Evidence-based Practice: A Practice without Implementation? Current Insights in Rural Areas

Received: 21 October 2022, Revised: 23 November 2022, Accepted: 27 December 2022

Abha Khisty^{1*}, Roopa Desai², Divya Sisodiya³, Darshana Sonune⁴, Aishwarya Sonawane⁵, Tushar Palekar⁶

¹Assistant Professor, Department of Physiotherapy, Dr. D. Y. Patil College Of Physiotherapy, Dr. D. Y. Patil Vidyapeeth, Sant-Tukaram Nagar, Pimpri, Pune-18, Maharashtra, India.

²Professor, Department of Physiotherapy, Dr. D. Y. Patil College Of Physiotherapy, Dr. D. Y. Patil Vidyapeeth, Sant-Tukaram Nagar, Pimpri, Pune-18, Maharashtra, India.

³Clinical physiotherapist, Krupanidhi College of Physiotherapy, Bangalore

⁴Resident, Department of Physiotherapy, Dr. D. Y. Patil College Of Physiotherapy, Dr. D. Y. Patil Vidyapeeth, Sant-Tukaram Nagar, Pimpri, Pune-18, Maharashtra, India.

⁵Clinical physiotherapist, Paralysis Center, Nashik.

⁶Principal, Dr. D. Y. Patil College Of Physiotherapy, Dr. D. Y. Patil Vidyapeeth, Sant-Tukaram Nagar, Pimpri, Pune-18, Maharashtra, India.

Keywords

Clinical application, Rehabilitation, Exercises

Abstract:

Introduction: Evidence-based practice is a combination of evidence and its clinical application. Decision-making on the basis of evidence has been a challenge for therapists. In therefore, there is crucial to assess the inculcation of recent trends, techniques, and methods into clinical practice it is essential to determine knowledge and perception of evidence-based practice in physiotherapists working in rural settings.

Aim: This study aims to identify the barriers and setbacks perceived by physiotherapists, hence by further promoting and enhancing patient care quality by incorporating recent evidence into their practices. The study also focuses on improving clinical decision making thereby improving the quality of care.

Materials and Methods: A multicentric study was conducted including 15 clinical setups in rural areas, 200 physiotherapists (Average experience of 5 years, mean age:37.6 years, both genders) were approached and instructed to fill out a self-explanatory Likert-type questionnaire. It consisted of three domains, knowledge, attitude, and perception of evidence-based practice and its implementation. The content validity of the questionnaire was obtained. Questions focusing on barriers, challenges, and difficulties faced by rural therapists in incorporating evidence in their practice were addressed.

Results: In the knowledge domain,62% of therapists were aware that evidence-based practice improves patient care however, only 27% of therapists know the procedure of critical appraisal of research findings. Besides only 12% knew that it enhances the ability of clinical decision-making. This poor knowledge about evidence-based practice is also reflected in the attitude domain,10% of therapists felt that evidence-based practice is only for academic purposes, and of 20% felt that evidence has no reflection upon the health outcomes of patients. In the perception domain, 20% of therapist-patient were implementing evidence in their day-to-day practice whereas, 10% of therapists inferred that evidence is not useful for clinical decision-making.

Conclusion: This study concludes physiotherapists in rural clinical setups are fairly aware of evidence-based practice however, they are not implementing it in clinical decision-making, and as a prognostic indicator possible reason is a lack of research environment and research infrastructure. This study recommends there can be interview-based questions to understand the barriers in depth.

1. Introduction

Evidence-based practice is a combination of recent advances in the field and its application in regular practice. It is essential to evaluate the existing literature and new concepts and judge their applicability^{1,2}. Physiotherapy is a method to restore and maintain a patient's physical ability. It is important that current trends and the newest methods are implemented in clinical practice so as to have a better impact on patient's physical capability, health outcomes, and quality of life³

There is progressing count in randomized control trails (RCT) and Meta-analysis in the field of physiotherapy^{4,5}. This is creating a strong background for evidence and its implementation. Previous studies confirm that utility of evidences is based on accessibility of most pertinent evidence, containing patients as their study sample and good knowledge about research methods and its implementation⁶.

