



## ABSTRAK

### **HUBUNGAN PEMBERIAN ASI EKSKLUSIF DENGAN SESNITISASI ALERGEN PROTEIN KEDELAI PADA ANAK BALITA**

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**Latar Belakang.** Kedelai merupakan protein nabati sering dijadikan alternatif pengganti protein hewani, termasuk pada bayi. Namun, prevalensi alergi protein kedelai pada anak masih tinggi yakni 3,9% pada anak dengan bakat atopi dan 12,9% pada anak alergi. Salah satu faktor yang diduga mencegah terjadinya sensitisasi alergi pada anak adalah pemberian ASI eksklusif. Kandungan ASI berupa immunoglobulin, laktiferin, dan oligosakarida diduga menjadi faktor yang berperan dalam hal ini.

**Tujuan.** Mengetahui hubungan pemberian ASI terhadap sensitisasi alergen protein kedelai pada anak balita serta mengetahui resiko terjadinya sensitisasi alergi pada balita yang tidak mendapat ASI eksklusif.

**Metode.** Rancangan penelitian yang digunakan dalam penelitian ini adalah potong lintang (*cross-sectional*) dengan subjek 80 anak usia balita di Daerah Istimewa Yogyakarta. Penelitian ini dimulai dari bulan Februari 2019 hingga April 2019. Pelaksanaan pengambilan data berupa data demografik, riwayat alergi, riwayat pemberian ASI dan hasil uji tusuk kulit dilakukan di Poli Anak bagian Alergi dan Immunologi Rumah Sakit Umum Pusat Dr. Sardjito, Sleman, Yogyakarta, serta 3 tempat Bidan Praktik di Kabupaten Kulon Progo. Peserta yang datanya hilang atau tidak lengkap disingkirkan dari penelitian ini. Analisis statistik akan dilakukan menggunakan uji statistik *fisher's exact*.

**Hasil.** Presentase balita yang tidak mendapat ASI eksklusif menunjukkan 62,5% tersensitisasi alergen kedelai sedangkan balita yang mendapat ASI eksklusif hanya 37,5% yang tersensitisasi. Berdasarkan uji analisis yang dilakukan, hubungan pemberian ASI eksklusif dengan sensitisasi alergen kedelai pada anak balita menunjukkan hasil yang bermakna ( $p=0,01$ ) dengan rasio relatif 5,47 ( $CI = 1,4 - 20$ ).

**Simpulan.** Pemberian ASI eksklusif memiliki hubungan dengan sensitisasi alergen protein kedelai pada anak balita. Balita yang tidak mendapat ASI eksklusif memiliki resiko 5,47 kali lebih besar untuk tersensitisasi alergen protein kedelai dibanding yang mendapat ASI eksklusif.

**Kata kunci.** asi eksklusif, sensitisasi, alergi, protein kedelai, *cross-sectional*, *fisher's exact*



## ABSTRACT

### RELATIONSHIP OF EXCLUSIVE-BREASTFEEDING ASSOCIATION WITH SENSITIZATION OF SOYBEAN PROTEIN ALERGEN IN CHILDREN

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**Background.** Soybean is a vegetable protein often used as an alternative to animal protein, including in infants. However, the prevalence of soy protein allergies in children is still high at 3.9% in children with atopic talent and 12.9% in allergic children. One of the factors suspected of preventing allergic sensitization in children is exclusive-breastfeeding. Breastmilk, which contain of immunoglobulin, lactoferrin, and oligosaccharides is suspected to be a contributing factor in this matter.

**Objective.** This study objective is to know the relationship of breastfeeding to sensitization of soy protein allergens in children under five and knowing the risk of allergic sensitization in infants who do not get exclusive breastfeeding.

**Method.** The study design used in this study was cross-sectional with the subject of 80 children aged under five in the Special Region of Yogyakarta. The study began from February 2019 to April 2019. The data collection took the form of demographic data, allergy history, breastfeeding history and the results of skin prick tests conducted at the Children of Allergy Poly Department and Immunology Dr. Central General Hospital. Sardjito, Sleman, Yogyakarta, and 3 places for Practical Midwives in Kulon Progo Regency. Participants who lost or incomplete data were excluded from this study. Statistical analysis will be performed using the statistical test fisher's exact.

**Results.** The percentage of children who did not get exclusive breastfeeding showed 62.5% sensitized soy allergens while children who received exclusive breastfeeding only 37.5% were sensitized. Based on the test analysis carried out, the relationship of exclusive breastfeeding with soy allergen sensitization in children under five showed significant results ( $p = 0,01$ ) with a relative ratio of 5.47 (CI = 1.4 – 20)

**Conclusion.** Exclusive breastfeeding has an effect on the negative sensitization of soy protein allergens in children under five. Children who did not receive exclusive breastfeeding had a risk of 5.47 times greater sensitivity to soy protein allergens than those who received exclusive breastfeeding.

**Keywords.** exclusive breast milk, sensitization, allergy, soy protein, cross-sectional, fisher's exact