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Economic Evaluation

Direct Medical Costs and Healthcare Resource Utilization of Treating Patients With Two Clinical Subtypes of Axial Spondyloarthritis in Colombia



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ABSTRACT

Objectives: This study aimed to calculate the healthcare resource utilization and direct medical costs in patients with 2 subtypes of axial spondyloarthritis (axSpA) in a rheumatic care center in Colombia.

Methods: This is a retrospective cost-of-illness study. Patients with at least 1 medical consultation associated with an axSpA diagnosis between October 2018 and October 2019 were identified. Patients were classified as having radiographic (r-axSpA) or nonradiographic axSpA (nr-axSpA). Direct medical costs were calculated in Colombian pesos and expressed in American dollars using an exchange rate of 3263 Colombian pesos = 1 US dollar (\$). Predictors of total direct costs were identified using a generalized linear model with gamma distribution and log-link.

Results: A total of 162 patients with a mean age of 49.6 years (\pm 13.7) were included in the study. Among these, 147 (90.7%) were considered as having r-axSpA and 15 (9.3%) nr-axSpA, with mean costs of \$6600 (\pm 6203) and \$843 (\pm 1135), respectively ($P < .001$). The total direct mean cost was calculated at \$6067 (\pm 6144) per patient. Medication costs were the main driver of total costs (97.6%, \$5921), with biologic disease-modifying antirheumatic drugs accounting for nearly 92.0% (\$5582) of these costs. Rheumatologist (100%) and physiatrist (64.2%) visits were the most frequently used medical service.

Conclusions: The economic burden associated with axSpA in the Colombian setting is substantial. There is a significant difference in direct medical costs between the r-axSpA and the nr-axSpA. Health policies aimed at the comprehensive management of nr-axSpA would have an important role in the reduction of the associated direct medical costs.

Keywords: axial spondyloarthritis, cost-of-illness, economic burden, healthcare resource utilization.

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Introduction

As the leading cause of disability worldwide, musculoskeletal (MSK) disorders (with low back pain as the first leading cause) contribute considerably to the overall economic burden of non-communicable diseases.^{1–3} Axial spondyloarthritis (axSpA) is a heterogeneous MSK disorder characterized by an inflammation of the axial skeleton.⁴ This chronic condition demands high expenditures in pharmacological treatment and generates a considerable burden to healthcare systems and society due to productivity losses and its impairment in quality of life.^{5–7}

Direct medical costs associated with axSpA are variable across countries. Previous research has reported mean direct costs per patient from US dollar (\$) 4669 in 2016 in Brazil to \$8565 in 2017 in Singapore.^{8,9} Most studies have broadly focused on radiographic axSpA (r-axSpA) or ankylosing spondylitis, the most severe form of axSpA.^{10–12} Medications are considered the major contributor of direct costs as more expensive therapies are

currently available for the treatment of axSpA, especially for patients with greater disease severity and those with a poor response to conventional disease-modifying antirheumatic drugs (cDMARDs).¹³

Despite the availability of guidelines for the diagnosis and treatment of axSpA, early disease management is challenging and remains heterogeneous. Two types of axSpA are described: one in which the diagnosis is performed by clinics and conventional X-rays of sacroiliac joints and is called r-axSpA¹⁴; this form of SpA is generally considered to be more rapidly evolving and therefore more costly. The other form of disease diagnosed by clinics and/or using magnetic resonance imaging is called nonradiographic axSpA (nr-axSpA); it is assumed that this presentation is a milder form of disease and does not generate as many costs as the previous one.¹⁴

An association between delayed axSpA diagnosis and increased clinical, economic, and humanistic burden has been reported.¹⁵ In Latin America, several other barriers exist for the adequate and

opportune treatment of axSpA, including the low supply of rheumatologists and the high cost of biologic disease-modifying antirheumatic drugs (bDMARDs).^{16,17} Although cost-of-illness studies are considered relevant inputs for the economic evaluation of novel medical technologies such as bDMARDs, they are scarce in Latin America. The objective of this study was to describe the healthcare resource utilization (HCRU) and costs associated with r-axSpA and nr-axSpA from a rheumatic care center in Colombia.

