## **Neonatal Screening for Genetic Blood Diseases**

Shaikha Al-Arayyed, PhD\* A Aziz Hamza, MD\*\* Bema Sultan\*\*\*
D. K. Shome, MRCPath\*\*\*\* J. P. Bapat, PhD\*\*\*\*

Background: Previous neonatal screening in 1986 showed that the incidence of sickle cell disease (SCD) is 2.1% and (SCT) is 11%. Since 1984 the Ministry of Health (MOH) instituted a prevention campaign. The incidence has been falling gradually since then.

Objective: To update the national data on the incidence of SCD among the newborns and to compare it with the previously available data.

Method: All Bahraini newborns delivered at the (MOH) maternity hospitals for a period of three months from February to April 2002 were targeted. Cord blood samples were analyzed by HPLC.

Result: Two thousand newborns constituted the study population five were excluded. Eighteen were found to be affected with SCD with an incidence of 0.9%. SCT was found in 325 (16.3%). G6PD deficiency was found in 18% of males, and 10% of females. Parental age distribution and consanguinity were documented.

Conclusion: Bahrain has for the first time recorded less than 1% babies with SCD.

Bahrain Med Bull 2007; 29(3):