Results: A total of 151 children and young people (age range 2-17 years; Table 1) have been reported to the database from 12 countries; mostly Spain (N=30), France (N=29), Israel (N=29), and Czechia (N=25). Most patients had a diagnosis of juvenile idiopathic arthritis (JIA; N=92; 61%). Other diagnoses were autoinflammatory syndrome (including TRAPS, CAPS, FMF; 12%), and systemic lupus erythematosus (4%). There were 14 (9%) hospitalisations and 1 (0.7%) death reported due to COVID-19. The most commonly reported symptoms were fever (46%), cough (34%), anosmia (19%), and headache (19%). Only 19 (13%) patients reported glucocorticoid use. DMARD therapy was used by 104 (69%) patients; 67 (44%) were on csDMARDs (methotrexate [N=54], antimalarials [N=7]), 45 (30%) on anti-TNF, 9 (6%) on IL-6 inhibitors, and 7 (5%) on IL-1 inhibitors. Among the 145 patients with hospitalisation data, patients on any DMARD therapy (cs/b/tsDMARDs) had similar odds for hospitalisation compared with those not on therapy, adjusted for age (odds ratio 0.7; 95% CI 0.2, 2.4).

		All Patients
N		151
Gender	Female	94 (62%)
	Male	56 (37%)
	Unknown	1 (<1%)
Age, years	Median (IQR)	12 (8, 15)
	Range	2 to 17
Top Rheumatology Diagnoses	Juvenile Idiopathic Arthritis (JIA)	92 (61%)
	Polyarthritis	*50 (33%)*
	Oligoarthritis	*31 (21%)*
	Systemic	*11 (7%)*
	Autoinflammatory syndrome (e.g. TRAPS, CAPS, FMF)	18 (12%)
		6 (4%)
	Systemic Lupus Erythematosus	
Comorbidities	None stated	112 (74%)
	Obesity	9 (6%)
	Ocular inflammation	9 (6%)
	Asthma	3 (2%)
Required Hospitalisation	Yes	14 (9%)
	No	131 (87%)
	Missing	6 (4%)
Top 5 Symptoms Reported	Fever	69 (46%)
	Cough	51 (34%)
	Anosmia	28 (19%)
	Headache	28 (19%)
	Fatigue	23 (15%)
Deaths due to COVID-19	Yes	1 (<1%)
Treatment at onset of COVID-19 infection	Glucocorticoids	19 (13%)
	csDMARDs	67 (44%)
	Methotrexate	*54 (36%)*
	Antimalarials	*7 (5%)*
	Mycophenolate	*5 (3%)*
	bDMARDs	64 (42%)
	Anti-TNF	*45 (30%)*
	IL-6	*9 (6%)*
	IL-1	*8 (5%)*
	Any DMARD	104 (69%)

Conclusion: These initial data on outcomes of COVID-19 in paediatric RMDs are very reassuring, with less than 1 in 10 patients reporting hospitalisation. Due to the database design and inherent reporting bias, this is likely an overestimate, suggesting that overall outcomes among this population appear to be generally good, with mild infection. Increasing case reports to the database will allow further exploration of drug- and disease-specific outcomes.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1243

POS1184 AUTOIMMUNE SYSTEMIC DISEASES AND COVID-19 INFECTION

S. Monov[1], R. Shumnalieva[2], D. Monova[3]. [1]*Medical University - Sofia, Departmant of Rheumatology, Sofia, Bulgaria*; [2]*Medical University - Sofia, Department of Rheumatology, Sofia, Bulgaria*; [3]*Medical Institute, Medical University - Sofia, Department of Internal Medicine, Sofia, Bulgaria*

Background: Covid-19 infection poses a serious challenge for immune-compromised patients. This is likely due to a combination of immune dysfunction, immunosuppressive therapy and excess co-morbidities. Little is known about the impact of Coronavirus disease 2019 (COVID-19) in patients with inflammatory autoimmune systemic diseases.

Objectives: The aim of this study is to describe clinical characteristics of patients with autoimmune systemic diseases and COVID-19, and to identify baseline variables associated with a severe infection requiring hospitalization.

