

QUALITY OF LIFE, QUALITY OF CARE, AND PATIENT SAFETY

HEALTH-RELATED QUALITY OF LIFE AMONG PEDIATRIC PATIENTS WITH ATOPIC DERMATITIS AND THEIR CAREGIVERS IN SINGAPORE

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Introduction: The prevalence of paediatric patients with atopic dermatitis (AD) in Singapore is high (1 in 5). Although clinicians intuitively agree more severe AD may result in a poorer quality of life (QOL) for pediatric patients and their caregivers, few studies have yet quantified related factors into a model prospectively.

Objective: To assess the impact of AD on the QOL of children and their caregivers, and to investigate related factors.

Materials and Methods: This cross-sectional study included pediatric patients (<16 years) with AD and their caregivers. Generic QOL of caregivers was assessed using RAND-36 and health-related quality of life (HRQOL) of patients was measured using Infants' Dermatitis Quality of Life Index (IDQOL) and Children's Dermatology Life Quality Index (CDLQI). Disease severity, using the Eczema Area and Severity Index, was extracted.

Results: 559 pediatric patients and their caregivers were included. The mean scores for IDQOL and CDLQI were 8.32 ± 5.50 and 8.75 ± 5.48 respectively. More than 60% of paediatric patients reported a moderate or large effect of AD on the QOL. Most affected factors were itching and scratching, emotional distress and sleep disturbance. A negative binomial model showed disease severity was the only variable negatively associated with infants' HRQOL (moderate: $P < 0.001$; severe: $P < 0.001$). As for children, both age and disease severity were associated with their HRQOL (age: $P = 0.022$; moderate: $P = 0.013$). Disease severity was also negatively associated with caregivers' physical health (severe: $P < 0.029$). Children's HRQOL had a negative impact on caregivers' physical health ($P < 0.001$) and mental health ($P < 0.001$).

Conclusions: This study reveals Singaporean pediatric patients with more severe AD have a poorer QOL. Results also show caregivers' QOL suffers equally or more severely in AD



than in other life-threatening paediatric diseases. The focus in current diagnostics and treatment has to be extended to assessing the influencing factors as well as adapting management accordingly.

