

The purpose of the study is to investigate the long-lasting impacts of the *Great Chinese Famine* exposure during the early stage of life and its associated health consequences in later life by comparing two sets of cohorts who were born in different periods. This study used nine waves of the China Health and Nutrition Surveys (CHNS) from 1989 to 2011 which include 15,829 individuals living in the rural area who were born in 1957 to 1966 to estimate the effect of 1959 to 1961 *Chinese Famine* on heights, Body Mass Index (BMI) and blood pressure. The severity of famine differed across regions. Therefore, this study introduces interaction terms between excess mortality rates and birth cohort dummies as proxy indices to measure the intensity of the famine at each province, using a difference-in-difference estimation. By contrasting cohorts who were born in 1957 to 1962 and who might be affected by the famine with another cohort who were born in 1963 to 1966 and who might not be influenced by the famine, I find the following results: (1) the height of 1959 birth cohorts decreased by about 1.85 cm for males, 1 cm for females, and 1.5 cm for both genders, in average; (2) the BMI of 1957 birth cohorts decreased by 0.3 kg/m^2 for males and 0.72 kg/m^2 for females; (3) The impact of famine on blood pressure seems to be statistically significant only for females, such that the systolic pressure of the 1962 birth cohorts increased by 2.89 mm Hg and the diastolic pressure of the 1961 birth cohort decreased by 2.66 mm Hg. Conclusively, there might be a gender difference probably due to the biological mechanisms. In addition, the impacts of the famine during the early stage of life on health outcomes would vary across ages in the later stage of life.

Keywords: Great Chinese Famine in 1959 – 1961, , impacts of famine on health outcomes, difference in difference