Methods

Analytical Framework

A retrospective cost-of-illness study was conducted using the healthcare system perspective (ie, third payer perspective). The Colombian healthcare system provides medical attention through 3 different schemes: (1) a subsidized plan to provide health insurance coverage of poor individuals (defined by the Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales [SISBEN], a general-purpose system for selecting beneficiaries for social programs in Colombia) and those outside the formal sector¹⁸; (2) a contributive plan for people with formal employment or those who can afford healthcare attention based on a mandatory payroll deduction (~ 12.5% of the gross income divided between the employee and the employer) or individual out-of-pocket contributions, respectively; and (3) a special plan: for members of the military, teachers, and others.^{19,20} These schemes have a standardized benefit plan (*Plan de Beneficios en Salud*, in Spanish) that covers a package of medical services paid by the Colombian healthcare system through insurance companies in a regulated competence market. Currently nearly 94.6% of the Colombian population have coverage to the *Plan de Beneficios en Salud*.²¹

Patients remitted from general practitioners of insurance companies with at least 1 outpatient medical consultation associated with an International Classification of Diseases, Tenth Revision (ICD-10) codes M45X or M469²² from October 2018 to October 2019 were identified in a database of medical records from a rheumatic care center in Bogotá-Colombia (Biomab

Institución Prestadora de Servicios de Salud, in Spanish). Biomab is a private healthcare center that provides specialized medical care to patients with rheumatic conditions and is pioneer in the comprehensive treatment of these conditions in Colombia. Patients with an M45X and M46.9 code were considered as having r-axSpA and nr-axSpA, respectively. Routine measurements of the Ankylosing Spondylitis Disease Activity Score, the Bath Ankylosing Spondylitis Disease Activity Index, and Bath Ankylosing Spondylitis Functional Index (BASFI) were available for the study. Medical services and medications prescribed in the study period related to nonrheumatic comorbidities were excluded to describe HCRU and direct medical costs only related to axSpA.

HCRU and Direct Medical Costs

We extracted information from clinical records of patients with a previous diagnosis of r-axSpA and nr-axSpA treated at a rheumatic care center in Bogotá, Colombia, for a year. We analyzed and reported HCRU and costs by the following categories: consultations (rheumatologist, dermatologist, physiatrist, orthopedist, physical therapy, and other consultations), imaging tests, medications (nonsteroidal anti-inflammatory drugs, analgesic drugs, cDMARDs, and bDMARDs), and other health services. Costs resulting of hospitalizations and surgeries were not considered in this study because of the low frequency of these events in axSpA.²³

Direct medical costs were calculated by multiplying individual cost inputs by the total frequency of each medical service or medication. All cost inputs were obtained from Colombian official databases. For pharmacological treatments, costs inputs were obtained using official information provided by the Drug Price Information System (*Sistema de Información de Precios de Medicamentos* [SISMED] in Spanish).²⁴ The SISMED reports minimum, average, and maximum prices and the number of units sold for each medication offered in the Colombian market. In this study, each drug price was obtained according to the SISMED reported prices, weighing them by the number of units sold for each presentation in the country.^{25,26} Costs of imaging tests, medical consultations, and other health services were calculated using the *Instituto de Seguros Sociales* price list, adding 30%, as is recommended by the Colombian agency for health technology

Table 1. Baseline characteristics of the study sample.

