

**Evidence-Based Practice Group Answers to Clinical
Questions**

**“Use of a Weighted Blanket as Treatment for
Post-Traumatic Stress Disorder (PTSD),
Anxiety, or Sleep Disorder”**

A Rapid Systematic Review

By

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About this report

Use of a Weighted Blanket as Treatment for Post-Traumatic Stress Disorder (PTSD), Anxiety, or Sleep Disorder

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About the Evidence-Based Practice Group

The Evidence-Based Practice Group was established to address the many medical and policy issues that WorkSafeBC officers deal with on a regular basis. Members apply established techniques of critical appraisal and evidence-based review of topics solicited from both WorkSafeBC staff and other interested parties such as surgeons, medical specialists, and rehabilitation providers.

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Objective

To determine whether or not there is any evidence to support the efficacy and/or effectiveness of the use of a weighted blanket as treatment for patients diagnosed with Post-Traumatic Stress Disorder (PTSD) or patients with anxiety or sleep disorder.

Methods

- A comprehensive, systematic literature search was conducted on August 9, 2018.
- The search was done on commercial medical literature databases, including the Cochrane Database of Systematic Reviews® (2005 to August 8, 2018), ACP Journal Club® (1991 to July 2018), UK York University Database of Abstracts of Reviews of Effects® (1st Quarter 2016), Cochrane Clinical Answers® (July 2018), Cochrane Central Register of Controlled Trials® (July 2018), UK NHS Health Technology Assessment® (4th Quarter 2016), UK NHS Economic Evaluation Database® (1st Quarter 2016), BIOSIS Previews® (1969 to 2008), Embase® (1974 to 2018 August 08), Medline Epub Ahead of Print®, Medline In-Process & Other Non-Indexed Citations®, Medline Daily® and Medline® (1946 to August 08, 2018), that are available through the Ovid® platform.
- These searches were done by employing combinations of keywords, as follows:
 1. (weighted **ADJ** blanket\$) **AND** (((post-traumatic **ADJ** stress **ADJ** disorder\$) **OR** (post **ADJ** traumatic **ADJ** stress **ADJ** disorder\$) **OR** ptsd))
 2. (weighted **ADJ** blanket\$) **AND** (anxiety **OR** sleep)
- No restrictions, such as on the language or date of publication, were implemented in any of these searches.
- A manual search was also conducted on the references of the retrieved article.

Results

- No published studies were identified through literature search No. 1; search No. 2 identified nine⁽¹⁻⁹⁾ published studies.
- Upon examination of the titles and abstracts of these nine⁽¹⁻⁹⁾ published studies, one⁽⁴⁾ study was thought to be relevant and was retrieved in full for further appraisal.
- France et al.⁽⁴⁾ reported a medium quality (*due to lack of appraisal of the primary studies*) systematic review (level of evidence 1. Appendix

1) investigating the effects of non-traditional (i.e. non-behavioural and non-prescription pharmaceutical) approaches to sleep in children and adolescence (0 to 18 years old). With regard to weighted blankets, the authors found two relevant primary studies showing that weighted blankets did not affect objective measures of sleep.

Summary

- At present, there is no published study showing the efficacy and/or effectiveness of weighted blankets as treatment for PTSD.
- At present, there is no published study showing the efficacy and/or effectiveness of weighted blanket as treatment for anxiety or sleep disorders in adults.
- At present, published studies investigating the efficacy and/or effectiveness of weighted blanket as treatment for sleep disorders in children (aged 0-18 years) did not provide any evidence on objective sleep measurements.

References

1. Neurodevelopmental disorders: No evidence for efficiency of weighted blankets in improving sleep in children with autism spectrum disorder. *Nature. Reviews Neurology*. (no pagination), 2014. Date of Publication: 22 Jul 2014.
2. Chen H.-Y.; Yang, H.; Chi H.-J., and Chen H.-M. Physiological effects of deep touch pressure on anxiety alleviation: The weighted blanket approach. *Journal. of Medical and Biological Engineering*. 33 (5) (pp 463-470), 2013. Date of Publication: 2013.
3. Creasey, N. and Finlay, F. Do weighted blankets improve sleep in children with an autistic spectrum disorder?. *Archives. of Disease in Childhood*. 98 (11) (pp 919-920), 2013. Date of Publication: November 2013.
4. France K.G.; McLay L.K.; Hunter J.E., and France M.L.S. Empirical research evaluating the effects of non-traditional approaches to enhancing sleep in typical and clinical children and young people. *Sleep. Medicine Reviews*. (no pagination), 2017. Date of Publication: 2017.
5. Furnell, C. and Finlay, F. The use of weighted blankets to modify sleep in attention deficit hyperactivity disorder (ADHD). *Archives. of Disease in Childhood*. Conference: Annual Conference of the Royal College of Paediatrics and Child Health, RCPCH 2016. United Kingdom. 101 (Supplement 1) (pp A354), 2016. Date of Publication: April 2016.
6. Gringras, P.; Green, D.; Wright, B.; Rush, C.; Sparrowhawk, M.; Pratt, K.; Allgar, V.; Hooke, N.; Moore, D.; Zaiwalla, Z., and Wiggs, L. Weighted blankets and sleep in autistic children-a randomised controlled trial. *Journal. of Sleep Research*. Conference: 22nd Congress of the European Sleep Research Society. Tallinn Estonia. Conference Publication: (var.pagings). 23 (SUPPL. 1) (pp 320), 2014. Date of Publication: September 2014.
7. NCT03113656. Weighted Blankets With Infants With NAS. <https://Clinicaltrials.Gov/Show/Nct03113656>. 2017.
8. NCT03546036. Controlled Study of Chain Blanket for Insomnia. <https://Clinicaltrials.Gov/Show/Nct03546036>. 2018.
9. Novak, T.; Scanlan, J.; McCaul, D.; MacDonald, N., and Clarke, T. Pilot study of a sensory room in an acute inpatient psychiatric unit. *Australasian. Psychiatry*. 20. 1(5):401-6, 2012 Oct.

Appendix 1

WorkSafeBC - Evidence-Based Practice Group Levels of Evidence

(adapted from 1,2,3,4)

1	Evidence from at least 1 properly randomized controlled trial (RCT) or systematic review of RCTs.
2	Evidence from well-designed controlled trials without randomization or systematic reviews of observational studies.
3	Evidence from well-designed cohort or case-control analytic studies, preferably from more than 1 centre or research group.
4	Evidence from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled
5	Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees.

References

1. Canadian Task Force on the Periodic Health Examination: The periodic health examination. CMAJ. 1979;121:1193-1254.
2. Houston TP, Elster AB, Davis RM et al. The US Preventive Services Task Force Guide to Clinical Preventive Services, Second Edition. AMA Council on Scientific Affairs. American Journal of Preventive Medicine. May 1998;14(4):374-376.
3. Scottish Intercollegiate Guidelines Network (2001). SIGN 50: a guideline developers' handbook. SIGN. Edinburgh.
4. Canadian Task Force on Preventive Health Care. New grades for recommendations from the Canadian Task Force on Preventive Health Care. CMAJ. Aug 5, 2003;169(3):207-208.