
Knowledge and Attitude towards Evidence Based Practice among the Physiotherapists

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Abstract:

Objective: Currently there is no latest scientific literature was found to identify barriers faces by Pakistani physiotherapists while implement evidence based practice in their clinics. Following this, research regarding EBP gained attention to determine its uptake into the physiotherapy profession. As for Pakistan, little research has been carried out, much less among therapists. The purpose of this study was to identify knowledge and attitude towards the implementation of EBP among Physical therapist of Pakistan.

Method: A survey was conducted among the physiotherapist of Pakistan which practicing in different hospitals. Non probability convenience technique was used, 120 postgraduate physical therapist were included. Self-administered questionnaire were used.

Results: Respondents agreed that evidence based practice is necessary to daily practice and it helps in decision making as well as to improve patient care. 85% of the respondents either agreed or strongly agreed that they had received formal training of EBP. 90% participant's showed able to conduct a search to answer to clinical question confidently. However 62% respondents reported that strong evidence is lacking to support their intervention. 45% respondents reported reading <1 article per month, with 41% stating they read 2-5 article in month.

Conclusion: Physiotherapist of Pakistan had a positive attitude towards EBP and inclined towards implementing evidence into their clinical practice. They are interested in attending courses to improve their knowledge and skills in EBP.

Introduction:

Evidence Based Practice:

Evidence-Based Practice (EBP) is defined as “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of the patient.” EBP is the integration of clinical expertise, patient values, and the best research evidence into the decision making process for patient care. (1)

The patient brings to the encounter his or her own personal preferences and unique concerns, expectations, and values. There are five steps of (EBP) Ask, Acquire, Appraise, Apply, and Evaluate. (2)

Evidence based physical therapy (EBPT) defined as "physiotherapy informed by relevant high quality clinical research". The practice of evidence-based physiotherapy should be informed by the integration of relevant high quality clinical research, patients' preferences and physiotherapists' practice knowledge". The goals of EBPT to make sure that all decisions made for patient care take into account "the best available evidence", analyze research studies and direct those findings to better care, take better measurement and do interpretation of outcomes to provide the best care possible, provide better patient information, better understand the reasons for lack of compliance by patients in relation to their PT care. (3, 4)

The application of the concept of EBP into clinical decision-making and practice has been reported to have potential benefits. Bury and Mead (1998) reported one of such benefits as improved patient care, which is an ultimate goal for all healthcare professionals. These authors stated that improved patient care could be achieved in many ways. One such way by invalidating previously accepted diagnostic tests and treatments/rehabilitation techniques and replacing them with the new ones that are more powerful, accurate, efficacious, and safer. Sackett et al. (2000) also saw the thoughtful identification and use of individual patients.

Predicaments, rights, and preferences in making decisions about their care. All such decisions are aimed at maximizing the health gains to patients. (5, 6)

Other benefits of evidence-based practice lie on the part of the health professionals. It allows them to keep up with the rapidly growing body of knowledge in the entire healthcare sector and, the professional knowledge in particular. Hereby it improves their skills in asking answerable clinical questions as well as finding, retrieving and critically appraising the best evidence to address these questions. This promotes self-directive learning to clinicians, therefore ensuring continuous professional development. In addition, evidence-based practice further identifies research areas and also promotes networking amongst professionals. Lastly, evidence-based practice can help health care providers make better use of limited resources in providing effective treatments. (7, 8)

Material and Method:

Survey was conducted in tertiary hospitals of Karachi Sample size of 120 postgraduate physical therapist. Non probability technique will use. A self-administered questionnaire that consisted of two sections will use to collect data. The questionnaire was adapted (Hannah C. Yahui, Narasimman Swaminathan) which consist of two section one is demographics data and other personal data. Physiotherapist included which work in clinical setting, have at least one year experience and should be aged 25 to 55 years or above. Those physiotherapist which have under graduate, age less than 25 years and who are not willing to participate were excluded from the study.

Data was analyzed by using statistical packages for social sciences (SPSS) version 20.0 (SPSS Inc., Chicago, IL, USA).(2) Pearson's χ^2 test for independence was conducted to examine the following associations: (1) responses to items measuring education, knowledge, and skills; attitudes and beliefs; use of literature; and access to and availability of evidence with items measuring

age, highest degree attained, and work experience (years); (2) responses to items measuring attitudes and beliefs with items measuring access to information; (3) responses to items measuring use of the literature with items measuring the number of physical therapists in practice settings, number of patients seen in an average day, and the number of hours worked in an average day; and (4) responses to items measuring access to and availability of evidence with items measuring the type of practice facility and the number of physical therapists in the facility. Cramer's V was then used to determine the strength of correlation where associations were found.

