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Getting Bullied In School May Affect Kids' Sleep

Is your kid bullied at school? Beware, it may produce long-lasting, depression-like sleep dysfunction and other effects on daily biological rhythms, warns a study.

The findings in an animal model, showed that being bullied can have dramatic effects on sleep and other circadian rhythm-related functions -- symptoms that are characteristic of clinical depression and other stress-induced mental illnesses in the long run.

Stress is known to trigger psychiatric illnesses, including depression and PTSD, and sleep is frequently affected in these conditions.

"While our study found that some stress-related effects on circadian rhythms are short-lived, others are long-lasting," said **William Carlezon**, from the **McLean Hospital** Massachusetts.

"Identifying these changes and understanding their meaning is an important step in developing methods to counter the long-lasting effects of traumatic experiences on mental health," Carlezon added.

For the study, detailed in the Journal of Neuroscience, the team used mouse model -- a smaller, younger mouse was paired with a larger, older, and more aggressive mouse, who bullies the former.

The results showed that the smaller mice showed many more bouts of paradoxical sleep -- which resembles REM (rapid eye movement) sleep in humans and when dreams occur and memories are strengthened -- the type of sleep disruptions often seen in people with depression.

These bullied mice also showed a flattening of body temperature fluctuations -- an effect seen in people with depression.

"Both the sleep and body temperature changes persisted in the smaller mice after they were removed from the physically and emotionally threatening environment, suggesting that they had developed symptoms that look very much like those seen in people with long-term depression," Carlezon said.

However, it may also be possible to mitigate these effects -- both intensity and duration -- with the use of an experimental class of drugs that can block stress, the researchers said.