

SURVEY OF PARTICIPATION, PERCEPTION, ATTITUDE AND BARRIERS TOWARDS RESEARCH AMONGST CLINICAL PHYSIOTHERAPIST

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ABSTRACT

Background: Research has been described as a systematic process of investigation, with the aim of contributing to the body of knowledge that shapes and guides academic and or clinical disciplines. Although the past decade have witnessed an increase in physiotherapy research but the implantation of research findings in clinical practice still remains a concern which till date has attracted relatively limited interest.

Aim: To study participation, perception, attitudes and barriers in clinical physiotherapist towards research.

Method: A cross sectional questionnaire survey was conducted amongst 291 physiotherapists. Questions about research were measured on Likert scale.

Results: Descriptive statistics were used for analyzing the responses. The clinical physiotherapist value research and consider research important to the profession, though they were neutral towards involvement in research. The common barriers they faced were lack of time and peer group support.

Conclusion: From the findings of this study we conclude that physiotherapist have positive attitude to research but are less motivated to participate in research. It is encouraging that the physiotherapist who replied to this survey value research. They have positive attitude towards evidence based practice but face difficulty in implementing it. The barrier to research was lack of availability of time and lack of peer group support.

KEYWORDS: Research; Physiotherapist; Attitude; Participation; Perception; Barriers

INTRODUCTION

Research comprises "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of humans, culture and society, and the use of this stock of knowledge to devise new applications¹."

Research is frequently seen as the life blood, hallmark or cornerstone in the development of a profession² in that it forms its scientific basis^{2,3}. In fact, lack of research could lead to the demise of the profession as a viable discipline³.

Hence the strength of physical therapy depends on research to expand its scientific basis for practice and patient care, leading to research-based practice or clinically oriented practice, a vision advocated by the American Physical Therapy Association (APTA)⁴.

Every physiotherapist can and should play a role in research in order to contribute to the scientific knowledge base or to apply research findings to practice.

As a clinical professional, the physiotherapist does not only need to acquire

skills and knowledge, but also to update his knowledge and continually seek ways of improving his treatment modalities. This is ensured by carrying out scientific enquiries into the rationale behind the use of his skills and modalities³. It is therefore important that physiotherapists carry out research regularly.

India is considered a knowledge hub of research. But in current scenario practitioners opt to go out of India to conduct research studies. There is little contribution to research by physiotherapist in India due to extra work load, lack of time and non-availability of funds to physiotherapy field.

Our credibility as a profession is at risk if we are unable to demonstrate that our treatment approaches have a significant beneficial effect to our patients and are cost effective⁵.

Hence it is important to carry out research, implement its findings to patient care, improve our standard of care, have a scientific base to our treatment method, and improve our profession's worth.

AIM

To study participation, perception, attitudes and barriers in physiotherapist towards research.

OBJECTIVES

- To find participation of physiotherapist towards research

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- To find perception of physiotherapist towards research
- To find attitude of physiotherapist towards research
- To find barriers of physiotherapist towards research

METHODOLOGY

After taking an approval from the ethical committee, a cross sectional study was conducted amongst Physiotherapists. It was a questionnaire based cross sectional survey carried out on working clinical physiotherapists. Purposive Sampling technique was used. Inclusion criteria was participants working in any clinical work setting, Participants who are qualified with a recognized degree and participants willing to take part in the study. Exclusion criteria was participants not working in India, non-responsive participants, Non clinical physiotherapists, physiotherapists absent at the time of data collection, physiotherapy interns and physiotherapists with academic duties. A questionnaire was prepared with items adopted and modified from questionnaire for similar studies conducted around the world and was validated.

PROCEDURE

Participants were selected for the study as per the criteria. They were then explained the need of study and were given the questionnaire either via online forms or were made to fill out printed questionnaires. The non-responders were sent remainder emails after 2 weeks. A total of 1000 questionnaires were distributed out of which 291 Physiotherapists responded (Response rate of 29.1%). The information obtained was documented and utilized for data analysis.

STATISTICAL ANALYSIS

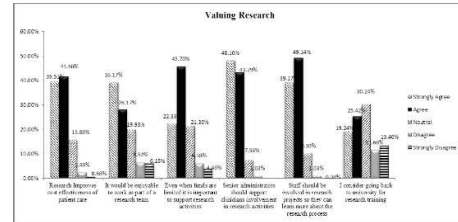
Descriptive Analysis and Microsoft Office Excel version 2007 was used for analysis of data collected. The responses were converted into percentiles, and then grouped accordingly. Data was represented in graphical form.

