# 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 (2nd 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

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

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| Databases searched: | x CINAHL (Ebsco) | x Medline (Ebsco) | Pubmed (NLM) | ☐ Nursing (Ovid) | ☐ Emcare (Ovid) | ☐ Other List: _____ |
| Keywords used: | Phototherapy, neonatal, newborn, jaundice, hyperbilirubinaemia, bilirubin | | | | | |
| Search limits: | 2011-2022. | | | | | |
| Other search comments: | | | | | | |

2020 Nursing Clinical Effectiveness Committee
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| Reference (include title, author, journal title, year of publication, volume and issue, pages) | Evidence level (I-VII) | Key findings, outcomes or recommendations |
|---|---|---|
| Moncrieff, G 2018, 'Bilirubin in the newborn: Physiology and pathophysiology', *British Journal of Midwifery*, vol. 26, no. 6, pp. 362–370, viewed 11 July 2022, <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=129989788&site=ehost-live>. | V | **Jaundice** in the **neonate** is usually easily treatable; however, underlying risk factors can significantly change the course of bilirubin metabolism and increase the risk of neurotoxicity. |
| Flynn, ME 2017, 'A Quality Improvement Project to Decrease Serum Bilirubins and Increase Appropriate Phototherapy Use by Following the AAP Guidelines in a Well Nursery', *Pediatric Nursing*, vol. 43, no. 3, pp. 143–148, viewed 11 July 2022, <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=123430207&site=ehost-live> | II | Standardising **neonatal jaundice** care with a clear clinical practice guideline increases **neonatal** care and outcomes and decreases further jaundice related concerns. |
| Aprillia, Z, Gayatri, D & Waluyanti, FT 2017, 'Sensitivity, Specificity, and Accuracy of Kramer Examination of Neonatal Jaundice: Comparison with Total Bilirubin Serum', *Comprehensive Child & Adolescent Nursing*, vol. 40, pp. 88–94, viewed 11 July 2022, <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=126346461&site=ehost-live>. | III | The use of the Kramer test remains an effective and accurate tool for determining **jaundice** among **neonates**. |
| *Kemper,A, Newman, T, Slaughter,J, Maisels, J, Watchko, J, Downs,S, Grout, R, Bundy, D, Stark, A, Bogen, D, Volpe Holmes, A, Feldman-Winter, L, Bhutani, V, Brown, S, Maradiaga Panayoti, G, Okechukwu, K, Rappo, P & Russel, T 2022 'Clinical Practical Guideline Revision: Mnagement of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation', The American Academy of Pediatrics* vol. 150 no. 3 e2022058859. | VII | This clinical practice guideline provides indications and approaches for **phototherapy** and escalation of care. |
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