N1OH, physicians avail its services for the identification of the pesticides and also request for cholinesterase assays.

4. Teaching or training in clinical toxicology, both at the undergraduate as well as at the postgraduate level is limited in some medical colleges.
5. Simple remedies such as syrup of IPECAC and activated charcoal which is recommended for most ingested poisons are not easily available in India. Very few antidotes are available even in big cities in India.
6. Many of the pesticide formulations are sold unlabeled in the market making it difficult for patient management. Some of the pesticide containers had incorrect information about antidotes which led to complications in many patients.
7. Occupational poisonings are quite common but are not reported due to various reasons.

In a country as large as India, it may be necessary to have a number of regional poison information centres. Many research institutes in India not only have fully equipped analytical laboratories.

This article is summary of lecture delivered by Dr. Aruna Diwan on toxicology to day, on occasion of inauguration of first volume of journal of A A.B.M.S.

Source: W/C ICMR bulletin Delhi

"NEONATAL CARE SERVICES IN INDIA"

Dr. Baldev S. Prajapati, M.D.(Ped.);D.Ped.
Hon.Asst. professor of pediatrics,
Smt. N. H. L. Municipal medical college, Ahmedabad-380 006.

INTRODUCTION

Throughout the life span of an individual, perinatal period is of great danger as regards survival and freedom from handicap, yet it was the last one to be recognizes as of any importance in improving the health of the society.
As opposed to geriatrics, death during this period .truly represents a nipping of life in the bud and sequence of various neonatal hazards manifest as a life long disability.

The developed countries launched neonatal intensive care programmes in late sixties and beginning of seventies which resulted in survival of newborns of very low birth weight, previously considered not viable. However In India, we are still struggling to get minimal care facilities for our neonates.

Neonatology has emerged as a most fascinating and challenging medical speciality over the past twenty five years. Understanding the diseases of newborn has posed a challenge to pediatricians. Until the 1960's, the practice of neonatology was based on pure clinical sense and supported by one's experience. Management of newborn was based on trial and errors. Since I960's Neonatal medicine has fast developed into a well established science. Physiological and Biochemical aspects of fetus and neonate are quite different from older

children and adults. Therefore, it is very essential ' to utilize the basic knowledge of the disease for the betterment of the neonate. It is of practical importance that all practicing physicians (Pediatricians) are provided the physiologic basis of neonatal medicine.

Neonatal Mortality:
The infant mortality rate of our country has declined gradually from 165 per 1000 live birth in 1950's to 84 in 1991 and 74 in 1993. In the other hand, the neonatal mortality rate has been almost static. Following good immunization coverage, implementation of programmes for improvement of nutrition and control programmes for various disease like diarrhoea, acute respiratory tract infectious and other infectious diseases. Post neonatal mortality has decreased, the decline of infant mortality rate of our country is mainly due to decline of post neonatal mortality.

Since last few years there is no significant decline of infant mortality rate of our country. And more than 60% of .the infant deaths take place during neonatal period. So for further reduction of infant mortality rate of our country, besides present programmes, Steps should be taken to bring down neonatal mortality rate.

In order to plan the strategy to reduce neonatal mortality rate and for proper priority of resources, it is important to know the contribution of various factors to neonatal deaths.

Birth Asphyxia, prematurity, infection and congenital malformations are the leading causes of deaths in the newborn. Lower birth weight categories comprise a higher proportion of neonatal deaths.

Development of Neonatal Services :
With knowledge of all these facts and ideas, pediatricians of our country have gone through 25 years of preparation leading to crystallization of thought process which has resulted in guidelines based on indigenous experience. The world Health Organization (W.H.O.) and Ministry of Health conducted a series of workshops on basic neonatal care for pediatricians and Nurses during 1960s & 1970s. This resulted in the creation of a band of pediatricians committed to development of neonatal care in the country. Some of them went through extended advanced training in Western countries and set up modern neonatal care units in their respective hospitals in various parts of the country. During last two decades, increasing number of Pediatricians have shown a positive interest in neonatology. Besides at Teaching institutions, well equipped Nurseries are coming up at private sector also.

Medical Education and Neonatology :
The inclusion of "essential newborn care" as an integral part of national programme and acceptance by the Medical Council of India of pediatrics as an independent discipline in undergraduate medical education has totally changed the perspective and the need for neonatal care in India for the coming decades.

With launching of D.M. (neonatology) Programme at some of the centres in the country and likely to be introduced in many more centres in the next decade, leadership base of the speciality is going to expand.

Delivery of Neonatal Care In India :

It is paradoxical that inspite of increasing interest in neonatology among Pediatricians, there is little impact on Neonatal Mortality Rate. This is largely because of the fact that nearly 95% of the deliveries in the rural and around 50% in the urban areas are being conducted at home. In this situation the three tier system of newborn care as recommended by the task force on Minimum Perinatal care of Health & Family Welfare, Government of India is emerging as the most suitable method of delivery of neonatal care in our country.

