

Dermatologist-Assessed Direct Medical Costs of Adult and Adolescent Patients with Atopic Dermatitis in China

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INTRODUCTION

- Atopic dermatitis (AD) is a chronic dermatological disease characterized by recurrent eczematous lesions, dry skin and pruritus¹. Type 2 inflammation is the predominant inflammatory pathway in AD^{2,3}.
- The prevalence of AD in China has been increasing during the past decade⁴.
- The study data was divided into two groups to analyze because the dosage of medication and adverse effect for adolescent patients with AD are different from adult patients.

OBJECTIVE

This study aims to assess the direct medical expenses of adult (Age≥18) and adolescent (12≤Age<18) patients with AD in China.

METHODS

- A comprehensive questionnaire was designed after an in-depth interview with three top dermatologists in China. 51 copies (30 for adults and 21 for adolescents) were then sent to dermatologists in geographically distributed regions in China to obtain the professional input about the direct medical costs of different severity of AD (The severity of AD was assessed from dermatologists' clinical experience).

- The survey included:

➤ The unit cost of moisturizers, topical drugs, systemic therapies and other treatments (including ultraviolet light therapy and traditional Chinese medicine)

➤ The frequency and duration of drug use

Costs were converted to US dollars using 2020 exchange rate. (1 USD=6.8974 RMB)

RESULTS

- 47 valid questionnaires (29 for adults and 18 for adolescents) were collected and analyzed.
- The average annual direct medical expenses for adult patients were \$826, \$1627, and \$3709 (from mild to severe), respectively. (Table 1)
- The average annual direct medical expenses for adolescent were \$371, \$1001, and \$1800 (from mild to severe), respectively. (Table 2)

Table 1: The average annual direct medical expenses for adult patients (Unit :\$)

	Moisturizers	Topical Drugs	Systemic Therapies	Other Treatments	Total Cost
Mild	504	279	15	28	826
Moderate	769	493	209	156	1627
Severe	1108	905	1167	528	3709

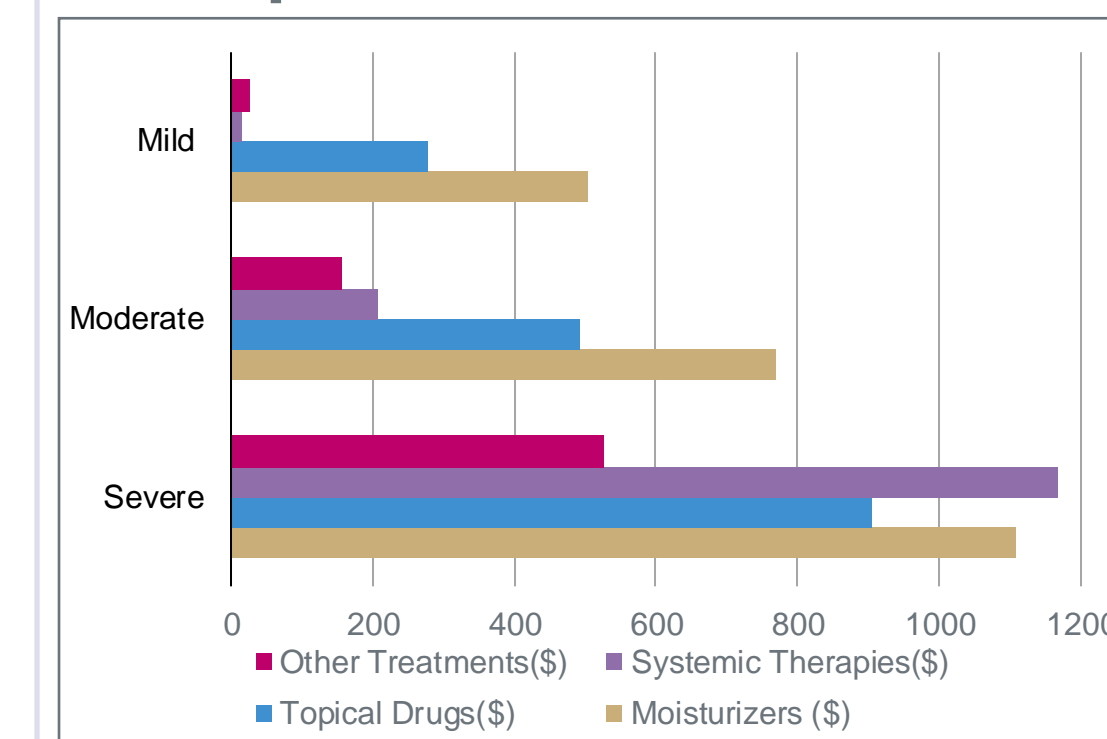
Table 2: The average annual direct medical expense for adolescent patients (Unit :\$)

