

The Barriers in Evidence Based Physical therapy with Stroke Patients

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Stroke is a problem of serious nature which has no known curative management available. Most part of the management of stroke patient comprises of rehabilitation strategies. Evidence Based Practice (EBP) is the usage of best recent evidence in clinical decision making for providing best care to the patient. This can be achieved by reviewing different available researches at different data bases. Its usage requires expertise and expertise acquires with experience. The most commonly identified obstacles applying EBP are that it is time consuming, lack of skills related to research, lack of knowledge related to statistical calculations, lack of availability of appropriate resources for acquiring knowledge. The purpose of this research was to evaluate the barriers of implementing EBP in the management of stroke patients. It was a cross-sectional study. Data collected from physical therapists working with stroke patients. The duration of study was 6 month. A modified form of questionnaire was used to collect the data. The results identified three major hurdles in applying EBP these are time constrain, lack of generalizability of findings, and inability to apply the findings of research on patients and also lack of support from the peers. The results show that time is the major issue according to the physical therapists but the fact is that the evidence based practice is the demand of today's world and its usage is very important and one should try to manage the time if he/ she wants his/ her practice to improve and wants to leave a good and lasting impact on the patient.

Key Words

Evidence Based Practice, Stroke, Physical Therapy, Barriers, Evidence Based Medicine, CVA, Evidence Based Physical Therapy.

1 INTRODUCTION

STROKE is a problem of serious nature which has no known curative management available. Most part of the management of stroke patient comprises of rehabilitation strategies [1]. The most common cause of disabilities was found to be stroke also it is the major cause of dying all over the world. Stroke is a group of symptoms of a disease caused by cerebral loss of blood supply [2]. In Pakistan the mean age of stroke sufferers, was found to be 57-62 years [3]. Males are more likely to suffer from stroke than females this comprises 60% males & 40% females. [4], [5].

The origin of Evidence Based Practice (EBP) extends back to 19th century. It has been a hot cake type of topic for clinicians and practitioners and public nowadays. Many efforts are also made to learn & teach the techniques of EBP [6], [7]. EBP is the usage of best recent evidence in clinical decision making for providing best care to the patient. This can be achieved by reviewing different available researches at different data bases. Its usage requires expertise and expertise acquires with experience. When it comes to best recent evidences, the randomized trails are consider to be gold standards, beside this meta-analysis are also considered very

important for most recent and current evidences [8]. Al though the concept of EBP is very old but its evolution is new so EBP's validation and application is considered as a young concept. [9]

EBP is use of expertise related to clinical work in accordance to the available evidences from research work [10]. Use of EBP in clinical practice help to improve the outcomes of provided treatment. The use of EBP can provide the best outcomes from the provided management. The mostly reported barriers are insufficient time, uniqueness of individual patients, lack of statistics knowledge, skills of searching the literature were lacking and the ability of appraising the literature critically are also absent [11], [12].

The field of physiotherapy has always been a victim of criticism due to deficient use of research based knowledge for decades [13]. With time the emphasis on EBP usage has increased and like other professions, physical therapy professionals are also using EBP with the good to use the knowledge to enhance and increase the effectiveness of their practice & help their patients. There is no recipe that could be employed rather EBP needs the expertise, experience and understandings of available facts. All these have equal importance when we need to implement the knowledge of EBP [14]. It is very important to not only know & accept the importance of EBP but also it needs implementation so as to use the benefits related to EBP. There are many challenges which have to be overcome when the goal is to implement the knowledge of EBP. The main challenges are lack of knowledge of Research methodology, lack of skills to understand & interpret the literature, and then the most important is that it is considered to be time consuming [15].

Stroke is a disease that causes disability and rehabili-

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tation has an important part of in the treatment plan of stroke patients. The rehabilitation includes functional recovery, improvement in gait pattern, fitness training and activities with repetitive actions to improve their ADL's. Along with this occupational therapy is also very important in the rehabilitation process of stroke patients. Also the authors had mention that still work is going on, on the topic of stroke rehabilitation and there are hopes for better resolution for stroke patients in future [16]. The physical therapists rely on their colleagues and friends for new information. Many of the participants reported lack of computer and information seeking skills. Others had said that lack of time was main issue due to which they could not seek for E.B.P. [17]. The implementation of EBP was found to be quiet poor. Currently EBP is looked according to profession and there is no inter professional approach. The future of this skill depends on the educational strategies, organizational support towards this skill [18].

There are some flaws in EBP's implication but it is a very important and necessary entity. Its main utilization is in solving the clinical related problems and also in research it plays a very important role. The EBP approach is in the level of development so there are many flaws but this does not vanishes the benefits that can be taken from evidence based practice [19].

