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p=0.007). Hoping not to become infected with COVID-19 and to maintain the same health status, were especially those who were older (3.6 vs 3.4 p=0.018) without anxiety (3.4 vs 3.6 at risk, p=0.005), and without depression (3.6 vs 3.4 at risk, p=0.006). Another important hope was the availability of a treatment or vaccine for COVID-19, which was important for patients experiencing better well-being (3.3 vs 3.0 with worse well-being, p<0.001; Figure 1).

**Conclusion:** The outstanding COVID-19-related fear expressed by European patients with RMDs was its impact on healthcare, while the greatest hope was to be able to continue treatment. Younger patients reported more fears while older patients were more hopeful. Those receiving biologics had greater fears and hopes associated with their treatment. In addition, patients at risk of mental disorders presented greater fears and less hopes.

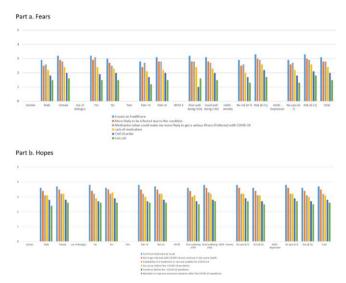


Figure 1. Fears and Hopes of REUMAVID participants

Acknowledgements: This study was supported by Novartis Pharma AG. We would like to thank all patients that completed the survey as well as all of the patient organisations that participated in the REUMAVID study including: the Cyprus League Against Rheumatism (CYPLAR) from Cyprus, the Association Française de Lutte Anti-Rhumatismale (AFLAR) from France, the Hellenic League Against Rheumatism (ELEANA) from Greece, the Associazione Nazionale Persone con Malattie Reumatologiche e Rare (APMARR) from Italy, the Portuguese League Against Rheumatic Diseases (LPCDR), from Portugal, the Spanish Federation of Spondyloarthritis Associations (CEADE), the Spanish Patients' Forum (FEP), UNIMID, Spanish Rheumatology League (LIRE), Andalusian Rheumatology League (LIRA), Catalonia Rheumatology League and Galician Rheumatology League from Spain, and the National Axial Spondyloarthritis Society (NASS), National Rheumatoid Arthritis (NRAS) and Arthritis Action from the United Kingdom.

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AB0677 GENDER DIFFERENCES ON THE IMPACT OF THE
COVID-19 PANDEMIC AND LOCKDOWN IN PATIENTS
WITH RHEUMATIC DISEASES. RESULTS FROM THE
REUMAVID STUDY (PHASE 1)

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**Background:** The COVID-19 pandemic has impacted health, lifestyle, treatment and healthcare of European patients with rheumatic and musculoskeletal diseases (RMDs).

**Objectives:** The aim is to evaluate gender differences on the impact of the first wave of the COVID-19 pandemic in the wellbeing, life habits, treatment, and healthcare access of European patients with RMDs.

**Methods:** REUMAVID is an international collaboration led by the Health & Territory Research at the University of Seville, together with a multidisciplinary team including patient organisations and rheumatologists. This cross-sectional study consisting of an online survey gathering data from 1,800 patients with a diagnosis of 15 RMDs, recruited by patient organisations in Cyprus, France, Greece, Italy, Portugal, Spain, and the United Kingdom during the first phase of the pandemic (April-July 2020). Mann-Whitney and  $\chi^2$  tests were used to analyse differences between gender regarding sociodemographic characteristics, life style, treatment, healthcare, and patient-reported outcomes.

Results: 1,797 patients were included in this analysis. 80.2% were female and a mean age of 52.6 years. The most common diagnosis was inflammatory

Table 1. Bivariate analysis by gender (N= 1,797 unless specify)

