

**Table SI. Relation between overall Dermatitis Family Impact and demographic characteristics, health-related quality of life (HRQoL) and RAND36 in univariate and multivariate models**

Variables	Dermatitis Family Impact					
	Univariate model			Multivariate model		
	IRR	95% CI	p-value	IRR	95% CI	p-value
Age of child, years	0.99	[0.97, 1.00]	0.038	0.97	[0.96, 0.99]	0.002
Sex of child						
Male	1 (Ref)					
Female	0.95	[0.84, 1.07]	0.386	0.93	[0.83, 1.05]	0.236
Ethnicity						
Chinese	1 (Ref)					
Indian	1.24	[1.05, 1.45]	0.009	1.13	[0.96, 1.31]	0.133
Malay	1.15	[0.86, 1.55]	0.349	1.02	[0.80, 1.30]	0.865
Caucasian and others	1.43	[1.17, 1.75]	<0.001	1.33	[1.10, 1.60]	0.003
Qualification						
Polytechnic and professional	1 (Ref)					
Primary and secondary	1.01	[0.85, 1.20]	0.896	0.88	[0.76, 1.02]	0.099
University	0.87	[0.76, 1.00]	0.053	0.99	[0.87, 1.14]	0.93
Children in family, n	1.02	[0.94, 1.11]	0.679	0.99	[0.91, 1.06]	0.712
Accommodation						
Government flat 1–3 rooms	1 (Ref)					
Government flat 4–5 rooms	0.81	[0.69, 0.95]	0.011	0.91	[0.78, 1.06]	0.235
Private housing (condominium, landlord)	0.68	[0.56, 0.83]	<0.001	0.81	[0.66, 0.99]	0.04
Disease duration, years	1.00	[0.99, 1.02]	<0.001	1.02	[1.00, 1.04]	0.019
Severity						
Mild	1 (Ref)					
Moderate	1.38	[1.20, 1.59]	<0.001	1.23	[1.09, 1.40]	0.001
Severe	1.50	[1.26, 1.79]	<0.001	1.26	[1.06, 1.49]	0.008
HRQoL	1.06	[1.05, 1.07]	<0.001	1.04	[1.03, 1.05]	<0.001
RAND 36						
Physical health	0.98	[0.97, 0.98]	<0.001	0.99	[0.98, 0.99]	<0.001
Mental health	0.98	[0.98, 0.99]	<0.001	0.99	[0.99, 0.99]	<0.001

\*Missing data: Disease severity,  $n=46$ ; Living accommodation,  $n=2$ .

Dermatitis Family Impact (DFI): The score ranges from 0 to 30. A higher score indicates a greater degree of QoL impairment.

HRQoL: disease-specific HRQoL of patients with AD was measured using Infants' Dermatitis Quality of Life Index (IDQoL) and Children's Dermatology Life Quality Index (CDLQI).

IRR: incidence rate ratio; CI: confidence interval.