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A Pilot Study of the Evidence Based Practice Training Program for Filipino Physiotherapists: Emerging Evidence on Outcomes and Acceptability

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ABSTRACT

Background: The use of evidence to guide clinical practice has been challenging for health professionals across the globe. Issues of implementing the evidence become even more challenging among health professionals in developing countries because of cultural and contextual issues which compound the existing implementation barriers reported in the literature. An evidence based practice (EBP) training was developed for physiotherapists in a developing country (the Philippines) based on the literature and preliminary exploratory studies. The training program aimed to address issues of barriers to EBP and the nature of practice in a developing country. This study reports the process and findings of pilot testing the training program (EBP for FilPTs). **Objectives:** The objectives of the pilot study were to 1) Estimate the effect size of the EBP training program in enhancing knowledge and skills in EBP; 2) Determine the sample size for a subsequent RCT, 3) Test the acceptability of the EBP training program, and 4) Refine the components of the intervention (training program) as needed. **Methods:** Seven physiotherapists purposively sampled from one training institution which does not provide training on evidence-based practice were randomly allocated to the intervention (EBP for FilPTs) and the waitlist control groups. Pre-post intervention measures of knowledge and skills associated with EBP were assessed using the Adapted Fresno test. Participants and observers completed an evaluation summary and commented on the program's objectives and strategies and its usefulness to guide practice. **Results and Conclusion:** The EBP training program resulted in significant and large improvement (Effect Size = 0.8) in knowledge and skills. It was considered by participants to be an effective, acceptable, and practical medium to teach EBP to physiotherapists.

INTRODUCTION

The application of research evidence (known as evidence implementation) to guide clinical practice decisions is challenging, despite an increasing body of research regarding effective implementation strategies.¹ Across all health professions, the uptake of the evidence into clinical practice requires changed thinking and organisational supports to underpin sustainable evidence-based clinical behaviours and practice change.¹ Many barriers to the concerted uptake of current best research evidence into practice have been reported in the literature, the most common being lack of time, access to the literature and knowledge of the

process, individual resistance to change, and organisational barriers.²⁻⁶ Strategies are continually being proposed, tested, and refined to address the range of barriers that confront health professionals wanting to implement research evidence into practice.

The issue of evidence implementation is particularly challenging in developing countries where cultural and contextual issues may add to many entrenched structural and process barriers to evidence uptake and implementation. A major concern is that a number of treatment interventions from which current best evidence has been synthesized come from trials evaluating programs in countries and settings which do not reflect those of developing countries. This concern was highlighted in a systematic review of evidence-based practice (EBP) in post graduate healthcare education where the identified and included studies for analysis were from North America, the United Kingdom, Australia, Germany, and Hong Kong.⁷ The issues which make it difficult to apply findings from the literature to developing countries include relevance of interventions to patient and organisation scenarios, differences in patient values due to cultures and traditions, and the contexts of local health care systems.⁸⁻¹⁰

The need for health professionals in developing countries to be informed of best practice interventions and be guided by the use of evidence is crucial in ensuring the best delivery of health care. A pre-requisite to understanding how to implement best evidence is learning the concepts and the skills related to EBP, as one of the main barriers to evidence uptake is lack of appropriate knowledge and skills. Effective education, training, and peer support have been identified as key solutions to address this issue.⁸⁻¹⁰

Our interest is health professionals in developing countries in Asia. There is evidence that out-of-date and even harmful practices are still being delivered in developing countries, despite evidence to the contrary from international research.⁹ Lack of resources (financial and intellectual), low priority given to research, and lack of evidence-based training and skills are just some of the reasons why health practices in Asia are not based on current research.¹¹ Traditional systems of practice can also influence the manner by which healthcare practices are identified and delivered. For instance, some health professionals such as physiotherapists in the Philippines and other countries in the Asia Pacific region, by tradition, are not first-contact practitioners.¹² This means that they cannot deliver services or treatment to patients without a detailed medical prescription. They receive referrals from medical doctors and these referrals often include a treatment plan which becomes the primary bases for identifying interventions to manage the patient case. In some instances, the requested treatment interventions may not be based on best research evidence, and are not best-practice interventions.

