

The Ideas of Afghan Physiotherapists about Evidence Based Practice - A Survey Research

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Abstract

Background: Evidence-based practice (EBP) is the explicit use of current best evidence in making decisions about the care of individual patients and is a concept of growing importance for physiotherapy.

Purpose: What are the ideas of physiotherapists about EBP? The aim of the present study was to investigate Afghan physiotherapists' ideas, attitude, knowledge, training requirements and barriers to EBP.

Method: A survey questionnaire was sent to 200 physiotherapists working in hospitals, nongovernmental organizations (NGO) and in private practice. One hundred and twenty-six were completed.

Results: Sixty eight percent of the respondents were male, and were from 10 different provinces of Afghanistan. The highest number (91%) of respondents had a 2-year diploma and 8% had a bachelor degree in physiotherapy. Physiotherapists were asked about the usefulness of EBP, 82.5% of the respondents said that EBP is useful for their daily clinical practice while 11.1% of the respondents mentioned that it is not useful. Eighty-eight per cent of the respondents agreed that EBP is necessary for their daily practice, 90% said they need to increase EBP in their daily practice and 84% agreed that EBP improves the quality of patient care. Seventy three percent disagreed that strong evidence is lacking to support the most of the interventions they use. Three quarters of the respondents agreed that patient preference influences the treatment choice. Eighty three percent agreed that EBP helps in clinical decision making.

Conclusion: Results suggest that Afghan physiotherapists had a positive attitude towards EBP. The respondents also felt the need to improve their knowledge and physiotherapy skills for practicing EBP. Respondents listed barriers to EBP such as lack of access to evidence research resources and lack of access to computers and internet. The recommendation to the stakeholders of physiotherapy profession in Afghanistan is that they must consider these barriers and provide the resources for easy access of knowledge about EBP.

Implication: Through the result of this study the institution and association will plan their capacity development program for Afghan physiotherapists.

Keywords: Evidence Based Practice; Afghanistan; Physiotherapy

Introduction

It is from the time of physicians like Hippocrates and Hector who are believed to have been the first practitioners of a primitive physiotherapy, advocating massage and hydrotherapy to treat people in 460 B.C [1]. The earliest documented origins of actual physiotherapy as

a professional group dates back to 1894 when four nurses in England formed the Chartered Society of Physiotherapy [2]. Other countries soon followed and started formal training programs, such as the School of Physiotherapy at the University of Otago in New Zealand in 1913 [3], and the United States' 1914 Reed College in Portland, Oregon, which graduated "reconstruction aides [4]. And in Australia, the first official education program, two year in duration started in Victoria and was approved by Federal council in May 1906 [5].

Physiotherapy was officially introduced in Afghanistan in 1984 with the establishment of the Physiotherapy School of Kabul (PSK), now renamed as Physiotherapy Institute (PTI) [6] Initially a two-year physiotherapy curriculum was introduced with considering both the needs of Afghanistan and the World confederation for Physical Therapy standards. In 1998, Afghans physiotherapist formed a professional association in Afghanistan by the name of Afghan Association for Physical Therapy (AAPT) and in 2007 they got membership to the WCPT.

Recently in 2008, the physiotherapy curriculum was upgraded from two years to three years. According to Lang C (2006) [6] there are approximately 200 physiotherapists in Afghanistan but due to wars and destruction this number is far from adequate to meet the needs of the Afghan people. But the latest estimation of Physiotherapy Institute of Kabul reported that almost 300 physiotherapists have been graduated till the beginning of 2011. Although physiotherapy is now included to a greater extent in the Basic Package of Health Services. (BPHS) [7]. In the practice awareness of the benefits of physiotherapy is still low, and there is little medical and public knowledge about the scope of the physiotherapy profession [6,8].

The term 'evidence based medicine' was first introduced in 1992 by a team at McMaster University, Canada, led by Gordon Guyatt (Evidence-Based Medicine working Group1992) [9]. A series of guides were produced to help those teaching medicine to introduce the notion of finding, appraising and using high quality evidence to improve the effectiveness of the care given to patient [10-12]. Evidence based practice (EBP) has been defined as "the conscientious, explicit and judicious use of the current best evidence in making decision about the care of individual patients" (Sackett, Straus, Richardson, Rosenberg & Haynes, 2002, P1) [13]. Emphasis for use of the evidence base of physiotherapy is rapidly increasing within the health care system [14]. The importance of EBP cannot be underestimated, since practitioner are professionally and morally obligated to ensure that their decisions are formed by and reflect best practice [15].