RESULT

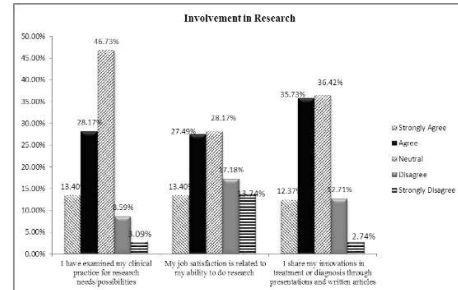
Out of 1000 physiotherapist 291 responded to the survey. Response rate was 29.1%.

Out of 291 physiotherapists 206 were female and 85 were male.

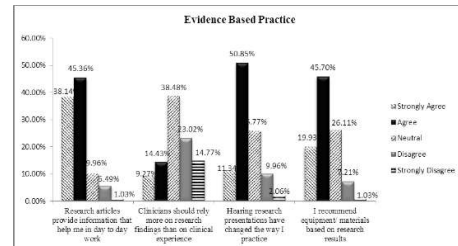
Mean average age was 28.628 years. (Standard Deviation ± 7.48) (Lowest age 22years-highest 67years)



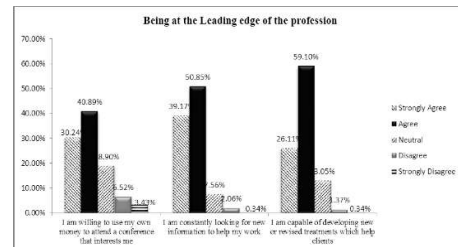
GRAPH 1



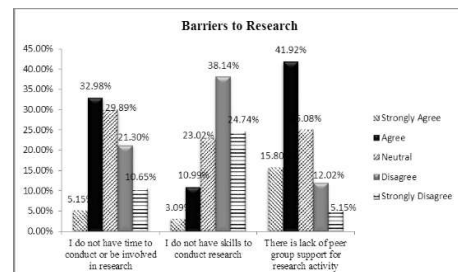
GRAPH 2



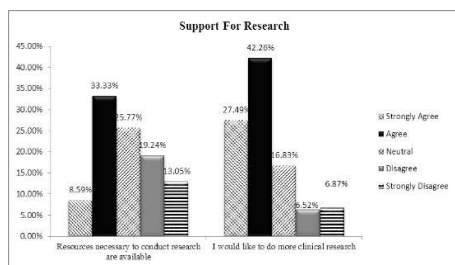
GRAPH 3



GRAPH 4



GRAPH 5



GRAPH 6

DISCUSSION

This study states that the physiotherapist have a positive attitudes towards the application of research findings to their practice and towards reading research article to update their knowledge. They agree to the importance of research for the profession and the benefit derived from research in terms of improving patient care.

Most of the respondents in graph 1 replied positively to “Research improves effectiveness of patient care”. Richard and Barney⁶ in their study said “Research may, indeed, be the only legitimate foundation for standards of care” which supports our finding.

The physiotherapist surveyed agreed that they would enjoy to work as a part of a research team (graph 1). Working together in a team with other health care professionals would increase their research skills and knowledge. Collaboration with other health professionals involved in research and in apprenticeships was listed as desirable methods to gain additional research skills⁷.

Most of the physiotherapists were neutral towards going back to university for conducting research as seen in graph 1. Going back to the University for Higher Studies is not easily achievable in terms of time required to do the course and also its cost. The courses offered and accessibility to these courses is also important. Other studies also supports that therapist are not motivated to actively participate in research^{8,9}. Hamzat et al in a study stated “It could also be an indication of their lack of interest in pursuing higher degrees, especially in situations where academic qualification(s) may not necessarily translate to better condition of services, or promotions”¹⁰.

The statement in graph 1 ‘senior administrators should support clinicians’ involvement in research activity’ was strongly supported. Personal and administrative support is important in an organization to encourage research^{9,11}.

The Physiotherapist in this study responded mostly neutral towards involvement in research very few strongly agree for research

involvement as seen in graph 2. This could be explained by the Eakin¹² model which indicates that the majority of persons in a profession will be consumers of research, with some becoming researchers and only a few research leaders. Research consumers use research to inform their practice but are not involved in research execution. There is also a possibility that lack of research ideas, skills, knowledge, use of statistics, low confidence are limiting the involvement of physiotherapist towards research. A study done in Nigeria by Hamzat et al states that: It is also possible that some physiotherapy clinicians are still of the opinion that research is synonymous with heavy machinery, equipment and laboratory experiments”⁸.

Lawrence concluded that the reason for a lack of physical therapy research was the therapists' reluctance to experiment on patients⁷.

