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**SPEAK TO YOUR GP IF  
YOU HAVE PROBLEMS WITH  
YOUR SLEEP, OR IF YOU HAVE  
ANY OTHER QUESTIONS  
ABOUT YOUR HEALTH.**

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# Sleep

## YOUR WAY TO BETTER HEALTH

For many of us, a good night's sleep comes naturally; unfortunately, for others, this could not be further from the truth.

**WORLD**-first research published in April in the *Australian Medical Journal* by the Gallipoli Medical Research Foundation (GMRF) and its research partner, RSL (Queensland Branch), identified sleep as a major health issue for Vietnam veterans with post-traumatic stress disorder (PTSD).

While sleep disturbance is a key symptom of PTSD, the research also identified that PTSD sufferers are more likely to have obstructive sleep apnoea, unusual sleep behaviours (like acting out dreams and vocalisation during sleep), and restless legs syndrome.

This study, involving 300 Vietnam veterans, examined relationships between physical illnesses like heart disease, gastric complaints and sleep disorders, and the psychological symptoms of PTSD.

From this research, GMRF and RSL (Queensland Branch) have developed a national education program that will equip GPs and other healthcare professionals with new strategies to better identify the signs and symptoms of PTSD. Through increased awareness of PTSD and improved education, we can help change the lives of more than one million Australians who are suffering from this

debilitating condition. Now, why can't I get to sleep?

### Barriers to sleep

Obstructive sleep apnoea (OSA) is a sleep disorder in which your breathing stops periodically during sleep due to airway obstruction from relaxation of the tongue or airway muscles. Common symptoms of OSA are snoring, waking up unrefreshed, daytime tiredness, slowed or stopped breathing during sleep, or waking up choking or gasping for air. However, many people with OSA are unaware they have it.

People with OSA have a higher risk of a range of diseases, such as heart disease, high blood pressure, stroke, diabetes, depression and impotence. Therefore, if you are at risk of OSA, it is important to be diagnosed and treated. Treating OSA can make you sleep better and feel better during the day, and it can also reduce your longer-term cardiovascular risk.

OSA is diagnosed by having a sleep study in which a variety of measurements are taken while you sleep, such as your breathing pattern, heart rate and blood oxygen levels. A specialist in sleep medicine then analyses your results to determine the severity of your OSA, and whether you require treatment.

## THE STUDY FOUND PARTICIPANTS WITH PTSD WERE:

**2x** as likely to have sleep apnoea

**2x** as likely to have restless legs syndrome

**3x** more likely the risk of acting out dreams while asleep

**= INCREASED FATIGUE DURING THE DAY**

**“NOT HAVING GOOD SLEEP MAY BE BECAUSE OF A PROBLEM WITH THE QUANTITY OF SLEEP, THE QUALITY OF THE SLEEP, OR BOTH.”**

There are a variety of treatment options for OSA, but as the causes can vary there is no single treatment that works for everyone. Treatment may include:

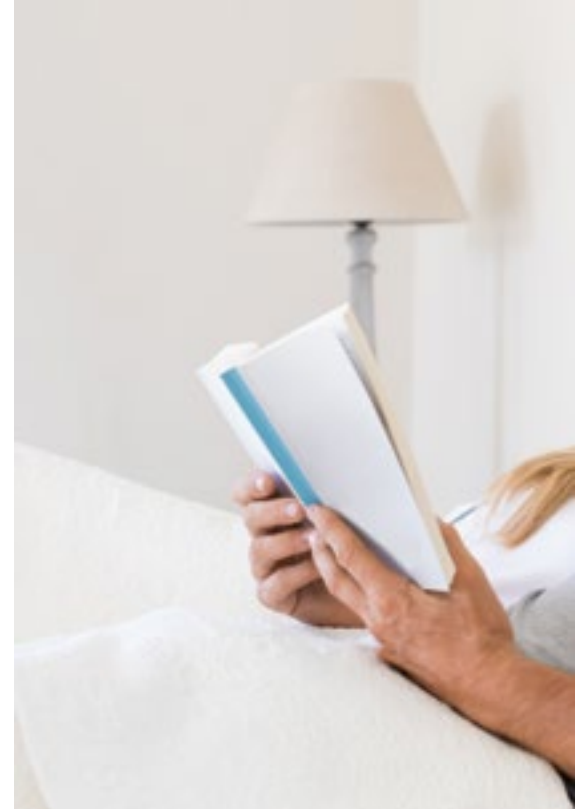
- Weight loss if you are overweight
- Reducing alcohol consumption
- Changing body position for sleep (not sleeping on your back)
- Oral appliances
- Continuous positive airways pressure (CPAP)

If you have OSA, your sleep specialist will help you determine what treatment is right for you.

Restless legs syndrome, or RLS, is a condition of the nervous system that results in the uncontrollable urge to

move the legs. It is a major cause of difficulty falling asleep and disturbing your sleep, or your bed partner's sleep. People with RLS may also have periodic limb movement of sleep (PLMS), which is a more common condition characterised by involuntary leg twitching or jerking during sleep that may affect sleep quality.

