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Research Article

BARRIERS FACED BY PHYSIOTHERAPISTS IN EVIDENCE BASED PRACTICE IMPLEMENTATION - A CROSS SECTIONAL STUDY IN PAKISTAN

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Abstract:

Background: Evidence based physiotherapy (EBP) is an emerging science in health care delivery system. The delivery of prime quality services has become a big challenge within the health care system these days.

Objectives: Primary objective of my study was to determine the present barriers in using and implementing the EBP faced by Physical therapists practicing in Lahore.

Materials and methods: Non-probability Convenience sampling technique was used. It was an analytical cross-sectional study with sample size of 235 participants. The data was encoded and analyzed by SPSS version 16. Percentages, bar charts, tables were used to show results.

Results: This graph shows the "generalize setting" was barrier according to 42.6%- moderate extent and 26.4% a great extent. "Publication of reports" was reported by 40.4% to a little extent, while 36.6% said it was a moderate barrier and 10.6% considered it as a great one. "Administration" was said by 34.0% and 38.7% PTs response great extent and moderate respectively.

Conclusion: This study shows that generalize settings, publication of reports and Administration was considered as barriers for evidenced practice and its usage in their clinical practice.

Key words: Barriers, Evidence Based, Clinical Practice, Physiotherapist, strategies, implementation

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INTRODUCTION:

Evidence based physiotherapy (EBP) is an emerging and increasing topic in rehabilitation and physiotherapy. Although it's increasingly used worldwide, a definite and appropriate definition has not been agreed on among clinicians and researchers. Demand for application of evidence on physical therapy practice and interest in it has increased in the last decade, as is partially clear, by publishing a series of systematic reviews within the special issue issued in October 2001 of physiotherapists and other articles related to evidence in practice.¹⁻³ There are also continuing education offers on same topic. Evidence-based practice (EBP) is "the integration of best research evidence with clinical expertise and patient values".⁴ Individual characteristics, such as awareness, knowledge, attitudes, skills, and self-efficacy, are viewed as primary influences on the successful implementation of EBP. So, these are considered as Individual barriers.⁵ Sackett and his colleagues described evidence based medicine : "the use of current best evidence in making decisions about the care of individual patients."⁶ They had pointed out that "both clinician experience and clinically relevant research had been important elements of evidence-based practice (EBP)". And they also have claimed that defining and applying patient preferences must be part of clinical decision-making. The concept of evidence based medicine, or more broadly, EBP, has indicated a shift in healthcare professionals from a conventional concentrate on authorities based procedures to direct clinical practice to a spotlight on data based, clinical relevant studies. To efficiently apply evidence in practice, still as skills in history taking, performing the examination, determining the diagnosis, and identifying the appropriate options for intervention, Guyatt and colleagues⁷ has emphasized that the physicians should have the power to identify gap in knowledge and formulate clinically relevant question , also to conduct effective research within the literature and apply the evidence bases, including a hierarchy of evidence, to work out the validity of studies, also apply literature findings effectively to the patients problem, Understanding how patient values can affect the balance between potential benefits and drawbacks of accessible management options, and appropriately involving the patient within the decision⁷. The incapability to perform any of those functions may constitute a barrier to the applying of evidence in practice. Haynes & Haines^{2021/10/8}, analyzed the gap between research and evidence, they has suggested that problems in applying evidence include the size and difficulty of the research base,

poor approach to evidence, also organizational barriers, and insufficient education. Researchers who studied on doctors and nurses⁹⁻¹⁵ also indicated a number of factors believed to be inhibiting the utilization of EBP in the clinic. Several authors have been cited limited time to retrieve and interpret the research and to apply the research to individual patients⁹⁻¹¹ This study is conducted to promote the implementation of clinical research evidence for patient treatment in normal daily routine. This study helps the novice as well as experienced physiotherapists to know that which barriers have more role to keep the professionals away from EBP in Physiotherapy and how to overcome these barriers.

