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Część praktyczna obejmuje studium przypadku: ćwiczenia - kształtowanie umiejętności świadomego i prawidłowego operowania oddechem.

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PODSTAWY NEUROREHABILITACJI - UDAR MÓZGU - MODUŁ 1

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PODSTAWY NEUROREHABILITACJI - UDAR MÓZGU - MODUŁ 2

Szkolenie obejmuje warsztaty praktyczne z zakresu diagnostyki funkcjonalnej pacjentów, podstawowych problemów strukturalnych i funkcjonalnych oraz propozycje terapii: reedukacji funkcji kończyny górnej i dolnej oraz wybranych strategii rehabilitacji. Omawiane jest również zagadnienie dysfagii, w tym objawy zaburzeń połykania, testy i ocena zaburzeń, zasady bezpiecznego karmienia, strategie terapeutyczne, ćwiczenia miofunkcyjne oraz specjalne techniki ułatwiające połykanie.

SCHORZENIA NARZĄDÓW RUCHU U DZIECI I MŁODZIEŻY - ZASADY I KRYTERIA LECZENIA ORTOPEDYCZNEGO

Szkolenie obejmuje zagadnienia wad postawy u dzieci i młodzieży, wad wrodzonych narządów ruchu, wczesnego wykrywania nabytych schorzeń narządów ruchu, naukę badania ortopedycznego oraz zbierania wywiadu oraz praktyczne wskazówki oraz koncepcje w stosowaniu ortez i aparatów ortopedycznych.
Szkolenie skierowane do lekarzy ortopedów, pediatrów, lekarzy rodzinnych, lekarzy rehabilitacji medycznej, fizjoterapeutów oraz średniego personelu medycznego.

WSPÓŁCZESNE METODY LECZENIA WYBRANYCH DYSFUNKCJI STAWU SKOKOWEGO I STOPY

Szkolenie obejmuje zagadnienia z anatomii, biomechaniki stawu skokowego i stopy, metodyki badania stopy, postępowania w leczeniu urazów stawu skokowego i stopy, nabytych zniekształceniach stopy (przyczyny, objawy, sposoby postępowania) oraz pozostałych dysfunkcjach w obrębie stawu skokowego i stopy (entezopatie, przeciążenia, zapalenia, zespoły uciskowe nerwów, gangliony, zmiany zwyrodnieniowe, stopa cukrzycowa, stopa reumatoidalna).

CHOROBA ZWYRODNIENIOWA STAWÓW - ALGORYTM POSTĘPOWANIA DIAGNOSTYCZNO-TERAPEUTYCZNEGO

Szkolenie obejmuje następujące zagadnienia: choroba zwyrodnieniowa stawów - podstawowe pojęcia, algorytm postępowania diagnostyczno-terapeutycznego , nowoczesne metody leczenia w chorobie zwyrodnieniowej stawów, nauka prawidłowej oceny zaawansowania choroby zwyrodnieniowej w oparciu o wywiad, badania ortopedyczne i badania dodatkowe, zastosowanie ortez i aparatów ortopedycznych w chorobach zwyrodnieniowych.
Szkolenie skierowane do lekarzy ortopedów, pediatrów, lekarzy rodzinnych, lekarzy rehabilitacji medycznej, fizjoterapeutów oraz średniego personelu medycznego.

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MÓZGOWE PORAŻENIE DZIECIĘCE - ALGORYTM POSTĘPOWANIA DIAGNOSTYCZNO-TERAPEUTYCZNEGO

Szkolenie obejmuje następujące zagadnienia: MPD - zespół symptomów, etapy leczenia, cele i wskazówki terapeutyczne, kwalifikacje pacjenta do danego etapu leczenia, nauka badania ortopedycznego w Mózgowym Porażeniu Dziecięcym, zastosowanie ortez i aparatów ortopedycznych w MPD.
Szkolenie skierowane do lekarzy ortopedów, pediatrów, lekarzy rodzinnych, lekarzy rehabilitacji medycznej, fizjoterapeutów oraz średniego personelu medycznego.

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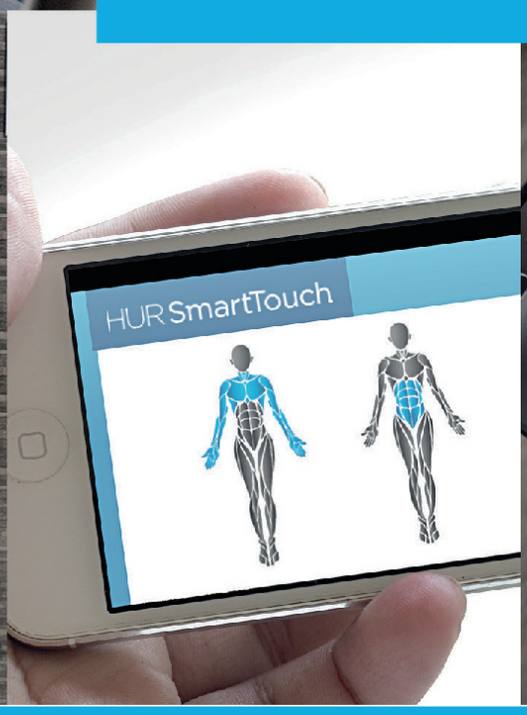

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NOWE ROZWIĄZANIE W LECZENIU, TERAPII I PROFILAKTYCE KRĘGOSŁUPA

Na polskim rynku pojawiła się niedawno doskonała mata do leczenia, terapii i profilaktyki schorzeń kręgosłupa i pleców StimaWELL®120MTRS. Technologia oparta jest o najnowsze know-how niemieckiego producenta firmy Schwa Medico GmbH, znanego od 40 lat producenta urządzeń w branży medycyny holistycznej, a w szczególności elektrostymulacji.

