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COMPARATIVE EFFECTIVENESS OF *Channa striatus* EXTRACT VERSUS GLUCOSAMINE SULPHATE FOR THE TREATMENT OF PRIMARY KNEE OSTEOARTHRITIS: A RANDOMISED CONTROLLED TRIAL

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ABSTRACT

Channa striatus, an indigenous freshwater fish, has been shown to treat knee osteoarthritis, but no study has been done to compare its effectiveness with other oral therapy. This study aimed to compare the effectiveness of oral Channa striatus extract and glucosamine sulphate in knee osteoarthritis symptoms and physical function. This is a double-blind randomised controlled trial, conducted among 78 patients with primary knee osteoarthritis. Patients were assigned to receive either 500 mg/d of Channa striatus or 1,500 mg/d of glucosamine sulphate for 6 months. The main outcome measures were pain, stiffness and physical function, as assessed by the Western Ontario and Mc Master Osteoarthritis Index (WOMAC) at baseline, 3- and 6-months post-randomisation. Seventy-three patients completed the study (Channa striatus, n = 37; glucosamine sulphate, n = 37). There was no significant between-group difference in the WOMAC index. However, the within-group comparison pointed to a significant improvement in all the WOMAC domains in both groups from baseline to 6 months. The effectiveness of Channa striatus shows no difference from that of glucosamine sulphate in reducing the symptoms of knee osteoarthritis. Channa striatus could be a new alternative treatment for the management of knee osteoarthritis.

***Keywords*:** *Channa striatus*, Glucosamine, Knee osteoarthritis, Randomised controlled trial

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