

[DOI: 10.20472/IAC.2019.052.006](https://doi.org/10.20472/IAC.2019.052.006)

**GOKBEN AYDILEK**

Gebze Technical University, Turkey

**MURAT ANIL MERCAN**

Gebze Technical University, Turkey

## **MARRIAGE MARKET IN TURKEY: AN IONIZED RADIATION DRIVEN NATURAL EXPERIMENT**

### **Abstract:**

The disaster in the atomic power plant in Chernobyl in northwestern Ukraine on 26 April 1986 discharged extensive amounts of radioactive materials. The destroyed reactor released large amounts of radioactive material to the environment and atmospheric conditions carried the radioactive discharges to other regions, enwidening its area of impact and changing the lives of those who are exposed during different times of their lifecycles. In addition to the physiological health hazard it has caused, the Chernobyl Forum report on Health defines the mental health impact of Chernobyl as the largest public health problem caused by the very accident. Though there are studies analysing the effects of prenatal exposure to ionizing radiation on the physical health status of people in their later lives, there are not many studies examining the psychosocial effects of prenatal exposure to the Chernobyl disaster. Previous studies examining the psychological effects of prenatal exposure to Chernobyl disaster conclude that people who are exposed to prenatal stress due to Chernobyl are more likely to experience depression, anxiety, attention deficit hyperactivity disorder and poor self-rated health status compared to others. In Turkey, one of the countries affected by Chernobyl mostly in the Blacksea Region, there are no studies regarding the potential psychosocial damage that this disaster might have caused. As the exposure to Chernobyl could be regarded as a natural experiment, this study aims to fill the gap in the literature by analysing the psychosocial effects of the prenatal exposure to Chernobyl disaster in Turkey regarding the marriage decisions of people as a proxy for attachment. In this study, 'Family Structure Survey - year 2016' data from the TurkStat questionnaire is exploited. The data is taken from a cross-sectional household survey conducted face-to-face on a nationally representative sample of 17,239 households; 35,475 individuals in the households who are above 15 years of age are interviewed. Given the strong cultural tendency of both men and women in Turkey to get married, the preliminary findings suggest a rather surprising effect that women who are exposed to maternal stress from their third trimester onwards are highly less likely to get married compared to those who are not. Our preliminary findings might suggest that stress related perturbations in fetal brain development during the third trimester might be related with the expanded predominance of negative mental status and might result in people leaving the marriage market by significantly differing from the cultural pattern.

### **Keywords:**

Natural experiment, Chernobyl disaster, marriage market, prenatal exposure

**JEL Classification:** I10, I10, I19