

## EPIDEMIOLOGICAL TRIAGE – CERTAIN ASPECTS REGARDING THE DETECTION OF ACUTE INFECTIOUS DISEASES IN STUDENTS FROM PRE-UNIVERSITY EDUCATION IN TIMIȘ COUNTY, ROMANIA: A CASE-STUDY

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**Introduction.** Epidemiological triage is a component of the prophylactic services aimed at promoting individual and collective health in schools. This process is typically conducted after vacations to identify acute microbial, viral, and parasitic conditions. Detecting acute infectious conditions in rural environments can be challenging, and a specific issue was identified in the interpretation of results and their application for local school populations. **Aim.** In this study we aimed to examine the progression of acute infectious diseases among students in pre-university education in Timisoara and Timis County from September 2021 to April 2023. **Material and methods.** The study was conducted with an average sample size of 245 pre-university educational units, with an enrollment of 45,830 students and 41,229 examined students (aged between 3 and 18 years) in pre-university educational institutions in Timiș County, Romania. The methodology involved a case-study with a 2-year retrospective investigation, covering the period from September 2021 to April 2023, to assess the progression of detected acute infectious diseases. Primary records were obtained from the Timis Public Health Department, and a database was created. Statistical analysis was performed using the SPSS 20 program. **Results.** A lower number of detected acute infectious diseases was reported in rural areas compared to urban areas. The lowest number of detected cases (preschoolers or pupils) with acute infectious diseases occurred in November 2021 (142 cases), while the highest number of detected cases was in November 2022 (743 cases). In November 2022, the most frequently detected acute infectious diseases were acute diarrheal diseases (34 cases), angina (404 cases), and other acute infectious diseases (175 cases). The highest frequency of detected pediculosis cases was recorded in January 2023 (48 cases). Notably, interesting results were observed in the curve evolution of detected acute infectious diseases when considering kindergartens, schools, and secondary schools. The curves for detected cases and angina in Timisoara showed similar trends for kindergartens and schools but differed for secondary schools. Meanwhile, the curves for detected cases, angina, and other infectious diseases in Timis County displayed a similar evolution. In contrast, the curves for detected cases of acute diarrheal diseases, mycosis, and pediculosis had a different evolution in Timiș County. Additionally, there was irregular evolution in the curves related to the number of educational units included in the epidemiological triage from September 2021 to January 2022, possibly due to the pandemic situation. **Conclusions.** In conclusion, several aspects regarding the detection of acute infectious diseases in preschoolers and pupils from pre-university education in Timisoara and Timis County have emerged. These include the highest frequency of detected acute infectious diseases in November 2022 and the peak of pediculosis cases in January 2023. Furthermore, we observed a similar trend in the curves of angina for kindergartens and schools in Timisoara, while secondary schools exhibited a different evolution. In Timis County, the curves for detected cases, angina, and other infectious diseases displayed a similar evolution, but acute diarrheal diseases, mycoses, and pediculoses followed different trajectories.