EBP is a relatively recent trend in health care and has grown at a rapid rate over the last ten years. Published research literature regarding EBP first emerged in the Medline data base in 1992 [9]. EBP become a pressing issue in physiotherapy since much of what physiotherapists practice awaits definitive research to establish its efficacy) [16]. The health care market has become more and more competitive and therefore the present interest in EBP has emerged as a natural consequence of contemporary economic, social and political trends and concerns [17]. The appropriate use of evidence about the effectiveness of various treatment strategies should result in clinicians selecting techniques known to be effective, and ultimately lead to improved patient outcomes [18]. Therefore, it is essential for the profession that its members understand the process of EBP to strengthen the position of physiotherapy in the present and future health care environment [14].

One of the early drivers of evidence-based physiotherapy was the Department of Epidemiology at the University of Maastricht in the Netherlands. Since the early 1990s this department has trained several 'generations' of excellent researchers who have produced an enormous volume of high quality clinical research relevant to physiotherapy [19].

The result of this study can be used by AAPT and PTI to promote the EBP of Afghan physiotherapists through continuous professional development courses (CPDs) which include awareness of EBP and this could lead to the change in attitudes about EBP among Afghan physiotherapists. Thereby, increased utilization of research evidence in daily clinical decision making ultimately could improve patients care.

Methods and Materials

A survey questionnaire was sent to 200 physiotherapists working in hospitals, NGO and in private practice. One hundred and thirty-eight were returned. Twelve of the returned questionnaires were later excluded from the study since they were from assistant physiotherapists.

Study Design

Cross sectional study design.

Measurement Tools and Equipments

Questionnaire: questionnaire, what are the ideas of Afghan physiotherapists about Evidence-Based Practice.

Procedure

To begin with, a questionnaire was developed by the researcher and using items from previously developed survey research (ROSS ILES et al 2006) [14] which investigated the Australian Physiotherapists "self-reported practice, skills and knowledge of Evidence-Based Practice and examined difference between recent and experienced graduates, physiotherapists with low and high levels of training and physiotherapist working in private practice and hospital settings [14]. And suitable items of the questionnaire were selected and modified as per the level of the Afghan Physiotherapists population. Then the draft of the questionnaire had been sent to the EBP experts (Australia) for the review and comments. The items were modified till the suitable items were finalized for the pilot study. Researcher himself personally went for the purpose of doing the pilot study and met Afghan Physiotherapists face to face and the questionnaire was then filled by 30 physiotherapists around the Capital, Kabul city in Afghanistan. Based on this pilot study some few points were modified in the questionnaire.

The questionnaire again as per requirement was sent to the EBP experts (Australia) for another review. In order to avoid errors that could occur due to language barriers, the survey questionnaire was prepared in English and was given to expert translator to translate into local language (Persian and Pashto) in Afghanistan. The translated form of the questionnaire was sent to the executive board of Afghan Association for Physical Therapy (AAPT) and Physiotherapy Institute (PTI) for further review that if they have any comments in translated questionnaire. Researcher approached the AAPT through mail, telephonic conversation and direct contact for their cooperation in the data collection. They had agreed to take the responsibility of sending and collecting the data from the subjects. The developed questionnaire was in two parts, first part was developed for the purpose of the quantitative analysis which consists of four part and total 26 items and the second part was developed for the purpose of qualitative analysis which had five open ended questions. However, the second part was not analyzed.

The questionnaire was then sent to AAPT through email. The AAPT had sent the questionnaire along with the consent and information form to the entire region where physiotherapists were working. In each region one of the representatives of AAPT was responsible for distribution of the questionnaire and then collection of questionnaires from physiotherapists and sending it back to the AAPT office which is located in the Capital Kabul, Afghanistan. After receiving the 90 questionnaire AAPT, they had sealed it and sent them to the researcher in India. Later for the second time AAPT had sent 48 more answered questionnaire. However, to mention, few of the questionnaire sent to different provinces by AAPT were not received by them due to unknown reason.

