



ASSESSMENT OF EVIDENCE BASED PRACTICE AMONG PHYSIOTHERAPISTS IN KERALA

Physiotherapy

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ABSTRACT

Background: The physiotherapy profession worldwide has evolved from traditional methods to a more practical and functional approach grounded in evidence-based practice. Numerous studies on Evidence-based practice (EBP) are being carried out across various countries. Some of these studies indicate that healthcare professionals, including physiotherapists, dedicate minimal time to reviewing clinical research, which reflects a deficiency in knowledge, confidence, and the application of EBP in both clinical settings and educational environments. It is crucial to assess the degree to which physiotherapists in Kerala implement EBP. **Objective:** To find out the attitude, knowledge and behaviour of physiotherapists towards Evidence Based Practice in Kerala and to find out correlation between EBP domains, level of study, area of practice and year of graduation. **Methods:** 180 physiotherapists both male and female with minimum 1 year work experience, between the age of 23 and 50 age, were done the EBP2 questionnaire. **Results:** A total of 180 subjects who satisfied the inclusion criteria participated in this study. Among them 103 were females while 77 were males. According to the statistical analysis, there is positive correlation between Relevance and Practice, Confidence and Terminology, Relevance and Terminology and is statistically significant. There is also a negative correlation between Year of experience and Practice. **Conclusion:** This study shows that physiotherapist in Kerala have a general understanding of EBP is above average and describes a good knowledge and a positive attitude towards EBP, but a insufficiently implement it in practice when compared to their knowledge and which suggested a need for an improvement.

KEYWORDS

Evidence Based Practice Profile Questionnaire, Physiotherapist, Relevance, Practice, Terminology, Kerala

INTRODUCTION

The concept of "Evidence-based Medicine" (EBM) was introduced into scientific literature in 1991 by Professor David Laurence Sackett and colleagues and is defined as "the conscientious and judicious use of the best current clinical research evidence in the personalised management of patients". [1] The medical field of physiotherapy, also referred to as physical therapy, focuses on the diagnosis, treatment, and prevention of physical impairments and disabilities. The capacity to design customized treatment programs and a thorough understanding of human anatomy and physiology are prerequisites for the profession. In the space of a few years, this concept has been used throughout the world, and is now structured into 5 stages: formulation of a resolvable clinical question, systematic search for the best available evidence in the scientific literature, critical reading of the data obtained from the scientific literature, application of the results obtained from the previous two stages to the clinical situation encountered and evaluation of efficacy. [1]

Over the past 20 years, a number of EBP guidelines pertaining to physiotherapy practice have been released. However, preliminary research on physiotherapists' use of EBP has revealed that they manage patients using methods they learned in their initial training or based on experience from their practice, and they spend relatively little time reading scientific journals in the field. [1]

In physiotherapy, evidence-based practice, or EBP, integrates the best available research data with clinical knowledge and patient values to inform treatment decisions. By ensuring that therapies are grounded in the most recent, robust scientific results, this strategy improves care effectiveness. In the end, EBP promotes a more methodical and knowledgeable approach to patient care, guaranteeing that therapies are both based on strong science and sensitive to the particular circumstances of each patient.

The five steps of EBP have been recommended to be Ask, Acquire, Appraise, Apply, and assess, in accordance with the Sicily Statement. Since EBP has become the industry standard, it is critical to evaluate which of the aforementioned EBP processes are used and routinely used in our graduate (UG) and post-graduate (PG) programs. The degree to which the aforementioned EBP processes are incorporated into Indian physiotherapy education programs is unknown. [2]

In order to guarantee that treatment techniques are based on the best available research data, patient values, and professional competence, evidence-based practice, or EBP, is essential in the field of physiotherapy. Physiotherapists can optimize patient outcomes, decrease practice variability, and improve patient safety by incorporating evidence-based practice (EBP) into their practice. Physiotherapists who embrace evidence-based practice (EBP) can confidently deliver patient-centered, evidence-based therapy that improves people's quality of life both individually and in communities. The relevance of this study in KERALA will be to determine an overview of the knowledge, attitudes, perceptions, education and practice of physiotherapists in EBP. The reason being it is not only a principal element to improve the performance of physiotherapists and the physiotherapy profession on a national level, but also for the training of future physiotherapists in KERALA and the sub-region. This will bring Kerala physiotherapists up to date with EBP as those in Europe, America and other developed countries. This study is designed to establish the current state of EBP among physiotherapists in Kerala, by assessing knowledge, practice, attitude and barriers to its implementation.

Methodology

A cross sectional survey was conducted among the Kerala physiotherapists from July 2024 to October 2024. The approval of the study was get from Scientific Research Committee of MTIMS, Kochi. 180 physiotherapist include post - graduate students, private practitioners, clinical practitioners in hospitals and professors in physiotherapy institutes who graduate between 1996 – 2022 with minimum 1 year work experience were included in the study. Students undergoing bachelors of physiotherapy degree and physiotherapist not available at the time of data collection and questionnaire return with incomplete information were excluded from the study.

