

U N E S C O

INTERNATIONAL CHILDREN'S  
CENTRE

THE CHILD FROM BIRTH TO 6 YEARS OLD

better understanding for better child-rearing

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## FOREWORD

In accordance with the programme of activities approved by the General Conference at its eighteenth session, Unesco was assigned the task of paying special attention "to organization of education for age groups at the pre-school and school stages... and the establishment of complete, flexible and diversified structures combining the features of formal and non-formal education so that they interact with each other".

The present study of the child from birth to the age of 6 years falls within this context. Prepared by the International Children's Centre at the request of Unesco, this document is intended to disseminate basic data concerning the physical, psychological and social development of the young child, and to set forth essential facts, knowledge of which will help educational staff and parents to assume jointly their responsibilities to the child.

It should be noted that though this study was prepared at the request of Unesco, the facts and opinions it contains are the sole responsibility of the International Children's Centre.

THE CHILD AND HIS DEVELOPMENT FROM BIRTH TO 6 YEARS OLD:  
BETTER UNDERSTANDING FOR BETTER CHILD-REARING

CONTENTS

	<u>Page</u>
INTRODUCTION . . . . .	5
1. THE FIRST YEARS OF LIFE. . . . .	7
1.1 The pre-school child . . . . .	7
1.2 What happens between birth and the age of 6 . . . . .	7
1.2.1 The growing child. . . . .	8
Weight	
Height	
Weight and height curves	
Cranial circumference	
Dentition	
1.2.2 The child learns to know himself, the people around him, and his environment . . . . .	10
(a) The importance of the first years . . . . .	10
(b) General characteristics of development. . . . .	10
(c) The major stages of development . . . . .	11
The infant from 1 month to 2 years . . . . .	11
The evolution of posture	
Sensory development	
Communication	
Physical contact	
Gestures	
Facial expression	
Speech	
Affective development	
The child from 2 to 6 years. . . . .	14
Perfecting of previous acquisitions	
Motor activity	
Orientation in space and time	
Toilet training	
Speech	
Affectivity	
Socialization	
Development of thought and moral sense in the child	

	<u>Page</u>
1.2.3 The child's growth and development depend on his living conditions . . . . .	18
(a) Feeding and nutrition . . . . .	18
Nutritional needs	
Calorie requirements: proteins, glucides, fats	
Water requirements	
The mother's milk	
Weaning	
Social aspects of feeding	
'b) The sanitary conditions of the surroundings. . . . .	20
Physical environment	
Insalubrity	
Contagious diseases	
(c) Affective ambience . . . . .	21
(d) Play . . . . .	22
Conclusion . . . . .	23
2. THE CHILD IN THE COURSE OF DEVELOPMENT. . . . .	24
2.1 Some reference points . . . . .	24
From birth to 3 years. . . . .	24
From birth to 3 months	
From 3 to 6 months	
From 6 to 9 months	
From 9 to 12 months	
From 12 to 18 months	
From 18 to 24 months	
From 2 to 3 years	
From 3 to 6 years. . . . .	27
From 3 to 4 years	
From 4 to 5 years	
From 5 to 6 years	
2.2 Obstacles on the way. . . . .	28
2.2.1 Malnutrition and psychological and social development . . . . .	28
2.2.2 Accidents . . . . .	29
2.2.3 Retarded psychological development. . . . .	30
2.2.4 Minor behavioural disorders . . . . .	30
2.2.5 The child of the socially underprivileged family. . . . .	31
2.2.6 Children from one-parent families or broken families. . . . .	31

