries such as Denmark, Belgium, the United Kingdom, the Netherlands, Italy and Ireland demand that the patient (if deemed necessary) be referred directly by the physiotherapist.

Lithuania sent a document, which not only applies to the physiotherapy profession but is seen more as a guideline for professions that deal with rehabilitation in general including Physiotherapy, Occupational Therapy and Adapted Physical Activity [22]. This document does not specifically mention keep/refer decision making abilities but generally requires that the therapists should be able to make “ an independent decision in a difficult situation that requires an innovative (holistic) approach“ [22].

The biggest surprise were the results from the Scandinavian countries. Although Sweden is regarded as the homeland of the professional physiotherapy movement [27], the Swedish physiotherapy association informed us that they do not have any national guidelines for the physiotherapy profession. Norway does not have individual professional guidelines either. This was especially unexpected given the fact that Norway has a prestigious Manual Therapy Association [28] and with Freddy Kaltenborn a pioneer of Manual Therapy [29]. Instead, the Norwegian Physiotherapy Association sent us an ‘Educational Framework‘ of what physiotherapy graduates are expected to learn during their undergraduate degree. This document mentions that the programme should be in “accordance with national and international guidelines“ but no further specification of what that exactly means could be found. For Finland, which has also a long tradition of physiotherapy education dating back to the end of the 19th century [30], it was unfortunately impossible to obtain any guidelines. Only Denmark requires that physiotherapists should know the limitation of their own expertise and recognize the potential need of other health care providers [19]. The results from the Scandinavian countries were unexpected since in those countries, patients do not need (at least in the private sector) prior examination and referral from a medical professional [31].

Results in the context of the access system to physiotherapeutic service

For countries that do not have a direct access system (Austria, Belgium, Germany, Switzerland) [31], the national guidelines of Belgium most specifically mention the keep/refer decision making process as a professional obligation for qualified physiotherapists. In the case of Austria, the ‘Berufsbild’ [15] does not explicitly mention keep/refer decision making abilities at all. It only requires the physiotherapists to determine if the referral is suitable from the perspective of the physiotherapy profession, or not [15]. Switzerland requires its physiotherapists to keep the referring medical professional up to date about the course of the treatment and the general outcome of the intervention [26], but keep/refer decision making abilities as an explicit requirement are missing.

In countries where patients can refer themselves to physiotherapy directly in the private sector but not in the public system [31] (Italy, Lithuania, Ireland, Denmark, Czech Republic, Slovenia, the Netherlands, Norway), only Italy, the Netherlands, Denmark and Ireland demand that physiotherapists must be able to decide about the appropriateness of physiotherapy for their patients. Slovenia has translated the ER-WCPT guidelines into Slovenian and therefore also requires its physiotherapists to be able make an accurate keep/refer decision.

In countries (UK) with direct access in both the public system and the private sector [31], it is mandatory that all qualified physiotherapists should have the professional autonomy to be able to determine when to keep or refer a patient.

In general, the regulatory requirement for professional autonomy over keep/refer decisions does not seem to correlate exclusively with the national health care system in each country. For instance, Belgium with no direct access system to physiotherapy [31] very clearly requires its qualified physiotherapists to know when to refer a patient [18]. In contrast,

Norway with a direct access system at least for the private sector [31] does not mention keep/refer decision making attributes in its ‘Educational Framework‘ at all [23].

Discussion

This review provides a unique insight into how individual ENPHE member associations include keep/refer decision making abilities into their national guidelines for the physiotherapy profession. This review also gives insight into the different interpretations of those specific abilities in individual national guidelines of ENPHE member associations. This is seems of significance in the light of recent changes within the European Mobility and Migration Policy [32] which make it easier for physiotherapists to have their qualifications recognized and subsequently allow them to work in different European Union member countries [33]. Given the fact that the keep/refer decision making process is a core element in the WCPT guidelines [8], the authors of this review believe that there exists no valid reason why this specific attribute, as part of the clinical reasoning process [34], should be omitted from the guidelines of some professional physiotherapy associations. Having said this, in the WCPT guidelines it is acknowledged that there is some room for interpretation based on individual national health care regulations [8]. However, the ability to make an independent keep/refer decision is certainly important for all physiotherapists to ensure patients‘ safety and should not depend on whether physiotherapists work in a direct or non direct access system [6, 7, 35]. Specific training in making keep/refer decisions and clinical triage has already shown to enable physiotherapists who work in the United States Armed Forces to be highly effective in recognizing sinister conditions which require medical attention [36].

