# **ORIGINAL ARTICLE**

# **Knowledge, Attitudes and Practices of Clinical Physical Therapists Regarding Evidence Based Practice**

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#### **ABSTRACT**

**Objective:** To determine knowledge, attitudes and practices of Physical therapist towards Evidence Based Practice and to identify the barriers faced by them regarding their practice

Study Design: A Cross Sectional Study.

**Place and Duration of Study:** Physical therapists of Rawalpindi and Islamabad working in different clinical setups from 1<sup>st</sup> December 2020 to 20<sup>th</sup> May 2021

**Materials and Methods**: A Cross sectional survey was conducted and 205 Physical therapists were randomly recruited from Rawalpindi and Islamabad working in different hospitals to respond to a self-administered questionnaire. First part of the questionnaire was about demographics and the second part highlighted the Knowledge, attitude and clinical practice among physical therapists.

**Results:** The study results showed that majority of Physical therapists had a clinical experience of less than 10 years and only 19% had more than 10 years' experience. 47.3% Physical therapists had a clear understanding of Evidence based practice. They had a positive attitude towards its implementation; they are interested in enhancing their skills. 45% of them consider that evidence based clinical practice helps in decision making regarding patient care.

**Conclusion:** Physical therapists have sufficient knowledge and a suitable attitude towards the use of Evidence based practice but only a few of them incorporate it in their practice. Insufficient time for implementation of evidence-based practice is the most prevalent barrier.

**Key Words:** Attitude, Decision making, Evidence based practice, Patient, Physical therapist.

#### Introduction

Evidence based Practice is defined as "The Conscientious, Explicit and Judicious use of current best research available to make decisions about Individual patient care." <sup>1</sup> It has been extensively used by all health care professionals in different clinical setups. Many medical organizations and agencies had flourished this concept and provided guidelines for the consumers which are easily accessible all over the world through different

Internet browsers like Google Scholar, PubMed. Physiopedia, Medline, books, journals and other resources.<sup>2</sup> Evidence-based practice is an essential component of clinical care. It is an effective tool to facilitate the process of rehabilitation, which remains in the domain of care provided by a rehabilitation doctor or a team on one-to-one interaction.<sup>3</sup> The driving force for evidence-based practice comes from payer and healthcare facility pressures for cost effectiveness, greater access of information, and greater consumer perception about treatment options. EBP demands alteration in education of students, more research oriented clinical practice and collaborative environment between health care providers and researchers.4 Knowledge includes clear understanding of EBP that how it is recognized and formulated. They must be aware of different medical search engines and accessible to guidelines related to practice. Nilsagard et al stated that health care providers are keen to enhance their skills, have self-directed learning so they can incorporate EBP in their daily practice.<sup>6</sup> Attitude shows how much Physical

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therapist are interested in learning and gaining skills and experiences regarding EBP and identifies clinical experience and scientific studies. A study conducted on Japanese Physical therapists determined that majority of them had knowledge about EBP and important factor was positive attitude, knowledge and behaviour of evidence-based practice and clinical guidelines was engagement in research activities. Practice involves the use of clinical guidelines in daily practice, how the PTs face patient participation limitation in their clinical settings. 5 The idea of EBP signifies the alteration of health services from traditional treatment and facilities depending upon the perceptions and expertise to another zone of care totally relying on data-based, clinically related research work.<sup>6</sup> The inability to carry out any of these functions may constitute a barrier to the application of evidence in practice. Limited time for extracting and gathering research data and for its application to individual patient has been reported by many authors as chief concern that clinicians are unable to amalgamate relevant research in their mode of treatment. Limited access to data also has been proven to be another major concern.6 According to the KAP study held in Australia most of the PTs read research literature at least monthly. A few of respondents reported critically appraising research reports.7 It also states that fresh graduates value their EBP skills but they are powerless to implement these skills <sup>8</sup>The purpose of this study was to observe the knowledge attitude and practices of physical therapist in Rawalpindi and Islamabad as majority of the studies were conducted in other cities of Pakistan and its barriers were not identified.

## **Materials and Methods**

A quantitative research based on Cross sectional survey was conducted from December 2020 to May 2021. Sample size was n=200 participants. This sample size was calculated by using Rao software for cross sectional survey with the confidence interval 95% and 5% margin of error. Non probability convenient sampling technique was used and 205 Physical therapists were recruited from Rawalpindi and Islamabad working in different hospitals and clinical settings to respond to self-administered questionnaire. Informed consent was taken from all the physiotherapists prior to the participation in the study. Participants were recruited in the study based

on inclusion criteria of; personals belonging to physiotherapy profession who had clinical experience of more than 6 months were allowed to participate in the study. A self-structured questionnaire was validated by conducting a pilot study and then modification were made upon recommendations of expertise in the field. The questionnaire comprised of 38 questions with 60 variables. This questionnaire was distributed into four sections. First section was about demographics having 8 questions. Next part was about knowledge of EBP among physiotherapists having 10 questions with majority responses like 1= Strongly Disagree, 2= Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree. The third section was about attitude towards integrating EBP in physiotherapy practice. Participants were asked to rate their response to a set of 10 statements from 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Strongly, Agree 5= Agree. Final section was about the understanding and practice of EBP with 9 questions focussing on PTs practicing and final question was on barriers of EBP with responses 1= Most barrier ,2= Less Barrier ,3= Least Barrier. The data was analysed on SPSS-21(Statistical Package for Social Sciences)

#### **Results**

A cross-sectional survey was conducted in the Physical therapy departments of Islamabad and Rawalpindi hospitals. This survey recorded a response rate of (n=205) physical therapists. The results showed that 85(41.4%) were male and 120(58.5%) were female physiotherapist.80% physiotherapist had a clinical experience of less than 10 years and 19.2% had experience more than 10 years. 50.7% physiotherapists had BSPT degree as an entry level degree, 45.3% had DPT degree. 77.8% PTs have had participated in continuing educational courses.47% of physical therapists had clear understanding of EBP (Mean ±S. D=4.13±1.04).44% PTs had online access to different databases for gaining information about diseases and making treatment protocols (Mean±SD= 4.17±0.99). The other important factors are shown in Figure 1.

