Does It Matter That the Ovaries Are the Most Rapidly Aging Organs in the Female Body?

*New study suggests that a longer reproductive lifespan is associated with a lower prevalence of multimorbidity*

CLEVELAND, Ohio (August 1, 2024)—Because of the aging of the ovaries, a woman’s fertility gradually declines, and she eventually enters menopause. The onset of menopause puts women at a significantly higher risk of various diseases such as cardiovascular disease and osteoporosis. A new study suggests that a shorter reproductive lifespan is linked with a higher risk of multimorbidity. Results of the survey are published online today in *Menopause*, the journal of The Menopause Society.

The effect of reproductive-related factors on women’s health has become a focus of interest and study in recent years. Previous studies have identified the ovaries as one of the earliest and most rapidly aging organs in the female body. This aging process causes women to enter menopause—typically around the age of 50 years.

Previous studies have additionally explored the associations of age at menarche and menopause with women’s health outcomes, including their links to risk of cardiovascular disease. One large study involving more than 120,000 postmenopausal women linked the length of the reproductive lifespan with risk of stroke.

The duration between menarche and menopause reflects the duration of exposure to endogenous estrogens. In general, the longer the duration, the lower the risk of disease and the more likely that a woman will live longer. This new study involving more than 1,300 postmenopausal Chinese women with an average reproductive lifespan of 34 years is one of the first to study the association between reproductive factors and multimorbidity, which refers to the presence of two or more chronic diseases. Notably, previous studies have found multimorbidity to be significantly higher in women than in men.

For purposes of this study, participants were divided into four quartiles based on the duration of their reproductive lifespans (Q1, ≤32 years; Q2, 33-34 years; Q3, 35-37 years; and Q4 ≥38 years).

Study results confirmed that the longer the reproductive lifespan, the lower the risk of multimorbidity such that postmenopausal women in Q3 and Q4, who had the longest reproductive lifespans, were less likely to have multimorbidity compared with those in Q1, who had the shortest reproductive lifespans. The study also revealed a linear trend such that the longer the reproductive lifespan, the lower the risk of multimorbidity.

Because of the study results, the researchers suggest that healthcare professionals should screen and assess reproductive factors to identify high-risk individuals.

Study results are published in the article “Association between reproductive lifespan and multimorbidity among Chinese postmenopausal women.”
“This study highlights the growing body of evidence that links the duration of the reproductive lifespan in women with health outcomes such as cardiovascular disease and mortality. What remains unclear and needs to be studied further is the direction of the association. In other words, does the presence of multiple chronic diseases cause the ovary to stop functioning earlier, or are the chronic diseases the result of the ovary “timing out” earlier?” says Dr. Stephanie Faubion, medical director for The Menopause Society.

For more information about menopause and healthy aging, visit www.menopause.org.

The Menopause Society (formerly The North American Menopause Society) is dedicated to empowering healthcare professionals and providing them with the tools and resources to improve the health of women during the menopause transition and beyond. As the leading authority on menopause since 1989, the nonprofit, multidisciplinary organization serves as the independent, evidence-based resource for healthcare professionals, researchers, the media, and the public and leads the conversation about improving women’s health and healthcare experiences. To learn more, visit menopause.org.