## 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. <u>http://www.nhmrc.gov.au/\_files\_nhmrc/file/guidelines/evidence\_statement\_form.pdf</u>
- OCEBM Levels of Evidence Working Group Oxford (2011). *The Oxford 2011 Levels of Evidence*. Oxford Centre for Evidence-Based Medicine. <u>http://www.cebm.net/index.aspx?o=1025</u>



| <b>Reference</b> (include title, author, journal title, year of publication, volume and issue, pages)   | Evidence<br>level<br>(I-VII) | Key findings, outcomes or recommendations   |
|---|------------------------------|---|
| Butterworth, S. A., Lalari, V. and Dheensaw, Keira.<br>(2014). Evaluation of sodium deficit in infants<br>undergoing intestinal surgery. <i>Journal of Pediatric</i><br><i>Surgery, volume 49, issue 5, 736-740</i>   | VI                           | Sodium is a critical growth factor for infants/children. A deficit can result in growth impairment and cognitive dysfunction. Correction of sodium deficits to achieve optimal urine sodium's can improve weight gain.  |
| Kormanik, K., Praca, J., Garton, H.J.L and Sarka, S.<br>(2010). Repeated tapping of ventricular reservoir<br>in preterm infants with post hemorrhagic<br>ventricular dilatation in preterm infants with<br>post-hemorrhagic ventricular dilatation does not<br>increase with the risk of reservoir infection.<br><i>Journal of Perinatology 30, 218-221</i> | v                            | Serial taps of ventricular reservoirs did not result in cerebral spinal fluid<br>infection and ventricular reservoir infection did not accompany blood culture<br>proven sepsis. Reservoir placement should not be limited secondary to concern<br>for infection due to repeated tapping. |
| MacDonald, M.G. and Ramaseth, J. (2007).<br>Tapping ventricular reservoirs. <i>Atlas of</i><br><i>Procedures in Neonatology 4<sup>th</sup> edition, pp 366-368</i>  | VI                           | Procedural recommendations published in a reference book.   |
| Western Neonatal Network Guideline Group<br>(2012). Guidelines of the assessment and<br>management of post-haemorrhagic ventricular<br>dilatation in neonates and infants<br>http://nestteam.org/attachments/File/Guidelines  | VII                          | Guideline formed based on expert opinion and previous studies   |