Results:

Result of this survey demonstrates an association between age and learning the foundation of evidence based practice (EBP). The majority of respondents were from the younger generation and they have learned the foundation of EBP during doctor of physical therapy (DPT) program compared with respondents who were in the elder age group. Although 69.4% of respondents said they frequently at last monthly read research literature. Only 10.6%, 15.3% and 26.6% of respondents, respectively searched Pedro, Cochrane and Medline or CINHALL database frequently and only 25.8% of respondents reported critically appraising research report. Recent graduate related their evidence based practice skills more highly than more experienced graduate but did not perform EBP task more often. PTs with higher level of training relate their evidence based practice skills more highly were more likely to search database and to understand a range of evidence based terminology than those with lower level of training.

Respondents agreed that the use of evidence in practice was necessary that the literature was helpful in their practice and that quality of patients care was better when evidence was used. Training familiarity with and confidence in search strategy, use of data base and critical appraisal tended to be associated with younger therapist with fewer year

since they were licensed. Seventeen percent of the respondents stated they read fewer than 2 articles in a typical month and one quarter of the respondents stated they used literature in their clinical decision making less than twice per month. The majority of respondents had access to online information although more had access at home than at work. According to the respondents the primary barrier to implementing EBP was lack of time. The participants of this survey had a positive attitude towards EBP. 88% participants agreed that EBP is necessary for their day to day practice and EBP is required to provide higher quality service for their patient.

Discussion:

The purpose of the present study was to explore the attitudes, knowledge, and barriers towards evidence-based practice among Pakistani physiotherapists. The results of this study as it relates to the above mentioned concepts, comparing it with findings in similar studies. Result of the present study demonstrates an association between age and learning the foundation of evidence based practice (EBP). The majority of respondents were from the younger generation and they have learned the foundation of EBP during doctor of physical therapy program (DPT).

The greater number of females in the present study differs from what Jette et al and Kamwendo reported in their studies that also investigated attitudes, knowledge, and barriers towards EBP. Approximately 70.6% of the respondents in a study by Jette et al were females whilst the remaining 29.4% were males. (9, 10)

In Sweden, a survey by Kamwendo found that 81.6% of the respondents were females whilst the remaining 18.4% constituted males. The age for the majority of the participants in this study (≤ 34 years) however, is within the age range (30 - 49 years) for the majority of participants in a study by Jette et al. (9, 10)

The majority of respondents in present study possess doctor of physical therapy (DPT) as their

highest professional qualification. This is in contrary with findings from a study by Jette et al. and Kamwendo. Authors of these two studies reported that majority of respondents in their respective studies possessed professional postgraduate degrees. (9, 10)

Contrary to what is found in other countries like the USA and Norway the majorities (72%) of physiotherapists in Pakistan are employed in the private sector whilst the remaining 28% is employed by the Government sector.

As has been found in other studies relating to EBP, which were conducted by different health care professionals (11, 12)

The majority of respondents in the present study have a positive attitude towards EBP. Similarly to the results in the present study, the respondents in the above mentioned studies also agreed that EBP improved the quality of patients care, and incorporated into day-to-day clinical decision-making. The respondents further agreed that research evidence is useful to their clinical practices.

Although only 85% of the respondents in the present study have had training related to evidence-based practice. The majority had good knowledge relating to the evidence-based practice and the list of resources that could be used to keep their knowledge up-to-date.

These results are similar to the findings by Jette et al. who reported that 42% and 40% of respondents respectively agreed and strongly agreed that they had participated in several educational sessions concerning EBP activities, which included literature search strategies. They further reported that the majority of respondents agreed or strongly agreed that they had skills to search databases such as Medline and CINAHL.

Herbert et al. reported that even in most evidence-based practice settings, the implementation of an evidence-based approach to clinical decision-

making and practice faces significant practical challenges. (13)

The results of the present study indicate that the majority of the respondents in this study experienced a huge number of barriers while implementing evidence-based practice such as insufficient time, limited access to search engine, Inability to apply research finding to patient population, lack of support from colleagues, lack of research skills.

