

Database Recognition/Journal Indexing Services for Physical Therapist

Aksh Chahal¹, Sunita Sharma², Parveen Kumar², Nitesh Malhotra³,
Pooja Chaudhuri⁴, Harbir Kaur Rao⁵, Narinder Kaur Multani⁶

¹Professor, MM Institute of Physiotherapy and Rehabilitation, ²Assistant Professor, MM Institute of Physiotherapy and Rehabilitation, ³Assistant Professor, Amity Institute of Physiotherapy, Amity University, ⁴Associate Professor, USTM University, Meghalaya, ⁵Professor, Department of General Medicine, ⁶Professor, Department of Physiotherapy, Punjabi University, Patiala, Maharishi Markandeshwar (Deemed to be University) Ambala, Haryana, India

Abstract

A “database” is a platform of information recruited in a planned and systematic pattern, configured to a program called as “Database Management System” which interacts with end users, applications and database itself. In other words, database captures and analyzes data, making it accessible electronically via desktop, laptop, tablet or mobile phone etc for serving transformation purpose of past and current acquaintance and advancements along with synthesis of information to develop latest methodologies in advancements. Physical Therapy is a branch of health science which comprise of assessment, rehabilitation through exercise and electrotherapy, manipulation, mobilization, research focused and future advancements through evidence based practice⁷ and lifestyle modifications to treat conditions related to Orthopedics, Sports, Neurology, Pediatric, Cardio-thoracic, Obstetrics and Gynecology, Community Based and Hand Rehabilitation, Biomechanics and hence improve the overall quality of life. As the author has mentioned in the beginning regarding various database available for healthcare professionally, in the current article the author intends to focus on database for publications from perspective of a Physical therapist/Physiotherapist.

Keywords: Physical therapist, Database, Publication, Peer-review, Rehabilitation, Medicine.

Introduction

A “database” is a platform of information recruited in a planned and systematic pattern, configured to a program called as “Database Management System” which interacts with end users, applications and database itself. In other words, database captures and analyzes data, making it accessible electronically via desktop, laptop, tablet or mobile phone etc for serving

transformation purpose of past and current acquaintance and advancements along with synthesis of information to develop latest methodologies in advancements. In today’s world sufficient database are available for healthcare professionals specializing in varied streams of Medicine, Epidemiology, Clinical & Para-clinical and Interdisciplinary Sciences etc. Databases are classified according to their nature of interest, intent and specifications. Physical Therapy is a branch of health science which comprise of assessment, rehabilitation^{1,2} through exercise and electrotherapy^{3,4}, manipulation⁵, mobilization⁶, research focused and future advancements through evidence based practice⁷ and lifestyle modifications⁸ to treat conditions related to Orthopedics⁹, Sports, Neurology, Pediatric, Cardio-thoracic¹⁰, Obstetrics and Gynecology^{11,12}, Community Based and Hand Rehabilitation, Biomechanics¹³ and

Corresponding Author:

Aksh Chahal

Professor, MM Institute of Physiotherapy and Rehabilitation

e-mail: drakshchahal@gmail.com

hence improve the overall quality of life. Scholar and researchers working indifferent settings on completion, intend to publish their work as Original articles (Randomized controlled trials, Epidemiological studies and Descriptive observational), Knowledge, Attitude and Practice (KAP) studies, Innovations, Audits, Systematic and Meta analysis, Short and Special communications, Research reports, Educational research, Healthcare analysis, Survey reports, View point, Psychological impacts, Diagnostic studies, View point, Case reports and series, Letter to the editor and Editorial etc. As the author has mentioned in the beginning regarding various database available for healthcare professionally, in the current article the author intends to focus on database for publications from perspective of a Physical therapist/ Physiotherapist.

The databases are as followed:

1. PubMed/MEDLINE
2. PEDro
3. Scopus
4. Web of Science
5. Google Scholar
6. SPORTDiscus
7. Eric on EBSCOhost
8. CINAHL
9. Cochrane Library
10. LILACUS
11. Trip
12. REHABDATA NARIC
13. Pro Quest

1. PubMed/MEDLINE: PubMed is a free¹⁴ primer source of electronic database service rendered through United States National Library of Medicine's (NLM) which consists of journals focusing in domains of Physical therapy¹⁵, Medicine, Rehabilitation sciences, Nursing, Dentistry and public Health. It provides accessibility to nearly 30 million citations from a wide period expanding from 1951 to till date. It provides access in the form of abstracts/articles/both¹⁶. It consists of both, paid and free journals. PubMed is constantly involved in updating its database on daily basis by keeping a check on all journals listed under them

via certain parameters set for consideration^{17,18}. Articles undergo the plagiarism policy as a general rule before being considered for publication. This constant monitoring in return helps to maintain the quality of standard of the journals with a peer review policy in action before considering articles to be published hence maintaining the overall quality of the journal.

