Public health, health services research, and health economics

AB1386 A SURVEY ON ACCEPTANCE OF COVID-19 VACCINATION AMONG PATIENTS WITH RHEUMATIC DISEASES -A SINGLE CENTER EXPERIENCE IN MALAYSIA

C. R. Ng[1], W. S. Wong[1]. [1]*Hospital Sultan Ismail, Rheumatology Unit, Department of Medicine, Johor Bahru, Malaysia*

Background: According to Statista, 78.5% of the population in Malaysia have completed their vaccination as of 6th january 2022 [1].The acceptance of patients with rheumatic diseases on Covid-19 vaccination is crucial in the long term protection against Covid-19 infection. We conducted a survey to determine the acceptance of Covid-19 vaccination amongst patients with underlying rheumatic disease.

Objectives: To find out the reasons of vaccination refusal amongst rheumatology patients.

Methods: This was an interview survey. All rheumatology patients who were follow up in rheumatology clinic Hospital Sultan Ismail, Malaysia from 26th April 2021 to 25th July 2021 (total 3 months) were interviewed. Demographic and diagnosis of the patients were collected.

Results: A total of 952 patients were identified. 83.7% of them were female patients (797/952) and majority of them were Malay (46.4%). This was followed by Chinese (36.1%), Indian (16.3%) and others (1.2%). The mean age group was 48 (range from 13 -85). 97.6% of the respondents were categorized as having inactive disease during the interview sessions. 36.6% of the patients were diagnosed to have rheumatoid arthritis and 29.1% of them were having systemic lupus erythematosus. These were followed by psoriatic arthritis (10.9%), mixed connective tissue disease (5.5%), systemic sclerosis (2.9%), gout (2.6%), Sjogren syndrome (1.9%), ankylosing spondylitis (1.6%), myositis (1.5%), vasculitis (1.3%), osteoarthritis (1.2%), antiphospholipid syndrome (0.9%), non-specific arthralgia (0.8%), juvenile idiopathic arthritis (0.8%), seronegative spondyloarthropathy (0.8%), undifferentiated connective tissue disease (0.7%), adult onset still's disease 0.5%) and others (< 0.5% each for Ig G 4 related disease, soft tissue rheumatism and fibromyalgia). 87.3% of them were keen or have already received Covid-19 vaccination. 12.7% of them were not keen for the vaccination with various reasons. 48.8% of them were worrying about worsening clinical condition, 12.4% of them were not keen as they concerned about side effects (3 worry about fever, 1 worry about hepatitis, 1 for nausea, 1 for dizziness, 1 for breathlessness, and 7 for non-specific reasons). 10.7% of them were not keen due to pregnancy, 5.79% of them were not keen as worried about allergic reactions, 4.9% of them were worrying about sudden cardiac death, 4% were not keen as on chemotherapy treatment, 3 % of them doubted the efficacy of vaccination, 2.5% were not keen as they worried about heart disease, 2.5% worried about increase risks of infection and others (2 for old age, 2 for thrombotic event, 2 for drug interaction and 1 patient due to hemodialysis).

Conclusion: The overall acceptance rate of Covid-19 vaccination amongst patients with rheumatic diseases is very encouraging with the percentage of >85% despite of lacking knowledge about vaccine Covid-19. This result can assist our Ministry of Health to plan for future battle to improve vaccine uptake that hopefully can lead to herd immunity against COVID-19 infection. More counseling sessions are required to clear up the doubts of vaccination and increase the vaccination rate amongst rheumatic patients.

REFERENCES:

[1] R. Hirschmann, Vaccination rate against Covid-19 Malaysia 2022, by state, Statista. Jan 7, 2022.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2022-eular.371

AB1387 THE EFFECTS OF PREGNANCY AND FERTILITY ON DRUG USAGE AND PREFERENCES IN RHEUMATOLOGICAL DISEASES: A SINGLE CENTER EXPERIENCE

B. Karataş[1], N. Çabuk Çelik[1], B. Karakaş[1], İ. Yalçın[1], G. Pire[1], H. Ş. Eren[1], M. Ş. Kuzu[2], M. Yıldırım[2], B. N. Özdamar[2], M. F. Aşkın[2], A. Sahin[1]. [1]*Sivas, Cumhuriyet University Internal Medicine-Rheumatology, Sivas, Turkey*; [2]*Sivas Cumhuriyet University Faculty of Medicine, Department of Internal Medicine, Sivas, Turkey*

Background: Rheumatological diseases usually affect women of reproductive age. Although the effects of these diseases on pregnancy vary; Joint and organ damage that may occur should be prevented, maternal and fetal effects of the treatment should be evaluated (1).