Characteristic	Overall sample	nr-axSpA	r-axSpA	P value
Number of patients	162	15	147	
Sex				
Men	106 (65.4)	4 (26.7)	102 (69.4)	.003
Age in years, mean (SD)	49.6 (13.7)	43.6 (13.3)	50.2 (13.6)	.086
Clinimetrics, mean (SD)				
BASDAI (0-10)*	2.3 (2.1)	1.5 (1.9)	2.4 (2.1)	.167
BASFI (0-10) [†]	2.4 (2.3)	1.2 (1.9)	2.5 (2.3)	.048
ASDAS (0-10) [‡]	1.5 (1)	1.2 (1)	1.5 (1)	.402
Comorbidities				
Primary osteoarthritis	45 (27.8)	3 (20.0)	42 (28.6)	.562
Fibromyalgia	11 (6.8)	0 (0)	11 (7.5)	.601
Intervertebral disk disorder	6 (3.7)	1 (6.7)	5 (3.4)	.447
Uveitis	8 (4.9)	3 (20.0)	5 (3.4)	.027
Primary hypertension	7 (4.3)	0 (0)	7 (4.8)	.999

ASDAS indicates Ankylosing Spondylitis Disease Activity Score; BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; BASFI, Bath Ankylosing Spondylitis Functioning Index; nr-axSpA, nonradiographic spondyloarthritis; r-axSpA, radiographic spondyloarthritis.

*Estimated for 156 patients.

[†]Estimated for 153 patients.

[‡]Estimated for 145 patients.

Table 2. Healthcare services and medication utilization related to axSpA type in the study period.

Medical service/medication*	Overall sample	nr-axSpA	r-axSpA	P value
Number of patients	162	15	147	
Consultations, n (%)				
Rheumatologist	162 (100)	15 (100)	147 (100)	-
Mean (SD)	3.7 (1.3)	2.5 (1.2)	3.9 (1.3)	< .001
Dermatologist	15 (9.3)	2 (13.3)	13 (8.8)	.633
Mean (SD)	1.7 (0.9)	2.5 (0.7)	1.5 (0.9)	.263
Physiatrist	104 (64.2)	10 (66.7)	94 (63.9)	.999
Mean (SD)	1.7 (0.9)	1.6 (1.3)	1.7 (0.9)	.809
Orthopedist	9 (5.6)	1 (6.7)	8 (5.4)	.593
Mean (SD)	1.2 (0.4)	2 (-)	1.1 (0.4)	-
Other consultations [†]	63 (38.9)	5 (33.3)	58 (39.5)	.784
Mean (SD)	1.8 (1.5)	2 (1.7)	1.8 (1.4)	.807
Physical therapy	74 (45.7)	6 (40)	68 (46.3)	.788
Mean (SD)	1.9 (1.8)	2.8 (3.5)	1.9 (1.5)	.531
Medical imaging	71 (43.8)	6 (40)	65 (44.2)	.792
Mean (SD)	1.7 (0.9)	2 (1)	1.7 (0.9)	.457
Other services [‡]	0.4 (0.5)	0.2 (0.4)	0.4 (0.5)	.103
Mean (SD)	6.7 (5.4)	2.3 (1.5)	6.9 (5.4)	.009
Total frequency of any medical service	162 (100)	15 (100)	147 (100)	-
Mean (SD)	10.1 (6.3)	7.3 (5.4)	10.4 (6.4)	.053
Medications, n (%)				
NSAIDs	91 (56.2)	11 (73.3)	80 (54.4)	.183
Mean (SD)	2.5 (1.3)	2.1 (1.1)	2.5 (1.4)	.263
Analgesic drugs	48 (29.6)	3 (20)	45 (30.6)	.556
Mean (SD)	3 (1.4)	1.5 (0.7)	3.1 (1.4)	.151
Conventional DMARDs [§]	93 (57.4)	12 (80)	81 (55.1)	.098
Mean (SD)	3.9 (2.4)	3.8 (2.5)	4 (2.4)	.771
Biologic DMARDs	112 (69.1)	1 (6.7)	111 (75.5)	< .001
Mean (SD)	3.9 (1.2)	1.5 (0.7)	4 (1.2)	.113
Total frequency of any medication	155 (95.7)	15 (100)	140 (95.2)	.990
Mean (SD)	7.4 (4.3)	4.8 (3.9)	7.7 (4.2)	.013

axSpA indicates axial spondyloarthritis; DMARD, disease-modifying antirheumatic drug; nr-axSpA, nonradiographic spondyloarthritis; NSAID, nonsteroidal anti-inflammatory drug; r-axSpA, radiographic spondyloarthritis.