Lack of research involvement may contribute to a limited knowledge base and lack of evidence, which may threaten the profession¹³.

Similar study done in Physiotherapist in Kuwait (2014) reported that there was a common belief among physiotherapist in Kuwait that they had less of a role, as well as a reduced ability, intention and level of engagement, in initiating research¹⁴.

More than half of the respondents were neutral towards I have examined my clinical practice for research needs/ possibilities (graph 2). “An often overlooked element of clinician’s skills in evidence based practice is that clinicians evaluate their own individual practice”^{15,16}.

Possible methods to stimulate research were salary increase, departmental promotions, awards and recognition, academic titles, and increased fund benefits⁷.

The use of evidence to update practice yielded equivocal results as seen in graph 3. This can be because of lack of understanding how to access current literature and use research findings to update practice. Joe Schreiber and Perri Stren quoted in a study “Therapists often have difficulty applying research findings to individual patients and are unclear as to whether high quality evidence exists to support or refute therapeutic interventions”¹⁷. A study done in Sweden¹⁷ concludes developing a more EBP approach requires time to identify and appraise research, reflect on its applicability, and apply it in clinical practice.

Haynes and Haines, analyzing the gap between research and evidence, suggested that the problems in implementing evidence included the size and complexity of the research base, poor access to evidence, organizational barriers, and ineffective education¹⁸.

In graph 3 “Clinicians should rely more on research findings than on clinical experience”

overall received a neutral response while many physiotherapist disagreed. The physiotherapists reported that their colleagues are the first people they turn to when they need more knowledge or a second opinion about a certain treatment method or to obtain support for testing a new approach¹⁷.

Similarly, the literature has shown that physical therapists in England and Australia rank colleagues of the literature as sources of information about patient management¹⁹⁻²¹.

Another possible explanation for the practitioners' disbelief is that their feelings of personal worth are tied to the belief that what they are doing is effective, which may differ from what research suggests²².

The fact that the majority of respondents saw themselves at the Leading edge of the profession (graph 4) might indicate a strong motivation to access the latest information and implement it in practice. This might again be part of valuing research and being consumers of research according to Eakin¹² even though there was limited involvement in research execution.

More than half of the respondents indicated that they used the results in practice but few also strongly disagreed. A possible reason for this might be the way in which research results are reported that made it difficult for clinicians to see a direct link with implementation^{16,17,23}.

They agreed to lack of time being a barrier to research in current study as seen in graph 5. Time has similarly been indicated as a common reason for limited participation in research in the literature^{5,7,8,14,24,25}. Time constraint as a hindrance to research could be an indication of a large clinical workload or a problem with time management on the part of the surveyed physiotherapist. Neither of these reasons could be confirmed from the results of this study.

In other studies time was closely linked with financial reasons for not conducting research because research limits patient treatment time which is quoted in Connolly's words as "inability to give up revenue producing time"².

The physiotherapist were neutral towards there is lack of peer group support for research activity (graph 5). The physiotherapist while applying research findings to practice may face opposition by colleagues, seniors, manager, and other health care professionals or by patient. Joe S et al who conducted a similar study found out that there is inadequate support from colleagues, managers and other health professionals towards research^{17,26}.

Many of them disagreed to not having skills to conduct research which is seen in graph 5. This can be because in India research projects are carried out in the bachelor's degree program as it is included in the University curriculum. The physiotherapy undergraduate's students are

exposed to research and they even send their articles for publications to various journals.

The physiotherapist agreed to availability of resources to conduct research which is evident in graph 6.

This can be due to availability of large population (1.31 billion) in India, with so many cases and different diseases. Hence the availability of participants or patients to conduct research is easily available.

In agreement with previous studies^{5,7,8,14,24,25}, it is advisable that a high level of involvement in research and commitment to the profession are anticipated amongst physical therapists.

Limitations to this study were low response rate. Areas that could have been examined in further detail include: research publication's, journal reading, availability of facilities like library, access to journals, funds.

CONCLUSION

From the findings of this study we conclude that physiotherapist have positive attitude to research but are less motivated to participate in research. It is encouraging that the physiotherapist who replied to this survey value research. They have positive attitude towards evidence based practice but face difficulty in implementing it. The barriers to research were lack of availability of time and lack of peer group support.

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CLINICAL IMPLICATION

To increase participation in research we recommend collaboration between academicians and clinical physiotherapist. This may result in publication of more scientifically proven data which will be useful for evidence based practice.

