Self-evaluation of menopausal symptoms underestimates true burden, study finds

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Physicians should consider a more in-depth evaluation of their menopausal patients' symptoms, as current approaches might not accurately reflect the number of hot flashes and night sweats each woman experiences, a new University of Pittsburgh School of Medicine study finds.

Patients tend to underestimate how often they have hot flashes and night sweats, clinically known as vasomotor symptoms (VMS), particularly if they suffer from anxiety, and overestimate nighttime VMS if they experience sleep disturbances, according to the study published today in the journal *Menopause*. New studies designed to treat VMS rely on patients reporting their symptoms, so improving their accuracy directly impacts patient care.

"We think physicians may want to consider probing deeper when evaluating their menopausal patients, to determine if anxiety or sleep problems might be influencing the way they perceive their VMS," said Rebecca Thurston, Ph.D., associate professor of psychiatry and epidemiology and director of the Women's Biobehavioral Health Laboratory at the University of Pittsburgh, the study's primary investigator. "Typically we use end-of-the-day and morning diaries to measure VMS, but these may not be the best approaches to testing how well our treatments reduce VMS, particularly if the treatments impact anxiety or sleep."

Dr. Thurston's study evaluated three different types of VMS reporting.

Women were asked to either record their symptoms at the end of each day and in the morning upon waking, or to report their symptoms at the time of VMS occurrence. At the same time, their symptoms were monitored via a portable hot flash monitor worn around the waist that continuously measures skin conductance, a validated biological measure of hot flashes.

"We found that when women recorded their symptoms at the end of the day, they tended to underestimate the number of VMS they experienced, particularly if they were anxious. Conversely, when women woke up in the morning and were asked to recall how many VMS they had overnight, they tended to overestimate how many VMS they experienced, particularly if they had poor sleep," said Dr. Thurston. "These disparities are important because accurate measurement of VMS is instrumental to adequately testing treatment options.

Hot-flashes and night sweats are among the most common menopausal symptoms that women discuss with their doctors. Women with these symptoms visit their doctors more frequently than those who don't experience them.

"While very common in menopausal women, hot flashes and night sweats can disrupt a woman's quality of life significantly," added Dr. Thurston. "We are eager to develop new treatments for VMS. Women deserve a range of safe and effective treatment options for their VMS, and we are not there yet. In order to test new treatments, we need to be sure we are assessing a woman's VMS as accurately as possible."

The study is part of the Study of Women's Health Across the Nation (SWAN), a multisite, multiethnic, longitudinal study that aims to characterize biological and psychosocial changes during the menopausal transition. At their 10th annual visit for SWAN, a subset of women (25 African-American women and 27 white women) from the Pittsburgh site

were invited to participate in this ancillary study.

These findings reveal:

- End of the day and morning diaries may not precisely assess the number of VMS a woman is having;
- Mood and sleep may impact the way a woman perceives and reports her VMS, and
- Clinicians and researchers should consider assessing sleep and mood to better understand how a woman is experiencing her VMS.

Provided by University of Pittsburgh