Limitations

There are two major limitations of this review that need to be mentioned. Firstly, and to our disappointment, it was not possible to obtain national guidelines from all ENPHE member organisations. Despite the fact that we contacted all ENPHE member associations several times via email, we did not receive an answer from all countries. In two cases (Sweden and Malta), we were notified that no national guidelines exist. As a consequence, it is impossible to get a complete European-wide overview of the importance of keep/refer decision making abilities as part of national guidelines. Secondly, only one country, whose first language is not English (the Netherlands) seems to have an English version of their guidelines. Lithuania also submitted a document which was in English. However, these were not the actual professional guidelines. When we requested the original Lithuanian guidelines so that we could translate them ourselves, we did not get a response back. For other countries (Belgium, Denmark, Norway, Italy) it was necessary to translate them into English using Google Translator. The fact that Google Translator, despite its usefulness and availability, is obviously not an officially acknowledged translator, there may be some translational mistakes/shortcomings. As a consequence, we have no certainty if we have either missed important passages that specifically mention keep/refer decision making abilities or our translation of the supposedly correct passage was not one-hundred percent correct. Since the main author is from Austria, there were no difficulties in ensuring an accurate translation of the German speaking guidelines (Austria, Switzerland, Germany). Slovenia directly translated the English version of ER-WCPT [9] guidelines into Slovenian and therefore caused no difficulty with the translation. The Czech Republic uses the European Physiotherapy Service Standards [25] which are also in English and required no further translation either.

Conclusion

This review is the first to assess whether keep/refer decision making abilities are specifically mentioned in the national guidelines of European countries which are also a member organisation of the ENPHE. Most surprisingly, not all ENPHE member countries seem to have yet developed individual national guidelines for the physiotherapy profession. Despite the fact that these specific abilities are undoubtedly an important part of the physiotherapeutic decision making process [4, 34], they are not explicitly mentioned in all national guidelines that we were able to review. Even though international guidelines [8, 9, 10] clearly deem those abilities crucial for every physiotherapist and the literature is full of case reports where physiotherapists helped to detect a wide range of systemic pathologies [6], those abilities are not included as a specific requirement in all guidelines that we were able to review. Despite the clear description of those abilities in the WCPT guidelines [8] (which are prescriptive and leave no room for interpretation), most countries have made some amendments for their own guidelines.

Recommendations

Future research should concentrate on analysing in how far qualified physiotherapists and physiotherapy students (in both, direct and non direct access system) across Europe are capable of making an accurate keep/refer decision as part of their clinical reasoning process. There have been some studies on qualified physiotherapists in Germany [37] and Switzerland [38]; data from other European countries is currently missing. In addition, it is the authors' opinion that there should be a European wide consensus about keep/refer decision making abilities as a mandatory content of all national guidelines (regardless of whether there exists a direct or non direct access system to physiotherapy). Moreover and most importantly, these specific abilities should be a compulsory part of every undergraduate physiotherapy curriculum across all European Universities.

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Conflict of interest

None.

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Table 1. Profile of various European countries concerning direct access to physiotherapy.