*The number of patients using each medical service/medication is reported. Relative frequencies were calculated using the total number of subjects for each column as denominator. Patients may have used more than one service/medication in the study period.

[†]Includes outpatient visits to the nutritionist, palliative care specialist, infectologist, psychologist, and psychiatrist.

[‡]Includes infusion therapy and pharmacovigilance.

[§]Includes leflunomide, cyclosporine, methotrexate, and sulfasalazine.

^{||}Includes golimumab, adalimumab, secukinumab, certolizumab, infliximab, etanercept, and ustekinumab.

assessment (*Instituto de Evaluación Tecnológica en Salud*, in Spanish) in its guideline to conduct economic evaluations.^{25,27}

The total cost per patient was calculated as the sum of all valued healthcare services and medication prescriptions observed in the study period. Mean and median direct costs were calculated only among patients who used the medical service or received the medication prescription. Calculated costs reflect the trends in healthcare utilization paid by the healthcare system resulting from the clinical care provided by physicians and healthcare workers. All costs were displayed in American dollars, using the official exchange rate reported by the Central Bank of Colombia between October 2018 and October 2019 (1 US dollar = 3263 Colombian pesos).²⁸

Statistical Analysis

Categorical and continuous variables were described with means and standard deviations and absolute (N) and relative frequencies (%). Direct medical costs were reported both as

arithmetic means with standard deviations and medians. Differences in costs and HCRU between r-axSpA and nr-axSpA were evaluated using *t* test and Pearson chi-square test. The ISPOR good research practice guidelines were used for cost data analysis.²⁹

We performed a one-part generalized linear model with gamma distribution, log-link function, and robust standard errors to identify direct medical costs key drivers.³⁰ Bivariate logistic regression models were used to evaluate the association between patient characteristics (demographic and clinical variables) and axSpA-related costs. Predictors with a *P* value < .25 were included in a multivariate regression model. The resulting coefficients were presented in their exponentiated form, indicating a ratio of costs between a category of interest and a category of reference for categorical predictors or as the percentage of increase in the mean cost per unit increase for a continuous predictor.³¹ Data analysis was performed in R: A language and environment for statistical computing version 3.3.6 (R Foundation for Statistical Computing, Vienna, Austria). A 2-sided *P* < .05 was considered statistically significant.

Table 3. Direct medical costs related to axial spondyloarthritis type.

Medical service/medication*	Overall sample		nr-axSpA		r-axSpA		P value
	Mean (SD)	Median	Mean (SD)	Median	Mean (SD)	Median	
Consultations							
Rheumatologist	52.6(18.4)	56.4	35.7(17.6)	42.3	54.3(17.6)	56.4	< .001
Dermatologist	14.5(7.8)	8.7	21.7(6.1)	21.7	13.4(7.6)	8.7	.263
Physiatrist	14.7(8)	8.7	13.9(11)	8.7	14.8(7.7)	13	.809
Orthopedist	10.6(3.8)	8.7	17.4(-)	17.4	9.8(3.1)	8.7	
Other medical visits [†]	7.7(7.2)	5.7	5.8(5.2)	2.9	7.9(7.3)	5.7	.442
Physical therapy	5.9(5.4)	3.1	8.7(10.9)	4.6	5.7(4.7)	3.1	.529
Medical imaging	53.2(71.8)	18.9	75.5(112.8)	16.4	50.7(66.5)	18.9	.587
Other services [‡]	129.1(108.4)	119.5	40.9(21.5)	39.8	133.3(109.2)	119.5	< .001
Any medical service	6190.7(6157.1)	144.6	745.8(1058.1)	97.9	6774.1(6192.5)	149.3	< .001
Medications							
NSAIDs	72(92.1)	33.8	61.4(74.5)	25.3	73.5(94.6)	33.8	.652
Analgesic drugs	100.5(122.8)	30.3	130.8(180.1)	130.8	99.1(122.4)	30.3	.845
Conventional DMARDs [§]	728.7(1019.4)	157.3	572.4(878.9)	157.3	751.9(1041.5)	157.3	.529
Biologic DMARDs	7799(5538.2)	6838.3	1721.3(466.9)	1721.3	7908.5(5526.6)	6956	< .001
Any medication	144.6(122.6)	6190.7	97.9(106.5)	745.8	149.3(123.5)	6774.1	.096
Total costs	6067.7(6148.8)	4334.4	843.7(1135.9)	250.9	6600.8(6203.1)	4897.2	< .001