		Mean ± SD or n (%)		P- value
		Male (N= 355)	Female (N= 1,442)	_
Sociodemographic characteristic	cs			
Disease	Inflammatory arthritis <sup>1</sup>	290 (81.7)	1,064 (73.8)	
	Fibromyalgia	25 (7.0)	287 (19.9)	
	Connective tissue disease <sup>2</sup>	18 (5.1)	195 (13.5)	
	Osteoarthritis	52 (14.6)	255 (17.7)	
	Osteoporosis	10 (2.8)	104 (7.2)	
	Vasculitis <sup>3</sup>	7 (2.0)	29 (2.0)	
	SAPHO	1 (0.3)	14 (1.0)	
Age, years		$52.8 \pm 14.2$	52.5 ± 12.9	0.896
Educational level	University	162 (45.6)	711 (49.3)	0.215
Marital status	Married or in relationship	269 (75.8)	983 (68.2)	0.002*
Member of a Patient organisation, N=1.795	Yes	188 (53.0)	559 (38.8)	<0.001*
Patient-reported outcomes				
HADS Anxiety, N=1,766	Risk	168 (48.1)	843 (59.5)	<0.001*
HADS Depression, N=1,766	Risk	130 (37.2)	680 (48.0)	<0.001*
Wellbeing, N=1,774	WHO-5 ≤ 50	188 (53.4)	681 (47.9)	0.064
Self-perceived health, N=1,783	Fair or bad	182 (51.4)	958 (67.0)	<0.001*
Change in health status during COVID-19 pandemic, N=1,783	Worse	333 (94.1)	1,339 (93.7)	0.799
Life style during COVID-19 pand	emic			
Smoking, N=555	More than before	20 (17.5)	117 (26.5)	0.001*
Alcohol consumption, N=1,083	Quit drinking	71 (25.4)	277 (34.5)	0.013
Physical activity, N=1,126	Yes	144 (60.3)	470 (53.0)	0.045*
Treatment and healthcare		. ,	, ,	
Able to meet rheumatologist, N= 721	No	89 (65.9)	332 (56.7)	0.049*
Access to GP, N=688	No	43 (39.4)	248 (42.8)	0.512

<sup>1</sup>Including: Axial Spondyloarthritis, Rheumatoid Arthritis, Psoriatic Arthritis, Juvenile Idiopathic Arthritis, Gout and Peripheral Spondyloarthritis; <sup>2</sup>Including: Systemic Lupus Erythematosus, Sjögren's Syndrome, Systemic Sclerosis and Myositis; <sup>3</sup>Including: Polymyalgia Rheumatic and Vasculitis or Arteritis.

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arthritis (81.7% male vs 73.8% female). There was a higher prevalence of fibromyalgia among females (20% vs 7.0% male). Overall, females reported worse self-perceived health (67.0% vs 51.4%, p<0.001), higher risk of anxiety (59.5% vs 48.1%, p<0.001), and depression (48.0% vs 37.2%, p<0.001). Females reported a greater increase in smoking (26.5% vs 17.5%, p=0.001), although they were less likely to drink alcohol (34.5% vs 25.4%, p=0.013), and also engaged less in physical activity (53.0% vs 60.3%, p=0.045). Overall, females were more likely to keep their scheduled rheumatology appointment (43.3% vs 34.1% of males (p=0.049; Table 1) with a higher proportion of females having their rheumatic treatment changed (17.0% vs 10.7%, p=0.005).

**Conclusion:** The first wave of the COVID-19 pandemic and the containment measures have worsened self-perceived health status of patients with RMDs, affecting genders differently. Females reported worse psychological health and life habits such as increased smoking and reduced physical activity, while males increased their alcohol consumption and were less likely to attend their rheumatology appointments.

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AB0678

## RATES OF SURGICAL PROCEDURES OF THE KNEE AND HIP DURING THE "FIRST WAVE" OF COVID 19 IN SWEDEN

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**Background:** Many countries imposed lockdowns in March 2020, in anticipation of the "first wave" of COVID-19 and the massive healthcare resources required to meet its acute medical needs. Sweden adopted a different strategy to contain the epidemic, opting for non-binding recommendations. Nonetheless, elective and acute surgical procedures in health care may have been affected.

**Objectives:** To investigate the effect of the "first-wave" of COVID-19 and the government's response in Sweden on the rates of total joint replacements (TJR), arthroscopies, and fracture surgeries of the knee and hip.

