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Effectiveness of health-led cognitive behavioral-based group therapy on pain, functional disability and psychological outcomes among knee osteoarthritis patients in Malaysia

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Abstract

Background: Psychosocial interventions for patients with osteoarthritis (OA) of the knee to reduce pain and improve physical and psychological functioning are still lacking in Malaysia. Methods: A parallel-group unblinded randomized controlled trial involving 300 patients was conducted in two hospital orthopedics clinics in Malaysia. Patients were randomly assigned to receive cognitive behavioral-based group therapy (n = 150) or no further intervention (n = 150). The primary outcome was the change from baseline in knee pain as determined by the Knee injury and Osteoarthritis Outcome Score (KOOS) at 6 months. The data collected were analyzed by covariate-adjusted mixed design repeated measures analysis of variance. All analyses were performed under the terms of intention-to-treat. Results: At 6 months, mean change from baseline in the KOOS knee pain score was 0.6 points (95% CI -1.73 to 2.94) in the control group and 8.9 points (95% CI 6.62 to 11.23) (denoting less knee pain intensity) in the intervention group (significant treatment effect $p < 0.0001$). Patients treated with such an approach also experienced significant improvement in functional ability when performing activities of daily living and had improved ability to cope with depression, anxiety and pain catastrophizing. Conclusion: The intervention module delivered by healthcare professionals had a sustained effect on knee OA pain and functionality over 6 months, thereby leading to an overall improvement in psychological well-being, thus benefitting most of the Malaysian knee OA patients. © 2020 by the authors. Licensee MDPI, Basel, Switzerland.

Author Keywords

Knee osteoarthritis; Malaysia; Pain; Patient education; Psychological outcomes

Index Keywords

cognition, disability, health status, hospital sector, injury, psychology, quality of life; adult, aged, analgesia, anxiety, Article, avoidance behavior, catastrophizing, clinical effectiveness, cognitive behavioral therapy, controlled study, daily life activity, depression, disability, female, follow up, functional status, group therapy, human, intention to treat analysis, Knee Injury and Osteoarthritis Outcome Score, knee osteoarthritis, knee pain, major clinical study, Malaysia, male, multicenter study, nurse, nursing management, pain assessment, pain intensity, patient compliance, patient education, physical performance, physiotherapist, physiotherapy, psychological well-being, randomized controlled trial, tertiary care center, treatment outcome, visual analog scale, cognition, cognitive behavioral therapy, group therapy, knee osteoarthritis, middle aged, pain, pain measurement, procedures, psychology; Malaysia; Activities of Daily Living, Adult, Aged, Cognition, Cognitive Behavioral Therapy, Female, Humans, Malaysia, Male, Middle Aged, Osteoarthritis, Knee, Pain, Pain Management, Pain Measurement, Psychotherapy, Group, Treatment Outcome

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