The researcher was in contact with the AAPT, PTI throughout and also individually with the regional representative of AAPT. If anyone had query regarding the filling of the questionnaire the queries were cleared through email and telephonic conversations.

Statistical Analysis

Data analysis was performed using SPSS -15 for window software. Data was tabulated in a master chart. To analyze the survey questionnaire of "What are the ideas of Afghan physiotherapist about the EBP, descriptive statistics was used to determine the frequencies of survey items. Fisher exact test was used to find the association EBP with personal information.

Results

Out of the 126 physiotherapists' 27 (21.43%) of them were in 20 - 29 yrs and 49(38.89%) were in 30 - 39 yrs and 50 (39.60%) people were in 40 yrs above age groups. As it is shown in table 1.

	Categories	No	%
Age	20 - 29 years	27	21.43
	30 - 39 years	49	38.89
	40+ years	50	39.60

Table 1: Age of the respondent in the study.

85 (67.55%) Physiotherapists were male and 38 (30.20) Physiotherapists were female and 3 PT (2.4%) missing data. As it is shown in table 2.

	Category	No	%
Gender	Male	85	67.50
	Female	38	30.20
	Missing	3	2.40

Table 2: Gender of the respondents in study.

	Frequency	Percent
Missing	4	3.2
Low	54	42.9
High	68	54

Table 3: Levels of qualification of subjects.

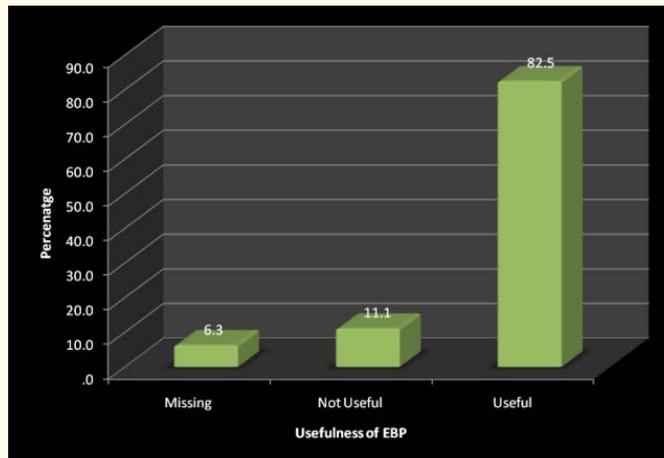
	Degree	N	%
Qualification	2year diploma	115	91.2
	Bachelor	10	7.90
	Other	0	
	Missing	2	0.80

Table 4: The rate of the knowledge of the respondent toward EBP.

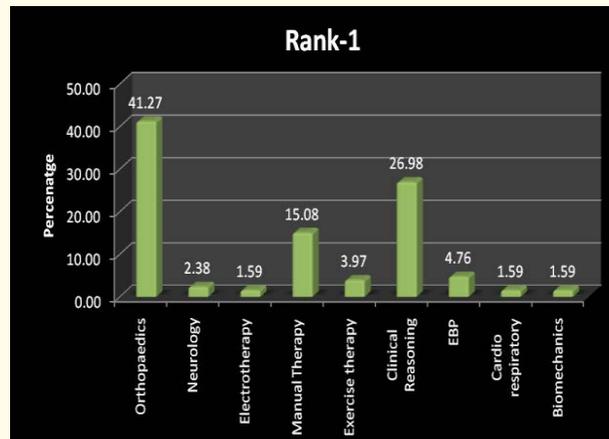
The usefulness of the EBP is in their daily practice.

101 subjects mentioned that EBP is useful in their daily practice and 14 of the subjects mentioned that EBP is not useful in their daily practice and 8 subjects didn't respond.

Knowledge requirement of improve your PT skills. This questionnaire was prepared to find out in which field on priority basis the physiotherapists wanted to improve their professional skills.



