

P051 SYMPTOMS OF COVID-19 AND ANXIETY LEVELS IN ADULT PATIENTS RECEIVING B-AND TS-DMARDS USING AN ONLINE REPORTING SYSTEM

May Nwe Lwin^{1,2}, Christopher Holroyd¹, Dinny Wallis¹, Saul Faust², Hans De Graaf³ and Christopher J. Edwards^{1,2}
¹University Hospital Southampton, Rheumatology, Southampton, UNITED KINGDOM, ²NIHR Clinical Research Facility, University Hospital Southampton, Southampton, UNITED KINGDOM, ³Paediatric Rheumatology, University Hospital Southampton, Southampton, UNITED KINGDOM

Background/Aims

The coronavirus disease-2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) is responsible for over 120,000 UK deaths. Those with chronic inflammatory conditions or receiving immunosuppressive medications are at higher risk of COVID-19 than the general population. As a result, rheumatology patients taking b- or ts-DMARDs were advised to shield. We planned to observe COVID-19 related symptoms and anxiety levels reported by rheumatology patients during the pandemic.

Methods

From April 2020, 1,004 rheumatology patients from an advanced therapy database were invited to participate in the adult ImmunoCOVID study to collect daily symptoms (fever, cough,

P051 TABLE 1: patient reported symptoms and anxiety score from immunoCOVID study

Week & (number of participants)	Fever (%)	Cough (%)	SOB (%)	Joint pain (%)	Fatigue (%)	Loss of senses (%)	No symptoms (%)	Tested (n)	Test positive (n)	Anxiety score
1 (26)	3.85	7.69	11.54	46.15	30.77	NA	30.77	0	0	6.31
2 (42)	2.33	11.63	9.30	52.38	34.88	NA	28.57	0	0	5.83
3 (69)	1.45	14.49	4.35	52.17	37.68	NA	23.19	4	1	5.88
4 (92)	1.09	11.96	6.52	54.35	31.52	NA	27.17	2	0	6.22
5 (110)	0.00	11.71	6.31	45.95	33.33	NA	30.00	0	0	6.15
6 (108)	0.00	10.19	3.70	50.00	26.85	NA	34.26	2	0	5.74
7 (119)	0.84	10.08	4.20	49.58	28.57	NA	34.45	2	0	5.93
8 (120)	0.00	7.50	5.00	51.67	34.17	0.83	29.17	3	0	5.62
9 (124)	0.81	7.26	3.23	52.42	29.84	0.81	36.29	4	0	5.64
10 (118)	0.00	8.47	3.39	48.31	29.66	0.85	34.75	2	0	5.28
11 (116)	0.85	8.47	6.78	49.15	29.66	1.69	33.62	3	0	5.65
12 (131)	0.00	6.11	4.58	56.49	26.72	0.76	35.11	2	0	5.45
13 (110)	0.91	6.36	2.73	50.00	29.09	1.82	42.73	1	0	5.44
14 (121)	0.83	7.44	2.48	47.11	25.62	0.83	39.67	8	0	5.28
15 (100)	1.00	7.00	3.00	46.00	23.00	1.00	41.00	4	0	5.48
16 (114)	0.88	7.89	3.51	39.47	25.44	1.75	42.98	9	0	5.27
17 (105)	0.00	8.57	3.81	44.76	22.86	0.95	43.81	4	2	5.10
18 (107)	0.00	6.54	3.74	43.93	19.63	0.93	43.93	4	0	5.30
19 (99)	0.00	5.05	2.02	40.40	19.19	1.01	45.45	5	0	5.08
20 (110)	0.91	4.55	2.73	50.91	24.55	0.91	39.09	NA	0	Missing data
21 (106)	0.94	6.60	2.83	50.00	20.75	0.94	39.62	4	0	5.28
22 (104)	2.88	9.62	6.73	49.04	30.77	0.96	35.58	3	0	5.50
23 (106)	1.89	7.55	3.77	42.45	26.42	0.94	36.79	8	0	5.89
24 (108)	0.93	8.33	2.78	44.44	22.22	0.93	41.67	6	0	5.61
25 (94)	1.06	7.45	4.26	41.49	15.96	2.13	44.68	6	0	5.49
Average	0.94	8.34	4.53	47.94	27.17	1.11	36.57			5.60
SD	0.97	2.31	2.25	4.39	5.35	0.42	6.09			0.34

Weekly data are the average of daily reported symptoms and anxiety levels.

shortness of breath (SOB), sore throat, blocked nose, red-eye, headache, fatigue, joint pain, muscle pain, chills, nausea, diarrhoea and vomiting, loss of senses) and anxiety level using an online portal. Loss of senses were not recorded until week 7 as these were not officially recognized at the pandemic onset.

Results

153 patients (rheumatoid arthritis, n=75, psoriatic arthritis, n=28, Axial spondyloarthritis, n=24, systemic lupus erythematosus, n=2 and other connective tissue diseases, n=24) consented and participated. By week 25, 142 patients remained. Among those, 36.57% ($\pm 6.09\%$) (average (\pm SD)) reported no symptoms over the 25 week period. The main symptoms reported were joint pain (mean=47.94%) followed by fatigue (27.17%). Few patients reported fever (0.94%), cough (8.34%), SOB (4.53%), or loss of senses (1.11%) with more symptoms reported during the first 8 weeks (April/May 2020) and another increase in September/October 2020. The anxiety score (pragmatic 10-point scale) mean (\pm SD) was 5.60 (± 0.34) and remained elevated throughout the study though higher when lockdown began.

Conclusion

During the first peak of SARS-CoV-2, the number of patients reporting COVID-19 symptoms appeared high and was associated with high levels of anxiety. As only a small number have been swab-tested, this may suggest that larger numbers of untested individuals have had COVID-19 with mild symptoms. Features of inflammatory rheumatic illnesses may mimic COVID-19 symptoms and create diagnostic difficulty (joint pain and fatigue) whilst anxiety may lead to over-reporting of symptoms in the absence of infection. The key symptoms of fever, cough and SOB were less common and may be most reliable.

Disclosure

M. Lwin: None. **C. Holroyd:** None. **D. Wallis:** None. **S. Faust:** None. **H. De Graaf:** None. **C.J. Edwards:** Honoraria; Abbvie, Biogen, BMS, Celgene, Fresenius, GSK, Janssen, Lilly, Mundipharma, Pfizer, Roche, Sanofi, UCB. Member of speakers' bureau; Abbvie, Biogen, BMS, Celgene, Janssen, Lilly, Sanofi, Pfizer, Roche. Grants/research support; Abbvie, Biogen, Pfizer.