# Adherence to therapy in chronic inflammatory rheumatic diseases: the older the better

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#### **Aims**

Adherence to therapy is a major challenge in chronic inflammatory rheumatic diseases (CIRD). Suboptimal adherence can lead to disease progression and increased disease burden. To date, the Compliance Questionnaire for Rheumatology (CQR) is the only self-reported adherence measure created specifically for and validated in rheumatic diseases. We used the recently validated Arabic version of the CQR (a-CQR) to evaluate the adherence to therapy in CIRD and its predictive factors.

#### Methods

We included 102 consecutive adult patients with CIRD (rheumatoid arthritis (RA), spondyloarthritis (SpA), connective tissue disease (CTD) and others), recruited from two rheumatology clinics. Adherence was measured using the validated a-CQR by autoquestionnaire. Additionally, patients were asked about subjective adherence and the obstacles to maintain therapy. Bivariate and multivariate analyses were conducted to identify clinical and disease characteristics associated with adherence.

### **Results**

Characteristics of the 102 consecutive CIRD patients are shown in Table 1. Average time to complete the questionnaire was 2 minutes and 48 seconds (standard deviation (SD) 41 seconds). 98% of the patients stated that the questionnaire was easy to complete.

Most of the patients (97.1%) subjectively considered themselves as totally or moderately adherent to therapy. The most common reported reasons for subjective poor adherence were forgetfulness (20.6%), uncertainty about treatment efficacy (17.6%), treatment cost (15.7%) and fear of side effects (6.9%).

The mean a-CQR score was 85.4% (SD 8.2%), ranging from 52% to 100%. It was significantly lower in the subjectively defined poor adherence group (p=0.014).

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Table 1. Population characteristics	
Disease (n)	102
RA	45
SpA	27
CTD	24
Others	6
Mean age, years (SD)	56.3 (15.1)
Female, %	75.5
University studies, %	44.1
Disease duration, years (SD)	8.7 (8.3)
On conventional DMARDs, %	87.3
On biologic DMARDs, %	33.3
DAS28 in RA, mean (SD)	3.21 (1.3)
Weekly number of pills, mean (SD)	40.7 (24.8)

CTD = connective tissue disease; DAS28 = disease activity score-28; DMARDS = disease-modifying antirheumatic drugs; RA = rheumatoid arthritis; SD = standard deviation; SpA = spondyloarthritis.

In bivariate analysis, a-CQR correlated with age (higher adherence in older patients, p=0.007), gender (higher in women, p=0.035), disease (higher in RA, p=0.042) and total number of comorbidities (p=0.005), but not with individual comorbidities. It was not correlated with the total number of pills per week, educational level, disease activity or disease duration. In multivariate analysis, age remained statistically associated with a-CQR score (p=0.001).

#### **Conclusions**

a-CQR was well accepted among CIRD patients. It showed an acceptable level of adherence to therapy, within the range of other international studies' results, and was positively associated with age. a-CQR can be a useful tool in future clinical and research settings.

## **Conflict of interest statement**

No conflict of interest to declare.