ABSTRACTS – 24TH CONGRESS OF THE EUROPEAN ANTHROPOLOGICAL ASSOCIATION
DOI: 10.20330/AnthropKozl.2026.67s.96

Anthrop. Közl. *67(Suppl.);* 96. (2026)

POSTER PRESENTATION – P8

THE INFLUENCE OF MATERNAL AGE ON NEONATAL OUTCOMES AND BIRTH WEIGHT

Ivaila Ivanova-Pandourska[1], Yanitsa Zhecheva[1] and Albena Dimitrova[1,2]

[1]Bulgarian Academy of Sciences, Institute of Experimental Morphology, Pathology and Anthropology with Museum, Sofia, Bulgaria; [2]National Spot Academy "Vasil Levski", Sofia, Bulgaria

Background: Maternal age has a significant impact on prenatal growth and development and being a great importance for neonatal outcomes and newborn sizes.

Objective: The study aims to evaluate how maternal age influences neonatal outcomes.

Subjects and methods: Data of 2740 livebirth singleton neonates born in 2010 (653) and 2020 (2087), as well as data on their mothers, were collected from the birth registry of the Obstetrics and Gynaecology Hospital "St. Sofia", Sofia. According to maternal age the women were divided into seven age groups: under 20 years, 20–24 years, 25–29 years, 3 0–34 years, 35–39 years, 40–44 years, 45 years and older. According to birth weight the newborns were defined as low birth weight (<2500) and normal birth weight (≥2500). The collected data were analysed by SPSS 16.0. Z-score transformation was applied to birth weight as Z-score was calculated for sex. The significant differences were assessed by the t-test of Student and one-way ANOVA analyses and significance level was set at $p \leq 0.05$.

Results: The maternal mean age and the number of women giving birth over the age of 30 have increased over the years. In 2010, the highest percentage of mothers (31.7%) fall into the age group 25–29 years, followed by mothers aged 30–34 years (28.6%). Among mothers who gave birth in 2020, the highest percentage (29,4%) fall into the 30-34 age group, followed by mothers aged 25–29 (27,1%). The percentage of mothers over 39 years of age is the lowest. Maternal age has a significant impact on the birth weight ($p=0.001$). The highest percentage of babies with low birth weight occurs in mothers under 20 and over 40 years. The newborns, whose mothers were under 20 years of age had mean birth weight of 3102.49±459.82 in 2010 and 2996.70±480.69 in 2020. The highest mean birth weight is observed in maternal age group 35-39 years in 2010 and over 40 years in 2020.

Conclusions: Maternal age affects the pregnancy outcome. Adolescent and older mothers are at risk of giving birth to babies with lower birth weight.

Keywords: Newborn; Maternal age; Births; Birth weight.

Acknowledgements / Funding Source: National Science Fund of Bulgaria, Grant No. КП-06-Н51/7 from 11.11.2021.