

## REVIEW ARTICLE NEWBORN SCREENING

PUSHPAMALA RAMAIAH

Professor, Sree Sakthi Mayil College of Nursing, Erode, Tamil Nadu, India

### ABSTRACT

The first disorder detected by modern newborn screening programs was a metabolic condition in which the inability to degrade the essential amino acid phenylalanine can cause irreversible mental retardation unless detected early. With early detection, and dietary management, the negative effects of the disease can be largely eliminated. Robert Guthrie developed a simple method using a bacterial inhibition assay that could detect high levels of phenylalanine in blood shortly after a baby was born. Guthrie also pioneered the collection of blood on filter paper which could be easily transported, recognizing the need for a simple system if the screening was going to be done on a large scale. Newborn screening around the world is still done using similar filter paper.

**KEYWORDS:** Newborn Screening Program, Dry Blood Sample, Infant Screening Tests, Neonatal Screening Tests, The PKU Test