

MALNUTRITION IN INFANTS AND YOUNG CHILDREN

One of the most alarming problems in the practice of medicine is the fact that there are such a great number of treatable and preventable conditions which remain outside the scope of effective therapy because of the unsatisfactory social and economic background of these problems.

One striking example of a condition of this nature is the problem of malnutrition in children. As is evident from reports which have been published in the medical press, it becomes increasingly clear that there are many thousands of infants and young children in South Africa today who are doomed to defective mental and physical development purely because they are receiving insufficient nourishing food.

Many children die from frank nutritional disorders such as marasmus, kwashiorkor, or rickets, and many from gastro-enteritis and pneumonia, which should not be fatal (particularly in the 1-4 years age group), but which are the cause of thousands of non-European deaths in childhood below the age of 5 years. It is a point of great significance that, while the infantile mortality rate among non-European infants is 4-6 times the rate among European infants, the death rate in the age group 1-4 among the Coloured population is 15 times, and among the Bantu, 30 times as great as the European death rate at this age. A large proportion of these deaths is caused by the conditions mentioned earlier. The basic reason for this distressing fact lies in lack of essential foodstuffs, particularly protein, in the daily diet of these children.

Recently, Robertson and her colleagues<sup>1</sup> pointed out, from the available figures, what an enormous loss of infant life there is in this country from gastro-enteritis, and they produced evidence to show that a very large proportion of this is caused by malnutrition.

Another revealing article was published by Moodie.<sup>2</sup> She studied the background of 150 hospitalized children with severe kwashiorkor, using the patients' siblings as controls. Her studies indicate that this disease tends to occur among child populations that show widespread evidence of growth retardation.

She also pointed out that one of the features that differentiates kwashiorkor, as it occurs in Cape Town, from the syndrome as it occurs in most communities in Africa, seems to be the earlier introduction of artificial feeding with its hazards of infection and overdilution. This is the case with both Cape Coloured and African mothers who, in this respect, resemble the Indian and Negro mothers in Trinidad.

Other pertinent findings noted by Moodie are dietary deficiency associated with poverty, ignorance, prevalence of infection, and a general state of poor housing and social disorganization among unskilled labourers in an area of rapid industrial development.

In yet another recent article, which was published in this *Journal*,<sup>3</sup> Snyman and Murray describe their findings in a study of 964 non-European children who were seen in the outpatient and casualty departments of the Karl Bremer Hospital, Bellville, Cape Town, during May 1960.

It was found that at least 28.3% of these infants received either no milk or less than 1 pint per day. Between the ages of 1 and 2 years, 66% received either no milk or less than 1 pint per day. Of those children between the ages of 6 months and 12 years, only 10.9% were of 'text-book' average normal weight or heavier; 48% were down to 24.9% below this average normal weight; and 41.1% were 25% below or worse. An analysis of the diagnoses confirmed the extremely poor state of nutrition of these patients. Kwashiorkor or nutritional marasmus was present in 8.4%, and 48.4% had some condition usually associated with malnutrition or undernutrition, e.g. rickets, tuberculosis, gastro-enteritis, or bronchopneumonia.

These findings assume even more shocking proportions if we view them against the background of the work done by Scrimshaw and Béhar,<sup>4</sup> who have recently pointed out that for every case of kwashiorkor in a population group, there are at least a hundred cases of underlying protein malnutrition—sometimes referred to as pre-kwashiorkor. These cases can best be recognized by the fact that their weight is below that expected for their age.

A great deal can be done to prevent this saddening and deplorable state of affairs. A step in the right direction would be to make available inexpensive milk and other sources of protein for pre-school children. But here, as elsewhere, we cannot disregard the factors of education and guidance. Moodie,<sup>2</sup> to whose work we have already referred, draws attention to a disturbing aspect of this problem, i.e. that so large a part of the Coloured population does not attend clinics. There is an understandable tendency to consider that the mothers are too idle to do so, but this makes no allowance for such factors as the distance from clinics, the time required to be absent from the home and other children, the failure to understand why a 'well' child should go to a clinic, the inability to pay for milk, the fear of reproof if money is not forthcoming, and the apathy engendered by prolonged poor nutrition, fatigue, slum living, ignorance, and limited intellectual ability. All these factors need to be studied thoroughly.

The whole problem of malnutrition in infants and young children will have to be approached with an open mind and with reference to all its medical and social implications. This approach, if successfully carried out, will diminish the necessity for expensive new hospitals, since many of the sick and undernourished children should

never have been allowed to deteriorate to a condition requiring prolonged hospitalization. The health structure of a community is as satisfactory or unsatisfactory as the foundations on which it rests. The care of the health of the children of all sections of the community is a social and moral responsibility which we dare not evade. This

problem can only be solved on the basis of purposeful and imaginative planning.

