THE ROLE OF PEDIATRICIAN IN UNDERGRADUATE INSTRUCTION ON THE NEWBORN **

by

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Pregnancy is satisfactorily concluded only if both mother and baby survive in good health. With increasing obstetrical knowledge, the maternal mortality has been greatly reduced but the neonatal death rate remains high. Furthermore among surviving babies, much physical or mental handicap remains.

Factors of size and maturity make the medicine of the new-born very different-and for the inexperienced it may be quite unrecognisably different, from that of the adult—and the investigation of a small baby may take long observation and a great deal of time-consuming work. For these reasons, the greater part, but not all, of the published advances in knowledge of the newborn child in U.K., U.S.A. and Europe have been achieved by the paediatric physician working in the closest harmony with his obstetric colleague.

Specialised study of the newborn is a postgraduate subject for the pediatrician and the best neonatal care is available from highly skilled neonatal physicians developed within pediatrics, but the undergraduate should be taught:

1. Simple neonatal care.
2. Teratogenic drugs.
3. Resuscitation, advances in which are due entirely to pediatric research in neonatal physiology.
4. Foetal and neonatal bleeding.
5. Birth injuries.
6. Infections.
7. Jaundice.
8. Prematurity.
9. Malformations which require urgent correction.

The experienced pediatrician can cover these subjects clearly in a few simple lectures. Such babies are not always available for demonstration but the student should be familiar with the appearance and behaviour of a normal newborn so that he can recognise the abnormal when it occurs. This may be done best by stimulating him to take greater and longer interest in the babies delivered by him. Student teaching should be in the hands of the obstetric-pediatric team but the clinical medicine of the newborn should be taught by the pediatric physician whose task it is to keep abreast of the enormous literature on this subject, which is found mostly in the pediatric journals, and

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take out the basic truths in simple form.

Let me give some examples: Simple techniques of taking blood from newborns like heel prick, femoral vein puncture for various investigations, the technique of the use of direct laryngoscope and laryngeal intubation in the badly asphyxiated babies, the technique of Coomb's test and Rh testing and exchange transfusions, the simple method of doing lumbar puncture in the newborns or of taking their blood pressure by flush method, the methods of investigation and management in babies drooling saliva or choking with a feed or vomiting blood, or not passing meconium — nay even the time-honoured routine of silver nitrate to the eyes and the binder to the umbilical cord — so much work has been done in all these areas that unless one has the time and patience to assimilate all these and the drive, staff and time to put these into practice, the teaching of these various facets to the undergraduates, whether done by the professor of pediatrics where such a department exists, or by the professor of obstetrics where no pediatric department exists, will be ineffective in both instances if not accompanied by actual practice of these techniques in the wards and delivery room. Nay it will even be confusing to the undergraduates, that what he is taught in theory is not actually practised.

What are the ways and means in India by which this teaching can be stepped up to the state of the teaching about newborns accompanied by practice that exists now in all western centres (Europe, America and Russia)? The answer is firstly, to open pediatric departments in medical colleges which do not have such, secondly, for the obstetricians and pediatricians to so plan care of the newborn that modern knowledge is utilised and practised. To start with the delivery room, the undergraduate is exposed to the techniques he sees practised in the delivery room since he has to conduct 20 labour cases. If there is an arrangement to get the pediatric resident staff to the delivery room in all difficult deliveries like forceps, caesarean, breech etc. where trouble for the baby is anticipated and the pediatric postgraduates are trained in modern methods of resuscitation including intubation through a laryngoscope, then teaching and practice will run parallel. Alternatively the obstetric resident staff can be orientated and trained in these modern techniques. Secondly the services of the pediatric staff could be utilised in these teaching hospitals for drawing up the routine care of newborn in health and in sickness. There should be a sick nursery in the maternity hospital with the services of the pediatric staff, where babies, born of difficult delivery and those in whom trouble is anticipated as also the actually sick babies, are all observed and treated utilising modern knowledge. The obstetrician is even more interested than the pediatrician that the baby he has helped to deliver into this world after perhaps great difficulty, survives if sick or is prevented from getting sick. However, since the pediatrician has often bestowed more time on reading of pediatric journals and given more thought to the problems in the new-

born period than the average obstetric teacher can afford to, it is in the obstetricians's own interest to utilise the services of the pediatricians fully in the teaching hospitals setting aside all questions as to whom the baby belongs. Of course the baby belongs to the parents first and the obstetrician next. But the pediatrician's services are available in many teaching hospitals in India now and he just happens to know more about neonatal pediatrics and is perhaps uptodate both by training and constant reading of pediatric journals — at least I hope so by and large. The undergraduate thus gets an opportunity to witness modern methods of management of sick newborns and of prevention of sickness. For the same reason, the pediatrician's services could also be utilised in integrated teaching when dealing with ante-natal care by the obstetrician. In the field of the care of the prematures, the Indian pediatrician in the teaching centre has a big part to play, because what is written in western text books on this matter has to be modified in actual practice in the tropics taking into consideration factors like the hot weather, the natural humidity, the unavailability of costly electric incubators and the necessity to use simple methods as well as keeping up breast milk flow in the mothers of the poorer classes.

Where pediatric staff are not available or insufficient, then the obstetrician can improve the routines existing in their newborn service by getting familiar with the simple routines of newborn care evolved in well developed centres, even if they may not have time to institute complicated procedures like exchange transfusions etc. Only thus will the teaching of undergraduates in newborn care improve.