



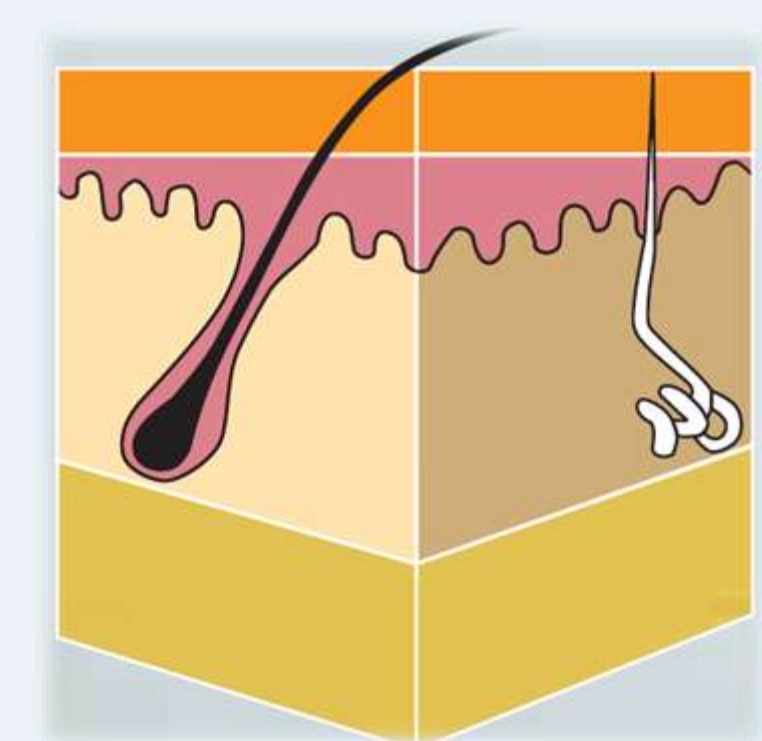
# QUALITY OF LIFE IN PATIENTS WITH PSORIASIS IN MALAYSIA: A MULTI-CENTER STUDY

MM Tang\*, CC Chang\*, LC Chan†, A Heng§

\*Department of Dermatology, Kuala Lumpur Hospital, Malaysia

† Department of Dermatology, Penang Hospital, Malaysia

§ Department of Dermatology, Ipoh Hospital, Malaysia



DERMATOLOGY HKL

## INTRODUCTION

Psoriasis is an immune mediated chronic inflammatory skin disease which affects approximately 2% of the world's population<sup>1</sup>. It has a major impact on patients' quality of life, influencing their career, social activities, family and all other aspects of life. Many studies have described the various ways in which psoriasis can affect patients' life. Very little is known however about the impact of psoriasis on the quality of life (QoL) of patients in Malaysia.

## OBJECTIVES

This study aims to describe the extent of psoriasis affecting the quality of life of patients treated in the government dermatology centers in Malaysia.

## MATERIALS & METHODS

A total of 250 patients with psoriasis treated in the dermatology centers of 8 government hospitals in Malaysia were studied. Quality of life was evaluated using the Dermatology Life Quality Index (DLQI) and the second version of 12-Item Short Form Health Survey (SF12v2).

## RESULTS

The general characteristics of the patients are shown in Table 1.

Table 1. Characteristics of recruited patients

Characteristic	Total = 250
<b>Age (years)</b>	Median 42.5 Range 18 – 83
<b>Gender</b>	Male 135 (54.0) Female 115 (46.0)
<b>Ethnic distribution</b>	Malays 116 (46.4) Chinese 75 (30.0) Indian 46 (18.4) Other ethnic minorities 10 (4) Foreigner 3 (1.2)
<b>Occupational Status</b>	Working White collar 57 (22.8) Blue collar 90 (36.0) Student 10 (0.04) Housewife 40 (16.0) Retired 34 (13.6) Unemployed/early retirement due to psoriasis 19 (7.6)
<b>Duration of Disease (years)</b>	Median 10.0 Range 0.5 – 49
<b>Body Mass Index (BMI)</b>	Mean (kg/m <sup>2</sup> ) 26.89 Range 16.4 - 52.1
<b>Psoriasis Area Severity Index (PASI)</b>	Median 9.9 Range 0.2 - 69.2
<b>Body Surface Area involvement (BSA) %</b>	Median 15.0 Range 1 – 95
<b>Number (%) of patients required a systemic therapy in the last 12 months</b>	110 (44.0)
<b>Number (%) of patients with at least one hospitalization in the last 12 months</b>	18 (7.2)
<b>DLQI</b>	Median 10.0
<b>SF 12v2 -Physical Health Summary</b>	Mean (SD) 43.68 (9.23)
<b>SF12v2 - Mental Health Summary</b>	Mean (SD) 42.25 (10.7)

Forty six percent of patients reported a DLQI of more than 10, which indicated severe quality of life impairment due to psoriasis or its treatment (Figure 1).

