

# ANALYSIS OF TUBERCULOSIS IN CHILDREN UNDER 15 YEARS IN ONE OF THE MOST AFFECTED REGION IN ROMANIA

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**Background and Aims.** Dolj County is one of the counties with highest incidence of tuberculosis in Romania. The purpose of this study was evaluation of tuberculosis in children under the age of 15 years in this region.

**Method.** Were included a 347 cases during 2001 and 2010. Inclusion criteria were diagnosis of tuberculosis, and age under 15 years. For statistically analyze it was used incidence, relative risk, and 95% confidence interval for risk.

**Results.** The average incidence was 32.79/100000 and was noticed a certain downward trend of incidence over the past 5 years ( $p < 0.005$ ). Decreased average incidence over the past five years was 43%. The risk of tuberculosis in the period 2001-2005 was 1.45 times higher compared with the period 2005-2010 (CI95% 1,09-2,11;  $p=0,018$ ).

Pulmonary forms predominated (76.23%) compared with extrapulmonary (23.77%). The risk for pulmonary localization tuberculosis was 3.2 times higher (CI95% 2.5-4.04,  $p < 0.005$ ). He was also noted a higher frequency of extrapulmonary forms in children in urban areas (25.83%) compared with those in rural areas (19.81%). Analysis of smear positive rate showed a low rate of only 25.84%, the risk of BK negative sputum being 2.88 (IC95% 2,29-3,61;  $p < 0,005$ ). Risk of a positive sputum in children from urban was almost two times higher than rural children (RR=1,85 IC95% 1,20-2,86;  $p=0,004$ ).

A total of 31 cases (7.75%) were from known outbreaks of tuberculosis. All cases of outbreaks of tuberculosis, however, were only identified in children from rural areas (21.09%).

**Conclusions.** Decreased incidence of tuberculosis in children under 15 is the result of joint efforts at regional and national level and WHO support. Lower rate of positive sputum in children continues to hamper the identification of new cases of tuberculosis in children. Outbreaks in rural areas require further combat and control of tuberculosis in rural communities.