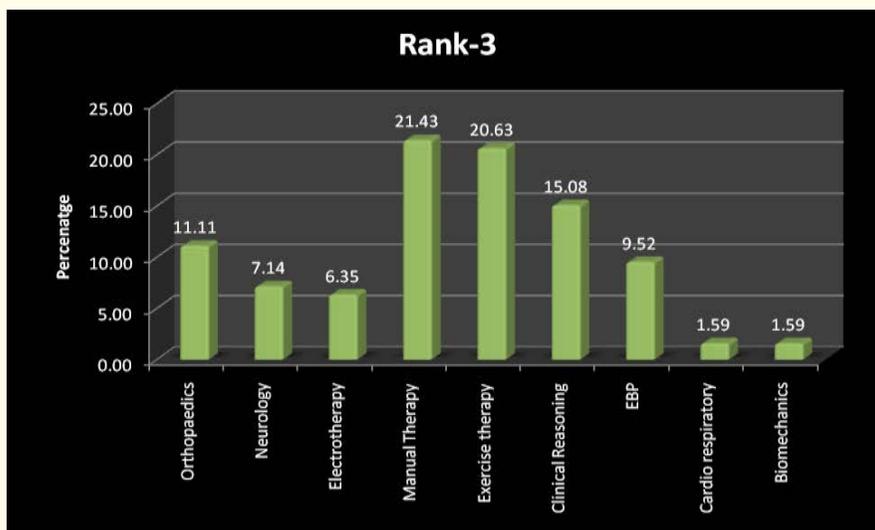
Graph 1: Usefulness of EBP in daily practice.



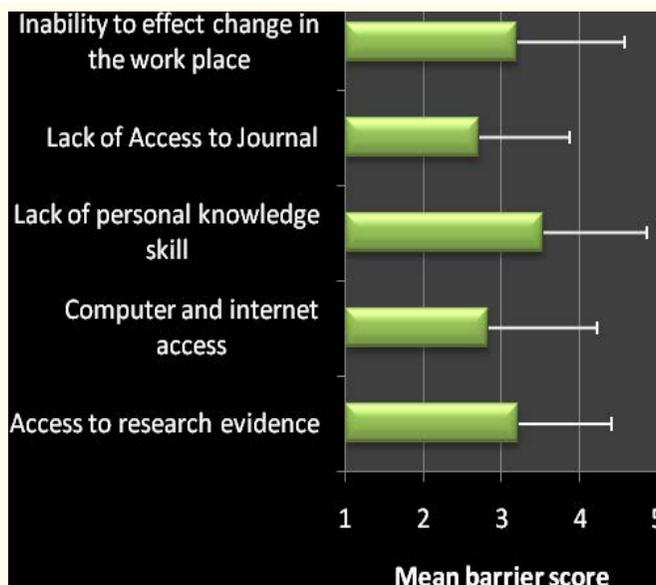
Graph 2: Knowledge requirement to improve their PT skills Rank one.



Graph 3: Knowledge requirement to improve their PT skills rank two.



Graph 4: Knowledge requirement to improve their PT skills rank three.



Graph 5: Analysis of the barrier faced while using EBP.

Attitude toward EBP practice	Agree (%)	Disagree (%)
Application of EBP is necessary in the practice	88.4	11.6
I need to increase the use of EBP in daily practice	89.7	10.3
EBP improves the quality of patients care.	84.4	15.6
Strong evidence is lacking to support most of the intervention I use with patients	27.0	73.0
Patient preferences influence treatment choice	74.6	25.4
EBP helps to make decision about patients care	82.6	17.4

Table 5: Attitude toward EBP.

Qualification	2 yr diploma	112	24.21	2.71	1.95	0.004	Significant
	Bachelor	10	25.90	1.37			
EBP knowledge	Low	52	23.40	2.66	4.188	0.000	Significant
	High	67	25.28	2.23			
Usefulness of EBP	Not useful	14	20.71	2.70	6.708	0.000	Significant

Table 6: Association of EBP with Qualification, EBP knowledge, Usefulness of EBP.

Discussion

This study was done to find out the ideas of Afghan physiotherapists about Evidence-Based Practice”. 200 questionnaires had been sent and 138 were responded. This chapter would emphasize on discussion of the results.

Part one: Demographic description

The age of the subjects was categorized into 3 groups, group 1 (i.e. age 20 - 29 years) consists of 27 subjects, group 2 (i.e. age 30 - 39 years) consists of 49 subjects and group 3 (i.e. age 40 and above years) consists of 50 subjects. Among these 85 were male, 38 were female and 3 somehow had not mentioned their gender.

