

Osteoarthritis of the Knee Treatment

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Course Number and Name

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Assignment Due Date

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Knee osteoarthritis (OE) is a chronic disorder affecting the knee joint and happens when the cartilage breaks down. The treatment is aimed at reducing the pain and swelling, help maintain daily activities, and improve the patient's quality of life (Abdel-aziem et al., 2018). The PEDro scale helps to identify trials that are valid and contain enough statistical information for efficient clinical decision-making. The paper analyzes an article on physiotherapy osteoarthritis treatment of the knee and discusses how it matches with the PEDro scale.

The article is on a study analyzing the effect of physiotherapy rehabilitation program. The study selected sixty participants with differing pain intensities. The participants were put into three groups using a randomization software using clinical records and based on pain intensity. The participants were taken through different activities such as pulsed electromagnetic field, stretching exercises, and strengthening exercises. Various aspects such as pain intensity, knee function, knee range of motion, and isometric quadriceps were evaluated using different indexes (Abdel-aziem et al., 2018). Evaluation was conducted before and after the rehabilitation. The results showed differences in the different aspects under study between the three groups with the conclusion that pain intensity is one of the factors in improvement of knee OA.

One challenge noted in the study is the lack of a follow up on the daily activities of the patients. The physiotherapy treatment procedure would have been more effective if the physiotherapist provided a daily check-list to their patients on the activities they should engage in. Guided strengthening activities are an effective way to reduce pain, swelling, and the stiffness associated with knee osteoarthritis. The therapist should also recommend any other medication such as viscosupplementation that contains hyaluronic acid to provide additional lubrication and cushioning in the knee joint for comfort.

The study matches with the PEDro scale. The first point is the specification of the eligibility criteria. The eligibility criterion was well detailed in a table. For example, participants must have been aged between 45 and 62 years. The third criterion on concealing the allocation is satisfied as the participants were equally allocated to a group using a randomization software that selected the participants' numbers from clinical records. The next criterion is a similar baseline for the groups. This was satisfied as the study required the participants to have moderate knee OA with different pain intensities. The fifth criterion is satisfied as participants were blinded to their allocation groups. The sixth and seventh criteria on blinding of therapists administering the therapy and assessor measuring outcomes are not satisfied. This is because the intensity of pain was evaluated using a visual analogue scale (VAS) and used the results to place patients into groups. The eighth criterion requires one of the key measures to surpass 85 %. This criterion is satisfied as pain which was a key aspect under study changed in all the three groups under study. The ninth criterion is not met as during the study, some participants withdrew and others were lost to follow-up. The tenth criterion is satisfied as the values of pain intensity, which is a key aspect under study, differed between the different pain groups showing consistency. Lastly, the last criterion is satisfied as the study provides measures of variability by using mean and standard deviation as the descriptive statistics.

In conclusion, the study satisfied eight of the eleven criteria of the PEDro scale. The score shows that the study was high quality and that the clinical trial was internally valid and with sufficient information. The clinical study showed that pain is a key factor in the improvement of knee OA, and by decreasing the pain intensity, there is an improvement in knee function. Physiotherapy treatment programs should thus concentrate on the grade of pain in patients.

References

- Abdel-aziem, A. A., Soliman, E. S., Mosaad, D. M., & Draz, A. H. (2018). Effect of a physiotherapy rehabilitation program on knee osteoarthritis in patients with different pain intensities. *Journal of physical therapy science*, 30(2), 307-312.
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