

THE PREVALENCE OF ASTHMA AMONG ADOLESCENTS OF HIGH SCHOOL AGE IN DUBROVNIK

HAĐIJA MARKOVIĆ K.¹, Vrbica Ž.¹, Dujmović I.¹, Vladić Carević V.¹, Markelić I.², Vukić Dugac A.²

- ¹ Opća bolnica Dubrovnik, Dubrovnik, Croatia Odjel pulmologije i imunologije
- ² KBC Zagreb, Zagreb, Croatia Klinika za plućne bolesti Jordanovac

Objective:

Asthma is a common chronic condition with wide-ranging implication for children's health, their families and the health care system. The diagnosis may be relatively straightforward for the child with characteristic symptoms, triggers, and response to therapy, but there are other less common presentations that can make the diagnosis challenging. Undertreatment of asthma is associated with significant potentially preventable morbidity, including frequent school absences. The aim of this study was to estimate the prevalence of asthma among adolescents of high school age in Dubrovnik.



Methods:

Adolescents from three high schools in Dubrovnik completed screening questionnaire which was consisted of five questions. Adolescents were considered to have a positive asthma screen and be at risk for having asthma undiagnosed if they answered negative on first question (are you being treated for asthma) and positive on at least one questions about asthma symptoms or family history of asthma. Adolescents with positive asthma screen were referred to pulmonologist who did clinical examination and spirometry.

Result:

962 students (53,7% female and 46,3% male) has completed the screening questionnaire.

5.7% participants (n=55) were categorized 'as known asthma'. The most reported symptom (78%) of as known asthmatics was wheezing or dyspnea after exercise. 25% participants (n= 248) who were identified as being at risk for asthma were referred to pulmonologist. We performed 231 clinical assessment and spirometry.

There were 102 new specialist-diagnosed asthma with 16% of cases being graded as mild persistent



(n=37), 19% (n=46) as moderate persistent and 7% (n=18) as severe persistent asthma according to GINA guidelines from 2002.

Among newly diagnosed asthmatics the most frequent symptom were recurrent colds, especially during spring (75.5%). 49% of newly asthmatics reported nocturnal respiratory symptoms, and 44 % dyspnea or wheezing after exercise.

Conclusion:

The overall prevalence of asthma among adolescents of high school age in Dubrovnik was 16 %. Efforts should be directed towards screening and early detection among the children to enable treatment and reduce morbidity. Questionnaire for asthma may provide simple, cheap and quick method of identifying adolescents with possible asthma.