RECOMMENDATIONS

GENERAL
The participants of the meeting resolved to call upon the governments, the professional bodies and the international agencies to take urgent steps to address the problem of high neonatal mortality in the Region.

CARE OF THE NEWBORN

Home level

* Antenatal care of pregnant mothers should be universalized. The efforts for tetanus toxoid immunization of pregnant women need to be redoubled in pockets where its coverage is still sub-optimal.

* All deliveries should be attended by trained personnel. Urgent action should be taken to impart skills in conducting safe deliveries to all the possible grassroots-level providers in the countries of the Region.

* A package of home-based newborn care should be developed incorporating principles of: (a) basic resuscitation, (b) care at birth, (c) prevention of hypothermia, (d) breast feeding, (e) prevention of sepsis, (f) care of low birth weight infant, (g) early detection of illness, (h) appropriate home treatment of manageable sicknesses, wherever possible, (i) referral of the those sick neonates who cannot be managed at home, and (j) care during transport.

* Mothers, grand mothers, fathers and other family members should be educated about the home care of normal and 'at risk' neonates.

* All births, irrespective of the place of delivery, should be documented and reported.

Village level

* The concept of community birthing place should be popularized in the countries of the Region.

* The village stake-holders should be involved in assessing newborn care needs of their communities and in organizing the required services through participatory approach.

Primary health centre (PHC) level

* A newborn care corner should be set up for deliveries and care of sick neonates.

* The utilization of these facilities for institutional deliveries should be enhanced by providing quality service.

* Minimum essential equipment for resuscitation, warmth and weighing etc. should be provided.
* The PHC physicians and other providers should be trained to provide care to normal and 'at risk' neonates, and to plan and supervise safe transport of sick neonates who cannot be managed at this level.

**The sub-district and the district level hospitals**

- These hospitals should provide adequate resuscitation facilities for neonates in their delivery rooms.
- A *newborn care corner* should be developed at each of these hospitals to provide care to LBW and sick neonates.
- These hospitals should have a referral linkage with the community, the primary health centres and other hospitals.
- A manual for neonatal care should be available for ready reference.
- These facilities should conform to the requirements of the Baby Friendly Hospital initiative.

**Strategies**

- Advocacy. Awareness regarding newborn care among public and policy makers should be spread through effective and sustained advocacy.
- Village level worker. A village-based provider should be designated for providing newborn care in the community including the care for sick neonates.
- Communication package. A communication package for mothers, fathers, elders, other family members, relatives, women's groups, panchayat (local self-government) members and other stake-holders in respective communities should be developed and implemented.
- Equipment. Basic minimum neonatal equipment should be provided at all the levels.
- Management information system (MIS). MIS on newborn care should be developed and implemented.

**TRAINING**

**Grassroots workers**

- Urgent efforts should be made to train the grassroots workers (namely, TBAs, anganwari workers, village health guides, auxiliary nursing midwives; or equivalent) in newborn care in order to make tangible impact on neonatal mortality within the next few years.
- The training of these providers should be truly competency-based. Although the exact mix and scope of skills to be imparted to different categories of workers will depend on their respective job-descriptions, the focus should be on the following...
competencies: resuscitation, Immediate care after birth, thermal protection, identification of LBW and other 'at risk' neonates, cord care, home care of LBW babies, feeding of normal and small babies, prevention of infection, early detection of neonatal sickness, home care of sick neonates, identification of neonates requiring referral, care during transport, and communication with mothers, grandmothers, fathers and other family members.

Physicians and nurses at secondary level health facilities:

- In order to upgrade the expertise in neonatal care at the secondary level of health system the physicians and nurses at sub-district and district level facilities should be trained in newborn care through time-bound programmes. This will help improve the utilization of the crucial secondary level of health system in a not-too-distant future.

- The training programme for secondary level physicians and nurses should be participatory and competency-based, and should encompass skills of neonatal resuscitation, care of normal and low birth weight neonates, supportive and specific therapy of sick neonates, and effective communication with the mother and the family.

- The training programme for physicians and nurses should be conducted at a functional facility located in a district/sub-district hospital. The duration of the course should be 4 to 5 days, providing enough time for demonstration and practice of skills.

- The trainers for the above training should not only be competent in clinical skills but also in teaching skills. The trainers for nurses should be drawn from amongst nurses/nursing teachers as far as possible.

Neonatal resuscitation programme

- It was recommended that Neonatal Resuscitation programme (based on the AAP module pioneered in India by the NNF), be launched in all countries of the Region wherever this activity has not been initiated. This programme promotes rational care of asphyxiated neonates, catalyses demand-generation of other components of newborn care among providers and stakeholders, and enthuses trainers as well as the trainees in disseminating neonatal care knowledge and skills.

- National faculty training courses in neonatal resuscitation should be followed by country-wide workshops of providers at all levels.

- Resources need to be mobilized through local, national and regional efforts - or providing training manikins and other equipment, and for organization of the workshops.