The aim of this study was to check for the obstacles of implementing EBP in the management of stroke patients.

2. MATERIAL & METHODOLOGY

It was a cross sectional study held in Karachi's physical therapy centers. The sample size was 100 working physical therapists of Karachi. The study duration was 6 months (from January 2014 to June 2014). The questionnaire for data collection was adopted from Salbach et al study [17]. For analyzing data descriptive statistics test was applied. The aim of this study was to check for the obstacles of implementing EBP in the management of stroke patients.

3. RESULTS

The response rate of this study was 100%. 60% of the participants were males 45% had experience 10-15 years. 52% of the participants had the highest degree of bachelors where as 25% had Masters & other 23% had PP-DPT. 65% of the participants work 20-30 hours weekly. 50% of the participants treated 5-10 patients daily where as 10% treated more than 15 patients, 30% treated 11-15 patients and 10% treated less than 5 patients daily. Out of these 65% dealt 2-5 stroke patients daily, 15% dealt less than 2 stroke patients and 20% deal 6-10 stroke patients daily. 46% of the respondent had 10-15 years of experience in dealing the stroke patients. Majority of respondents had the highest degree of bachelors. 50% of the respondents deal 5-10 patients daily on average but they may have to deal more or less than this no. of patients depending on circumstances.

TABLE 1: Responses to the questions related to EBP

S. No	Question Asked	Strongly Agreed	Agreed	Neutral	Disagreed	Strongly Disagreed
1	EBP's usage is necessary in physical therapy practice.	30	25	20	10	15
2	In my day-to-day practice research findings are very helpful.	30	30	10	15	15
3	There is a need to enhance my usage of EBP.	15	15	25	20	25
4	EBP causes extraordinary demand on physical therapists.	25	45	0	10	20
5	EBP improves the quality of patient care.	30	30	5	20	25
6	Interested in enhancing the skills to utilize EBP.	10	20	5	20	45
7	There is a definite divide between research and practice.	35	35	5	0	25
8	Searching the literature to answer the clinical questions is physical therapist's duty.	25	20	10	20	25
9	Critical analysis of literature is physiotherapists' duty.	20	20	15	15	30
10	Interpretation of literature is Physiotherapists' duty.	20	20	15	15	30
11	EBP was a part of my academics.	5	10	15	15	55

12	My facility appreciates the usage of new research findings in practice.	5	35	40	15	5
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4. DISCUSSION

EBP helps to resolve the problem according to the evidences available. This not only helps the patient but also help to improve one's practice. EBP is very useful, and necessary to use in daily practice. This will help to improve the rehabilitation process of stroke patients. As well all know that this process is very hard and comprises of many hurdles, if we use EBP in this process not only the process of rehabilitation can be improved but also this can help to encourage the patients, their family and also the physical therapist working with the stroke patients. [16]. There is a dire need to appreciate the usage of EBP in our clinical practice if we want our practice to improve and our patients to improve as well. Majority of the participants believe that EBP is necessary & they need to increase its usage. But how many of them are actually applying the knowledge of EBP in their daily practice is still questionable. [20], [21].

Although majority agree that EBP usage is necessary along with this they also say that application of EBP causes unreasonable demand. They believe so because they do not have enough time to search for adequate data which may prove to be fulfilling the needs of their patients. Along with this there is lack of computer literacy which causes hurdles in this process of searching data [17]. There is undue demand on physical therapists because they have limited time, in this time they not only have to treat a large number of patients but also they have to do counseling of their patients along with this they have to plan the whole plan of treatment for their patients also implement it and maintain the documentation of their patients. All these tasks are time consuming. Then searching adequate data and articles is also time consuming and if a person is already running out of time than extra tasks can be burdensome. If a person has any problem probably it's the duty of that person to seek for its solution. Likewise if a therapist is treating a patient it is his/her duty to seek for evidences of good practice. A research showed that many of the therapists rely on their colleagues and co-workers for new information and they themselves do not make any effort to search for new information [12].

