

with sensitization to other groups of allergens and is more often clinically manifested by allergic rhinitis.

**Conflicts of Interest:** The authors did not specify any links of interest.

#### 001574 | Analysis of sensitization to different groups of pollen allergens and allergic diseases in patients of the southern region of Ukraine

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**Background:** Analyze the features of sensitization to different groups of pollen allergens and allergic diseases in patients of Southern region of Ukraine.

**Method:** 46 people, 18–65 y.o., living in the south of Ukraine (Odesa, Kherson, and Mykolaiv regions) were accepted to study. Participants were divided into three groups depending on age: group I – 18–29 y.o. ( $n=15$ ), group II – 30–50 y.o. ( $n=20$ ), group III – 51–65 y.o. ( $n=11$ ).

**Results:** The reaction on three groups of allergens (trees, grasses, weeds) was detected in 8.7% of patients, sensitization to two groups of allergens was noted in 34.8%; a combination of tree and weed pollen – 17.4%; reactions to grass and weed pollen were observed in 13.0%, reactions to tree and grass pollen – 4.3%. When assessing the sensitization profile of patients in all groups, the reaction to weeds (ragweed, wormwood) prevails: in group I – 93.1%, in group II – 92.1%, and in group III – 85.6%. The reaction to tree pollen was the highest in group III – 24.2% ( $p<0.05$ ), among patients in group I – 17.5% and group II – 14.9%. Sensitization to grasses: in group I – in 3.8%, in group II – in 1.4%, in group III – in 1.2%. Polysensitization: in group I in 32.1%, in group II – 22.1%, in group III – 15.6%. Among the clinical manifestations in patients of the southern region of Ukraine, the combination of rhinitis and conjunctivitis is most often noted in the study group – 84.6%, in the I group – 88.6%, in the II group – 83.2%, in the III group – 78, 8%. The frequency of bronchial obstruction in group I – was 6.2%, in group II – was 11.0%, and in group III – 12.1%.

**Conclusion:** Among the causative allergens in our region, weeds predominate – 90.3% of sensitization in the examined group. There is no significant difference in different age groups ( $p>0.05$ ). Among the clinical manifestations, the combination of rhinitis and conjunctivitis is most often noted – 84.6%, which coincides with international data.

**Conflicts of Interest:** The authors did not specify any links of interest.

#### ALLIED HEALTH AND PRIMARY CARE

#### 000613 | Real-world adherence to anaphylaxis guidelines among different age groups in emergency departments: A Taiwan tertiary hospital experience from 2001 to 2020

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**Background:** Anaphylaxis is a life-threatening clinical emergency. Anaphylaxis guidelines recommend prompt intramuscular injection of epinephrine, referral to an allergist, and patient education on avoidance of triggers and recognition of symptoms. Little is known about adherence to guidelines in the management of anaphylaxis among patients of different age groups in emergency departments (EDs). This study aimed to investigate real-world adherence to anaphylaxis guidelines among elders, adults, and children in EDs.

**Method:** This study retrospectively reviewed electronic medical records of all consecutive patients with anaphylaxis presented to two EDs of Chang Gung Memorial Hospital, the largest tertiary hospital in Taiwan, from January 1, 2001, to December 31, 2020. Patients met the National Institute of Allergy and Infectious Diseases/Food Allergy and Anaphylaxis Network criteria for anaphylaxis were enrolled and grouped by age: elders ( $\geq 65$  years), adults (18–64 years), and children ( $<18$  years).

**Results:** A total of 766 patients (113 elders, 495 adults, and 158 children) were presented to our EDs with anaphylaxis over a 20-year period. Epinephrine (intramuscular, subcutaneous or intravenous) was administered in 391 (51.0%) of 766 anaphylaxis patients (45.1% elders, 51.5% adults, and 55.7% children;  $p=0.320$ ). Specifically, intramuscular epinephrine was administered in 30.1% of elders, 37.8% of adults, and 46.8% of children ( $p=0.01$ ). When stratified by severity, intramuscular epinephrine was more frequently administered in elders with severe anaphylaxis than moderate anaphylaxis (37.3% vs. 13.9%;  $p=0.01$ ), while such difference was not found in adults and children. Upon discharge from EDs, 15.3% of patients received documented allergist referral (2.6% elders, 6.7% adults, and 51.9% children;  $p<0.001$ ). Approximately 12.3% of patients received education on avoidance of triggers (8.0% elders, 11.1% adults, and 19.0% children;  $p=0.01$ ). Approximately 16.1% of patients received education on recognition of anaphylaxis symptoms (13.3% elders, 14.7% adults, and 22.2% children;  $p=0.06$ ).

**Conclusion:** This real-world study demonstrates suboptimal adherence to anaphylaxis guidelines in EDs, particularly among elderly patients aged 65 years and above. Physician-targeted interventions are needed to close the gap between guidelines and clinical practice in the management of anaphylaxis.