

Cervix Uteri Cancer Incidence in Relation to Ethnic Situation in Opole Province, Poland

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Summary: This paper presents results of a retrospective ecological analysis of cervix uteri cancer incidence in relation to the ethnic situation in the province of Opole, Poland. A few well-known methodological procedures were applied in the study. Detecting spatial disease clusters followed Tango's method. Estimates of relative risks of cancer morbidity were calculated via Clayton and Kaldor's empirical Bayes approach. To measure spatial correlation between neoplastic incidence and ethnic density, Moran's statistic was used. The Poisson modelling of the variables was performed using Markov Chain Monte Carlo technique - Gibbs sampling. The results presented in tables and graphs suggest a possible association between the ethnic pattern and risk of cervix uteri cancer in the analyzed province.

Key words: cervix uteri cancer, ethnic group, disease cluster, spatial correlation, Bayesian statistics

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