Given this situation, we have developed an EBP training program named "EBP for FilPTs" to teach practical EBP to physiotherapists in the Philippines. The EBP for FilPTs is aimed at improving skills and building the Filipino physiotherapists' capacity to engage in EBP, and consequently, making recommendations, if necessary, to doctors for the use of and delivery of best practice interventions in treating patients. To design the training program, we conducted preliminary exploratory studies on the history and nature of physiotherapy practice in the Philippines. In addition to this, we created a comprehensive profile of physiotherapists' current practice and the basis for treatment selections, and identified perspectives in teaching EBP to the target population. These were important in order to map current practice, attitudes, and evidence-implementation behaviours of Filipino physiotherapists.¹³ From these, we found empirical data that treatment decisions by physiotherapists are generally not based on current research evidence and are mostly based on treatment decisions made by doctors, undergraduate education, and textbook materials. This highlighted the need to conduct focused EBP training in order to influence behaviours and attitudes of current physiotherapists, as well as new generations of therapists. We subsequently identified culturally-specific strategies to teach Filipino physiotherapists to understand and apply the concepts of EBP, these being short and simple lectures with sufficient time for practice sessions.¹³

From our systematic review, we found the best evidence on EBP training programs in allied health. We have identified the most appropriate way of developing the course contents, method of delivery, duration, components and strategies of effective programs.¹⁴ There is evidence to suggest that local opinion leaders and multifaceted interventions were most likely to improve attitudes and behaviours with respect to EBP.^{15,16} We also found that combined lectures and workshops using face-to-face media, and conducted over at least one half-day are most likely to be effective in improving knowledge and skills in EBP.¹⁴ We layered the findings from our preliminary studies and the literature review with principles of adult learning, educational strategies, and the literature discussing EBP needs and strategies for developing countries to develop the EBP for FilPTs training program.⁸⁻²⁰

The EBP for FilPTs training program is envisioned as a strategy to implement best evidence in practice to cultivate a culture of EBP in the Philippines' health care system. The tested model can be marketed and provided to other health professionals in the Philippines, including doctors, occupational therapists, and nurses. Physiotherapists and other health professionals who take part

in the training and have improved capacity in EBP can take part in planning and providing EBP education in the undergraduate training later on in order to fully integrate EBP in the system.

This paper outlines the process of pilot testing the EBP for FILPTs and reports on the findings which informed the next phase of the project, the randomised controlled trial (RCT). The objectives of the pilot study were to:

1. Estimate the effect of the EBP training program in enhancing knowledge and skills in EBP
2. Use this to determine the sample size for the larger RCT
3. Test the acceptability of the EBP training program to Filipino physiotherapists
4. Refine the components of the intervention (training program) as needed

METHODOLOGY

Ethics

Ethics approval was obtained from the University of South Australia’s Human Research Ethics Committee.

Study Design

A pilot-sample using a randomised controlled study design was conducted to address the study aims. The EBP for FILPTs program was tested against a waitlist control group, which was assessed at the same time as the intervention group (pre-post test) but provided with the intervention, after all pilot intervention data had been collected.

Participant Recruitment

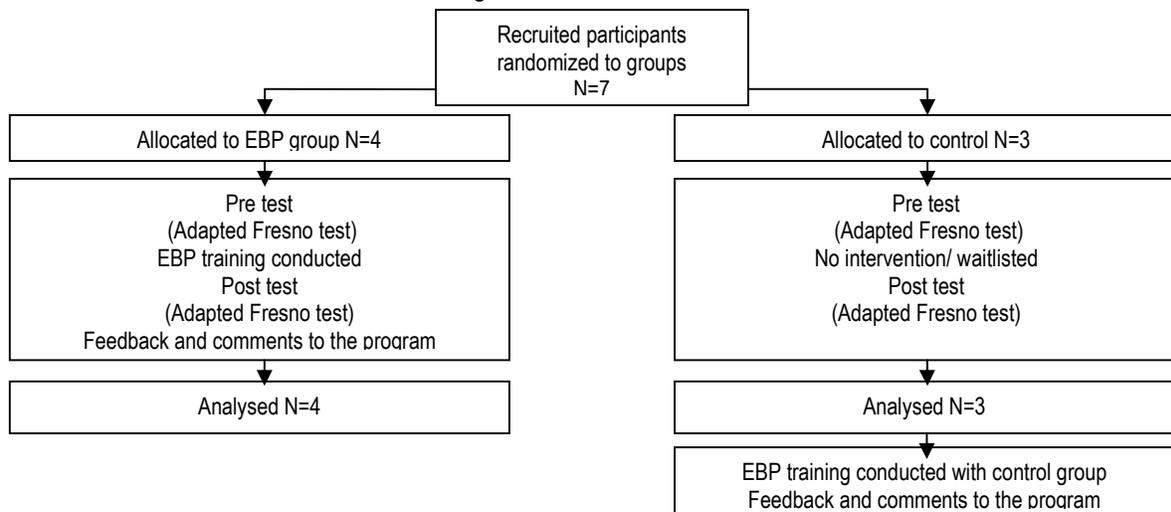
All seven physiotherapists from the Department of Physical Medicine and Rehabilitation of Our Lady of Lourdes Hospital (OLLH) in Mandaluyong City, Philippines, were invited to take part in this pilot study. Approval to conduct this study was obtained from the hospital administrator. This hospital facility was chosen as it represented a “usual” clinical rehabilitation department, where physiotherapists work closely with medical doctors and undertake the provision of treatment prescriptions made by doctors.