A large patient load and low salaries were also mentioned by the respondents as barriers to implementing evidence-based practice. The findings in this study (patient overload) are similar with those reported from the United States of America. Both reported that patient's overload was the most prevailing barrier to implementing evidence-based practice.

Poor salaries on the other hand were reported to have forced Pakistan's physiotherapists to engage in other income generating activities, thereby limiting the time they would have to search for and read literature in order to improve their physiotherapy knowledge. This is in contrary to physiotherapists in the United States of America and Sweden. In these two countries, though not reported in the respective studies working conditions and salaries in particular, are considered better.

The results of the present study with other similar studies that investigated attitudes, knowledge, and barriers towards EBP (Maher et al.; Jette et al., Kamwendo,). (9, 14)

The majority of participants in this study not only demonstrated positive attitudes towards EBP but also indicated that they have much more knowledge about EBP. Participants of this study, like those in other similar studies, also encounter significant barriers while practicing EBP. Several statistically significant relationships have been found to exist between demographic variables and barriers towards EBP.

Table 1 Characteristics of respondents

CHARACTERISTICS	No	%
Gender		
Female	62	62.0
Male	38	38.0
Age (Y)		
25-34	75	75.0
35-44	18	18.0
45-54	7	7.0
≥ 55		
Working Experience (Y)		
2-5	53	53.0
>5	22	22.0
>10	14	14.0
>15	8	8.0
>20	3	3.0
Highest degree		
Diploma certificate		
Bachelors degree	15	15.0
Masters degree	34	34.0
Doctoral degree	51	51.0
Area of Practice		
Government hospital	28	28.0
Health clinic	2	2.0
Private hospital	41	41.0
Private clinic	17	17.0
Home care	3	3.0
Universities	16	16.0
Own practice	4	4.0
Geographical area of practice		
Karachi	98	98.0
Islamabad	1	1.0
Larkana	1	1.0
Work (h/week)		
<20	24	24.0
20-30	18	18.0
30-40	22	22.0
More than 40	36	36.0