	<u>Page</u>
3. HELPING THE HARMONIOUS DEVELOPMENT OF THE CHILD (Recommendations) . . . . .	32
3.1 Introductory remarks. . . . .	32
Consideration for the parents and family	
Consideration for traditions and customs	
Consideration for the child	
Receptiveness	
Top priority for child-parent relationships	
3.2 Helping to improve the child's physical health. . . . .	33
Physical development	
Nourishment	
Prevention of transmissible diseases	
Detection of handicaps	
Prevention of accidents	
3.3 Helping the child's mental and social development . . . . .	37
Physical contact and dialogue between adult and child	
Psychomotor and sensory stimulation	
Play	
3.4 Some examples of programmes for young children. . . . .	41
(a) Some institutionalized systems . . . . .	41
Participation of parents . . . . .	42
Parents in their role as educators of their own children:	
In Great Britain	
In Colombia	
Parents (or certain other members of the community) in the role of paid assistants:	
In Cameroon	
In Senegal	
Parents in the role of counsellors and decision-makers at the kindergarten level:	
In Italy	
(b) Some trends and programmes in different countries . . . . .	45
El Salvador	
France	
Hungary	
India	
CONCLUSION . . . . .	50
ANNEX: Extracts from the Working Document of the Meeting on Pre-School Education as the First Phase of Lifelong Education, organized by Unesco in Paris, 5-9 January 1976. . . . .	
BIBLIOGRAPHY. . . . .	

## INTRODUCTION

Research undertaken in recent years in the field of the general development of the child has shown the importance of the first 6 years of life and the capital and predominant role they play in the child's future.

Children under 6 years old account for a non-negligible share of the population: between 10% and 20%, depending on the country. This age-group is also the most vulnerable one, in which morbidity and mortality are very high in numerous developing countries. This points up the importance of any preventive and educational action undertaken on behalf of children in this age-group in order to give them the best possible chances of success and to reduce the risks to which they are exposed.

In societies where the family is composed of parents, grandparents, brothers, sisters, uncles, aunts and cousins, the young child is taken under the wing of the family group as a whole, which helps him to become acquainted with life. In this traditional type of family, the child imitates the behaviour of those around him, learns their dances, listens to their dictums, stories, proverbs and advice, and registers those things that are forbidden; thus he learns everything which is contained in the conceptions of the family. He takes part in the various tasks of day-to-day life, and in the various fetes, festivals and rites. The older members of the family play a vital role in the stimulation of the child and his initiation into life.

But as a result of urbanization, the fact of women having to go out to work, and the influence of certain life-styles, this type of large family unit is tending to disappear and to give way to the nuclear family composed uniquely of parents and children. Consequently, society itself must concern itself with the health, education and stimulation of the child of pre-school age, taking upon itself the tasks which formerly fell to the large family unit and which the nuclear family cannot cope with.

During this period physical growth, together with the development of language, creativity, motor activity, social awareness and intelligence, is very rapid, and conditions subsequent development. This is why it is of prime importance, over and above health and nutritional care, to promote the cognitive and affective development of the child, to enable him to discover the different moral and social values in order to help him to take his place in family and community life. The child's education must give him a feeling of affective security which he will need in order to cope with a world in constant process of change, and to participate confidently in that world. The child must be educated as a member of a community, and as a person living in that community; consequently, all the educational resources of the community must be employed in order to help him to fit into it. But his community (parents, neighbours, teachers, social workers in contact with families) must be specifically informed of the needs of the child before he goes to school; it is important to disseminate precise knowledge of the child's overall development, allowing for the particularities of each community group.

It is nowadays an accepted fact that pre-school education must be seen as the initial phase of lifelong education, of which it is the basis. In various parts of the world where many children are still subject to social and cultural handicaps, it plays a compensating role and attenuates the influence of adverse conditions.

The resources required for an early and suitably adapted education does not call for particularly costly or difficult resources. Such an early education is mainly dependent on the characteristics of the persons who are in contact with the child. It does not seem to demand a high level of education, nor expensive equipment. In many cases, parents lack the necessary time and knowledge to stimulate the development of their children, and it is very important to help them to do so.

## 1. THE FIRST YEARS OF LIFE

### 1.1 The pre-school child

In most countries, educational systems recognize the child only from the age of 5 to 6, when he enters primary school. But from birth to the age of 6 the child's development is much more rapid than at any other period of his life, both psychologically and physically. If we know what happened in pre-school years, we have a better understanding of the school child.