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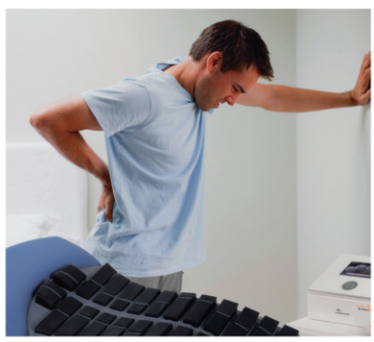
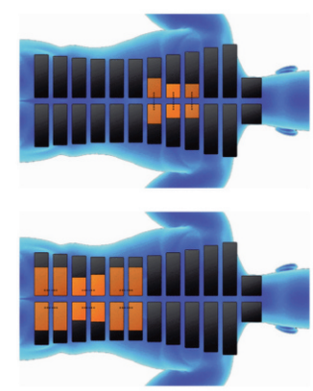


Wyłączny dystrybutor w Polsce warszawska firma SLOEN Sp. z o.o. wprowadziła we wrześniu 2017 roku matę StimaWELL®120MTRS na polski rynek tuż po zaprezentowaniu jej na tegorocznych targach Rehabilitacja 2017 w Łodzi. Produkt zdobył uznanie specjalistów, którzy uhonorowali go złotym medalem targów! Firma SLOEN, jako sponsor strategiczny, bierze także udział w XIII Konferencji Polskiego Towarzystwa Fizjoterapii, która odbędzie się w dniach 24 i 25 listopada 2017 w Pabianicach, gdzie będzie możliwość zapoznania się z urządzeniem i uzyskania o nim bliższej informacji – serdecznie zapraszamy!



StimaWELL®120MTRS to wysokiej jakości dynamiczny system terapii pleców i kręgosłupa, który został zaprojektowany z wykorzystaniem najnowszych osiągnięć technologicznych w tej dziedzinie. Dwunastokanałowa mata StimaWELL®120MTRS umożliwia teraz pacjentowi wielowymiarowy system leczenia kręgosłupa, każdy zabieg trwa od 20 do 30 minut i jest naprawdę skuteczny. Szczególne znaczenie ma fakt, iż urządzenie to zostało wyposażone w doceniony na niemieckim rynku elektrostymulator StimaWELL® pracujący w zakresie niskich i średnich modulowanych częstotliwości w zakresie od 0 do 100Hz i 2000 do 6000Hz (prąd dwufazowy, symetryczny, prostokątny), które z łatwością pokonują barierę skóry i docierają do najgłębszych warstw mięśni. System został zaprojektowany głównie do terapii bólu, terapii mięśniowej i masażu (4 w 1). Twój pacjent skorzysta ze zwiększonego zakresu opcji, które możesz mu teraz zaoferować! Dodatkowo, należy wiedzieć, że mata została wyposażona w 24 elektrody, który są podgrzewane do 40°C.

System StimaWELL®120MTRS zapewnia kompleksowy pakiet do profilaktyki i leczenia ostrych i przewlekłych chorób pleców. Mata wyposażona jest w szeroki wachlarz możliwości programowania w zależności od modulacji i ustawień uruchamiamy terapię bólu, budowę mięśni, relaksację mięśni, a także różnego rodzaje masaże, takie jak stukanie, gładzenie i ugniatanie. Opatentowana technolgia StimaWELL®120MTRS to dla pacjenta skuteczny, głęboko relaksujący system terapii. Dwie z wielu zalet stymulacji średniej częstotliwości w porównaniu z innymi typami to osiągnięcie wysokiego poziomu kompatybilności pacjentów i kojące uczucie, generowane przez przepływ prądu elektrycznego. Ten proces aktywuje silne skurcze mięśniowe i zapewnia większe obszary leczenia. Zastosowanie średniej częstotliwości w systemie StimaWELL®120MTRS, występującej w zakresie od 2000 do 6000 Hz, impulsy łatwiej pokonują aspekt oporu skóry niż prądy w dolnych zakresach częstotliwości. Oznacza to, że dla pacjenta terapia oparta na przepływie prądu elektrycznego w średnim zakresie częstotliwości jest często doświadczana jako szczególnie przyjemna, a nie drażniąca. System StimaWELL®120MTRS jest niezwykle łatwy w obsłudze i nie wymaga specjalnej preparacji. Sterowanie za pośrednictwem intuicyjnego ekranu dotykowego jest proste i czytelne. Programy można szybko wybrać i jeśli to konieczne, dopasować do konkretnych potrzeb Twojego pacjenta. Dzięki nowemu trybowi automatycznego wyboru programów opartych na wskazaniach przy użyciu diagnozy – kalibracji, użytkownik ma możliwość automatycznego wyboru odpowiedniego programu terapeutycznego zgodnie z danymi anamnestrującymi, które mogą być stosowane w każdej sesji terapeutycznej. Twój pacjent jest w stanie kontrolować poziom prądu elektrycznego za pomocą pilota zdalnego sterowania.

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Evidence-based physiotherapy practice in Lithuania: attitudes, application, and barriers

Grazina Krutulyte[1(A,B,C,D,E,F)], Egle Lendraitiene[1(A,B,C,D,F)], Daiva Petruseviciene[1(A,B,D,F)], Ieva Piezaite[1(A,B,D,E)], Marek Kiljański[2,3,4(E,F)]

[1]Lithuanian University of Health Sciences, Eiveniu 2, Kaunas Lithuania
[2]Faculty of Medicine and Health Sciences, Institute of Physiotherapy, Jan Kochanowski University in Kielce, Poland
[3]Rehabilitation Center in Pabianice, PCM Sp. z o.o., Pabianice, Poland
[4]University of Computer Science and Skills, Lodz, Poland

