



EFFECTS OF KALTENBORN MOBILIZATION WITH AND WITHOUT KINESIO TAPING IN GRADE 3 KNEE OSTEOARTHRITIS PATIENTS

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ABSTRACT

Background
Knee osteoarthritis is a degenerative health problem that mainly affects elderly individuals, causing pain, stiffness, and disability. There are researches that demonstrate how Kaltenborn Mobilization improves knee joint range of motion and physical function, while Kinesio Taping reduces pain symptoms.

Purpose of Study
To find the effectiveness of Kaltenborn Mobilization with and without Kinesio Taping in terms of pain, stiffness, and physical function in grade 3 knee osteoarthritis patients.

Methodology
The quasi-experimental trial was carried out over two months in Allied Hospital and Physio Care and Rehab Clinic Faisalabad. Fifty-three patients were selected and divided into two groups, with Group A receiving Kaltenborn Mobilization and Kinesio Taping treatment, and Group B receiving Kaltenborn Mobilization only. Numeric Pain Rating and WOMAC scale were used to measure pain, stiffness, and physical function in both groups.

Results
Mean of pain calculated by Numeric Pain Rating scale before treatment of Kaltenborn with Kinesio Taping was higher than after the treatment (Mean= 4.1200). Moreover, mean calculated by Numeric Pain Rating scale before the intervention with Kaltenborn was more than after the treatment (Mean= 6.7200). Mean of pain calculated by WOMAC Osteoarthritis Index scale before treatment of Kaltenborn with Kinesio Taping was higher than after the treatment (Mean= 53.0000). The mean calculated by WOMAC before the intervention with Kaltenborn was more than after the treatment (Mean= 65.5600). Both groups showed significant improvement after treatment, but group A having Kaltenborn Mobilization with Kinesio Taping showed better results.

Conclusion
Conventional physical therapy along with Kaltenborn and Kinesio Taping has significant effects in patients with grade III knee osteoarthritis. Although both groups showed positive results but the experimental group showed better results than control group.

Keywords
Kaltenborn mobilization, kinesio taping, knee, osteoarthritis, numeric pain rating scale, Womac scale.

INTRODUCTION

Knee osteoarthritis is degenerative health problem that occur due to age, defined by repetitive decrease of articular cartilage resulting from pain, impairment, and disability. The Kinesio taping provide physiological effects by improving blood and lymph circulation and by lifting the skin to increases the inter-tissue space. Kinesio tape also manage pain by neuro facilitation and “Gate-control theory” in the body. There are studies present which explain the role of kaltenborn mobilization is helpful for physical function and increasing range of knee joint while Kinesio taping helps in relieving pain symptoms.

OBJECTIVE

The objective of the research was to find the effectiveness of kaltenborn mobilization with and without kinesio taping in terms of pain, stiffness, and physical function in grade 3 knee osteoarthritis patients.

METHODS AND MATERIALS

The quasi-experimental trial was carried out over two months in Allied Hospital and Physio Care and Rehab Clinic Faisalabad. Fifty-three patients were selected and divided into two groups, with Group A receiving Kaltenborn Mobilization and Kinesio Taping treatment, and Group B receiving Kaltenborn Mobilization only. Numeric Pain Rating and WOMAC scale were used to measure pain, stiffness, and physical function in both groups.

