

Hammond A, Prior Y, O'Brien R, Woodbridge S, Radford K (2014) Work rehabilitation in inflammatory arthritis: a pilot randomised controlled trial. *Annals of the Rheumatic Diseases*, 73 (Suppl 2): 1209 doi:10.1136/annrheumdis-2014-eular.5378

Background: Work problems are common in people with inflammatory arthritis (IA): with 28-40% of people with rheumatoid arthritis (RA) stopping work in 5y of diagnosis. There is little research into effectiveness of job retention vocational rehabilitation (JR-VR) for employed people with IA. Brief JR-VR led to significantly fewer job losses at 3.5 years in the USA (Allaire et al, 2003) and a UK pilot trial demonstrated 6m improvements in work instability and work satisfaction (Macedo et al, 2009).

Objectives: To conduct a pilot randomised controlled trial (RCT) evaluating a JR-VR intervention with employed people with IA, to facilitate planning a full RCT.

Method: Participants with IA were recruited from 6 Rheumatology departments and randomised to VR (delivered by Rheumatology OTs with VR training) or a control group. Both groups received written self-help information about managing work problems. The VR group could receive up to 6h JR-VR, including a work visit. Presenteeism outcomes included: RA-Work Instability Scale (RAWIS:0-23), Work Limitations Questionnaire Productivity Loss (WLQPL: %), Work Activities Limitations Scale (WALS:0-33). Absenteeism was measured using monthly work diaries. Health outcomes included: SF12v2 Physical component (SF12-PC), pain and fatigue VAS (0-100). Mean (SD) change scores and effect sizes were calculated.

Results: 213 eligible employed patients with IA were identified, of whom 55 (26%) participated (34 with RA): 13M, 42F; aged 49y (SD 8.8); 7.9y (SD 8.9) disease duration; 33 worked full-time; job types were professional (27%), associated professional/skilled (15%), partly skilled/admin/caring/retain (53%), unskilled (5%). Both groups were comparable at baseline (see Table). At 9m: effect sizes were moderate to large for changes in work and health outcomes in the JR-VR group and none to small in the control group; %working days lost due to sickness: JR-VR =9.6% (SD 13.6); control = 20% (SD 27.1). JR-VR lasted on average 3.08 (SD 1.8) hours and cost £74.98 (SD £46.80) per patient.

	JR-VR 0m	JR-VR change 9m	JR-VR Effect Size	Control 0m	Control change 9m	Control Effect size
RAWIS	16.2 (5)	-3.9 (5.3)	-0.74	15 (5.7)	-1 (3.5)	-0.19
WLQPL	10.9 (4.9)	-3.2 (3.7)	-0.62	11.2 (5.6)	-0.4 (4.3)	-0.08
WALS	12.8 (5.3)	-2.2 (4.5)	-0.39	12.7 (6.2)	0.6 (6.0)	0.11
SF12PC	32.5 (8.3)	5.3 (11.11)	0.58	32.6 (10.1)	2.5 (8.3)	0.27
Pain	50.4 (22.6)	-12 (27)	-0.50	45.7 (25.7)	0.1 (21.8)	0
Fatigue	60 (22.4)	-5.3 (22.9)	-0.20	58.7 (30.1)	5.4 (26.4)	0.21
Health	50.9 (18.4)	-14.6 (28.8)	-0.71	48.7 (23.1)	-3.9 (15.8)	-0.19

Conclusions: This pilot suggests brief JR-VR provided by Rheumatology OTs can improve presenteeism, absenteeism and health status, indicating a RCT is warranted. Recruitment was problematic, with many not consenting. Potential reasons include: fear about employers (in a recession) learning they have arthritis; concerns about time out of work attending VR; and not perceiving VR is needed as yet. JR-VR intends to prevent work problems. Support is needed to enable employed people with IA and work problems to attend JR-VR.

References: Allaire SH, Li W, La Valley MP (2003). *Arthritis Rheum* 48(11): 3212–3218; Macedo A et al (2009). *Arthr Care Res* 61(11):1522-1530

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