
News Release

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MULTIMEDIA ALERT: Video and a photo of Dr. Krahn is available for download from the [Mayo Clinic News Network](#).

News Bureau
200 First Street SW
Rochester, Minnesota 55905
<http://www.mayoclinic.org>

Contact:

Sharon Theimer
507-284-5005
507-284-2511 (evenings)
Email: newsbureau@mayo.edu

For Immediate Release

Are Smartphones Disrupting Your Sleep? Mayo Clinic Study Examines the Question

Research suggests lowering light setting, holding phone several inches from face help in-bed use

BALTIMORE — Smartphones and tablets can make for sleep-disrupting bedfellows. One cause is believed to be the bright light-emitting diodes that allow the use of mobile devices in dimly lit rooms; the light exposure can interfere with melatonin, a hormone that helps control the natural sleep-wake cycle. But there may be a way to check your mobile device in bed and still get a good night's sleep. A Mayo Clinic study suggests dimming the smartphone or tablet brightness settings and holding the device at least 14 inches from your face while using it will reduce its potential to interfere with melatonin and impede sleep.

The research was among Mayo Clinic studies being presented at SLEEP 2013, the Associated Professional Sleep Societies annual meeting in Baltimore.

“In the old days people would go to bed and read a book. Well, much more commonly people go to bed and they have their tablet on which they read a book or they read a newspaper or they're looking at material. The problem is it's a lit device, and how problematic is the light source from the mobile device?” says co-author Lois Krahn, M.D., a psychiatrist and sleep expert at Mayo Clinic in Scottsdale, Ariz.

“There's a lot of concern about using mobile devices and that prompted me to wonder, are they always a negative factor for sleep?” Dr. Krahn says. “We found that only at the highest setting was the light over a conservative threshold that might affect melatonin levels. If it's at the mid setting or at a low setting it's bright enough to use.”

In the study, researchers experimented with two tablets and a smartphone in a dark room, using a meter on its most sensitive setting to measure the light the devices emitted at various settings when held various distances from a person's face. They discovered that when brightness settings were lowered and the devices were held just over a foot from a user's face, it reduced the risk that the light would be bright enough to suppress melatonin secretion and disrupt sleep.

Other Mayo research presented at the conference includes the finding that some sleep apnea patients may not need annual follow-up visits. Patients with obstructive sleep apnea being treated with positive airway pressure are less likely to need a yearly check-up.

The researchers suggest developing a screening tool to assess which of these patients need annual follow-up visits.

Limiting annual visits to the obstructive sleep apnea patients who truly need them will reduce resource use and improve quality of care and patient satisfaction, says co-author Kannan Ramar, MBBS., M.D., a pulmonary and critical care physician with the Mayo Clinic Center for Sleep Medicine in Rochester, Minn.

For interviews with Dr. Krahn, Dr. Ramar and other Mayo Clinic sleep experts, please contact Sharon Theimer in Mayo Clinic Public Affairs at 507-284-5005 or newsbureau@mayo.edu.

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