METHODOLOGY

A cross sectional study was conducted in Public and Private Physiotherapy clinical set ups in Lahore. It was done in 6 months after approval of the synopsis. We take sample of 235, calculated by using the following formula, by considering that "margin error" was 5% , "level of confidence" was 95% , "size of population, and response distribution was 50% .¹⁶ All the Physiotherapists who were practicing either in Government or Private clinical set up with minimum 2 years of experience and have knowledge about EBP and others were excluded. Convenience sampling technique was used and the tool Validity is also an important characteristic to evaluate in a tool. Validity is a degree to how well the instrument measures the concept being observed (Burns & Grove, 2007). There are three types of validity: content, predicted, and construct validity. Funk et al. (1991a) determined the validity of the contents of the tool on the basis of a panel of judges and analyzes of the factors accomplished. All complete questionnaires were entered in SPSS with coding. The data was encoded and IBM "Statistical Package for Social Sciences" (SPSS) used for calculation of results. The Frequencies, Percentages, Bar charts, tables were used.

RESULTS:

In this study both male and female were included. Male frequency was 104 (44.3%) and Female frequency was 131 (55.7%). This table shows that both single as well as married Physiotherapists were included. Unmarried were 149 (63.4%) and married were 86 (36.6%). Physiotherapists (PTs) having degree of DPT were 103 (43.8%), while 124 (52.8%) PTs were having Masters/Mphil degree and 8 (3.4%) PhD scholars participated.

Table 1: The Highest Education Level Of Physiotherapists (PT)

Outcomes	Variables	Frequencies	Percent (%)	Cumulative (%)
Gender	Males	104	44.3	44.3
	Females	131	55.7	100.0
Marital Status	Unmarried	149	63.4	63.4
	Married	86	36.6	100.0
Qualifications	DPT	103	43.8	43.8
	Masters/Mphil	124	52.8	96.6
	PhD	8	3.4	100.0

The graph shows the response of Physiotherapists (PTs) to this barrier. 35 (14.9%) of total 235 PTs response to “To no extent”, 38 (16.2%) PTs response to “To a little extent”, 100 (42.6%) PTs response to “To a moderate extent” and 62 (26.4%) PTs response to “To a great extent”.

(Graph 1)

The Physiotherapist feels results are not generalizable to own setting

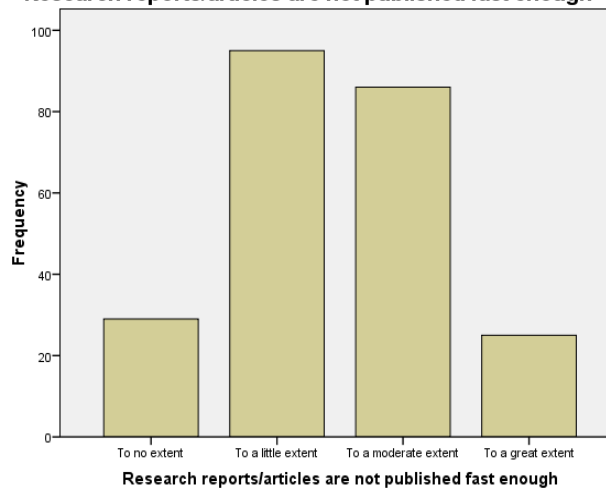


Graph: 1 Response- Results Generalize

The graph shows the response of Physiotherapists (PTs) to this barrier. 29 (12.3%) of total 235 PTs response to “To no extent”, 95 (40.4%) PTs response to “To a little extent”, 86 (36.6%) PTs response to “To a moderate extent” and 25 (10.6%) PTs response to “To a great extent”.

(Graph 2)

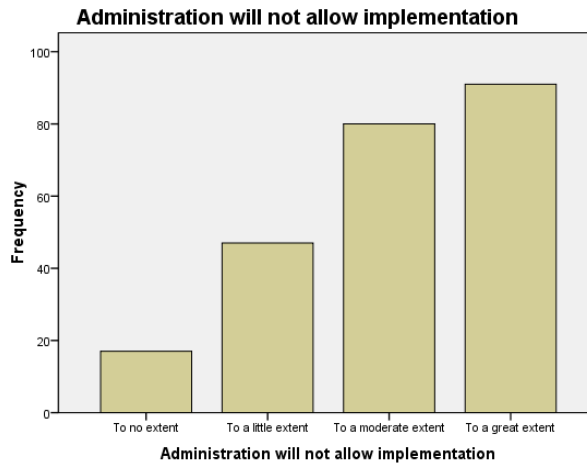
Research reports/articles are not published fast enough