Training modules

- In view of the paucity of training resource material on newborn care for some key categories of providers (for instance, nurses of the peripheral hospitals, the village
health guides, village practitioners etc.) action should be taken to develop suitable training modules for them.

- The training resource materials already developed by different groups in different countries should be shared, appraised and adapted by professionals in other countries for use in respective programmes.

**Training institutions**

- Steps should be taken to incorporate adequate neonatal care education into the curricula of medical/nursing/para-professional schools to ensure that the future health professionals donot lack the expected competencies in this key area.

- The neonatal care expertise and infrastructure at teaching institutions and training schools should be strengthened to at least level II to enable them to serve as credible training sites for physicians and nurses.

**Capacity building**

- Opportunities should be generated for capacity-building of trainers and leaders in neonatal care through intracountry and regional fellowships and exchange.

**RESEARCH**

**Collaboration**

- It was recommended that the countries of the South East Asia Region should collaborate on priority research agenda on neonatal health. There is a need to develop research protocols and seek resources from funding agencies jointly.

**Research priorities**

- Field testing of an improved Mother-Baby Package WHO. The Mother- Baby Package should be field-tested through multi-site research. The existing WHO package should be improved upon by incorporating newer strategies and low cost technologies, and the essentials of other WHO modules (namely 'Integrated Management of Childhood Illness,' 'Essential Newborn Care', 'Sick Neonates', 'Basic Resuscitation', 'Cord Care') as well as country documents on newborn care prepared in India, Indonesia and other countries,

- *Newborn care practices and care-seeking behaviour.* Studies on newborn care practices and care-seeking behaviour of rural and urban communities for sick neonates should be undertaken to provide basis for community-based interventions.

- *Newborn care modules for community application.* The following interventional modules should be developed and tested through multi-site research:

  (a) *Management of birth asphyxia in the home setting.*
(b) Home care of low birth weight neonates.
(c) Community management of sick neonates.

- Low birth weight.
  Following studies were identified on the problem of low birth weight:
  (a) Studies to elucidate determinants of prematurity and intrauterine growth retardation in the community.
  (b) Community-based interventions aimed at reduction of low birth weight and prematurity.

South-East Asia Neonatal- Perinatal Database

- It was strongly recommended that a South-East Asia Neonatal-Perinatal Database Network be established on the lines of the Indian (NNF) model. This network should eventually provide community-based surveillance of maternal/neonatal morbidity and mortality. (This recommendation has also been made at the SEAR Consultative Meeting on WHO Collaborating Centres held in 1997).

Capacity-building.

- Urgent measures should be taken for capacity-building in research methodology and epidemiology targeted to the neonatal care professionals in the Region.

SOUTH EAST ASIA NEONATAL NETWORK FORUM

- With the aim of forging close networking and partnerships on neonatal health initiatives, the participants of the meeting resolved to form the South East Asia Neonatal Network Forum.

- The Network Forum will be constituted by the following:
  (a) National institutions of expertise in newborn care in the Region;
  (b) WHO collaborating centres in neonatal and perinatal health as well as in the allied fields in the Region;
  (c) Professional bodies involved in the promotion of newborn care; (d) The participants of the present meeting;
  (e) Government and non-government organization involved in newborn care advocacy, delivery, training and research, and
  (f) International agencies concerned with neonatal-perinatal health in the Region.

- The objectives of the Forum will be:
  (a) To share experiences in newborn health advocacy, delivery of care, training research and policy initiatives;
  (b) To collaborate in multi-centre operational research;
  (c) To promote exchange of health professionals for training and capacity building;
and

(d) To serve as a resource for the WHO on newborn health.

- The Nodal Centre for the Network Forum will be the WHO Collaborating Centre for Training and Research in Newborn Care at the All India Institute of Medical Sciences, New Delhi.

- The participants of the meeting will identify potential constituents (centres of expertise, agencies, professional bodies etc.) of their respective countries in order to enlarge the Network Forum into a critical mass capable of steering positive change in neonatal health in the Region.

**NETWORKING**

The following activities were recommended for priority networking:

- Sharing of experiences in newborn care delivery, training and research in different countries of the Region through electronic exchange and print (e.g. newsletter, reports monographs etc.).

- Advocacy with the governments and international agencies for according the desired priority to neonatal health.

- Collaborative research on areas identified in the present meeting.

- Dissemination of resource material (training modules, reports, etc.) on neonatal health already developed by different groups/agencies.

- Developing new training modules that are unavailable at present and are considered to be of high regional priority.

- Regional level meeting on newborn care to review the progress of neonatal care every two years.

- Training of trainers in neonatal resuscitation and essential newborn care in countries where these initiatives have not yet taken off.

- Inter-country visits by newborn care professionals in the Region.

- Fellowships for trainers, researchers, nurses, and others for capacity-building.

- Establishment of the SEA Regional neonatal-perinatal database.

- Interaction among professional organizations in different countries working on neonatal -perinatal health to promote newborn care in the Region.

- Creation of an Internet website on Newborn Care in SEA Region.