



PAEDIATRIC DERMATOLOGY

THE FAMILY IMPACT OF CHILDHOOD ATOPIC DERMATITIS IN SINGAPORE

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Introduction: Atopic dermatitis (AD) affects one in five children in Singapore. In Asia, the importance of family is strongly embedded in daily life. A sick child could distort normal family life. In return, family structures will have an effect on patient-related outcomes. However, research on the impact of AD on family life is limited.

Objective: To assess the family burden of the paediatric AD patient in the Singaporean population and to investigate its influencing factors.

Materials and Methods: Families of paediatric patients (<16 years) with AD were invited to this cross-sectional study. The Dermatitis Family Impact (DFI) questionnaire was employed to measure the impact of AD on family quality of life (QOL). RAND-36 was used to assess generic QOL of caregivers and health-related quality of life (HRQOL) of paediatric patients was measured using Infants' Dermatitis Quality of Life Index (IDQLI) and Children's Dermatology Life Quality Index (CDLQI). Disease severity was determined using Eczema Area and Severity Index.

Results: 559 families were included in this study. More than 94% of families reported their family life was affected by their children's disease. The mean score for DFI was 9.19 ± 7.28 , with sleeping disturbance (34%), emotional distress (33%), and tiredness/exhaustion (33%) most reported areas affected. Multivariable analysis was employed to analyze the influencing factors for DFI and revealed that children's HRQOL ($P < 0.001$) and caregiver's QOL (mental health: $P < 0.001$; physical health: $P < 0.001$) were both predictors for DFI. Results also suggested that children's age ($P = 0.002$), ethnicity (Caucasian: $P = 0.003$), child's disease duration ($P = 0.019$), disease severity (moderate cases: $P = 0.001$; severe cases: $P = 0.008$), and family accommodation (private housing: $P = 0.04$) affected family QOL.

Conclusions: Social, clinical factors and QOL of family members contribute to impaired family functioning. The focus of AD should not be limited to the patients, but the scope should be broadened to include their family members.

