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Original Article

Assessment of sexual quality of life in patients with psoriatic arthritis and validation of the QualipsoSex questionnaire in Spanish

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ABSTRACT

Objectives: To validate the questionnaire QualipsoSex (QSQ) in patients with psoriatic arthritis (PsA), assess sexual quality of life and clinical/sociodemographic impact on it.
Material and methods: Sexually active adult with PsA. Sexual quality of life was assessed using Qualisex and QSQ. QSQ includes 10 questions, and it is calculated the sum of the total items, 40 points being the worst case.
Results: 77 patients, 59.7% women, median (m) age 57 years. Presented disease activity and mild skin involvement. Qualisex m was 1.6 and QSQ m 5. The QSQ demonstrated high reliability (Cronbach's alpha 0.93), floor effect 1.3% and ceiling 24.7%. The correlation between QSQ and Qualisex was moderated. Sexual quality of life was significantly worse in patients who do not practice physical activity, those with psoriasis, morning stiffness, higher disease activity, anxiety, depression and/or suicidal symptoms. High disease activity (B 0.24, IC95% 0.04–0.45) and moderate to severe depression (B 0.57, IC95% 0.04–1.10) were associated with worse sexual quality of life.
Conclusion: QSQ is valid and reliable. Higher disease activity and major depression were associated with poorer outcomes.

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Evaluación de la calidad de vida sexual en pacientes con artritis psoriásica y validación al español del cuestionario QualipsoSex

Palabras clave:
Sexualidad
Artritis psoriásica
QualipsoSex

RESUMEN

Objetivos: Validar el *Questionnaire of sexual quality of life perceived by patients with cutaneous and/or articular psoriasis* (QualipsoSex-QSQ) en pacientes con artritis psoriásica (APs), analizar calidad de vida sexual y el impacto clínico/sociodemográfico sobre la misma.
Material y métodos: Adultos con APs sexualmente activos. La calidad de vida sexual fue evaluada con Qualisex y QSQ. QSQ incluye 10 preguntas, se calcula mediante la sumatoria del total de ítems, siendo 40 el peor escenario.
Resultados: Setenta y siete pacientes, 59.7% mujeres, edad mediana (*m*) de 57 años. Presentaban actividad de la enfermedad y extensión del compromiso cutáneo leve. Qualisex m fue 1.6 y QSQ m 5. QSQ demostró alta fiabilidad (alpha de Cronbach 0.93), efecto piso 1.3% y techo 24.7%. La correlación entre QSQ y Qualisex fue moderada (Rho: 0.51). La calidad de vida sexual fue significativamente peor en pacientes que no

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realizaban actividad física, aquellos con psoriasis, rigidez matinal, mayor actividad de la enfermedad, ansiedad, depresión y/o síntomas suicidas. Alta actividad de la enfermedad (B 0.24, IC95% 0.04–0.45) y depresión moderada a severa (B 0.57, IC95% 0.04–1.10) se asociaron con peor calidad de vida sexual.
Conclusión: El QSQ es válido y confiable. Mayor actividad de la enfermedad y depresión mayor se asociaron a peor calidad de vida sexual.
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Introduction

Psoriasis (Ps) is a systemic immune-mediated disease characterised by chronic inflammation, triggered by psychological, genetic, and environmental factors.[1,2] It affects .9%–8.5% of the population, impacting men and women equally.[3] Furthermore, it can coexist with various comorbidities and extracutaneous manifestations.[1,2] Approximately 20%–30% of patients develop psoriatic arthritis (PsA). This can cause pain and musculoskeletal dysfunction, associated with pruritus, scaling, and in some cases, disfiguring lesions, which can significantly impair the patient's quality of life and social functioning.[2] In this context, a negative impact on sexuality and intimate relationships has been observed in these patients.[1,2,4,5] The reasons for this dysfunction are multiple, including pain and inflammation, limited mobility, deformities and/or joint replacement surgeries, adverse events related to medication use, in addition to the psoriatic lesions themselves. Regarding the latter, it is particularly important to highlight those that are extensive and/or located in specific areas, such as the genital region, which often lead to low self-esteem, depression, and social isolation.[6] It has also been estimated that approximately 60% of patients with psoriatic arthritis (PsA) experience anxiety symptoms and 26% experience major depression.[7]

