

South-East Asia Networks for Newborn & Birth Defect



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This Month...

Birth Defects

- [Completeness assessment of the Breton registry of congenital abnormalities: A checking tool based on hospital discharge data](#)
- [The national birth defects prevention study: A review of the methods](#)

Newborn

- [State of neonatal health care in eight countries of the SAARC region, South Asia: how can we make a difference?](#)
- [Delays in healthcare delivery to sick neonates in Enugu South-East Nigeria: an analysis of causes and effects](#)

Publications

Every newborn action plan and postnatal care for mother and newborn



Member States have made significant progress towards reducing maternal and child mortality, but still a woman dies every seven minutes in pregnancy and child birth, every hour more than two hundred under-five children die in the Region including more than one hundred newborns. Slow neonatal mortality reduction has retarded progress to MDG4 in SEAR, and tackling the first few days' neonatal mortality is the real challenge.

Global Every Newborn Action Plan (ENAP) was developed following a systematic review of the progress in addressing newborn survival and extensive expert consultations. ENAP was endorsed at the Sixty-seventh World Health Assembly in May 2014. WHO has also released guidelines for postnatal care (PNC) for mothers and children to be addressed.

The regional meeting on ENAP and PNC was organized to review the national newborn action plans and share successful experiences for scaling up. WHO technical guidelines on PNC for mothers and newborns were shared for ensuring uniform and universal implementation of these in Member Countries of the Region. Country teams prepared plans for implementation of newborn action plans and post natal care to accelerate reduction in newborn mortality. The meeting report provides highlights of the proceedings from the regional meeting.

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Birth Defects

Completeness assessment of the Breton registry of congenital abnormalities: A checking tool based on hospital discharge data

[Riou C.](#), [Rouget F.](#), [Sinteff JP.](#), [Pladys P.](#), [Cuggia M.](#)

Abstract

BACKGROUND:

Exhaustiveness is required for registries. In the Breton registry of congenital abnormalities, cases are recorded at the source. We use hospital discharge data in order to verify the completeness of the registry. In this paper, we present a computerized tool for completeness assessment applied to the Breton registry.

METHODS:

All the medical information departments were solicited once a year, asking for infant medical stays for newborns alive at one year old and for mother's stays if not. Files were transmitted by secure messaging and data were processed on a secure server. An identity-matching algorithm was applied and a similarity score calculated. When the record was not linked automatically or manually, the medical record had to be consulted. The exhaustiveness rate was assessed using the capture recapture method and the proportion of cases matched manually was used to assess the identity matching algorithm..

RESULTS:

The computerized tool has been used in common practice since June 2012 by the registry investigators. The results presented concerned the years 2011 and 2012. There were 470 potential cases identified from the hospital discharge data in 2011 and 538 in 2012, 35 new cases were detected in 2011 (32 children born alive and 3 stillborn), and 33 in 2012 (children born alive). There were respectively 85 and 137 false-positive cases. The theoretical exhaustiveness rate reached 91% for both years. The rate of exact matching amounted to 68%; 6% of the potential cases were linked manually.

CONCLUSION:

Hospital discharge databases contribute to the quality of the registry even though reports are made at the source. The implemented tool facilitates the investigator's work. In the future, use of the national identifying number, when allowed, should facilitate linkage between registry data and hospital discharge data.

The national birth defects prevention study: A review of the methods.

[Reefhuis J.](#), [Gilboa SM.](#), [Anderka M.](#), [Browne ML.](#), [Feldkamp ML.](#), [Hobbs CA.](#), [Jenkins MM.](#), [Langlois PH.](#), [Newsome KB.](#), [Olshan AF.](#), [Romitti PA.](#), [Shapira SK.](#), [Shaw GM.](#), [Tinker SC.](#), [Honein MA.](#); [National Birth Defects Prevention Study](#)

Abstract

BACKGROUND:

The National Birth Defects Prevention Study (NBDPS) is a large population-based multicenter case-control study of major birth defects in the United States.

METHODS:

Data collection took place from 1998 through 2013 on pregnancies ending between October 1997 and December 2011. Cases could be live born, stillborn, or induced terminations, and were identified from birth defects surveillance programs in Arkansas, California, Georgia, Iowa, Massachusetts, New Jersey, New York, North Carolina, Texas, and Utah. Controls were live born

infants without major birth defects identified from the same geographical regions and time periods as cases by means of either vital records or birth hospitals. Computer-assisted telephone interviews were completed with women between 6 weeks and 24 months after the estimated date of delivery. After completion of interviews, families received buccal cell collection kits for the mother, father, and infant (if living).

