

Factors conditioning Health Related Quality of Life in patients with psoriasis in Europe: A systematic review of the literature

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INTRODUCTION

Psoriasis is a chronic, incurable, inflammatory skin disease that affects approximately 2% of the European population and poses a lifelong burden for those affected¹.

Several numbers of studies have demonstrated a significant negative impact of psoriasis on patient's HRQoL, however, the complex association among physical, psychological and demographic factors and HRQoL are not fully understood.

OBJECTIVE

To identify conditioning factors of HRQoL of patients with psoriasis as reported in the literature during the last 5 years in Europe.

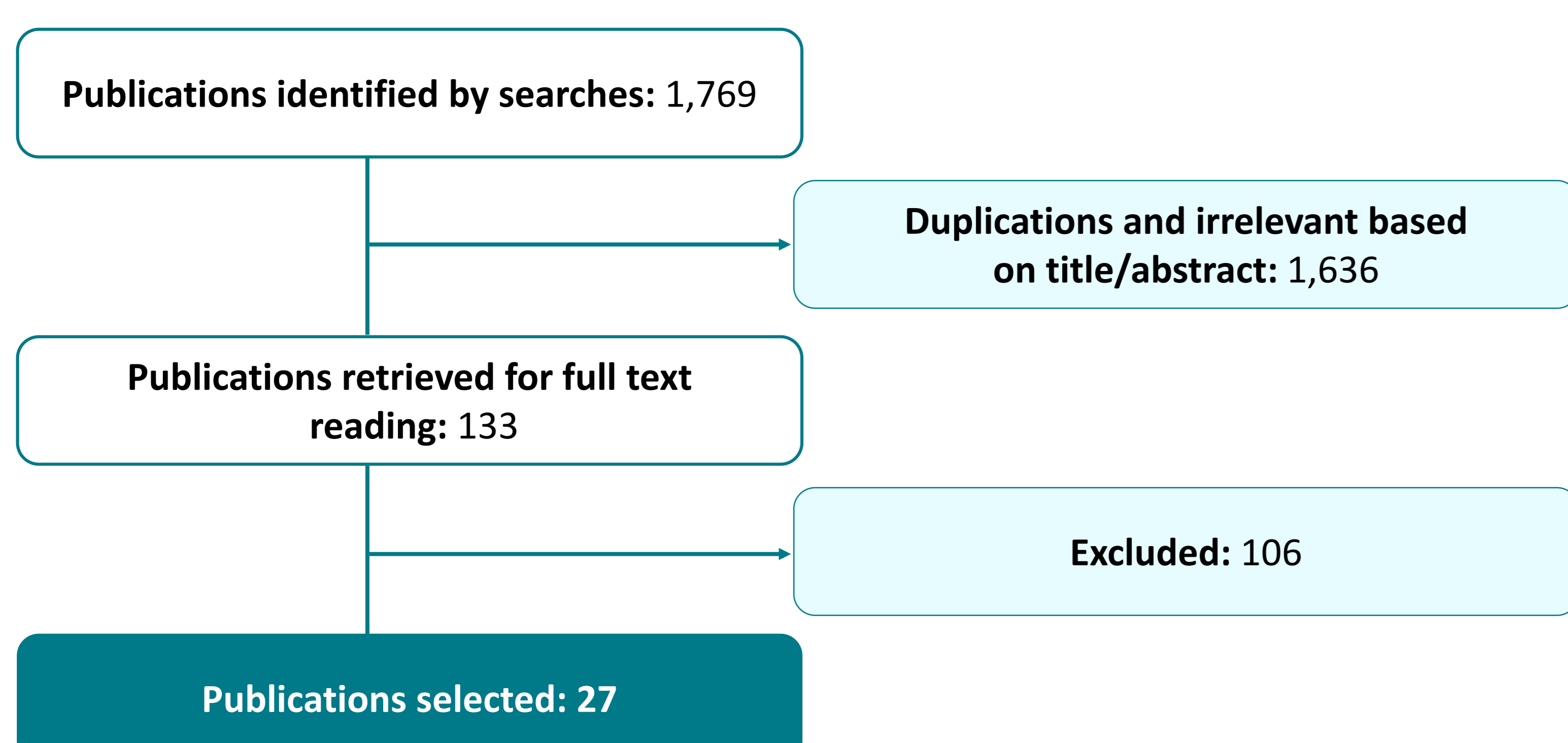
METHODS

Electronic databases [PubMed, ISI-WOK, Cochrane Library, MEDES, CSIC-IME, IBECs] and grey literature [Google Scholar], were searched to identify studies written in English or Spanish on HRQoL in patients with psoriasis, published between January 1, 2009 and December 31, 2013 in Europe. Bibliographic references were hand searched. Editorials, letters, commentaries, opinion papers and studies related to specific treatments were excluded.