Methods: A telephone survey investigating the impact of COVID-19 on patients with systemic lupus erythematosus (SLE), systemic sclerosis (SSc), inflammatory arthritis (rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis), idiopathic inflammatory myopathies (IIM), ANCA-associated vasculitis (AAV) was administered. Data extraction included diagnosis, disease activity status, demographics, disease duration, occupational exposure, adherence to social distancing advise, therapy, comorbidities, and laboratory tests. Covid-19 was classified as definite diagnosis of Covid-19 disease: presence of symptomatic Covid-19 infection, confirmed by a nasopharyngeal SARS-CoV-2 polymerase chain reaction test. Comparisons between patients with or without hospitalization were performed.

Results: 512 patients (median age 53,4 ± 14,3 years) with autoimmune systemic diseases (234 IA, 182 SLE, 42 SSc, 31 IIM, 23 AAV) were included in the study. 89 patients (58 woman, 31 men) developed at least one symptom (fever, asthenia, chills, cough, sore throat, dyspnea, chest pain, headaches, arthralgias, myalgias, odynophagia, diarrhea, conjunctivitis, hypo-, ageusia, hypo-, anosmia) of COVID-19 and were PCR test positive. Of patients with COVID – 19 infection 54 patients were treated with methylprednisolone, 36 – with methotrexate, 34 – with hydroxychloroquine, 26- with biologics, 10 - with azathioprine, 6 - with cyclophosphamide prior to their COVID-19 illness.

Conclusion: Covid-19 is more frequent in the subgroup of patients without therapy with modifying anti-rheumatic drugs, which might play some protective role against the most harmful manifestations of Covid-19. 21 patients required hospitalization - these were more frequently men, older and with comorbidities (cardio-respiratory illness, renal diseases, diabetes mellitus). Male sex, previous coronary and lung disease, serum creatinine level, proteinuria, glucocorticoids use > 5 mg/day, were associated to hospitalization. Patients with inflammatory arthritis do not seen to be at higher risk for infection or a severe course of COVID-19.

REFERENCES:

[1] Monova, D., S. Monov. Mechanisms of kidney injury in patients with COVID-19. Nephrology, dialysis and transplantation, 2020; 26 (4): 5-15.

[2] Monova, D., S. Monov. Kidney injures in COVID-19. Nephrology, dialysis and transplantation, 2020; 26 (4): 16-34.

Disclosure of Interests: Simeon Monov Speakers bureau: AMGEN, PFIZER, NOVARTIS, ABBVIE, ROCHE, ASTRA-ZENECA, Russka Shumnalieva: None declared, Daniela Monova: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1254

POS1185 IMPACT OF LOCKDOWN DURING COVID-19 PANDEMIC ON THE ONSET OF POST-TRAUMATIC STRESS DISORDER (PTSD) IN SYSTEMIC SCLEROSIS PATIENTS: A CASE-CONTROL STUDY

D. M. Reza Beigi[1], G. Pellegrino[1], A. Lorello[1], C. Angelelli[1], K. Stefanantoni[1], F. Conti[1], V. Riccieri[1]. [1]*Sapienza University of Rome, Department of Internal Medicine, Anesthesiology and Cardiovascular Sciences, Rome, Italy*

Background: Social distancing due to COVID-19 pandemic had a major impact on the mental health of general population, with a high prevalence of post-traumatic stress disorder (PTSD) related symptoms[1, 2]. Psychological repercussions were notably found in people with chronic diseases, including systemic sclerosis (SSc) patients, where an increasing of anxiety symptoms, related also to low financial resources, emerged[3].

Objectives: To evaluate the impact of COVID-19 lockdown on the onset of PTSD in patients with SSc, firstly during the total confinement period (March-April 2020) and then at the time of less restrictive government measures, following the RT index lowering (June-July 2020)[4].

Methods: We carried out a case-control study on 57 SSc patients, according to the ACR/EULAR 2013 criteria, and on 57 healthy subjects as control group (HC), matched by sex and age. At T0 (March-April) and T1 (June-July) both populations received the "Impact of Event Scale Revised" questionnaire (IES-R) by e-mail, with a cut-off of ≥ 33 defining probable diagnosis of PTSD[5]. A multivariate analysis of possible factors influencing IES-R score, such as age, number of cohabitating people and weekly outings count, was performed in SSc patients at both times of the survey.