	Moisturizers	Topical Drugs	Systemic Therapies	Other Treatments	Total Cost
Mild	238	81	11	42	371
Moderate	449	199	80	274	1001
Severe	602	464	453	281	1800

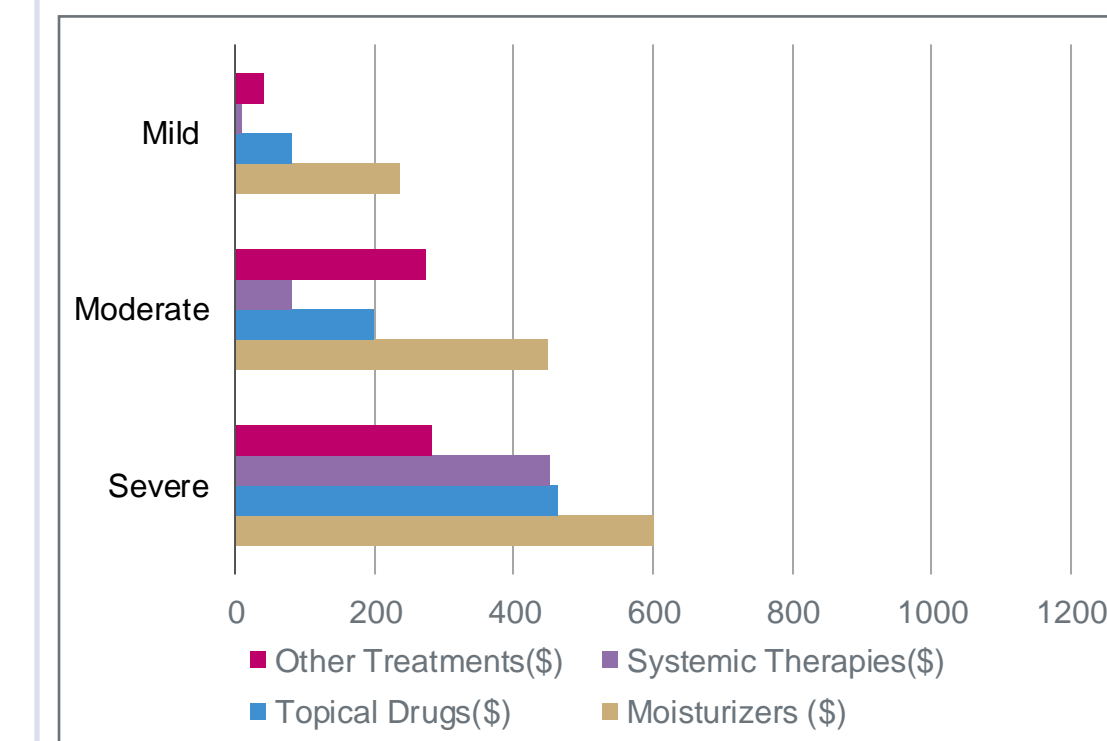
- For cost composition, moisturizers accounted for the largest proportion of all groups except adults with severe AD who spent the most on systemic therapies. (Figure1 and 2)

Figure 1: The direct medical cost for patients with different severity

Adult patients:



Adolescent patients:



USD(\$) year at 2020

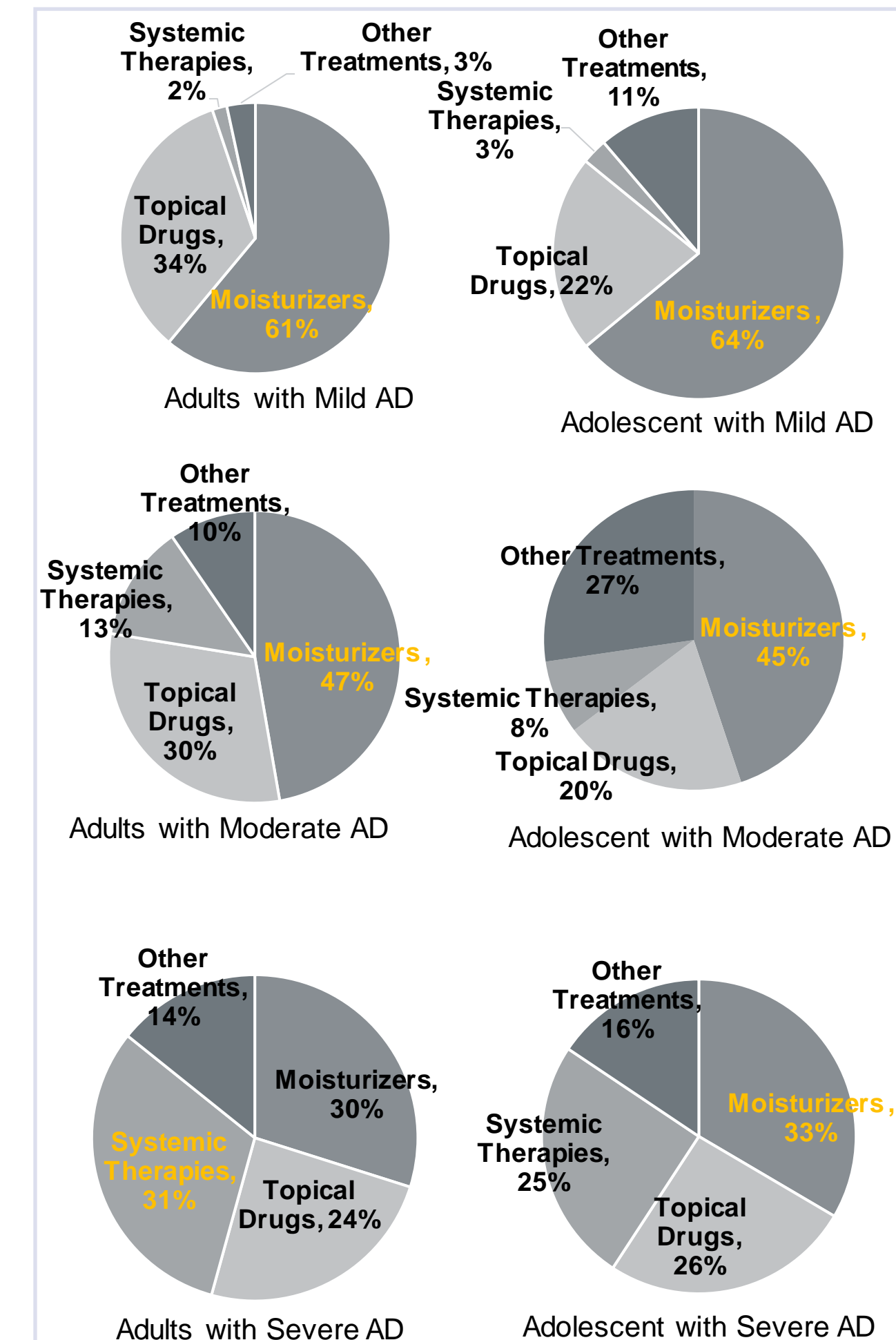


Figure 2: The cost composition of patients with different severity

CONCLUSIONS

In China, the direct medical costs of both adult and adolescent patients with AD increase with the disease severity worsening.

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