Objectives: The aim of this study to determine the effects of rheumatological diseases and drugs used on pregnancy and fertility.

Methods: Between January 2014 and January 2021, women between the ages of 18-45 who were diagnosed and treated at Cumhuriyet University Medical Faculty Rheumatology-Internal Medicine Department were retrospectively analyzed.

Results: The median age of the patients is 37 (min 19-max 45) years. 517 patients (51,7%) were pregnant after diagnosis, 39 patients (3,9%) had abortion after diagnosis, 957 patients (95,7%) had live birth, 69 patients (6,9%) had curettage, 43 patients (4,3%) could not have children. The median of pregnancies before diagnosis is 2 (min 1-max 11) the median of pregnancies after diagnosis is 1 (min 1-max 6) the median of abortions before diagnosis is 2 (min 1-max 7) the median of abortions after diagnosis is 1 (min. 1-max 4) the median of curettage is 1 (min 1-max 3) the median of live births is 2 (min 1-max 5). The distribution of patients according to drug use and drug used during pregnancy is shown in Figure 1. The distribution of the patients according to the diagnosis and the factors affecting pregnancies after diagnosis, abortions after diagnosis, curettage and live birth is shown in Table 1.

Table 1. The distribution of the patients according to the diagnosis and the factors affecting pregnancies after diagnosis, abortions after diagnosis, curettage and live birth.

	†FMF	‡RA	¶AS	§PSA	Sarcoidosis	Granulomatous Mastitis	Myositis	Vasculitis	Behçet's Disease	Still's Syndrome	Gout	Fibromyalgia	††SLE	Sjögren's Syndrome	Systemic Sclerosis	‡‡APS
Avaliable (%n)	224 %22.4	197 %19.7	274 %27,4	59 %5,9	1 %0,1	1 %0,1	1 %0,1	7 %0,7	169 %16,9	3 %0,3	2 %0,2	146 %14,6	105 %10,5	60 %6	37 %3,7	29 %2,9
Not Avaliable (%n)	776 %77,6	803 %80,3	726 %72,6	941 %94,1	999 %99,9	999 %99,9	999 %99,9	993 %99,3	831 %83,1	997 %99,7	998 %99,8	854 %99,9	895 %89,5	940 %94	963 %96,3	971 %97,1
Total (%n)	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100	1000 %100
			Use of colchicine (*OR %95 confidence range)			Use of anakinra (*OR %95 confidence range)			Use of methorexate (*OR %95 confidence range)				Use of leflunomide (*OR %95 confidence range)			
Number of pregnancy after diagnosis			**p value *OR:1,58 (1,22-2,034) **p: ‹0,001			**p value *OR:6,69 (1,51-29,60) **p: ‹0,004			**p value *OR: - 0,73 (0,51-0,93) **p: 0,05				**p value *OR: - 0,53 (0,30-0,93) **p: 0,035			
					‡‡APS (*OR %95 confidence range)						††SLE (*OR %95 confidence range)					
Number of abortion after diagnosis					**p value *OR: 3,7 (1,68-8,43) **p: ‹0,001						**p value *OR: 7,5 (2,78-20,25) **p: 0,001					
									‡‡APS (*OR %95 confidence range)							
Number of curettage Number of live birth									**p value *OR: 5,5 (1,94-15,84) **p: 0,001 *OR: - 0,20 (0,05-0,75) **p: 0,017							

*OR: Odds Ratio**p‹0,05 significant†FMF: Family Mediterranean Fever‡RA: Rheumatoid Arthritis¶AS: Ankylosing Spondylitis§PSA: Psoriatic Arthritis††SLE: Systemic Lupus Erythematosus‡‡APS: Anti Phospholipid Syndrome

Ann Rheum Dis: first published as 10.1136/annrheumdis-2022-eular.513 on 23 May 2022. Downloaded from http://ard.bmj.com/ on November 4, 2022 at SIVAS CUMHURIYET U.. Protected by copyright.