Clinical application of recent research is a crucial part of academic course of physiotherapy. The procedure of its application includes understanding the clinical questions, critically evaluation and inculcating these research findings into clinical practice⁷. Despite of many positive aspects of evidence-based practice its use in actual management of patients is fairly limited. Besides, research findings are poorly utilized for clinical decision making. Therefore, to understand barriers in implementing the evidences into clinical practice is essential⁸.

Clinicalphysiotherapists implement acquired knowledge during their academic sessions. Coinciding with existing known facts and new research findings would help aid the prognostic indications in patients⁹. It is necessary to identify barriers in its use and address those barriers so as improve patient's health outcome. Lack of research environment and infrastructure in rural clinical setups are established barriers of evidence-based practice however, more in depth understanding is a current need^{10,11}.

2. Methodology

This study was conducted on 200 clinical physiotherapists in 15 rural clinical setups. Their average experience was 5 years with a mean age of 37.6 years. They were instructed to fill a questionnaire which was self-created. The questions were made addressing the barriers in rural areas for evidence-based practice. Content and face validity was done by senior experts in the field of physiotherapy. The questionnaire had 3 domains; knowledge domain had 5 questions, attitude domain had 6 question and practice domain had 5 questions. Practice domain were coded

separately under 4 points. Each question was translated, and reverse translated in vernacular language. The responses were coded for statistical analysis. Physiotherapists participated in the study were explained the purpose of this survey, and the collected information was anonymous and confidential and written informed consent was obtained.

3. Result

Data were analysed using the SPSS software. The responses were coded, frequency distribution was made. The actual score was converted to percentages.

Physiotherapists (Average experience of 5 years, Mean age:37.6 years, both genders) were approached and instructed to fill out a self-explanatory Likert-type questionnaire. Table no 1 shows the percentage of responses for the questions are under knowledge domain.67% therapists know that using evidences guides understand recent trends,62% knew that its implementation will aid in patient care however, only 27% understand that its helpful in decision making in clinical setups

Table no 2 shows the attitude towards evidence-based practice and its understanding the various perspectives.20% therapists have a confidence in application of evidences into actual clinical practice, Besides 10% have a belief that its used only as academic purpose. Table no 3 mentions the practice domain, in which 17% therapist refers published papers to address their clinical queries,17.5% understand the importance of evaluating the research paper and findings before applying into actual practice.

4. Discussion

Clinical physiotherapists in rural areas were approached for this study in order to identify the barriers in implementation of evidences and develop the skills of a professional health practitioner². Fatimah Hegazy et.al 2021 conducted a study on clinical therapists working in Dubai to explore the approach, perception, cognizance and understanding towards Evidence-based practice. They concluded there is high incidence about inculcating evidences into their clinical practice contrast, the current study included therapist working in rural areas. To best of our knowledge, there is a lack of research environment and infrastructure along the research resources, therefore its crucial to identify the barriers experienced by clinical therapists in rural areas.4 In our study despite of having good knowledge about the evidences its utilization into clinical practice is fairly limited. The barriers identified were lack of research methodology knowledge and

skills, time, support and resources which indicate that there is a opportunity and need to improve the adoption of evidence-based practice professionals working in rural setups⁶. During the evaluation, few questions were addressed regarding the methos of rehabilitation used by therapists in rural areas, it was found that the time taken for rehabilitation was fairly high with poor and incomplete recovery. This is an alarming sign that awareness and knowledge about application of evidences is essential part of health education in rural settings. During the interview it was also visible that therapist was less confident to apply new skills based on research findings. Deepali Rajpal et al conducted a study, where they identified the problems faced by therapists in rural areas. They found that many of the therapist have traditional approach towards management methods also they are inflexible in their approaches

While understanding about the attitude domain most of the physiotherapists were having a fair attitude towards evidence-based practice, however most of the therapists conferred that it is an unknown term for that⁷. The possible reasons for this low score in attitude domain includes lack of formal teaching about evidence-based practice in their curriculum and deprived skills of implementation. about 26.5% of therapists agreed that evidence based practice is necessary in clinical practice as they believe that evidenced based implementation helps in clinical decision making and promotes health care outcome. However, only 14.5% therapists strongly feel confident in managing, taking clinical decisions for patients. This implies that there is a lack of understanding about search engines, mesh terms and study protocols. Therefore, it is essential that therapists must be enlightened about reading relevant articles on regular basis so as to update with knowledge and advanced health care trends.