According to the World Health Organization (WHO), sexuality is a central aspect of being human and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy, and reproduction.[8] Sexual health is defined as a state of physical, emotional, mental, and social well-being. Despite this, it is a topic rarely addressed in routine doctor-patient interactions, and those with rheumatic diseases are no exception.[5,9]

The prevalence of sexual dysfunction in patients with psoriatic disease has been reported to range from 35.5% to 71.3%, depending on the cohort analysed and the tool used for its detection.[9] Poor sexual quality of life in patients with psoriatic arthritis (PsA) has been associated with older age and disease duration,[5] greater extent and severity of skin involvement, male sex, and the presence of arthritis.[10] However, despite its relevance and high prevalence, sexual quality of life is not routinely assessed in clinical practice. Only the Dermatology Life Quality Index (DLQI) self-administered questionnaire includes a question related to sexuality.[11] This aspect was also not included in the set of measurements suggested by the Outcome Measures in Rheumatoid Arthritis Clinical Trials (OMERACT).[12]

The Qualisex is a questionnaire primarily developed to assess sexuality in patients with rheumatoid arthritis (RA) that has proven to be valid, reliable, and reproducible.[13] In Argentina, it has been validated in patients with axial spondyloarthritis (axSpA), demonstrating similar properties.[6] The Questionnaire of sexual quality of life perceived by patients with cutaneous and/or articular psoriasis (QualipsoSex-QSQ) is a questionnaire specific to psoriatic disease that assesses its impact on sexuality and has proven to be a valid, reliable, and sensitive tool.[14]

Given that most information regarding sexual quality of life comes from patients with psoriasis, our objectives were to validate the QSQ questionnaire in patients with psoriatic arthritis (PsA), analyse the sexual quality of life in this population, and determine the impact of various sociodemographic and clinical factors on it.

Material and methods

Study design and population

This was a cross-sectional study in which sexually active adult patients ≥ 18 years of age, of both sexes,[8] diagnosed with PsA according to CASPAR criteria[15] from the Psoriatic Arthritis Registry of the IREP, Argentina (RAPSODIA), were consecutively included.

Patients with difficulty completing the self-assessments (illiterate, blind) or who did not wish to do so, and those with decompensated comorbidities, as determined by a physician, that could affect their sexual quality of life independently of psoriatic disease, were excluded. All patients signed an informed consent form, agreeing to participate in the study.

Study variables

Study variables: Sociodemographic data were recorded, including age, sex, marital status, education level, cohabitants, health insurance coverage, and occupation; clinical data, including duration of psoriatic arthritis (PsA), onset and progression of the disease, presence of comorbidities according to the abbreviated Charlson Comorbidity Index,[16] body mass index (BMI), and treatments received. The presence and duration of morning stiffness (MS) in minutes were recorded, as well as pain, fatigue, and overall disease activity, as defined by both the patient and the physician using a numerical visual scale (NVS) in centimetres. The number of swollen and painful joints was assessed (66/68).

Acute phase reactants (APR), erythrocyte sedimentation rate (ESR) in mm/h, and C-reactive protein (CRP) in mg/dL were recorded. Disease activity was calculated using the Disease Activity in Psoriatic Arthritis (DAPSA)[17] composite index, and compliance with Minimal Disease Activity[18] (MDA) criteria was considered. Skin involvement was assessed using the Body Surface Area (BSA)[19] tool, enthesis sites using the Maastricht Ankylosing Spondylitis Enthesis Score (MASES),[20] and the presence of dactylitis was assessed by physical examination.

Each attending physician asked their patients to complete the questionnaires in a comfortable environment, taking into account any difficulties that might arise when answering intimate questions. Functional capacity was assessed using the Argentine version of the Health Assessment Questionnaire (HAQ-A).[21] Quality of life was assessed using the DLQI and EuroQol - 5 dimensions - 3 lines (EQ-5D-3L),[22] and the presence of depression and anxiety was assessed using the Patient Health Questionnaire-9 (PHQ-9)[23] and General Anxiety Disorder-7 (GAD-7)[24] questionnaires, respectively. Anxiety was defined as a GAD-7 score ≥ 5 and major depression as a PHQ-9 score ≥ 10. The presence of suicidal symptoms was assessed using question 9 of the PHQ-9 questionnaire. Sexual quality of life was studied using the Qualisex and QSQ questionnaires. The Qualisex questionnaire consists of 10 questions answered using a 0–10 VAS (Visual Analogue Scale). The score is

Table 1
Sociodemographic and clinical characteristics in patients with psoriatic arthritis.