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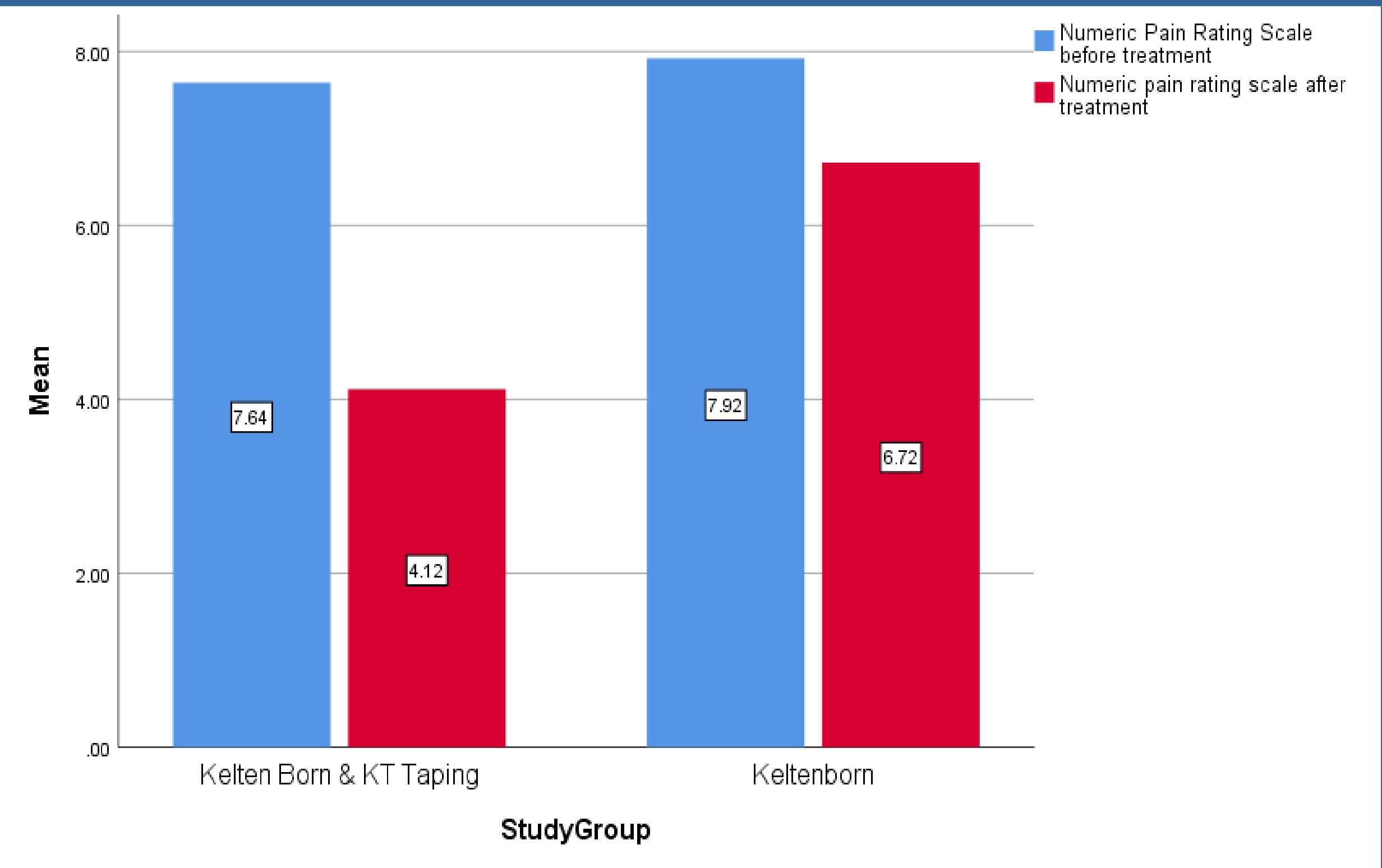


