

MIDWIVES' UNION SECTION

Early Infantile Mortality and Its Prevention *

(From 'The Nursing Times')

Except in the case of the new-born infant, the care of the child is in the hands of the paediatrist. I shall therefore deal only with early infantile mortality and its prevention.

The annual infantile mortality rate is calculated on the number of deaths of infants under one year per thousand live births registered in that year. At the end of last century the mortality rate was very high, over 150 out of 1,000, or $1\frac{1}{2}$ infants out of every ten, dying before they were a year old. The death-rate has now been nearly halved, being below 70, or less than $\frac{3}{4}$ of an infant out of every ten.

The infantile death-rate is highest in the large towns and county boroughs of the North of England, especially those of Lancashire and Yorkshire, where it sometimes exceeds 200. This is accounted for by the fact that many of the women work in the mills, and since they like to continue their work after they are married, the baby is brought up on the bottle. The low mortality is chiefly maintained in the country districts and rural areas where mothers do not go out to work. The rate is very low in some parts of Ireland where there is great poverty (in Connemara for instance), but the mother remains at home and nurses her child.

The greatest number of deaths (rather more than half) occurs in the first three months and the rest during the last nine months of the first year. When we come to analyse the first three months we find the mortality is greatest in the first month, when over one-third of all the deaths of the year occur. When the deaths in the first few weeks of life are analysed, they fall roughly into three portions, nearly one-third occurring on the first day, another one-third in the remaining days of the first week and a little over one-third in the remaining three weeks. Thus the early mortality is largely an obstetric problem.

The chief causes of death are immaturity, errors in development incompatible with life, maternal disease (especially toxic and renal diseases) and birth injury. The causes of later deaths are immaturity again (for these children sometimes live for a time), diarrhoea and vomiting, and diseases of the respiratory system.

DIMINUTION OF DIARRHOEA AND VOMITING

A great diminution in these cases occurred quite suddenly some time before the War. This may have been due to the work of health visitors and infant welfare centres, or to causes which we do not know, but mostly the latter. I remember that at St. Thomas's Hospital we used to make special arrangements

* Notes of a lecture given some months ago by Dr. J. S. Fairbairn at Carnegie House, 117, Piccadilly, London, W. I.

to cope with the cases of diarrhoea and vomiting, but suddenly these became quite unnecessary. Why was this? Many people said that the increase in motor traffic and the decrease in the use of horses diminished the risk of infection carried by flies. Diseases come and go in an unaccountable way, as any history of disease will tell us—psittacosis, for instance, has turned up again, but that form of anaemia known as chlorosis, which used to be so common in young girls, is now very rare. Diarrhoea and vomiting, and in a lesser degree respiratory diseases, and the deaths they caused, have been reduced in infancy.

Our aim, as in obstetrics, must be to maintain development on lines as nearly physiological as possible. I think the most important thing of all is to reform bottle-feeding. We make a great error by instituting artificial feeding, for our first aim should be to encourage the natural and normal method. I have told you how a child thrives when it is breast-fed, especially in the country and in the fresh air, as shown by the mortality rate. The death-rate rises when the textile worker gives the child the bottle and puts it out to be nursed. We must keep to the physiological, and try to avoid infections of the digestive or the respiratory tract.

We have found that the child is always much better fed on mother's milk, even if this is of poor quality. Mothers often complain that their milk is poor, but they do not realise that the fat globules are much smaller and the curdy matter less in human milk than in cow's milk. The all important stimulus to breast activity is good suction by the infant; difficulty will arise if the infant is feeble. The breast is a wonderful organ and responds to stimulus; the milk varies very little in composition, but its amount increases with the child's needs, and the breast goes on producing more and more milk as the infant grows older. A great point to remember is that the breast should be completely emptied, so that when a child's suction is poor one must make sure that the breasts are thoroughly drained by expression afterwards. Diet is a subject about which the mother thinks more than anything else. She should be instructed to take plenty of fluid and a good mixed diet, the plainer the better. A wet-nurse was often employed in the old days to feed the delicate heir to the earldom; the wet-nurse was well cared for and often over-fed, and her milk soon went, but on her return to the simple diet of her own home the milk returned and she was able to feed her own baby. With our knowledge of vitamins we know that the mother requires fresh green food; she must also have dental treatment when necessary, and care must be given to the bowels, as absorption from the bowels may be harmful in breast-feeding.

The psychological attitude of the mother is important. A mother may not wish to feed her infant if she has not been taught in an ante-natal clinic; in the richer home, too, the husband sometimes objects to the mother feeding the child. Health visitors and child welfare workers should endeavour to interest mothers in breast-feeding. Difficulty will arise when the mother wishes to go out to work. All points of view should be considered and the mother helped as much as possible. One might explain tactfully how much less trouble breast-feeding can be, especially when there is difficulty in keeping

bought milk or the weather is hot and thundery. I explain to the more educated mothers that though it is easy to modify milk and make it correspond to human milk, there are certain protective qualities in human milk, and I find that the idea that the child will acquire immunity from the mother appeals to them.

