

Direction for Future Actions—From dermatologists' standpoint

JMAJ 52(3): 168–172, 2009

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Abstract

In April 2007, the Ministry of Education, Culture, Sports, Science and Technology published “The Report of the Survey on Allergy Diseases.” Among the various allergy diseases surveyed, dermatologists mainly participated in the study of atopic dermatitis. We discussed the surveying and grasping of the current situation of atopic dermatitis, special considerations in school life, special considerations for physical education and sports events, the provision of hot water showers, special consideration during excursions and school trips, aiding the use of medications and other products in school, and future actions.

Key words The Report of the Survey on Allergy Diseases, Atopic dermatitis, Survey on the current situation of atopic dermatitis, Special consideration in school life, Special consideration in excursions and school trips, Future actions for atopic dermatitis.

Introduction

In April 2007, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) published “The Report of the Survey on Allergy Diseases.”¹

Among the various allergy diseases discussed in this report, we mainly participated in the study on atopic dermatitis, including the grasping of present circumstances and consideration of future actions based on analysis and evaluation of the findings.

This article discusses the findings from the atopic dermatitis survey and the current circumstances of actions in schools from the standpoint of dermatologists.

Findings from the Atopic Dermatitis Survey

According to the survey report, valid answers

were obtained from 12,773,554 students and the actual number of atopic dermatitis is 699,086. The prevalence rate was 6.3% among elementary school students, 4.9% among junior high school students, 4.0% among high school students, and 6.6% among secondary school (combined junior high and high school education) students. The total prevalence rate from all students was 5.5% (Fig. 1). The very large scale of this survey made the data obtained exceptionally valuable. However, these figures presumably do not include mild cases, and are considered to indicate the frequency of moderate to severe cases. Various reports^{2–4} suggest that the actual frequency is most likely in the range from 10 to 13% of all students. The gender ratio (male:female) was 1.04:1 in total, while comparison among prefectures revealed various regional variations. It is notable that Okinawa Prefecture had the lowest prevalence in all age categories from elementary

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This article is a revised English version of a paper originally published in the Journal of the Japan Medical Association (Vol.137, No.4, 2008, pages 45–48).

The article is based on a presentation made at the school physician symposium “Allergic Diseases at Schools: Support and Management” held at the JMA hall on February 23, 2008.

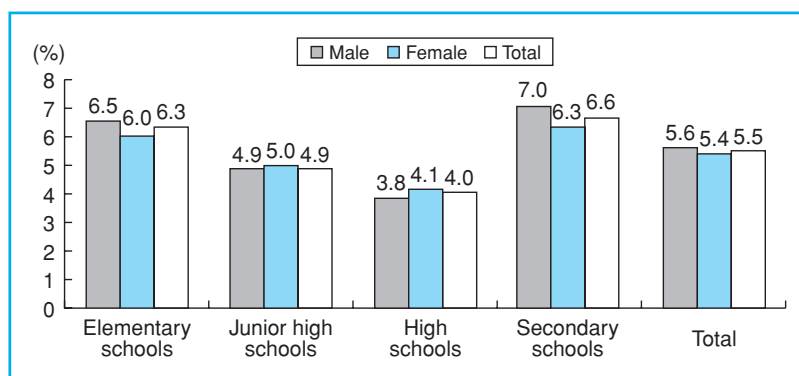


Fig. 1 Prevalence of atopic dermatitis among students

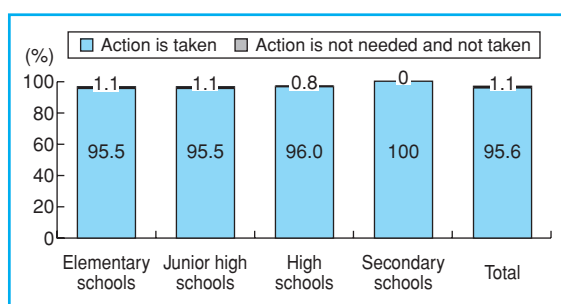


Fig. 2 Grasping of current situation

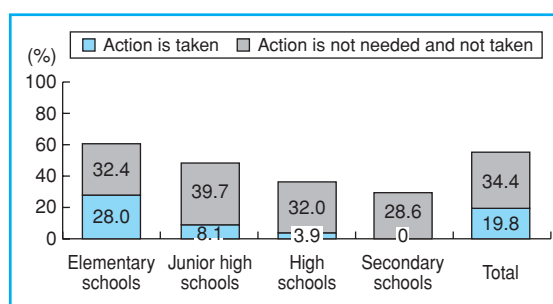


Fig. 3 Special consideration regarding room cleaning duties and other activities

school students to high school students.