Methods: We used register data for the entire population of Skåne, the southernmost region in Sweden with 1.3 million inhabitants (13% of the total Swedish population). We identified all residents aged ≥18 years who between 1st January 2015 and 31st November 2020 underwent any of the following surgical procedures of the knee or hip: TJR (TJR due to fracture excluded), arthroscopy, and surgery due to fracture (including TJR). To demarcate pre-event and post-event periods, we established a differentiation point corresponding to mid-March 2020, the timepoint at which the the Swedish Public Health Agency began recommending social distancing, working from home, distance learning for secondary schools and universities. At the aggregate level, we modelled the number of surgeries per 10,000 adults from January 2015 up to September 2020. We did an interrupted time-series (ITSA) analysis using segmented ordinary least-squares regression to estimate changes

in the levels and trends of surgical procedures compared to pre-COVID-19 levels, adjusting for seasonal variations. The month of March was treated as a "phase-in" period to give time for the new recommendations to be implemented. In addition, we estimated the absolute and relative difference (with its 95% confidence interval [CI]) between the predicted and the counterfactual scenario in the monthly number of surgeries from April 2020, where the counterfactual is the rate of surgery that would have been expected if COVID-19 had not happened. To account for the possibility that other co-occurring events may be responsible for the observed changes, we assessed changes in the number of surgeries due to fractures, which are normally treated as emergencies that cannot be cancelled or rescheduled, and thus should be less affected, at least by policies at the hospital level.

Results: We identified a total of 20,831 TJRs, 12,156 arthroscopies and 15,041 fracture surgeries of the knee or hip over the study period. The monthly rate of surgeries and ITSAs are presented in Figure 1, with the pre-COVID period starting from February 2019 for readability (Figure 1). The results suggest that in April 2020. there was a decrease of 2.08 (95%CI 1.81; 2.35) TJRs per 10,000 adults which corresponds to a decrease of 74% (95%CI 65%; 85%) when compared to the counterfactual scenario. This was followed by a positive trend signifying a monthly increase of 0.36 (95%CI 0.31; 0.40) TJRs per 10,000 adults. The rate of arthroscopies followed a similar pattern with a decrease of 0.55 (95%Cl 0.39: 0.71) arthroscopies per 10,000 adults in April, which corresponds to a 49% decrease (95%Cl 28%; 63%) followed by a positive trend signifying a monthly increase of 0.11 (95%CI 0.07; 0.15) arthroscopies per 10,000 adults. The rate of surgery due to knee or hip fractures showed no decrease in April and was followed by a negative trend signifying a monthly decrease of 0.03 (95%CI 0.002; 0.04) surgeries per 10.000 adults. Conclusion: In Sweden, we observed a marked decrease in the number of typical elective knee and hip surgeries such as TJRs and arthroscopies, following the government's response to Covid-19. We then observed a slow but steady recovery that brought the rates of procedures towards expected levels by Fall 2020, before the "second wave" hit the country. The number of acute fracture surgeries showed no sharp drop, instead showing a steady and slow decline potentially due to reduction in commuting and in physical activities linked to recommendations of social

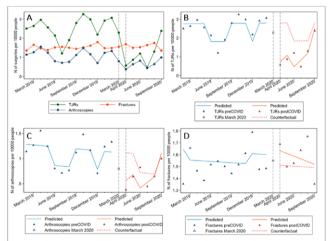


Figure 1: Monthly incidence of surgeries per 10,000 Skåne inhabitants aged > 18
A: Monthly incidence for TJR, arthroscopies and fracture-related surgeries. Interrupted time series for B:
TJR, C: arthroscopies, and D: fracture-related surgeries. Pre-COVID data is presented from February 2019

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AB0679

## NAILFOLD VIDEOCAPILLAROSCOPY RESULTS IN COVID-19 PATIENTS RECOVERED FROM DIFFERENT DISEASE SEVERITY

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**Background:** COVID-19 is a multifaceted condition with a wide range of clinical manifestations, including microvascular/endothelial dysfunction, that starts in the early phase of the disease and may become dramatically harmful in the late stage, causing a massive pro-thrombotic state. Nailfold videocapillaroscopy (NVC) is the most used tool to identify microvascular status in a large spectrum