The physiotherapists who were invited to take part in the pilot test were identified using the following criteria:

1. Licensed to practice physiotherapy in the Philippines
2. Have not attended any formal EBP training

Those eligible to participate were asked to complete a preliminary survey of age, gender, years in practice, highest educational attainment, and a screening form which sought information on whether participants had undergone any EBP training program, and if so, to describe it in detail (Appendix A). This was particularly important as participants should not have been exposed to a formal EBP training to minimize the potential confounding influence of such on the outcomes. Once assessed for eligibility, a meeting was held to orient all participants to the procedures of the study and written informed consent was obtained. An independent researcher randomly allocated participants into either the EBP training group or a waitlist control group using computer generated random numbers. After allocating the participants, the dates of the training were provided (Figure 1). Two assessors of the study outcomes were blinded to the participants’ allocation.

Figure 1. Flow of Procedures



The Intervention

The **EBP for FiIPTs** is a face-to-face, one-day lecture and workshop training program conducted at the University of Santo Tomas' College of Rehabilitation Sciences' Computer Barn with access to some online databases (Medline, CINAHL and EBSCOHOST). The **EBP for FiIPTs** consists of six short lectures with time for practical sessions in between, to facilitate learning of knowledge and skills in EBP (Appendix B). The main contents of the training program are:

1. Introduction to EBP
2. Hierarchy of evidence and study designs
3. Drafting the clinical question using the PICO (PICO format, P-participant, I-intervention, C-comparison and O-outcome) format
4. Designing the search
5. Critical appraisal of the evidence and answering the clinical question based from the evidence found.

Each of the lectures had general and specific objectives and output expected from the participants. Lectures were delivered face-to-face and were enhanced by power point presentations. Practical sessions were facilitated by the primary author (JRD) and focused on the following:

1. Drafting a question based on clinical case experience
2. Setting up a search strategy (identifying the keywords and databases to use)
3. Doing the actual search for evidence using the computers in the laboratory
4. Critical appraisal of the evidence found
5. Answering the clinical question based on the evidence by using the EBP checklist

The training program was enhanced by a checklist (EBP Checklist) which assisted participants to apply the evidence that they might find from answering a clinical question (Figure 2). This became a recommendation form to guide the physiotherapists' use of evidence in actual patient case. The EBP checklist consists of items related to applicability or clinical relevance, validity of the evidence base, clinical impact, or magnitude of effects. The checklist is similar to the READER checklist used by general physicians in evaluating the literature to make recommendations for treatment and was in part based on the body of evidence matrix of the National Health and Medical Research Council (NHMRC) of Australia (<http://www.nhmrc.gov.au>).²¹⁻²² Items related to identifying potential barriers to applying the evidence with strategies to address the barriers were also included in this checklist. Barrier and strategy identification in the early stages helps facilitate the process of evidence implementation.

