Knitting as a promising self-management strategy for older women with osteoarthritis of the hands

A community-based pilot randomized controlled trial
Research objective

- Examine the effectiveness of a 12-week supervised knitting program on morning stiffness, pain, grip strength, hand function and quality of life in older women with mild to moderate osteoarthritis of the hands, compared to a waiting list control group.
Methods

• RCT with parallel group design (single blind)
  – **Knitting group**: bi-weekly 20-min knitting session at senior’s club + 20-min home daily knitting sessions for the 5 remaining week days for 8 weeks
  – **Control group**: educational pamphlet + usual care; participants were asked to avoid cryotherapy/thermotherapy in the morning

• Assessments were performed by a blinded evaluator at 0, 4, 8 and 12 week
  – Intervention: 0 to 8\(^{\text{th}}\) week;
  – Follow-up: 8\(^{\text{th}}\) to 12\(^{\text{th}}\) week (no intervention)

• Diagnosis and severity of HOA were made by the ACR criteria by a rheumatologist
Outcome measures

• Australian/Canadian Osteoarthritis Hand Index
  – Morning stiffness
  – Pain
  – Hand function
  – Quality of life

• Hand-held dynamometer
  – Grip strength
Results and conclusion

• Participants in the knitting group tended to report higher pain compared to the control group; differences were statistically significant at 4 weeks (p < .05) but never reached clinical significance (small effect with no noticeable effect on daily life).

• The duration of morning stiffness was lower in the knitting group at 8 weeks compared to the control group (see Figure 2).

• No other differences were noted between the two groups for the other time measures and clinical outcomes (all p-values > 0.05).

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![Figure 2. Morning stiffness](image)

Conclusion

• Although knitting can slightly and transiently increase pain in the first 4 weeks, its use can be beneficial to reduce morning stiffness.

• This beneficial effect is not observed at follow-up, suggesting that this type of activity needs to be performed on a regular basis.