P055  WORRY ABOUT COVID-19 AMONGST ADULT RHEUMATOLOGY PATIENTS IN THE UK IS ASSOCIATED WITH THE NUMBER OF CASES, AND DRIVES RISK-REDUCING BEHAVIOURS

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Background/Aims
In March 2020, the WHO characterised COVID-19 as a pandemic. Whilst many people with COVID-19 infection appeared to have mild or no symptoms, a significant proportion became seriously ill. At the time, little was known about how patients with rheumatic or autoimmune conditions, many of whom use immunosuppressive medications, are affected by the virus. The aim of the patient-led longitudinal survey (the COVID-19 European Patient Registry, EPR) is to better understand the impact of COVID-19 on these patients. This specific analysis aims to understand how the number of confirmed COVID-19 cases affects the self-reported level of worry experienced by participants.

Methods
The EPR comprises an online health questionnaire. Each week participants are sent a short follow-up survey concerning exposure to COVID-19, symptoms, diagnosis, how worried they feel (scale, 0-10), and a range of behaviours. The weekly mean worry score from participants was calculated by country, and compared to the weekly total number of cases of COVID-19 reported within each country. The association between worry score and a range of behaviours was also calculated.

Results
To 27 September 2020, a total of 3,619 adults and 639 children were included in the EPR. There is a correlation between the total number of weekly cases and the mean worry score amongst UK-based adult participants in the EPR (linear regression, R²=0.779, P<0.001). Interestingly, there is no such correlation in any other country with participants in the EPR, nor amongst parents of children with rheumatic conditions. Additionally, the level of worry is associated with specific behaviours that affect exposure to the coronavirus for all adult participants.
Table 1: Effect of worry

| Behaviour                        | Effect of worry                                                                 |
|----------------------------------|---------------------------------------------------------------------------------|
| Social distancing                | Mean worry correlated with proportion of participants social distancing         |
| Self-isolation (staying at home  | Mean worry correlated with proportion of participants self-isolating           |
| despite no symptoms or known    |                                                                                  |
| exposure to cases)               |                                                                                  |
| No action to protect against    | Mean worry negatively correlated with proportion of participants not social     |
| coronavirus                      | distancing or self-isolating                                                   |
| Mask wearing or remaining home   | Participants with higher worry score more likely to                           |
|                                 | not leave home at all during the week                                           |
|                                 | Participants with higher worry score more likely to                           |
|                                 | remain outside and not enter buildings during the week                         |
|                                 | Participants with higher worry score more likely to                           |
|                                 | wear a mask every time they leave home                                          |
|                                 | Participants with lower worry score more likely to                           |
|                                 | not wear a mask                                                               |
|                                 | Participants with lower worry score more likely to                           |
|                                 | wear a mask only ‘sometimes’                                                  |

Level of self-reported worry, associated with a range of behaviours.
Pearson’s correlation, $P < 0.001$.
ANOVA, $P < 0.05$.

Conclusion
The number of confirmed cases of COVID-19 is associated with the level of worry, and consequent behaviour change, amongst UK adults with rheumatic conditions. This suggests that the number of cases, government response, and media portrayal affect how worried participants feel. This in turn drives behavioural change towards COVID-avoiding behaviours. This phenomenon appears exclusive to UK-based adults, suggesting differences in the perception of the threat posed by COVID varies between countries.

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