POSTER HPR12

Patient reported outcomes in psoriasis over time: differences by sex from three cross-sectional, real-world studies in the United States

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OBJECTIVE

- To use real-world data to identify differences in patient-reported outcome measures between sexes in patients with Psoriasis (PsO) in the United States (US) over time.

CONCLUSIONS

- Overall, our findings indicate that females were more burdened by their PsO in 2016 compared to males.
- This difference between sexes was not observed in 2018 and 2022, indicating a reduction in the gap between sexes in PsO over time.
- In addition, future research could take into account any differences in treatment choice, satisfaction and disconnect between the physician and patient receiving treatment.
- Continued monitoring of sex differences in PsO is important to ensure women continue to receive equitable healthcare in line with their needs.

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INTRODUCTION

- PsO is one of the most common immune-mediated skin diseases affecting roughly 3% of United States (US) adults over the age of 20 (1).
- Physical manifestations of psoriasis, in terms of symptoms and severity, comorbidities, treatment pathways and impact on quality of life (QoL) have all been shown to vary by sex (2).
- Observational studies have shown females report a greater impact of PsO on QoL, whereby females are more likely to suffer depression and feel stigmatized due to their disease compared to males (2,3).
- Females are also found to have higher treatment expectations than males with greater emphasis on feeling comfortable showing themselves in public (3, 4).
- Understanding sex-dependent differences is fundamental to help identify unmet needs, improve treatment outcomes, and reduce inequity in care by sex.
- However, in a changing treatment environment, it is also important to assess how needs change and whether inequities are being addressed.

METHODS

- Data were drawn from three Adelphi PsO Disease Specific Programme (DSP)™ conducted in the US in 2016, 2018, and 2022. The methodology has previously been published and validated (6-8).
- DSPs are multi-country, real-world surveys that collected real-world data from specialists and their consulting patients.
- Patients were recruited independently for each cross-sectional study; the same patients were not followed up over time.
- Dermatologists provided demographic and clinical data for their next 1-10 consulting patients aged ≥18 years with a confirmed PsO diagnosis, not currently participating in a clinical trial.
- The same patients completed a voluntary patient-reported outcomes questionnaire containing attitudinal questions as well as the Dermatology Life Quality Index (DLQI; scores ranged from 0-30, high scores = worse QoL) (8) and Work Productivity and Activity Impairment questionnaire (WPAI; percentage impairment) (9).
- Higher scores of both of these patient-reported outcome measures (PROMs) indicate worse health. The pain/discomfort component of the EQ-5D PROM was used in analysis, based on relevance of pain/discomfort to PsO.
- Data were stratified by sex. Missing data were not analyzed. Fisher's exact tests were used to compare binary categorical variables such as female and male patients and t-tests used for numeric variables.

RESULTS

Patient Demographics and Characteristics

- In total, 80 physicians participated in the surveys with 283, 205 and 352 patient-reported questionnaires collected in 2016, 2018 and 2022, respectively.
- Overall, 46% (n=130), 54% (n=111) and 49% (n=171) of the patient sample were female, with 83.8% (n=109), 87.4% (n=97) and 87.7% (n=150) being identified by their dermatologist as white/Caucasian and a mean (SD) age of 49.8 (16.8), 42.0 (14.6) and 44.2 (15.6) years; in 2016, 2018 and 2022 respectively (Table 1).

Table 1. Physician-reported patient demographics over time

Demographics	2016		2018		2022	
	Male	Female	Male	Female	Male	Female
Base, n	153	130	94	111	181	171
Sex, n (%)	54	46	46	54	51	49
Age (years), mean (SD)	46.7 (15.2)	49.8 (16.8)	41.6 (12.8)	42.0 (14.6)	46.4 (15.4)	44.2 (15.6)
Ethnicity, n (%)						
White Caucasian	121 (79.1)	109 (83.8)	73 (77.7)	97 (87.4)	154 (85.1)	150 (87.7)
African American (US)	6 (3.9)	8 (6.2)	7 (7.4)	7 (6.3)	8 (4.4)	6 (3.5)
Native American (US)	0 (0.0)	0 (0.0)	1 (1.1)	1 (0.9)	0 (0.0)	0 (0.0)
Asian-Indian subcontinent	2 (1.3)	1 (0.8)	0 (0.0)	0 (0.0)	3 (1.7)	0 (0.0)
Asian – other	6 (3.9)	6 (4.6)	1 (1.1)	1 (0.9)	2 (1.1)	4 (2.3)
Chinese	6 (3.9)	6 (4.6)	1 (1.1)	1 (0.9)	2 (1.1)	4 (2.3)
Hispanic / Latino	0 (0.0)	1 (0.8)	0 (0.0)	0 (0.0)	2 (1.1)	2 (1.2)
Middle Eastern	15 (9.8)	5 (3.8)	2 (1.1)	0 (0.0)	6 (3.3)	4 (2.3)
Mixed race	1 (0.7)	0 (0.0)	1 (1.1)	0 (0.0)	0 (0.0)	2 (1.2)
South-East Asian	2 (1.3)	0 (0.0)	6 (6.4)	4 (3.6)	4 (2.2)	2 (1.2)
Other	0 (0.0)	0 (0.0)	3 (3.2)	1 (0.9)	0 (0.0)	0 (0.0)
	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.1)	1 (0.6)

