

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: There are few studies on the clinical application of ankle flexion and extension exercises combined with psychological intervention in KOA. In this study, the authors aimed to clarify the effect of ankle flexion and extension exercise combined with psychological intervention on psychological and AD in patients with KOA. The authors comparatively analyzed the psychological status, ADL, knee joint function, pain, fatigue, and quality of life of the control group and research group. The results showed that ankle flexion and extension exercises is highly effective in easing negative psychology, enhancing ADL, daily living ability, knee joint function and QoL, and relieving pain and fatigue in KOA patients, which is worthy of clinical promotion. The study design is reasonable, and the results reflects the conclusion as well. I recommend its acceptance after the minor revision. The detailed comments: -a. The abstract needs to be modified, and a structured summary with clear background, purpose, method, results and conclusions of the study is needed. -b. Please add in the Materials and Methods: Was it approved by the Ethics Committee? -c. In the first paragraph of Materials and methods, it is mentioned that: The two patient groups did not differ much in baseline data and had clinical comparability($P>0.05$). This is repeated with the description of the first part of the results Analysis of baseline data of KOA patients in two groups. -d. The results section can be presented in more detail.

Reply: Thank you for your comments. Knee osteoarthritis (KOA) is a joint disease that occurs in middle-aged and elderly women, which predisposes patients to various clinical symptoms such as joint pain, swelling, stiffness, deformity, and dysfunction, negatively affecting patients' daily living ability to varying degrees, bringing psychological distress to patients, and compromising their quality of life. Therefore, psychological intervention is very important for patients. On the other hand, ankle flexion and extension exercises are a kind of exercise method mainly based on ankle plantar flexion, ankle dorsiflexion and other movements to achieve ankle flexion and extension, which has a positive effect on blood circulation and muscle strength increase in lower limbs. Therefore, this study took patients receiving conventional treatment, nursing and psychological intervention as the control group, and those who were additionally treated with ankle flexion and extension exercises as the research group, to conduct a comparative analysis from the aspects of psychological condition, ADL, knee function, pain, fatigue and quality of life. We are pleased that this study has received your approval regarding the reasonableness of the study design and the consistency between the results and conclusions. We have carefully revised the manuscript according to your suggestions in order to achieve the smooth publication of

this paper. The Abstract section has been revised to include the background, purpose, methods, results and conclusions of the study. In the materials and methods section, we have added that this study has been approved by the Ethics Committee. We have also deleted and modified the contents in the first paragraph of Materials and methods section which are repeated with the first part of the results. For the Results section, we have supplemented the relevant content as thoroughly as possible on the basis of the original.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: This manuscript investigates the influence of ankle flexion and extension exercises combined with psychological intervention on the psychology and activities of daily living of patients with KO. It's an interesting study; however, I have the following questions and comments: 1. The results of the current text and the Figures provided show the changing trend of each grade. I wonder if the authors could provide specific grades in the study? 2. Several typo and grammar issues should be addressed. For example, in sentence "Therefore, ankle flexion and extension exercises is highly effective in easing negative psychology, enhancing ADL, daily living ability, knee joint function and QoL, and relieving pain and fatigue in KOA patients." is should be are. Sentence "The QoL of KOA patients in two groups was evaluated by the SF-36 scale." was should be were.

Reply: Thank you for your specific comments and your recognition of the interestingness of this study. We have carefully read your suggestions and modified them accordingly. Where possible, we have provided specific data for this study in the results section to enrich the results. The spelling errors and grammar issues you mentioned have been carefully corrected as required.