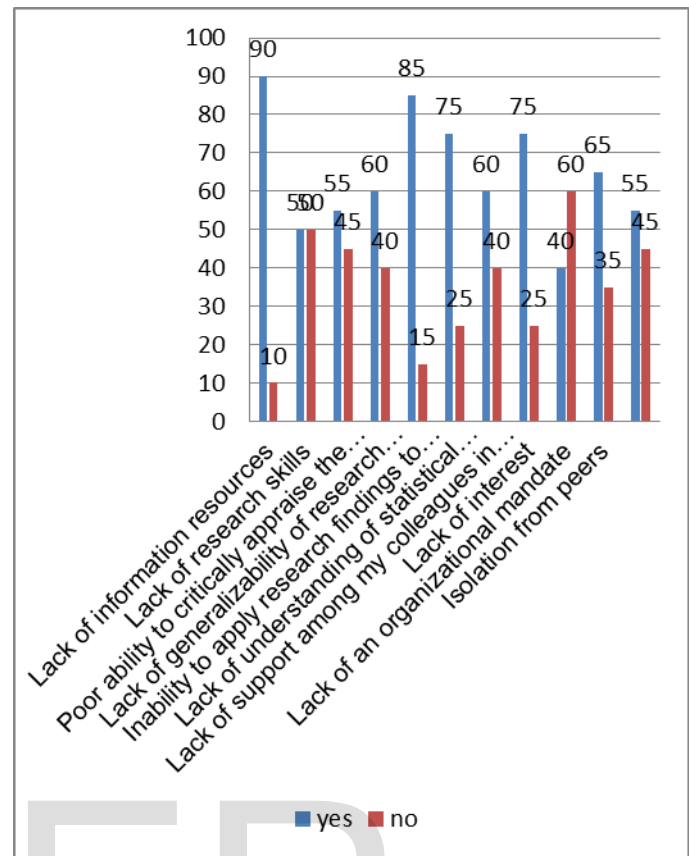


Figure1: Barriers in EBP usage in stroke patients

Along with the search of literature, it is the duty of the physical therapist treating the patients to critically analyze the literature but research showed that time and lack of skills can be a major issue in not doing so (22). Along with critical appraisal, the interpretation of research findings should be the responsibility of physical therapist. If a research is related to physical therapy it should be done by physical therapist along with this all the aspects of that particular research should be fully understood by the physical therapist. This is necessary because a physical therapist can only understand the problem related to his/her field. When a research related to a particular field should be done by a person belonging to that field then it is also necessary that the person should be able to interpret the result of research or the work done and effort exerted on that work both would become useless [21].

The education, information and knowledge related to EBP should be a part of studies. Nowadays the concept of EBP is getting highlighted in each field so it becomes very necessary that this concept should become a part of academics. Not only should it become a part of our academics at the entry level but also at the higher levels. It has become a hot demand nowadays. Also it is necessary that EBP should be implemented in day to day practice. It's very necessary if one wants to improve his/her practice skills and wants to improve the condition of their patient in an evident and skillful way. As the result already showed that majority of the participants had highest degree of bachelors this may be a cause of this re-

sponse. But whatever may be the cause EBP is very important entity and it should be added in the curriculum even at the entry level programs. Majority of participants are using the old known skills to treat their patients and they are not even bothered to upgrade their skills & knowledge. The reason for this may be lack of organizational support & lack of good and adequate educational strategies [18], [23]. To gain knowledge it is very necessary that the source of knowledge should be freely assessable. Time is very important entity when it comes to searching data. Many of the researches have proven that participants believe that time is a major issue [24], [21], [11], [22], [25].

Like many other researches [24], [21], [11], [22], [25] the results reveal that 90% of responses show that major barrier in implementing EBP was time. The therapist are not given protected time to search for evident data by their organizations. Along with this the therapists are so busy in their practical field that they do not have enough time left for searching data. The other barrier found was that everything could not be applicable to every patient (85%). Each stroke patient is an individual with unique characteristics so the lack of generalizability of research remains an issue. The other most evident barrier found was lack of support from colleagues & organization. These results can be associated with the research results of research done in 2002 by Swinkles et al. which proved the organization support can help to improve the use of EBP in the field [18].

5. CONCLUSION & RECOMMENDATIONS

The results obtained from this study reveal that the appropriate knowledge regarding EBP and its application is lacking among the physical therapists. Also the hurdles that the physical therapists had to face in implementing and applying EBP are many in number. Out of these too many hurdles three are found to be of major concern among the physical therapists. First major obstacle in this concern is time constrain (90%), second is lack of generalizability of findings (85%), and the third is inability to apply the findings of research on patients and also lack of support from the colleagues.

The results show that time is the major issue according to the physical therapists but the fact is that the evidence based practice is the demand of today's world and its usage is very important and one should try to manage the time if he/she wants his/her practice to improve and wants to leave a good and lasting impact on the patient. Not only one's practice will improve but the quality of services provided to the patients will also improve by doing so.

- 1) Strategies to enhance the understanding of EBP & related skills of research.
- 2) Inclusion of EBP & searching skills at bachelor level of education of physical therapy.
- 3) Emphasis on implementation of EBP at organizational level.
- 4) Encouragement of continuing education, also help for this purpose at organizational level.
- 5) Personnel efforts from physical therapists to implement and enhance the knowledge of EBP.

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