

## MALNUTRITION: FACT OR FICTION?

In South Africa one side states that it is rife and produces sensational pictures and facts to prove it. Fiction, and the other side strongly denies its existence and quotes its statistics ad lib.

During 1970 Professor John Reid, head of the department of physiology at the University of Natal, addressed one of our general meetings. His subject, on which he is an authority, was the causes of malnutrition and its effect on the mind and body. This is not a new topic but it is a very real one. The inevitable question was asked: what can we do?

The Natal Coastal Region felt that something could be done and it set about interesting hospitals in its project. In April 1971 the first meeting of the Malnutrition Study Group took place. Three hospitals had been approached and were enthusiastic about the idea; they are in Zululand, the Transkei and the urban area of Durban, and this enables us to obtain both an urban and a rural picture of malnutrition. The Black Sash had three members present as the Region had undertaken to classify, analyse and publish the information obtained.

At this meeting the purpose of being together was discussed and it was planned to give the general public simple, honest and unemotional facts about the socio-medico reasons for malnutrition. The idea was to publish in the press facts and figures highlighting the incidence of malnutrition in these areas each month. The object was to arouse public interest and concern and perhaps to stir a conscience or two. This information was also to be made available to local authorities and to the Department of Health.

Is this possible when facts and emotions are so closely interwoven in the human race. If the Black Sash was to produce facts that would be acceptable to politicians, church leaders and the Department of Health, then we would have to study the ways and means of collecting the facts.

Where is malnutrition? In the cities, in the rural areas, in the Homelands, all over South Africa - or just in an isolated pocket? Questions ... questions ... but what about the answers?

There is no point in duplicating or producing facts that would be subject to the same criticisms as previous studies. With only a medical opinion one would then really question if malnutrition was fact or fiction. It is well known that a hospital would be the first to diagnose it or indeed any other disease. But does malnutrition leave permanent damage? Professor Smythe, head of paediatrics at the University of Natal, says that the brain cells are permanently damaged if a child under the age of two suffers serious malnutrition.

Another object of our programme was to establish the sociological background of the patient. We all know the sorry tale of migrant labour, unemployment and low wages. Can we relate these factors to a medical case history? It is important to do so because of the heavy cost of hospitalising a case - and then to return the patient to the identical environment. But in a busy hospital it is not always possible to follow each case closely and obtain these facts.

We wrote to the department of sociology and to the Institute for Social Research at the University for suggestions. We met with not only suggestions but also with a desire to become involved, and so we compiled a questionnaire to embrace the home and economic background. At our final meeting in September 1971 we decided to computerise the information. Then the three hospitals kindly agreed to handle the questionnaire during normal routine.

The original idea of obtaining information from birth to eighteen years was far too broad a span to be of true value, and so we split into three groups:

Birth to 5 years  
5 years to 12 years  
12 years to 18 years

Doctors and sociologists agreed that specific types of malnutrition would become evident in the different age groups.

Our region decided to start the survey with the first group. If the conference wanted, then other regions could proceed with the next age groups. If this were to happen then the whole country would have been surveyed without duplication. How easy it would be to say that malnutrition is only in Natal. It would be a different story if the picture was shown to be in all provinces.

4,800 forms have been completed and processed for 1972. But it is important to conduct the survey over a two-year period and the 1973 results will be available for comparison early in 1974. It is highly unlikely for an identical situation to occur in the same months of two years. Also the computer shows very clearly your crisis months: the summer months obviously the enteric outbreaks, whilst the winter would be the respiratory infections. Could it be that malnutritional symptoms were present in these patients to give a higher mortality in black babies than white babies?

At present our results are only for the rural areas in Natal, but money to support the families is earned mainly in the towns. It is not the intention in this paper to comment on migratory labour - the facts and figures speak for themselves. The average breadwinner of any colour cannot support himself and a distant family adequately under these conditions. I challenge anyone to deny this.

At this point let us study the forms in front of you. You have a Boston percentile chart, a coding guide and the malnutrition form. I will try and explain all of these to you.

