

## Early detection and effective management of neonatal jaundice: A clinical protocol-based study in egyptian neonatal units

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**Statement:** Neonatal jaundice remains a leading cause of hospital admissions and complications in newborns across Egypt. In many healthcare facilities, inconsistent diagnostic practices and delayed interventions contribute to adverse outcomes, including severe hyperbilirubinemia and kernicterus. This study focuses on improving neonatal jaundice outcomes through standardized diagnostic and management protocols tailored for the Egyptian healthcare setting. This prospective study was conducted over a 10-month period in three major neonatal units in Cairo. A total of 280 neonates born at  $\geq 35$  weeks' gestation were enrolled. A protocol was implemented using transcutaneous bilirubin (TcB) measurements, total serum bilirubin (TSB) when needed, and the Bhutani nomogram for risk assessment. Neonates were monitored for bilirubin trends, phototherapy initiation timing, and hospital readmissions. Data were analyzed to compare outcomes before and after protocol implementation. The implementation of a protocol-based approach significantly enhanced early identification of neonates at risk for severe jaundice. Timely intervention with phototherapy reduced the need for exchange transfusions and prevented neurological complications. The study underscores the importance of uniform guidelines and continuous staff training to improve neonatal outcomes, particularly in Egyptian public healthcare settings.

### Biography

Salma El-Masry, MD is a leading neonatologist based in Cairo, Egypt. She currently serves as a Consultant Neonatologist at Cairo University Children's Hospital, where she is involved in both clinical care and neonatal research. With over 15 years of experience in neonatology, Dr. El-Masry has published several research papers focused on neonatal jaundice, infection control, and low-resource interventions. She is passionate about improving neonatal care standards across Egypt through evidence-based practices and staff education programs. Dr. El-Masry is an active member of the Egyptian Society of Neonatology and frequently participates in regional and international conferences.

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**Received:** November 10, 2024; **Accepted:** November 12, 2024; **Published:** April 08, 2025

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