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SCHIZOPHRENIA Factsheet

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What is sleep disturbance in schizophrenia?

Typically, sleep follows a characteristic pattern of four stages, where stage 1 is a state of drowsiness and early sleep, stage 2 comprises the largest component of the sleep cycle and is the first complete loss of awareness of the external environment, stage 3 is a deep slow-wave sleep, and the fourth stage is rapid eye movement (REM) sleep where muscle paralysis and memorable dreaming occurs. Sleep disturbances include changes in sleep time, sleep latency (the length of time it takes from full wakefulness to sleep) and sleep efficiency (the amount of time spent asleep while in bed). Chronotype describes sleep-wake and activity timing, involving a preference for either evening hours, intermediate (neither) hours, or morning hours. These preferences can change over time and differ in the peaks of circadian rhythms and the secretion of hormones. Parasomnias include sleep walking, night terrors, nightmares, sleep paralysis, and dream enactment behaviours.

What is the evidence for sleep disturbance?

Moderate quality evidence found medium-sized effects of more total sleep time, more time in bed, more evening chronotype, and more motor activity in people with schizophrenia than in controls. There were also small effects of more sleep latency, less sleep efficacy, and more time awake after sleep onset in people with schizophrenia. There were medium-sized effects of increased stage 1 sleep, decreased stage 4 sleep, decreased slow wave sleep, and decreased REM latency. There were small effects of decreased stage 3 sleep and increased REM duration. Sleep disturbances were also found in people at-risk of psychosis compared to controls.

People recently withdrawn from antipsychotics had shorter total sleep time, longer sleep onset latency, decreased sleep efficacy, longer awake time, increased stage 1 sleep, decreased stage 2, 3, and 4 sleep, decreased slow wave sleep and shorter REM latency than controls. People on antipsychotics had significantly longer sleep onset latency, increased stage 2 sleep, and decreased total REM sleep than controls.

Moderate to low quality evidence finds frequent (weekly) nightmares were reported in 9% to 55% of people with schizophrenia. Around 15% reported sleep paralysis and 17% reported sleep-related eating disorders.

For more information see the technical table

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au/donate.

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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.