# Yoga-therapy for rheumatoid arthritis: Marked improvement in patient-reported outcome measures

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### **Aims**

A service evaluation study of 10 adult-onset rheumatoid arthritis (RA) participants was undertaken to determine:

- a) the feasibility of providing yoga-therapy (YT) for RA in a standard consulting room
- b) the impact of a 16-week YT intervention programme on outcomes of function and quality of life.

## **Methods**

Ten RA volunteers (aged 29–71) with RA duration of 1–15 years: the patient group comprised one Indian male, one white British female, three African-Caribbean females and five Indian females. The volunteers consented to 10 individual YT sessions: once weekly (4); biweekly (6).

Intervention included lifestyle/behavioural strategies and cognitive restructuring concepts taken from yogic philosophy. Yogic tools include breath-centered physical yoga postures, breathing techniques; visualisation techniques for focused attention; mantras, meditation and mindfulness techniques. The schedules were personalised and adapted to the needs and abilities of each individual.

Mixed method analysis with validated questionnaires and thematic analysis of semi-structured interviews was applied.

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### **Results**

98/100 booked sessions were attended by the participants. All 10 approved the clinic setting of service delivery.

See Table 1.

Semi-structured interviews demonstrated that participants placed considerable value on the therapeutic function of the consultation, of being listened to and receiving advice on concerns. Therapeutic mechanisms thus appeared to reflect tailored physical practices alongside psychosocial techniques, which promoted psychological wellbeing and increased perceptions of control and self-efficacy.

Several reported reductions in usage of their medication and broader benefits, such as improved sleep, mood and energy. All but one participant reported positive changes to their RA symptoms, including pain reduction, greater mobility and joint flexibility.

# **Conclusion**

This was the first UK pilot of YT intervention, and was positively received by patients with RA, with high levels of adherence to both the course of treatments and the tailored home practice. The results suggest that yoga therapy has potential as an adjunct therapy to improve RA symptoms, increase self-care behaviours and manage stress and negative affect such as anxiety. The 'whole package' of shared care appears to improve both physical and psychological health. While promising, a larger multicentre study is required to evaluate the therapeutic and cost-effectiveness of YT as part of the multidisciplinary RA programme.

# Conflict of interest statement

No conflicts to declare.

Table 1. RA PROMS: post-YT intervention changes			
	Pre-intervention	Post-intervention	Change
Mean depression	6.7	2.3	- 65 %
Mean anxiety	9.4	4.8	- 48 %
Mean health assessment questionnaire (HAQ)*	1.1025	0.85	- 23 %
Mean pain scores (HAQ)	5.668	2.4	- 58 %
Mean health scores (HAQ)	5.1	1.72	- 66.3 %
Mean health utility (Eqol5d)**	6.017	8.401	+ 39.6 %

 $<sup>^*8/10~\</sup>text{HAQ}$  reduced > 0.35 = /> MID (minimal important difference);

<sup>\*\*6/10</sup> participants achieved Egol 5d maximum score = 1

PROMS = patient-reported outcome measures; RA = rheumatoid arthritis; YT = yoga therapy.