axSpA indicates axial spondyloarthritis; DMARD, disease-modifying antirheumatic drug; nr-axSpA, nonradiographic spondyloarthritis; NSAID, nonsteroidal anti-inflammatory drug; r-axSpA, radiographic spondyloarthritis.

*Mean and median costs were calculated only among patients who used the medical service or received the medication prescription.

[†]Includes outpatient visits to the nutritionist, palliative care specialist, infectologist, psychologist, and psychiatrist.

[‡]Includes infusion therapy and pharmacovigilance.

[§]Includes leflunomide, cyclosporine, methotrexate, and sulfasalazine.

^{||}Includes golimumab, adalimumab, secukinumab, certolizumab, infliximab, etanercept, and ustekinumab.

Results

Sample Characteristics

Table 1 depicts the baseline sociodemographic characteristics of the study sample. A final sample of 162 patients was analyzed. Among these, 147 (90.7%) were considered as having r-axSpA and 15 (9.3%) nr-axSpA. Patients had a mean age of 49.6 years (\pm 13.7) and 138 (85.2%) were younger than 65 years. A higher proportion of male patients was observed among the r-axSpA group compared with nr-axSpA group ($P < .001$). Although we found higher baseline values of the Bath Ankylosing Spondylitis Disease Activity Index and Ankylosing Spondylitis Disease Activity Scores among the r-axSpA group, no statistically significant differences were found compared with the nr-axSpA group ($P > .050$). Only the BASFI score showed a significantly higher mean value among patients with r-axSpA ($P = .048$), indicating a higher disability than the nr-axSpA group. Regarding comorbidities, primary osteoarthritis and fibromyalgia were the most frequent comorbid conditions.

Healthcare Resource Utilization

The HCRU owing to the attention of patients with axSpA is presented in Table 2. Rheumatologist (100%) and physiatrist visits (64.2%) were the most frequently used medical service. On average, a patient with r-axSpA was seen by a rheumatologist \sim 4 times per year. Patients with r-axSpA had a mean higher frequency of consultations to the rheumatologist and other medical services ($P = .001$ and $P = .009$, respectively). Regarding medication utilization, 95.3% of patients had at least 1 prescription of any axSpA-related medication. bDMARDs (69.1%) were the most commonly prescribed medication and analgesic drugs the least (29.6%). Among patients with a prescription of bDMARDs, 60.7% had at least 1 prescription of a cDMARD. Compared with the

nr-axSpA group, patients in the r-axSpA group had a higher relative frequency of prescriptions of any bDMARD in the study period (6.7% vs 75.5%) ($P = .001$). Adalimumab (23.5%) and etanercept (17.9%) were the most frequently prescribed biologics. Among cDMARDs, sulfasalazine (46.6%) and methotrexate (21.6%) were the most frequently prescribed drugs.