The severity of RLS symptoms may be lessened by reducing caffeine, alcohol and nicotine intake. It is important to see your doctor if you think you may have RLS, as other underlying causes, such as diabetes, kidney problems or iron deficiency, may also require treatment. Your doctor may also prescribe medication to help reduce the symptoms of RLS.



Q&A with Dr Robyn O'Sullivan, respiratory and sleep physician and PTSD Initiative Investigator

### Why did you want to be involved with this research?

“Having had the privilege of working with veterans for many years in our weekly sleep clinic, it became very obvious to me that a large number of sleep problems were coming up remarkably frequently in our veteran group, and it was clearly important that we define the magnitude of these sleep problems with high-quality research. Generous funding from RSL (Queensland Branch) made this possible in our Vietnam veteran group and was a dream come true for me.”

**Nightmares are a hallmark symptom of PTSD, so it was not surprising that Vietnam veterans with PTSD in our study had significantly more nightmares than those without PTSD. The results also showed that they were more likely to have sleep apnoea, restless legs and fatigue than those without PTSD. Were these findings surprising to you?**

“These results have confirmed my clinical suspicion, although seeing the real magnitude of sleep problems that many of these veterans with PTSD face is really quite sobering. It certainly helps strengthen the case



for careful clinical evaluation and investigation of all veterans with a history of sleep problems.”

**Some of our participants were referred on for sleep studies based upon a screening questionnaire they completed as part of the study. Can you explain the value in having a sleep study for those who might be at risk of sleep apnoea?**

“A sleep study allows assessment of the severity of sleep apnoea in terms of the number of times breathing is affected by collapse of the upper airway during sleep (for more than 10 seconds), as well as the extent to which the oxygen level falls during sleep. This obviously impacts sleep quality and can have a major adverse effect on daytime functioning. The fragmentation of sleep at night as a result of sleep apnoea can also worsen sleep problems, like dream enactment behaviour. Untreated, obstructive sleep apnoea can have far-reaching effects on many different body organs and functions. Where sleep is already compromised due to PTSD, treating sleep apnoea is obviously very important. Where there are other health issues present, like diabetes, high blood pressure, heart disease, atrial fibrillation and stroke, we have an even lower threshold to treat sleep apnoea, because of the associated benefits from treatment. Nonetheless, the severity of sleep apnoea determined by the sleep study

definitely helps guide management.”

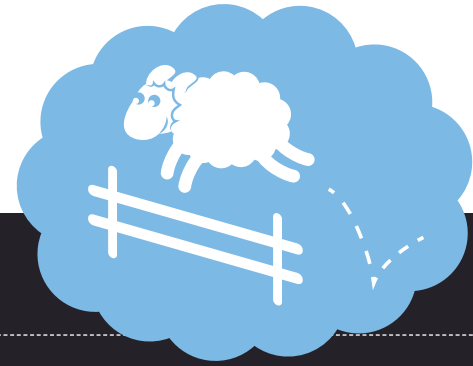
**How do you see the results of the study helping our veterans?**

“The study results have confirmed a strong link between PTSD and treatable sleep problems, including obstructive sleep apnoea, and an increased awareness of these likely sleep problems will hopefully lead to better health care for more veterans. Any interventions that can improve sleep quality and optimise sleep quantity will benefit health in general, and this research helps justify a strong emphasis on sleep.”

**Do you have any advice for any of our readers who may have trouble sleeping?**

“Not having good sleep may be because of a problem with the quantity of sleep, the quality of the sleep, or both. Changing behaviours is often very helpful in addressing problems with the quantity of sleep achieved (see our ‘sleep tips’ section). Not looking at the clock when you do wake overnight helps you remain drowsy so that you are more likely to return to sleep without delay.

“Unrefreshing sleep may be due to a problem with the quality of sleep, rather than simply the quantity of sleep achieved, and sleep apnoea needs to be considered here. If you think you, or someone close to you, have issues with sleep, seeing a doctor and having a sleep study done is definitely worthwhile.” ←



## SLEEP TIPS

- Stick to a bedtime routine. Make sure you are feeling sleepy when you go to bed, and don't go to bed too early or too late. Aim to be up at the same time each morning. Try to avoid napping during the day if possible to promote sleep at night.
- Engage in a relaxing activity before bedtime. Try to reduce excitement, stress or anxiety by having a warm bath or shower, reading or meditating before you sleep.
- Avoid food for two hours before bedtime; limit caffeine and alcohol intake, and avoid caffeine later in the day.
- Exercise regularly. Burn off extra energy during the day by engaging in moderate to vigorous exercise to help make you more sleepy at night (speak to your GP about what level of exercise is safe for you). It is best to exercise in the morning or early in the evening.
- Early morning sunlight. Exposure to natural light early in the morning promotes hormones that help set the body clock and promote a wakeful state.
- Limit the use of devices with screens, such as TVs, phones and tablets before bed; the light emitted by these devices may delay the release of melatonin, a hormone that induces sleep.
- Create a calming sleep environment in your bedroom.
- Make sure you are comfortable, with a good mattress, pillow and fresh bedding.