

BIG DATA ANALYTICS IN NEONATAL

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ABSTRACT

Giving birth to a sick or premature baby can be unforeseen for any parent. The first 28 days of life of infants is called the neonatal period. The majority of all neonatal deaths (75%) occur during the first week of life, and about 1 million new-borns die within the first 24 hours. Preterm birth, intrapartum-related complications (birth asphyxia, seizures, sepsis or respiratory distress syndrome), infections and birth defects cause most neonatal deaths. Causes of premature babies include poor nutrition before and during pregnancy, smoking, using illegal drugs, or drinking too much alcohol during pregnancy. Here, NICU can be irresistible. NICU is used to check constant pulse rate, BP, temperature, and oxygen level. Big Data Analytics is a trending technology. It plays a vital role in different domains like healthcare, government, social media, E-Commerce, manufacturing, Media & Entertainment, Fraud detection and prevention and many more. Big Data can be a leading way to fight against premature death. Big Data basically helps us to predict the signs and symptoms of premature babies. Big data is a well-known technology that basically analyses enormous amounts of data to figure out patterns and trends. Big data analytics use in the neonatal intensive care unit has the potential to facilitate earlier detection of clinical deterioration, expedite application of efficient clinical decision-making algorithms based on real-time and historical data mining, and yield significant cost-savings. This research study is intended towards the exploration of big data analytics techniques and tools in the field of neonatal care.

Keywords: Big data analytics, Neonatal, Healthcare, Preterm birth