RISK FACTORS OF INTRAUTERINE GROWTH RETARDATION: A STUDY OF AN URBAN POPULATION IN POLAND

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SUMMARY

The main objective of the study was to examine the role of selected socio-occupational factors on the development of intrauterine growth retardation (IUGR) in the urban population of Łódź, Poland. An epidemiological model of the case-control study was employed. Both the cases and controls were recruited from the female population covered by obstetric services in district hospitals during 1 January–30 June 1992. A group of cases included 92 females who delivered IUGR children, the control group – 438 mothers of term born eutrophic babies. The presence of the relationship between IUGR manifestation and selected variables was initially assessed using the unadjusted odds ratio (OR). The variables described as significant were considered in the logistic regressions model, separately for all women and those with previous pregnancies. A comparison of the groups of cases and controls has revealed a significant excess of risk of delivering an IUGR child by mothers with the following characteristics: marital status – single, low educational level, low height (less than 1.60 m), low prepregnancy weight and low maternal weight gain. An elevated risk of delivering an IUGR child was found in the group of women who reported to have their first contact with the physician after 12 weeks of pregnancy. An adverse effect of prolonged vaginal bleeding was observed. Women who recently lost their job, compared to those employed continuously during pregnancy, were at an increased risk of IUGR. Cigarette smoking appeared to be the most important variable affecting the evaluated pregnancy outcome. For the women smoking 6–10 and more than 10 cigarettes a day, the risk of delivering an IUGR child was found to be almost 4 and 7 times, respectively, higher than for non-smokers. A logistic regression covering all the above mentioned maternal characteristics was employed. Only four of them proved to be significant: low maternal weight gain, prolonged vaginal bleeding, smoking and the marital status – single.

The process of preventing IUGR and its consequences requires more effective activities aimed at increasing the level of health education and stimulating the development of appropriate, health-oriented behaviour.

Key words: IUGR, SGA, cigarette smoking, IUGR risk factors

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