Abstract

Background. No research has been done in Lithuania regarding the knowledge and attitudes of physiotherapist relative to the use of evidence in practice. WCPT policy statement indicate that physiotherapist are responsible for the application of scientific evidence in practice and have to ensure that the treatment of patients is based on the best available evidence. Scientific evidence has to be combined with clinical experience, taking into consideration the patients' beliefs, values, environment, and needs.
The aim of the study was to analyze the attitude of Lithuanian physiotherapist towards EBP practice and its application.
Methods. The study used 37 item "EBP Questionnaire". Using this questionnaire, a randomized survey of physiotherapists practicing in Lithuania was performed.
Results. The final sample size was 229 subjects (response rate – 78%). The majority of the respondents demonstrated a positive attitude towards EBP and guidelines: 93.2% of the surveyed physiotherapist in Lithuania stated that the application of EBP is necessary, and 90.4% of the respondents stated that EBP guidelines are important in clinical practice. The majority of physiotherapists agreed that EBP helps to make decisions in the choice of treatment. Less than one-half of the respondents stated that they read 2 to 5 scientific articles related to their clinical practice per month. One-third of the respondents indicated that the treatment techniques they applied weren't based on clinical evidence. The most common barrier to the implementation of EBP was a lack of time (29.9%).

Key words:

Evidence-based practice, physiotherapy.

Contribution of the Paper

The physiotherapists in other countries will know what the situation with evidence–based practice in Lithuania.
Study results will help to carry out a comparative analysis of the Evidence-based physiotherapy practice attitudes, application, and barriers in Europe and in the World.

Introduction

World Confederation for Physical Therapy adopted policy statement "Evidence based practice" indicating that: "physiotherapist have a responsibility to use evidence to inform practice and ensure that the management of patients is based on the best available evidence."[1] Evidence has to be combined with clinical experience, taking into consideration local environment and patients preferences [1]. The majority of physiotherapist accept this concept, yet the integration of evidence into daily clinical practice is complicated [2, 3, 4]. Tilson et al. stated that one of potential ways to solve this problem is a theoretical one – i.e. the use of EBP educational programs in order to improve physiotherapist abilities to use evidence in clinical practice [5]. Physiotherapist should have an opportunity of professional development as well as of deeping his knowledge and raising his qualifications [6].

Methods

For this study, we used Bernhardsson's and Larsson's "EBP Questionnaire" [7]. Permission for the use and adaptation of the questionnaire was granted by the authors via e-mail. The translation and cross-cultural adaptation of the questionnaire were performed in accordance with the guidelines [8]. During the first stage, the questionnaire was translated into Lithuanian and made cross-cultural adaptation. During the next stage, a pilot study was performed: 20 questionnaires were distributed among Lithuanian physiotherapist and minor adjustments were made based on the physiotherapist responses.
The questionnaire consisted of three parts. Part A consisted of 11 questions about the subjects' demographic characteristics. Part B consisted of 12 questions about the subjects' personal attitude towards EBP practice, its application, benefits, and shortcomings. Part C consisted of 14 questions about the subjects' personal attitude towards clinical practice guidelines, their application, and barriers preventing their implementation.
The study was conducted in cooperation with the Lithuanian Physiotherapy Association. Our study sample consisted of a random sample of 300 physiotherapist in Lithuania, 229 (76%) questionnaires were returned.

The respondents (n = 229) were distributed into groups according to age: 20-29 years (n = 106), 30-39 years (n = 58), 40-49 years (n = 29), 50 years and older (n = 36). According to working experience, the respondents were distributed into 6 groups: < 3 years (n = 67), 3-5 years (n = 30), 6-10 years (n = 50), 11-15 years (n = 23), 16-20 years (n = 23), and > 20 years (n = 36).

Results

The majority of the respondents (59.8%) agreed or strongly agreed (23.1%) with the statement that EBP needs to be applied in daily clinical practice. Strongly agreed (13.1%) and agreed (68.6%) with the statement that "EBP can help me make decisions in the choice of treatment". More than one-half of the respondents disagreed (51.1%) or strongly disagreed (14%) with the statement "I think it creates unreasonable demands to apply EBP in my daily work". 50.7% of the respondent's disagreed, and 7% – strongly disagreed with the statement "Strong evidence is lacking for most treatments that I use for my patients" (Fig.1).

