

# Covid-19 and RMD: infection rates, attitudes and medication adherence

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## BACKGROUND

- Covid-19 has caused >900,000 deaths
- The relationship between RMDs, immunosuppressive medications and Covid-19 is unclear
- This study explores Covid-19 prevalence, DMARD adherence, information sources and attitudes to virtual clinics amongst RMD patients during the current pandemic.

## METHODS

- An online survey assessing Covid-19 status, RMD diagnoses, adherence and information sources was disseminated via the Arthritis Ireland website and social media channels

## RESULTS

- There were 1381 respondents with 74.8% on immunosuppressive medication (Table 1)
- Symptoms of Covid-19 were reported by 3.7% of respondents of which 0.46% tested positive, consistent with the general Irish population
- The frequency of Covid-19 symptoms was higher for respondents with spondyloarthropathy (OR 2.06, 95% CI 1.14-3.70) and lower in those on immunosuppressive medication (OR 0.48, 95% CI 0.27-0.88), and those compliant with health authority (HSE) guidance (OR 0.47, 95% CI 0.25-0.89)
- Adherence to RMD medications was reported in 84.1%, with 57.1% using Health authority guidelines for information on medication use
- Importantly, adherence rates were higher amongst those who cited guidelines (89.3% versus 79.9%,  $p < 0.001$ ), and conversely lower in those with Covid-19 symptoms (64.0% versus 85.1%,  $p = 0.009$ )
- 70.4% of respondents supported the use of virtual clinics

## CONCLUSIONS

- The rate of Covid-19 positivity in RMD patients was similar to the general population
- Covid-19 symptoms were lower amongst respondents on immunosuppressive medication and those adherent to medication guidelines
- Respondents were supportive of HSE advice and virtual clinics

**Table 1. Respondent characteristics**

<b>Gender</b>	
<b>Female</b>	1207 (87.8%)
<b>Male</b>	168 (12.2%)
<b>Age</b>	
<b>&lt;40</b>	331 (24.1%)
<b>41-60</b>	814 (59.2%)
<b>&gt;60</b>	230 (16.7%)
<b>RMD*</b>	
<b>Rheumatoid Arthritis</b>	726 (52.9%)
<b>Spondyloarthropathy</b>	451 (32.9%)
<b>CTD/Vasculitis</b>	77 (5.6%)
<b>Other RMD</b>	193 (14.1%)
<b>None</b>	118 (8.6%)
<b>Covid-19 status</b>	
<b>Asymptomatic, without infected contact risk</b>	1176 (91.8%)
<b>Asymptomatic, with infected contact risk</b>	58 (4.5%)
<b>Symptomatic, without infected contact risk</b>	39 (3.0%)
<b>Symptomatic, with infected contact risk</b>	8 (0.6%)
<b>Covid-19 test status</b>	
<b>Not tested</b>	1203 (92.7%)
<b>Negative</b>	89 (6.9%)
<b>Positive</b>	6 (0.5%)
<b>RMD medications</b>	
<b>Biologic/JAKi</b>	664 (51.8%)
<b>csDMARD (excluding HCQ/chloroquine)</b>	526 (40.8%)
<b>Glucocorticoid</b>	116 (12.9%)
<b>HCQ/chloroquine</b>	118 (9.2%)
<b>None of the above</b>	290 (22.5%)

\*Some respondents had more than one RMD