**Figure 2. EBP Checklist
RECOMMENDATION FOR APPLYING THE FINDINGS**

<p>Clinical relevance or Applicability</p> <ul style="list-style-type: none"> • Is the population similar to your patient case and values? • Was the intervention described in detail for you to replicate? • Do you have the skills and facilities (equipment/venue) to apply the intervention? 	YES	NO
<p>Validity of the evidence-base</p> <ul style="list-style-type: none"> • Is the study valid based on the results of the appraisal? • Were outcome measures valid? • Were other relevant factors considered? 	YES	NO
<p>Magnitude of effects or Clinical Impact</p> <ul style="list-style-type: none"> • Are findings clinically significant? • What are the expected effects? 	YES	NO
<p>Applicability Based on the clinical relevance, validity and magnitude of effects, are you confident to apply the findings to your own patient?</p>	YES	NO
<p>Barriers to applying the evidence Given that the findings are clinically relevant, valid, expected effects are reproducible and applicable, what would make it difficult for you to apply the findings to your patient?</p>	<p><i>List potential barriers</i></p> <ol style="list-style-type: none"> 1. 2. 3. 4. 	
<p>Strategies to address barriers What are your suggestions to address the barriers? (please identify realistic and doable strategies)</p>	<p><i>List possible strategies</i></p> <ol style="list-style-type: none"> 1. 2. 3. 4. 	

This EBP checklist is intended to be used by physiotherapists to recommend and discuss the best treatment intervention with the medical doctors within their practice setting. The effect of the intervention is evaluated by the therapist in terms of outcomes reported in the evidence initially found, and then discussed with the doctors during the patient's check up. For instance, if there is sound evidence for mobilization to decrease pain among patients with chronic neck pain using an outcome of a pain visual analogue scale (VAS) and the physical therapist has the skills to provide the appropriate mobilization techniques, then this intervention can be recommended to the doctors using the EBP checklist. Mobilization might then be part of the recommended treatment procedures and assessed for its effect using a pain VAS. The checklist process is the application of principles of EBP that combines research evidence, physiotherapists' skills and clinical expertise, patient choices and goals, and the contextual nature of local practice. This process also aims to enhance the decision making skills of the therapists and build their capacity as health professionals working as part of a health care team. The effectiveness of this process however, remains untested.

An online support was also developed as part of the intervention and can be accessed through this link: <http://www.unisa.edu.au/cahe/iCAHEGroups/EBPPhil/default.asp>. The training materials assist participants later by enabling them to review the lectures and supporting materials. The website also assists participants in searching and appraising the evidence by logging their PICO in the link. This support will assist participants in addressing lack of resources, time, and access to information on evidence. It complements the training provided to the participants and addresses barriers that have been identified worldwide in the uptake of EBP.²³⁻²⁵ Behaviour outcomes related to this component of the intervention were evaluated in the RCT.

Outcome Measures

The Adapted Fresno Test (AFT) was used to measure EBP knowledge and skills. The test was adapted by McCluskey and Bishop from the original Fresno test used in medicine.²⁶⁻²⁷ It has acceptable psychometric properties, and it measures change in knowledge and skills of EBP among novice rehabilitation professionals. The test consists of seven questions which address EBP competencies. There are two versions of the test and ICC scores for subtests were Version 1: ICC, 0.80–0.96; Version 2: 0.68–0.94. ICC for total scores were Version 1: ICC, 0.96; Version 2: ICC, 0.91. Internal consistency was acceptable (Cronbach's alpha =0.74).

Two assessors independently scored participants' answers to the Adapted Fresno test, using both versions of the test. An inter tester reliability among assessors was conducted prior to the intervention phase by asking both assessors to independently score the answers of two physiotherapists on the two versions of the AFT. This resulted to an ICC of 0.99 for both versions. For our study, we used version 1 of the Adapted Fresno test as the cases in this version were specific to physiotherapists.

Procedure

One week before the scheduled EBP training was conducted for the intervention group, all participants (from both intervention and control groups) answered the Adapted Fresno test to provide baseline assessment of knowledge and skills relative to EBP. The EBP intervention group then attended the training program on September 5, 2010. General and specific objectives were presented to the participants, and the goal by the end of the training was that the clinical question that each participant formulated as part of the training program would be answered by the best available evidence. This was the vehicle for the participant's systematic search of the literature using a PICO format and for appraisal of the identified literature for methodological quality.^{28,29} The recommendation checklist guided the application of evidence from the literature search to an actual patient case. Each participant had to report their answers to their PICO to the other participants using the checklist. At the end of the training, the intervention group participants were asked to provide a second set of answers to the Adapted Fresno test (for post- intervention assessment) before leaving the training venue.