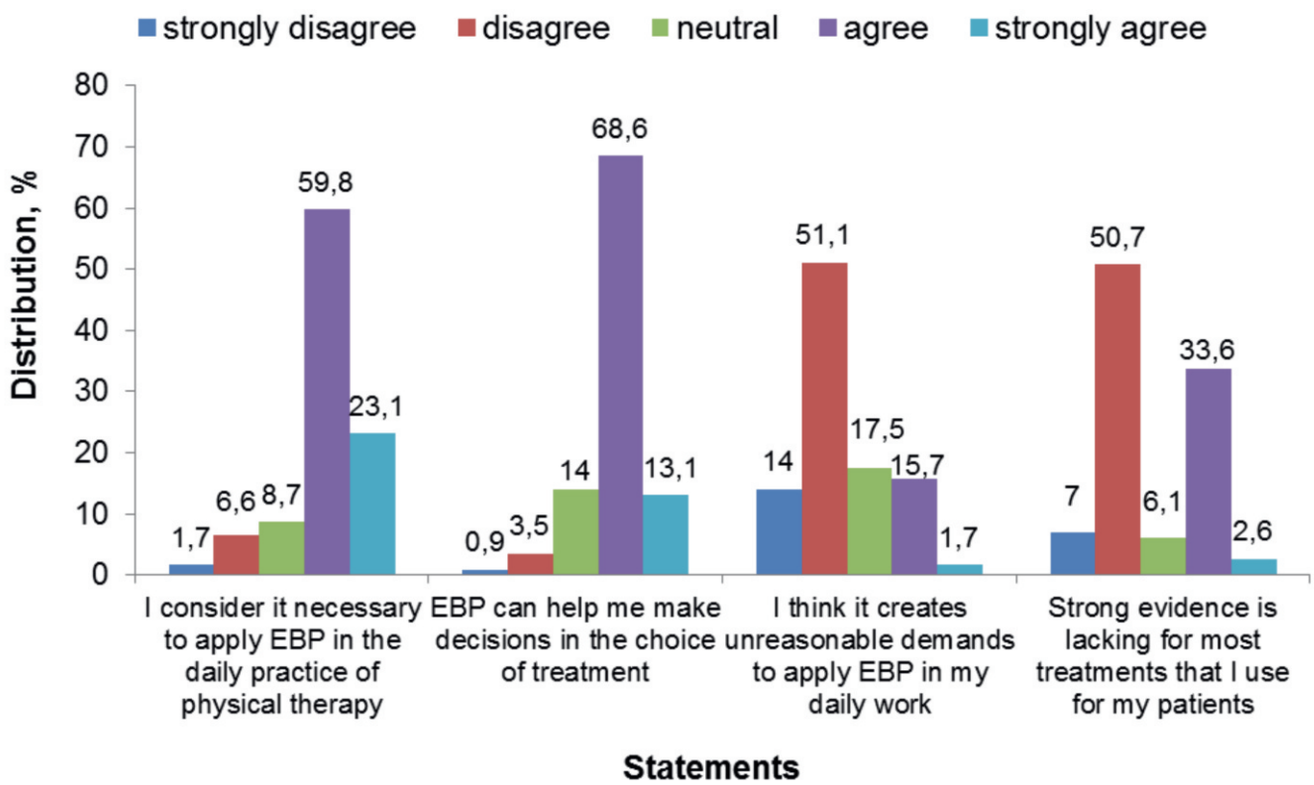

Fig. 1. Distribution of the responses to the statements on EBP practice (%)

Table 1 presents factors that were detected via univariate logistic regression analysis and were found to affect physical therapists' responses to statements about EBP.

With the statement "I feel confident in my ability to find relevant research to answer my clinical questions" 65.8% of the respondents agreed and 11% – strongly agreed The majority of the respondents were convinced that they were capable of treating their patients according to clinical evidence (80.3% – agreed, and 10.1% – strongly agreed). 68.1% of the respondents agreed, and 19.7% - strongly agreed that they would like to learn and improve the knowledge and skills necessary to apply EBP in their practice (Fig. 2).

The 37.7% of respondents didn't use databases or only used them once per month when looking for literature related to their clinical practice. 35.1% of the physiotherapist used databases 2-5 times per month, 14% respondents – 6-10 times per month, 7% respondents – 11-15 times per month, 6.2% of the respondents - over 15 times per month. 28.9% of the physiotherapist didn't read scientific articles related to their clinical practice at all or read not more than one article per month. 42.5% of the respondents read from 2 to 5 scientific articles per month, 18.9% – from 6 to 10 articles per month, 7% – from 11 to 15 articles per month, and 2.7% indicated that they read more than 15 scientific articles per month.

Physiotherapist in the age group of 20-29 years indicated that they read more than one scientific article related to their clinical practice during a month, compared to physiotherapist over 49 years of age (OR = 0.26; 95% CI = 0.12-0.59). Physiotherapist with over 20 years of experience were less likely (OR = 0.21; 95% CI = 0.09-0.53) to indicate that they read more than one scientific article per month, compared to physiotherapist with less than 3 years of experience.

The survey showed that 68.9% of the respondent's agreed, and 21.5% – strongly agreed with the statement that the use of EBP guidelines was important in their work. 65.6% of the physiotherapist agreed, and 7.5% – strongly agreed with the statement "EBP guidelines are important to facilitate my work" (Fig. 3).

Table 1. Factors affecting responses to statements about EBP (univariate logistic regression)

Dependent variable	Independent variable	Categories	Odds ratio (95% CI)	Model p	n
At my place of work the use of current research is encouraged	Working experience	<3 years	Reference	0.036	228
		3-5 years	1.97 (0.82-4.72)		
		6-10 years	1.03 (0.5-2.16)		
		11-15 years	1.7 (0.66-4.43)		
		16-20 years	1.31 (0.5-3.44)		
		>20 years	**3.93 (1.61-9.63)**		
Monthly read more than one scientific article related to clinical practice	Age groups	20-29 years	Reference group	0.01	228
		30-39 years	0.58 (0.28-1.21)		
		40-49 years	0.66 (0.26-1.68)		
		>49 years	**0.26 (0.12-0.59)**		
	Working experience	<3 years	Reference group	0.01	228
		3-5 years	0.79 (0.28-2.24)		
		6-10 years	0.51 (0.22-1.2)		
		11-15 years	1.14 (0.33-3.94)		
		16-20 years	0.52 (0.18-1.52)		
		>20 years	**0.22 (0.09-0.53)**		
EBP guidelines are important to facilitate my work	Age groups	20-29 years	Reference group	0.044	228
		30-39 years	**3.26 (1.4-7.62)**		
		40-49 years	1.3 (0.52-3.25)		
		>49 years	1.57 (0.67-3.68)		
	Working experience	<3 years	Reference group	0.001	227
		3-5 years	2.51 (0.95-6.64)		
		6-10 years	**4.58 (1.8-11.66)**		
		11-15 years	**8.01 (1.74-36.96)**		
		16-20 years	1.1 (0.42-2.93)		
		>20 years	3.16 (1.22-8.23)		
I use EBP guidelines in my work	Working experience	<3 years	Reference group	0.032	228
		3-5 years	2.13 (0.71-6.35)		
		6-10 years	**3.83 (1.32-11.07)**		
		11-15 years	**9.36 (1.18-74.28)**		
		16-20 years	1.14 (0.39-3.32)		
		>20 years	2.13 (0.77-5.91)		
I'm aware that EBP guidelines for diagnoses relevant to my work exist	Working experience	<3 years	Reference group	0.010	228
		3-5 years	**2.69 (1.11-6.53)**		
		6-10 years	1.01 (0.45-2.24)		
		11-15 years	**3.66 (1.36-9.81)**		
		16-20 years	**2.82 (1.05-7.58)**		
		>20 years	**2.63 (1.14-6.07)**		
EBP can help me make decisions in the choice of treatment	Age groups	20-29 years	Reference group	0.033	229
		30-39 years	**4.61 (1.53-13.94)**		
		40-49 years	1.64 (0.57-4.73)		
		>50 years	1.71 (0.64-4.55)		

