Bahrain report.

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The Kingdom of Bahrain is made up of an archipelago of 36 Islands in the Arabian Gulf

2005 estimated population was 724,645

the crude birth rate was 20.9/ 1000.

Annually, the number of newborn is between 13-15,000.

Consanguinity rate:

The consanguinity rate was estimated in 1995 to be 39.4%

while The rate of first-cousin marriage was 21 %.

A recent study in 2005, revealed that the consanguinity rate is 20%,

11.4% for the first cousins marriages, 8.6% for distant relatives.

80% are not related to their partner.

This showed a decline from the previous figure.

The neonatal screening in 1984 –1985 covered:-

10000 newborns, birth prevalence of **sickle cell disease (SCD)** was **2.1%** of **sickle cell trait 11%**

A pilot study on hempglobinopathies ,2002 covered:- 2000 newborns ,
sickle cell disease incidence **1%**
with a decline of **50%**

A pilot study on metabolic disorders 1995 showed high incidence.
Another study reported the incidence of **1/1000**

-At present, there are:
newborn screening for blindness, deafness.

-Screening for Hemoglobinopathies, and hypothyroidism will start soon .

-These two projects received national budget,

-The central laboratory at Salmaniya hospital will be utilized.

- The data on testing results will be accumulated nationally.

Techniques used for the newborn screening are :

- High performance liquid chromatography HPLC and Isoelectric focusing for hemoglobinopathies

-Radioimmunoassay for thyroid,

-and MS/MS for metabolic screening .

Barriers for implementation of screening program include

Budget, training, creation of system for referral and follow up.

It is also necessary to improve on technical resources for diagnosis, confirmation, and patient management.

The political support for the program will be of greatest assistance in developing and improving the newborn screening.

Affected newborn can be tracked utilizing the CPR, which is the central personal registration number.

Affected newborn can be recalled and refereed to appropriate section to confirm diagnosis,

then referred to consultant for further management.

We have Birth defect registry but it is not active for many reasons,

now we are using the MOH annual statistics.

The common genetic disorders are hemoglobinopathies, metabolic disease, hypothyroidism, genetic deafness and genetic blindness, etc.