Figure 1.

Disclosure of Interests: None declared

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POS1464-HPR ASSESSMENT OF EMOTIONAL WELL-BEING IN RHEUMATIC PATIENTS DURING COVID-19 LOCKDOWN THROUGH A WEB-BASED SURVEY APPROACH

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Background: The severe measures of lockdown imposed in Italy to limit the SARS coronavirus 2 disease (COVID-19) spread caused an increase of reported anxiety, depression and suicidal rate among general population. Patients affected by rheumatic disorders feature an increased risk of mood disorders for the chronic course of the disease itself and for the related disability.

Objectives: Aim of this study was to investigate the impact of COVID-19 lockdown on emotional well-being of a large cohort of rheumatic patients through a telemedicine approach.

Methods: Patients in follow-up in rheumatologic out-patient clinics of our hospital were invited to participate to an online survey. They were asked also to invite their best friend, matched for age and sex, to participate the survey, as control group. The online survey included demographic questions and validated, psychometric scales for stress vulnerability (Stress Vulnerability Scale-SVS), resilience (Resilience Scale-RS), depression (Zung's depression questionnaire-Zung-D) and anxiety (Zung's anxiety questionnaire-Zung-A) evaluation.

Results: The cohort was composed by 484 subjects (84,1% F, 15,9% M). The number of subjects and the frequency of various diagnosis are shown in Table 1. According to the psychometric scales, 55,5% and 43,3% of subject showed respectively an increased stress vulnerability and a reduced resiliency. Moreover, 64% and 40,5% of the enrolled subjects reported respectively anxiety and depressive symptoms worthy of psychiatric attention. There was a significant different distribution of scores for SVS ($p<0,0001$), Zung-A ($p<0,0001$) and Zung-D ($p<0,0001$) among the various diagnosis. In comparison with controls, higher scores of SVS were present in connective tissue diseases (CTD) ($p=0,007$), Sjogren's Syndrome (SSJ) ($p=0,0029$) and fibromyalgia (FM) ($p<0,0001$) patients, higher scores of Zung-A were present in SSJ ($p=0,006$) and FM ($p<0,0001$) patients and higher scores of Zung-D were present in FM ($p<0,0001$) patients (Figure 1). Ordinal regression analysis showed that higher classes of anxiety were independently predicted by the Tension ($\beta=0,32$; CI=0,13-0,52; $p=0,003$) and Demoralization ($\beta=0,22$; CI=0,04-0,44; $p=0,046$) components of SVS and by the Zung-D score ($\beta=0,09$; CI=0,05-0,1; $p<0,001$), while higher classes of depression were independently predicted by SVS total ($\beta=0,17$; CI=0,03-0,30; $p=0,012$), by its subcomponent Demoralization ($\beta=0,22$; CI=0,01-0,43; $p=0,038$), by a lower absolute RS score ($\beta=-0,083$; CI=-0,1-0,06; $p<0,001$) and by the Zung-A score ($\beta=0,11$; CI=0,06-0,15; $p<0,001$). In both cases, a specific diagnosis was not associated to a higher risk of advanced anxiety and depression classes.

Conclusion: Rheumatic patients developed a high frequency of anxiety and depressive symptoms following COVID-19 lockdown, of which a large part should be referred for specialist attention according to their severity. There was a large variability of the symptoms reported among the various diagnosis. CTD, SSJ and FM patients were the most susceptible to the development of anxiety, depression and stress vulnerability. The application of psychometric scales

through a telemedicine approach represents a useful tool to identify patients with higher levels of anxiety and depression.

Table 1.

DIAGNOSIS		
	Frequency	Percent
Controls	45	9,3
RA	82	16,9
PSA	21	4,3
UA	4	0,8
SPA	7	1,4
CTD	70	14,5
FM	79	16,3
Myositis	8	1,7
Behcet's	11	2,3
Vasculitis	16	3,3
APS	6	1,2
Other AID	13	2,7
SSJ	122	25,2
Total	484	100

RA: Rheumatoid Arthritis; PSA: Psoriatic Arthritis; UA: Undifferentiated Arthritis; SPA: Spondyloarthritis; CTD: Connective tissues diseases (including Systemic Lupus Erythematosus, Scleroderma, Undifferentiated Connectivitis, Mixed Connectivitis); FM: Fibromyalgia; APS: Anti-phospholipid syndrome; Other AID: Other autoimmune/inflammatory disorders (including Adult-onset Still disease, IgG4 related disease); SSJ: Sjogren Syndrome

Figure 1.

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HPR Epidemiology and public health (including prevention)

POS1465-HPR THE RELATIONSHIP BETWEEN SEDENTARY BEHAVIOR AND SLEEP IN RHEUMATOID ARTHRITIS: A CROSS-SECTIONAL STUDY

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Background: Rheumatoid arthritis (RA) is a chronic, autoimmune inflammatory condition that affects 0.5% of the adult population worldwide (1). Sedentary behavior (SB) is any waking behavior characterized by an energy expenditure of ≤ 1.5 METs (metabolic equivalent) and a sitting or reclining posture, e.g. computer use (2) and has a negative impact on health in the RA population (3). Sleep is an important health behavior, but sleep quality is an issue for people living with RA (4, 5). Poor sleep quality is associated with low levels of physical activity in RA (4) however the association between SB and sleep in people who have RA has not been examined previously.

Objectives: The aim of this study was to investigate the relationship between SB and sleep in people who have RA.

Methods: A cross-sectional study was conducted. Patients were recruited from rheumatology clinics in a large acute public hospital serving a mix of urban and rural populations. Inclusion criteria were diagnosis of RA by a rheumatologist according to the American College of Rheumatology criteria age ≥ 18 and ≤ 80 years; ability to mobilize independently or aided by a stick; and to understand written and spoken English. Demographic data on age, gender, disease duration

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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