The participants in the waitlist (control) group were also asked to answer the Adapted Fresno test a second (over time) assessment. They were asked to email their answers to the investigator on the day that the EBP for FilPTs training was conducted with the intervention group. In this way, contamination of the participants' exposure to the EBP training was avoided. Two weeks after the EBP intervention group had received the training and all post assessments had been collected, the same training program was provided for the waitlist control group.

Feedback on the EBP for FilPTs training program was sought from all the participants (intervention and waitlist groups) and two independent observers who were invited to attend and observe the EBP training programs. The two observers were 1) a medical doctor who specialized in rehabilitation medicine and 2) a physiotherapist. Both have undertaken a formal EBP course under a masters program and work as clinicians and educators. A short list of questions to evaluate the program objectives, strategies, duration, and resources was provided to participants and observers. The evaluation questions, developed by the authors of this study, were answerable by YES or NO and are outlined below:

1. Were the objectives of the program clear to the learners?
2. Was the strategy (lecture –demo, problem solving) to teach the EBP program appropriate to the learners?
3. Did the program address the learning objectives?
4. Was the duration (one day) appropriate enough to conduct the training?
5. Was the time allotted for each of the topics adequate?
6. Were the resources to teach the program adequately provided to the learners?

The participants were also free to provide any comment which might improve the training program. The results of the evaluation and the comments from the participants and the observers were all taken into account to refine the training program.

DATA ANALYSIS

Data were analysed using SAS statistical software version 9.2. Intra class correlation was used to test the reliability of assessors. Median and range of scores were used to report data. A Mann Whitney test was used to compare differences between groups. The effect size for the intervention group (compared with the control group) was computed using Cohen’s d. Feedback and comments were summarized and reported as key themes.

RESULTS

All seven physiotherapists (4 males and 3 females) of the department were eligible to take part in this pilot study. The physiotherapists were randomised to the EBP group (N=4) and waitlist control (N=3). There were no statistical differences in demographic details or outcome measures between the groups at baseline although there was a trend toward significance in the pre-test scores of the waitlist control group (Table 1).

Table 1. Baseline Characteristics of Participants

Variables	EBP group (N=4) Median and range	Waitlist control (N=3) Median and range	p values
Age (years)	27 (23-32)	25 (25-35)	0.9
Years of practice (years)	3.5 (1-5)	3 (2-8)	0.58
Gender	Males= 2 Females=2	Males= 2 Females=1	0.66
Pre-test Adapted Fresno Test scores	19.5 (6-26)	37 (25-41)	0.06

*significant p value (<0.05)

Changes in Knowledge and Skills and Sample Size Estimation

The physiotherapists in the intervention group had significantly higher scores in EBP knowledge and skills after EBP training compared to the waitlist control group. The change in scores was also significantly higher in the EBP group. The EBP training resulted in a large effect size (0.83) (Table 2). With the large effect size, the sample size required for the RCT is one (1) in each group (total N=2). However, as we are uncertain what caused the inflation of the effect size, instead of using the large effect size to estimate the sample size for the future RCT, we opted to test for a moderate effect which required a sample of at least 27 in each group.

Table 2. Change in knowledge and skills

Groups	Pre-test knowledge and skills scores (Median and range)	Post test knowledge and skills scores (Median and range)	Change in scores (Median and range)	Within group comparison (p value)	Between group comparison (p value)	Effect Size (E-S)
EBP group	19.5 (6-26)	63.5 (40-100)	47.5 (26-75)	0.02*	0.03*	0.83
Waitlist control	37 (25-41)	37 (28-45)	3 (0-4)	0.19		

* significant p value (<0.05)

Evaluation and Feedback on the EBP Training Program

Overall, the feedback about the program was positive and four of the six items in the evaluation list were scored 9 out of 9 respondents (7 participants, 2 observers) (Table 3).

Table 3. Summary of evaluation scores

Evaluation Questions	YES responses	NO responses
1. Were the objectives of the program clear to the learners?	9	0
2. Was the strategy (lecture –demo, problem solving) to teach the EBP program appropriate to the learners?	9	0
3. Did the program address the learning objectives?	9	0
4. Was the duration (one day) appropriate enough to conduct the training?	8	1
5. Was the time allotted for each of the topics adequate?	8	1
6. Were the resources to teach the program adequately provided to the learners?	9	0

The EBP training was viewed positively by all participants, and on this basis, a larger roll-out of this program is acceptable to Filipino physiotherapists. Participants reported that the lectures and practical sessions were well organized and the strategies used were effective in enhancing their learning.