Actions in Schools

The report explored the actions taken at schools regarding the following six items:

Grasping the realities of schools

The percentage of schools that answered “actions are taken to grasp the real problems of students with atopic dermatitis, including the identification of allergens, based on health surveys, health examinations, and reporting from guardians” was 95.5% among elementary schools, 95.5% among junior high schools, 96.0% among high schools, 100.0% among secondary schools, and 95.6% among all schools surveyed (Fig. 2). This indicated that most schools make efforts to grasp the current problems of allergy students. At present, schools get the information concerning the health of students from the guardians’ reports such as health surveys and health examinations con-

ducted upon school admission and at regular intervals. It is desirable that more concrete and detailed information be collected and utilized in actions at schools in future.

Special consideration in school life

The percentage of schools that answered “special consideration is given regarding room cleaning duties (animal keeping duties) and other activities” was 28.0% among elementary schools, 8.1% among junior high schools, 3.9% among high schools, 0% among secondary schools, and 19.8% among all schools surveyed (Fig. 3). A school should basically ensure that students with atopic dermatitis may experience the same school life as other students. Therefore, it is desirable that appropriate measures be taken to avoid the known factors for the aggravation of atopic dermatitis. As room cleaning and animal keeping may be causes of aggravation in students with severe atopic dermatitis, appropriate consideration should be given to such students depending

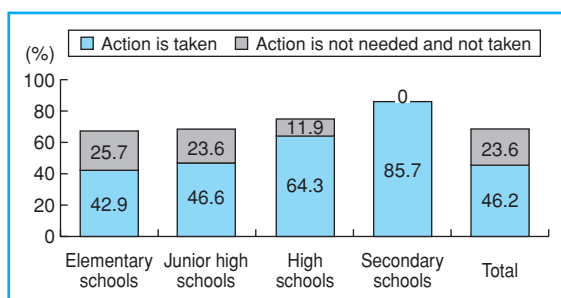


Fig. 4 Special consideration regarding PE classes and other activities

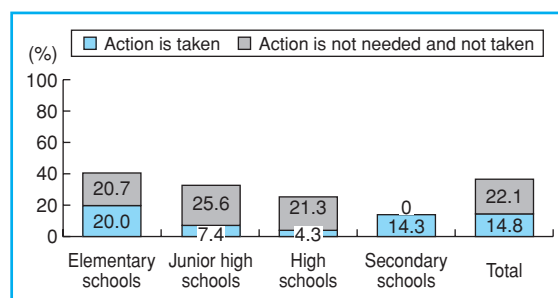


Fig. 5 Provision of hot water showers and other facilities

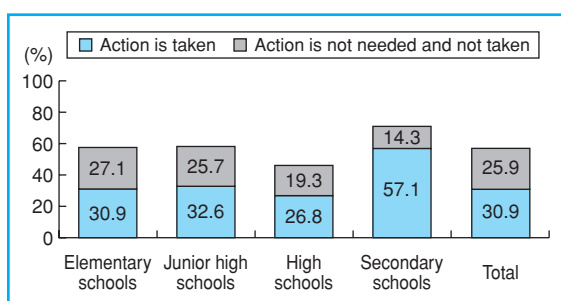


Fig. 6 Special consideration regarding (one-day) excursions

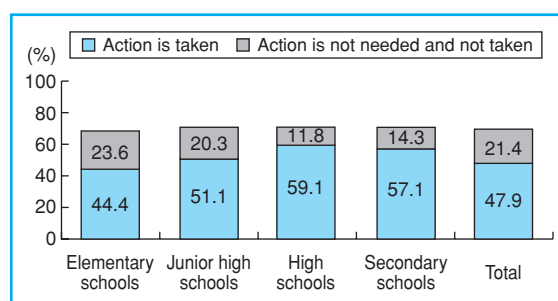


Fig. 7 Special consideration regarding (overnight) school trips

on the situation.

Special consideration in physical education (PE) and other events

The percentage of schools that answered “special consideration is given regarding attendance of physical education classes and sports festivals” was 42.9% among elementary schools, 46.6% among junior high schools, 64.3% among high schools, 85.7% among secondary schools, and 46.2% among all schools surveyed (Fig. 4). Sweating and exposure to ultraviolet rays during physical activities, disinfectant in swimming pools, and other factors are known to aggravate atopic dermatitis. Concrete measures regarding these factors are required.

Hot water showers

The percentage of schools that answered “hot water showers and other facilities are provided” was 20.0% among elementary schools, 7.4% among junior high schools, 4.3% among high schools, 14.3% among secondary schools, and 14.8% among all schools surveyed (Fig. 5). The basics

of skin care for atopic dermatitis are cleanliness, moisture retention, and protection of the skin, hence the use of showers in school life is recommended.⁵ However, the number of schools with hot water showers remains small. Awareness-raising activities should be expanded to promote the installation of hot water shower facilities at schools.