Variables	n = 77
Female sex, n (%) 46 (59.7)	46 (59.7)
Age (years), m (IQR) 57 (45–65)	57 (45–65)
Education (years), m (IQR) 12 (6.5–14)	12 (6.5–14)
Health insurance coverage, n (%) 49 (63.6)	49 (63.6)
Occupation, n (%) 51 (66.2)	51 (66.2)
Physical activity, n (%) 30 (39%)	30 (39%)
Overweight and obesity, n (%) 55 (71.4)	55 (71.4)
Diagnosis of psychiatric illness, n (%) 17 (22.1)	17 (22.1)
BSA, m (IQR) 1 (0–3)	1 (0–3)
Morning stiffness, n (%) 54 (70.1)	54 (70.1)
Patient's Global Assessment of Illness (VAS) [cm], m (IQR) 5 (2–7)	5 (2–7)
Fatigue (VAS) [cm], m (IQR) 5 (1.5–6.5)	5 (1.5–6.5)
HAQ-A, m (IQR) 0.8 (0.2–1.2)	.8 (.2–1.2)
EQ-5D-3L, m (IQR) 0.8 (0.4)	.8 (.4)
DLQI, m (IQR) 2 (0–4.5)	2 (0–4.5)
MASES, m (IQR) 1 (0–3)	1 (0–3)
GAD-7, m (IQR) 6 (2–12)	6 (2–12)
PHQ-9, m (IQR) 5 (1–11.5)	5 (1–11.5)
Qualisex, m (IQR) 1.6 (1–3.1)	1,6 (1–3.1)
QualipsoSex, m (IQR) 5 (0.5–19)	5 (.5–19)

BSA: Body Surface Area; DLQI: Dermatology Life Quality Index; EURO Quality 5 Dimensions 3 Lines; EQ-5D–3L: MASES: Maastricht Ankylosing Spondylitis Enthesis Score; GAD-7: General Anxiety Disorder-7; HAQ-A: Health Assessment Questionnaire Argentine version; IQR: interquartile range; m: median; n: number; PHQ-9: Patient Health Questionnaire: VNS: visual numerical scale;

Table 3
Correlation between the QualipsoSex and Qualisex questionnaire scores and sociodemographic and clinical variables of PsA.

Variables	QSQ		Qualisex	
	Rho	*P*	Rho	*P*
Age	.017	.8840	−.073	.5270
Education	−.074	.5230	−.033	.7760
Duration of PsA since onset	−.109	.3470	−.187	.1040
Patient's disease activity (EVN)	.359	.0010	.290	.0110
Pain (EVN)	.359	.0010	.360	.0010
Fatigue (EVN)	.492	.0001	.317	.0050
BSA	.225	.0490	.119	.3050
DAPSA	.423	.0001	.343	.0020
HAQ-A	.410	.0001	.177	.1240
DLQI question N°9	.468	.0001	.468	.0001
DLQI	.442	.0001	.500	.0001
MASES	.184	.110	.333	.0030
GAD-7	.445	.0001	.444	.0001
PHQ-9	.474	.0001	.459	.0001

BSA: Body Surface Area; DAPSA: Disease Activity Psoriatic Arthritis; DLQI: Dermatology Life Quality Index; GAD-7: General Anxiety Disorder-7; HAQ-A: Health Assessment Questionnaire Argentine version; MASES: Maastricht Ankylosing Spondylitis Enthesis Score; PHQ-9: Patient Health Questionnaire-9. PsA: psoriatic arthritis; VNS: visual numerical scale;

calculated by averaging the results, yielding a final value between 0 and 10, where 0 represents the best possible sexual quality of life and 10 the worst.[6] The English version of the QSQ questionnaire was translated into Spanish by two rheumatologists (CAI and EES). These translations were then compared, and when discrepancies were found, a consensus was reached between the parties for the final version. Subsequently, a native English speaker performed the back-translation, which matched the original questionnaire by over 90%. The QSQ consists of 10 questions designed to assess sexual quality of life and the impact of the disease over the past three months. Six questions relate to intimacy with a partner (questions 1, 2, 4–7), one to sexual desire (question 3), and three to sexual activity (questions 8–10). Questions are answered using a Likert scale from 0 to 4, with 4 representing the worst possible outcome. The score for this questionnaire is calculated by summing the total scores of the 10 items, with 40 representing the worst possible sexual quality of life. Additionally, it includes four global questions on sexual quality of life: two assess the impact of skin and joint involvement (A and B), one the effect of medications (C), and one the physician's interest (D). Responses are scored using a NVA (Non-Visual Analogue Scale) from 0 to 10, but these do not affect the final score of the questionnaire[14] (Appendix B, Annex 1).

