

## Supplement\_H\_PICO\_6\_what professionals manage adherence

### PICO 6: Which health care providers are responsible for managing non-adherence?

Assuming non-adherence is important to treatment outcome, the question remains who should manage non-adherence in people with RMDs?

All interventions included in the selected systematic reviews were reviewed. Only physicians and health professionals in rheumatology (HPR) delivering interventions that showed a positive effect on adherence were finally selected.

#### Summary

The evidence is based on a total of 4 reviews, including fifteen RCT studies where physicians and/or health professionals in rheumatology (HPR) delivered interventions improving adherence (9 studies[1-9] for medication adherence; 7[10-16] for non-pharmacological/exercise adherence). The details and descriptions of interventions are listed in table 1.

#### Medication adherence

Patients in the included studies were diagnosed with: rheumatoid arthritis (RA)[2-6], psoriasis[1], systemic lupus erythematosus (SLE)[7, 9], juvenile rheumatoid arthritis (JRA)[8].

In the studies, the following professions delivered intervention that were shown to improve medication adherence:

- 1) Rheumatologists/physicians[3, 4]
- 2) Nurses[2, 8]
- 3) Pharmacists[6, 7]
- 4) Therapists[5]

Nieuwlaat, Wilczynski [17] conclude that nurses, pharmacists and therapists are more and more becoming part of delivering interventions that may increase adherent behaviour in people with RMDs. Hence, in a future perspective, it would be relevant to further explore and expand the role of HPRs in the management of RMDs, including, counselling patients for enhancing medication adherence[17].

#### Exercise adherence

Included patients were diagnosed with, rheumatoid arthritis (RA)[15, 16], osteoarthritis[10-12, 14], and low back pain[13], and the interventions were delivered by (i) rheumatologists/physicians[10, 14, 15], (ii) physiotherapists[12, 13] (iii) exercise physiologist[11], and (iv) patient educators[16].

**Table 1.** Professionals delivered effective interventions to enhance adherent behaviour in people with RMDs.

Study	Review	Diagnoses	Interventions delivered by
Studies with significant effects on medication adherence			
Balato, Megna [1]	Depont, Berenbaum [18]	Psoriasis	Text Messages, no professions mentioned explicitly
Hill, Bird [2]	Depont, Berenbaum [18]	RA	rheumatology nurse practitioner
El Miedany, El Gaafary [3]	Depont, Berenbaum [18]	Early RA	rheumatologist
El Miedany, El Gaafary [4]	Depont, Berenbaum [18]	RA	rheumatologist
Clifford, Barber [6]	Galo, Mehat [19]	RA	community pharmacist
Ganachari and Almas [7]	Galo, Mehat [19]	SLE	pharmacist
Rapoff, Belmont [8]	Galo, Mehat [19]	JIA	nurse
Evers, Kraaiaam [5]	Depont, Berenbaum [18]	Early RA	therapists
Ting, Kudalkar [9]	Galo, Mehat [19]	childhood-onset SLE	Text Messages, no professions mentioned explicitly

Study	Review	Diagnoses	Interventions delivered by
Studies with significant effects on exercise adherence			
Ravaud, Flipo [10]	Ezzat, MacPherson [20]	OA/knee,	rheumatologists
Vong, Cheing [13]	Nicolson, Bennell [21]	Low Back Pain	physical therapists
Halbert, Crotty [11]	Ezzat, MacPherson [20]	OA	exercise physiologist
Brus, Van De Laar [15]	Depont, Berenbaum [18]	RA	rheumatologist
Pisters, Veenhof [12]	Ezzat, MacPherson [20]	OA/hip, knee	physiotherapists
Tüzün, Cifcili [14]	Nicolson, Bennell [21]	Knee OA	physician
McEvoy Devellis, Blalock [16]	Galo, Mehat [19]	RA	patient educator

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