- 2. PEDro (Physiotherapy Evidence Database):** It is a database focusing nearly on Physical therapy/ Physiotherapy with 44,000 published articles under its umbrella falling in the category of Randomised trials¹² for evaluating Physical therapy interventions, Clinical Practice, Guidelines in Physical therapy and Systematic reviews¹⁹. Since its focal point is on Evidence-Based-Physiotherapy, it is a choice for scholars and researchers from the Physical therapy and Rehabilitation field to publish their respective articles in journals slated with PEDro. For the benefit of mankind and spreading health to all this database provides links to full text.
- 3. Scopus:** It is Elsevier's database launched in 2004 consisting of journals which follow a peer-review strategy for article publication. The peer-review strategy analyses research papers regarding their originality, methodology and application of research²⁰. Both abstracts and full-text articles are provided by Scopus to researchers (the autonomy with the journal). Scopus consists of nearly 22,794 active and 13,583 inactive titles from roughly 11,670 publishers' with 49 million records, out of which 78 percent with abstracts and also a collection of 5.3 million conference papers²¹.
- 4. Web of Science (Wo S):** This e-database is provided by Clarivate Analytics. It is the world's leading scientific platform and citation search consisting of nearly 8,700 high impact journals from Science, Social science, Arts and Humanities where a significant number are linked to full text articles²². For a clear and efficient functioning, Wo S categorized its content/publications as either in Journals, Books and Conference Proceedings²³. The core collection of journals consist of:
 - a. Science Citation Index Expanded (SCIE)
 - b. Social Science Citation Index (SSCI)
 - c. Arts & Humanities Citation Index (AHCI)
 - d. Emerging Sources Citation Index (ESCI)

Along with the core collection, Wo S also has Book Citation Index (BKCI) which consist of books and Conference Proceedings Citation Index (CPCI) which deals with conference proceedings of high repute. Any journal listed with Wo S is listed in either if the above core collection, wherein Science Citation Index (SCI) being the cream of all, is been followed by SSCI, AHCI and ESCI respectively. Physical therapy scholars can select any of the core collection depending on the nature, population and type of their study. Journals with high quality publications and citations migrate from SCIE to SCI. In addition to the above collection, Wo S also contains Biological Abstracts, Biosis Previews, Biosis Reviews Reports & Meetings and Zoological records under which journals with their respective theme are attached accordingly¹⁸.

5. **Google Scholar:** It is free (only an internet connection is required), most widely and easily approachable database for Physical and Rehabilitation therapist, scholars and scientists. It can be searched for content in relation with Original articles, Systematic reviews, Meta-analysis, Case report and series, Short and special communication, Editorial, Letter to the editor, Thesis, Dissertations, Abstracts and books. Google scholar maintains associations with academic publishers, professional societies, research governmental and private organizations and universities. This multidimensional feature of Google scholar makes it a choice for Physical Therapy researchers, scientist and students. It provides access to abstracts and full text articles²⁴.
6. **SPORT Discus:** This database consist of around 300,000 content in the form of abstracts and full text articles on Original, Review, Systematic, Meta-analysis, Special and short communication, Case report and series etc on topics and issues in context to Physical Therapy, Exercise Science, Sports Medicine, Fitness, Sports related discipline administration, Sports law, Legislation, Sports with disabled, School sport, Drugs, Doping, Biomechanics, Nutrition and Occupational health. It covers data back from 1892 to till date. It's another peculiarity is that it provides reference to articles of around 60 different languages¹².
7. **Eric on EBSCO host:** It is the world's largest database in relation to education wherein education being mainly focused on all health topic to serve for betterment of mankind. It comprises nearly 20,000 thesis and dissertations along with incorporation of around of around 680 full text journals. It is published by the United States Department of Education with all journals enlisted with this database are graduated regularly with high impact factor, enormous citations and supreme repute in nature. Articles related to investigation, recommendation and implementation of new concepts in Physical therapy related to conventional and teaching and curriculum achievements and setbacks should be prioritized to be published in journals integrated with this database.
8. **CINAHL (Cumulative Index of Nursing and Allied Health Literature):** This database covers literature related to Randomised trials of Physical therapy interventions. Articles related to prevalence, Incidence, Epidemiology, treatment interventional studies performed in small or large sized population can be published in journals under the net of this database. It consists of articles from 1961 to till date.
9. **Cochrane Library:** It is designated with highest standard in quantity and quality towards promotion of Evidence Based Healthcare. It concentrates on systematic reviews of Randomised Controlled Trials²⁵ wherein studies dealing with healthcare interventions and meta-analysis of supreme quality on human health²⁶. Articles published in journals associated with Cochrane Library are weighted to the extent that these independent evidences are used for making healthcare decision making. While it is a one click free access in low and middle income countries, it is a chargeable for articles for researchers from any domain belonging to high income group countries. Cochrane Systematic Reviews recognize impact of therapeutic interventions in disease prevention, treatment and rehabilitation strategies²⁷.
10. **LILACS (Latino Americana em Ciencias da Saude):** This database includes more than 600 journals from the medical fraternity publishing from Latin American and Caribbean countries²⁸. Journals associated with this database pritorize systematic reviews and Clinical practice²⁹. Along with English it is also interface in Spanish and Portuguese. Journals indexed with LILACS are not indexed in any other database. Mostly articles can be downloaded for free.
11. **Trip (Turning Research Into Practice):** This database started in late nineties with the aim to