Statistical analysis

Descriptive statistics were performed. Continuous variables were expressed as medians with their corresponding interquartile range (IQR) or as means and standard deviations (SD) depending on their distribution, and categorical variables as frequencies and percentages. The reliability of the QSQ questionnaire was assessed using Cronbach's alpha. Inter-item correlation and correlation between each item and the total questionnaire were assessed using Spearman's rank correlation coefficient. Redundancy between items was established when the correlation (Rho) was greater than or equal to .8. The ceiling and floor effects of each item and the total questionnaire were estimated. To assess construct validity, the QSQ score was correlated with the Qualisex questionnaire and question 9 of the DLQI, as well as other clinical variables of the disease, including pain, joint count, fatigue, and functional capacity. To evaluate the association between different sociodemographic and clinical variables with the QSQ score, Student's *t*-test with Levene's test for homogeneity of variances or ANOVA with post-hoc tests, chi-square test, or Fisher's exact test were used, as appropriate. Multiple linear regression models were performed using the QSQ score as the dependent variable,

Table 2
Inter-item correlation and correlation with the total QualipsoSex questionnaire.

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	PA	PB	PC	PD	QSQt
P1		*.823*	.696	.600	.464	.493	.651	.646	.484	.639	.479	.575	.468	.373	.837
P2			.707	.629	.475	.507	.609	.537	.495	.571	.474	.549	.412	.341	.793
P3				.619	.519	.592	.593	.676	.609	.792	.513	.538	.435	.452	.834
P4					*.806*	.749	.670	.624	.588	.663	.651	.523	.363	.570	.768
P5						.618	.462	.557	.433	.542	.536	.508	.348	.545	.633
P6							.548	.483	.542	.585	.675	.443	.291	.543	.652
P7								.727	.672	.645	.570	.623	.560	.542	.811
P8									.643	.738	.493	.694	.661	.471	.824
P9										.603	.489	.474	.395	.368	.749
P10											.530	.602	.500	.508	.823
PA												.558	.452	.726	.625
PB													.706	.613	.715
PC														.546	.608
PD															.558

Q: question; QSQt: Total QualipsoSex. Values greater than .8, which are considered redundant, are shown in italics.

Table 4
Association between QualipsoSex and sociodemographic and clinical variables.

Variables		QualipsoSex (SD)	*P*
Physical activity	Yes	6.1 (7.6)	.008
	No	12.0 (11.5)	
Morning stiffness	Yes	11.3 (10.7)	.038
	No	5.9 (9.0)	
Active cutaneous psoriasis (BSA > 0)	Yes	10.1 (10.7)	.001
	No	3.6 (2.5)	
MDA criteria compliance	Yes	3.7 (6.7)	.0001
	No	12.2 (10.8)	
Diagnosis of psychiatric illness	Yes	15.0 (13.4)	.064
	No	8.2 (9.1)	
Anxiety (GAD-7 ≥ 5)	Yes	12.6 (11.4)	.001
	No	5.4 (7.3)	
Major depression (PHQ-9 ≥ 10)	Yes	18.0 (12.1)	.0001
	No	6.3 (7.7)	
Suicidal symptoms	Yes	17.4 (12.9)	.015
	No	7.8 (9.0)	

BSA: Body Surface Area; GAD-7: General Anxiety Disorder-7: MDA: Minimal Disease Activity; PHQ-9: Patient Health Questionnaire; SD: standard deviation.

Table 5
Association of QualipsoSex with sociodemographic and clinical variables. Multiple Linear Regression Model.