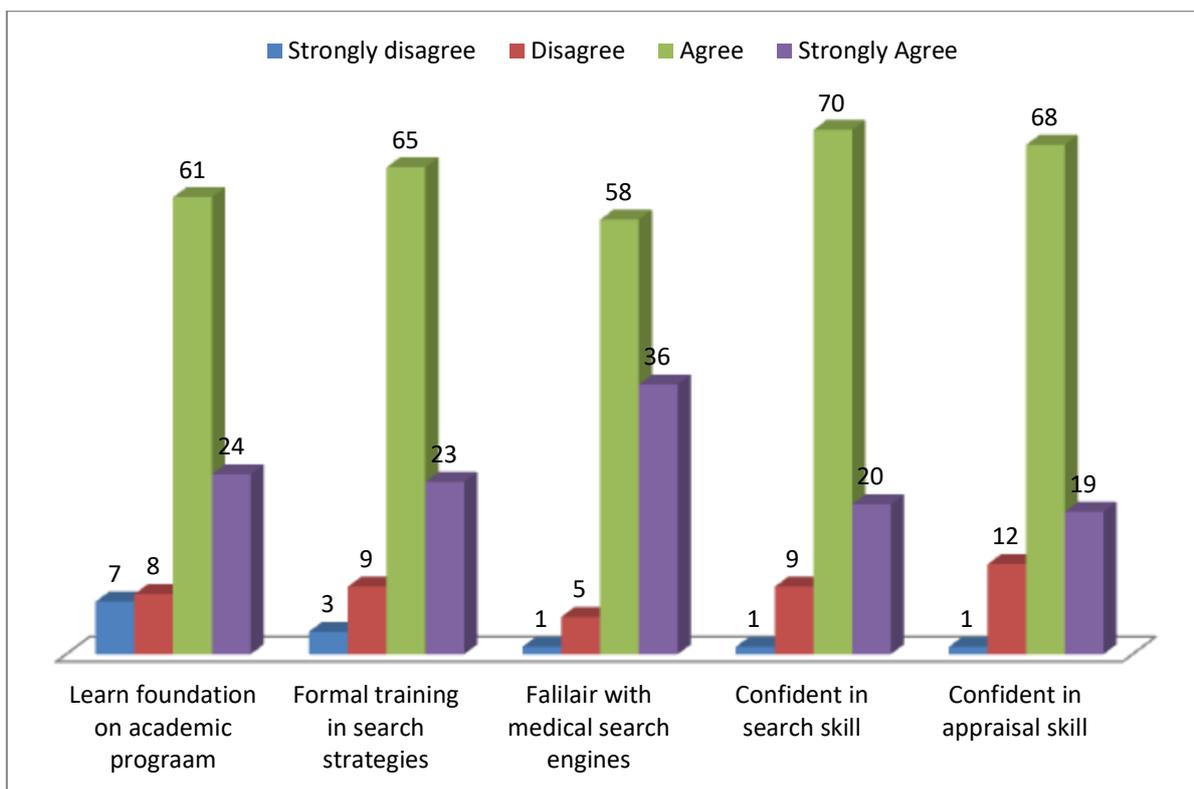


Figure 1 Self-reported education, knowledge and skills on evidence-based practice.

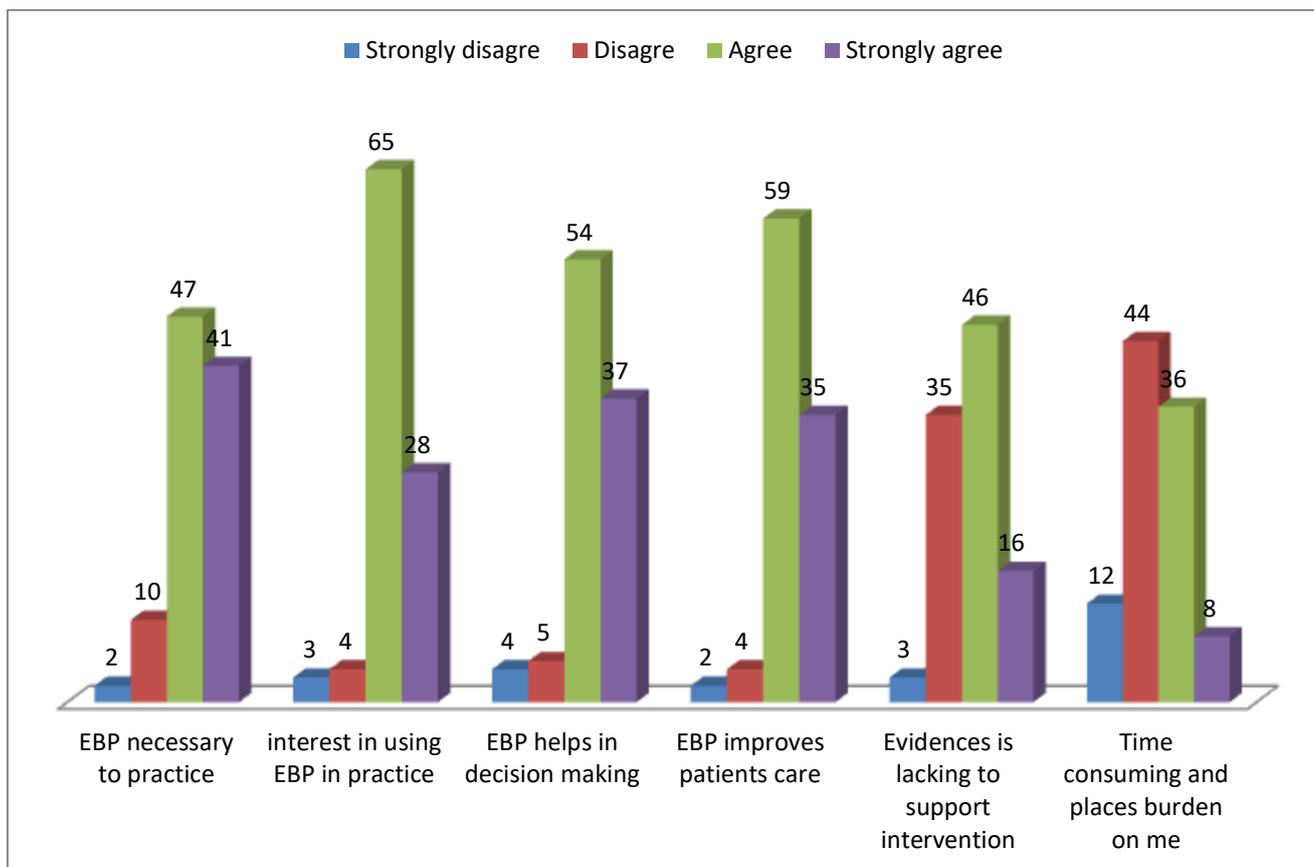


Figure 2. Self-reported attitudes and beliefs of EBP evidence-based practice.

