

# Therapeutic education in atopic dermatitis: Results from an observationnal cohort

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#### **KEYWORDS**

Atopic dermatitis, therapeutic education, education program, pruritus

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#### **ABSTRACT**

Atopic dermatitis (AD) is a chronic inflammatory disease that requires therapeutic patient education (TPE). In the dermatology department, we initiated a therapeutic education program for patients with AD. This study aims to describe our therapeutic education activity. We conducted a single-center, prospective, observational study at the Dermatology Department of Mustapha Hospital in Algiers, including all patients with moderate-to-severe AD (SCORAD ≥ 25) observed between January 2024 and June 2024. Demographic data, SCORAD, and the Numerical Rating Scale (NRS) for pruritus were collected. Thirty-five patients with AD were enrolled, and all participants attended three therapeutic education sessions. The mean NRS pruritus score was 7 at baseline and decreased to 4 after six months. The mean SCORAD was 34.6 at baseline and 21.2 at six months. TPE is an integral part of the management of AD and is recommended in international guidelines. Numerous studies have demonstrated its effectiveness in reducing pruritus, disease severity, and improving quality of life. Our results highlight the value of atopy schools in the management of AD. The development of educational structures is essential for the treatment of chronic dermatological diseases.

#### 1. Introduction

Atopic dermatitis (AD) is a chronic inflammatory disease that affects 10% of adults and 20% of children (1, 2). It is characterized by recurrent eczematous lesions, intense pruritus and xerosis impacting sleep and quality of life (3). The use of topical corticosteroids during outbreaks and the regular and continuous application of emollients to avoid skin

xerosis are necessary for AD. Understanding the disease, the recognition of triggering factors and the appropriate use of treatments requires therapeutic education (4). In the dermatology department, we started a therapeutic education program for AD patients. This study aims to provide a description of our therapeutic education program (TEP).

#### 2. Materials and methods

We conducted a prospective, single-center study including patients of all ages with moderate-to-severe AD (SCORAD ≥25) at the Dermatology Department in Algiers, Algeria, from January 2024 to June 2024. Patients were diagnosed with atopic dermatitis according to the United Kingdom Working Party criteria and were enrolled in a therapeutic education program. Our educational program was structured around three themes:

**Knowledge:** understanding AD, its pathophysiology, clinical aspects, disease course, and treatment options.

**Skills:** acquiring practical skills for the management of AD, including the use of topical corticosteroids, emollients, and itch management strategies.

Attitudes: learning how to live with AD.

The program was delivered by a multidisciplinary team consisting of a dermatologist, a psychologist, and a nurse. The dermatologist was responsible for the theoretical component, the nurse conducted the practical training on the use of topical treatments, and the psychologist addressed the burden of the disease, its impact on quality of life, and relaxation techniques.

Educational tools included coloring activities for younger children, mood cards (Fig. 1), dolls for treatment demonstrations and simulations, and illustrated brochures. Thermal water sprays and cool compresses were used to demonstrate practical measures for reducing itch.

Data were collected at baseline and after completion of the program using questionnaires assessing demographic characteristics, SCORAD (Scoring Atopic Dermatitis), and the Numerical Rating Scale (NRS) for pruritus. The educational objectives evaluated were knowledge of the disease, itch management, and the ability to apply topical treatment. Informed consent was obtained from all participants (with parental consent for minors).



**Fig 1.** *Mood cards used during workshops.* 

#### 3. Results

Thirty-five patients with atopic dermatitis were enrolled, including 15 children under 2 years of age (42.85%),12 children aged 2–16 years (34.28%), and 8 adults (22.85%). The mean age was 7.5 years for the pediatric group and 31 years for the adult group.

During the study period, all participants attended three therapeutic education sessions, each lasting approximately 90 minutes. Sessions were organized in groups of six participants, with pediatric patients accompanied by at least one parent. Group sessions were held separately for children and adults.

Among the participants, 29 patients (82.85%) attended group workshops, while 6 patients (17.14%) participated in individual sessions. Three

workshops were conducted outside the hospital and included art therapy activities such as painting, drawing, and mosaic (Fig. 2). All parents (100%) inquired about the causes of AD; 17 patients (48.57%) mentioned the role of diet in AD, and 27 patients (77.14%) discussed strategies to stop itching.

The mean SCORAD was 34.6 at baseline and decreased to 21.2 at six months (Fig. 3). The mean NRS pruritus score was 7 at baseline and 4 after six months. Educational objectives were achieved: 80% of participants were able to use itch-coping methods and correctly demonstrate emollient application. Three patients (8.57%) were lost to follow-up.



Fig 2. Workshop of paintings.

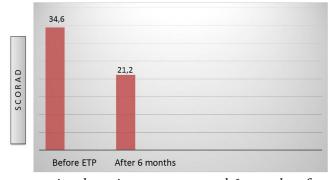


Fig 3. SCORAD before the therapeutic education program and 6 months after.

#### 4. Discussion

The creation of a therapeutic education activity for both adults and children in a dermatological department is described in this study. Therapeutic education is an integral part of the care process during AD and is included in international guidelines (5, 6). Our study showed the benefits of therapeutic education in terms of severity scores of AD (SCO-RAD and NRS pruritus) as reported in previous studies (7). The multidisciplinary approach of our team also reported by Barabarot and al. is associated with an increased emollient use and better itch strategies (8). We reported both individual and collective approach. The later allows exchanges between patien

ts. Art therapy was introduced in our educational program in three worshops conducted outdoors as a complementary approach that addresses medical and psychological aspects of the disease (9). Art therapy has been documented in psoriasis with an improvement of the self-image (10). The educational objectives of our program were achieved illustrating the benefits of interactive sessions.

The limitations of our study include the sample size and the observational design of the study. Nevertheless, our results are similar to published studies. Our program reinforced the evidence that therapeutic education improves AD.

#### 5. Conclusion

The development of educational structures is essential for the treatment of chronic dermatological diseases such as AD.

Conflict of interest: None

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