The subject were included from different provinces of Afghanistan and highest number of the respondent were from Capital city, Kabul (30 subjects), followed by Balkh (22) then Herat (19) and others were from the following provinces Nangharhar, Takhar, Kunduz, Ghasni, Samangan, Logar, Wardak, Badkshshan, Jowaz Jan, Baghlan, Kapisa, and 15 of the respondent had not mentioned their provinces. This geographical distribution of physiotherapists shows that a high number of physiotherapists are working in main cities. And there are provinces which had no physiotherapists at all, even though there was a need of physiotherapy services in those areas.

The physiotherapists were categorized into different intervals depending upon the year of work experience they had. The highest frequency was among the physiotherapists having more than 16 years of work experience, whereas the lowest frequency was among the physiotherapists having 0 - 5 years of work experience. The highest numbers of physiotherapists were having two years of diploma (91.2%) whereas the physiotherapists with bachelor degree were very less in numbers (7.9%). This may be attributed to the fact that only two years of diploma was introduced since the start of the physiotherapy profession in Afghanistan, until recently when one batch of physiotherapists graduated as bachelor in 2008.

The physiotherapists were evaluated for their knowledge toward EBP on 2 point scale. The numbers of physiotherapists having high knowledge of EBP were 54% and 42.9 % were having low knowledge towards EBP, and 3.2% didn't respond.

The physiotherapists were also evaluated for the usefulness of the EBP, 101 of the respondents mentioned that EBP is useful in their daily practice and 14 of the subjects mentioned that it is not useful in their daily practice.

Part two: Knowledge requirement to improving your PT skills

When the physiotherapists were being asked regarding the field of knowledge required to improve their physiotherapy skills based on their priorities. Statistically result were found as 41% of respondents choose the orthopedic as first rank of priority, followed by the clinical reasoning by 27% and Manual therapy by 15% of the respondents. The percentage of second rank was higher in EBP practice (21.4%) followed by the manual therapy (21.4%), Exercise therapy (16%). Manual therapy common occurs in the third choice (21.43%) followed by exercise therapy (20.63%) and clinical reasoning (15%).

As the orthopedics had been ranked as first priority by the most of the respondent it indicates that it has a great importance for their clinical practice. And the reason could be that most of the clinical cases which come to physiotherapy department are having musculoskeletal conditions. This requirement can be fulfilled through establishing continuous professional development program.

This is matter of concern that only 1.59% of the respondents had ranked biomechanics as rank one. Because most of the knowledge of physiotherapy is based on biomechanical principles and it shows that Afghan physiotherapists are not aware of this fact. Although recently biomechanics had been included in the curriculum of three year diploma program and this would lead to improve their knowledge of biomechanics. It is of prime concern to make all physiotherapists aware of the importance of the biomechanics in the field of physiotherapy. And also, this part indicates that Afghan physiotherapists need further training for the above mentioned categories.

Part three: the attitude towards EBP

Attitude toward EBP questions were divided into 5 point scale but while analysis it was collapsed into two categories (agree) and (disagree). 88% of the respondent agreed that EBP is necessary for their daily practice, 90% of the physiotherapists agreed that they need to increase the use of EBP in their daily practice. 84% of the respondents agreed that EBP improves the quality of patients care and it means they have positive attitude toward EBP.

73% of the respondents disagreed and only 27% agreed that strong evidence is lacked to support most of the intervention which they use. It means strong evidence may be available to support their treatments but they don't have access for that evidence due to the barriers of EBP. 75% of the respondents agreed that patient's preference influences the treatment choice. It is describing that EBP is including the patient's preference in clinical decision making process. 83% of the respondents agreed that EBP helps in clinical decision making about patients care. It is again indicating that Afghan physiotherapists are having positive attitude towards EBP.

Association between attitude towards EBP and demographic data

There was no significant association between age, experience and gender with the EBP but there was a significant association between qualification, knowledge and usefulness of EBP with attitudes towards EBP. The above findings clearly indicate that qualification, knowledge and usefulness of EBP play a positive role towards the attitude of EBP. Upgrading programs, continuing professional education development programs, seminars, workshops, conferences will definitely develop an affirmative role towards the attitude of EBP.

