

Space-age mask may reduce pre-term labor

Dr. Joette Giovinco reports

By: Dr. Joette Giovinco, FOX 13 News POSTED:FEB 06 2017 06:07PM EST
UPDATED:FEB 07 2017 08:31AM EST

TAMPA (FOX 13) - Whether it's on a plane or in a bedroom, most people wear masks to block out annoying light. But there is one mask being developed that does just the opposite.

Kyndermed CEO Melanie Simmons hopes the mask will help prevent pre-term labor.

"We want women to turn it on when they go to sleep, and then after they've been asleep for 45 minutes, the lights would come on."



The St. Petersburg-based company claims the mask uses the same science NASA uses to phase light to trick the body into thinking it's time to wake up and to go back to sleep. It blocks a natural go-to-sleep chemical in our brain called melatonin. The brain releases melatonin at night once the sun sets.

Kyndermed co-founder Don Rosenkoetter says a Florida State University researcher discovered melatonin in pregnancy causes the uterus to contract.

"Once he determined that these receptors for melatonin appear in the uterus at the point of delivery and not before, that was kind of my a-ha moment because we can regulate melatonin levels," he explained.

The artificial blue light regulates melatonin. The light comes on twice each night for one hour. The blue beams penetrate the eyelids without disrupting sleep. A small study in women who weren't in pre-term labor showed melatonin levels dipped 40 percent and contractions by 43 percent.

Rosenkoetter believes that dip could give unborn babies more time to grow and develop.

"Every day that a woman at 24 weeks can keep that baby in the womb, the chances of survival go up by 5 percent," he continued.

If it works, the sleep mask may boost survival odds across the world. Kyndermed hopes to get the mask into third-world countries.

But before moms-in-waiting can wear this prototype mask, more studies are needed, hopefully bringing Kyndermed one step closer to realizing their dream.

"Our hope is that we can save many, many lives. We won't be able to be effective on everyone because there are some conditions that are beyond blue light, but that's our passion," Rosenkoetter added.

Studies testing the mask during preterm labor are next. Since this is a device, the FDA only requires that Kyndermed prove it's safe. If that happens, it could hit the market within the next two years.

For more information on Kyndermed go to <http://www.kyndermed.com/>