As shown in Figure 2, higher proportions of patients were severely affected by the symptoms of itch and pain due to psoriasis, and they felt embarrassed because of psoriasis.

Figure 1. Dermatology Life Quality Index (DLQI) in Psoriasis Patients

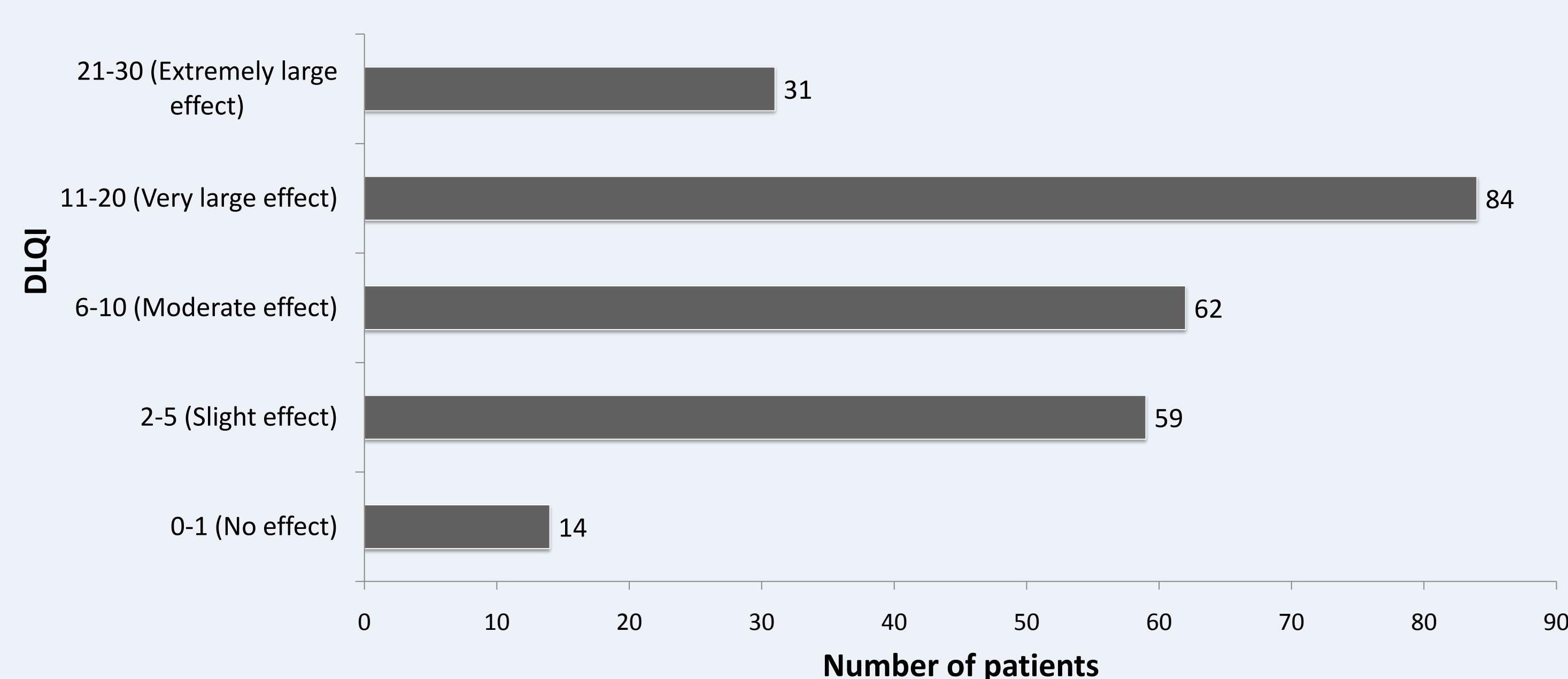
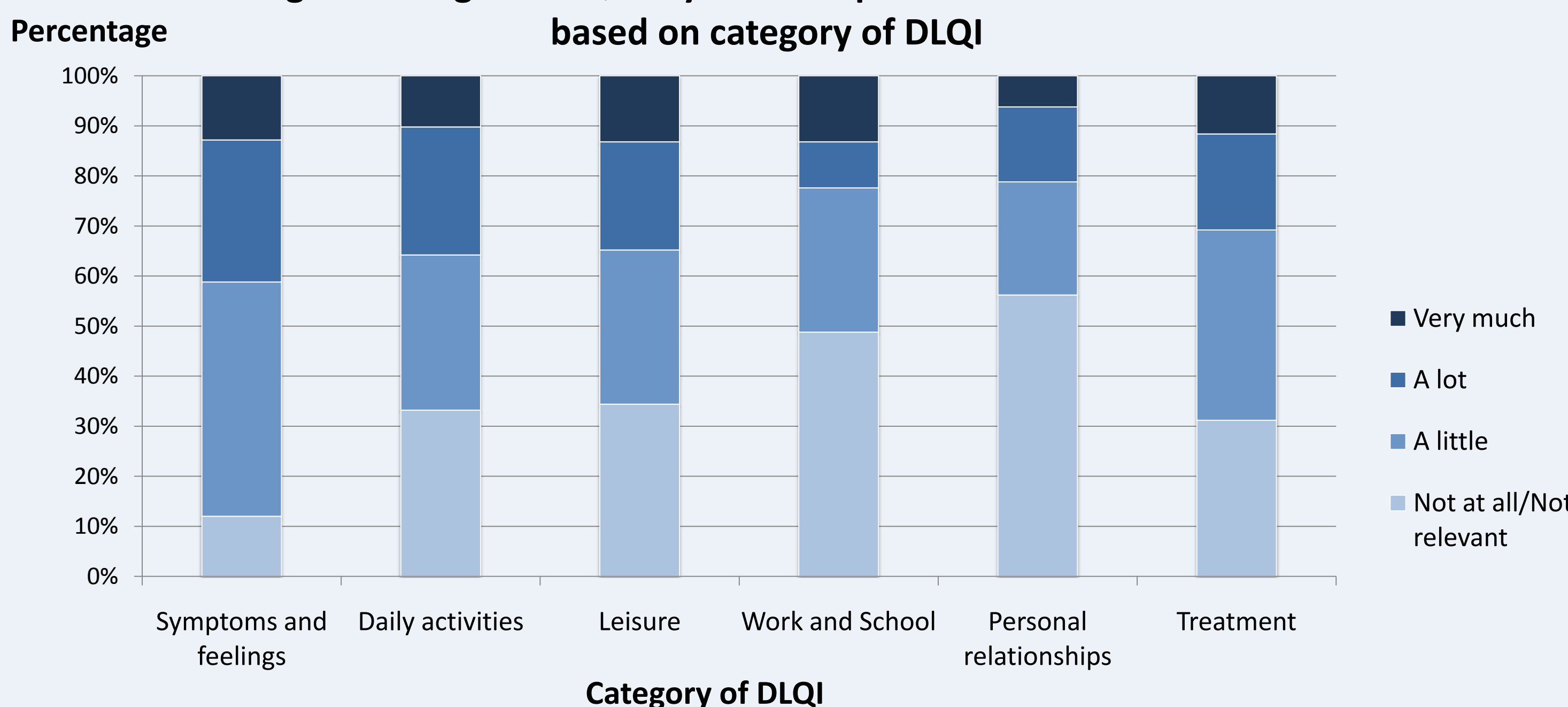