Variables	Standardised B coefficient	95% CI		*P*
		Inferior	Superior	
Age	.033	−.14	.20	.70
Sex	−1.331	−5.46	2.80	.52
Duration of PsA since onset	.008	−.01	.02	.43
DAPSA	.249	.04	.45	.01
GAD-7	.150	−.39	.69	.58
PHQ-9	.570	.04	1.10	.03
Psoriasis	2.769	−5.65	11.1	.51
Overweight and obesity	−.028	−4.73	4.67	.99

Dependent variable: QSQ.
CI: confidence interval; DAPSA: Disease Activity in Psoriatic Arthritis; GAD-7: General Anxiety Disorder-7; PHQ-9: Patient Health Questionnaire-9; PsA: psoriatic arthritis; QSQ: QualipsoSex.

including as independent variables those that showed an association in the univariate analysis with $P < .1$ or that, in the investigator's judgment, were of interest.

A P-value < .05 was considered statistically significant. The statistical software R (version 4.2.3) (Free Software Foundation, Inc., Boston, USA) was used to perform the data analysis.

Results

Seventy-seven patients were included, with a median age (m) of 57 years (IQR 46–65); 59.7% were female. Sixty-three (81.8%) lived with a partner, and 38 (49.4%) were married. Forty-six (59.7%) patients had comorbidities, the most frequent being hypertension in 26 (33.8%). The median duration of psoriatic arthritis (PsA) was 20 years (IQR 10–30) and of psoriatic arthritis (PsA) was 11 years (IQR 5–18). The majority of patients (85.7%) had peripheral arthritis. The extent of skin involvement was mild, with a BSA score of 1 (IQR 0–3), and joint disease activity was low, with a DAPSA score of 11.9 (IQR 5.6–20.8). The MDA criteria were met in 23 patients (29.9%). 37.7% of the patients were receiving biologic therapy. Sexual quality of life, as measured by Qualisex, was 1.6 (IQR 1−3.1) and by QSQ 5 (0.5−19). The remaining sociodemographic and clinical characteristics of the patients are presented in Table 1.

The QSQ demonstrated very good reliability, with a Cronbach's alpha of .93, a floor effect of 1.3%, and a ceiling effect of 24.7%. Correlation between the different QSQ items revealed some redundant questions, including those referring to partner approach (questions 1 and 2, attraction and seduction) and physical contact (questions 4 and 5) (Table 2).

The construct validity of the QSQ was good. The correlation between the QSQ and Qualisex and question 9 of the DLQI was moderate, with rho values of .515 and .468, respectively.

The correlation between the QSQ and certain clinical variables, including fatigue, DAPSA, DLQI, HAQ-A, GAD-7, and PHQ-9, was moderate, while for other variables such as pain, patient-reported disease activity, and BSA, it was low. No correlation was observed with age, education level, or duration of PsA (Table 3). Similar results were obtained with the Qualisex questionnaire.

The quality of sexual life assessed by the QSQ was significantly poorer in those who did not perform physical activity (12.0 vs. 6.1, $P = .008$), in those who presented with MS (11.3 vs. 5.9, $P = .038$), in those who did not meet MDA criteria (12.2 vs. 3.7, $P = .0001$) and in those who presented with anxiety (12.6 vs. 5.4, $P = .001$), depression (18.0 vs. 6.3, $P = .0001$) and/or suicidal symptoms (17.4 vs. 7.8, $P = .015$) (Table 4). The different disease activity levels measured by DAPSA, as well as anxiety levels measured by GAD-7 and depression levels measured by PHQ-9, were linearly associated with sexual quality of life as assessed by the QSQ (Fig. 1A–C).

In the multiple linear regression analysis, using the QSQ as the dependent variable, disease activity as measured by DAPSA (B.25, 95% CI .04–.45, $P = 0.019$) and depression as measured by PHQ-9 (B .57, 95% CI .04–1.10, $P = .03$) were the only variables that remained independently associated with sexual quality of life. An increase of one unit in the value of any of these variables was associated with a change in the QSQ of .25 in the case of disease activity and .57 in the case of depression (Table 5).

Discussion

Few studies have evaluated the quality of sexual life in patients with PsA. Most of the information, therefore, is extrapolated from reports in patients with PsA. To our knowledge, this is the first study to use this questionnaire, since its development, to assess the quality of sexual life in a group of patients with PsA. According

to the results of our study, the QSQ proved to be a valid and reliable questionnaire for this group of patients, and sexual dysfunction was independently associated with greater disease activity and the presence of major depression.