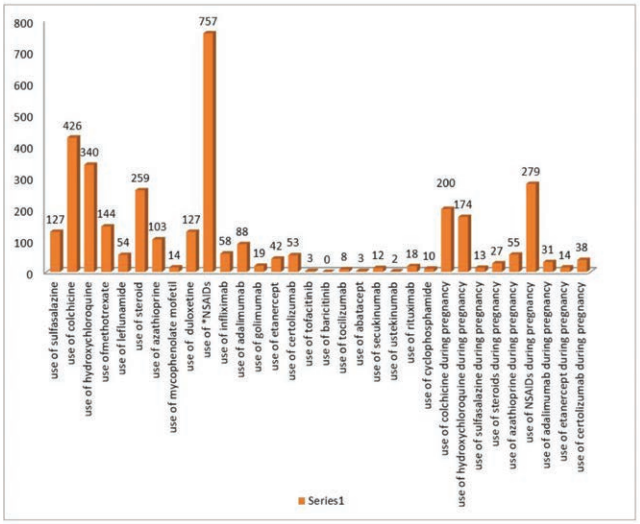


Figure 1. Distribution of patients according to drug use and drugs used during pregnancy

Conclusion: Women with rheumatic diseases should be in remission before pregnancy and should be followed closely throughout their pregnancy and treated with pregnancy-safe drugs. Preparations that can cause infertility in women during the reproductive period should not be used as much as possible. Patients should be informed in detail about the effects of their disease and the drugs used on pregnancy.

REFERENCES:

[1] Peterson E. A., Lynton J., Bernard A., Santillan M. K., Bettendorf B., Rheumatologic Medication Use During Pregnancy, Obstetrics & Gynecology: May 2020 - Volume 135 - Issue 5 - p 1161-1176doi: 10.1097/AOG.0000000000003755.

Acknowledgements: We would like to thank to Biostatistics Faculty Member Dr. Ziynet Çınar.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2022-eular.513

AB1388 CHARACTERISTICS ASSOCIATED WITH MYCHART ACTIVATION AND REASONS FOR NON-USE AMONG RHEUMATOLOGY CLINIC PATIENTS

C. Siegel[1], A. Bass[1,2], D. Jannat-Khah[1,2], O. Bruce[1], J. Olmscheid[1], N. Ghosh[1,2], S. E. Sattui[3], M. Schwartzman[1], D. Zisa[1], A. Lakhanpal[1], K. Yip[1], L. Yue[1], J. Aizer[1,2], J. Berman[1,2]. [1]*Hospital for Special Surgery, Medicine, New York, United States of America*; [2]*Weill Cornell Medicine, Medicine, New York, United States of America*; [3]*University of Pittsburgh, Medicine, Pittsburgh, United States of America*

Background: Electronic patient portals, such as MyChart by Epic, allow patients to view their medical records, request medication refills, and communicate with their health care providers. Factors associated with portal use include being younger, female, White, having private insurance, and having chronic illness.[1] The Hospital for Special Surgery (HSS) rheumatology clinic serves primarily patients with public insurance (Medicaid, which insures low-income adults, and Medicare, which insures adults >65 years old and those with eligible chronic illness/disability). These patients may be at increased risk for poor health outcomes due to clinical and socioeconomic factors and they are less likely to use MyChart than patients seen in HSS private practices. Increased MyChart use may benefit this high-risk group and improve health equity.

Objectives: This study aims to identify characteristics associated with MyChart activation and reasons for its underutilization among patients seen in the HSS rheumatology clinic.

Methods: We identified all patients aged ≥ 18 years seen in the HSS rheumatology clinic at least twice between January 15, 2019 and January 14, 2021, with at least one visit occurring between July 15, 2020 and January 14, 2021. MyChart status (active vs. inactive) and sociodemographic and clinical variables were extracted from the electronic health record (EHR). We used chi-square tests and t-tests to compare characteristics between patients with and without active MyChart; p-value <0.05 was considered significant (Table 1). In addition, 10 rheumatology fellows were prompted on 3 occasions over 6 weeks to informally survey their own clinic patients with inactive MyChart accounts by asking: "What is your primary reason for not using MyChart?"

Table 1. Baseline Characteristics of Hospital for Special Surgery Rheumatology Clinic Patients Stratified by MyChart Activation Status

	MyChart Active (N=726)	MyChart Inactive (N=501)	p-value
Age, yrs - Mean (SD)	50.3 (15.6)	60.0 (15.3)	*<0.01*
Female - N (%)	601 (82.8)	412 (82.2)	0.80
Race - N (%)			0.37
•White/Caucasian	275 (37.9)	184 (36.7)	
•Black/African American	185 (25.5)	135 (27.0)	
•Asian	58 (8.0)	25 (5.0)	
•Other	189 (26.0)	145 (28.9)	
•Unknown	18 (2.5)	11 (2.2)	
Ethnicity - N (%)			0.27
•Hispanic/Latino	294 (40.5)	226 (45.1)	
•Not Hispanic/Latino	422 (58.1)	268 (53.5)	
•Unknown	10 (1.4)	7 (1.4)	
Preferred language - N (%)			*<0.01*
•English	611 (84.2)	332 (66.3)	
•Spanish	72 (9.9)	134 (26.8)	
•Other	43 (5.9)	35 (7.0)	
Needs interpreter - N (%)	106 (14.6)	156 (31.1)	*<0.01*

