Ita. J. Sports Reh. Po.

Italian Journal of Sports Rehabilitation and Posturology

## DETERMINANT OF RESEARCH USE IN CLINICAL DECISION MAKING AMONG PHYSICAL THERAPIST PROVIDING SERVICES POST STROKE. A CROSS SECTIONAL STUDY

Ayesha Sultan<sup>1</sup>, Muhammad Saad Khan<sup>2</sup>, Ali Rafaqat<sup>3</sup>, Suhail Karim<sup>4</sup>, Zarfasheen Zia<sup>5</sup>, Zona Mehreen<sup>5</sup>

<sup>1</sup> Jinnah post-graduate Medical Center karachi – Pakistan

<sup>2</sup> Jinnah post-graduate Medical Center karachi Nane - Pakistan

<sup>3</sup> Institute. Health Management Department .European University of lefke .Cyprus

<sup>4</sup> Riphah International University Islamabad – Pakistan

<sup>5</sup> Isra University Islamabad Campus – Pakistan

2036

### ABSTRACT

**Objective.** Determinant of research use in clinical decision making among physical therapist providing services post stroke. Study Design. A cross-sectional study Materials & Method. A cross sectional study was carried out on physical therapists in all of the physical therapy centers in all over Pakistan. They all were providing facilities for patients with stroke. The study questionnaire included the practitioner and organizational features and views of studies considered to impact on proof based practice and clinical frequency, making use of study in typical month. In order to identify factors connected with study use, regular regression was used. **Results**. The proportion of respondents reporting the use of studies in clinical decision making by 0-1, 2-5, 6-10, 11-15, 16+ were 12%, 68.7%, 13.3%, 4% and 2% respectively in a month. The use of analysis was all related to educational training for EBP principles, research participation, clinical instructor, service, self-efficiency for implementing EBP. Positive research approach received organizational support and access to work on the bibliographic base of research and internet. Results indicated a lack of time was the main obstacle for applying EBP in their practice. Interdisciplinary training at EBP, self-efficiency of EBP, consent to useful research results and research involvement were each significantly associated with the use of research. Conclusions. In clinical decision making, results underline the half of the values of organizations providing environments not only in order to facilitate access to online information but also to promote involvement in research projects within the context of tasks of the physical therapist continuing Evidence based practice education can play a key role in enhancing auto effectiveness of EBPs. Half of therapists were found rarely using research evidences. They had advantageous approach towards EBP. In EBP students may stimulate research in the field of education in neurological therapy practice, efficiency of EBP, positive research approaches and involvement in research at work. Further study need to investigate the EBP exposure. Authorship credit. "Criteria authorship scientific article" has been used "Equal Contribution" (EC) Citation. Ayesha Sultan, Muhammad Saad Khan, Ali Rafaqat, Suhail Karim, Zarfasheen Zia, Zona Mehreen ; Determinant of research use in clinical decision making among physical therapist providing services post stroke. A cross sectional study Ita. J. Sports Reh. Po. 2022; 9 (20); 2;1 ; 2036 – 2053 ; ISSN 2385-1988 [online]; IBSN 007-111-19-55; CGI J OAJI 0,101)]. Published online . Open Access (OA) publishing.

Corresponding Author : Ali Rafaqat. European University of Lefke , Cyprus , mail : alirafaqat64@gmail.com

Key Words: Evidence Based Practice, Physical Therapist, Stroke.

### **INTRODUCTION**

This method is used to take decisions on treatments that are appropriate for individual clients by using data from study, medical experience and logic. Most of the information Evidence Based Practice (EBP) particularly is a new concept that Sackett et al, peculiarly defined in 1996 as "Desegregation extremely individual clinical expertness with the fundamentally best medical results from systematic studies almost publicly accessible". Academic physical therapy programs have embraced EBP and are committed to developing students with the knowledge and skills needed to take the steps of EBP. Which included the expression of questions that arises from ethical practices in a constantly updated format to address the issue a step that may require an as online literature search and the critical assessment of EBP.