Despite the good performance of the QSQ, some redundant questions were found. In this particular case, we felt it acceptable to ask again about these aspects, as it is a sensitive topic that can present certain barriers, such as prejudice or embarrassment. This questionnaire has a low floor effect, which allows us to accurately identify patients with mild alterations in the quality of their sexual life. However, it has a high ceiling effect, limiting its ability to adequately discriminate between very high levels of sexual dysfunction.

We observed good disease control in the analysed cohort, both in the skin and joints, which could explain the mild impairment of sexual activity identified by the QSQ and Qualisex questionnaires. Likewise, the functional limitations of these patients were not marked, as assessed by the HAQ-A questionnaire.

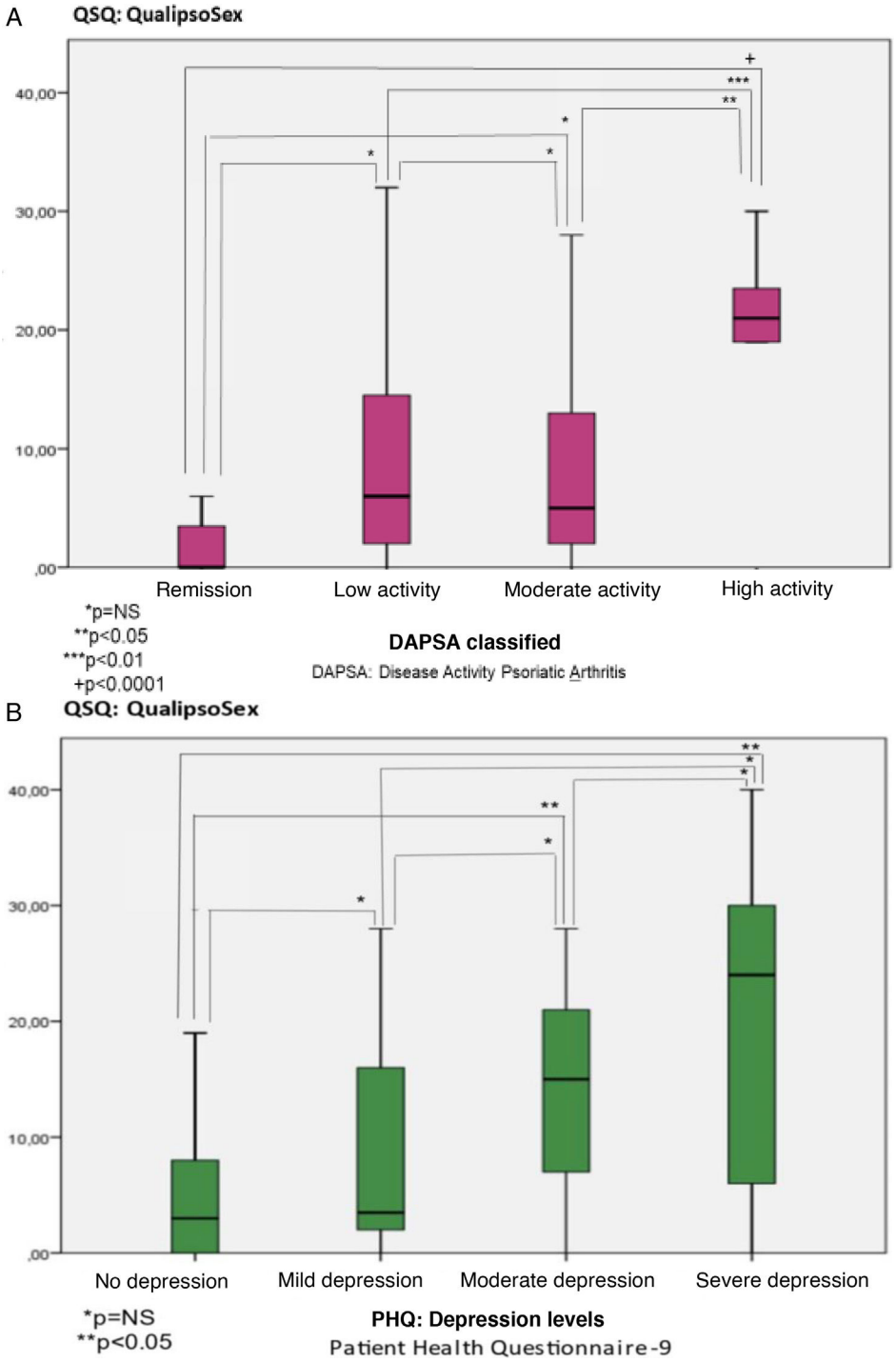

Fig. 1. QSQ questionnaire score according to PsA activity, presence of depression, and anxiety. A) QualipsoSex and PsA activity categorized by DAPSA: Describes the variation in sexual quality of life (QSQ) according to disease activity as categorized