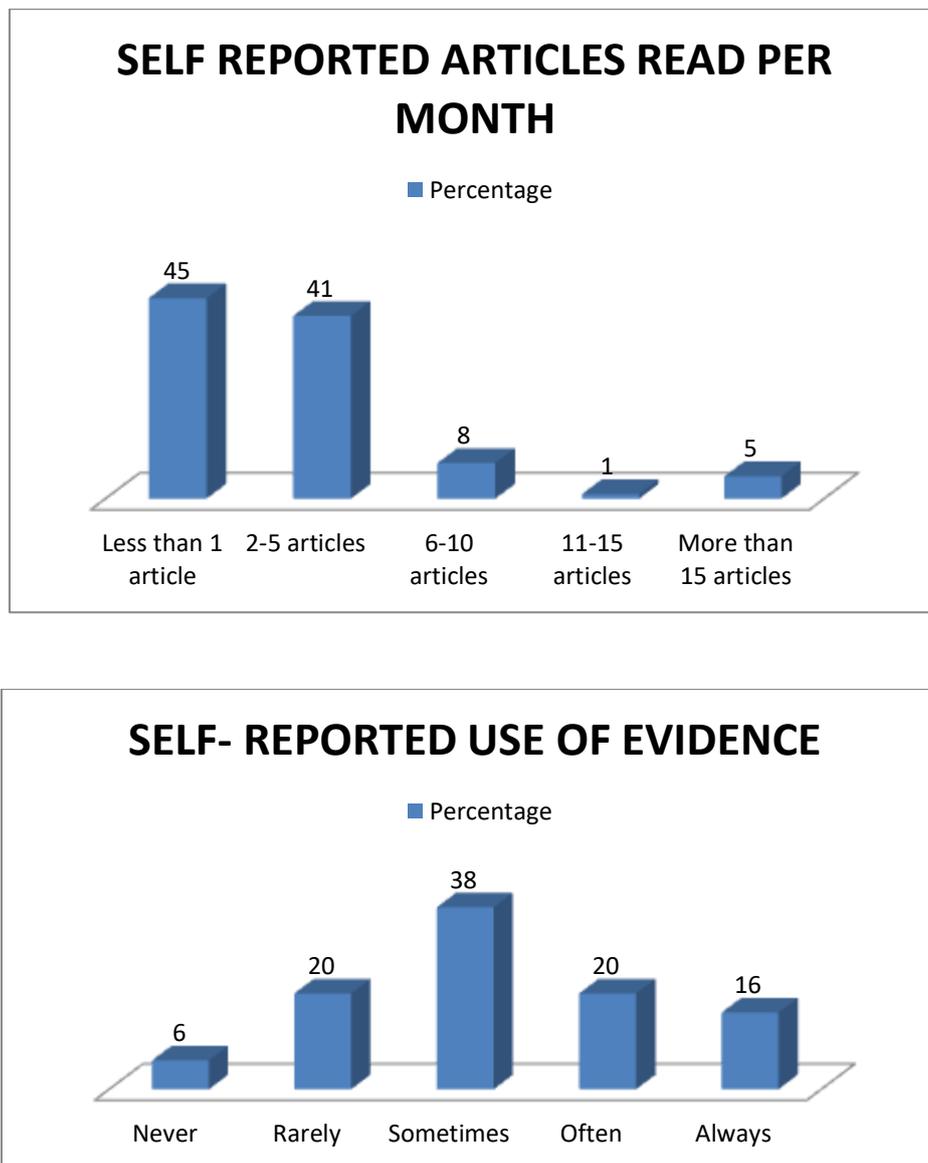


Figure 3 Self-reported access to search engines. (A) Self-reported articles read per month; (B) self-reported use of evidence

Conclusion:

The physiotherapist of Pakistan have much more knowledge on evidence based practice and shows positive attitudes towards implementing it also the respondents have generally positive attitudes towards evidence based practice. Majority of the respondents indicated an interest in adopting evidence based practice in their clinical setup and evidence based practice is necessary for daily clinical practice. The findings of this study may provide a base for implementing evidence based practice in different clinical settings by understand the barriers which hazards the smooth adaptation.

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