RESULTS

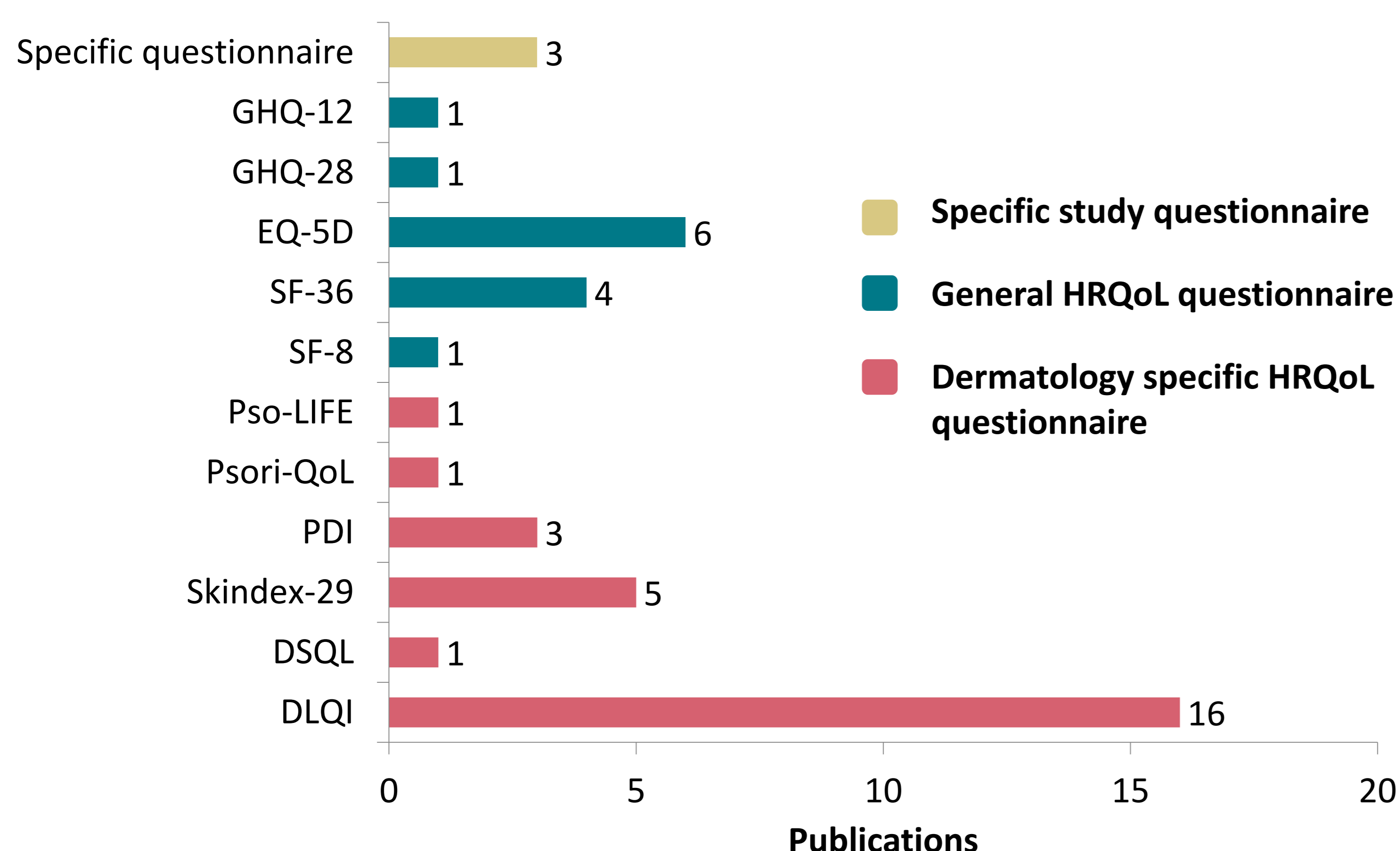
The search strategy resulted in 1,769 citations. 1,636 of them were excluded as duplicates or clearly not relevant. After inclusion/exclusion criteria application, **27 studies** were included (Figure 1)²⁻²⁸.

Figure 1. Flow-chart of literature search strategy



- 66.7% of the reviewed publications (n=18) were cross-sectional studies; 25.9% (n=7) had a prospective design while 7.4% (n=2) were retrospective.
- Most of the instruments used to assess patients' HRQoL were psoriasis or dermatology specific questionnaire, being the Dermatology Life Quality Index (DLQI) the most frequently used (59.3%, n=16) (Figure 2).

