Living in greener neighborhoods may postpone the natural onset of menopause
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Living near green spaces is associated with a wide variety of benefits, including a lower risk of obesity, improved attention capacity in children and slower physical decline in old age. Now, for the first time, a study led by the University of Bergen and the Barcelona Institute for Global Health (ISGlobal), a centre supported by "la Caixa," has found that living in a greener neighbourhood is also associated with older age at the onset of menopause.

The study, published in the November issue of Environment International, analysed data on 1,955 women from nine countries (Spain, France, Germany, Belgium, United Kingdom, Sweden, Estonia, Iceland and Norway) who took part in the European Community Respiratory Health Survey (ECRHS). Over a 20-year period, participants completed questionnaires on their health and lifestyle factors and underwent blood sampling. The availability and extent of green space in their neighbourhoods was also calculated.

The study found that women living in neighbourhoods with little green space became menopausal 1.4 years earlier than those in living in the greenest areas. On average, age at menopause was 51.7 years for women living in the greenest areas, compared with 50.3 years for women living in areas with little green space.

In addition to genetic factors, age at menopause is influenced by lifestyle factors such as smoking, obesity, physical activity and the use of oral contraceptives. A number of biological processes could explain the association between green space and older age at menopause. "We know that stress increases the level of cortisol in the blood, and numerous studies have shown that exposure to green spaces reduces it," explained Kai Triebner, postdoctoral visiting researcher at ISGlobal and lead author of the study.

"Low cortisol levels have been associated with increased levels of estradiol, an important female sex hormone. Perhaps women who live near green space have lower cortisol levels, which would allow them to maintain higher levels of estradiol, which may in turn delay the onset of menopause." He added: "Exposure to green space is also associated with a lower risk of certain mental health conditions, such as depression, which is also associated with younger age at menopause."


Provided by Barcelona Institute for Global Health