Primary Care (Level I Care):

Three tier system provides for primary or. level I care in domiciliary, sub center or primary health center situation through the primary health care provides such as the trained traditional birth attendants, auxiliary nurse midwives and general physicians. The national birth giving pattern of over 75% home delivery and fewer center of institutional based deliveries is unlikely to change in the near future. Hence, current Government policy of delivery of essential newborn care from grass root level should continue till this care becomes uniformly available all over the country. The policy of double efforts of training of health professionals and providing the tools to practice the knowledge and skills and for actual care of the newborn is appropriate and must continue. Primary care should remain the focus with major resources inputs into it as this is likely to yield positive results and provide firm roots for future development of newborn care.

Secondary Care (Level II Care)

We initiated newborn care in the late fifties and sixties by providing hospital based neonatal care as secondary or level II care. Initially it was primitive, but during last two decades it has improved a lot at the government and non government levels. It is logical and natural that as concept -of essential newborn care gets spread widely, there will be increasing need and demand for level II units at district and taluka level. In some parts of the country, level II care is developing and improving very fast at private sectors compared to government level.

To improve level II care, trained manpower, physical space and equipments are basic requirements. Trained manpower especially the nurses, is the hardest constrain to development of secondary or level II units. It is in this context, the the concept of participation by the mother in the care of newborn under close supervision of trained and experienced neonatal team of nurses and pediatricians become extremely relevant. Devising simple methods for sucting the airway of baby, use of room heater for preservation of developing hypothermia to the newborn, rather than going for costly sophisticated gadgets, is also cost effective. Such type of approach ensures establishment of newborn care units at minimal and affordable cost is most practical.

The experience of nursing by mother in the hospital under supervision provides the confidence and opportunity for her to learn the appropriate and suitable ways of looking after such infants.

Tertiary Care (Level III Care):

With the concept of neonatal services in a phased manner, we have realized that for real intensive care of the critically ill neonates, development of tertiary care centres of Neonatal Intensive Care Units (NICU) is essential. The pioneering efforts in successful delivery of tertiary care in early eighties by Safdurjung Hospital Neonatal Unit team at Delhi provided the necessary impetus for the beginning of such a unit at an apex institution or hospital in the government and non government organization become a growing demand and necessity. During the last decade, many such centres have come up across the country.

The goals of a NICU are (a) to improve the clinical 'care of the critically sick neonates, (b) to reduce the neonatal morbidity and mortality and (c) Impart continuing in service of training personnel in the care of the newborn.

The bed strength is determined by considering the approximate need of the regions with number of deliveries, incidence of very low birth weight babies and neonatal mortality. It has been calculated that there should be 1.5 intensive care cots and 5 high dependency and special care cots per thousand births per year. This apex institution should have all the intensive care cots for its catchment area and take into account the high dependency and special care facilities available in neighboring district general hospitals.

N.I.C.U. must be equipped with centralized oxygen supply, suction facilities, servo controlled open care system/ incubators, vital signs and transcutaneous' monitors, ventilators, infusion pumps etc. Since such services are very expensive and hitech, a great interest and planning are required to organise the unit taking into consideration the available resources, medical and nursing personnel, space and equipments and other, supportive services. Good laboratory and investigative facility is quite essential. Making proper policies regarding administration, emergency protocols, infection control, medication administration, procedures and N.I.C.U. routine practices is vital for optimal patient care. Documentation, Education Programmes and follow up programmes are the key to success of any N.I.C.U. services and immense help not only in improving the existing services but also for future planning and development.

Needless to say, N.I.C.U. should be supported by matching obstetric services providing optimum ante natal care, ideal intrapartum care and safe and prompt delivery and caesarean sections.

The technology of neonatal care has advanced tremendously in Western countries, still it is in its infancy in our country. Although an increasing number of pediatricians have shown positive interest in neonatology, the standard of care of the newborn is widely different across the country and it is not satisfactory. We have to go a long way in the coming days.

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WHO-MESSAGE WORLD HEALTH DAY 2000 : BLOOD SAVES LIVES

W/C Dr.Aparajita Shukia (M.D.) Asst.Prof. P & S.M.
Smt. NHL. Mun. Med. College, Ahmedabad.

"World Health Day 2000" has been dedicated to the theme of Blood Safety.
The key messages of World Health Day 2000 are : There is a positive health impact from safe blood There is a need for more safe blood donations
Effective and appropriate measures are needed to prevent the transmission of blood born diseases
Donated blood must be used safely and appropriately to ensure patient safety, and to demonstrate a respect for the donor.

As a result of WHO- 2000, we expect:
An increased awareness among the public that blood donation is a safe process, and that the donation process is handled in confidence and professionally.

An increased awareness of the need for blood and therefore an increase in regular blood donations.

Health professionals and the public will be more informed and able to make rational decisions on the need for blood transfusion.

Government authorities and stakeholders will be more informed of the need for an enabling environment for blood services to be able to deliver safe and adequate blood supplies.