Figure 2. Instruments used to assess patients' HRQoL



Impact of psoriasis in patients' HRQoL

- Most of the psoriatic patients experience a **detriment in their HRQoL**, ranging their DLQI score (0-30, higher score poorer HRQoL) between 4²⁵ and 16.5⁴ and their EQ-5D (0-1, being 1 perfect health) between 0.5²⁰ and 0.8²⁵.
- **Ghatnekar et al. 2012** evaluated the relationship between costs and HRQoL assessed by DLQI, indicating that **a unit increment in DLQI would raise annual costs per patient by 4.5%⁸**.

A total of **20 publications** studied the conditioning factors of HRQoL (Table 1).

Predictors of HRQoL

HRQoL and patients' characteristics

- Most of the publications studying the relationship between gender and HRQoL (75%, n=6) indicated that **females** presented **worse HRQoL**^{2,3,5,6,11,15}. Half of the studies that evaluated the correlation between age and HRQoL showed that **younger patients** presented more **deteriorated HRQoL**^{2,7,9,15}.
- Patients with **psychiatric co-morbidities or disease stigma** refer **poorer HRQoL**^{3,9,13,14,18}, while **effective coping strategies** are associated with **better HRQoL**^{13,14}.

HRQoL and disease characteristics

- HRQoL impairment was associated with more **visible skin lesions**^{2,5,9}.
- Patients with **active psoriasis** presented **worse HRQoL**^{5,13,16,17}.
- Disease severity was one of the most frequent assessed factors. **Higher PASI score predicts impaired HRQoL**^{2,3,5,6,8,9,13,14,16,18,21}.
- Psoriasis symptoms such as **pain¹², discomfort¹² or pruritus¹⁹** were identified as the elements that **negatively influenced HRQoL**.

HRQoL and treatment

- Use of **biological agents** was associated with a **decrease of disease severity (PASI)** which contributed to an **improvement of patients' HRQoL (DLQI) and treatment satisfaction**^{7,15,21}.
- **Higher treatment satisfaction** correlated with **better HRQoL**^{2,21}.

Table 1. Factors correlated with HRQoL

Study	Patients' characteristics				Disease characteristics				Treatment		
	G (F)	A (Y)	ED*	ODA	VSL	DA	DS	SPD	P	BA	HS
Blome et al. 2010 ²	■	■	■	■	■	■	■	■	■	■	■
Böhm et al. 2013 ³	■	■	■	■	■	■	■	■	■	■	■
Cozzani et al. 2010 ⁴	■	■	■	■	■	■	■	■	■	■	■
Daudén et al. 2013a ⁵	■	■	■	■	■	■	■	■	■	■	■
Daudén et al. 2013b ⁶	■	■	■	■	■	■	■	■	■	■	■
Fernández-T et al. 2012 ⁷	■	■	■	■	■	■	■	■	■	■	■
Ghatnekar et al. 2011 ⁸	■	■	■	■	■	■	■	■	■	■	■
Hernández et al. 2012 ⁹	■	■	■	■	■	■	■	■	■	■	■
Jacobi et al. 2013 ¹⁰	■	■	■	■	■	■	■	■	■	■	■
Lindberg et al. 2013 ¹¹	■	■	■	■	■	■	■	■	■	■	■
Ljosaa et al. 2011 ¹²	■	■	■	■	■	■	■	■	■	■	■
Miniszewska et al. 2013a ¹³	■	■	■	■	■	■	■	■	■	■	■
Miniszewska et al. 2013b ¹⁴	■	■	■	■	■	■	■	■	■	■	■
Norlin et al. 2012 ¹⁵	■	■	■	■	■	■	■	■	■	■	■
Palotai et al. 2010 ¹⁶	■	■	■	■	■	■	■	■	■	■	■
Panigalli et al. 2009 ¹⁷	■	■	■	■	■	■	■	■	■	■	■
Pereira et al. 2011 ¹⁸	■	■	■	■	■	■	■	■	■	■	■
Reich et al. 2010 ¹⁹	■	■	■	■	■	■	■	■	■	■	■
Tadros et al. 2011 ²⁰	■	■	■	■	■	■	■	■	■	■	■
Ragnarson T et al. 2012 ²¹	■	■	■	■	■	■	■	■	■	■	■

■ WORST HRQoL ■ BETTER HRQoL ■ NO CORRELATION ■ NO EVALUATED

G: Gender (female); A: Age (young); ED: Emotional disturbance; ODA: Optimist and disease acceptance; VSL: Visibility skin lesions; DA: Disease activity (PASI); SPD: Skin pain and discomfort; P: Pruritus; BA: Biologic agent; HS: High satisfaction

CONCLUSIONS

HRQoL has been broadly addressed in patients with psoriasis in Europe, showing that several disease and patient-related factors contributed to its deterioration. Most of these results suggested that therapeutic measures with proved effectiveness in controlling disease symptoms and reducing PASI should be considered in patients with severe disease who consequently have poorer HRQoL.

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