Results: At T0 we found a significantly greater number of SSc patients with IES-R score ≥ 33 compared to HC (26/45.6% vs 13/22.8%; median value [quartiles] 31 [19.5;42.5] vs 24 [15.5; 32]; p-value 0.046). At T1, we obtained data from 44 SSc patients and 35 HC but no significant difference was noticed (18 / 40.9% vs 8 / 23.5%; 26 [15.25; 38] vs 26.5 [20.75; 32.5]; p> 0.05). SSc patients also had significantly fewer weekly outings than HC, both at T0 (p <0.001) and T1 (p <0.001) (Table 1). The multivariate analysis performed at T0 on SSc patients showed a significant association of IES-R ≥33 score with age (p 0.025) and with a lower count of weekly outings (p 0.002). The latter data negatively correlated with an IES-R ≥33 score in SSc patients (r -0.267, p 0.004).

Conclusion: We found a significantly higher prevalence of PTSD in SSc patients compared to HC at the strictest lockdown time, turning into comparable when

government measures were less restrictive, due to the minimum RT index values recorded in Italy. Older age and lower count of weekly outings were associated with PTSD in SSc patients during the lockdown, whereas the count of weekly outings was lower than in HC during both the examined periods. The results of this study indicate that COVID-19 lockdown had a worse impact in SSc patients, where the fewer weekly outings may depend on their clinical condition and on a greater concern about their health[6]. These findings strengthen the World Scleroderma Foundation recommendations regarding care to the psychological frailty of SSc patients[7].

REFERENCES:

[1] Wang C, Brain Behav Immun. 2020.
[2] Dubey S, Psychiatr Pol. 2020.
[3] Thombs BD, J Psychosom Res. 2020 Dec.
[4] https://covid19.infn.it/grafici/?chart=italia,rt,covidstat
[5] Weiss, D. S., & Marmar, C. R. (1996). The Impact of Event Scale - Revised, Assessing. psychological trauma and PTSD (pp. 399-411).
[6] Orlandi M, *Clin Rheumatol*. 2020
[7] Matucci-Cerinic M, *Ann Rheum Dis*. 2020

Table 1. Descriptive analysis of study population: T0 (Time 0), T1 (Time 1), SD (Standard Deviation), IES-R (Impact of Event Scale-Revised).

	SSc patient group	HS group
Female:male ratio at T0	46:7	46:7
Mean age ± SD at T0	59±12.8	51±8.7
IES-R ≥33 score n°/% at T0	26/45.6%*	13/22.8%
IES-R ≥33 score n°/% at T1	18/40.9%	8/23.5%
IES-R score at T0, median value [quartiles]	31 [19.5;42.5]	24 [15.5;32]
IES-R score at T1, median value [quartiles]	26 [15.25; 38]	26.5 [20.75; 32.5]
N° of weekly outings at T0, median value [quartiles]	2 [1;3.5]	4 [2;10]**
N° of weekly outings at T1, median value [quartiles]	5 [3;6]	14 [6.75;15]**

*p<0.046; **p<0.001

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1266

POS1186

EFFECT OF SOCIO-ECONOMIC STATUS AND EDUCATIONAL LEVEL ON COVID-19 OUTCOMES IN PATIENTS WITH RHEUMATIC DISEASES FROM ARGENTINA: DATA FROM THE SAR-COVID REGISTRY

L. Sorrentino[1], J. Rebak[1], F. Maldonado[1], V. V. Castro Coello[1], A. Brigante[1], A. Hamaui[1], D. Dubinsky[1], R. Baez[2], C. Pisoni[2], C. Gobbi[2], L. Carlevaris[2], R. Tanten[2], A. K. Cogo[2], M. Delavega[2], R. Perez Alamino[2], M. A. Lazaro[2], M. Pera[2], S. I. Pineda Vidal[2], M. E. Calvo[2], D. Guaglianone[2], C. G. Alonso[2], M. Guinsburg[2], C. Retamozo[2], C. Aeschlimann[2], R. Quintana[3], K. Roberts[3], C. A. Isnardi[3], G. Pons Estel[3]on behalf of SAR-COVID Registry. *[1]Sanatorio Güemes, Department of Rheumatology, Ciudad Autónoma de Buenos Aires, Argentina*; *[2]Argentine Society of Rheumatology, On behalf of SAR-COVID Registry, Ciudad Autónoma de Buenos Aires, Argentina*; *[3]Argentine Society of Rheumatology, Research Unit - SAR-COVID Registry, Ciudad Autónoma de Buenos Aires, Argentina*

Background: SARS-CoV-2 infection can present with a broad clinical spectrum, from asymptomatic to lethal. Different risk factors have been recognized. Socio-economic status and educational level may affect access to the healthcare system and therefore COVID-19 infection outcome.