Physically, the 6 year old child weighs on the average 20 kilograms (six times more than at birth); he is about 115 centimetres tall (approximately twice his stature at birth); and his cranial circumference is 53 to 54 centimetres (nine-tenths of its final size).

Psychologically, a 6 year old child has already acquired knowledge of many kinds, <sup>(1)</sup> and above all he has laid the foundations which will enable him to undergo new experiences. His behaviour is frequently erratic; he switches without transition from calm to agitation, from gentleness to violence, from submissiveness to aggressiveness. He often gives expression to his feelings excessively, sometimes through physical reaction: he sings, prances, jumps with joy, throws things around, and shouts. At times he expends a great deal of energy, and shortly afterwards refuses to make any effort.

From the age of 2 or 3, the child begins to establish relationships outside his immediate family. Though he remains mostly dependent on adults, and under their guidance, he becomes capable of developing certain autonomous forms of behaviour. He has begun a process of assimilation through which he learns to live. He is not content to reproduce aspects of the culture of his environment; he evaluates himself and reorganizes himself in function of that culture. The social context in which he lives is important for this process of personal organization.

The school is the cultural instrument which helps him to extend and perfect his personal and relational universe. The function of the school is to provide personal and cultural experiences which simultaneously organize growing emotions and the intellectual energies associated with them.

### 1.2 What happens between birth and the age of 6?

Despite very wide variations in geographical environment, material living conditions, social structures and cultural values, children as a whole throughout the world present a certain number of characteristics in common and pass through the same stages of development.

The development of a "normal" child must conform to certain general requirements:

it must lie in the vicinity of an average value, between limits of distribution which, at each age, embrace the majority of the population of reference (generally 95% for the indicators of physical development); <sup>(2)</sup>

its rhythm, evolution and rate must also lie in the vicinity of an average;

lastly, it must be harmonious; there must be no discordance between the various sectors of development. This applies, for example, to weight in relation to height, or to psychological development in relation to motor development.

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(1) The acquisition of knowledge is called "cognitive development".

(2) Indicator: By this is meant any quantifiable datum (e.g. weight, height, etc.) which can best measure the conditions of life of a population group and make it possible to keep track of their modifications.



### 1.2.1 The growing child

Childhood is made up of a succession of periods, each with its own particularities: growth is a continuous phenomenon, each stage being a preparation for the following one, from which it is separated by boundaries which are often not clearly defined. It is also an overall process, which must not be dissociated from the development of the senses, motivity, affectivity, and intelligence.

Among all the indicators used to assess the child's growth and development, we shall consider the four which are considered the most important and the simplest to record: weight, height, cranial circumference and dentition.

Weight. This is a very sensitive indicator. It reflects the condition of the child. Its variations are rapid and considerable. The measurement of weight is by far the best known and commonest method of surveillance. It is also the most useful one, because the maximum amount of information can be derived from it. Weight is an excellent indicator of a child's state of health and his nutrition. What tells us most is not the weight at any given moment, but the way it evolves over a period of time.

The weight curve can serve as a basis for:

the detection of a state of malnutrition, well before the appearance of other clinical symptoms;

the surveillance of a state of dehydration, and the assessment of its gravity;

a whole series of preventive and educational measures where health is concerned: dietary advice and the prescription of additional foods; education, the participation of parents (using the weight curve to explain the child's state of health and what measures to take); evaluation of the nutritional situation and/or the efficacy of individual or collective preventive measures (indicators of the health of a community).

The child born of a healthy mother after a normal pregnancy weights on average 3,000 to 3,500 grams. The extreme limits of normality are between 2,500 and 4,000 grams.

After birth, if lactation happens to be slightly delayed, the child may begin by losing a little weight (the heavier he was at birth, the more he will lose); he reverts to his weight at birth after a period varying from one to three weeks. After which his weight increases continuously; the younger he is the more rapidly it increases. The infant puts on about 750 grams a month during the first three months, 600 grams a month during the second three months, 450 grams a month during the third three months, and 300 grams a month during the fourth three months, so that his weight triples between birth and the age of one year.

