Working shifts may delay the onset of menopause
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It's no secret that working nontraditional shifts can wreak havoc on lifestyle and sleep habits. Shift work has also been known to have a negative effect on workers' health. A new study suggests it also may delay the onset of natural menopause, possibly because of disruptions in circadian rhythms. Study results are published online in Menopause, the journal of The North American Menopause Society (NAMS).

Shift work has increased globally in recent years, with an estimated 20% of the economically active population in North America and Europe working some type of nontraditional or alternating shifts. Although shift work has become an economic necessity to keep up with the increased demand for goods and services, it is not without health risks. Previous studies have linked shift work with an increased risk of coronary events, with the highest risk being associated with night shifts. Other related health problems include peptic ulcers, type 2 diabetes, and cancers such as prostate, colorectal, and breast.

Although previous studies have shown the various adverse health effects of shift work on working adults, there has been little research on the effect of shift work on middle-aged and older adults. Age at natural menopause is a matter of concern for middle-aged and older women, because both early or late menopause may be a significant risk marker for subsequent morbidity and mortality. Environmental factors such as smoking, parity, and socioeconomic status have previously been identified to be strongly associated with variations in age at natural menopause.

Researchers have hypothesized that a factor that may affect age at menopause is shift work, as previous studies have suggested a possible effect of circadian rhythm disruption on ovulation and fertility. In addition, excessive exposure to artificial light during dark hours has been documented to cause melatonin suppression that, in turn, leads to disruption of ovarian activity. To date, little has been documented regarding the relationship between shift work and age at natural menopause.

This new study, based on secondary data analyses of nearly 3,700 premenopausal women, aimed to investigate the association between shift work exposure and variations in age at natural menopause in adult Canadian workers. Based on study results, a significant relationship has been shown between rotating shifts and delayed onset of menopause. The researchers speculate that disruptive circadian rhythms may play a role, although further investigation is necessary.

Study results are published in the article "The association between shift work exposure and the variations in age at natural menopause among adult Canadian workers: results from the Canadian Longitudinal Study on Aging (CLSA)."

"This study shows a potential influence of circadian regulation on age at natural menopause, with current rotating shift work linked to later age at menopause and current night shift work linked to..."
earlier age at menopause. Whether these differences in age at menopause are directly related to the effect of circadian rhythm changes on underlying hypothalamic regulation or are because of other sociodemographic factors such as chronic stress, economic insecurity, and substance use or abuse requires further study," says Dr. Stephanie Faubion, NAMS medical director.

More information: The association between shift work exposure and the variations in age at natural menopause among adult Canadian workers: results from the Canadian Longitudinal Study on Aging (CLSA), Menopause (2022). DOI: 10.1097/GME.0000000000001981

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