



SEMINAR ON NUTRITIONAL PROBLEMS  
IN THE WEANING PERIOD

Addis Ababa, 3-15 March 1969

EM/SEM.NUTR.PROB.WEAN.PRD./OC15  
26 February 1969

ENGLISH ONLY

NUTRITION AND WEANING IN IRAQ

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# NUTRITION AND WEANING IN IRAQ

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## Introduction:

Recently, the importance of the first years of life is being recognised, not only because the pre-school age constitutes an important section of the population in developing countries, but also because of its decisive effect on the individual's future physical, mental and social finalization. Yet this age group is the most neglected, though it is <sup>the</sup> most vulnerable age group. It is in the preschool child that most of the cases of severe malnutrition are found (Trowell & Davies 1952)<sup>1</sup>, "Hidden Hunger" or milder forms of malnutrition is prevalent in them as indicated by a retarded physical (and mental) development in the developing countries. Mortality rate in the age group of 1-4 years reflects the striking difference between the more and the less developed countries, (William, 1966)<sup>2</sup>. This puts a big responsibility on the shoulders of planners in the developing countries to revise their programmes and give the priority in health services and nutrition programmes to the pre-school child.

## Malnutrition in the pre-school age in Iraq.

Some workers believe that "Seventy per cent of toddlers in developing countries are usually estimated to be malnourished"<sup>3</sup>. In Iraq, a country-wide nutritional survey is not yet made therefore the real incidence of malnutrition is not known, although undernutrition is an outstanding feature in paediatric practice. Figures taken from the hospital records of the Children's Welfare Hospital in Baghdad for three successive years reveal a rather high incidence of protein-Calorie malnutrition among hospital attendants, (Zaki, 1968)<sup>4</sup>. Table I shows these figures which represent only severe cases who attend the hospital seeking treatment for the malnutrition itself. This leaves out a significant number of cases who are classified under other

heading , usually the associated infections. An incidence of 4.5% of the outpatient and up to 10% of the inpatients

Table I.\* Prevalence of protein-Calorie Malnutrition among the attendants of the children's Welfare Hospital in Baghdad  
( Marasmus and Kwashiorkor are classified together)

	Year	Total Number	P- C.M.	
			No.	%
Out-patients	1962	505277	22139	4.4
	1963	511232	23588	4.6
	1964	501141	23323	4.6
In-Patients	1962	5591	612	10.9
	1963	6861	799	11.6
	1964	8308	814	9.6

\* From Zaki, L.A. (1968), Kwashiorkor in Iraq.

and up to 10% of the inpatients is considered to indicate a rather high prevalence in the community. Gunelle and Demarche (1953)<sup>5</sup>, taking the mean weight of Iraqi Children attending two clinics in Baghdad in the age group of 1-18 months and comparing them with the mean weight of children in Europe found that up to two months of age, the Baghdad baby has the same weight as the European baby. A lag was found to begin from the 3rd month so that by the 7th month a difference of 400 gm. is found between the two mean weights. At the 9th month the difference was found to be 950 and at 12 months the Baghdad baby was 1410 gm. less than the European weight for the same age. This progressive retardation in the growth of young children receiving poor environmental care is also emphasised by various authors (Jackson 1966)<sup>6</sup>. Demarche et al (1965)<sup>7</sup>, examining attendants of three MCH Centres in Baghdad of the pre-school age found a rather low incidence of frank kwashiorkor (3 cases out of

2501) , but in the age group of 1-18 months a progressive weight deficit ranging between 10-40%, as compared to Glan-zman's average weight for various ages, was discovered. Babies who were breast-fed had a higher mean weight than those who were on artificial feeding during the first 6 months of life. This deficit in weight was seen to become more marked in the age group above 6 months, ( Table II), when muscle growth should accelerate, but the mother's milk is no longer enough. This is the age when under prevailed

Table II. Percent distribution of normal weight & weight deficit in children of 1-18 months attending 3 MCH Centres in Baghdad

Age in Months	Total Number	Normal	Weight deficit		
			10-24%	25-40%	More than 40 %
1 - 6	790	50.6	32.8	14.0	2.5
7 -12	595	39.6	35.2	21.5	3.4
13-18	426	31.0	40.8	25.7	3.5

\* Adopted from Demarche et al, 1965.

age when under prevailed children all over the world begin to develop varying degrees of protein-calorie malnutrition. ~~the~~ basic cause for this progressive undernutrition in Iraq is a complex one. Maternal nutrition and the influence of prenatal nutrition on the infant is one factor, Weaning a child from the breast to a starchy diet low in protein content- not only because of poverty, but also because of ignorance in the principles of infant feeding - is another. Early weaning of babies and replacing the well-balanced clean breast milk by inadequate and unclean artificial feeding ~~is a~~ dangerous modern tendency in the low-income class of towns ~~as~~ in imitation of the upper classes is another. The additional stress of infection to which these children are exposed at an early age is an important contributory factor. Most important than all infections are the diarrhoeal diseases.