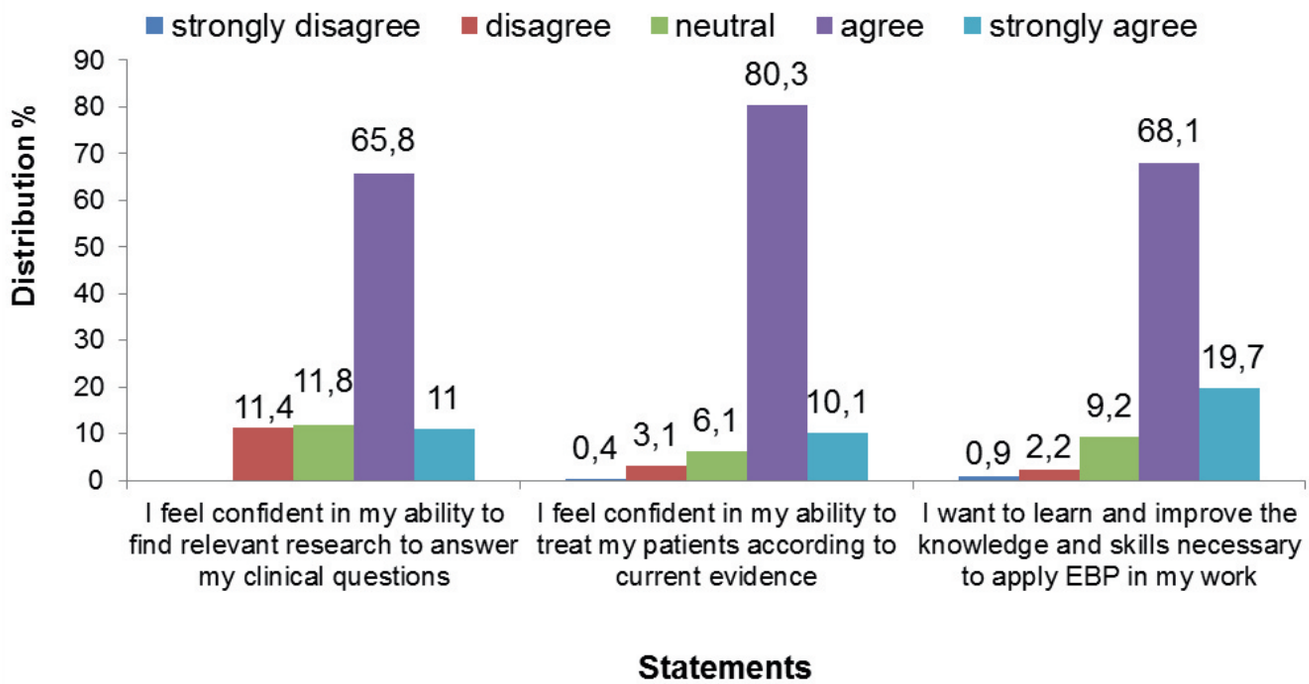

Fig. 2. Distribution of the responses to the statements on the skills required for the application of EBP practice (%)

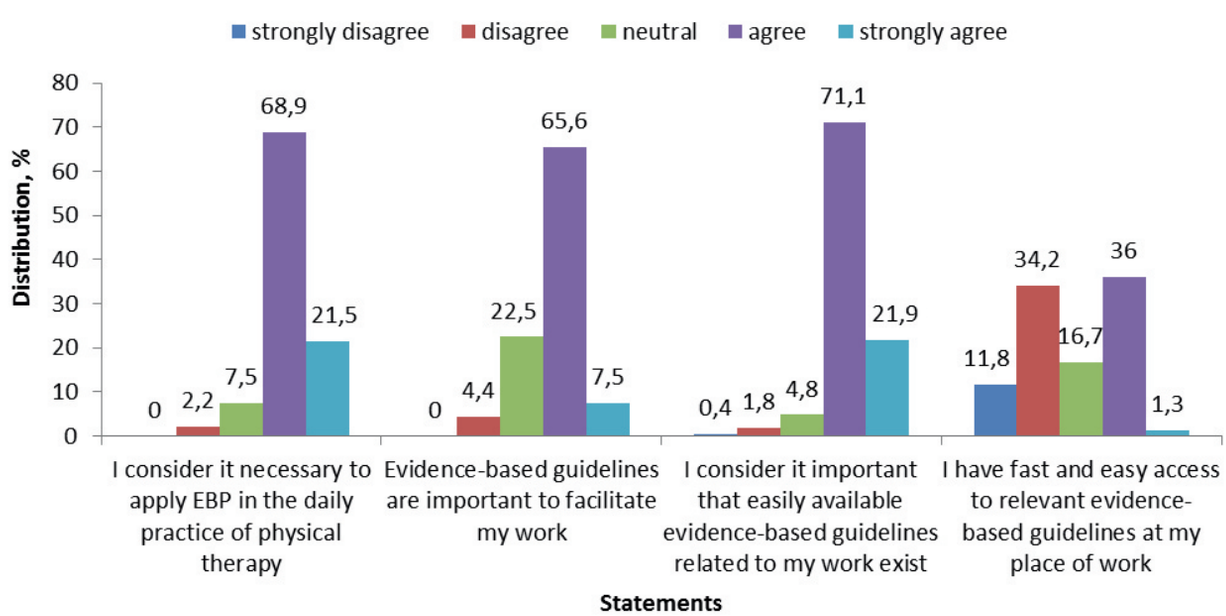

Fig. 3. Distribution of the responses to the statements on EBP guidelines (%)

