



Epidemiologic Studies Continue to Reveal Different Women's Advantages in Morbidity and Mortality During Fertile and Postmenopausal Periods

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Received: March 05, 2026

Published: March 24, 2026

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Earlier, since 2005 [1] we studied both morbidity (according to the number of hospitalizations) and mortality in three Brazilian states of Southern region, using the data from national database DataSus. Just recently we have extended chronologic period of this epidemiologic evaluation from 1998-2007 to 2008-2023. At first we explored the morbidity caused by different types of anemias, demonstrating women's disadvantage of higher morbidity during fertile period [2]. Now we completed this investigation with the data on cardiometabolic diseases: hypertensive disorders, diabetes mellitus and acute myocardial infarction (as a consequence of atherogenic dislipidemia), considered to be the principal components of metabolic syndrome. The main preliminary results are resumed below:

- First of all, rather high stability of relative (or proportional) morbidity and mortality from cardiometabolic disorders are confirmed both in space and time;
- Women's advantages in lower morbidity and mortality from myocardial infarction during fertile period are also confirmed;
- However, accelerated aging of women in postmenopausal period, according to progressive increase in female fraction after the age of 50 y takes place more evidently for mortality, whereas for morbidity it is observed only for myocardial infarction.

By the way, some of these results were confirmed also in our previous studies [3,4]. The reasons of these differences in fertile

and postmenopausal periods are not clear yet, however earlier we suggested that their partial explanation may be related to neuroprotective and antistress actions of estrogens during fertile period [5]. Nevertheless, huge women's advantages in much lower morbidity and mortality from myocardial infarction in fertile period continue to be a complete mystery, although it is obvious that these advantages may correspond to principal feminine role in reproduction and taking care of offspring, as well as to higher masculine involvement in dangerous and stressful activities (military, police, etc.).

At present we are on the way to complete the investigation of morbidity and mortality from some neurodegenerative disorders, but it is clear to us that these studies should be continued in near future for other groups of disorders: neuropsychiatric, gastrointestinal, pulmonary, etc.

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