*“Well organized lecture; that is why we were able to follow easily.
“The alternate lecture-exercise-lecture was effective.”*

Most of the participants reported that the time allotted for the lectures and practical sessions was appropriate.

*“The lecture was just enough and more time was allotted for practical application for better learning. Thanks for a very good learning experience.”
“The lectures were not too long nor too short; just adequate to get the message across. The exercises were appropriate for the participants to practice the knowledge they acquired from the lecture.”*

There was a comment from one observer though that there should be more time spent for the practical session on searching and appraising.

“I think more time must be allotted for the search and appraisal.”

The venue and the resources were appropriate for the purpose of the training.

*“The internet service was good. The lights and other technical bits and pieces were conducive for learning.”
Overall, the feedback was very good and the participants recognized that the EBP training conducted can be a medium to link research and practice, and that the knowledge learned from the training can be applied in practice.
“I learned a lot from this EBP training. This might be the solution that can bridge the gap between theory and practice.”
“The process of finding the answer to our PICO and finally coming up with a recommendation for practice recommendation was very helpful.”*

Acceptability

In its current format, the training program is appealing and acceptable to the participants. Only minor modifications were required in the time allotted for searching and appraising. This is understandable as these skills were very new to participants and therefore take time to consolidate.

DISCUSSION

This is the first paper that reports on the results of pilot testing an EBP training program developed for physiotherapists in a developing country. The EBP training program meets the needs of the Filipino physiotherapists and resulted in gains in knowledge and skills. The program was considered acceptable as an update in practice. There is support for conduct of a larger randomised controlled trial. Substantial information was gained from this pilot study in terms of the processes in tailoring a training program, gains in knowledge and skills reported as effect size, and assessing for its acceptability.

Our results support the findings reported in the literature on effectiveness of EBP education programs in improving knowledge and skills in EBP.^{7,14,30,31} The strategies used in our study matched the competencies required to improve EBP knowledge and skills. These were lectures to learn the concepts of EBP, and practical sessions to learn the skills which made the teaching process effective.³² Changes in knowledge and skills are pre-requisite to changing behaviour.^{9,10} Without the basic knowledge of what EBP truly is and the skills that are required to practice it, changing behaviour is impossible. Health professionals will be misled and confused on what EBP really entails and thus would choose not to adapt its principles in practice.

With regards to knowledge and skills in EBP, we were not sure of the reasons why there was a higher median pre-test score in the waitlist control group (though non-significant) as no one in this group had training in EBP. We hypothesize that this may be because of those participants who had practiced for more years (more than five years as compared with those in the other group) and may have read about EBP in one way or another. However, the potential to significantly improve EBP knowledge and skills with an EBP training program is still noteworthy as there was a significant change in pre and post test scores of EBP knowledge and skills in the group who had the training compared to the waitlist control group. We believe that this was influenced by the problem-solving process and applying the evidence session where the participants had to report an answer to their PICO using best available evidence and make recommendations using research evidence layered with their clinical expertise, as they are not first contact practitioners.

The large gains in knowledge and skills in this pilot though remarkable, could have occurred as a result of a Hawthorne effect and the small sample (and class size), thus inflating the effect size. The Hawthorne effect is a possible explanation for intervention studies where participants tend to perform better knowing they are part of a study or a trial or they perform better knowing they are receiving a new intervention.^{33,34,35,36} We are aware of the possibility of a Hawthorne effect and it is for this reason we made sure we had a waitlist control group in our study and blinded the assessors to the group allocation. Having a waitlist control allows all participants to be informed that they are all attending the training but in different dates. Blinding the assessors was also a way of minimizing a Hawthorne effect and assessor bias. The assessors' scores in the Adapted Fresno test were the bases for the knowledge and skills measure in EBP. We stress that whilst we report on the changes in EBP knowledge and skills in this study, this is only a pilot study and included only a small sample; therefore, the exact effect of the training in terms of knowledge and skills requires investigation in the planned RCT in relation with effects on attitudes and behaviour measures.