Physiotherapist in the age group of 30-39 years were by 3.26 times (95% CI = 1.4-7.62) more likely to agree with the statement "EBP guidelines are important to facilitate my work", compared to 20-29 year-old physiotherapists. Physiotherapist with 6 to 10 years of experience were by 4.58 times (95% CI = 1.8-11.66) more likely to agree with this statement, 11-15 years of experience – by 8.01 times (95% CI = 1.74-36.96), and over 20 years of experience – by 3.16 times (95% CI = 1.22-8.23), compared to physiotherapist with less than 3 years of experience.

The 71.1% of the respondents agreed, and 21.9% - strongly agreed with the statement "I consider it is important easy to find EBP guidelines". 34.2% of the respondent's disagreed, and 11.8% – strongly disagreed with the statement "I have the possibility easy to access EBP guidelines at my workplace", 36% of the respondents agreed, and 1.3% – strongly agreed with this statement.

The study showed that 42.1% of the respondents stated that they were aware of the existence of EBP guidelines, 45.2% of the respondents knew about the existence of such guidelines

only partially, and 12.7% of the respondents stated that they weren't aware of the existence of such guidelines. 33.3% of the respondents knew how and where to find EBP guidelines on the Internet, 50.4% of the respondents knew this only partially, and 16.3% of the respondents didn't know this at all.

The analysis of the responses to the statement "I'm aware that EBP guidelines exists" showed that physiotherapist with 3 to 5 years of working experience were by 2.69 times (95% CI = 1.11-6.53) more likely to agree with the above statement, compared to physiotherapist with less than 3 years of experience. The probability of respondents with 11 to 15 years of experience to agree with this statement was by 3.66 times (95% CI = 1.36-9.81) higher, physiotherapist with 16 to 20 years of experience were by 2.82 times (95% CI = 1.05-7.58), over 20 years of experience – by 2.63 times (95% CI = 1.14-6.07) more likely to agree with the above statement, compared to physiotherapist with less than 3 years of experience.

A significant part of the respondents (42.1%) indicated that they used EBP guidelines in their work quite often, and 6.1% – very often. 11.4% of the respondents indicated that they used EBP guidelines very seldom or never, 7.5% of the respondents – that they used these guidelines seldom, and 32.9% of the respondents indicated that they used EBP guidelines sometimes.

We selected 20 variables that were statistically significantly related to the frequency of the application of EBP guidelines in clinical practice. By applying binary logistic regression analysis and backward elimination, we eliminated 16 statistically non-significant regression. The final resulting model was statistically reliable ($\chi 2 = 106.61$; $p < 0.001$) (Table 2).

Table 2. Analysis of factors related to the application of EBP guidelines and the final multiple logistic regression model

Independent variable	Coefficient	Standard error	Wald criterion	df	Statistical p-value of the Wald criterion	Odds ratio	95% Confidence interval	
kl27(1)	1.333	0.698	3.646	1	0.056	3.793	0.97	14.91
kl26(1)	1.435	0.733	3.834	1	0.049	4.200	1	17.67
kl31(1)	2.590	0.509	25.888	1	<0.001	13.328	4.92	36.144
kl30(1)	1.811	0.553	10.724	1	0.001	6.116	2.07	18.08
Constant	-1.328	0.367	13.053	1	<0.001	0.265		

A statistically non-significant (Wald criterion $p = 0.56$) regression (question 27) was left in the model because its removal would have seriously reduced the percentage of correctly classified cases. The Wald criterion showed that all three regression were statistically significant. The statistical value of the Hosmer-Lemeshow criterion was 4.804 ($p = 0.569$). Nagelkerke's determination coefficient was $R^2 = 0.603$. When applying the model for the analyzed data, 67.4% of physiotherapist who didn't apply or rarely applied EBP guidelines and 97.7% of physiotherapist who applied EBP guidelines sometimes, often, or very often were correctly classified. In total, 91.2% of the respondents were correctly classified. The following model was obtained:

$$\ln \frac{\hat{P}\ (\text{entry} = D)}{\hat{P}\ (\text{entry} = N)} = 1.333\text{kl27}(1) + 1.435\text{kl26}(1) + 2.59\text{kl31}(1) + 1.811\text{kl30}(1) - 1.328$$

Entry - the frequency of the application of EBP guidelines (N – don't apply of apply rarely, and D-apply sometimes, often, or very often).

Kl27 – I know how and where to find EBP guidelines related to my work on the Internet (0 – don't know or know only partially, and 1 – know).

Kl26 – I'm aware that EBP guidelines for diagnoses relevant to my work exist (0 – don't know or know only partially, and 1 – know).

Kl31 – EBP guidelines are important to facilitate my work (0 – strongly disagree, disagree, or neutral, and 1 – agree or strongly agree).

Kl30 – I can integrate the patients' preferences with EBP guidelines (0 – strongly disagree, disagree, or neutral, and 1 – agree or strongly agree).

Compared to not knowing where and how to find the guidelines, knowing this increased the probability that physiotherapist would frequently use EBP guidelines in their work by 3.79 times (95% CI = 0.965-14.905). Compared to not knowing that EBP guidelines for diagnoses relevant to the physiotherapist's work exist, knowing this increased the probability that physiotherapist would frequently use EBP guidelines in their work by 4.2 times (95% CI = 0.999-17.665). This probability was also by 13.33 higher in physiotherapist who agreed with the statement "EBP guidelines are important to facilitate my work" than in those who disagreed with this statement. In addition, physiotherapist who agreed with the statement "I can integrate the patients' preferences with EBP guidelines" were by 6.12 times more likely to use EBP guidelines in their work frequently, compared to physiotherapist who disagreed with this statement.

