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Phototherapy Services for Newborn with Jaundice; Availability and Practices in Southeast Nigeria

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Objectives*:* Severe neonatal hyperbilirubinemia remains a cause of neurologic damage in children with a higher incidence in low-income countries. Phototherapy, which is the standard of care for neonatal hyperbilirubinemia is not only necessary but an essential neonatal service that should be readily available in all health facilities with delivery services. The study describes the availability and distribution of phototherapy service in secondary health institutions in Southeast Nigeria.

Methodology: This was a cross-sectional descriptive study carried out in four of the largest cities in Southeast Nigeria using convenient sampling methods. Researcher administered questionnaire was used to obtain information regarding availability of phototherapy machines, its use and personnel availability

Results: A total of seventy-seven facilities were surveyed. Fifty-five (71.4%) of the studied facilities manage jaundice in their facility. Of these, 45/55 (81.8%) use phototherapy in the management of jaundice in newborns. The most used phototherapy is LED (42.2%). Others were fluorescent (26.6%), fabricated LED (11.1%) and fabricated fluorescent (20%). Routine serum bilirubin assay was done in 60 (77.9%) of the facilities even though majority was done in laboratories outside the facility. Non-invasive serum bilirubin monitoring was available in only two facilities. Only 21 (47.7%) had a servicing protocol for their phototherapy machines, and just 12 (27.7%) of these services were offered by a biomedical engineer.

Conclusion: Phototherapy use in secondary health facilities is suboptimal. There is urgent need for states health authorities to collaborate with private health facilities especially those offering maternal and child services in provision of phototherapy machines as well as in training health workers for optimal management of neonatal hyperbilirubinemia.

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