Part four, Barriers faced while using EBP

The main possible barrier was lack of accessibility to journals. This is right that physiotherapists don't have an access and facility for the journals, although Physiotherapy Institute regularly receives APA journal of physiotherapy but limited people are having access to it. Another possible reason could be that physiotherapists are not well versed with English. Most of the physiotherapists cannot interpret the knowledge given in these journals. One more reason could be that Afghan physiotherapists are not able to interpret the research articles as it has many specific research and statistical terminology which they are not aware of.

Another main barrier of the EBP was lack of computer and internet access. The internet is the ultimate sources of evidence and research results, which can help the professional members to update their knowledge on regular basis. Afghan physiotherapists are not having accessibility to this treasured source of knowledge. Even if they have access, they may not be able to interpret it due to language barrier. Therefore, first they need to develop proper language skills then accessibility to the literature is a next matter of concern.

Relationship of barriers to EBP with age

Statistical findings revealed that lower age group had fewer barriers compared with the higher age group. However, lack of personal knowledge skills in searching and evaluating the research evidence was significantly different. 20 - 29 year age group had higher scores which are indicating that they had less barrier compared to the other age groups.

The possible reason for the above results could be that younger Afghan physiotherapists are eager to develop physiotherapy skills and want to excel those skills. While as older age group might be less enthusiastic towards EPB, not interested and thinking that their own clinical experience is enough.

Limitation of the study

Lang C (2006) [6] reported approximately 200 physiotherapists across the country but the number has increased to around 300. Although a total of 200 questionnaire had been sent and only 138 of it were responded with a response rate of 69%. If the present number of physiotherapists is considered (i.e.300) then the views of around 54% were not included in the results of the study.

The researcher considers this as limitation for the present study.

The self-reporting in the present study is a limitation as the respondents could have chosen responses that they perceived to be acceptable to the researcher. Another possible limitation could be the unawareness of the Afghan physiotherapists about the survey questionnaire, which might have affected the actual ideas.

The subjects were in one country i.e. Afghanistan and the researcher was in another country i.e. India. The limitation could have been checked if the researcher and subjects would have been in the same country.

Future study

The survey questionnaire identified a positive attitude towards EBP, but does not address physiotherapists' perceptions of what EBP is. There is a need to identify the actual EBP knowledge, skills, behavior and attitude towards EPB as the present study was only designed to find out the ideas of Afghan physiotherapists.

The refresher training program should include specialized training program according to their area of work and this could serve a specialization of the physiotherapy in Afghanistan to meet the international standards.

Conclusion

Recent attempt to improve clinical decision making and practice through the use of best available evidence have lead to the wide spread of the term evidence-based practice in Afghanistan. Healthcare that include physiotherapists therefore, need to have knowledge and skill to implement the evidence-based practice by the use of quantitative and qualitative research evidence, clinical experience along with the patients preference.

This study has been done to investigate the ideas of Afghan physiotherapists about the evidence-based practice.

Afghan physiotherapists are generally having a positive idea toward evidence-based practice. Afghan physiotherapists are interested in acquiring knowledge to improve their physiotherapy skills. But at same time they are facing with barriers to incorporate evidence-based practice in their daily clinical practice. There is an essential need for the quality improvement of physiotherapy services in Afghanistan. Implementation of EBP in clinical setting is not only the job of individual PT practitioner but also the responsibility of all the stakeholders of physiotherapy and health care providers to provide the congenial environment for the same.

Recommendation to the stakeholders of physiotherapy profession in Afghanistan

Respondents rate their barriers which they face while using EBP as very high. Therefore, recommendation to the stakeholders of physiotherapy profession in Afghanistan is that they must consider the mentioned barriers and provide the resources for easy access of knowledge about EBP. This will not only increase the quantity of physiotherapy services but most importantly the quality of services will be improved. And the research results suggest that Afghan physiotherapists are interested for the development of their professional knowledge to serve with high quality care.

Based on the results of this study we can conclude that the hypothesis has been supported that Afghan physiotherapists are having a positive attitude towards evidence-based practice. And also, that Afghan physiotherapist requires further training in development of skills to inculcate evidence-based practice in them.

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