Every baby had a malnutrition form completed on arrival at the hospital. No case was duplicated because the hospital record would note the completion. With ante-natal, post-natal and well baby clinics there was plenty of opportunity to get the information we required.

These are now our thoughts: wages or ignorance? With the income coming from the towns and very little at that, and ignorance in the rural areas, the situation appears hopeless. The breadwinner wants at least to have the opportunity to rear and educate his family. Is this a privilege for only a section of our population? Are we really concerned with this situation and are our thoughts geared to eliminate some if not all of these problems?

The Boston percentile - what is it? The Harvard School of Public Health drew up scales of growth for white children in normal environments to show what the weight and height under normal conditions should be up to the age of eighteen years. The World Health Organisation accepted these figures as a guide to the growth patterns in other countries.

At the South African nutrition conference in September 1972 the Department of Health agreed that there is an alarming increase of malnutrition. In fact 25 percent of our children are below the third percentile on the Boston scale. The number of the percentile indicates the position which the measurement would hold in a typical series of one hundred - that is the tenth percentile gives the value for the tenth child in a group of one hundred. Then nine will be smaller and ninety will be larger. And so any child below this third percentile would be regarded as being retarded in growth through

sickness or malnutrition. I wonder if these figures have increased or decreased in South Africa.

What has emerged is that of the 4,800 forms processed children fall into this category of being below the third percentile.

### Wages

This is a truly pitiful situation. How can a family be supported by anyone, however educated, on these amounts. Study this point carefully as it is not the salary received by the breadwinner but the amount he sends home to support his family. This question was phrased like this purposely. One could not get very accurate data if it were salary earned instead of cash received.

Let me give you some examples.

Case no. 4434 is a three year old girl weighing 11,2 Kg and 89 cm tall. Her diagnosis was pellagra and low weight for age. Pellagra we know is a deficiency disease. The sociological picture is that there is R4 a month coming into the home to support 2 adults and 7 children.

Case no. 4426 is a 2 years 4 months old girl weighing 5,75 Kg, 72 cm tall. Look at your chart and the result is startling. The breadwinner is a builder in Durban and he sends home R5 per month to support 3 adults and 16 children.

Case no. 4453 is a breast-fed boy of three months weighing 6,5 Kg. He attended the well baby clinic and is doing very well at present. Look now at his background. His father is a night watchman in Germiston sending home R5 per month. This is meant to support 6 adults and 9 children. It is not difficult to imagine the future for this infant.

Case no. 4443 is a three year old girl weighing 10,7 Kg and 94 cm tall. She is reared by her grandfather who has to support 7 adults and 7 children on R6 per month. All that the family has ever eaten is mealie meal.

How are we going to solve the problem whilst gross ignorance is very obvious and so is extreme poverty. You might say: quite simple - education and higher salaries. Is it that simple though? I would not even hazard a guess, but would like to say that the sooner every single person is aware of these facts, attempts to find solutions must be made, or our problems will really increase.

This is not a political issue but a very real human one. The cost of a litre of milk at 20 cents is preferable to hospitalisation at about R2,50 a day. Yet how can this even out when the cash received in the home doesn't allow this, and yet the State is forced into the heavy expense of hospitalisation. What a crazy setup!

Let me now explain the computer programme. This is the stage that necessitates accuracy all the time. If the forms are not completed correctly or the code number does not correspond with the question, the computer will reject the information. I have simplified the process in my paper because no purpose would be served by too much detail at this stage. But if the regions do decide to follow up on this survey the computer department would be much better at filling in the details.

With these results in front of us, malnutrition must indeed be regarded as a fact. I hope that when the survey is completed in 1974, the ripples of concern will really spread. If we have data that can be examined and scrutinised dispassionately, this must surely be a sound foundation on which to build.

I hope that these facts will stand sufficiently on their own to warrant the concern of commerce and industry, State health and the churches. If they do, then it is only a matter of time before we see a picture of decreasing malnutrition and of increasing productivity.

Doreen Patrick

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