Figure 2. Degree of Quality of life impairment due to Psoriasis based on category of DLQI



The analysis of all the dimensions of the SF 12-v2 showed that the current cohort scored worst on General Health (GH) for the physical health component (36.99) while for mental health component, patients scored worst on Role Emotion (RE) (40.13) (Figure 3).

In contrast to those with mild to moderate disease, the QoL of patients with more severe disease activity was tremendously impaired (Table 2).

Psoriasis led to a significantly higher impact on QoL in younger patients with the median DLQI of 11.0 compared to older patient who had a median DLQI of 8.0 ( $p=0.001$ ). Although patients who were above 45 years old reported a higher percentage of co-morbidities, their physical component of HRQL was not significantly worse than the younger age group. In fact, the mental component of HRQL in the older age group was better than the younger age group.

Psoriasis had similar impact on the QoL in both genders. On average, patients with psoriatic arthropathy had significant lower SF-12v2 physical health component scores than those without arthropathy (Table 3).

Figure 3. The Mean SF12v2 Scores in Psoriasis Patients

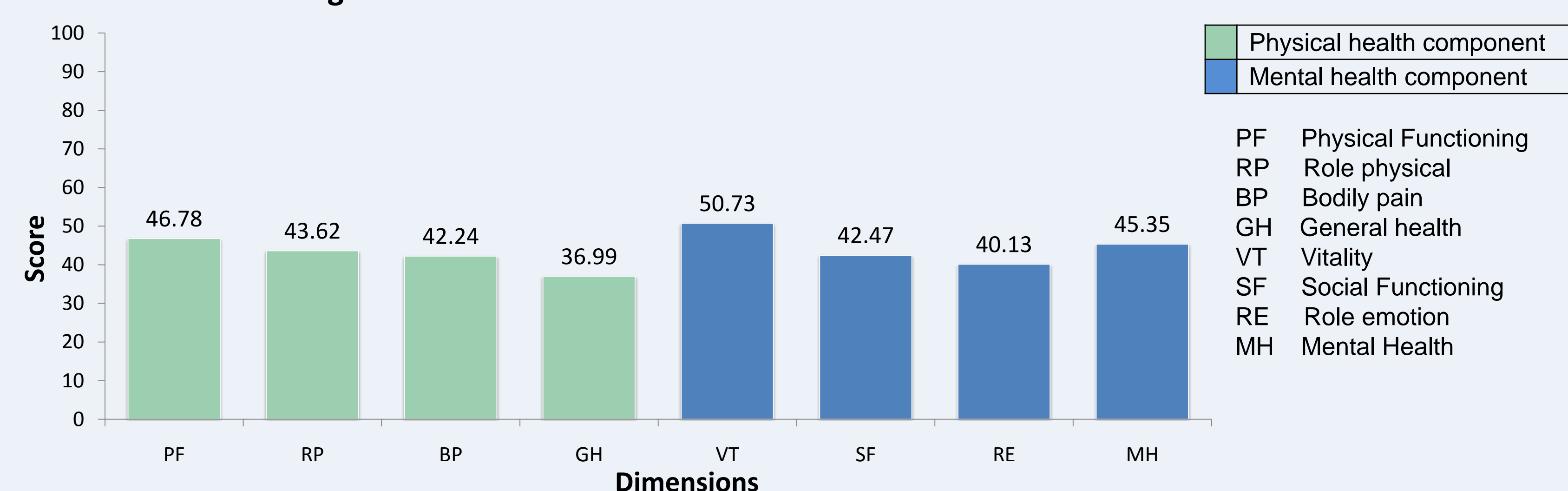


Table 2. Comparison of characteristics between patients with mild to moderate disease versus patients with severe disease

Characteristic		Mild – moderate disease (PASI<10)	Severe disease (PASI≥10)	P value
		N=126	N=124	
DLQI	Median	7.0	12.0	<0.001
Patients with DLQI>10	N (%)	42 (33.3%)	73 (58.8%)	<0.001
SF12v2	Physical Health Summary	Mean (SD) 45.67 (8.74)	41.65 (9.31)	0.001
	Mental Health Summary	Mean (SD) 45.56 (10.40)	42.61 (11.48)	0.034
Time needed daily for treatment (min)	Median	30	60	<0.001
No of patients required phototherapy and/or systemic therapy in the last 12 months	N (%)	39 (31.0%)	71 (57.3%)	<0.001
Patients with at least one hospitalization in the last 12 months	N (%)	1 (0.8%)	17 (13.7%)	<0.001

Table 3. Comparison of characteristics between psoriatic patients with or without psoriatic arthropathy

Characteristic		With psoriatic arthropathy N=92	Without Psoriatic arthropathy N= 158	P value
Patients who are working/studying	N (%)	49 (53.3%)	108 (68.4%)	0.02
PASI	Median	11.4	9.4	0.07
BSA	Median	20.0	14.0	0.058
DLQI	Median	10.0	9.5	0.53
SF12v2	Physical Health Summary	Mean (SD) 39.27 (9.59)	46.24 (8.00)	<0.001
	Mental Health Summary	Mean (SD) 43.36 (10.73)	44.52 (11.18)	0.42
Patient using systemic treatment	N (%)	52 (56.5%)	58 (36.7%)	0.004
No days of absence from work or school in the last 12 months	Mean	11.2	4.3	0.008

Psoriasis patients had significant lower physical and mental health components compared to healthy individuals regardless of co-morbidities (Table 4). Patients with ischaemic heart disease, diabetes mellitus and hypertension had significantly lower physical scores, but their mental scores were comparable to healthy subjects.