Recent reports revealed that physical therapist who graduated at least 15 years ago are less likely than therapist who graduated recently with a degree to benefits from the principles of EBP in their training programs and less likely to report trust in Evidence based practice such as reading and reviewing the literature. If therapist have time to read the relevant literature is important because reading is the basic requirement in in interpreting and applying the results of research to clinical practice. A physician chooses on a cause of action after taking into consideration study proof clinical awareness and patients need and preferences. The final stage in EBP is regarded continues impact of clinical practice <sup>1, 2, 3</sup> EBP is used as the quality of patient care is improved <sup>4,5</sup> many do not identify proof as main sources of data for guiding clinical practice <sup>5,6</sup>. There have been indication of evidence supporting this stroke hypothesis <sup>7,8</sup> not only. Perhaps there is a physical rehabilitation, but also patient satisfaction committed with compliance with clinical activities. Guidelines for pro-stroke rehabilitation, <sup>7,8</sup> Optimizing access to and used of EBP results consistently involves some features and resources routinely classified as characters and of the organization <sup>9</sup>. Physical therapy professionals appear to value of EBP (Evidence based practice)<sup>5,10</sup>, report incompatible dependence on study proof in their clinical decision making, <sup>11,12</sup>. The design of instructional measures to improve the implementation of research in the functional physical therapy is required to inform practitioners and institutional features that might impede EBP <sup>13,14</sup>. For a range of reasons, the delivery of physical treatments services to people with stroke offers an ideal context for the EBP study. Firstly, there is a wide range of literature on physio-therapeutics to inform, comprehensive guidelines on clinical practice <sup>15,16</sup> and systemic stroke restoration review are accessible via digital bibliographic data base, online websites, structural tools for evaluation <sup>17,18</sup>. Secondly post rehabilitation compliance to clinical trials suggestions was related to physical recovery and after stroke satisfaction <sup>7,8</sup>.



Reinforcing the basis to facilitate the application of studies in this region of exercise by physical therapist. Finally, worldwide stroke remains and significant cause of death and disability <sup>19</sup>.

The world is frequently impacted by stroke <sup>20</sup>. The walk ability is often impacted with as many as 60-80%, individuals lose their capacity to walk independently instantly after stroke <sup>21,22</sup>. Walking shortcomings often continue, restrict community participation <sup>23,24</sup> and influencing health perceptions negatively <sup>25</sup>. Scientifically evidence-based medicine was better described as the specific and functional use of the many up to date evidence in patient care decision <sup>1</sup>. Many perceived advantages from evidenced practices which job climate, increasing professional's accountability securing the professional future improving service effectiveness and quality assurance initiatives can lead health workers to integrate clinical evidence compliance with regulatory organizations or jobs <sup>26</sup>. Its quality of health worker to integrate clinical evidence on clinical decision making. These last advantages are supported in post-acute stroke rehabilitation by empirical data which associate not only physical recovery <sup>9</sup>, however patient outcomes with clinical practice guidelines <sup>8</sup>. Despite the anticipated advantages of EBP, qualitative and survey studies repeatedly reveal that do not consult research paper to inform the clinical policy maker easily with the physical therapist <sup>12,27,29</sup>.

The trend towards evidence-based practice aims to promote and, in some ways, compel practitioners and other decision makers to pay more attention in order to inform their decision making.

### **METHODOLOGY**

In order to assess practitioners and organizational features the survey questionnaire was modelled mainly after Jette et al <sup>5</sup>, research perception and EBP activities performance. Education in EBP perceptions and beliefs (seven items) were used as a subgroup for identifying desires (two items) and perceived roles (3 items), personal and demographic characteristics (age, gender and highest degree of practitioner experience) and professional practices (four items) <sup>10</sup>. We divided the questionnaire in four sections first section about personal attitudes towards use of and perceived benefits and limitations of EBP. Second section inquires about personal use and understanding of clinical practice guidelines. Third section inquires about availability of resources to access information and personal skills in using those resources. The last section inquires about personal demographic information. The autonomous effectiveness of physical therapists to achieve EBP measures <sup>1,3,28</sup> has been evaluated by a fresh 12- point scale that provides a full score between 0% and 100% <sup>10</sup>. Higher results represent higher trust in the ability to execute the EBP measure. Organic features such as perceived organic help,



peer support for EBP (two items), institutional resources and support for EBP (6 items) were also assessed. We have used ordinary logistic regression in order to analyze practitioner's relationship with institutional and experimental factors such as native variables and use of research literature in the decision-making process, i.e. contingent variable. Ordinal regression is used when there are more than two response categories for the dependent variable. Independent variables are re-categorized as binary variables before ordinary regression In positive worded statements categories 'strongly agree' and 'agree' in 'agree' category. And 'neutral', 'disagree' and 'strongly disagree' in 'disagree'. The category' strongly disagree' in negative worded declarations and the categories' disagree' form disagreements. In terms of questions that are classified as "yes," "no" or "do not know," we categorize "no" and categories "do not know," assuming "not know," "yes" and "may" know the presence of a resource. For the issues rated as "yes."

