

PA40) Effects of Asthma and Atopic Dermatitis on Indoor Exposure in Children

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1. 서론

- More than 80-90% of the modern living environments of people are indoors, and exposure to various chemical and environmental factors may cause diseases, such as atopic dermatitis and asthma.
- It chronic and recurrent and is associated with bronchial asthma and food allergies.
- In children with atopic dermatitis, allergic rhinitis is known to progress from 50% to asthma and from 75% to allergic rhinitis.

2. 자료 및 방법

- Seven-year-old children living in Seoul and Gyeonggi-do in 2017 were selected as subjects for this study.
- The survey was conducted through parents' applications. After loading the sampling device, the sample was collected at 28.3 L/min for 7 minutes.

3. 결과 및 고찰

- The frequency of questionnaires about the family situation and the relation with the diagnosis of the disease indicates that the bed mattress cleaning cycle is less than 1 day and frequent cleaning has a favorable effect of more than 80%.
- As a result, it can be confirmed that it directly affects the presence of fine dust.
- For the analysis of the total aerobic bacteria and fungi (samples), the culture medium in which the indoor air was collected was incubated at 35°C and 25°C, respectively, for 48 hours in an incubator to culture the collected microorganisms. After culturing, the number of bacterial colonies in the medium was measured; the number of colonies per unit volume (CFU/m³) was calculated by dividing the number of colonies by the collected indoor air volume. The average number of colonies in the medium used was 3 for each spot, and the total number of airborne bacteria and fungi in the indoor space was calculated. In addition, the CO₂ measurement equipment and analysis could measure indoor CO₂ mainly by human respiration using a non-dispersion infrared fine-dust (PM_{10,2.5}) instrument.

4. 참고문헌

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