simplify the search method for high quality, clinically relevant health aspects and evidence based information in the form of systematic review, instant and future Clinical guidelines, calculators and answers along with evidence based proposals. It works on a 4s approach to identify the most relevant evidence of studies, synthesis, synopsis and system³⁰. It is greatly used by health care professionals mainly General Physicians as Clinicians, Clinical Physical therapist and students willing to search articles on evidence based practice for present and future enhancement and deployment of new treatment strategies³¹.

12. REHABDATA (NARIC): This database comprise of abstracts related with topics of physical, mental and psychiatric impairments and disabilities and rehabilitation method. It presents with material from 1956 to till date.

13. ProQuest: This database consists of journals dealing with fields forming Allied Health domains. These comprise of full text journals, e-books, thesis, dissertations etc. This database can also be used for searching articles on been worked on by researchers and selection of journals for publishing their articles in context with the journal focusing on.

Conclusion

Physical therapist working in Out Patient Department/Universities/Public and Private Organizations etc should wisely select respective database comprising of multidimensional journals to choose from. All therapists should focus on publishing their articles in journals of high repute for both, national and international recognition and serve the humanity by imparting high quality healthcare.

Conflict of Interest: Nil

Source of Funding: Nil

Ethical Clearance: Not applicable

References

1. Beattie PF, Pinto MB, Nelson MK, Nelson R. Patient satisfaction with outpatient physical therapy: instrument validation. *Physical Therapy*. 2002; 82(6):557-565.
2. Hall AM, Ferreira PH, Maher CG, Latimer J, Ferreira ML. The influence of the Therapist-Patient Relationship on Treatment Outcome in Physical Rehabilitation: A Systematic Review. *Physical Therapy*. 2010; 90(8):1099-1110.
3. Bunce SM, Moore AP, Hough AD. M-mode Ultrasound: a reliable measure of transverses abdominis thickness? *Clin Biochem*. 2002;17(4):315-7.
4. Henry SM, Westervelt KC. The use of real-time ultrasound feedback in teaching abdominal hollowing exercises to healthy subjects. *Orthop Sports Phys Ther*. 2005; 35(6):338-45.
5. Rice AD, Patterson K, Wakefield LB, Reed ED, Breder KP, Wum BF, King CR, Wum LJ. Ten-year Retrospective study on the efficacy of a Manual Physical Therapy to Treat Female Infertility. *Altem Ther Health Med*. 2015; 21(3):32-40.
6. Kramp ME. Combined manual therapy techniques for the treatment of women with infertility: a case series. *J Am Osteopath Assoc*. 2012; 112(10):680-84.
7. Wallwork TL, Hides JA, Stanton WR. Intrarater and interrater reliability of assessment of lumbar multifidus muscle thickness using rehabilitative ultrasound imaging. *J Orthop Sports Phys Ther*. 2007. 37(10):608-12
8. Sahu KS, Bharti B. Role of Physiotherapy in Public Health Domain: India Perspective. *Indian Journal of Physiotherapy & Occupational therapy*. 2014; 8(4):134-7.
9. Wong JJ, Shearer HM, Mior S, Jacobs's C et al. Are manual therapies, passive physical modalities, acupuncture effective for the management of patients with whiplash-associated disorders or neck pain and associated disorders? an update of the bone and joint decade task force on neck pain and its associated disorders by the optima collaboration. *Spine Journal*. 2015; 16(12):1598-1630.
10. Bruurs MJ, Giessen VD, Lianne J, Heleen M. The effectiveness of Physiotherapy in patients with Asthma: A systematic review of the literature. *Respiratory Medicine*. 2013; 107(4):483-94.
11. Wum BF, Wum LG, King CR, Heuer MA, Roscow AS, Homberger K, Scharf Es. Treating fallopian tube occlusion with a manual pelvic physical therapy. *Altem Ther Health Med*. 2008; 14(1):18-23.
12. Wum BJ, Wum LG, King CR, Heuer MA, Roscow AS, Scharf ES, Shuster JJ. Treating female infertility and improving IVF pregnancy rates with