Direct Medical Costs

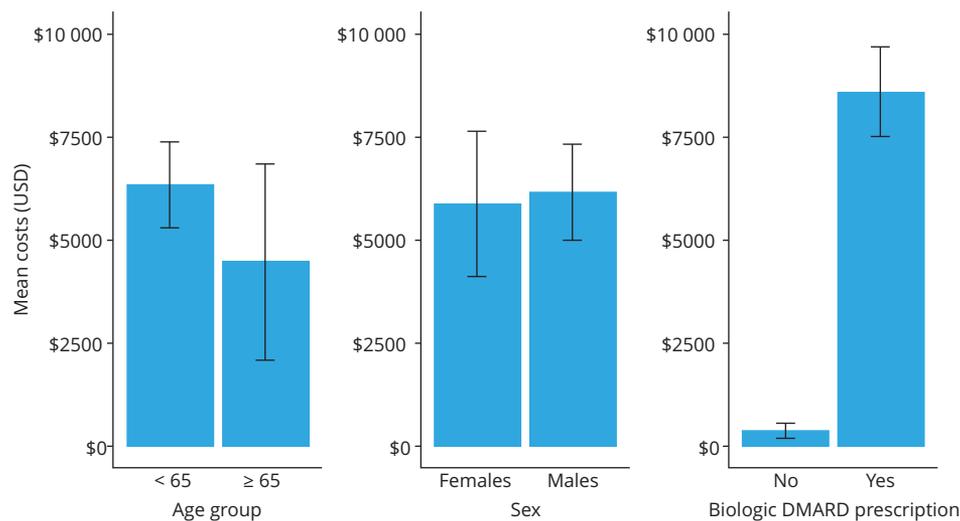
Table 3 gives a breakdown of the direct medical costs of patients with axSpA. The calculated mean annual cost per patient was \$6067 (\pm 6144). Mean total costs for r-axSpA and nr-axSpA were \$6600 (\pm 6203) and \$843 (\pm 1135) ($P < .001$). No statistically significant differences were observed in mean total costs between males (\$6160 [\pm 5959]) and females (\$5893 [\pm 6545]) ($P = .799$). Similar results were obtained regarding age groups ($P = .151$) despite a higher mean cost for patients younger than 65 years (\$6344 [\pm 6207]) than those at the age of 65 years or older (\$4478 [\pm 5664]). The overall economic burden from the health system perspective for all treated patients was \$982 973 per year. Medication costs were the main driver of total costs (97.6%), corresponding to \$959 554. bDMARDs accounted for nearly 92.0% of these costs (\$881 286). With regard to the distribution of total costs by type of axSpA and cost component, patients in the r-axSpA group accounted for 98.7% of total costs (\$970 319), and medication costs were more concentrated among these patients (97.7% vs 88.4% for patients with nr-axSpA).

A comparison of mean direct medical costs according to age (\geq 65 vs $<$ 65 years), sex, and prescription of any bDMARD is presented in Figure 1.

Direct Cost Predictors

Results of the multivariate regression analysis are presented in Table 4. Having $<$ 65 years of age and a diagnosis of r-axSpA were

Figure 1. Mean total costs according with age group, sex, and prescription of biologic disease modifying antirheumatic drugs. Error bars indicate 95% confidence intervals.



DMARD indicates disease-modifying antirheumatic drug.

significant predictors of greater direct medical costs. No association was found between male sex and direct medical costs. Neither primary osteoarthritis as comorbid condition nor baseline BASFI score was significantly associated with direct medical costs ($P = .670$ and $P = .075$, respectively).

Discussion

To the best of our knowledge, this is the first study that calculated the HCRU and direct medical costs due to axSpA for different disease categories in a real-world setting in Colombia. Our results suggest that patients with a radiographic phenotype are associated with a higher cost than patients with the non-radiographic variant of axSpA (\$6600 vs \$843). We consider that these results were obtained mainly due to the high proportion of patients with r-axSpA under treatment with bDMARDs (75.5%). Medications accounted for 97.6% of total costs.

