

Krakow's children and cognitive function: can the study by Jedrychowski et al. show us the bigger picture?

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We very much welcome the paper by Jedrychowski et al. [2], but we would like to raise some relevant confounders not addressed in that paper. Jedrychowski et al. reported that early weaning is associated with slower cognitive development, but they did not include significant confounders such as exposure to mercury, lead, fish, and their respective interactions with neurodevelopment. Several studies have been published about the cohort of children in the Jedrychowski and colleagues' paper, each looking at the various influences on neurodevelopment individually. Missing from the analysis is an integrative statistical analysis and/or discussion.

One important confounder has not been considered in any of the publications, namely ethyl mercury (EtHg) exposure during pregnancy and postnatal period through thimerosal-containing vaccines (TCVs). TCVs were used in Poland during the time of the cohort formation (2001 to 2004). Some children could also have been exposed to EtHg in utero by anti-RhoD immune globulins or maternal vaccinations. In view of the experimental (in vitro and in vivo) neurotoxicity of low doses of EtHg relevant to vaccines (reviewed by Dorea [1]), some findings demonstrated that infant monkeys manifested delay in reflexes (root, snout, and suck). The deficit of such reflexes could hinder successful breastfeeding. Could early weaning and

its health consequences be linked to neurotoxic exposure to EtHg in utero and infancy [1]? The Krakow prospective birth cohort study can offer the opportunity to explore this issue in a population that had been exposed to different doses of thimerosal from different vaccinations. Such information is relevant both to the legacy of such exposure in Poland and the guidance for infant vaccination in other parts of the world.

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