

Education and treatment adherence during the COVID-19 pandemic. Response to: 'Adherence to medication in patients with rheumatic diseases during COVID-19 pandemic' by Khabbazi *et al*

With great interest, we read the study of Dr Khabbazi *et al*¹ regarding treatment adherence in patients with inflammatory rheumatic diseases during the COVID-19 pandemic in the East Azarbaijan province of Iran. They conducted telephone interviews to 1324 patients and inquired about treatment adherence behaviours during 2 weeks from July 2020. Of the 858 patients included in the final analysis, non-adherence was reported by 6.5% of the patients (defined by the group as $\geq 20\%$ change in the dose or frequency of medications). In accordance to previous studies,² this work demonstrates that a small percentage of patients were non-adherent to their treatment and with a lower frequency than the one reported in our Latin American sample population (15.1%).³ The principal pattern of non-adherence was the complete discontinuation of medications (58.9%), and the most common reason (62.5%, n=35) was the fear of the immunosuppressive effects of therapy.

Treatment adherence in rheumatic diseases encompasses a complex relationship between patients, healthcare team/system, community and economy.⁴ The COVID-19 pandemic has importantly impacted all of factors making treatment adherence during the current times a difficult challenge. While cross-sectional studies are limited to draw solid conclusions or design adequate strategies, they provide an important general overview of the impact of COVID-19 and adherence in rheumatic diseases in different populations. The evaluation of medication persistence and longitudinal evaluation are necessary to determine the real impact of COVID-19 on adherence behaviours. Nonetheless, strategies to diminish non-adherence should not wait for the evidence to accumulate. Education regarding the relationship between medications, rheumatic diseases and COVID-19 are key to improve adherence and dissipate patients' fear and unfounded beliefs. Educational strategies should be promptly established worldwide to possibly limit unnecessary morbidity and mortality due to medication non-adherence.

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REFERENCES

- 1 Khabbazi A, Kavandi H, Paribanaem R, *et al*. Adherence to medication in patients with rheumatic diseases during COVID-19 pandemic. *Ann Rheum Dis* 2022;**81**:e200.
- 2 Fragoulis GE, Evangelatos G, Arida A, *et al*. Treatment adherence of patients with systemic rheumatic diseases in COVID-19 pandemic. *Ann Rheum Dis* 2021;**80**:e60.
- 3 Pineda-Sic RA, Galarza-Delgado DA, Serna-Peña G, *et al*. Treatment adherence behaviours in rheumatic diseases during COVID-19 pandemic: a Latin American experience. *Ann Rheum Dis* 2021;**80**:e85.
- 4 Drenkard C, Feldman CH. Untangling the complexity of medication adherence in SLE. *Nat Rev Rheumatol* 2020;**6**–7.