

Comparison of Efficacy of Telephysiotherapy with Supervised Exercise Programme in Management of Patients Suffering with Grade I and II Osteoarthritis

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Abstract

Aim: The aim of this study was to investigate the effect of a 4-week Telephysiotherapy programme on quality of life of patients with osteoarthritis of the knee using smart phone application medium which is widely available, affordable and relevant telecommunication in India. **Method:** Patients meeting the inclusion criteria were recruited to the study by convenient sampling method and then alternately assigned to the two groups: Group A (Telephysiotherapy) and Group B (Supervised exercise programme). For the first 2 weeks, patients in both groups received conventional physiotherapy treatment 3 sessions/week. After the second week, Group A received standardized exercise programme through mobile application and was notified 3 times a week for additional 4 weeks. Group B received supervised exercise programme 3 times a week at clinical setting (OPD) for additional 4 weeks. No telephonic coaching or monitoring was done for this group. Patients were assessed pre-post intervention for pain (on NPRS), knee range of motion, knee muscle strength and flexibility, balance and proprioception, and physical function (on WOMAC). Standardized exercise programme was planned and delivered to the patients. **Results:** All outcome measures showed significant improvement in both groups ($p < 0.05$). On between group comparisons, there was no significant difference on all outcome measures except balance. On comparing cost effectiveness within group cost expenditure for treatment was lower in Telephysiotherapy group. **Conclusion:** This indicates that the Telephysiotherapy showed comparable improvements on impairments and functional outcome measure (WOMAC), when compared to supervised therapy group in the management of patients with osteoarthritis of the knee. Also, it had an additional benefit on balance scores and was more cost effective than supervised therapy group. Hence, it can be considered as a feasible mode of treatment.

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