## Allergic rhinitis: a cross-sectional survey assessing the knowledge and therapeutic approach among final year medical students, pharmacy students, general practitioners and community pharmacists in Croatia

Nikolina Bogdanić<sup>1</sup>, Toni Vidović<sup>2</sup>, Armin Mehmedović<sup>1</sup>, Marion Tomičić<sup>3</sup>, Željka Roje<sup>4</sup>

<sup>1</sup>University Hospital for Infectious Diseases "Dr. Fran Mihaljević", Zagreb, Croatia, <sup>2</sup>Zagreb City Pharmacy, Zagreb, Croatia, <sup>3</sup>Community Health Center of Splitsko-dalmatinska County, Croatia, <sup>4</sup>Private ENT Practice "dr. Željka Roje", Split, Croatia

Objectives. To assess the current knowledge of allergic rhinitis (AR) among final year medical and pharmacy students, general practitioners (GPs) and community pharmacists in Croatia.

Methods: Data were collected from September 2017 to November 2017 through an online questionnaire. Final year medical and pharmacy students (N=201), GPs and pharmacists from Croatia (N=127) were included. The two factor structured questionnaire was formed regarding general knowledge and treatment of AR. T-test and chi-square tests were used for statistical analysis.

Results: Overall knowledge of AR was low among respondents (mean score among GPs: 11.4/20, pharmacists: 11.3/20, pharmacy students: 10.8/20, medical students: 10.3/20). With reference to treatment mean scores were also low; GPs 5.1/10, pharmacists: 4.9/10, pharmacy students: 4.3/10 and medical students: 4.1/10. GPs were significantly better than medical students in reference to treatment approach (p<.001) and overall knowledge (p=0.004). Pharmacists' knowledge of treatment was better than pharmacy students' (p=0.029), and the overall knowledge was insignificantly higher (p=0.210). The overall knowledge was insignificantly different among GPs and pharmacists (p=0.911), as was knowledge of treatment approach (p=0.335). The overall knowledge and knowledge of AR treatment was insignificantly better among pharmacy vs. medical students (p=0.252, p=0.583 respectively).

Conclusion: This study indicates an inadequate level of knowledge of AR among participants. Even though GPs and pharmacists' knowledge on therapy of AR was better than among students, it was still unsatisfying. It would be advisable to introduce the changes to curriculum regarding AR, with more emphasis on treatment approach and to organize additional education for GPs and pharmacists.

Keywords: allergic rhinitis, pharmacists, general practitioners, pharmacy students, medical students