Fig 1. NPRS pre and post results among Study Groups

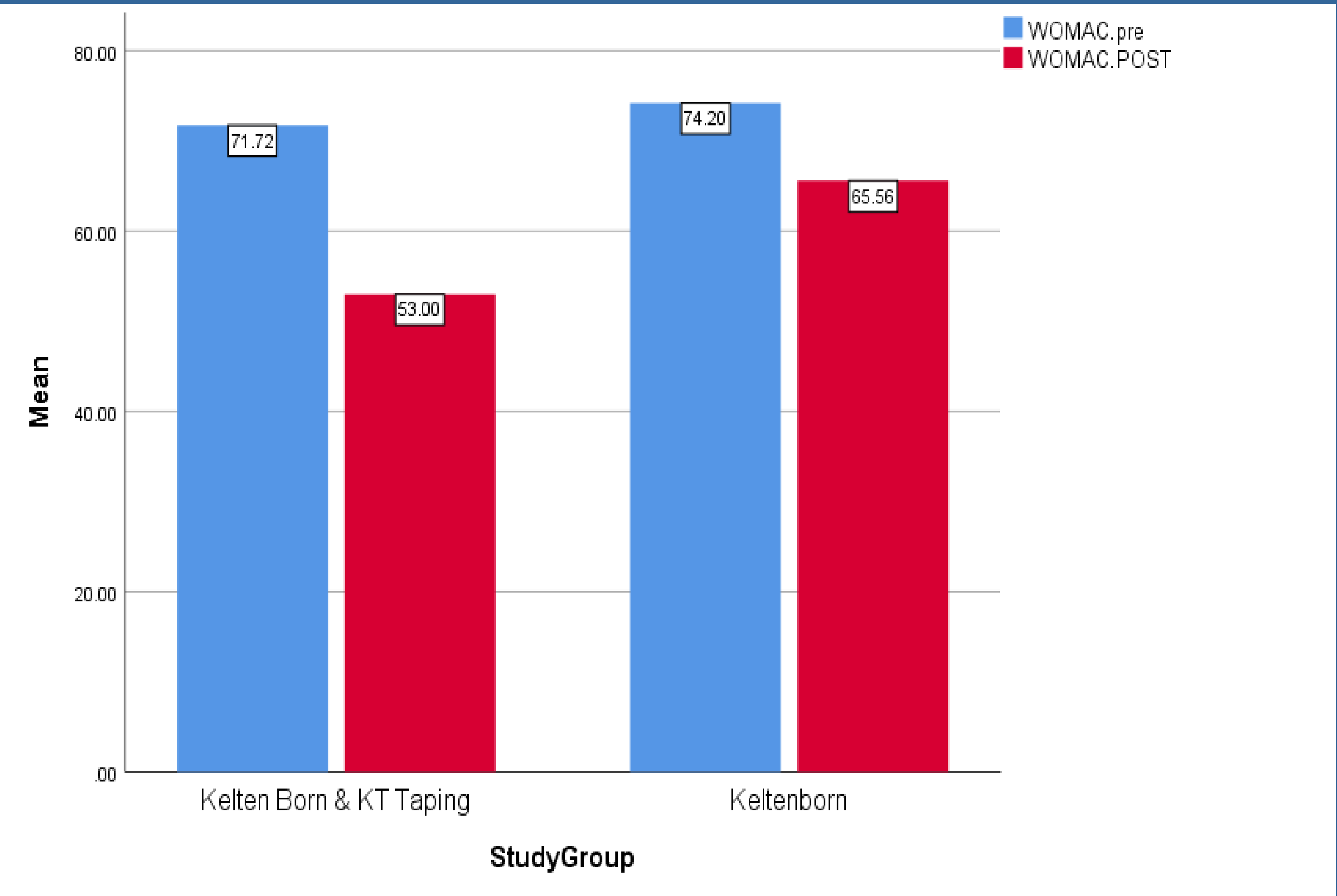


Fig 2. WOMAC Pre and Post Results in Study Groups

CONCLUSIONS

The study concluded that the group A having kinesio taping with kaltenborn mobilization showed more significant improvement than group b with kaltenborn alone treatment. On the basis of results, this treatment technique can provide more beneficial effects along with conventional physiotherapy treatment in participants having osteoarthritis of knee. Both the groups showed better outcomes in management of pain for few extent but group A shows significant more better results in decrease of pain in Numeric pain rating scale and reduction in stiffness and overall better performance of body in daily living activities reported by the patients.

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