

# Hi The Hierarchy of Evidence



The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynyk and Fineout-Overholt (2011).

- I Evidence obtained from a systematic review of all relevant randomised control trials.
- II Evidence obtained from at least one well designed randomised control trial.
- III Evidence obtained from well-designed controlled trials without randomisation.
- IV Evidence obtained from well designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case- series
- V Evidence obtained from systematic reviews of descriptive and qualitative studies
- VI Evidence obtained from single descriptive and qualitative studies
- VII Expert opinion from clinicians, authorities and/or reports of expert committees or based on physiology

Melynyk, B. & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing & healthcare: A guide to best practice (2<sup>nd</sup> ed.)*. Philadelphia: Wolters Kluwer, Lippincott Williams & Wilkins.

National Health and Medical Research Council (2009). *NHMRC levels of evidence and grades for recommendations for developers of guidelines (2009)*. Australian Government: NHMRC. [http://www.nhmrc.gov.au/files\\_nhmrc/file/guidelines/evidence\\_statement\\_form.pdf](http://www.nhmrc.gov.au/files_nhmrc/file/guidelines/evidence_statement_form.pdf)

OCEBM Levels of Evidence Working Group Oxford (2011). *The Oxford 2011 Levels of Evidence*. Oxford Centre for Evidence-Based Medicine. <http://www.cebm.net/index.aspx?o=1025>

Reference (include title, author, journal title, year of publication, volume and issue, pages)	Evidence level (I-VII)	Key findings, outcomes or recommendations
Abdeyazdan, Z., Mohammadian-Ghahfarokhi, M., Ghazavi, Z. and Mohammadzadeh, M. (2016) Effects of nesting and swaddling on the sleep duration of premature infants hospitalized in neonatal intensive care units. <i>Iranian journal of nursing and midwifery research</i> , 21(5), pp. 552-556.	IV	Swaddling and nesting are considered supportive developmental care measures.  Developmental supportive positions help avoid energy expenditure caused by unnecessary movements of the infant and reduce unnecessary and excess sedation, and help wean from analgesia.
Baddock, S. A., Purnell, M. T., Blair, P. S., Pease, A. S., Elder, D. E. and Galland, B. C. (2019) The influence of bed-sharing on infant physiology, breastfeeding and behaviour: A systematic review. <i>Sleep Medicine Reviews</i> , 43, pp. 106-117	I	Bed-sharing between infants and parents has been identified in potentially adverse circumstances and as an increased risk for SUDI/SIDS. There are also positive benefits to the infant and parents through bed sharing.  There are cultural and value based social norms in areas where SIDS rates are low and parents choose to bed share.  Health professionals should provide up to date evidence about advantages and risks to facilitate parental decisions.
Buccini, G. d. S., Pérez-Escamilla, R., Paulino, L. M., Araújo, C. L. and Venancio, S. I. (2017) Pacifier use and interruption of exclusive breastfeeding: Systematic review and meta-analysis. <i>Maternal &amp; Child Nutrition</i> , 13(3), pp. e12384.	I	WHO recommendations on pacifier use.  There is no general consensus on the use of pacifiers. Pacifier use can be a risk to poor breastfeeding outcomes when considering exclusive breastfeeding for the first 6 months of an infant's life.
Craig, W. R., Hanlon-Dearman, A., Sinclair, C., Taback, S. and Moffatt, M. (2004) Metoclopramide, thickened feedings, and positioning for gastro-oesophageal reflux in children under two years. <i>Cochrane Database of Systematic Reviews</i> , (4), pp. Cd003502	I	Elevating the head of the bed has no effect in reducing symptoms of gastro-oesophageal reflux. Thickened feeds have more of a positive effect.