Results: There were 1,227 patients included (93.2% with Medicaid and/or Medicare insurance). Compared to patients with inactive MyChart (42.9%), those with active MyChart (57.1%) were younger (50.3 ± 15.6 vs. 60.0 ± 15.3 years, p<0.01). The majority of patients in both groups was female. There was no significant difference in race or ethnicity between groups. Patients without active MyChart were less likely to identify English as their preferred language and more likely to require an interpreter for clinic visits (Table 1). The rheumatology fellows collectively asked 16 clinic patients with inactive MyChart their primary reason for non-use. The most commonly cited reason was difficulty using the technology (n=8; 50.0%); others included visual impairment (n=2; 12.5%), preference for using the telephone (n=2; 12.5%), concerns about security/spam (n=2; 12.5%), not having a smart phone/computer (n=1; 6.3%), and having a language barrier (n=1; 6.3%).

Conclusion: In the HSS rheumatology clinic, patients who did not have active MyChart were older and less likely to be English-speaking than those who did. The most common barrier to MyChart use reported by patients was difficulty with the technology. This pilot data suggests a need for interventions to facilitate patient-provider communication, specifically targeting older and non-English-speaking rheumatology clinic patients, with the goal of advancing patient engagement and health equity.

REFERENCES:

[1] Ancker JS, et al. J Gen Intern Med. 2011 June 7. doi: 10.1007/s11606-011-1749-y.

Disclosure of Interests: Caroline Siegel: None declared, Anne Bass: None declared, Deanna Jannat-Khah Shareholder of: AstraZeneca, Walgreens, Cytodyn, Omar Bruce: None declared, Justin Olmscheid: None declared, Nilasha Ghosh: None declared, Sebastian E. Sattui Grant/research support from: AstraZeneca, Monica Schwartzman: None declared, Diane Zisa: None declared, Amit Lakhanpal: None declared, Kevin Yip: None declared, Linda Yue: None declared, Juliet Aizer Grant/research support from: Pfizer and Lilly, Jessica Berman: None declared

DOI: 10.1136/annrheumdis-2022-eular.693

AB1389 COST-MINIMIZATION ANALYSIS IN RHEUMATOID ARTHRITIS IN SPAIN

J. M. Martínez-Sesmero[1], J. A. Schoenenberger-Arnaiz[2], C. Crespo-Diz[3], M. Cerezales[4]. [1]*Hospital Clínico San Carlos, Chief of Pharmacy Department, Madrid, Spain*; [2]*Institut Català de la Salut, Chief of Pharmacy Department. Regió Sanitària de Lleida, Lleida, Spain*; [3]*Servizo Galego de Saúde, Chief of Pharmacy Department. Área Sanitaria Pontevedra e O Salnés, Pontevedra, Spain*; [4]*Axentiva Solutions S.L., Health Economics, Oviedo, Spain*

Background: Rheumatoid Arthritis (RA) is a chronic condition causing fatigue, swelling and deformation of the joints. Together with its associated co-morbidities and high indirect costs represents a high humanistic and economic burden [1]. In Spain, RA has a prevalence around 1%[2], representing about 473.942 people. Since biological treatments were introduced, such as adalimumab (ADA), the clinical outcomes of RA's have improved[3]. Nevertheless, due to its high cost, biologics introduction was hurdled until biosimilars appeared[4]. At the moment, the available network meta-analyses[5,6] do not show a statistically significant difference in effectiveness between the different available treatment. Therefore, cost-minimization analysis can be a useful tool in this pathology.

Objectives: Our objective was to conduct a cost-minimization analysis for RA in Spain.

Methods: All the cost information for the therapeutic alternatives (certolizumab, etanercept, golimumab, infliximab, tocilizumab, tofacitinib, and upadacitinib)

Ann Rheum Dis: first published as 10.1136/annrheumdis-2022-eular.513 on 23 May 2022. Downloaded from http://ard.bmj.com/ on November 4, 2022 at SIVAS CUMHURIYET U.. Protected by copyright.