46% Physical therapist found EBP necessary in daily practice (Mean±SD=4.32±0.803).43.8% Physical therapists are very keen in learning skills because it has increased quality of care (Mean±SD=4.33±0.82).

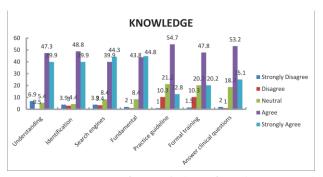


Fig. 1: Percentage of Knowledge of Evidence Based Practice among Physiotherapists

For some PTs previous work experience is more important than research findings in making treatment protocol (35.5%) and some prefer research on experience (16.7%) as shown in graph no 2.54% Physical therapists implemented EBP in daily practice (Mean±SD= 3.76±0.85) but PTs workload is increasing and is causing hurdle in keeping up to date with evidence (Mean±SD= 3.76±0.89) as shown in Figure 3.

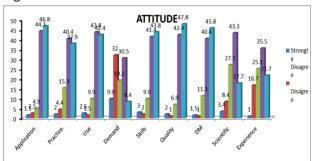


Fig. 2: Shows Percentage of Attitude of Physiotherapists towards Evidence Based Practice

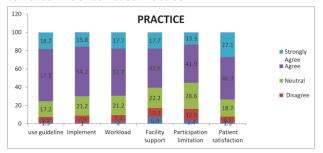


Fig. 3: Shows Percentage of Practice of Evidence based Practice among Physiotherapists

Insufficient time is the common obstacle faced by the physical therapists (63. 1%). Other barriers are shown in Table I.

#### Discussion

Majority of physical therapists are knowledgeable about Evidence Based Practice and have a positive

Table I: Barriers Regarding Evidence Based Practice

No	Barriers Towards EBP	Most %	Least%
1	Insufficient time	63.1	37
2	Lack of information resources	26.6	73.4
3	Lack of research skills	25.1	74.9
4	Poor ability to critically appraise	23.2	76.9
	the literature		
5	Lack of generalizability of the	24.6	75.3
	literature findings to my patient		
	population		
6	Incompetence to implement	24.6	75.3
	research findings to specific		
	patients with unique sign and		
	symptoms		
7	Lack of understanding of	24.6	75.3
	statistical analysis		
8	Lack of mutual support among	26.1	73.9
	my co-workers in my workplace		
9	Lack of interest	27.1	72.9

outlook towards integration of EBP. The positive attitude of PTs towards EBP in their practices is found to be associated with sufficient knowledge. This is a 1<sup>st</sup> comprehensive study assessing EBP among PTs in twin cities working in various government and private hospital and clinics. Female constituted the majority of study respondents, correlating with the participants of study conducted in South Africa by Taukobong et al on knowledge, Attitude and Practice about health promotion amongst PTs in South Africa. Mostly physical therapists had a clear understanding of EBP as reported by Ross Iles and Megan Davidson. PTs were gaining information from online databases about diseases and their treatment Protocols. Another study conducted by Diane U Jette et al stated that majority (70%) physical therapists were of the view that they had sufficient information and knowledge about the databases like MEDLINE and CINAHL.9 This study results favored current study results as majority of physiotherapists are aware of Evidence based practice in Pakistan. Most of the contributors had a positive attitude as they agree and strongly agree that application and use of EBP in day to day practice is obligatory. 10 This current study findings are in coherent with other studies conducted elsewhere, in which physiotherapists considered the role of EBP as important in promoting the health of their patients as reported by Shirley et al regarding strong implementation of EBP. 11 They believed that EBP helps in CDM patient care so they show interest in increasing use of EBP and improving

the skills necessary to incorporate EBP into their practice.<sup>12</sup>Physical therapists had identified a significant role to play in patient care and prevention yet had realized a wide gap exists between their ideal and actual levels of involvement as said by Johansson et al. in 2010.13The results of this study signify that further studies are needed to assess the content of EBP in the curriculum of the different medical institutions. Focus should also be put on knowledge and use of EBP integration at undergraduate, graduate and continuing professional development levels. Lack of time has been one of the major barriers perceived by the physical therapists in twin cities of Pakistan. In a study carried by Susanne Heiwe et al, it has also been found as a most common barrier that has increased over time. There is a need of organization which regulate practice guidelines for PTs, so that they can implement EBP in their daily clinical practice. Institutes, rehabilitation centers and hospitals should have access to online databases.

#### Conclusion

Physical therapists of twin cities have a clear understanding of Evidence based Practice and they are interested in enhancing their skills for patient's betterment and its implementation. Insufficient time is the most common barrier in applying EBP during clinical practice.

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### **CONFLICT OF INTEREST**

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#### **DATA SHARING STATMENT**

The data that support the findings of this study are available from the corresponding author upon request.

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