At the age of 2, the average weight is four times that at birth, namely about 13 kilograms. Subsequently, the increase in weight stabilizes at around 2 kilograms a year; the 6 year old child weighs about 20 kilograms.

Height. This is a very accurate measurement of the phenomenon of growth. A child's height curve is an excellent depiction of his past life and reflects the whole history of his growth. Unlike weight, which may undergo considerable and rapid variations, height is a very stable measurement which does not diminish, but it is more difficult to measure than weight.

Broadly speaking, its evolution is parallel to that of weight and the reference curves of weight and height are similar in shape. In a healthy child, the evolution of height and weight is very similar and more or less parallel; any dissociation that is observed generally indicates an abnormal phenomenon.

The newborn baby measures on the average 50 centimetres. At 6 months, he measures about 65 centimetres, at 1 year 75 centimetres, at 2 years 85 centimetres, at 4 years 100 centimetres, at 5 years 106 centimetres, and at 6 years 113 centimetres. There are often very marked individual differences, linked in particular to the height of the parents.

Weight and height curves. Because of these variations, we ought to use weight and height curves established for each country. But in the face of the difficulty encountered in obtaining them, we are led to use international curves. We shall show, as an example, the reference curves proposed by the World Health Organization in Geneva, which are in trial use in several countries.

These curves have been established on the basis of measurements of weight and height of healthy children living under good conditions. If a country has national standards, these curves serve as a comparison for that country. If not, they can be temporarily used to follow the evolution of child populations and of each individual child. Their main value lies in an attempt to unify the innumerable data sheets and curves used throughout the world (Figures 1 and 2, pages 34 and 35).

Cranial circumference. The measurement of this quantity is valuable up to the age of about 2. It makes it possible to assess the volume of the brain and its development, as reflected in the gradual increase in the circumference of the head.

The cranial circumference increases on the average from 35 centimetres at birth to 47 centimetres at the end of the first year and to about 50 centimetres at the age of 2, which corresponds with the increase in volume of the brain, which is particularly rapid during the first 18 months of life.

The infant's skull bones are not yet joined, and there is a diamond-shaped space between them in the front.

Dentition. The first teeth are called milk teeth; there are 20 of them, and they appear in a specific order (with a very variable chronology) over a period averaging between 6 and 30 months. The order of appearance and the chronology are generally as follows:

from 6 to 12 months: the incisors, first the median and then the lateral (8 teeth). The first to appear are generally the lower median incisors;

from 12 to 18 months: the first premolars (4 teeth);

from 18 to 24 months: the canines (4 teeth);

from 24 to 30 months: the second premolars (4 teeth).

These milk teeth are then gradually replaced from the age of 6, usually beginning with the upper teeth, the first to go being the first which appeared.

### 1.2.2 The child learns to know himself, the people around him, and his environment

(a) The importance of the first years. The first years of life are of capital importance: the development of intelligence, affectivity and social relations is so rapid that we may consider that its success very largely determines the whole future. Any irregularity may, unless it is detected in time and treated appropriately, markedly reduce future capacities.

This prodigious maturing of the nervous system is very important, because it is a preparation for the development of intelligence. But if the intelligence is to develop optimally, there must be not only normal maturing, but also a favourable environment.

This means that the child's education does not begin when he enters school. School provides the seeds of knowledge, but the aptitude of the ground to receive them has been prepared well in advance. With adolescence comes a whole series of new social and affective forms of behaviour, but their satisfactory emergence is largely determined in advance by how the early years were lived.