<p>Friedmann, I., Dahdouh, E. M., Kugler, P., Mimran, G. and Balayla, J. (2017) Maternal and obstetrical predictors of sudden infant death syndrome (SIDS). <i>The Journal of Maternal-Fetal &amp; Neonatal Medicine</i>, 30(19), pp. 2315-2323</p>	<p>IV</p>	<p>Maternal smoking remains the strongest prenatal modifiable risk factor for SIDS</p>
<p>Heere, M., Moughan, B., Alfonsi, J., Rodriguez, J. and Aronoff, S. (2017) Factors Associated With Infant Bed-Sharing. <i>Global Pediatric Health</i>, 4, pp. 2333794X17690313</p>	<p>VI</p>	<p>American Academy of Pediatrics advises against bed sharing as there have been strong associations with SIDS and accidental suffocation and strangulation in bed.  Bed-sharing is both a risk factor for SIDS and a major barrier to safe sleep</p>
<p>Horne, R. S. C., Fyfe, K. L., Odoi, A., Athukoralage, A., Yiallourou, S. R. and Wong, F. Y. (2016) Dummy/pacifier use in preterm infants increases blood pressure and improves heart rate control. <i>Pediatric Research</i>, 79(2), pp. 325-332</p>	<p>III</p>	<p>Dummy use improves cardiac control in pre term infants and thus can be a mechanism to reduce SIDS</p>
<p>Kahraman, A., Başbakkal, Z., Yalaz, M. and Sözmen, E. Y. (2018) The effect of nesting positions on pain, stress and comfort during heel lance in premature infants. <i>Pediatrics &amp; Neonatology</i>, 59(4), pp. 352-359</p>	<p>IV</p>	<p>Nesting in the prone position has a pain reducing effect, enhancing comfort and reducing stress in premature infants</p>
<p>Naugler, M. R. and DiCarlo, K. (2018) Barriers to and Interventions that Increase Nurses' and Parents' Compliance With Safe Sleep Recommendations for Preterm Infants. <i>Nursing for Women's Health</i>, 22(1), pp. 24-39</p>	<p>VI</p>	<p>The importance of hospitals having and implementing current, evidence based safe sleep policies. Ensure clear transitions for premature infants that have been hospitalised and ensure consistent nursing and parental education around safe sleep.</p>
<p>Pretorius, K. and Rew, L. (2019) Sudden Infant Death Syndrome: A Global Public Health Issue and Nursing's Response. <i>Comprehensive Child and Adolescent Nursing</i>, 42(2), pp. 151-160</p>	<p>VII</p>	<p>The role of nurses in addressing safe sleeping practices</p>

Psaila, K., Foster, J. P., Pulbrook, N. and Jeffery, H. E. (2017) Infant pacifiers for reduction in risk of sudden infant death syndrome. <i>Cochrane Database of Systematic Reviews</i> , (4)	I	No randomised controlled trials examining infant pacifiers for reduction in risk of SIDS.
Red Nose (2018) What is a safe sleeping bag?	VII	Recommendations of safe sleeping bags
Red Nose. National Scientific Advisory Group (2017) Information Statement: Wrapping infants. (This information statement was first posted in October, 2005. Most recent version April 2017)	VII	Recommendations on baby wrapping for sleep. Wrapping techniques for different ages Red Nose's six safe sleeping recommendations to reduce SUDI
Red Nose. National Scientific Advisory Group (NSAG) (2015) Information Statement: Smoking. (The first edition of this information statement was posted in March, 2009)	VII	Recommendations around smoking and safe sleeping, smoking and breastfeeding, ways to minimise smoke exposure to infants.
Task Force on Sudden Infant Death Syndrome (2016) SIDS and other sleep-related infant deaths: updated 2016 recommendations for a safe infant sleeping environment. <i>Pediatrics</i> , 138(5), pp. e20162938	VII	Recommendations to reduce the risk of SIDS and other sleep related infant deaths
World Health Organization (2020) Breastfeeding Available: <a href="https://www.who.int/health-topics/breastfeeding#tab=tab_1">https://www.who.int/health-topics/breastfeeding#tab=tab_1</a> .	VII	WHO guidelines for breastfeeding and pacifiers