The "diarrhoea- malnutrition circle" is a characteristic epidemiological pattern and bacterial agents that readily cause diarrhoea in the under-nourished child are often recovered from the stools of the well nourished ones without causing clinical diarrhoea (skrimshaw, 1966)<sup>2</sup>. In Iraq, diarrhoeal diseases as an important causes of infant death is generally recognised. Figures taken from the Directorate of Statistics of the Ministry of Health, (table III), reveal that amongst the registered deaths infections in

Table III, Registered total Death and death from Infection in the pre-school age in Iraq.

Year	Children under 1 year							Children 1-4 years						
	Total	Diarrhoea		Infections		Other Causes		Total	Diarrhoea		Infections		Other Causes	
		No.	%	No.	%	No.	%		No.	%	No.	%	No.	%
1963	2971	1597	54	956	32	418	14	1915	291	15	522	27	1102	5
1964	3079	1346	44	892	29	841	27	2446	392	16	850	35	1204	4
1965	2950	1028	35	817	28	1105	37	2172	368	17	742	34	1062	4
1966	2665	990	37	923	35	752	28	2166	374	17	911	42	881	4

infections in general, and diarrhoea in particular play a major role. This could be taken as another indirect indication of the wide spread state of malnutrition in Iraq.

The real rate of infant mortality in Iraq is not known mainly because of under-reporting. It is estimated at about 100-150 per thousand during the first year of life. The figures are probably lower in areas where a clean water supply and other health and medical services are available.

#### Dietary and weaning patterns.

In general infant feeding in the low-income class conform with the traditional custom of prolonged breast feeding given on demand

on demand during the day and night. Demarche et al (1965) in the work referred to above found that amongst children in age group of 1-6 months, 92 % were on the breast and 29.8 of these received addition milk in any form.

at 7-12 months, 78% were on the breast and 55% received addition milk.

at 13-18 Months, 60% " " " " " 47% " "

milk.

2 Years, 17% were on the breast and } 53.3% of them received  
3 Years 12% " " " " " }  
addition milk.

Solids , mainly rice or biscuits, were given to 16.2 % of children of the 1 - 6 / <sup>months</sup> . After 12 months solids appeared to increase gradually but again mainly in the form of carbohydrates. Eggs (35%) and meat (13%) also appeared in the age group of 13-18 months old.

Our own impression from an unfinished study on the food patterns of infants is that bottle feeding and early weaning are gaining popularity among the low-income class, at least in the town of Baghdad . This is a rather dangerous state since the feeds given are usually excessively diluted and unclean . Additional food during the first 6 months of life is scarcely given except to those who attend MCH Centres, those receive free skimmed, powdered milk and Vitamin A & D preparations. Sugar water and concoctions of various " Carminatives " such as aniseed , anithum, anchusa, curmonis etc.. are extremely popular and are given even on the first day of life. Rice water is another popular food for babies especially when they get diarrhoea, when solids are added, they are mainly starchy items such as rice soup mashed rice or wheat bread (or biscuit) dipped in tea. A form of gruel made of rice flour with sugar and milk diluted with water is another popular preparation. Yogurt or curdled milk is also used as it is believed to prevent or cure diarrhoea. An interesting preparation used by the

old-fashioned class, specially those who come from the villagers of the north of Iraq is composed of equal amounts of hazelnuts and sugar (sometimes with some cardamon). These are powdered together, about a table spoonful is wrapped and tied in a handkerchief of thin cotton, dipped in water and given to the child to suck at while the mother is busy with house work.

#### MCH Centres in Iraq:

Though insufficient in number the MCH Centres in Iraq are well developed and have a good recording and registration system. They are very popular and always overcrowded. They combine prenatal care, well-baby clinic services and immunization with outpatient treatment of sick children. While the principle of "the same paediatrician looking after the child in health and during illness" is a sound one, the big number of patients will inevitably result in relative sacrifice of the preventive side of child health for the benefit of the more urgent curative side. It is felt that there is need to remind nurses, health visitors and even paediatricians in MCH Centres that most of the diseases they are treating are preventable. To spend more time on health education regarding the principles of infant feeding, weaning practices and food hygiene is essential. This, combined with a good scheme of immunization against prevalent diseases will certainly pay by diminishing attendance on the sick side.

There are 3 bodies in Iraq interested in MCH services as shown in Table IV. They are the Ministry of Health, the Ministry of Labour and Social Affairs and the Children Welfare Society which is a voluntary organization. All of them are under the

(7)

Table IV. Number of MCH Centres and their attendants in Iraq:

	No. of Centres	No. of Families	No. of Children 0-6 years	Home Visits to Children
	_____	_____	_____	_____
Ministry of Health	101	30,000	120,570	35901
Children's Welfare Society	15	?	161,512*	-
Ministry of Labour & Social Affairs.	9	?	11,591*	-

\* Number of attendances and not individual children .

coordinated supervision of the Director of MCH in the Ministry of Health who also qualifies them for UNICEF aid. With some reorganization these Centres could be used as Centre for Nutritional education and they could probably be an important tool in the War against malnutrition.



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