Data Collection

Data was collected using EBP2 questionnaire through google forms and printed copies. Questionnaire included demographic information about the subjects and items for measuring the awareness of, attitude towards, knowledge of, barriers to and implementation of EBP. The questionnaire contained 5-point Likert-type scale and multiple-choice questions to assess the knowledge, attitude and implementation of evidence based practice.

RESULTS

Out of 200 survey questionnaire forms, 180 forms were completed and returned back with response. Females had a higher participation with 57% response rate. The academic qualifications of the participants were bachelors (68%), masters (32%). Out of 180 respondents, majority subjects had an experience of 0-5 years,. Only 32% respondents stated that they have taken some formal training in EBP. Approximately, 79% mentioned that they were aware of term evidence-based practice. The intention for developing knowledge and implementation, application and the

Demographic Data

	NO	PERCENTAGE
Male	77	43%
Female	103	57%
UG	122	68%
PG	58	32%

PARAMETERS	MEAN+ SD
AGE	30+6.78
YEAR OF EXPERIANCE	72+77.8
DOMAIN	MEAN
Relevance	79+14.74
Sympathy	55+14.96
Terminology	79+22.3
Practice	61+21.9
Confidence	68+18

Correlation Between Relevance And Practice

VARIABLES	n	PEARSON CORRELATION	SIGNIFICANCE [P-VALUE]
RELEVANCE & PRACTICE	180	0.433	<0.001
CONFIDENCE & TERMINOLOGY	180	0.647	<0.001
RELEVANCE & TERMINOLOGY	180	0.482	<0.001
YEAR OF EXPERIENCE & PRACTICE	180	-0.084	<0.001

DISCUSSION

The purpose of the study was to assessment of Evidence Based Practice among physiotherapists in Kerala. In this study 180 physiotherapists, both male and female between the age of 23 and 50 were selected. It was made sure that selected physiotherapists were working in hospitals, clinics and colleges and are graduated between 1996-2022 and also with atleast one year of work experience. Inorder to assess this, we choose EBP2 questionnaire. After carefully evaluating the data we found correlation between relevance & practice ,relevance & terminology, confidence & terminology, and year of experience & practice.

The study results concluded that 79% of physiotherapists know what is mean by EBP, and 74% are aware of current advancement in the field. There is an existed positive correlation between relevance & practice, relevance & terminology, confidence & terminology and no significant correlation between the year of experience & practice. Concerning the knowledge of physiotherapists about EBP, the study findings Considering inthe scores of domain, physiotherapist has showed a good knowledge terminologies(79%) but a insufficiently implement it in practise(61%) when compared to their knowledge and which suggested a need for an improvement.As barriers to EBP, we noted lack of time(88%),work load(84%),cost of access to computers and lack of resources(82%).

Muntessu et a, conducted a study on Assessment of EBP among physiotherapists in Cameroon. The study show that 43% of physiotherapists do not understand what is meant by EBP, 53% are not aware of recent developments of EBP in the profession which reflects a

lack of knowledge about EBP. A total of 110 physiotherapists from all ten regions of the country participated in the research. The majority of respondents were male (54.5%), with an average age of 34 years. The gender distribution in our sample appears to contrast with the national distribution reported by World Physiotherapy (WP) for 2022, which indicated that 80% of physiotherapists in Cameroon were female. This discrepancy may be attributed to the greater availability of male physiotherapists during the study period. Additionally, 44.5% of participants reported having no certified specialization, and 80% indicated that they had never received training in EBP. Considering the scores by domain of the EBP2 questionnaire, they find that physiotherapists don't join awesome significance to the EBP and insufficient implement it in practice. On the other hand, they appear to have a great information of the terminology of EBP.[1]

In a separate investigation titled "Development and Psychometric Testing of a Trans Professional Evidence-Based Practice Profile Questionnaire" conducted by McEvoy et al., the researchers utilized the EBP2 questionnaire. The creation of the EBP2 questionnaire involved the participation of over 700 individuals from six healthrelated fields and one non- health field, including Physiotherapy, Occupational Therapy, Medical Radiation, Human Movement, Nursing, Psychology, and Commerce. This instrument is notable for being the first self-report EBP tool to employ factor analysis to evaluate the underlying domains of its items, and it has undergone development and psychometric testing across various professions. The validity and reliability assessments yielded 105 complete datasets for analysis, demonstrating acceptable test-retest reliability across all five identified factors.[3]

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CONCLUSION

This study shows that physiotherapist in Kerala have a general understanding of EBP is above average and describes a good knowledge and a positive attitude towards EBP, but a insufficiently implement it in practice when compared to their knowledge and which suggested a need for an improvement.

We highlight the low participation from some regions of Kerala and may be chance of bias due to the use of both online surveys and printed questionnaire for data collection.

And also we can suggest physiotherapist associations to conduct some training & seminars on the topic EBP and to include topics on EBP in UG syllabus . Also we can encourage to recruit more physiotherapist which will help to reduce the workload of physiotherapists and therefore permit an adequate work environment.

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