ENPHE Member Association	Professional Guideline (Original Title)	Relevant Keep/Refer statement (English translation)	Guideline date	Native language version (YES/NO)	Direct translation of ER-WCPT guideline (YES/NO)	Direct access to physiotherapy (YES/NO)	Differentiated regulations for generalist specialist (YES/NO)	for versus grades
Denmark	Ethiske retningslinjer for Danske Fysioterapeuter	Physiotherapists refer patients to colleagues or other health professionals when the limit of own area of competence has been reached and it is estimated that other competencies are necessary to ensure optimal patient care. (p.5)	Unkown	YES	NO	YES (but only for the private sector)	NO	
Norway	RAMMEPLAN FOR FYSIOTERAPEUTU TDANNING	Physiotherapist program shall be in accordance with national and international health education policy guidelines (p.4).	2004	YES	NO	YES (but only for the private sector)	NO	
Lithuania	Descriptor of the study field of Rehabilitation	Take an independent decision in a difficult situation that requires innovative (holistic) approach (17.4.2.)	2015	YES	NO	YES (but only for the private sector)	NO	
Belgium	Beroeps- en Competentieprofiel van de kinesitherapeut in België	Depending on the results of the first screening and taking the findings in the clinical examination the physiotherapist, in consultation with the patient, decides to set in treatment, give the necessary advice or refer to another health care provider. (p.18)	2010	YES	NO	NO	NO	
Germany	Berufsordnung des deutschen Verbandes für Physiotherapie	If any peculiarities during the examination or the course of the treatment occur, consult with the referring medical practitioner if deemed necessary (p.2).	Unkown	YES	NO	NO	NO	
Ireland	Therapy Project Office; Physiotherapy Competencies	<u>Graduate Entry level:</u> “Recognizing own limitations and liaising with senior staff and other team members when appropriate.“ (p. 11) <u>Senior competencies and Clinical Specialist:</u> “Recognizing when it is appropriate to refer decisions to a higher level of authority and include colleagues in the decision making process.“ (p. 13 and p. 16)	2008	YES	NO	YES (but only for the private sector)	YES	
The Netherlands	The professional profile of the physical therapist	Depending on the results of the first screening and the findings from the physiotherapeutic evaluation, the physical therapist makes decision in consultation with the patient with regard to the treatment to be started, advice or referral.“ In direct access, the physical therapist determines in the first screening whether further physiotherapeutic	2006	NO	NO	YES (but only for the private sector)	NO	

		analysis is useful. Depending on the outcomes, diagnostic physiotherapeutic evaluation is subsequently done or the patient is referred.“ (p.17)					
Austria	Berufsbild Physiotherapie. MTD Ausbildungsverordnung. PhysiotherapeutInnen in Primary Health Care- best point of service.	<u>Primary Health Care:</u> Communication with other health care providers. Screening what kind of or whether movement based intervention is indicated. <u>MTD Ausbildungsverordnung:</u> 4. Recognize authority/competence of other medical/health care professions. <u>Berufsbild:</u> Independently assess if referral by medical practitioner is suitable from the perspective of the physiotherapy profession (p. 20); Especially important in the event of changes in the patient’s health status (p.21).	2004 2006 2014	YES YES YES	NO	NO	NO
United Kingdom	Standards of Proficiency	“Registrant physiotherapists must know the limits of their practice and when to seek advice or refer to another professional.“ (p. 7)	2013	YES	NO	YES	NO
Italy	LA FORMAZIONE “CORE” DEL FISIOTERAPISTA	Refer the patient to another (health care) professional when their activity is required and when the situation is beyond the therapists professional and / or experience and/or competence (page. 72).	2013	YES	NO	YES (but only for the private sector)	NO
Slovenia	European Core Standards of physiotherapy practice (Slovenian translation)	Refer to original document	2008	No	Yes	YES (but only for the private sector)	No
Switzerland	Berufsbild Physiotherapie. Berufsordnung des Schweizer Physiotherapie Verbandes	<u>Berufsordnung des Schweizer Verbandes:</u> Inform referring doctor about course of the treatment and treatment outcome (p. 3). Promote interdisciplinary collaboration within various health professions (p. 3).	2009 2013	Yes	NO	NO	NO
Czech Republic	European Physiotherapy Service Standards	/	2003	NO	YES	YES (but only for the private sector)	NO