Abbreviations: (SD), standard deviation; US, United States

Symptom Burden

- Females reported a higher burden compared to males in 2016. A lower proportion of females reported no pain/discomfort (57% female versus 74% male, p=0.004), while a higher proportion reported severe skin itch/soreness/pain/stinging (24% versus 11%, p=0.006) or joint pain/stiffness in 2016 (44% versus 28%, p=0.007) (Figures 1 – 3).

Figure 1. Percentage of patients experiencing no pain/discomfort at data collection over time.

Figure 2. Percentage of patients experiencing severe skin itch/soreness/pain/stinging at data collection over time.

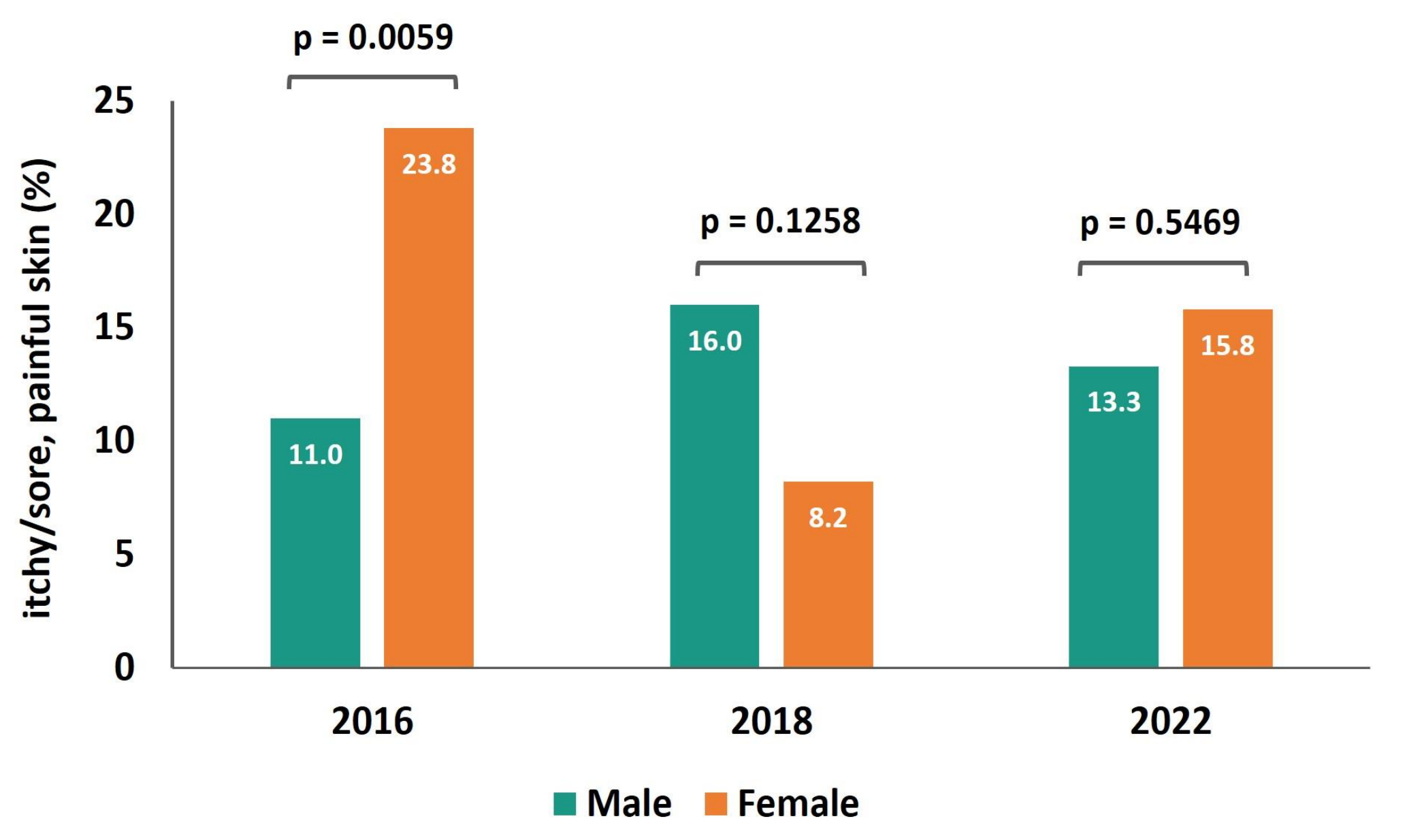
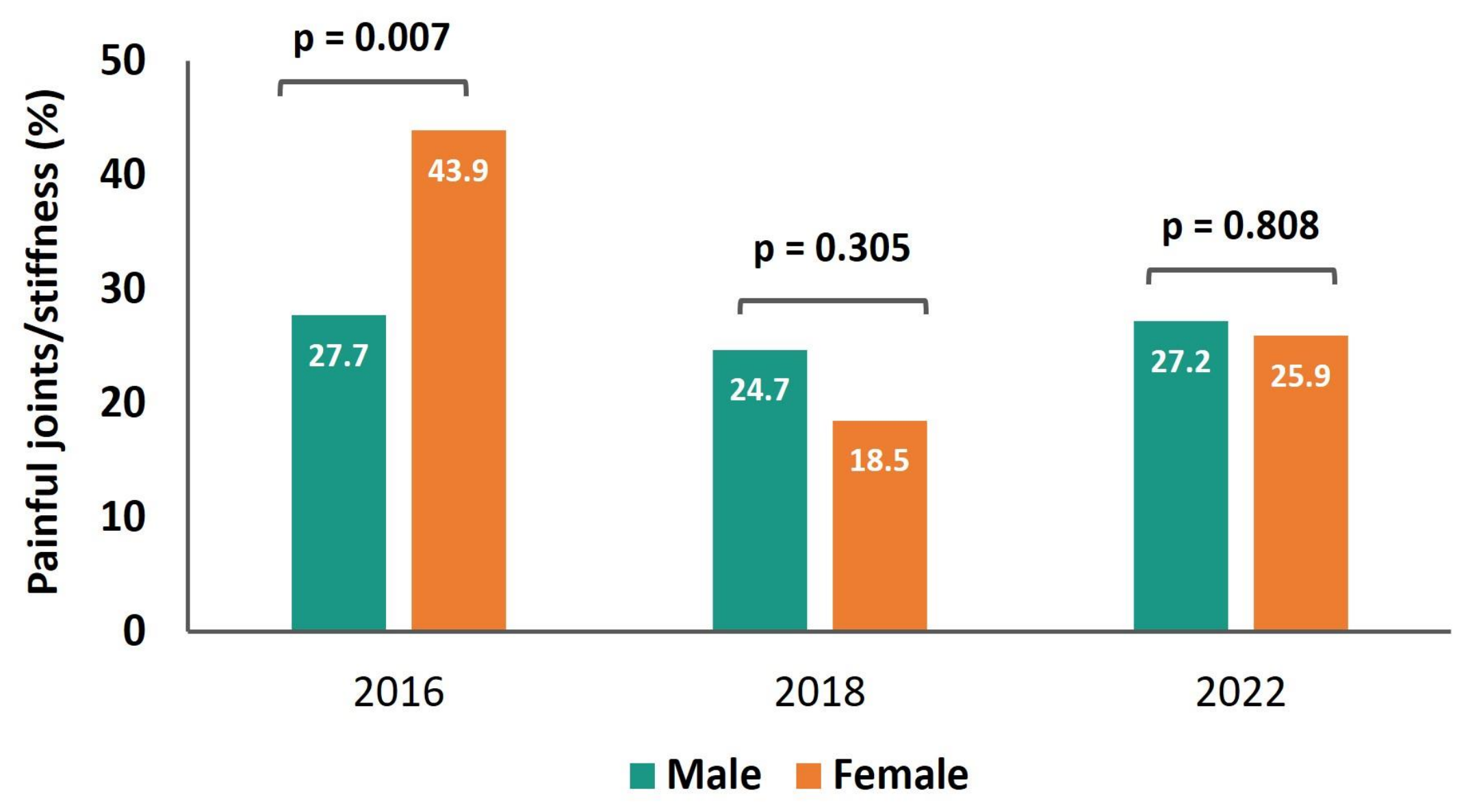


Figure 3. Percentage of patients experiencing severe joint pain/stiffness/mobility at data collection over time.



