

عنوان مقاله:

Biomonitoring of Maternal and Fetal Mercury Exposure in Sabzevar City and its Affecting Risk Factors

محل انتشار:

پانزدهمین کنگره بین المللی زنان و مامایی ایران (سال: ۱۳۹۸)

تعداد صفحات اصل مقاله: ۱

نویسندگان:

Mojtaba Hadavifar - Assistant professor, Environmental Sciences Department, Hakim Sabzevari University, Sabzevar, Iran

Mitra Rastakhiz - General physician, Sabzevar University of Medical Sciences, Sabzevar, Iran

Behnaz Souvizi - MSc of Epidemiology, Department of epidemiology & biostatistics, School of public health, Sabzevar University of Medical Sciences, Sabzevar, Iran

Rahim Akramid - MSc of Epidemiology, Department of epidemiology & biostatistics, School of public health, Sabzevar University of Medical Sciences, Sabzevar, Iran

خلاصه مقاله:

Mercury (Hg) is a well-known neurotoxicant and exposure in high levels can harm to living organisms and human being in all ages. Fetuses and young children are a sensitive group even in low level exposure to Hg that can damage the brain and affect their central nervous system and cognitive development. The aim of this study was determining the maternal and fetal mercury burden levels in ۸۹ mothers whom refer to Shahidan Mobini Hospital for delivery. About ۳۶۰ samples were taken from ۸۹ mothers as placenta tissue, placenta blood (representing mother blood), umbilical cord tissue and umbilical cord blood (representing infant blood) that the average of total mercury (tHg) in these samples were ۱۰.۶۵, ۱۰.۶۵, ۱۲.۱۸ and ۹.۱۰ $\mu\text{g/L}$, respectively. Findings also revealed that there was a strong and significant correlation ($r=0.89$, $p\leq 0.001$) between mothers blood and infants blood mercury burden. There was a negative significant correlation between number of pregnancy and mercury level values of placenta tissue ($p\leq 0.036$). The level of mercury in the blood of mothers and newborns had a meaningful relation with mother's living area. Our studies showed that the number of abortions and fruit consumption decrease the blood mercury levels with a non-significant correlation.

کلمات کلیدی:

Mercury; Placenta; Umbilical cord; Maternal and fetal mercury

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/۹۵۴۲۶۲>