Epidemics or famines, women tough it out better

The report says that newborn girls were able to survive the harsh conditions better than newborn boys. File photo. | Photo Credit: Monica Tiwari

A new study published in scientific journal *PNAS* says that women survive longer than men in adverse conditions such as famines and epidemics. Scientists from Denmark and Germany examined seven populations from different countries that faced extreme conditions and arrived at this conclusion. They figured that other than behavioural and social factors, there must be a strong biological reason behind women becoming “life-expectancy champions.”

Previous research has proved that almost anywhere in the world today women can live longer than men and they also “survive cardiovascular diseases, cancers and disabilities longer than men.”

In this study,scientists wanted to investigate the power of women to survive under extreme circumstances such as famines and epidemics and also during slavery.

The researchers, for instance, found out that 43% of freed slaves who were allowed to return to Liberia from America between 1820 and 1843 died in the first year of their return. Life expectancy at birth was reduced to 1.68 years for men and 2.23 years for women. A similar reduction in life expectancy was seen among the plantation slaves in Trinidad in the early 19th century. Their life expectancy dropped to as low as 15 for men and 20 for women.

They also studied the 1933 famine in Ukraine, the 1772-73 Swedish famine, the Icelandic measles epidemics in 1846 and 1882, and also the Irish famine of 1845-49. In all these case studies, women lived longer than men though women were in bad health during those extra years.

The researchers also found that women survived longer than men during the Dutch famine and famines of Madras and Bombay.

Further, the report says that newborn girls were able to survive the harsh conditions better than newborn boys. The fact that females survive better shows that the survival advantage comes from “fundamental biological roots,” it says.

Some studies have shown that progesterone and testosterone have immunosuppressive effects, while estrogens can enhance immunity. More studies are required to understand the exact mechanisms behind sex hormones and immune response.

Astronauts on extended space travel missions would have significant bone and muscle complications.

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