Patient-reported outcomes

- Mean DLQI and WPAI activity impairment scores were also greater in females than males in 2016 (DLQI: 5.95 versus 3.78, p=0.001; WPAI: 20.39 versus 14.75, p=0.041, respectively). However, observed differences between the sexes for these five patient-reported outcomes were not statistically significant in 2018 and 2022 (Figures 4 - 5).

Figure 4. Impact of Psoriasis on quality of life as measured by the Dermatology Life Quality Index (DLQI) over time.

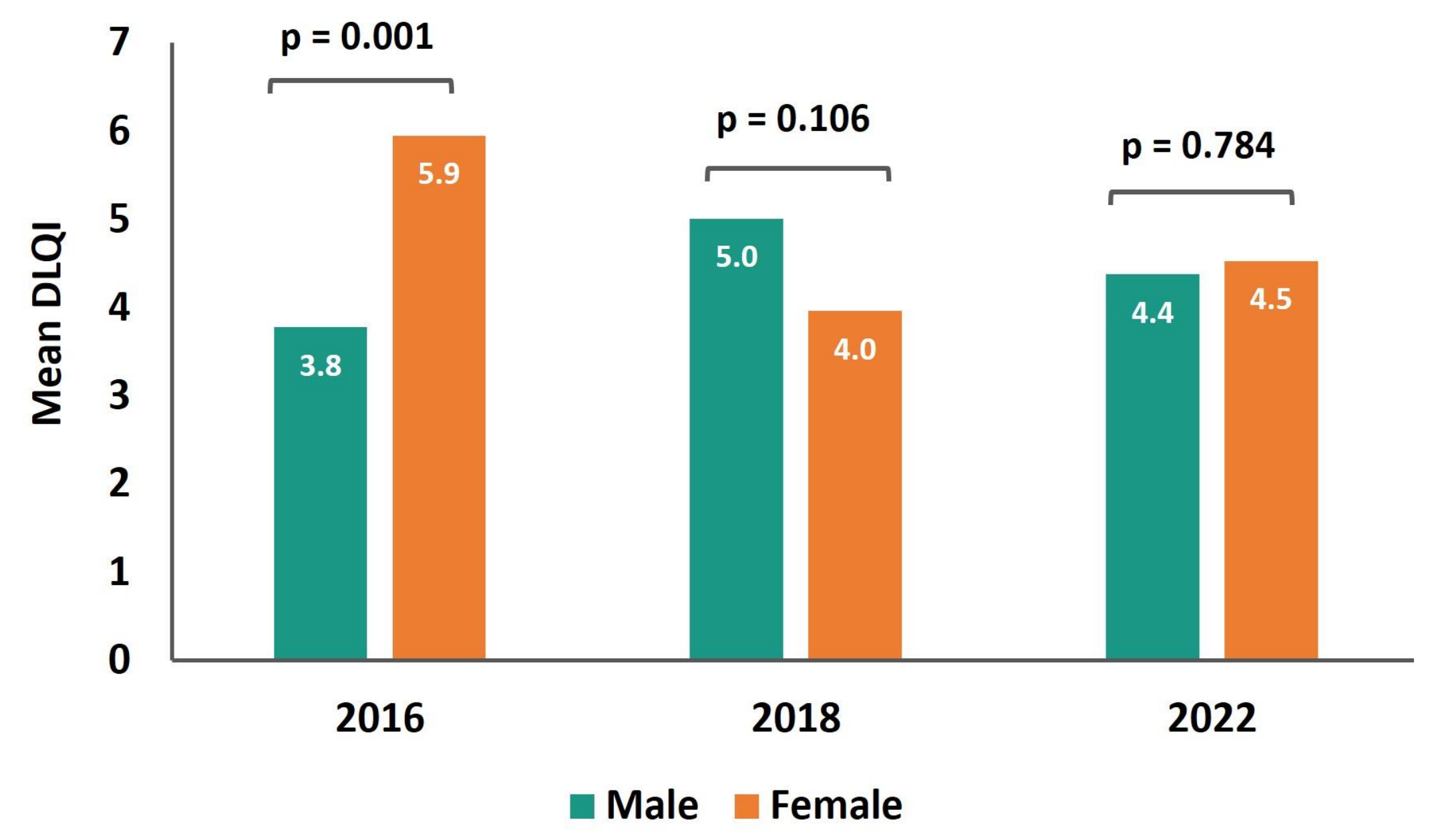
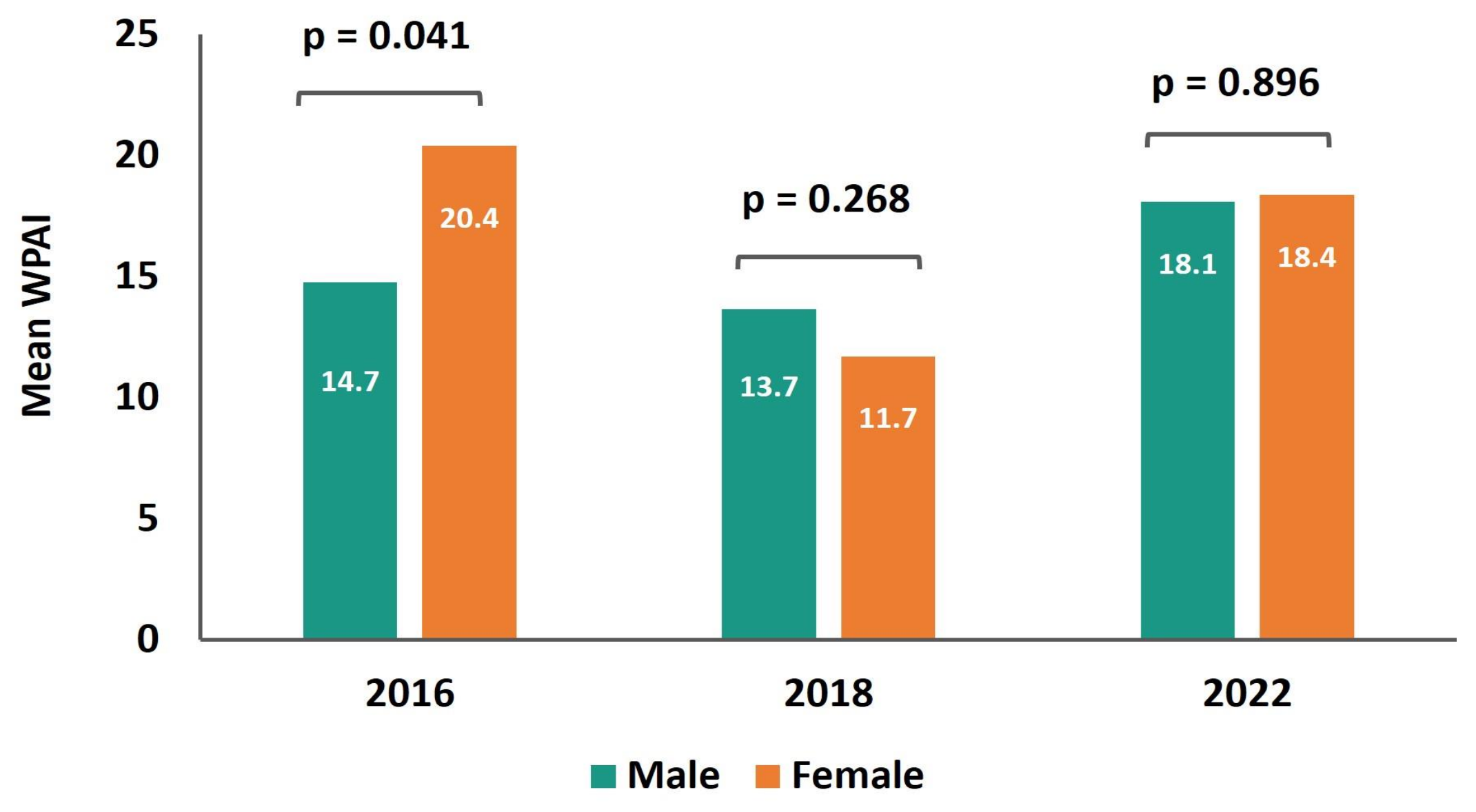


Figure 5. Impact of Psoriasis on quality of life as measured by the Work Productivity and Activity Impairment questionnaire (WPAI).



LIMITATIONS

- Participating patients may not reflect the general PsO population since the DSP only includes patients who were consulting with their physician. This means that patients who consult more frequently had a higher likelihood of being included in this study.
- The DSP is based on a pseudo-random sample of physicians and patients. While minimal inclusion criteria governed the selection of participating physicians, participation was influenced by willingness to complete surveys.
- To minimize selection bias of patients, physicians were asked to provide data for a consecutive series of eligible patients. Patient eligibility was based on the judgement of the respondent physician and not on a formalized diagnostic checklist; however, it is representative of the physician's real-world classification of their patients.

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