Feeding should be started very gradually, for it is a great change to a baby after uterine life. All the child needs for the first three days is the few drachms of colostrum it may get from the breast. It should have boiled and sweetened water only if thirsty. Do not give a purge to expel the meconium, for this probably protects the bowel and the purge may only excite irregular action. Peristalsis can be promoted by sucking. Then, again, the child may easily become infected after birth, although it is rare for it to be infected during uterine life. Every care must be taken to protect the eyes. We have done much to banish damage to the eyes, but it should not be forgotten that one-third of the cases in a blind asylum are infected at birth. The care of the cord is most important. Pemphigus neonatorum is a disease which we must guard against; it is apt to occur in a house where the children are suffering from sores. There is a very high mortality from this disease, and folds of skin and any abrasions must be carefully looked after.

Baby clinics have their dangers; their sphere should be confined to well babies, whereas mothers often take their sick babies for advice. The dummy is to be avoided for two reasons; first, it may convey infection to the intestinal tract, and secondly, it may deform the palate. It is a bad habit, although we have every sympathy with the mother who wishes to keep her child quiet. In the clinics it is our endeavour to see that the child develops on normal lines.

Do not be over-anxious about the child's gaining weight, but let the increase be normal. If it is too rapid the child is probably having just as much food as it can manage, and a point will soon be reached when it cannot digest it. If, however, the child is consistently not gaining, advice must be sought. Paleness or attacks of pallor must be watched for and any blueness noted; do not force a child who exhibits these symptoms; if it is eating and sleeping normally there is no need to worry, but beware of rapid breathing and a quick movement of the nostrils. The first and last word in the care of an infant is to keep it as near the average line as possible.

A Nurse's Prayer

Guide Thou my hands, that e'en their touch may prove
The gentleness and aptness born of love.
Bless Thou my feet, and while they softly tread
May faces smile on many a sufferer's bed.
Touch Thou my lips, guide Thou my tongue,
Give me a word in season for each one.
Clothe me with patient strength all tasks to bear,
Crown me with hope and love which know no fear.

STUDENT NURSES' ASSOCIATION SECTION

The following units have so far joined this Association. We are sure there are other Hospitals where units can be formed. All enquiries may be made of the S. N. A. Secretary.

1. Government General Hospital Unit, Madras. ...	60 members
2. Presidency General Hospital Unit, Calcutta ...	46 "
3. Rainy Hospital Unit, Madras ...	22 "
4. K. E. M. Hospital Unit, Bombay ...	54 "
5. Women's Medical School Hospital Unit, Vellore ...	28 "

To our fellow-members of the Student Nurses' Association,

We, the student-nurses of the Women's Medical School Hospital, have formed a unit of the students' branch of the T. N. A.I. in our school.

So far we have only had two meetings, the first was a business meeting, when we chose our Committee, which consists of Sister, two Senior nurses, one Junior, and one first year nurse. At the end of six months we are going to re-elect our Committee, so that we all get a chance to represent our class.

We decided to have a monthly meeting, and the junior class were to get up an entertainment for the next meeting. After the business meeting we had a social on the roof of our Children's Ward to which we invited the Graduate Nurses and the compounders. This was at the end of January.

In February we had a Committee meeting to which we asked two staff nurses to come. This was because we wanted to have a joint social with them, to say good-bye to two of our Doctors, and our Chemistry Professor who were going on furlough. We made all arrangements for March 25th, and reminded the Juniors that they must get on with their preparations for the entertainment.

We held the farewell meeting, at 8-30 p.m. on the badminton court. The Chairman was Staff Nurse Martha. First of all, two of the Junior Nurses sang us a duet. Then several of them gave a guide entertainment. Next came a station scene, which was very good and made everybody laugh. Then they had an elephant circus and the elephants were Juniors under bathing blankets! we were all excited and enjoyed it very much. After the entertainment was over, we had our refreshments. Then we all sat together in the bright and beautiful moon-light and we began our farewell meeting.

We sang a Hymn, (God will take care of you), then one of the Staff Nurses read the farewell address and we garlanded the two Doctors and the Chemistry Professor. Afterwards each of them made a short and sweet speech and the meeting was closed with prayer.

Hoping that some of you will write and tell us about your meetings.

We are,

Your fellow-students of the

Vellore Medical School Hospital,

EVA MANIKAM, *Secretary.*

The Vellore Unit is to be heartily congratulated on its initial effort and especially in forwarding the proceedings of meetings for publication. When are other units responding to the invitation of Vellore to "tell us all about your meetings"?

L. NINA JEANS, S.R.N.,

Organising Secretary.

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