and medication were recorded. Pain and fatigue were measured by the Visual Analogue Scale (VAS), anxiety and depression were assessed using the Hospital Anxiety and Depression Scale (HADS), and sleep quality was assessed using the Pittsburgh Sleep Quality Index. SB was measured using the ActivPAL4™ activity monitor, over a 7-day wear period. Descriptive statistics were calculated to describe participant characteristics. Relationships between clinical characteristics and SB were examined using Pearson's correlation coefficients and regression analyses.

Results: N=76 participants enrolled in the study with valid data provided by N=72 participants. Mean age of participants was 61.5 years (SD10.6) and the majority 63% (n = 47) were female. Participant mean disease duration was 17.8 years (SD10.9). Mean SB time was 533.7 (SD100.1) minutes (8.9 hours per day/59.9% of waking hours). Mean sleep quality score was 7.2 (SD5.0) (Table 1). Correlation analysis and regression analysis found no significant correlation between sleep quality and SB variables. Regression analysis demonstrated positive statistical associations for SB time and body mass index (p-value=0.03846, $R^2 = 0.05143$), SB time and pain VAS (p-value=0.009261, $R^2 = 0.07987$), SB time and HADS (p-value = 0.009721, $R^2 = 0.08097$) and SB time and HADS (p-value = 0.01932, $R^2 = 0.0643$).

Conclusion: We found high levels of sedentary behavior and poor sleep quality in people who have RA, however no statistically significant relationship was found in this study. Future research should further explore the complex associations between sedentary behavior and sleep quality in people who have RA.

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Table 1. Sleep quality in people who have RA

Sleep variable	
Bed Time N(%)	
before 10pm	13(18%)
10pm-12pm	43 (60%)
after 12pm	16 (22%)
Hours Sleep mean(SD)	6.56 (1.54)
Fall Asleep minutes mean(SD)	33.3(27.7)
Night Waking N(%)	45(63%)
Self-Rate Sleep mean(SD)	2.74 (0.90)
Hours Sleep mean(SD)	6.56 (1.54)

Disclosure of Interests: None declared

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POS1466-HPR IMPACT OF COVID-19 PANDEMIC ON ADHERENCE BEHAVIOR OF LATIN-AMERICAN PATIENTS WITH RHEUMATIC DISEASES

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Background: One of the greatest challenges of the COVID-19 pandemic for rheumatologists concerns the patient's adherence to treatment (1). The impact of poor adherence on the effectiveness of chronic disease treatment is severe in terms of poorer health outcomes and increased health care costs (2). Information regarding covid-19 on adherence behavior in Latin-American is scarce.

Objectives: The aim of this study is to describe impact of COVID-19 outbreak on adherence behavior in Latin-American population with rheumatic diseases.

Methods: We carried out a descriptive, cross-sectional, self-report study through voluntary telephonic survey, to determine adherence behaviors during

the COVID-19 pandemic, from September 9th, 2020 to November 19th, 2020, for consecutive patients of the outpatient rheumatology clinic in the Hospital Universitario (Monterrey, Nuevo Leon, Mexico), which serves a resource limited population that lack access to health insurance, from five neighboring states. A 17-items survey was designed. Baseline demographics that were collected included age, sex, rheumatologic diagnosis, current medications and patient perception of disease control. Patients were asked if they continued follow-up care, last prescribed therapy and reasons. Also, the survey assessed whether patients had any issues with medication supply and where they were obtaining information about covid-19 (could choose as many options as applicable). Transferred to SPSS for analysis for descriptive statistics.

Results: A total of 150 patients were called, the survey response rate was 54.6% (n=82), with a mean completion time of 10 minutes. The mean +/- SD age of the participants was 52 +/- 15.9 years, and 95% were female. The most common self-reported diagnoses were rheumatoid arthritis (RA) (13.4%) and systemic lupus erythematosus (SLE) (13.4%) [Table 1]. Patient perception of disease control was primary good 37.8% and regular 35.4%.