Special consideration in school excursion

The percentage of schools that answered “special consideration is given regarding the destination of (one-day) school excursions in terms of environmental and other factors” was 30.9% among elementary schools, 32.6% among junior high schools, 26.8% among high schools, 57.1% among secondary schools, and 30.9% among all schools surveyed (Fig. 6).

The percentage of those that answered “special consideration is given regarding the destination of school trips and other events involving lodging” was 44.4% among elementary schools, 51.1% among junior high schools, 59.1% among high schools, 57.1% among secondary schools,

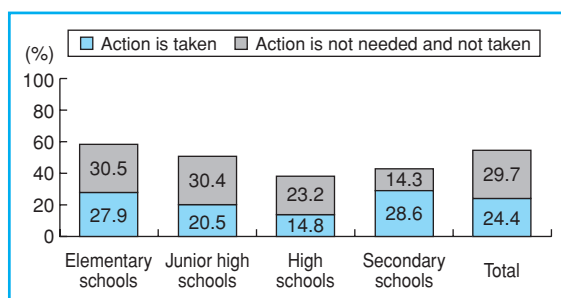


Fig. 8 Checking of medicines brought to school

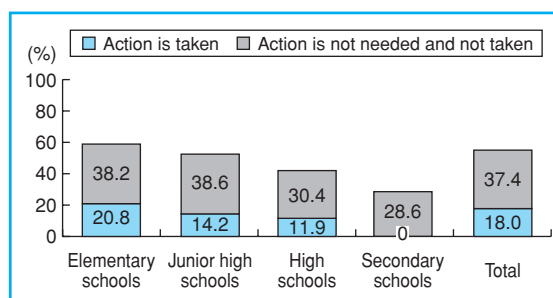


Fig. 9 Provision of places for medicine safekeeping and skin care

and 47.9% among all schools surveyed (Fig. 7).

The content of consideration regarding excursions and overnight trips varied from school to school. It is important to accumulate and analyze information regarding concrete measures, and provide a better environment so that the students with atopic dermatitis may actively participate in these activities.

How to aid the use of medicines and other items at schools

The percentage of schools that answered “the medicines students bring to school are checked” was 27.9% among elementary schools, 20.5% among junior high schools, 14.8% among high schools, 28.6% among secondary schools, and 24.4% among all schools surveyed (Fig. 8).

Those that answered “places for medicine safekeeping and skin care are provided” was 20.8% among elementary schools, 14.2% among junior high schools, 11.9% among high schools, 0% among secondary schools, and 18.0% among all schools surveyed (Fig. 9).

The present situation regarding the use of medicines and other items at schools is unsatisfactory, considering the fact that some students with atopic dermatitis need medicines to be applied while they are at schools. Although atopic dermatitis is not a condition frequently requiring emergency care, it is necessary to provide appropriate places for the use of medicines according to the direction of physicians and in response to requests from guardians.

Future Actions

Concrete actions that should be taken in school

life include: (1) the avoidance of direct sun exposure during sports meetings (students should stand by under a tent), (2) special consideration regarding the topical application of skin care products and consumption of medicines, (3) the use of shower basins after swimming classes in pools and the provision of shaded places on the poolside, and (4) special consideration regarding uniforms (PE uniforms, school uniforms, etc.) in terms of friction around the neck, the fabric of the material, and the wearing of long-sleeved clothes, etc. In addition, further consideration should be given regarding (5) the permission to use topical sun screen products in the pool and during outdoor activities, (6) the use of goggles if needed to prevent itching around the eyes, and (7) the avoidance of immersion in a disinfection bath with a high chlorine concentration. It is important that schools understand these needs.

Conclusion

We discussed the survey concerning atopic dermatitis and the actions taken at schools from the standpoint of dermatologists. The actions taken by schools to grasp the current problems are generally satisfactory. The actions regarding one-day excursions and overnight school trips, as well as those regarding the participation in PE classes and sports meetings, are also relatively adequate. However, consideration regarding room cleaning duties and other activities, the installation of hot water showers, and the use of medicines still remain far from sufficient.

The Japanese Society of School Health, commissioned by MEXT, has established the Committee for the Promotion of Measures against

Allergy Diseases at Schools. Through the activity of this Committee, MEXT is now developing a “School Life Management Guidance Table (for Allergy Diseases),” “Guidelines for Actions against Allergy Diseases at Schools,” and “How

to Use School Life Management Guidance Table (for Allergy Diseases).” These efforts are expected to realize more concrete and advanced measures to support students with atopic dermatitis in their school lives.

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