1. Robertson, I., Hansen, J. D. L. and Moodie, A. (1960): *S. Afr. Med. J.*, **34**, 338.
2. Moodie, A. (1961): *J. Pediatr.*, **58**, 392.
3. Snyman, J. D. and Murray, A. B. (1961): *S. Afr. Med. J.*, **35**, 595.
4. Scrimshaw, N. S. and Behar, M. (1959): *Fed. Proc.*, **18**, 82.

## NARKOTISEUR EN / OF GENEESHEER

Gedurende die afgelope vyf-en-twintig jaar het anesthesiologie as 'n spesialiteitsfeer van krag tot krag ontwikkel sodat dit vandag 'n eerbare plek vul in die bolwerk van die mediese praktyk. Die eer vir hierdie uittoeg uit 'n voormalige woestyn is hoofsaaklik te danke aan 'n handjievol alombekende vakmense in die Britse en Amerikaanse narkosepraktyk. Hulle konserwatiewe en weldeurdagte leiding behels nog steeds die kern van ontwikkeling en bied 'n gesonde lees waarop die toekoms van hierdie jong spesialiteit geskoei kan word. Belangrik is dit om daarop te let dat hierdie baanbrekers in die eerste plek geskoolde klinici in die praktyk van die interne medisyne is.

Dit is tot 'n mate te betreur dat tegniese aspekte voortdurend benadruk word wanneer die ontwikkelingsgang van die narkosepraktyk in oënskou geneem word. Tegniese vaardigheid is geensins die enigste kenmerk van 'n goeie narkotiseur nie, net so min as wat bloot operatiewe vaardigheid alleen 'n uitmuntende chirurg kenmerk. Hunter<sup>1</sup> het reeds tien jaar gelede voorspel dat die tyd sal aanbreek wanneer die status van die narkotiseur beoordeel sal word op grond van die kwaliteit van sy kliniese insig in teenstelling met bloot tegniese vaardigheid.

Nog meer betreurenswaardig is dit dat so min, indien enige, pasiënte die narkotiseur as 'n integrale deel van die sukses van hulle chirurgiese ondervinding beskou. Die pasiënt se verhouding tot sy narkotiseur is in die reël die mees onpersoonlike aspek van sy verblyf in die hospitaal.<sup>2</sup> Heel uitsonderlik gebeur dit dat die ideale vereiste van ons primêre doelwit, naamlik 'n kerngesonde geneesheer-pasiënt verwantskap, vervul word.

Om hierdie ideale verwantskap aan te knoop sal in die toekoms 'n opdraende taak wees, want tot ons leed word die omvang van narkosepraktyk op die huidige tydstip nog grootliks net met die operasiekamer vereenselwig. Die

vrugbare kliniese veld van die pre- en postoperatiewe periode lê braak en word al te dikwels stiefmoederlik benut. Vry algemeen nog vind die eerste kennismaking tussen pasiënt en narkotiseur in die operasiekamer plaas en eindig wanneer die tegniese fase van die chirurgiese ingreep voltooi is; moontlik nog voor die pasiënt volle bewussyn herwin het.

Die huidige ontwikkelingsrigting met betrekking tot vereistes vir spesialisasie toon 'n neiging om steeds meer en meer die kwalifikasie van ondervinding in die algemene praktyk op die agtergrond te skuif. Die gevaar bestaan dus dat 'n geslag narkotiseurs ontluk wat geen, of uiters geringe, kontak het met die probleme van mediese praktyk in sy breedste vorm, en wat volgens die huidige aard van hulle spesialiteitspraktyk weinig geleentheid het vir die ideale persoonlike kontak met hulle pasiënte; of die vrugbare geleentheid wat wel bestaan nie genoegsaam benut nie.

Die wind van verandering waai deesdae om elke hoek, en as die narkotiseur nie bloot as vaardige farmaseutiese tegnikus oor die bewustelose individu wil uitwarrel nie, behoort hy opnuut die geleentheid te soek om terug te keer tot 'n verhouding met sy pasiënte wat in die eerste plek dié van geneesheer in die breedste sin van die woord is. Die benamings goeie geneesheer en vaardige spesialiteit is nie noodwendig sinoniem nie. In hierdie opsig rus daar 'n swaar verantwoordelikheid op die skouers van diegene wat gemoeid is met die onderrig van aspirant narkotiseurs om te verhoed dat die pasiënt as mens met alledaagse drange, gevoelens, en bekommernisse nie in die doolhof van tegniek en statistiese gegewens verlore raak nie.

1. Hunter, A. R. (1952): *Anesthesiology*, **13**, 108.
2. Karp, M. (1957): *Curr. Res. Anesth.*, **36**, 36.