Graph 2: Response - Research Reports and Publication

The graph shows the response of Physiotherapists (PTs) to this barrier. 17 (7.2%) of total 235 PTs response to “To no extent”, 47 (20.0%) PTs response to “To a little extent”, 80 (34.0%) PTs response to “To a moderate extent” and 91 (38.7%) PTs response to “To a great extent”.

(Graph 3)



Graph 3: Response – Administration and EBP

DISCUSSION:

This study was conducted in Lahore, aimed to find out the barriers faced by physiotherapist while using research, clinical guidelines and latest research in their clinical practice. Same was done by Nancy et al. to find out practitioner and organizational barriers to physical therapists (PT) in implementation of evidence-based practice (EBP) for people with stroke in Ontario, Canada. Finally, this study confirmed that majority of the PTs within the sample have a positive opinion about EBP which they need to enhance their knowledge, skills and attitude towards it. Organizational provision of access to Web based resources is almost insufficient to reinforce research use by clinicians.¹⁷ The current study stated no generalized results, the response of Physiotherapists (PTs) to this barrier. 14.9% said no extent”, 16.2%) said to a little extent but 26.4% reported it to a great extent. In Ghana consistent with their study lack of adequate resources, low self-efficacy and lack of organizational support were major barriers to do EBP activities for stroke survivors. They suggest that a supportive organizational infrastructure is necessary to further integrate research into physiotherapy practice.¹⁸ Hesham et al. investigated attitudes toward EBP, assessed the current level of data, knowledge and skills necessary for EBP, and identified the barriers to EBP among physical therapists within the State of Kuwait. The ultimate result showed that EBP lacks support from superiors at work. So identifying methods and techniques to support physical therapists in adopting EBP within the State of Kuwait is

important.¹⁹ A study by M. Khammarnia et al. was done in Zahedan Teaching Hospitals, Iran, to identify barriers in implementing EBP between nurses. Result showed that participants faced 56% and 57% of barriers associated with organizational and individual aspects, respectively. The final conclusion was barriers to application of EBP occurred at both individual and organizational levels.²⁰

Fast paper publications as issue was responded by 38.7% response to a great extent and 34.0% response to a moderate extent. The study was supported by study by F. Shifaza, et al. to explain the barriers to EBP faced by nurses working in Maldives. The conclusions showed that greater barriers in utilization of researches were “the relevant literature is not compiled in one place”, there’s “insufficient time on the job to implement new ideas”, and also “administration will not allow implementation.” So that they need encouragement, support and recognition by the management and the administration.²¹ Robinson Ramirez et al. described the current situation regarding the sharing of observed barriers in utilization of EBP between physiotherapy in Colombia and also to identify factors associated with barriers that transform without implementing EBP. Results showed 41% of the participants indicated that a “lack of research skills” was the greater barrier. However, many physiotherapists had shown a positive opinion on EBP.²² T. M. Silva et al stated that in Brazilian physiotherapists regarding EBP, barriers were difficulties in obtaining full text papers, higher cost

and therefore the language of publication. Though they had knowledge and skills but still faced difficulties in successfully implementing EBP.²³ In a study showing systematic review, interventions and facilitators in physical therapy and identification of techniques to boost acquisition and application of it. The conclusion was many physical therapists had positive attitudes towards utilization of EBP. Greater barriers to EBP were lack of time and skills, and misperceptions about EBP. Final conclusion was there is not a "one-size fits all" proposal to enhance the EBP application and assessment of organizational culture before designing the interventions is crucial.²⁴

CONCLUSION:

This study shows that generalize settings, publication of reports and Administration were considered as barriers for evidenced based practice and its usage in their clinical practice. These Barriers should be restricted for physiotherapist, so that their work efficiency and patient care can be improved.

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