Table 4. Comparison of SF-12v2 between healthy adults and patients with psoriasis and other chronic medical diseases in Ipoh Hospital Malaysia

Type of Chronic Medical diseases	N	Mean age of cohort (years)	SF-12v2				
			Physical Score		Mental Score		
			Mean (SD)	p value compare to Healthy subjects	Mean (SD)	p value compare to Healthy subjects	
Healthy	32	38.7	52.91 (7.02)	-	48.84 (8.41)	-	
Psoriasis	All	50	43.0	41.67 (8.51)	<0.001	42.25 (10.7)	0.004
	Without any co-morbidity	27	36.7	39.23 (8.52)	<0.001	41.81 (10.5)	0.006
With other co-morbidities	23	51.3	44.52 (7.74)	<0.001	42.78 (11.1)	0.025	
Depression	20	55.6	37.45 (9.71)	<0.001	38.64 (8.07)	<0.001	
Ischaemic heart disease	32	58.7	43.96 (8.58)	<0.001	44.81 (9.17)	0.07	
Diabetes mellitus	23	55.6	42.08 (10.9)	<0.001	47.12 (8.21)	0.45	
Hypertension	35	58.6	41.36 (9.17)	<0.001	46.45 (10.15)	0.30	

## Discussion

This study demonstrated that psoriasis has significant influence on the QoL of patients in government dermatology centers in Malaysia.

- The most important factor affecting QoL was the clinical severity of psoriasis measured by PASI.
- This finding is consistent with previous studies<sup>2-3</sup> which found that higher PASI scores are associated with more severe impairment in the QoL.
- Nevertheless, about a third of patients with mild to moderate disease (33.3%) reported very large effect of their QoL with DLQI > 10. On the other hand, about 40% of patients with severe disease had only mild to moderate effect on their QoL (DLQI ≤ 10).

The observation on the decreased impact of psoriasis with increasing age was also demonstrated in other studies<sup>4-6</sup>.

- Older individuals, who generally had longer duration of psoriasis, may have learnt to cope better in living with psoriasis.
- Younger patients are usually more self conscious and more active socially.

From our current observation both genders reported similar degree of impairment in their QoL. This finding is similar to the previous studies done by Zachariae R et al<sup>7</sup> and Kanikowska A et al<sup>8</sup>.

Psoriasis imparts a negative impact on health related QoL similar to the impact of other chronic conditions like diabetes mellitus, ischaemic heart disease, hypertension and depression. This concurs with findings of previous studies that psoriasis is not just a cosmetic nuisance<sup>9-10</sup>.

## CONCLUSION

The QoL of patients with psoriasis was extensively impaired compared to healthy subjects. The impairment was comparable to patients with other chronic medical illnesses. Therefore, dermatologists or physicians managing psoriasis should also focus on the quality of life of their patients and hence, provide the ideal holistic care.

## REFERENCES

- Christophers E. Psoriasis – epidemiology and clinical spectrum. *Clin Exp Dermatol* 2001; 26:314-320
- Schöffski O, Augustin M, Prinz J et al. Costs and quality of life in patients with moderate to severe plaque-type psoriasis in Germany: A multi-center study. *JDDG* 2007; 5: 209-218
- Kanikowska, Kramer L, Pawlaczek M. Quality of life in Polish patients with psoriasis. *J EADV* 2009; 23, 70–110
- Gupta MA, Gupta AK. Age and Gender differences in the impact of psoriasis on Quality of life. *Int J of Dermatol* 1995; 34: 702-3.
- Mckenna KE, Stern RS. The impact of psoriasis on the quality of life of patients from the 16-center PUVA follow-up cohort. *J Am Acad Dermatol* 1997;36:388-94
- Gelfand JM, Feldman SR, Stern RS et al. Determinants of quality of life in patients with psoriasis: A study from the US population. *J Am Acad Dermatol* 2004;51:704-8
- Zachariae R, Zachariae H, Blomqvist K et al. Quality of life in 6497 Nordic patients with psoriasis. *Br J Dermatol* 2002; 146: 1006-1016
- Kanikowska A, Kamer L et al. Quality of life in Polish patients with psoriasis. *J EADV* 2009; 23:92-93
- Finlay AY, Coles EC. The effect of severe psoriasis on the quality of life of 369 patients. *Br J Dermatol* 1995;132:236-44
- Rapp SR, Feldman SR, Exum L et al. Psoriasis causes as much disability as other major medical diseases. *J Am Acad Dermatol* 1999; 41: 401-7