The first and principal educators are therefore the parents, or in some cases those who replace them. They must be aware of this ennobling mission, though it is a hard task and not devoid of risks; they must know what can favour and what can hinder the psychological development of the child. They must be aware of the importance of the influence of the environment on their child's development. Many children are retarded not because of a defect in maturing, but because of an unfavourable environment. In particular, parents, and especially the mother, must possess the qualities and the knowledge necessary to bring up children properly. Parental inadequacy, which constitutes an obstacle to the development of the child can be more frequent in countries, regions, or population categories where mediocre socio-economic conditions predominate, but this is not an absolute rule. What is mainly lacking in underprivileged surroundings is "maternal availability", that is to say the amount and quality of time that the mother can devote to her young child.

Numerous developmental anomalies among the children of underprivileged families are attributed to heredity, whereas they are the result of unfavourable living conditions before or shortly after birth. If such children could receive the necessary care and affection in their family, they would have the same chances as other children. In his development, the child may suffer not because of his heredity, but as a result of surrounding conditions unfavourable to normal development; if he were brought up in a better atmosphere, he would retain no special imprint connected with the mediocrity of his initial living conditions. Educational personnel concerned with young children must be prepared to detect this type of trouble due to an unfavourable environment, especially in the case of mothers who are not very capable or available, so as to advise and guide them.

(b) General characteristics of development. Development is continuous. From the first days of life, the child develops continuously. The "stages" are merely convenient reference points which we use to facilitate description. Some of them, it is true, are more important and open up quite new possibilities, such as the ability to walk unaided. Language is acquired slowly and gradually, from the first words, and has meaning through the interpretation of the people with whom the child is in contact, right up to the phrased and structured language of the 4 year old child.

Development is an overall phenomenon. Increase in height and weight, and mental and affective development, depend on the same influences. In effect, the different aspects of the child's development are interlinked and imbricated, and if we study them separately we risk giving the resulting fragmentation an artificial character. The harmony of development in all its components is just as important as the acquisition at a given age of this or that ability or this or that number of centimetres. It is not a question of the child running an obstacle race as quickly as possible, but of a balanced flowering of his body and mind. But at the time when certain acquisitions such as language are developing very rapidly, progress seems to halt in other fields; we must understand that a child cannot concentrate his efforts on all sectors at once.

Each child is unique. The pattern of development is common to all children, but differences in temperament, physical capacity, environment, and family ambience explain that at a given age perfectly "normal" children can behave differently; the infant who walks at the age of eleven months is no closer to the normal than the one who walks at sixteen or eighteen months. A child who has initially advanced very quickly may slow up in the rate of his acquisitions and be caught up with a child who seemed "late" a few months previously.

So to assess the satisfactory development of a child is more complex than it appears. It is not sufficient, book in hand, to assess conformance or non-conformance with given points of reference; we must have an overall view of the child and his conditions and family life, and not worry about an isolated anomaly.

(c) The major stages of development

The infant from 1 month to 2 years

It must be remembered that the only point of making a division into "age brackets" is that it is convenient. Nothing, either at one month or at two years, is more important than what has happened previously; that is to say, the child's past, his history. This period is of capital importance in respect of the number of things the child acquires at the level of sensory development, communication, and knowledge of his own body. But stress should be laid on one important reference point: from the age of 7 to 8 months, the child begins to understand speech, to make a distinction between words, even if he does not yet speak; a little later he begins to crawl and walk. In point of fact, the key months for the child's acquisition of social and intellectual capacity are between 9 and 18 months. A deficiency at this age risks penalizing the child intellectually, to a more or less serious extent.

The evolution of posture is the condition on which the ability to walk depends. Head held up between 1 and 3 months, stable sitting position between 7 and 8 months, sitting up from the lying position and crawling on all fours between 8 and 9 months, and standing up with support at 10 months: these are the landmarks prior to the beginning of walking between 12 and 18 months - an acquisition of capital importance, true, but one which will still be improved.

Sensory development is the essential means of awareness of the surrounding world. At a very early age, the sense of smell undoubtedly has great importance as a factor in recognizing the mother. The sound of the mother's voice, and later various household noises, the visual perception of faces and then of objects and of the child's own hands, are indispensable to knowledge and progress.