### RESULTS

The total number of physical therapy related personnel included in my study was n=150 and all were registered physical therapists. Statistical Package for Social Science (SPSS) versions 18 were used in data entry and analysis.

### **Personal Demographics Data**

Table-I shows that the majority of gender respondents were Male (52.7%) and female were (47.3%) who filled the questionnaire. The result of mean age of physical therapists was 20-29 (56.7%). 87.3% physiotherapists of them hold a valid therapy license that 71.3% physical therapist were licensed less than 5 years. Similarly, 52.7% participants committed that Baccalaureate is their entry level for physical therapy. 36.7% participants committed that their highest degree level was entry level Masters. 89.3% of participants responded agreed that if they do not currently hold an advance degree, then they can pursue in future. 87.3% physical therapists agreed that they are clinically certified specialist. Likewise, 82.7% respondents agreed that they belong to one or more professional oriented, organizations. 92 percentage of physical therapists were those who regularly participates in continuing education courses. 94.7% respondents were clinical instructors for physical therapist/ students and interns. The physical therapists then reported their working hourly per week (n=100) was 0-20 hours (38%), 20-30 hours (38.7%), 31-40 hours (12%) and 40+ hours (11.3%). Respondents who reported the average of patients they see daily (n=100) was 0-5 patients (26.7%), 5-10 patients (44.7%), 11-15 patients (21.3%), 15+ patients (7.3%). The percentage of respondents who reported that



physical therapists full time are in facility in which they do the majority of the patient care n=100) was 0-5 (22.7 %), 5-10 (46%), 11-15(16%), 15+ (15.3%). 34% physical therapist work in Sindh,7.3% works in Baluchistan,23.3% works in Punjab, 28.7% works in Khyber Pakhtunkhwa and 6.3% works in Gilgit Baltistan. 86.7% of the physical therapist works in urban areas. Work percentage shown that acute care hospital was the most common facility (64%) at which physical therapist do the most of their patient care. Majority of physical therapist see problems in Orthopedic (40.7%), Neurological (42.7%), Cardiovascular /pulmonary (13.3%) and (3.3%) were those who do not treat patients.

2041

Gender	Male	Female
N%	52.7(52.7%)	47.3 (47.3%)

Age	20 29 years	30 39 years	30 39 years	50+ years
N%	56.7(56.7%)	39.3(39.3%)	4 (4%)	1 (1%)

Valid physical therapy license	Yes	No
N%	87.3(87.3%)	12.7(12.7%)

Years of license	<5	5-10	11-15	>15
N%	71.3 (71.3%)	24.7(24.7%)	3.3(3.3%)	7.0(7.0%)

Entry level degree for P.t	Certificate	Baccalaureate	Entry level test	Entry level doctorate
N%	4.7 (4.7%)	52.7 (52.7%)	10.0(10.0%)	32.7(32.7%)

Highest Degree Attained	Baccalaureate	Advance Master	Entry level masters	Entry doctorate
N%	10(10.0%)	29.3(29.3%)	36.7(36.7%)	2.0 (2.0%)



If you don't hold an advance degree, do you intend to pursue it in future	Yes	No	Don't know
N%	89.3(89.3%)	8.7(8.7%)	2.0(2.0%)

	Yes	No
Are you a clinical certified specialist (N%)	87.3 (87.3%)	12.7 (12.7%)
Yearly participate in continuing education courses (N%)	92.0 (92.0%)	8.0 (8.0%)
Belong to professional oriented organization (N%)	82.7 (82.7%)	17.3 (17.3%)
Are you clinical instructor for physical therapist students/interns/residents(N%)	94.7 (94.7%)	5.3 (5.3%)

On average how many hours per week do you work	<20 hours	20-30 hours	31-40 hours	>40 hours
N%	38.0(38.0%)	38.7 (38.7%)	12.0 (12.0%)	11.3(11.3%)
On average how many patients do you see daily	<5	5-10	11-15	>15
N%	26.7(26.7%)	44.7 (44.7%)	21.3(21.3%)	7.3(7.3%)
How many full time Physical therapists are in facility in which you do majority of your patient care	<5	5-10	11-15	>15
N%	22.7(22.7%)	46.0(46.0%)	16.0(16.0%)	15.3(15.3%)

List the province in which you practice	Sindh	Baluchistan	Punjab	Khyber Pakhtunkhwa	Gilgit Baltistan
N%	34(34%)	7.3(7.3%)	23.3(23.3%)	28.7(28.7%)	6.7(6.7%)



