ABSTRAK

UNIVERSITAS MUHAMMADIYAH JEMBER
PROGRAM STUDI DIII KEPERAWATAN
FAKULTAS ILMU KESEHATAN

Karya Tulis Ilmiah
Revi Diyanti Nurhofifah

Gambaran Tindakan Fototerapi Pada Bayi Dengan Hiperbilirubin Di Ruang Perinatologi Rsud Dr. H. Koesnadi Bondowoso

xv + hal 59 + 2 tabel + 9 lampiran

Abstrak

Latar Belakang: Hiperbilirubinemia neonatal ditandai dengan ikterus pada kulit dan sklera akibat penumpukan bilirubin >10 mg%. Fototerapi efektif mengubah bilirubin menjadi bentuk yang mudah dikeluarkan. Perawat berperan penting dalam efektivitas terapi, seperti pemantauan suhu, kadar bilirubin, pemberian ASI, dan perlindungan mata serta genitalia **Metode:** Penelitian ini menggunakan desain deskriptif kualitatif dengan studi kasus pada bayi usia 8 hari. Data dikumpulkan melalui observasi langsung, studi dokumen, dan pengkajian. Pelaksanaan pada 26–28 Juni 2025. **Hasil:** Bayi Ny. H mengalami ikterus derajat Kramer 3, kadar bilirubin total 17,79 mg/dL (direk 1,33 mg/dL, indirek 16,46 mg/dL), bayi tampak lemah dan kesadaran menurun. Fototerapi dilakukan selama 2 × 24 jam menggunakan Phototherapy Bilisphere 360 LED (panjang gelombang 430–490 nm, intensitas 35 μW/cm²/nm). Bayi dalam inkubator tanpa pakaian (hanya popok dan pelindung mata), posisi dirotasi tiap 2 jam, ASI diberikan teratur. Suhu tubuh dipantau tiap 2 jam, sempat naik sesaat lalu normal kembali. Setelah fototerapi, kadar bilirubin total menurun menjadi 2,96 mg/dL (direk 1,55 mg/dL, indirek 1,41 mg/dL), derajat ikterus turun ke Kramer 1, responsivitas dan aktivitas meningkat. **Kesimpulan:** Fototerapi dapat menurunkan kadar bilirubin dan derajat ikterus pada hiperbilirubinemia neonatal. Peran aktif perawat dalam pelaksanaan, pemantauan, dan dukungan nutrisi berkontribusi besar terhadap keberhasilan terapi dan pencegahan komplikasi.

Kata Kunci: Hiperbilirubinemia Neonatal, Fototerapi, Bilirubin, Ikterus, Perawatan Bayi

ABSTRACT

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Overview of Phototherapy Actions in Infants with Hyperbilirubinemia in the Perinatology Room at Dr. H. Koesnadi Hospital Bondowoso

xv + 59 pages + 2 tables + 9 appendices

Abstract

Background: Neonatal hyperbilirubinemia is characterized by yellowing of the skin and sclera in newborns, with bilirubin levels >10 mg%. Phototherapy is an effective method to convert bilirubin into a water-soluble form that is easily excreted through urine and feces. Nurses play an essential role in the effectiveness of phototherapy, such as monitoring the baby's temperature, bilirubin levels, frequency of urination, and breast milk intake. **Objective:** To describe the implementation of phototherapy in infants with hyperbilirubinemia in the perinatology room at Dr. H. Koesnadi Hospital, Bondowoso. **Method:** This research used a descriptive method with a case study approach. Data collection techniques included observation, interviews, and documentation. The subject was one infant undergoing phototherapy due to hyperbilirubinemia. **Results:** The results showed that the initial bilirubin level was 17.79 mg/dL (26/06/2025), and after undergoing phototherapy for 48 hours with LED light, the bilirubin level decreased to 2.96 mg/dL (28/06/2025). During phototherapy, nursing actions included monitoring body temperature every 2 hours (ranging between 36.2°C–37.6°C), monitoring bilirubin levels, fluid intake, elimination patterns, eye protection, skin color observation, and maternal education. **Conclusion:** Phototherapy with LED light was effective in reducing bilirubin levels. Nursing care plays an important role in optimizing phototherapy outcomes.

Keywords: Hyperbilirubinemia, Neonates, Phototherapy, Bilirubin, Jaundice, Infants