'SURVIVAL OF THE FITTEST’ DESPITE WARTIME DEPRIVATION: Why people born during the Second World War turned out surprisingly healthy in later life

People born between 1940 and 1945 in the occupied countries of France, Belgium and the Netherlands had better cognitive performance and fewer physical limitations at the ages 50 and above than comparable generations born earlier and later. This may be because healthier mothers conceived and only healthier children survived, according to research by Reyn van Ewijk and Maarten Lindeboom, to be presented at the annual congress of the European Economic Association in Geneva in August 2016.

Analysing data on 30,000 elderly people from the Survey of Health, Aging, and Retirement in Europe between 2004 and 2011, the authors show that being conceived during the war led to better health in later life. This is despite pregnant mothers experiencing stress, rationing, limited healthcare and a recession – all of which might be expected to reduce the health of their offspring in later years.

The authors explain that as well as the ‘survival of the fittest’ explanation for war babies, the deprivation experienced by pregnant mothers didn’t reach a threshold level that would affect their children later. This has implications for all wars, they say:

‘One would expect children born in a beleaguered city to suffer more often from health problems later in life. But in many conflicts, at any specific time point, most civilians do not suffer from extreme levels of violence and destruction, or famines. The suffering they do experience may drive up infant mortality rates, but the children that do survive tend to recover from their bad pre-natal circumstances and not to suffer from negative health consequences later in their lives.’

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Mothers who experience bad circumstances during pregnancy tend to give birth to children who have worse health throughout their life-courses. Maternal malnutrition, high stress levels and economic crises are all known to damage the offspring’s health. We would therefore expect past and present-day wars, such as those in Syria and Ukraine, to have lifelong implications for the health of the people who experienced them in the womb.

Why then are people who were born during World War 2 (WW2) healthier at old age? This especially applies to females, as the research that uses data on close to 30,000 elderly people collected in the Survey of Health, Aging, and Retirement in Europe between 2004 and 2011 shows.

The researchers show two reasons why being born during WW2 is associated with good later-life health. First, mothers who conceived during WW2 were healthier than mothers conceiving during earlier and later years. This may be because unhealthier women were unable to conceive during the hardship of WW2 or deliberately postponed their pregnancies. Healthier mothers tend to get healthier children.

Second, infant mortality rates increased by several percentage points during the war. Having health problems could easily turn lethal for babies during these years. This led to ‘survival of the fittest’: children with few health problems were likelier to survive. And such children with few health problems tend to have a better later-life health as well.
Though there may be reasons why people born during WW2 have better health, biologists would have predicted worse health. After all, conditions during WW2 in occupied countries were clearly bad: food was rationed, mothers experienced stress, there was a sharp recession and a sub-optimally functioning health care system. Why then did pre-natal exposure to the hardship of WW2 not lead to life-long negative health effects?

The likely explanation is that although life was hard in occupied countries during WW2, at any given time, the majority of pregnant women were not directly exposed to extreme levels of misery such as violence or famines. It is known that less extreme levels of hardship may sometimes lead to worse child health. But it appears that the WW2 circumstances did not count among these. Apparently, human beings can be resilient to such bad conditions as long as they do not cross a certain threshold level.

This finding has important implications for more recent wars. It is known that children born to mothers who experienced extreme wartime conditions tend to have more health problems throughout their life courses. So one would, for example, expect children born in a beleaguered city to suffer more often from health problems later in life.

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Why people born during World War 2 are healthier

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