CONFLICTS OF INTEREST

None

SOURCE OF SUPPORT

None

REFERENCES

1. <https://en.wikipedia.org/wiki/Research>
2. Christiansen CH. Editorial. Toward resolution of a crisis: Research requisites in occupational therapy. *Occup Ther Jnl of Research*. 1981; 1,116-124
3. Seale J & Barnard S. *Therapy Research: process and practicalities*. Oxford: Butterworth Heinemann, 1998.
4. American Physical Therapy Association: Vision 2020: vision sentence for physical therapy and vision statement for physical therapy. 2012. <http://www.apta.org/vision2020>
5. Mothabeng DJ. Research and the Profession in South Africa- Reflection on a pilot study. *South African Journal of of Physiotherapy*. 2003; 59(4):9-14.
6. Richard W Bohannon and Barney F LeVeau. Clinicians' Use of Research Findings. A Review of Literature with Implications for Physical Therapists. *PHYS THER*. 1986; 66:45-50.
7. Ballin AJ, Breslin WM, Wierenga KA and Shepard KF. Research physical therapy: philosophy, barriers to involvement, and use among California physical therapists. *Phys Ther*. 1980; 60:888-895.
8. Mothabeng DJ. Research and the Profession in South Africa- Reflection on a pilot study. *South African Journal of of Physiotherapy*. 2003; 59(4):9-14.
9. Connolly B, Lupinnaci NS, Bush AJ. Changes in attitudes and perceptions about research in physical therapy among professional physical therapist students and new graduates. *Phys Ther*. 2001;81:1127-1134
10. Hamzat TK and Amusat NT. Belief and participation of clinical physiotherapists in research. *The South African Journal of Physiotherapy*. 2002; 58(2):32-34.
11. Ilott, I. The research assessment exercise: a personal SWOT analysis. *Br J Occup Ther*. 1997; 60(4): 167-168.
12. Eakin P. Research: Why we need a strategy. *Br J Occup Ther*. 1997; 60: 469.
13. Taylor E & Mitchell M. Research attitudes and activities of occupational clinicians. *Am J Occup Ther*. 1990; 44(4): 350-355.
14. Sameera H. A, Hesham N. A, Naser M. A, Maqdad M. T, Habib A and Talal A. A. Research amongst Physical Therapist in the state of Kuwait. Participation, Perception, Attitude and Barriers. *Med Princ Pract*. 2013;22:561-566
15. Sumison T. Client Centered implications of evidence based practice. *Physiotherapy*. 1997;83(7):373-374
16. Joe Schreiber, Perri Stern. A review of the literature on evidence- based practice in Physical Therapy. *The Internet J of Allied Health Sciences and Practice* 2005; 3(4).
17. Petra Dannapfel, Anneli Peolsson and Per Nilsen. What supports physiotherapists' use of research in clinical practice? A qualitative study in Sweden. *Implementation Science*. 2013, 8:31 <http://www.implementationscience.com/content/8/1/31>
18. Diane U Jette, Kimberly Bacon, and Cheryl Batty Melissa Carlson, Amanda Ferland, Richard D Hemingway, et al. Evidence-Based Practice: Beliefs, Attitudes, Knowledge, and Behaviors of Physical Therapists. *PHYS THER*. 2003; 83:786-805
19. Turner PA, Whitfield TWA. Physiotherapists' use of evidence-based practice: a cross-national study. *Physiotherapy Research International*. 1997; 2:17-29.
20. Carr JH, Mungovan SF, Shepard RB, et al. Physiotherapy in stroke rehabilitation: bases for Australian physiotherapists' choice of treatment. *Physiotherapy Theory and Practice*. 1994;10:201-209
21. Bohannon RW. Information accessing behavior of physical therapists. *Physiotherapy Theory and Practice*. 1990; 6:215-225.
22. Halpert HP: Communications as a basic tool in promoting utilization of research findings. *Community Ment Health J*. 1966; 2:231-236.
23. Retsas, A. Barriers to using research evidence in nursing practice. *Jnl Adv Nurs*. 2000; March 31(3):599-606.
24. Kamwendo K. What do Swedish physiotherapists feel about research? A survey of perceptions, attitudes, intentions and engagement. *Physiother Res Int* .2002; 7:23-34.
25. Gorgon EJ, Barrozo HG, Mariano LG, Rivera EF. Research evidence uptake in a developing country: a survey of attitudes, education and self-efficacy, engagement, and barriers among physical therapists in the Philippines. *Journal of Evaluation in Clinical Practice*. October 2013;19 (5): 782-790,
26. Petra Dannapfel, Anneli Peolsson, Per Nilsen. A Qualitative Study of Individual and Organizational Learning through Physiotherapists' Participation in a Research Project. *International Journal of Clinical Medicine*. 2014; 5: 514-524. <http://www.scirp.org/journal/ijcm>