	Rural	Urban	Sub Urban
N%	12(12.0%)	86.7(86.7%)	1.3(1.3%)

Which of the following best describes the facility at which you do most patient care?				
Acute care hospital	64 (64%)			
Acute rehabilitation	16.7 (16.7%)			
Subacute rehabilitation	4.7 (4.7%)			
Skilled nursing facility	7.0 (7.0%)			
Privately owned outpatient clinic	5.3 (5.3%)			
Facility based outpatient clinic	1.3 (1.3%)			
Home care	2.0 (2.0%)			
University	5.3 (5.3%)			

Which one of the following best describes type of problem you see?			
Orthopedic	40.7(40.7%)		
Neurological	42.7(42.7%)		
Cardiovascular/ Pulmonary	13.3(13.3%)		
Do not treat patient	3.3(3.3%)		

### Personal attitudes toward, use of, and perceived benefits and limitations of EBP.

In this section, 14 questions in statements form were asked to assess the personal attitudes towards use of, perceived benefits and limitations of EBP. 91.3% have agreed the application of EBP is necessary in physical therapy and 9.7% was the minority rate of disagreed. Similarly, 84.3% agreed that literature and research findings were useful in their day to day practice and 16.3% disagreed on this statement. 85% participants agreed that the need to increase the use of evidence in their daily practice and 15% doesn't agree on this review. Then 64.7% agreed in

2043



the adaptation of EBP places on unreasonable demand on physical therapists and 35.3% disagree with it. Moreover 81.3% were interested in learning or improving the skills necessary to incorporate EBP in their practice and 18.7% were not interested. 78% gave positive statement on that EBP improves the quality of patient care and 22% does not agree with it.

Similarly, 62% approved that EBP doesn't take into account the limitation of their clinical practice setting and 38% disapprove it. Further 58.7% of participants agreed that their reimbursement rate will increase if they incorporate EBP into their practice and 35.4% disagreed about the reimbursement rate. 59% agreed on that the stronger evidence is lacking to support most of interventions they use in their practice and 41% were the minority rate of disagreement. 72.7% agreed that EBP help them making decisions about patient care and 27.3% doesn't agreed on it. Likewise, 66% gave positive feedback on that the EBP doesn't take into account patient preferences and 34% gave negative feedback on it. Similarly, percentage of respondents who reported reading article and reviewing research in clinical practice at different frequencies (n=100) was 0-1 article (9.3%), 2-5 articles (76%), 6-10 articles (8.7%), 11-15 (3.3%) and 16+ articles (2.7%). Percentage of respondents who reported using literature in clinical decision making at different frequencies in typical month (n=100) was 0-1 times (12%), 2-5 times (68.7%), 6-10 times (13.3%), 11-15 times (4%) and 16+ times (2%). Again participants reported the use of Medline or other data base for practice relevant research at different frequencies in typical month was 0-1 times (30%), 2-5 times (48%), 6-10 times (14.7%),11-15 times (3.3%) and 16+ times (3.3%).

Benefits and Limitations	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Application of	f EBP is necessa	ry in physical th	erapy		
N%	2.7(2.7%)	1.7(1.7%)	5.3(5.3%)	75.3(75.3%)	16(16.0%)
Literature and	research finding	gs are useful in r	ny day to day pi	ractice.	
N %	2(2.0%)	7(7.0%)	7.3(7.3%)	77.3(77.3%)	7(7.0%)
I need to increase the use of evidence in my daily practice.					
N%	4.3(4.3%)	2.7(2.7%)	8.3(8.3%)	71(71.0%)	14(14.0%)
The adaptation of EBP places an unreasonable demand of physical therapy.					
N%	1.3(1.3%)	11.3(11.3%)	22.7(22.7%)	54(54.0%)	5.4(5.4%)

Table 1: Personal attitudes toward, use of, and perceived benefits and limitations of EBP.