12. a manual physical therapy technique. *Med Gen Med.* 2004;6(2):51.
13. Moseley L. Combined physiotherapy and education is efficacious for chronic low back pain. *Australian Journal of Physiotherapy.* 2002; 48(4):297-303.
14. Lindberg DA. Internet access to the National Library of Medicine. *Effective Clinical Practice.* 2000;3(5):256-60.
15. Michaleff ZA, Costa LO, Moseley AM, Maher CG, Elkins MR, Herbert RD, Sherrington C. CENTRAL, PEDro, PubMed and EMBASE are the most comprehensive databases indexing randomized controlled trials of physical therapy interventions. *Phys Ther.* 2011;91(2):190-7.
16. Chang AA, Heskett KM, Davidson TM. Searching the literature using medical subject headings versus text word with PubMed. *The Laryngoscope.* 2006;116(2): 336-40.
17. Fatehi F, Gray LC, Wootton R. How to improve you PubMed/MEDLINE searches: 3. Advanced searching, Me SH and My NCBI. *Journal of Telemedicine and Telecare.* 2014; 20(2):102-12.
18. Falagas ME, Pitsouni EI, Malietzis GA, Pappas G. Comparison of PubMed, Scopus, Web of Science and Google Scholar: Strengths and weaknesses. *The FASEB Journal.*2007; 22(2):338-42.
19. Sherrington C, Herbert RD, Maher CG, Moseley AM. PEDro. A database of randomized trials and systematic reviews in physiotherapy. *Man Ther.* 2000; 5(4):223-6.
20. Burnham JF. Scopus database: A review. *Biomedical Digital Libraries.* 2006; 3:1.
21. Kulkarni AV, Aziz B, Shams I, Busse JW. Comparison of citations in Web of Science, Scopus and Google Scholar for Articles Published in General Medical Journals. *JAMA.* 20009; 30210:1092-6.
22. Li K, Rollins J, Yan E. Web of Science use in published research and preview papers 1997-2017:a selective, dynamic, cross-domain, content-based analysis. *Scientometrics.* 2018; 115(1):1-20.
23. Jasco P. Metadata mega mess in Goggle Scholar. *Online information Review.* 2010. 34:175-91.
24. Serenko A, Dumay J. Citation classics published in knowledge management journals. Part II: Studying research trends and discovering the Google Scholar Effect. *Journal of Knowledge Management.* 2015; 19(6):1335-55.
25. Dickersin K, Manheimer E, Wieland S, Robinson KA, Lefebvre C, Mc Donald S. Development of the Cochrane Collaboration's Central Register of Controlled Clinical Trials. *Eval Health Prof.* 2002; 25(1):38-64.
26. Grimes DA, Hou MY, Lopez LM, Nanda K. Do clinical experts rely on Cochrane library? *Obstet Gynecol.* 2008; 111(2):420-2.
27. Kongsted H, Konnerup M. Are more observational studies being included in Cochrane reviews? *BMC Research Notes.* 2012; 5(1):570.
28. Manriquez JJ. A highly sensitive search strategy for clinical trials in Literature Latino Americana e do Caribe em Ciencias da Saude (LILACS) was developed. *J Clin Epidemiol.* 2008; 61(4):407-11.
29. Freitas AE, Herbert RD, Latimer J, Ferreira PH. Searching the LILACS database for Portuguese- and Spanish-language randomized trials in physiotherapy was difficult. *J Clin Epidemiol.* 2005; 583:233-7.
30. Haynes RB. Of studies, synthesis, synopsis and systems: the "4s" evolution of services for finding current best evidence. *Evid Based Med.* 2001; 6: 36-38.
31. Richards D. The Trip Database. *Evidence Based Dentistry.*2008; 9:28-29.