At 3 weeks, the child follows with its eyes an object or a face which moves slowly in its field of vision, fairly near to his eyes. From 6 weeks onwards, this "ocular tracking" is complemented by lateral movements of the head, which widen the visual field. At 6 months, the child can fix his gaze on an object 1 centimetre in diameter at a distance of 30 centimetres.

Motor and sensory progress enables the child to become aware of his own body, to form his "bodily image", that is to say to recognize himself as a person. Seeing his hands at about 3 months, then at about 6 months (if the development of muscle tone allows) catching hold of his foot and bringing it up to his mouth, gradually becoming aware of the image of his own body reflected in a mirror without confusing it with somebody else's; these are important landmarks in self-discovery.

This brief description gives a better idea of the importance of a sensory handicap (whether visual or auditory) which risks hindering the child's psychological development.

Communication with others, the system of exchanges and relationships which the infant establishes with those around him, are highly determining factors in his overall development.

The infant establishes relations with his mother and with members of his close family circle through very varied and sometimes surprising means of communication; this is particularly true of the mother-child relation. Between the mother and the child there exists an exchange of impressions and information which does not only make use of conventional means of communication between human beings, namely the senses and speech.

For instance, the child is very sensitive to his mother's emotional state; he is calm and feels secure if the mother herself is calm and collected; even at a few weeks old, the child shows signs of anxiety if the mother is worried or tense.

Physical contact, "skin to skin", between the mother and the infant is an important medium of relationship. In many traditional communities, this contact has retained a privileged place, and Western societies are rediscovering it today. Its essential manifestations are carrying the baby on the back, prolonged breast feeding, sleeping at night with the child against the mother's body, stroking, caressing, etc.

Gestures have a very great importance and at a very early age satisfaction is expressed by smiling. Overall agitation may reflect either joy or lack of satisfaction. From the age of 12 months, the language of gesture is amplified; the child imitates the gestures of adults, and an effective means of intercourse is established (expressing "bravo", "sending a kiss", holding out the arms, pointing the index finger, expressing thanks or leave-taking, etc.).

Facial expression is a particularly rich form of communication, and one which develops constantly. Between one and two months, the child smiles deliberately at the sight of a human face or at an affective intonation of a familiar voice. Later, one can see in the child's expression the fear induced by a strange face. Not until the age of about 1 year does facial expression reflect the child's voluntary or involuntary emotional state.

Language is obviously the principal means of social communication. Between birth and the age of 2 years it develops spectacularly. Vocalizations and burlings in the early months have no specific significance but they express well-being; the child is learning to modulate the sounds which he emits. At about 6 months, he voluntarily repeats the sounds he hears and he begins to understand a few words. If his mother, or somebody else, repeats them with him, a veritable dialogue - often without any specific meaning - is initiated.

Towards the age of 7 or 8 months, vocalization begins to be organized. The adults in contact with the child give some of the sounds it utters a meaning which corresponds with the child's meaning. "Papapa" and "mamama" become "papa" and "mama", and not simple vocal exercises; they begin to designate a specific person. The infant understands, from the tone of voice, a prohibition or an encouragement.

Encouragement of the child's development undoubtedly has the most impressive effect where the acquisition of speech is concerned. In infantile burbling, the affective element is not absent; in the little sessions where the baby and its mother "talk" together and amuse themselves by imitating each other, it is not quite clear which of the two takes the lead in the game, so much do they both join in the same gay activity. Where the understanding of speech is concerned, it is based on affective togetherness at all times and on the innumerable stimulations provided by the play which enlivens day-to-day routine. It is in attending to the child and playing with him that the mother teaches him his mother tongue, and this acquisition is powerfully backed by the feelings which the child has for its mother; so that in the early stages he will not talk "for" just anybody. It is the lack of this affective factor which may be responsible for the delay in the advent of speech and its insufficiency among children living in institutions, and also for the verbal regression observed among children placed in surroundings lacking affectivity at a very early age. Speech, a medium of contact and of expression, obviously implies affectivity and affective contact.