### Italian Journal of Sports Rehabilitation and Posturology

I am interested in learning or improving the skills necessary to incorporate the EBP into my practice.					
N%	1.3(1.3%)	2.7(2.7%)	14.7(14.7%)	66(66.0%)	15.3(15.3%)
EBP improve	s the quality of p	atient care.			
N%	7(7.0%)	2(2.0%)	13(13.0%)	61.3(61.3%)	16.7(16.7%)
EBP does not	take into accour	t the limitation	of my clinical p	ractice setting.	
N%	1.3(1.3%)	10.7(10.7%)	26(26.0%)	57.3(57.3%)	4.7(4.7%)
My reimburse	ement rate will in	crease if I incor	porate EBP into	my practice.	
N%	2.7(2.7%)	8.7(8.7%)	24(24%)	58.7(58.7%)	6(6.0%)
Strong eviden	ce is lacking to s	support most of i	interventions I u	use with my patie	ents.
N%	4(4.0%)	6.7(6.7%)	22(22.0%)	60.7(60.7%)	6.7(6.7%)
EBP helps me make decisions about my patients care.					
N%	2(2.0%)	6(6.0%)	19.3(19.3%)	60(60.0%)	12.7(12.7%)
EBP does not take into account patient preferences					
N%	4.7(4.7%)	14.7(14.7%)	14.7(14.7%)	62.7(62.7%)	3.3(3.3%)

			6-10	11-15	
	<1 article	2-5 article	article	article	16+ article
Read/review	research/literature	e related to my c	clinical practice.		
N%	9.3(9.3%)	76(76.0%)	8.7(8.7%)	3.3(3.3%)	2.7(2.7%)
	<1 time	2-5times	6-10 times	11-15 times	16+ times
Use professio	onal literature and	research finding	gs in the proces	s of clinical deci	sion making.
N%	12(12%)	68.7(68.7%)	13.3(13.3%)	4(4.0%)	2(2.0%)
Use Medline or other databases to search for practice - relevant literature /research.					
N%	30(30.0%)	48(48.0%)	14.7(14.7%)	3.3(3.3%)	3.3(3.3%)

In these section six questions inquires about personal use and understanding of clinical practice guidelines. 88.7% respondents know that practice guidelines are available for the topic related to their practice and 11.3% respondents doesn't know about the practice guidelines.72% participants responds positively that they actively seek practice guidelines pertaining to areas of their practice and 28% response was negative. Percentage of respondents who use practice guidelines in their practice was 72.7% and 27.4% doesn't use practice guideline. 96.7% respondents were aware that practices guidelines are available online aand3.3% were not aware of it. The percentage of respondents who were able to incorporate



patient with practice guidelines was 71.3% and 28.7% were not able to do this. 93.7% respondents were able to access practice guidelines online and 6.3% were not able to access.

**Table II:** Personal use and understanding of clinical practice guidelines.

Clinical practice guidelines	Yes	No	May be	Do not know	
Practice guidelines are available for the topic related to my practice.					
N%	82.7(82.7%)	3.3(3.3%)	6(6.0%)	8(8.0%)	

	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
I actively seek practice guidelines pertaining to areas of my practice.					
N%	3.3(3.3%)	6(6.0%)	18.7(18.7%)	66.7(66.7%)	5.3(5.3%)
I use practice guidelines in my practice.					
N%	2(2.0%)	4.7(4.7%)	20.7(20.7%)	66(66.0%)	6.7(6.7%)
I am able to incorporate patient preferences with practice guidelines.					
N%	4(4.0%)	10(10.0%)	14.7(14.7%)	67.3(67.3%)	4(4.0%)

	Yes	No				
I am aware that practice guidelines are available online.						
N%	96.7(96.7%)	3.3(3.3%)				
I am able to access practice guidelines online.						
N%	93.7(93.7%)	6.3(6.3%)				

# Availability of resources to access information and personal skills in using those resources.

12 questions were asked to assess the availability of resources to information and personal skills in using those resources. 90.7% respondents know that how to access current research through professional journals in their paper forms 9.3% do not knows about that. 89.3% physical therapists committed that they know how to access relevant databases and internet at their facilities and 10.7% was the minority rate doesn't know about that. The percentage of respondents who have the ability to access relevant databases and the internet at home or locations other than family was 92% and 8% doesn't avail this ability. 66% respondents agreed