by DAPSA. B) QualipsoSex and depression according to PHQ-9: Describes the variation in sexual quality of life (QSQ) in relation to different levels of depression categorised by PHQ-9. C) QualipsoSex and anxiety according to GAD-7: Describes the variation in sexual quality of life (QSQ) in relation to different levels of anxiety categorized by GAD-7.

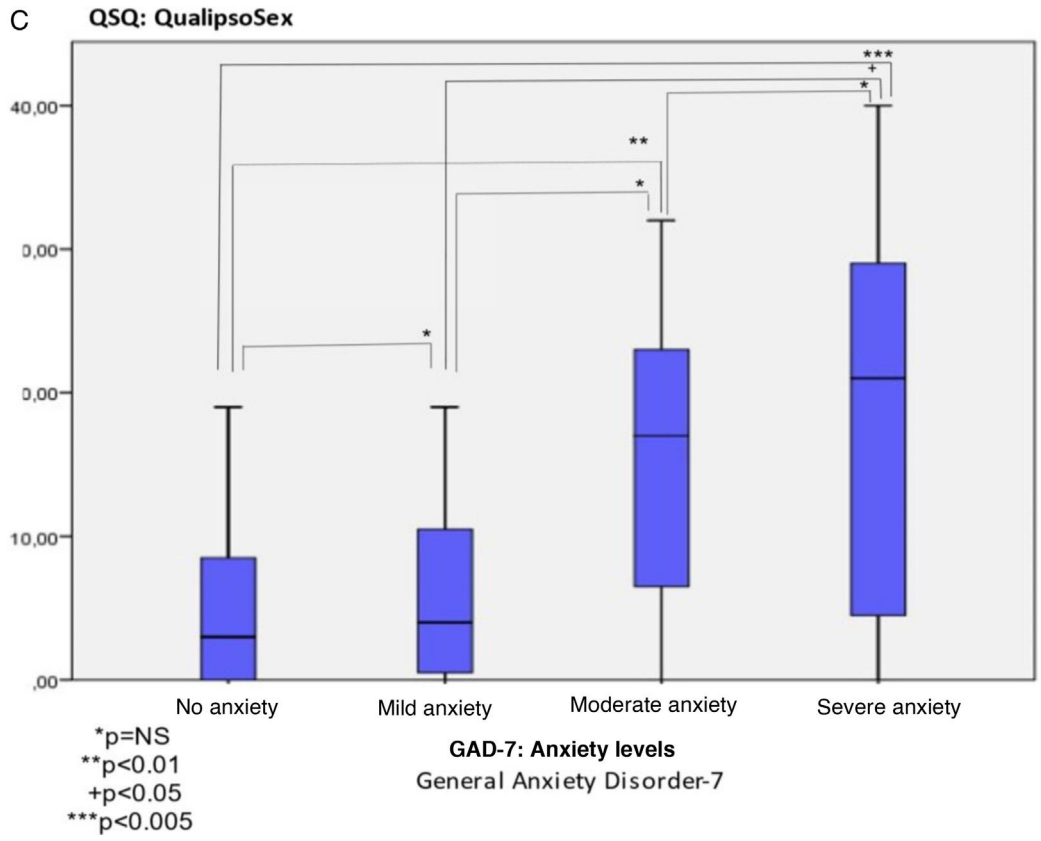

Fig. 1. (*Continued*)

Although a correlation was observed between the two sexual quality-of-life questionnaires, it was not optimal. This result could be due to the fact that Qualisex does not specifically consider skin involvement as the QSQ does. Conversely, a similar effect was identified in relation to question 9 of the DLQI, which only assesses the impact of Ps.

The lack of correlation between the QSQ and age and duration of PsA could be considered an advantage, as it demonstrates its usefulness in a wide variety of patients, regardless of age group and in both early and established PsA. Kedra et al.[2] showed similar results when assessing sexual dysfunction in patients with Ps using the DLQI and Sexual Life Questionnaire.

