

Quantitative and Qualitative Analysis of Randomized Controlled Trials in Physiotherapy from India

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Abstract : Introduction and Rationale: Increased scope of Physiotherapy (PT) practice also has contributed to research in the field of PT. It is essential to determine the production and quality of the clinical trials from India since, it may reflect the scientific growth of the profession. These trends can be taken as a baseline to measure our performance and also can be used as a guideline for the future trials. Objective: To quantify and analyze qualitatively the RCT's from India from the period 2000-2013' May, and classify data for the information process. Methods: Studies were searched in the Medline database using the key terms "India", "Indian", "Physiotherapy". Clinical trials only with PT authors were included. Trials out of scope of PT practice and on animals were excluded. Retrieved valid articles were analyzed for published year, type of participants, area of study, PEDro score, outcome measure domains of impairment, activity, participation; 'a priori' sample size calculation, region, and explanation of the intervention. Result: 45 valid articles were retrieved from the year 2000-2013' May. The majority of articles were done on symptomatic participants (81%). The frequencies of conditions repeated more were low back pain (n-7) and diabetes (n-4). PEDro score with mode 5 and upper limit of 8 and lower limit 4 was found. 97.2% of studies measure the outcome at the impairment level, 34% in activity level, and 27.8% in participation level. 29.7% of studies did 'a priori' sample size calculation. Correlation of year trend and PEDro score found to be not significant ($p > .05$). Individual PEDro item analysis showed, randomization (100%), concealment (33%) baseline (76%), blinding-subject, therapist, assessor (9.1%, 0%, 10%), follow-up (89%) ITT (15%), statistics between groups (100%), measures of variance (88 %). Conclusion: The trend shows an upward slope in terms of RCTs published from India which is a good indicator. The qualitative analysis showed some gaps in the clinical trial design, which can be expected to be, fulfilled by the future researchers.

Keywords : RCT, PEDro, physical therapy, rehabilitation

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