
Knowledge and attitudes towards evidence-based practice among clinical physical therapists in Metro Manila

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Abstract

Introduction The study aimed to determine the demographic profile of clinical physical therapists in Metro Manila, their knowledge and attitudes towards evidence-based practice and the relationship of their educational background to knowledge and attitudes towards evidence-based practice.

Methods A quantitative correlational research design was utilized to describe the profile, knowledge and attitudes of clinical physical therapists, selected by purposive sampling, towards evidence-based practice. An adapted Likert-type questionnaire was utilized to gather data necessary to the study.

Results Majority of 33 respondents had their basics of evidence-based practice as part of their academic preparation and had positive attitudes towards evidence-based practice. There was a weak non-significant correlation of educational background with knowledge of evidence-based practice and no correlation with attitudes towards evidence-based practice.

Conclusion Educational background may be factor in terms of knowledge of evidence-based practice. However, educational background is not correlated with the personal attitudes towards evidence-based practice.

Key words: Evidence-based practice, knowledge, attitudes, physical therapy, clinical physical therapists

In recent years, there have been few studies supporting the use of evidence-based practice (EBP) among physical therapists. The use of EBP helps determine the effectiveness of the caregiver's interventions or outcome measures. In 2012, Manske and Lehecka

concluded that practicing evidence-based medicine (EBM) helped the sports physical therapist deal with the increasingly insurmountable growth of medical literature that is published and EBM allowed clinicians an avenue for excellence and development in clinical practice. According to Sackett clinical research is an important factor in clinical decision-making and practice. Their group noted that both clinician expertise and clinically relevant research were important components of EBP.²

However, this view is challenged by recent data showing 61% of the respondents disagreeing on the use of evidence-based practice because of the unreasonable demands on them. The respondents were diverse in their knowledge and attitudes about

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whether or not there was a lack of strong evidence to support aspects of their physical therapy practice.³ Also, recent graduates demonstrated better knowledge of evidence-based practice skills compared with therapists with 6 to 15 years of clinical experience.⁴ However, all groups used clinical experience most frequently as their source of information for clinical decisions. Likewise, research evidence was infrequently included in decision-making. Therapists may employ some interventions simply because they are in widespread use. They may also elect to use interventions because they are new and different or because they are the focus of "anecdotal testimonials" in continuing education. The analysis of research evidence paired with the physical therapist's experience and expertise provides a powerful tool to guide clinical decision-making.⁵ There are areas of practice in physical therapy that lack rigorous examination and evidence.

This paper hoped to gauge the knowledge and attitude of physical therapists regarding evidence-based practice and whether or they use EBP in the clinical setting to give the best intervention and decision-making for their patients. The purpose of this study was to determine the knowledge and attitudes regarding evidence-based practice and to determine the relationship of educational background of physical therapists to their knowledge and attitude towards EBP.

Methods

A correlational study using a survey questionnaire analyzed the relationship between clinical physical therapists' educational background and their knowledge and attitudes towards EBP. Clinical physical therapists that treated/managed patients and had working hours in a clinical, hospital or home setting were recruited by purposive sampling. Those who signed an informed consent were included. The investigators used a survey tool adapted from the questionnaires made by Jette and Gorgon.⁶ The questionnaire consisted of questions on knowledge, attitudes and practice of EBM with a 5-point Likert-type scale (strongly agree, agree, neutral, disagree, strongly disagree). The questionnaire was pilot tested among licensed physical therapists of the College of Allied Rehabilitation Sciences in the University of the East Ramon Magsaysay Memorial Medical Center.

The subject's profiles were outlined using descriptive statistics mean, median, mode and standard deviation. Meanwhile, the relationship between profile and knowledge, and profile and attitudes were analyzed using Spearman's rho. The statistical level of significance was set at $p < 0.05$.

Results

Thirty three physical therapists that satisfied the inclusion criteria and gave their consent were included in the study. Their characteristics are shown in Table 1. More than 75% of respondents were women and in their middle 20s. Around two-thirds were taking up a masteral program in Physical Therapy. The subjects worked at an average of 41 hours per week and managed around seven patients per day. Majority worked in a privately-owned facility or general hospital treating mostly adult patients with orthopedic conditions or stroke.

Table 1. Characteristics of the participants.

Variable	n= 33
Age (yr ± SD)	26.5 ± 4.66
Gender	
Male	8 (24%)
Female	25 (76%)
Years of practice	3.8 ± 3.12
Entry level degree	
Certificate	
Baccalaureate	33 (100%)
Masters	
Doctorate	
Highest degree attained	
Baccalaureate	13 (39%)
Baccalaureate with earning units related to PT	20 (61%)
Baccalaureate with earning units not related to PT	
Masters degree in PT	
Masters degree not related to PT	
Doctorate	
Number of hours working per week	41.6 ± 7.36
Number of patients per day	7.0 ± 3.08
Type of facility	
Generalized facility (hospitals)	12 (36%)
Specialty facility	
Privately owned facility	20 (61%)
School-based facility	1 (3%)
Community-based facility	

Number of PT in facility	7.24 ± 3.19
Type of condition for majority of patients	
Orthopedic	18 (55%)
Neurological	14 (42%)
Cardiovascular	1 (3%)
Pediatric	
Others	
Age of majority of patients treated	
Pediatric	28 (85%)
Adult	5 (15%)
Geriatric	

respondents had formal training in search strategies. More than 70% were confident of their critical appraisal skills and their ability to find relevant evidence to answer clinical questions. Table 3 shows that 80 to 97% of respondents showed positive attitudes towards EBP in terms of its necessity in the practice of physical therapy, usefulness of research in practice, increased use of evidence, interest in improving EBM skills and that EBM improves the quality of patient care.