Our results are in line with those previously published in Latin America. We observed a similar distribution of our sample according to age and sex to those reported by Machado et al⁹ and Azevedo et al³² in Brazil. Mean age was reported to be between 41.0 and 43.9 years, and male patients were between 65.3% and 75.2% of total patients. In our sample, we found a mean age of 49.6

years and a frequency of 65.4% of the male sex. In addition, primary osteoarthritis and fibromyalgia were the most frequent comorbid conditions reported in the clinical records of the studied patients with axSpA; similar findings were described in previous studies.³³⁻³⁵ Regarding costs and HCRU, the retrospective study by Azevedo et al³² calculated costs related to the treatment of ankylosing spondylitis in a tertiary hospital in Brazil and found that 63.4% of patients were prescribed an anti-tumor necrosis factor medication. The associated costs accounted for 97.9% of total direct medical costs (\$2.1 million of 2012) and 96.2% of medication costs (\$1.8 million of 2012). In our study, we obtained a similar prescription frequency of biologics (69.1%) and a comparable participation of their cost in those related to the overall sample (92.0%). Although the authors only included patients with r-axSpA, these similarities may be associated with the high frequency of patients with r-axSpA in our sample (89.1%), but it is important to emphasize that our study is one of the first in Latin America to discriminate the costs between r-axSpA and nr-axSpA.

A previous study by Machado et al⁹ in Brazil that estimated cost related to medications in a sample of 1251 patients with axSpA (ICD-10 codes M45, M46.9, and M46.8) reported that 78.0% of patients were treated with either adalimumab (41.0%), etanercept (20.4%), or infliximab (5.2%). Approximately 94% of medication costs were owing to adalimumab (52.1%) and

Table 4. Generalized linear model of total direct costs.

Characteristic	Coefficient	95% CI	P value
Intercept	564	287-1199	< .001
Men vs women	0.85	0.59-1.20	.360
Age < 65	1.63	1.03-2.48	.031
r-axSpA vs nr-axSpA	7.26	3.85-12.6	< .001
BASFI score	1.07	0.99-1.15	.075
Primary osteoarthritis	1.08	0.75-1.59	.670

Note: Akaike Information Criteria: 2959

BASFI indicates Bath Ankylosing Spondylitis Functioning Index; CI, confidence interval; nr-axSpA, nonradiographic spondyloarthritis; r-axSpA, radiographic spondyloarthritis.

etanercept (41.6%) prescriptions. These results indicate a trend toward a similar prescription pattern and high access to these medications in Colombia and Brazil.

Our results underline the high economic burden of axSpA to the health system in a middle-income setting and highlight the necessity of comprehensive management of this disease, focused on the achievement of the highest quality of care at the lowest possible cost.³⁶ In addition, this study filled a gap regarding the direct medical costs of axSpA in Colombia. Then, our findings offer useful inputs to conduct cost-effectiveness analyses of new technologies to treat this MSK disorder.

Our study has limitations. We were unable to calculate indirect costs, and thus, our calculations may underestimate the total economic burden associated with axSpA in our sample. Regarding disease classification, we could not have access to other relevant clinical variables such as magnetic resonance imaging reports for a more exhaustive assessment of the radiographic nature of the patients with axSpA. We classified patients based on their ICD-10 codes, and this may lead to an inaccurate distinction between patients with nr-axSpA and r-axSpA. Nevertheless, the distribution of our sample among the 2 disease categories is similar to the frequency distribution reported by Kwan et al⁸ in a cost-of-illness study in Singapore that used the Assessment of Spondyloarthritis International Society classification criteria (11.8% and 88.2% in the nr-axSpA and r-axSpA groups, respectively). In addition, the authors reported no statistically significant differences in the utilization of medical services between patients with r-axSpA and nr-axSpA. In our study, we only found differences in the frequency of medical consultations to the rheumatologist, other medical services (ie, infusion therapy and pharmacovigilance), and the prescription of bDMARDs, with 75.5% of patients in the r-axSpA group with at least 1 prescription of these medications. Furthermore, we analyzed data from a single healthcare center, and our results might not be generalizable to the overall population of patients with axSpA in Colombia. These limitations can be overcome with the availability of more exhaustive data sources.

Conclusions

The economic burden associated to axSpA in the Colombian setting is substantial. Health policies aimed at the comprehensive management of nr-axSpA would have an important role in reducing the associated direct medical costs.

Article and Author Information

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