

# Person-Centred Care Can Help Patients to Become More Effective Consumers in the Use of Health Information than Regular Care - an RCT in Patients with Arthritis Undergoing Biological Therapy

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# Conclusion:

Replacing just one of three visits over 12 months to a nurse-led rheumatology clinic based on personcentred care instead of a rheumatologist-led clinic based on regular care resulted in more effective consumers concerning the use of health information. Larger studies over longer time frames focusing on person-centred care are needed to better understand its full impact on effective consumer skills measured by EC-17.

# **Background:**

Person-centred care (PCC) is a holistic approach with respectful and individualized care allowing negotiation of care where persons with health problems are empowered to be involved in health their care. Little is known of the impact of PCC vs. regular care on patients' skills as health care consumers.

### Aim:

To study the impact on effective consumers' skills over 6 and 12 months as measured by the Effective Consumer Scale (EC-17) in patients undergoing biological therapy and randomly assigned to either a nurse-led rheumatology clinic (NLC) based on PCC or to a rheumatologist-led clinic (RLC) based on regular care.

## **Method:**

A 12 month RCT in 107 patients with chronic inflammatory arthritis. Inclusion criteria were ongoing biological therapy and a DAS28 ≤3.2. All patients met a rheumatologist at inclusion and after 12 months, while the 6 month follow-up was randomized to either NLC (PCC) or RLC (regular care).

Outcome measure was the EC-17, developed and endorsed by the OMERACT, including five subscales; 1. Use of health information, 2. Clarifying personal priorities, 3. Communicating with others, 4. Negotiating roles and 5. Deciding and taking action. EC-17 total score ranges from 0-100, worse to best. Differences between and within NLC and RLC were analyzed with Friedman's test or Mann Whitney U-test.

Table 1. Nurse-led rheumatology clinic, change over time in the five EC-17 subscales analyzed with Friedman's test.

	Baseline Median (Min-Max)	6 months Median (Min-Max)	12 months Median (Min-Max)	p
1. Use of health information (0-12)	10 (5-12)	10 (8-12)	11 (7-12)	0.04
2. Clarifying personal priorities (0-12)	9 (6-12)	10 (5-12)	10 (6-12)	0.10
3. Communicating with others (0-12)	10 (7-12)	10 (7-12)	10 (8-12)	0.94
4. Negotiating roles (0-16)	13 (9-16)	14 (9-16)	14 (9-16)	0.52
5. Deciding and taking action (0-16)	13 (8-16)	14 (8-16)	13 (8-16)	0.65
Total score (0-68)	56 (42-68)	57 (39-68)	59 (40-68)	0.28

Table 2. Rheumatologist-led clinic, change over time in the five EC-17 subscales analyzed with Friedman's test.

	Baseline Median (Min-Max)	6 months Median (Min-Max)	12 months Median (Min-Max)	p
1. Use of health information (0-12)	10 (8-10)	10 (8-12)	10 (5-12)	0.61
2. Clarifying personal priorities (0-12)	9 (7-12)	9 (7-12)	9 (6-12)	0.94
3. Communicating with others (0-12)	10 (6-12)	10 (3-12)	10 (5-12)	0.81
4. Negotiating roles (0-16)	13 (8-16)	13 (10-16)	13 (9-16)	0.88
5. Deciding and taking action (0-16)	14 (9-16)	13 (8-16)	13 (9-16)	0.22
Total score (0-68)	56 (41-68)	56 (37-68	55 (39-68)	0.84

Table 3. Nurse-led rheumatology clinic (NLC) vs. Rheumatologist-led clinic (RLC) in EC-17 total score (recoded into 0-100) at all three time points. Analyzed with Mann-Whitney U test

	NLC Median (Min-Max)	RLC Median (Min-Max)	p
Baseline	82 (62-100)	82 (60-100)	0.92
6 months	84 (57-100)	82 (54-100)	0.30
12 months	87 (59-100)	82 (57-100)	0.16

# **Results:**

After 12 months 97 patients completed the RCT (NLC n=47, RLC n=50), mean (SD) age 55.4 (12.7) years, disease duration 16.7 (11.5) years, DAS28 2.1 (0.7), HAQ 0.54 (0.38), global health 20.4 (17.1), pain 21.1 (18.0) and 56% were women.

There were no statistically significant differences within or between the two intervention groups at baseline nor in EC-17 total score mean (SD) at baseline.

However, in NLC there was a statistically significant improvement in EC-17 subscale "1. Use of health information" at both 6 and 12 months (p=0.04 and p=0.004 respectively).







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