Multiple dichotomy was applied to calculate the following results: in total, 229 respondents 461 times mentioned barriers to the implementation of EBP guidelines. The most commonly mentioned barrier was a lack of time (29.9%), the second -"Guidelines are too general and too unspecific" (18%), and the third one – "Guidelines are too much "recipe" and don't let me decide what is most appropriate" (11.9%) (Fig. 4).

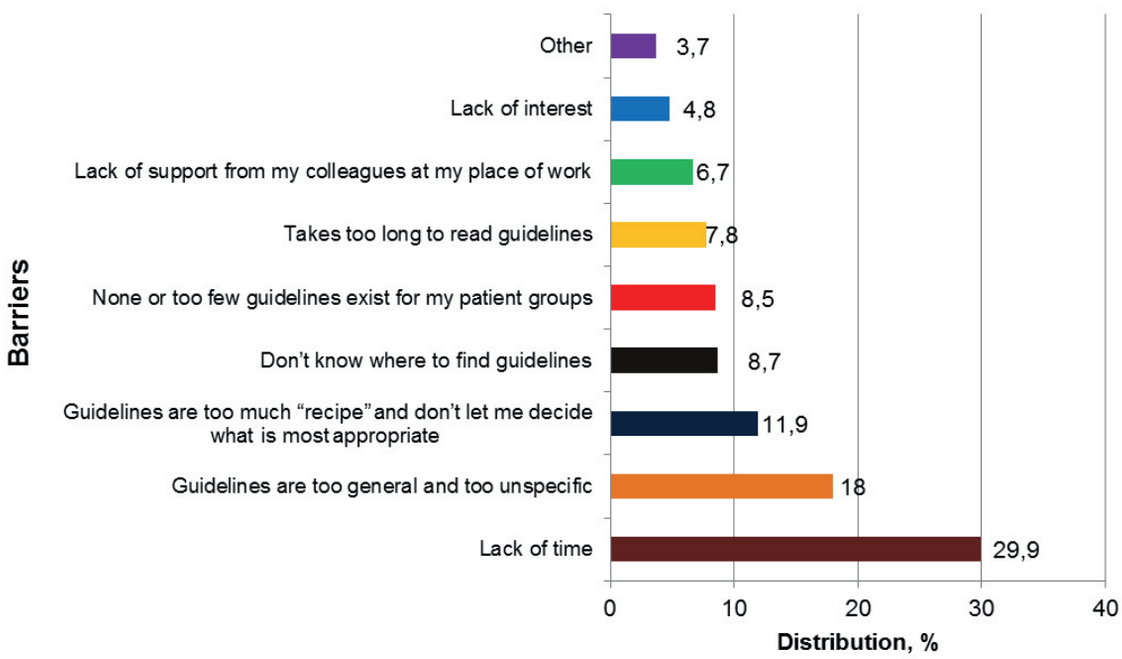

Fig. 4. Barriers to the application of EBP guidelines

Discussion

The investigation of Lithuanian physiotherapist attitudes towards EBP showed that 82.9% of the physiotherapist agreed with the statement "I consider it important to use EBP guidelines in my work". Somewhat higher percentages of respondents who agreed with this statement were found in studies conducted in Canada (93.2%), the United States (91.6%), and Sweden (90%) [9, 10, 11]. A study conducted in Switzerland stated that 80% of French-speaking physiotherapist agreed with this statement [12]. A study performed in Austria showed that only 69.3% of the physiotherapist agreed with this statement. According to the authors, Austria lacks academic and research traditions in physiotherapy, which might have influenced the results of the study [13]. Two studies showed that, respectively, 78.1% and 90.3% of the respondents indicated that they believed that scientific literature was important in clinical practice [9, 14].

In our study, 81.7% of the physiotherapist agreed with the statement "EBP can help me make decisions in the choice of treatment". A similar study showed that 83% of the respondents agreed with this statement [11]. Deirmayr et al. stated that 83.5% of the physiotherapist agreed that current research results were useful in their clinical practice [13]. In addition, several studies showed that, respectively, 51.4% and 84% of the respondents believed that EBP improved the quality of healthcare [9, 12].

17.4% of the Lithuanian physiotherapist agreed with the statement "I think it creates unreasonable demands to apply EBP in my daily work". In a study by Salbach et al. conducted in Canada, 13.2% of the respondents working with post-stroke patients agreed with this statement [9]. Bernhardsson et al., stated that over 20% of the Sweden physiotherapist agreed with this statement [11].

Our study showed that 76.8% of the respondents agreed with the statement "I feel confident in my ability to find relevant research to answer my clinical questions". Bernhardsson et al. stated that (62%) agreed with this statement [11]. In a study by Deirmayr et al. – 52.3% of the physiotherapist agreed with the statement that they felt confident in their ability to find relevant scientific articles, and 64% of the respondents stated that they felt confident in their ability to understand and evaluate scientific articles [13]. Other studies showed that

21% of the respondents stated that they had knowledge about EBP [15]. A study by Salbach et al. showed that 47% of the respondents stated that they knew how to perform a search in databases, and 59% of the respondents indicated that they knew how to formulate a clinical question [16]. Other authors stated that (70%) of the physiotherapist knew how to formulate a clinical question [15]. Other studies showed that, respectively, 48% and 70% of the respondents indicated that they had skills for critical evaluation of scientific literature [15, 17]. The comparison of the results obtained in Lithuania with those obtained in other countries showed that Lithuanian physiotherapist demonstrated greater confidence in their knowledge and skills required for the application of EBP. According to Bernhardsson et al., greater experience has a positive influence on the confidence in one's knowledge and skills [11]. Physio-therapists should be encouraged to improve systematically their skills [18].