The correlations of the QSQ score with clinical variables of activity, function, and quality of life were mostly moderate, but significant. Comparable data were observed in patients with Ps[2] and with axSpA.[6] In a previous study conducted at this institution that included patients with SpA, Ps had no impact on sexual quality of life, an effect probably due to the limited extent of skin involvement in this cohort[6]. Conversely, Queiro et al. reported greater sexual dysfunction among patients with PsA compared to those with axial spondyloarthritis (axSpA), mainly in those with greater activity of peripheral joint disease.[25] In our study, the presence of Ps was associated with a higher QSQ score. However, we found no association with the extent of skin involvement measured by BSA. Unfortunately, we did not record the affected skin area, and for this reason, we could not evaluate the impact of this condition in certain locations of interest, such as the face, hands, and genital area, on sexual quality of life, as demonstrated by other authors.[26] An interesting finding was that patients who did not engage in physical activity and those with higher MRI showed worse sexual quality of life. There is extensive information regarding the positive influence of physical activity on pain, fatigue, function, and quality of life in patients with PsA, but there are no data regarding sexual quality of life. Epidemiological studies reveal that the main reasons why patients with musculoskeletal diseases engage in less physical activity are a lack of promotion by rheumatologists and fear of pain, injury, or reactivation of their condition.[27] Exercise, even of moderate intensity, does not increase disease activity; on the contrary, it improves many of the symptoms that afflict patients.[28] Several studies have reported that the quality of sexual life, as assessed by Qualisex or DLQI, is worse in women with psoriatic disease.[6,29] However, we found no difference between the sexes.

Regarding the psychopathological sphere, we observed an association between the QSQ and suicidal ideation, major depression, and anxiety. While some authors have found that sexual dysfunction can be present in patients with Ps regardless of their psychological state, several studies have demonstrated its association with depression and/or anxiety.[1,4,5,7,29] In a recent publication of a cohort of patients with Ps, suicidal ideation was identified in 21% of individuals, major depression in 26%, and anxiety in 56%. Furthermore, these patients reported greater pain, fatigue, MRI, and a worse quality of life. Disease activity was independently associated with these mood disorders.[7] Similarly, in our study, after adjusting for confounding variables, higher DAPSA and PHQ-9 scores were independently associated with worse sexual quality of life as measured by the QSQ. These data are consistent with the findings of most reports, not only in psoriatic arthritis (PsA) but also in other rheumatological diseases.[2,6,9,25,30] It is understandable that patients with more active PsA experience poorer sexual quality, since pain, swelling, and limited range of motion negatively affect most of their daily activities, including pleasurable ones. Similarly, depression has been associated with sensitisation of nerve endings, a decreased pain threshold, increased fatigue, disease activity, and a poorer quality of life.[7]

Sexuality remains a taboo subject that many physicians feel unable or limited to address and do not consider within their scope

of practice. Likewise, patients may not feel comfortable enough to discuss the impact of their disease on their sexuality with their doctors. For this reason, the use of questionnaires could also be an acceptable way to communicate about this sensitive topic, and likewise provide an opportunity to initiate a discussion with patients about their sex lives.[9,14]

Our study has certain limitations. First, its cross-sectional design prevents us from evaluating the causal effect between the different variables and establishing the impact of clinical changes, such as psoriatic arthritis activity or treatment regimens, on sexual quality of life. However, we believe that this initial experience allowed us to identify and study this problem in our cohort, validate this new tool, and conduct a longitudinal study in the future. Second, the location of the skin involvement was not recorded, preventing us from determining the impact of the affected skin region on sexual quality of life. Finally, because the assessment of sexual quality of life was carried out through questionnaires, there may be bias in the responses, as patients may have felt intimidated by the questions and not reported this to their physicians. However, we know that given the subject matter being evaluated, this difficulty could be present, and we believe that, even with this limitation, it is possibly less than that identified when these topics are addressed verbally. As a strength, to our knowledge, this is the first study conducted in patients with PsA in our country, it addressed a scarcely studied aspect of the disease, and we successfully validated the Spanish version of a specific questionnaire to measure the quality of sexual life in patients with PsA.

In conclusion, the QSQ has proven to be a reliable and valid instrument for evaluating the quality of sexual life in patients with PsA. Greater disease activity and major depression were associated with poorer quality of sexual life.

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Declaration of competing interest

The authors have no conflict of interests to declare.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.reumae.2025.502038.

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