khisty ,seemasaini conducted an observational study on awareness about neurodevelopmental disorders in pregnant women(2022) .This study reported that the knowledge, attitude and perception questionnaire is most feasible way to identify the barriers of a problem¹¹. The current study also confirms that physiotherapy students are made aware about the procedure of evidence based practice. However, because of time pressure, large number of patients or insufficient knowledge and skills to access the online databases its implementation is still poorly practice. Limitations of this study are the syllabus and the curriculum was not taken into account before evaluating their understanding, this might alter the responses. Our study recommends that in future phenomenological research using open ended questions in the form of interview which will give understanding of barriers in depth.

5. Conclusion

The study findings reflect upon although there is a good awareness about evidence-based practice. However, basis of its utilization, confidence about implementation is weak is rural area. There are identified barriers for this which includes lack of research environment and infrastructure, basic knowledge regarding the research tools. This study also suggests that there is need of creating the awareness of use of evidence so that it will improve patient health outcome and reduce recovery time.

References

- [1] Alshehri MA, Alalawi A, Alhasan H, Stokes E. Physiotherapists' behavior, attitudes, awareness, knowledge and barriers in relation to evidence-based practice implementation in Saudi Arabia: a cross-sectional study. International journal of evidence-based healthcare. 2017 Sep;15(3):127.
- [2] Barghouti F, Halaseh L, Said T, Mousa AH, Dabdoub A. Evidence-based medicine among Jordanian family physicians: awareness, attitude, and knowledge. Canadian Family Physician. 2009 Jul 1;55(7):e6-13.
- [3] Saunders H, Gallagher- Ford L, Kvist T, Vehviläinen- Julkunen K. Practicing healthcare professionals' evidence- based practice competencies: An overview of systematic reviews. Worldviews on Evidence-Based Nursing. 2019 Jun;16(3):176-85.
- [4] Perraton L, Machotka Z, Grimmer K, et al. Embedding evidence-based practice education into a post-graduate physiotherapy program: eight years of pre-post course evaluations. Physiother Res Int 2016.
- [5] Piza F, Kesselheim JC, Perzhinsky J, Drowos J, Gillis R, Moscovici K, Danciu TE, Kosowska A, Gooding H. Awareness and usage of evidence-based learning strategies among health professions students and faculty. Medical teacher. 2019 Dec 2;41(12):1411-8.
- [6] McEvoy MP, Lewis LK, Luker J. Changes in physiotherapy students' knowledge and perceptions of EBP from first year to graduation: a mixed methods study. BMC Med Educ. 2018 May 11;18(1).
- [7] Wilson A, Howitt S, Holloway A, Williams AM, Higgins D. Factors affecting paramedicine students' learning about evidence-based practice: a phenomenographic study. BMC Med Educ. 2021 Jan 12;21(1)
- [8] Ateef M. Evidence-based learning and practice in physical therapy: A need for novice physical therapists. Saudi J Sports Med 2015;15:106-7
- [9] Silva TM, Costa L, Costa LO. Evidence-Based Practice: a survey regarding behaviour,

- knowledge, skills, resources, opinions and perceived barriers of Brazilian physical therapists from São Paulo state. Brazilian journal of physical therapy. 2015 Jul;19:294-303.
- [10] AlKetbi H, Hegazy F, Alnaqbi A, Shousha T (2021) Evidence-based practice by physiotherapists in UAE: Investigating behaviour, attitudes, awareness, knowledge and barriers.
- [11] Abha Khisty, Seema Saini, Neha Chaudhary, Sayali Dalvi, Toral Dave, Deborah Baretto, "Knowledge, Attitude and Perception about Neurodevelopmental Disorder among Pregnant Women: A Cross-sectional study", Journal of clinical and diagnostic research, 2022.