87.8% of the respondents agreed with the statement "I want to learn and improve the knowledge and skills necessary to apply EBP in my work". Other authors in similar studies found different percentages of the respondents who agreed with this statement: 90.2% [9], 70% [12] and78.6% [13].

In our study 37.7% of the respondents didn't use databases or only used them once monthly when searching for literature related to their clinical practice, 35.1% Lithuanian physiotherapist used databases from 2 to 5 times per month. Bernhardsson et al. found that 71% of the respondents used databases less than 2 times per month, whereas only 23% of the respondents used databases from 2 to 5 times per month [11]. Deirmayr et al. state that one-half of the respondents (49.9%) didn't use databases when searching for clinically relevant literature, 22.5% used databases only once monthly, and 17.2% used databases from 2 to 5 times per month [13]. Other studies showed that respectively 8%, 16%, and 32.8% of the respondents sometimes used databases during a week [3, 15, 17]. The authors also indicated that, respectively, 20% and 62.3% of the respondents used databases once per month [3, 15]. In two studies, 27.3% and 84% of the respondents, respectively, indicated that they searched for scientific literature in databases [12, 17]. Thus, studies performed in various countries yielded differing results.

28.9% of physiotherapist didn't read scientific articles related to their clinical practice at all or read one article per month, 42.5% of the respondents read from 2 to 5 scientific articles per month, 18.9% of the respondents 6 to 10 articles, 7% of the respondents – from 11 to 15 articles, and 2.7% of the respondents read over 15 scientific articles per month. A study in the USA yielded similar results. This study revealed that 33.8% of the physiotherapist didn't read scientific articles at all or read one article per month, 52.9% of the respondents read from 2 to 5 scientific articles per month, 6.8% – from 6 to 10 articles, 2.7% of the respondents – from 11 to 15 articles, and 3.8% – over 15 scientific articles per month [19]. A larger percentage (44%) of physiotherapist who didn't read scientific articles or read one article per month was found in Sweden [11]. Deirmayr et al. found that 33.1% of the respondents read only one scientific article related to their clinical practice, 8.1% of the respondents didn't read articles at all [13]. Two studies found that, respectively, 46% and 41.9% of the physiotherapist read on from 2 to 5 scientific articles per month [11, 13]. Different studies presented different outcome of respondents who sometimes read several scientific articles per month – respectively, 10%, 17%, and 40% [3, 15, 17].

Several studies revealed that, respectively, 23.9%, 48%, and 62% of the respondents indicated that at their workplace, the application of EBP was encouraged [11, 15, 20]. Our study showed that 52.7% of the respondents agreed with the statement "At my work place the use of current research is encouraged". Meanwhile, in a study by Deirmayr et al., only 18.3% of the respondents agreed or strongly agreed with the statement that their workplace financially supported the development of EBP skills [13]. Bernhardsson et al. considered experience to be one of the affecting factors: the comparison of the characteristics of the studied samples showed that in the study by these authors, 38.4% of the respondents had over 15 years' experience [11], while in our study, such subjects comprised 25.7% of the studied sample, which could have influenced lower results.

The analysis of data on EBP guidelines showed that 90.4% of the respondents agreed or strongly agreed with the statement "I consider it important to use EBP guidelines in my practice". Bernhardsson et al. presented similar data, indicating that 96% of the respondents agreed or strongly agreed with this statement [11].

The obtained data showed that 48.2% of the Lithuanian physiotherapist quite often or very often used EBP guidelines in their clinical practice, 32.9% of the respondents used them sometimes, and 18.9% of the respondents used them seldom or never. In a study by Bernhardsson et al., 47% of the respondents stated that they used EBP guidelines in clinical practice very often or quite often, 41% - sometimes, and 12% of the respondents used them seldom or never [11]. A study conducted in Austria showed that 46.8% of the respondents agreed with the statement "I use EBP guidelines in my practice" [13]. The results of other two studies revealed that, respectively, 25.8% and 86% of the respondents used EBP guidelines in their clinical practice [15,16].

Deimayr et al. in their study identified three most common barriers to the use of EBP guidelines. The first one was a lack of time (21.8%), the second – a lack of statistical knowledge (15%), and the third one – a lack of basic scientific understanding (10.1%) [13]. In our study, a lack of time was also one of the most commonly identified barriers (29.9%) – its frequency in percentage was similar to that found in a study by Deimayr et al. The majority of the authors also mentioned the lack of time as one of the main barriers to the application of EBP guidelines in physiotherapy [3,11,12,14,15,16,17].

The results of our study suggest that further research is needed on the application of EBP in the field of physiotherapy, during and after the studies. Also, improvement and promotion of EBP study programs, courses, and practical and theoretical seminars are required, as well as the improvement of conditions facilitating the application of EBP in physiotherapist clinical practice.

Conclusions

1. According to Lithuanian physiotherapist, EBP practice should be applied in daily clinical practice. The majority of physiotherapist agreed that EBP helped them make decisions in the choice of physiotherapy techniques. Only a small part of the respondents thought that the application of EBP created unreasonable demands in their daily work. Physiotherapist attitudes towards EBP were influenced by age and experience.
2. Less than one-half of the respondents read from 2 to 5 scientific articles related to their clinical practice during a typical month. One-third of the respondents indicated that strong evidence was lacking for most treatments that they used for their patients.
3. According to Lithuanian physiotherapist, the use of EBP guidelines in clinical practice was important. The majority of them agreed that EBP guidelines facilitated their work. According to the respondents, the main barrier to the application of EBP guidelines in clinical practice was a lack of time.

Adres do korespondencji / Corresponding author

Grazina Krutulyte

Lithuanian University of Health Sciences,. Eiveniu 2,
Kaunas Lithuania, LT-50009
Grazina.krutulyte@gmail.com

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