

## E0027 Public knowledge and attitudes related to antibiotic use in the Southern Great Plain of Hungary: a questionnaire-based pilot study

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**Background:** Antibiotics are essential components of modern medicine, but their inappropriate use by patients threatens their effectiveness. The emergence of antibiotic-resistant bacteria is a global public health burden that has implications for everyone, regardless of age, gender, income or place of residence. The aim of our study was to evaluate the public knowledge and attitudes toward antibiotic use in the southern part of Hungary.

**Materials/methods:** A self-administered questionnaire-based study was performed at general practitioners' offices at health centers in the Southern Great Plain of Hungary. The questionnaires were developed in accordance with the Special Eurobarometer 407 report of the European Commission. Data collection has been running since April 2016. Statistical analyses were performed by IBM SPSS Statistics 24.0.

**Results:** The 109 respondents (with a 48.1% rejection rate) involved 60.6% female patients, the average age was 50.76±17.77 years. 56.9% of respondents lived in cities and 53.7% had a chronic illness. Two-thirds (64.8%) of the respondents (predominantly women;  $p < 0.001$ ) were satisfied with their knowledge on infectious diseases. 32.1% has taken antibiotics within the last year, 34.8% believes that they should stop taking antibiotics once they are symptom-free. 51.4% believes that antibiotics are effective against viruses, 13.2% stated that they took the drugs to treat common cold and 6.6% took them to treat influenza. There was significant association between the number of correct answers and education level ( $p < 0.001$ ), however, there was no correlation with their health status, age or place of residence. 4.6% of the respondents have attempted to obtain antibiotics without a doctor's prescription, while 13.8% believed that, if necessary, they could acquire these drugs without a prescription (typically people living in urban areas;  $p = 0.021$ ).

**Conclusions:** Antibiotics are medicines of vital importance and users need to manage them adequately. There must be a change in attitude on the patients' level, to avoid the unnecessary use of these drugs. The involvement of behavioral sciences and investment in patient education by medical professionals and governmental agencies could be of great significance in achieving development.