Abstract

In India, 30% to 40% babies are low birth weight babies (LBW) as opposed to about 5% to 7% of newborn in the west. In India, 7 to 10 million LBW infants are born annually. About 10% to 12% of Indian babies are born preterm (less than 37 completed weeks) as compared with 5% to 7% incidence in the west. These infants are physically immature and therefore their neonatal mortality is high. It is possible to increase the survival of the infants and quality of human life through prompt and adequate disease management of the newborn.

The proposed model of cost effective major infant disease management system based on
artificial intelligence algorithm is helpful for diagnostic- cum- preventive approach to reduce the immaturity, fragility, vulnerability and dependence of the neonates in the developing countries to reduce neonatal and child mortality. Secondly, a significant proportion of the pediatricians' time, especially in major hospitals, large cities and overpopulated areas is spent on examination and evaluation of apparently healthy babies and detection of minor developmental defects.

In addition to these facts, many third world countries including countries like Pakistan and Bangladesh face the major problem of child health diagnosis and malnutrition. Medical facilities and expertise is either absent or out of reach of these tribal and poor communities, many public health centers (PHCs) lack in advice by experts on immediate basis in case of emergencies. Major hurdles include the lack of medical experts and trained manpower, scarcity of funds and improper budgetary allocation for rural health at state and central government level.

Reference

- Santosh Kumar A., Paediatric Clinical Examination, Paras Medical Publisher, 2008.
Index Terms

Computer Science

Expert Systems

Key words

Artificial Neural Network

Infant Disease Management

Malaria

Typhoid

Dengue

FFANN