that their facility supports the use of current research practices and 34% disagreed about that. 71.4% of physical therapists have learned the foundation for EBP as part of their academic preparation and 28.6% physiotherapist doesn't learn the foundation of for EBP. The physical therapist who agreed that they received the formal training in search strategies for finding research relevant to their practice was 59.3% and 40.6% disagreed it. The respondents who were not familiar with medical search engines was 59.3% and 41% were familiar with it. 46.7% respondents disagreed that they received formal training in critical appraisers of their academic preparation and 53.3% agreed it. Physical therapist who disagreed that they are confident in their ability to critically review professional literature was 50.7% and 49.3% agreed about it. 57.4% of physical therapists agreed and 42.7% disagreed that they were confident in their ability to find the relevant research to answer their clinical questions. Understanding terms were asked by physical therapists; 72.7% doesn't know about the term relative risk and 27.3% were aware of this term. 74.7% respondents were not aware of term absolute risk and 25.3% were aware of this term. 76.7% systematic risk and 23.3% were not aware of these terms. 77.4% participants died not knows about odd ratio and only 22.7% knows about it. 74.7% participants don't know about meta-analysis and 25.3% knows about it. Participants who were unaware of the term confidence interval was 73.3% and 26.7% were aware of this term. 80% of participants don't know about heterogeneity and 20% knows about it. The most faced barrier to use EBP in their practice was, insufficient time (27.3%), lack of research was (26%), lack of interest was (19.3%) and lack of understanding of statistical analysis was (12%) and the least faced problems were poor ability to critically appraise literally and lack of generalizability of literature findings to patient popular was(4.7%), lack of collective support among their colleagues was (2.7%) and inability to apply research findings to individual patients with unique characteristics was (3.3%)

Yes	No	Don't know
I have access to curren	t research through professional	journals in their paper form.
90.7(90.7%)	8(8.0%)	1.3(1.3%)
I have the ability to acc	cess relevant databases and the i	nternet at my facility.
89.3(89.3%)	8(8.0%)	2.7(2.7%)
I have the ability to acc family.	cess relevant databases and the i	nternet at home or locations other than
92(92.0%)	6(6.0%)	2(2.0%)

Table III: Availability of resources to access information and personal skills in using those resources

## Italian Journal of Sports Rehabilitation and Posturology

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My facility sup	ports the use of cu	irrent research pra	actices.		
N%	4.7(4.7%)	5.3(5.3%)	28(28.0%)	60(60.0%)	4(4.0%)
I learned the fo	oundation for EBP	as part of my aca	demic preparatio	on.	
N%	2(2.0%)	3.3(3.3%)	23.3(23.3%)	67.4(67.4%)	4(4.0%)
I have received practice.	d formal training in	search strategies	for the findings	research relevant	to my
N%	2(2.0%)	5.3(5.3%)	33.4(33.4%)	55.3(55.3%)	4(4.0%)
I am familiar v	with the medical se	arch engine (e.g.	Medline CINAH	L).	
N%	1.3(1.3%)	5.3(5.3%)	36.7(36.7%)	52(52.0%)	5(5.0%)
I received form	nal training in critic	cal appraisals of r	ny academic pre	paration.	
N%	1.3(1.3%)	6.7(6.7%)	38.7(38.7%)	49.3(49.3%)	4(4.0%)
I am confident in my ability to critically review professional literature.					
N%	2(2.0%)	6.7(6.7%)	42(42.0%)	44(44.0%)	5.3(5.3%)
I am confident in my ability to find the relevant research to answer my clinical questions.					
N%	2(2.0%)	4(4.0%)	36.7(36.7%)	50.7(50.7%)	6.7(6.7%)

Understanding Terms	Understand Completely	Understand some what	Do not understand
Relative risk	27.3(27.3%)	62.7(62.7%)	10(10.0%)
Absolute Risk	25.3(25.3%)	58.7(58.7%)	10(10.0%)
Systematic risk	25.3(25.3%)	56.7(56.7%)	20(20.0%)
Odds ratio	22.7(22.7%)	54.7(54.7%)	22.7(22.7%)
Meta-analysis	25.3(25.3%)	52(52.0%)	22.7(22.7%)
Confidence Interval	26.7(26.7%)	52(52.0%)	21.3(21.3%)
Heterogeneity	20(20.0%)	56(56.0%)	24(24.0%)



Greatest barrier to use of EBP in your practice	Frequency and Percentage
Insufficient time	27.3(27.3%)
Lack of research skills	26(26.0%)
Poor ability to critically appraise the literature	4.7(4.7%)
Lack of generalizability of the literature findings to my patient population	4.7(4.7%)
Inability to apply research findings to individual patients with unique characteristics	3.3(3.3%)
Lack of understanding of statistical analysis	12(12.0%)
Lack of collective support among my colleagues in my family	2.7(27%)
Lack of interest	19.3(19.3%)