Patients that continued their follow-up with their rheumatologist (on the clinic face-to-face, electronically or telehealth) or in another clinic were 26.9%, the majority were nonadherent 73%. Persistence to treatment was 82.9%, the main reason to discontinue therapy was lack of prescriptions or medical advice 8.5% and overall 58.5% had trouble finding their medicine.

Information regarding covid-19 was mainly obtained by television (health secretary conference) 90.2%, and the least directly from their doctor 4.8%.

Table 1. Survey Results

	N (%)
Age, mean +/- SD years	52 +/- 15.9
Female/ Male	78 (95.1) / 4 (4.9)
Diagnoses	
RA	50(61)
SLE	11(13.4)
Osteoarthritis	10(12.2)
Other	11(13.4)
Disease Control during covid-19	
Excellent	8 (9.8)
Good	31 (37.8)
Regular	29 (35.4)
Bad	14 (17.1)
Continued follow-up	22 (26.9)
(face-to-face, telehealth, other)	
Continued last prescribed treatment	68 (82.9)
Reasons to discontinue treatment	
Lack of prescriptions/ medical advice	7 (8.5)
Lack of availability	6(7.3)
Economic disadvantage	3 (3.6)
Fear of getting sick of COVID-19	2(2.4)
"Trouble" finding medicine	48 (58.5)
COVID-19 information	
Television (Health Secretary conference)	74 (90.2)
Social network	27 (32.9)
Newspaper/ magazines	14 (17)
Internet	9 (10.9)
From a doctor	4 (4.8)

Conclusion: Patients continue their therapeutic regimen, still many of them have trouble finding their medications, which affects the disease control. Also, despite having a poor disease control (majority between regular and bad) they are not continuing their follow-up care, more objective studies are needed to determine a specific cause.

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POS1467-HPR SEVERE RESPIRATORY INFECTIONS IN RHEUMATOID ARTHRITIS PATIENTS WITH BIOLOGIC THERAPY. COMPARATIVE STUDY BETWEEN VACCINATED AND NON VACCINATED PATIENTS

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Background: Rheumatoid arthritis (RA) patients are at increased risk of severe infections due to the disease itself, and the immunosuppressive treatment. Vaccination programs are designed to decrease the risk of infections.

Objectives: In patients with RA treated with biologic therapy (BT) our aim was to assess a) the incidence of severe respiratory infections and b) to compare the risk between vaccinated and non vaccinated patients.

Methods: Observational study of 431 patients diagnosed with RA that initiated BT. One group of patients participated in a vaccination program from October 2011 to October 2016 (Group 1). The other group was not included in the vaccination program (Group 2). The follow-up was made until June 2017 with a minimum follow-up period of 8 months and a maximum of 5.5 years.

Information on severe respiratory infections, defined as those that required hospitalization or at least one dose of intravenous antibiotic treatment at the emergency room, was retrieved from the hospital medical records.

Results: We studied 431 patients (335 women/96 men); mean age 63.4±13.7 years. In the vaccination program (group 1) were included 299 (69.37%) patients and in the group 2 132 patients (30.63%). The main features of both groups are summarized in Table 1.

During the follow-up, we registered 299 hospital admissions due to severe respiratory infections in both groups (incidence density 9.9 (95% CI: 6.9-13.6). In group 1, vaccinated patients, this incidence density was reduced to 7.1 (95% CI: 4.1-11.6). Figure 1.

The vaccination program reduced the general incidence of severe respiratory infection in 44%.

Conclusion: RA patients with BT included in the vaccination program present a lower incidence of severe respiratory infections compared with non vaccinated patients.