Objectives: The aim of this study was to assess the association between socio-demographic status and educational level and SARS-CoV-2 outcomes, such as hospitalization, ICU admission, need for mechanical ventilation and death, in Argentinean patients with rheumatic diseases from the SAR-COVID Registry.

Methods: We performed a cross-sectional study of consecutive adult patients with rheumatic diseases and SARS-CoV-2 infection included in the multicentric Argentinean SAR-COVID Registry. The following variables were included: gender, ethnicity, age, health insurance, educational level (under or over 12 years of education), socio-economic level according to Graffar Scale in high, medium-high, medium, medium-low, low; underlying rheumatic disease, its duration and treatment at the time of infection.

SARS-CoV-2 infection outcomes were: hospitalization, admission to ICU, mechanical ventilation requirement and death.

Statistical analysis was performed using Chi^2, Fisher, T-test, ANOVA.

Results: Five hundred and twenty-five patients were included, 422 (80.4%) were female, with a mean age of 51.3 years (SD 15.2). Most of them were caucasians (48%) or mestizos (43%) and 96.8% lived in an urban environment. Almost half of the patients (47%) were categorized as middle-class, 24% middle-high or high class, 21% middle-low or low. 48.4% of the patients were employed. Regarding educational level, 54% had more than 12 years of education.

The most prevalent rheumatic disease was Rheumatoid Arthritis (40.4%), followed by Systemic Lupus Erythematosus (14.9%), Sjögren (5.5%) and Psoriatic Arthritis (5.5%). Treatments used at the time of SARS-CoV-2 infection were corticosteroids (19%), cs-DMARDs (49%), and b- and ts-DMARDs (16%).

Overall hospitalization frequency was 35%, median hospital stay was 10 days (IQR 10 days), 11.6% were admitted to the ICU, 10% required mechanical ventilation and the global mortality was 8%.

Notably, patients with less than 12 years of education required mechanical ventilation more frequently than the more educated ones (11.9% vs. 5.6%, p=0.026) and showed a higher mortality due to COVID-19 (9% vs. 2.8%, p=0.0004).

Patients categorized as upper social classes (middle-high and high) were admitted to the hospital on a more frequent basis (74.4% of cases), when compared with middle class (64.4%) and middle-low and low class (58%) (p=0.77). Median duration of hospitalization for the aforementioned groups was 12.5 (IQR 17.3), 10 (IQR 9) and 10.5 (IQR 9.3) days respectively (p=0.60).

Patients with health insurance were found to be hospitalized more frequently in comparison to those without insurance (42.4% vs. 33.7%, p=0.14), but showed similar admission rates to the ICU (11.8% vs. 12.8%; p=0.78), need for mechanical ventilation (10.7% vs. 8.7%; p=0.70) and mortality (7.1% vs. 6.5%; p=0.99).

Caucasian patients had fewer hospital admissions when compared against other ethnicities (mestizos mostly) (26.1% vs. 43.4%; p<0.0001), but showed no statistically significant difference in need for mechanical ventilation 10.3% vs. 9.9% (p=0.99) or mortality 8.7% vs. 5.1% (p=0.15).

Conclusion: Patients with lower educational level needed twice the frequency of mechanical ventilation, and showed thrice the mortality than those with more than 12 years of education.

Albeit patients in upper social stratus and those with health insurance were admitted to the hospital in a more frequent manner, no statistically significant differences were found regarding the need for ICU, mechanical ventilation or mortality.

Caucasians were hospitalized less frequently than mestizos, but had no significant differences in the other measured outcomes.

Disclosure of Interests: Laura Sorrentino Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Jonathan Rebak Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Federico Maldonado Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Vanessa Viviana Castro Coello Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Alejandro Brigante Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Adriana Hamaui Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Diana Dubinsky Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Roberto Baez Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Cecilia Pisoni Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Carla Gobbi Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Leandro Carlevaris Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Romina Tanten Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Adriana Karina Cogo Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Maria DeLaVega Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Rodolfo Perez Alamino Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Maria Alicia Lazaro Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Mariana Pera Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Susana Isabel Pineda Vidal Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Maria Elena Calvo Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Debora Guaglianone Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Carla G Alonso Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Mara Guinsburg Grant/research support from: Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data., Cinthya Retamozo Grant/research support from: Unrestricted