### DISCUSSION

2049

In this elementary study we found a progressive rate of use of research in clinical decision making and identified several factors related to the research use. Results indicates the main obstacle to EBP application was lack of time, lack of research skill and lack of interest was the 2<sup>nd</sup> main obstacles. Majority were in favor of application of EBP in physical therapy and in favor of literature and research findings were very useful in their practice. In addition to a previous analysis of past patterns of research literature and inquiries into therapist knowledge tool <sup>29</sup> and expectations of researcher's literature, the relation between the use of assets contained in the current study is important to understand. Approach is necessary self-effective system. Our findings show that attitude can help and explain how EBP is important. While we translate the responses of therapists to certain statements measuring attitudes towards EBP, improves patient care and decision making, such as EBP, is important. 95% of physical therapists were able to access practice guidelines online. 52% were not familiar with medical search Engines. Interestingly, only 2-5 of research time were taken by 81 per cent of research participants. Analysis that helps to promote involvement, positive attitudes and autonomy to the implementation of EBP are relatively interconnected and key factors which allow research findings to be incorporated into the decision-making process. Majority of samples concluded EBP to be essential; we agree that their understanding, expertise and attitudes in evidencebased practice must be strengthened. Eventually the critical correlation between perceived



empirical support and the use of proof in the decision-making process by physicians must be shown. Three EBP behaviors, searches, reading and using clinical decision-making research results were independent of supported perceptual facilities but they were still unimportant. The precise essence of this service and its potential interplay between the organization's factors and assumed EBP assistance, supply of EBP's resources and involvement in research need. Still need more work to be done to determine appropriate organizational strategies that promote the use of research in clinical practice? Ultimately this study revealed important and modifiable differences in the use of research at the level of patient (i.e. educational training, attitude towards research, self-efficacy involvement in research being a medical in structure) and the organization (i.e. internet access, research usage supports facility) underlying the efforts to support Evidence based physical therapy.

### **CONCLUSION**

Although clinical decision-making research findings are rarely used by half of Pakistan's physical therapists. The result suggests a number of potential factors that enhances the uses of research by physicians with stroke services. Potential EBP studies should be based on the impact of academic learning, self-efficacy, attitudes, and expectations of the value of research evidences in clinical daily practice, involvement in research support and internet provision access to bibliographical data base. The respondents had a positive attitude to evidence-based practice and time for easy to understand up-to-date access. Evidence summarizes access to journals, a lack of research skills, and the assessment of findings were key impediments to EBP. We concluded that further study needs to investigate the EBP exposure.



#### **Conflict of interest Statement**

No potential conflict of interest relevant to this article was reported.

### **Responsibility.**

The scientific contents of the article are the responsibility of the authors.



### REFRENCES

- 1. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, and Richardson WS: Evidence based medicine: what it is and what it isn't. BMJ 1996, 312: 71-72.
- 2. Straus SE, Richardson WS, Glasziou P, Haynes RB. How to practice and teach EBM. Evidence-Based Medicine. Third edition. Elsevier. 2005:13-29.
- 3. Davidoff F, Haynes B, Sackett D, and Smith R. Evidence based medicine.
- 4. Salbach NM, Jaglal SB, Korner-Bitensky N, Rappolt S, Davis D. Practitioner and organizational barriers to evidence-based practice of physical therapists for people with stroke. Physical therapy. 2007 Oct 1; 87(10):1284-303.
- 5. Jette DU, Bacon K, Batty C, Carlson M, Ferland A, Hemingway RD, Hill JC, Ogilvie L, Volk D. Evidence-based practice: beliefs, attitudes, knowledge, and behaviors of physical therapists. Physical therapy. 2003 Sep 1; 83(9):786-805.
- 6. Turner PA, Whitfield TA. Physiotherapists' use of evidence based practice: a cross-national study. Physiotherapy Research International. 1997 Mar; 2(1):17-29.
- 7. Duncan PW, Horner RD, Reker DM, Samsa GP, Hoenig H, Hamilton B, LaClair BJ, Dudley TK. Adherence to post-acute rehabilitation guidelines is associated with functional recovery in stroke. Stroke. 2002 Jan 1; 33(1):167.
- 8. Reker DM, Duncan PW, Horner RD, Hoenig H, Samsa GP, Hamilton BB, Dudley TK. Post-acute stroke guideline compliance is associated with greater patient satisfaction. Archives of physical medicine and rehabilitation. 2002 Jun 1; 83(6):750-6.
- 9. Berwick DM. Disseminating innovations in health care. Jama. 2003 Apr 16; 289(15):1969-75.
- 10. Pollock AS, Legg L, Langhorne P, Sellars C. Barriers to achieving evidence- based stroke rehabilitation. Clinical Rehabilitation. 2000 Dec; 14(6):611-7.
- 11. Jette DU, Grover L, Keck CP. A qualitative study of clinical decision making in recommending discharge placement from the acute care setting. Physical Therapy. 2003 Mar 1; 83(3):224-36.
- Stevenson TJ, Barclay-Goddard R, Ripat J. Influences on treatment choices in stroke rehabilitation: survey of Canadian physical therapists. Physiotherapy Canada. 2005; 57(2):135-44.
- 13. Cranney M, Barton S, Walley T. Addressing barriers to change: an RCT of practice-based education to improve the management of hypertension in the elderly. Br J Gen Pract. 1999 Jul 1; 49(444):522-6.
- 14. Grimshaw JM, Shirran L, Thomas R, Mowatt G, Fraser C, Bero L, Grilli R, Harvey E, Oxman A, O'Brien MA. Changing provider behavior: an overview of systematic reviews of interventions. Medical care. 2001 Aug 1; 39(8): II-2.
- 15. Van Peppen RP, Hendricks HJ, Van Meeteren NL, Helders PJ, Kwakkel G. The development of a clinical practice stroke guideline for physiotherapists in The Netherlands: a systematic review of available evidence. Disability and rehabilitation. 2007 Jan 1; 29(10):767-83.