RESULTS:

There were 47,832 eligible cases and 18,272 eligible controls. Among these, 32,187 (67%) and 11,814 (65%), respectively, provided interview information about their pregnancies. Buccal cell collection kits with a cytobrush for at least one family member were returned by 19,065 case and 6,211 control families (65% and 59% of those who were sent a kit). More than 500 projects have been proposed by the collaborators and over 200 manuscripts published using data from the NBDPS through December 2014.

CONCLUSION:

The NBDPS has made substantial contributions to the field of birth defects epidemiology through its rigorous design, including case classification, detailed questionnaire and specimen collection, large study population, and collaborative activities across centers.

Newborn

State of neonatal health care in eight countries of the SAARC region, South Asia: how can we make a difference?

[Das JK](#), [Rizvi A](#), [Bhatti Z](#), [Paul V](#), [Bahl R](#), [Shahidullah M](#), [Manandhar D](#), [Stanekzai H](#), [Amarasena S](#), [Bhutta ZA](#).

Abstract

The South Asian Association for Regional Cooperation (SAARC) is an organization of eight countries - Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, Sri Lanka and Afghanistan. The major objectives of this review are to examine trends and progress in newborn and neonatal health care in the region. A landscape analysis of the current state of neonatal mortality, stillbirths and trends over the years for each country and the effective interventions to reduce neonatal mortality and stillbirths was undertaken. A modelling exercise using the Lives Saved Tool (LiST) was also undertaken to determine the impact of scaling up a set of essential interventions on neonatal mortality and stillbirths. The findings demonstrate that there is an unacceptably high and uneven burden of neonatal mortality and stillbirths in the region which together account for 39% of global neonatal deaths and 41% of global stillbirths. Progress is uneven across countries in the region, with five of the eight SAARC countries having reduced their neonatal mortality rate by more than 50% since 1990, while India (43%), Afghanistan (29%) and Pakistan (25%) have made slower progress and will not reach their MDG4 targets. The major causes of neonatal mortality are intrapartum-related deaths, preterm birth complications and sepsis which account for nearly 80% of all deaths. The LiST analysis shows that a gradual increase in coverage of proven available interventions until 2020 followed by a uniform scale-up to 90% of all interventions until 2030 could avert 52% of neonatal deaths (0.71 million), 29% of stillbirths (0.31 million) and achieve a 31% reduction in maternal deaths (0.25 million). The analysis demonstrates that the Maldives and Sri Lanka have done remarkably well while other countries need greater attention and specific focus on strategies to improve neonatal health.

Delays in healthcare delivery to sick neonates in Enugu South-East Nigeria: an analysis of causes and effects

[Ekwochi U](#), [Ndu IK](#), [Osuorah CD](#), [Onah KS](#), [Obuoha E](#), [Odetunde OI](#), [Nwokoye I](#), [Obumneme-Anyim NI](#), [Okeke IB](#), [Amadi OF](#).

Abstract

BACKGROUND:

In most parts of the world, neonatal mortality rates have shown a slower decline when compared with under-5 mortality decline. A sick newborn can die within minutes if there is a delay in presentation, thus early diagnosis and treatment are essential for the survival of a critically ill newborn. This study investigated factors responsible for delays in healthcare services for the sick newborn and maternal socio-demographic variables that influence these delays in Enugu, South-East Nigeria.

METHODS:

This was a community-based descriptive study. A total of 376 respondents were randomly selected from 4 of the 17 local government areas of Enugu State. Mothers and/or caregivers that were nursing or had nursed a child in the previous 2 years were enrolled. Self-reported data on delays encountered during healthcare for sick newborn were collected using pretested structured questionnaire. Chi-square and multivariate logistic regression were used to determine the association between causes of delays in newborn healthcare services, maternal socio-demographics and relationships with newborn mortality.

RESULTS:

Delays in reaching healthcare facilities accounted for the most common delays encountered by respondents, 78.0%, in this study, followed by delays at household level, 24.2% and delays at health facility level 16.0% ($P = 0.000$). Mothers with knowledge of ≥ 3 WHO recognized danger signs compared with those with ≤ 2 were significantly less likely to delay at household (level 1: 40.7 versus 59.3%) ($P = 0.017$) and reaching healthcare service (level 2: 19.9 versus 80.1%) ($P = 0.028$). Delays at health facility level (level 3) occurred more at tertiary health facilities (59.0%), secondary health facilities (39.1%) and primary healthcare facilities (19.7%) compared with private health facilities (13.5%) ($P = 0.000$).

CONCLUSIONS:

Delays in seeking healthcare at all levels especially those related to transporting the sick newborn to the hospital are a contributor to newborn mortality in Nigeria. Improving access to healthcare could potentially reduce mortality in the sick newborn.

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