The “healthy immigrant” phenomenon attributes health benefits to immigrants. We examined this phenomenon using the relationship between immigration and mortality, by income level, among Soviet immigrants to Israel in the 1990s, in comparison to veteran immigrants with similar genetic makeup.

A retrospective cohort study of mortality during 1996–2016 was conducted among 99,037 immigrants born during 1940–1955 in the USSR or Eastern Europe who immigrated during 1990–1995, compared to a control group of 119,150 Jews born during 1940–1955 who and/or whose parents were born in those same countries and immigrated by 1960.

Mortality was higher among immigrants compared to non-immigrants after adjusting for gender, age, income and marital status. Classifying by gender and income level, and after adjusting for age and marital status, we found higher mortality among immigrants compared to non-immigrants for 27,563 men and for 32,220 women with low incomes. The opposite relationship was found for 45,863 men and for 24,852 women with high incomes. At the middle income level, no significant relationship between immigration and mortality was found for 37,094 men, while for 50,959 women, a “healthy immigrant” trend was observed.

For the total study population, we found support for the “sick immigrant” phenomenon. However, both genders in the high-income subgroup, and women in the middle-income subgroup, demonstrated the “healthy immigrant” phenomenon. Decision makers in Israel should devote particular attention to immigrants from a low socioeconomic level. Our results emphasize the need for social stratification when examining the relationships between immigration and health outcomes.