The EBP training was found to be acceptable among the participants and the observers. We plan to conduct the training with a small group (10 to 15) with at least one trained facilitator other than the primary researcher who conducts the training. If the class size is increased, then we will add more facilitators to assist in the training, especially during practical sessions. Evaluating the acceptability of a training program is a preliminary process to conducting the training on a larger scale. This facilitates a practical assessment of a program and makes it more relevant to the target population. It allows modifications to be undertaken prior to conducting the program on a larger scale and lessens the chances of educational errors in subsequent project stages.

To further complement the training, a printed training manual is necessary to provide to participants of the RCT. The printed material may be useful as a handy reference when the physiotherapists have completed the course and are practicing in clinics. Printed copies are preferred by health professionals from developing countries due to lack of internet and other resources in clinical settings.⁹

IMPLICATIONS OF THIS PILOT STUDY

- The EBP for FilPTs training program has the potential to be an effective medium to teach clinicians from developing countries about the concepts of EBP and to encourage the use of research evidence to guide them in practice.
- This pilot study provides support for the appropriateness of this specific training program for physiotherapists in developing countries.
- This study design may be a model for evaluating continuing education for physiotherapists and also for other allied health professionals.
- This study can inform undergraduate EBP training in the Philippines

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**APPENDIX A
PARTICIPANT INFORMATION SHEET AND SCREENING FORM**

Current Work Position :	Gender: <input type="checkbox"/> Female <input type="checkbox"/> Male
Affiliation:	
Years of practice:	
Email address (materials will be sent through email):	

Educational Background/Training

Education	School/University	Location of School/ Region if within the Philippines; If outside the Philippines, please indicate which country
Bachelors Degree		
Masters Degree Please specify:		
PhD Degree Please specify:		
Postgraduate (masters/PhD)units Please specify:		
Certification/Diploma Course Please specify:		

Have you had any formal training in evidence based practice? _____ Yes _____ No

If YES, please describe in more detail:

APPENDIX B EBP TRAINING FOR FILIPINO PHYSIOTHERAPISTS

Program Objectives

The tailored Evidence Based Practice (EBP) program for Filipino physiotherapists aims to teach the concepts of EBP in a manner fitting the practice of physiotherapy in the Philippines. The EBP program also aims to develop an evidence seeking pattern among the physiotherapists and therefore update their existing knowledge and enhance the use of the best evidence to guide practice in the long term process.

Specific:

1. To teach the concepts of EBP
2. To teach clinical question formulation using the PICO format (based on a scenario where clinician is faced with a new or unique case)
3. To teach participants how to search for the best evidence to answer the clinical question (including hierarchy of evidence and sources of the best available evidence)
4. To teach critical appraisal skills to assess the quality of the evidence found
5. To apply the knowledge and skills learned to draft an answer the question identified
6. To assess the process from question formulation to applying the skills learned

Strategies

Lecture and demonstration
Actual practice of skills
Problem solving

Assessment

To objectively measures changes in EBP knowledge, skills and attitudes, the Adapted Fresno Test (McCluskey and Bishop 2009) will be administered before and after the EBP program.

To assess the feasibility and acceptability of the EBP program, independent observers and the participants need to answer the following questions and may also provide other comments:

1. Were the objectives of the program clear to the learners?
2. Did the program address the learning objectives?
3. Was the strategy (lecture –demo, problem solving) to teach the EBP program appropriate to the learners?
4. Was the duration (one day) appropriate enough to conduct the training?
5. Was the time allotted for each of the topics adequate?
6. Were the resources to teach the program adequately provided to the learners?

Activities

Schedule	Topic	Strategy	Participant's Output
08:30 – 09:00	Introduction to EBP	Lecture	
09:00 – 09:45	Hierarchy of evidence and study designs	Lecture	
09:45 – 10:00	Break		
10:00 – 10:30	PICO Formulation	Lecture on drafting PICO Practical session on: a. Drafting PICO from a case b. Drafting own PICO	Own PICO
10:30 – 11:15	Designing the search	Lecture -demo	Own search strategy
11:15 – 12:00	Conducting the search	Practical session	Acquire evidence
12:00 – 01:30	Lunch		
01:30 – 03:00	Appraising the evidence	Lecture Practical session	Appraised paper
03:00 – 03:15	Break		
03:15 – 04:30	What does the evidence say and how applicable is it? How can it be applied using the EBP Checklist	Lecture Practical session	Answer to own PICO
04:30 – 05:00	Post program knowledge, skills and attitudes assessment	Adapted Fresno test and answer evaluation questions	