There was weak and non-significant correlation between educational background and the different aspects of knowledge of EBM, as seen in Table 4. The correlation between educational background and formal training in search strategies was weak but significant. Table 5 shows no correlation between educational background and personal attitudes towards evidence-based practice among the physical therapists sampled.

As seen in Table 2, 70% of the respondents reported that they learned the foundation of EBP as part of their academic preparation. Sixty-one percent of the respondents learned critical appraisal of research literature in college. Less than half of the

Table 2. Personal knowledge towards evidence based practice among the participants.

Variable	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Learned EBP foundation in the undergraduate as academic preparation	8 (24%)	15 (46%)	9 (27%)	1 (3%)	
Learned critical appraisal of research literature in the undergraduate as academic preparation	5 (15%)	15 (46%)	11 (33%)	2 (6%)	
Received formal training in search strategies in the clinics	5 (15%)	10 (30%)	17 (52%)	1 (3%)	
Confidence in appraisal skills	9 (27%)	15 (46%)	8 (24%)		
Confidence in answering clinical questions using relevant research	10 (30%)	14 (42%)	8 (24%)	1 (3%)	

Table 3. Personal attitudes towards evidence based practice among the participants.

Variable	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
EBP's necessity to practice	22 (67%)	10 (30%)	1 (3%)		
Research usefulness in everyday practice	14 (42%)	14 (42%)	5 (16%)		
Increase use of evidence in daily practice	11 (33%)	18 (55%)	4 (12%)		
Interest in learning or improving skills	19 (58%)	11 (33%)	3 (9%)		
Improves quality of patient care	15 (46%)	14 (42%)	4 (12%)		
EBP's account for limits of practice setting	4 (12%)	16 (49%)	11 (33%)		
EBP's help in decision making	2 (6%)	12 (36%)	15 (46%)	2 (6%)	
Lack of evidence to support interventions	6 (18%)	17 (52%)	10 (30%)	4 (12%)	
EBP's account for patient preferences	3 (9%)	8 (24%)	18 (55%)	4 (12%)	

Table 4. Correlation of educational background and personal knowledge towards evidence based practice among the participants.

Variable	r value	p value
Learned EBP foundation in the undergraduate as academic preparation	0.282	0.11
Learned critical appraisal of research literature in the undergraduate as academic preparation	0.282	0.10
Received formal training in search strategies in the clinics	0.371	< 0.01
Confidence in appraisal skills	0.021	0.91
Confidence in answering clinical questions using relevant research	0.215	0.23

Table 5. Correlation of educational background and personal attitudes towards evidence based practice among the participants.

Variable	r value	p value
EBP's necessity to practice	0.067	0.71
Research usefulness in everyday practice	0.053	0.77
Increase the use of evidence in daily practice	-0.091	0.61
Interest in learning or improving skills	0.096	0.59
EBP's improve quality of care	0.122	0.50
EBP's account for limits of practice setting	0.014	0.94
Lack of evidence to support interventions	0.183	0.31
EBP's help in decision making	0.214	0.23
EBP's account for patient preferences	0.007	0.97

Discussion

This study's findings are similar to the results of Jette that engagement in educational sessions either in undergraduate preparation or through continuing education, knowledge on search strategies and confidence in skills and ability to critically appraise information were associated with the age, years since licensure and both professional and advanced academic degrees.³ The results show that majority of the respondents learned the foundation of EBP and critical appraisal as part of their academic preparation. In contrast, the study of Gorgon showed that content relevant to EBP was incorporated in the various foundation and professional courses of which at least 50% were under research methods and undergraduate thesis.⁶

The results showed that the respondents have a positive attitude towards EBP, similar to the findings of Knops.⁷ A survey showed that slightly more than half of the respondents disagreed on the lack of

evidence to support the most used interventions in their practice.⁸ The integration of evidence from literature helped them improve their skill and decision-making to provide a better quality of patient care. The respondents exhibited high interest and willingness to advance skills relative to EBP. The findings were supportive of a study by Akinbo, wherein the respondents believed that incorporating EBP into practice lead to an enhanced quality of service and developed clinical skills.⁹ According to Schreiber, despite their willingness, most of physical therapists still tend to use the information they acquired during entry level education and rely on personal experiences and "expert" opinions instead of the information gathered from new studies and literature.¹⁰

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