- Duncan PW, Zorowitz R, Bates B, Choi JY, Glasberg JJ, Graham GD, Katz RC, Lamberty K, Reker D. Management of adult stroke rehabilitation care: a clinical practice guideline. Stroke. 2005 Sep 1; 36(9): e100-43.
- 17. Korner-Bitensky N, Roy MA, Teasell R, Kloda L, Storr C, Asseraf-Pasin L, Menon A. Creation and pilot testing of Stroke Engine: a stroke rehabilitation intervention website for clinicians and families. Journal of rehabilitation medicine. 2008 May 5; 40(5):329-33.
- 18. Teasell RW, Foley NC, Bhogal SK, Speechley MR. An evidence-based review of stroke rehabilitation. Topics in stroke Rehabilitation. 2003 Apr 1; 10(1):29-58
- 19. Salbach NM, Veinot P, Rappolt S, Bayley M, Burnett D, Judd M, Jaglal SB. Physical therapists' experiences updating the clinical management of walking rehabilitation after stroke: a qualitative study. Physical therapy. 2009 Jun 1; 89(6):556-68.
- 20. Writing Group Members, Rosamond W, Flegal K, Furie K, Go A, Greenland K, Haase N, Hailpern SM, Ho M, Howard V, Kissela B. 21. Glossary. Circulation. 2008 Jan 29; 117(4): e25-146.
- 21. Friedman PJ. Gait recovery after hemiplegic stroke. International disability studies. 1990 Jan 1; 12(3):119-22.
- 22. Wade DT, Wood VA, Heller A, Maggs J, Langton RH. Walking after stroke. Measurement and recovery over the first 3 months. Scandinavian journal of rehabilitation medicine. 1987; 19(1):25-30.
- 23. Lindmark B, Hamrin E. A five-year follow-up of stroke survivors: motor function and activities of daily living. Clinical rehabilitation. 1995 Feb; 9(1):1-
- 24. Perry J, Garrett M, Gronley JK, Mulroy SJ. Classification of walking handicap in the stroke population. Stroke. 1995 Jun; 26(6):982-9.
- 25. Mayo NE, Wood-Dauphinee S, Co<sup>te</sup> R, Durcan L, Carlton J. Activity, participation, and quality of life 6 months' post stroke. Archives of physical medicine and rehabilitation. 2002 Aug 1; 83(8):1035-42.
- 26. Gale BV, Schaffer MA. Organizational readiness for evidence-based practice. JONA: The Journal of Nursing Administration. 2009 Feb 1; 39(2):91-
- 27. McGinnis PQ, Hack LM, Nixon-Cave K, Michlovitz SL. Factors that influence the clinical decision making of physical therapists in choosing a balance assessment approach. Physical therapy. 2009 Mar 1; 89(3):233-247.
- 28. Grimmer-Somers K, Lekkas P, Nyland L, Young A, Kumar S. Perspectives on research evidence and clinical practice: a survey of Australian physiotherapists. Physiotherapy Research International. 2007 Sep; 12(3):147-61.
- 29. Ramírez-Vélez R, Correa-Bautista JE, Muñoz-Rodríguez DI, Ramírez L, González-Ruíz K, Domínguez-Sánchez MA, Durán-Palomino D, Girabent-Farrés M, Flórez-López ME, Bagur-Calafat MC. Evidence-based practice: beliefs, attitudes, knowledge, and skills among Colombian physical therapists. Colombia Médica. 2015 Mar; 46(1):33-40







ISSN 2385 - 1988 [Online]