

Study: Mindfulness training programme helps to reduce pre-sleep cognitive arousal
(English translation of Zaobao article on Duke-NUS & Brahm Centre mindfulness study on 7 September 2019)

Latest research shows that attending mindfulness courses reduces pre-sleep cognitive arousal and improves sleep quality.

Duke-NUS Medical School and Brahm Centre presented the study findings at the recent Singapore Mindfulness Conference 2019. The study found that pre-sleep cognitive arousal was significantly reduced among those who attended mindfulness course compared to those who didn't.

The team recruited 96 participants from a Mindfulness Foundation Course. 57 were assigned to the treatment group while 39 were on the waitlist.

For the treatment group, they attended a four-week, 2-hour per session mindfulness foundation course at Brahm Centre.

During the course, participants covered didactic teaching, group discussion, inquiry and formal mindfulness practices which include body scan, breath awareness, loving-kindness meditation and informal mindfulness practices of mindful eating and mindfulness of daily activities.

In addition, participants were provided with weekly session handouts and guided audio meditation tracks for their daily practice.

The researchers used 6 measures to gauge the participants' sleep quality and mindfulness. Pre-sleep cognitive arousal decreased significantly for the treatment group but not the waitlist group.

The team also found that reducing cognitive arousal prior to sleep is correlated with improvements in sleep quality.

"Most prior studies of mindfulness and sleep have involved an eight-week intervention period, with a more demanding homework load. Although these mostly report positive effects, eight-week programmes have lower uptake and higher attrition rates because of the commitment required to complete them," said Dr Julian Lim, Assistant Professor at the Centre for Cognitive Neuroscience, Neuroscience and Behavioural Disorders Programme, Duke-NUS Medical School.

The study showed that a four-week mindfulness course achieved similar results compared with an eight-week programme.

Mindfulness encourages participants to focus on the present, feel one's body movements, breath, feelings and thoughts to strengthen one's awareness and learn to let go of negative emotions and thoughts.

“Our four-week Mindfulness Foundation Course is our most popular offering, with over 3,700 people benefiting from it. Many participants have gained awareness on how to apply mindfulness techniques to empower themselves and create their own happiness. We are encouraged to see the scientific evidence supporting the efficacy of the course in helping people to improve their sleep quality,” said Mr Eric Lim, Mindfulness Psychologist, Brahm Centre.

Sleep difficulties are common in Singapore, which sees an insomnia prevalence rate of approximately 15 per cent. About a quarter of the population reportedly suffers from poor quality sleep, and more than 40 per cent of Singaporeans get insufficient sleep on weekdays.

Poor quality or insufficient sleep can lead to acute adverse effects such as negative moods, cognitive impairment and low quality of life. More importantly, chronic sufferers of poor quality sleep are at higher risk of developing more serious health problems such as diabetes and cardiovascular disorders, along with having a higher overall mortality risk.