

Financing Developing Newborn Screening Program: A Saudi Experience

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Kingdom of Saudi Arabia

- Area: 2 million squared Km
- Population: 22.5 million (27% expatriates)
- Growth rate: 2.4%
- Under five: 12% --- under 15: 36%
- Crude birth rate: 25.3/1000
- Infant mortality rate: 19.1/1000
- MOH hospitals: 250,000 births (2005)
- Other governmental hospitals: 81,000 births

Newborn Screening Program:

- From Research to National program
- In collaboration with the Ministry of Health (MOH), Prince Salman Center for Disability Research (PSCDR) and KFSH&RC
- Activated on August 2005
- Started with Riyadh city (5 hospitals)
- To include all hospitals with maternity services in major cities during 1st year (100000 newborn)

Organization:

- Executive committee
- 2 Technical committees (screening – management)
- Regional coordinator
- Hospital team

(Comprehensive guideline for the program, educational brochures and posters, training..)

Coordination:

- Close coordination between MOH & lab. in PSCDR (administrative and technical)
- Main coordinators from NCD (MOH) & PSCDR
- Coordinator in every participating hospital
- All participating hospitals are provided with all necessary supplies before starting screening
- Training
- Prompt reporting system in case of positive result

- Each of the 24 hospitals assigned:
 - Part time physician
 - Full time nurse
- And equipped with
 - Office
 - Computer and printer
 - Fax machine
 - Copier

Results:

- From August 2005 until October 2005: >50,000 newborn screened
- Incidence ratio: >1.6/1000 (expected to increase...)

Cost

- In the first 2 years the cost is 150 SR (40 U\$) for:
 - specimen collection
 - transportation
 - lab work
- From the third year the cost is 65 SR (17.3 US)
- For the 50,000 done: the cost is 2 m U\$

manpower cost

- Fulltime nurse 4000 SR/m= 48000 SR (12800 U\$)/year
- Part time physician 2500 SR /m=30000 SR (8000 U\$)/year
- Total/year for 24 hospitals= 499200 U\$

- Offices equipment:

24x20000 = 480000 SR (128000 U\$)

Future steps:

- 3rd year.....250,000 (MOH hospitals)
 - Annual lab Cost: 16.24 m SR (4.3 m U\$)
 - Manpower: around 2 m SR (0.53 m US)
- 4th year331,000 (full coverage for MOH and other governmental hospitals)
 - Cost (no manpower) 21.5 m SR (5.74 m U\$)
- Support MOH labs in Eastern and Western regions
- Private hospitals: 70000 births/year