

**ANTIBIOTICS UTILIZATION PATTERN FOR NEONATES IN SPECIAL  
BABY CARE UNIT IN AMPARA DISTRICT GENERAL HOSPITAL,  
SRI LANKA.**

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No proper standard guidelines for prescription of antibiotics for neonates are available. The careless, needless, and overuse of antibiotics has resulted in an alarming increase in antibiotic resistance, a serious risk to public health. It is necessary to develop and implement improved guidelines for the use of antibiotics in newborn sepsis based on microbial aetiology and sensitivity. Therefore, the purpose of the study was to assess the patterns of antibiotic utilization of neonates in a special baby care unit in Teaching Hospital, Ampara in Sri Lanka. A descriptive cross-sectional study was conducted in a single centered study from October 2022 to March 2023. A total of 51 patients admitted to the neonatal unit, Ampara Hospital, Sri Lanka. Neonates who were receiving antibiotics during the period of hospital stay at the neonatal unit were included in the study. The demographic data, the prescribed drug information and other relevant data were extracted from the medical records and neonatal unit registers. The p-value <0.05 was considered statistically significant. Males (55%) were higher than females. High number of antibiotics were prescribed for those born term (39) followed by preterm (8), extreme preterm (2) and moderate to late preterm (2). The neonates received a total of 123 prescribed drugs and 12190 doses. Among the 13 antibiotics, Benzylpenicillin (47), Cefotaxime (37), Flucloxacillin (7) and Gentamicin (7) were most frequently prescribed. More than half of the neonatal subjects have received two antibiotics and a quarter of them received three antibiotics. The most frequently prescribed drug categories were Penicillins, Cephalosporins and Aminoglycosides. The total prescribed drug dose was higher in term neonates (10089mg) followed by preterm (1408mg), moderate or late preterm (318mg) and extreme preterm neonates (301). Antibiotics dosing interval was higher in extreme preterm followed by preterm, term and moderate or late preterm neonates, respectively. Most of the infants were admitted to neonatal unit for neonatal sepsis followed by Preterm, Neonatal Meningitis, and Small for Gestational Age. Most frequently prescribed drug categories were Penicillins, Cephalosporins and Aminoglycosides. Benzylpenicillin, Cefotaxime, Flucloxacillin and Gentamicin were most frequently prescribed antibiotics.

**Keywords** – Antibiotic, utilization pattern, Neonates