



## Sleep disruptions are associated with prostate cancer

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Difficulty sleeping is a common issue for men with prostate cancer, yet it's rarely discussed. The symptoms of prostate cancer, side effects of treatments and other issues associated with the disease may be causing sleep problems. This week's research blog looks at some of the latest research studying sleep for men with prostate cancer.

### Sleep disorders

A sleep disorder is a condition that disrupts normal sleep patterns. There are many different types of sleep disorders that range in severity. Sleep disruptions can be caused by medical conditions, mental health issues, side effects from medications or lifestyle issues such as shift work. The chances of developing some types of sleep disorders increase with age.

Some common sleep disorders include:

*Insomnia*, which is the most common sleep disorder. People with insomnia either find it difficult to get to sleep or to stay asleep. They often feel sleepy during the day.

*Circadian rhythm sleep disorders* affect the timing of sleep. People affected by these disorders may have trouble staying awake during the day or falling asleep during the night.

*Snoring*, which gets worse with age or weight gain, can disrupt sleep.

*Sleep apnoea* occurs when normal breathing is partially blocked, and the struggle to breath normally leads to waking up.

*Restless legs syndrome* is an irresistible urge to move the legs that often disrupts sleep.

There are hundreds of other types of sleep disorders that can impact on a person's quality-of-life.

### Does poor sleep cause prostate cancer?

Some studies have shown that men with sleep disorders are more likely to get prostate cancer. One particularly [good study](#) from Taiwan was published last year. The researchers followed the fate of over 80,000 men. They could do this by accessing a detailed database of people using



health insurance. They used this database to examine health records of men diagnosed with sleep disorders and compared them to men of similar ages, with similar health issues and medications – who did not have sleep disorders. In this study, diagnosis with any of hundreds of possible sleep disorders was recorded.

The results of the Taiwan study showed that men diagnosed with sleep disorders were more likely to be later diagnosed with prostate cancer. In the study, for each of 10,000 people followed-up per year, an average of 9.6 people were diagnosed with prostate cancer if they had a sleep disorder, compared to 6.4 people without a sleep disorder.

This type of study is very useful but can't tell us the direct cause of the prostate cancer in these men. It's unlikely that the poor sleep itself is directly causing the prostate cancer, but it might make some contribution. It's probably the case that these two groups of people have many differences, one or more of which may increase the risk of prostate cancer.

The researchers were able to adjust their findings for age, other diseases, medications and occupation types (classified as white collar versus blue collar). However differences in smoking and alcohol consumption weren't measured. Men who had these habits might have other unhealthy habits that put them at high risk of the cancer.

Despite some limitations, this large study showed a distinctly higher rate of prostate cancer for men diagnosed with sleep disorders. This could be useful information for identifying men who should consider PSA testing for early detection of prostate cancer.

### **Problems sleeping with prostate cancer**

A [recent study](#) has asked how common sleep problems are, and the possible causes, for men with prostate cancer. Performed in Ireland, this study is part of a larger project called [Prostate Cancer Treatment, your experience](#) (PiCTure).

The researchers surveyed 3,348 men with prostate cancer about their sleep and other issues. Men joining the study were at least 2 years past their prostate cancer diagnosis. Most of the men were married and half were employed. Over half reported at least one other health problem. 51% of

these men had radiotherapy, 47% reported taking hormone therapy (ADT) and 28% had prostate surgery.

Results from this study showed that 19% of these prostate cancer survivors reported significant problems sleeping. The researchers identified aspects of prostate cancer that may be the causes of these sleep issues. In order of most influence, these are:

- Urinary symptoms, such as needing to go more often
- Depression and anxiety
- Side effects of hormone therapy (hot flushes and nocturia – waking due to needing to urinate)
- Pain
- Bowel issues

Results from the Irish study highlight a need that is seldomly addressed directly: **poor sleep is one of the most common issues for men diagnosed with prostate cancer.**

Knowing the possible causes of poor sleep for these men gives them a chance of getting help. These men and their doctors may find it useful to discuss strategies for reducing the effects of hot flushes, excess urination at night and anxiety or depression. A pain management plan may also help with sleep for people with cancer.