Table 1. Main general features at BT onset

	Group 1 Vaccination program N=299	Group 2 Non vaccination program N=132	p
Age (years) mean±SD	61.32±13.04	67.97±14.17	0.32
Women, n (%)	231 (77.3%)	105 (79.5%)	0.59
Duration of RA (months) mean±SD	73.24±10.4	112.62±60.2	
Positive RF/ Positive ACPA, n (%)	177(59.2)/172 (57.52%)	93(70.5%)98 (74.24%)	0.02/0,01
Erosive disease, n (%)	116 (38.8%)	70 (53%)	0.06
Vasculitis, n (%)	15 (5%)	2 (1.5%)	0.08
Interstitial lung disease n (%)	12 (4%)	7 (5.3%)	0.54
Subcutaneous nodules n (%)	16 (5.4%)	6 (4.5%)	0.72
Corticosteroids	299 (100%)	132 (100%)	1
Number of conventional DMARDs, mean±SD	1,66±0.89	2.03±1.05	0.3

Figure 1.

Disclosure of Interests: None declared

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POS1468-HPR THE IMPACT OF COVID-19 ON RHEUMATOLOGY HEALTH CARE WORKERS AND THEIR SCIENTIFIC OUTPUT: HEAVY LIES THE CROWN ON FEMALE RHEUMATOLOGISTS

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Background: COVID-19 has changed daily practice in medicine and affected teaching as well as research activities of medical personnel. Meanwhile, the pandemic's impact on private life and responsibilities for dependents also affected health care workers in rheumatology.

Objectives: To examine the adaptability of clinician-researchers in rheumatology in a time of crisis focusing on academic output in the first six months of the COVID-19 pandemic and to investigate the professional and private burden experienced by health care workers in rheumatology.

Methods: A systematic search in PubMed, medRxiv and bioRxiv for reports of rheumatic diseases and COVID-19/SARS-CoV-2 submitted (or published) from January 1 to June 30 2020 was carried out. As comparison, publications from April 6 to 13 2019 of the same rheumatic diseases without COVID-19 were analysed in terms of author characteristics and journal metrics. Additionally, a questionnaire was circulated via EULAR countries rheumatology societies and individual working group members. The participants were asked to answer 43 questions regarding their family situation, professional background, research output, changes in work and private responsibilities during the pandemic as well as the burden experienced. Responses were collected using an online survey tool and data analyses performed with SPSS Statistics 25; missing variable analysis was performed, excluding records with >15% missing responses. Descriptive and summary statistics were calculated for the entire dataset and split by gender.

Results: Whereas the overall number of publications and authors was equal between 2020 and 2019, the portion of female first authors of review articles and original studies decreased substantially in the first phase of the pandemic (Table 1). The numerical contribution of female authors in highly ranked journals (impact factor>6) was comparable in 2019 and 2020, however, the percentage of female first authors dropped from 50% to 32% (P=0.07).

Table 1. Author and journal metrics of publications

	Authors		
	2019 (%)	2020 (%)	
Proportion female	N=1386	N=1361	P-value
overall	46,8	41,1	n.s.
first authorships			
all publications	46,8	35,3	0,021
reviews	56,7	30	n.s.
original studies	46,2	18,2	0,004
other reports*	42,6	39,9	n.s.
last authorships			
all publications	34,7	27,9	n.s.
reviews	33,3	15	n.s.
original studies	32,1	30,3	n.s.
other reports*	40,7	29,1	n.s.

*other reports: letters/editorials/case reports

In the survey, a total dataset was available for N=180 responders. On average, female respondents (52.5%) were younger, more likely to live alone (19,1% vs 10,5%) and have no caring responsibilities (51.1% vs. 36.3%) than male respondents.

Male doctors were more often tenure-track/tenured or chairmen (31.4% vs 12.8% female) and worked less often part-time (9,3% vs. 19,1%). Unpaid overtime hours of all participants were striking with 46.3/44,2% (female/male) reporting to accumulate >10 hours/ week.

Regarding gender differences in scientific output, male respondents more frequently revealed >20 publications as first (57,6% vs. 26,9%) or last authors (34,1% vs. 10,1%). Similarly, 44,7% of male respondents reported a last author publication during COVID-19 vs. 26,4% of female respondents.

While female and male respondents reported similar experience of burden during the pandemic, more female respondents reported increased family care as a major source of this (38,2% vs. 22,2%). Both genders would like to see increased support from superiors and official institutions.