If the language of the family, and especially that of the mother, is poor and inexpressive, that of the child will be also, and all subsequent possibilities of expression may be affected.

Affective development. A large part of the process of development is therefore a question of affectivity, and growth is only satisfactory, even in terms of weight and height, if the child is cared for, loved and encouraged.

The affectivity of the infant is dominated by its relationship with its mother or the mother-substitute.<sup>(1)</sup> But the father is not absent from the picture, quite the contrary; his role is different, but of capital importance in the formation of the child's personality. The quality of the relationship between mother and child depends on the quality of the links between the parents and on the development of the mother's character and personality. Furthermore, the father, or another masculine figure, provides the child with motivations of a different kind, which at a very early age he can recognize and which enable him to achieve his affective evolution and his identification as boy or girl in a balanced manner.

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(1) The mother-substitute is the term used to designate the person who habitually looks after the child in the mother's absence, and with whom the child can establish substitute relationships.

### The child from 2 to 6 years

The 2 year old child has acquired a certain degree of autonomy; he can move around and communicate. In subsequent years there occurs a broadening of socialization, discovery, and integration into a larger world than that of the family and people close to the child. At the same time, affective relationships with other people become modified, and the personality of the future adult depends to a large extent on their evolution.

#### Perfecting of previous acquisitions

Motor activity. The first 2 years of the child's life have been marked by the acquisition and subsequent consolidation of the capacity to stand and walk. In the following years, there occurs a considerable development of motor activity, in both quantity and quality.

Running, hopping on one foot, and walking on tip-toe are initially games for the child of 2 to 4 years; they demonstrate the improvement of motor activity. The same applies to jumping and climbing in the case of the 5 year old child. A child of 6 can, so far as his strength allows, successfully accomplish all the physical activities of older children. He brings to them a precision and a possibility of co-ordination which greatly improve between the ages of 2 and 6. Movements become more precise, more skilful, more refined. This faculty enables the child gradually to make complex movements in play or in day-to-day activity. For example, at 2 years he can stack six cubes one upon the other, and try to undress on his own. At the age of 4, he can dress himself, and draw simple geometric figures. At 6, the precision of movements, together with the child's capacity to comprehend space and time, makes it possible for him to learn to read and write.

Orientation in space and time. Laterality (right handedness or left handedness) is established about the age of 2 years, but for many children uncertainty persists until about 5 or 6 years, though this is neither abnormal nor a cause for concern. After the age of 6, if there is no clear-cut right handedness or left handedness, the child may have speech difficulties, trouble in learning to read, etc. A proper spatial orientation, gradually acquired during these early years, is therefore of capital importance for the child's subsequent progress. Temporal orientation takes longer; the young child confuses yesterday and tomorrow for quite a while, and it is not until the age of 4 that he knows his age, and later the days of the week, the seasons and the months. Furthermore, the notion of time as adults understand it has no great meaning for the child. Answering his questions and his demands by telling him "wait - later - when you are older", etc. does not satisfy him and scarcely helps his progress.

Toilet training begins during the second year in societies where the child is encouraged. It is a process in which the quality of the affective link between mother and child has a quite determining importance. In many regions, mothers pay great attention to the functions of elimination in infants. During the first months, there is no question of teaching the child anything at all, and the mother is very tolerant. Later, in some countries, especially those where children are carried on the mother's back, the mother practises a form of compulsory training by introducing soap and water into the child's rectum at a fixed time. She then sits on the ground with toes touching and heels apart in the form of a receptacle, seats the child on her feet arranged in this way, and in the process of amusing him exhorts him to perform his natural functions.

But the neurological maturing of the sensitivity and motivity of the sphincters<sup>(1)</sup> is an essential preliminary, and prevents any excessive anticipation of toilet training. About the age of 2, the child is old enough to control his sphincters and to understand what his mother wants; he can then be persuaded into clean habits without encountering any major obstacle. Daytime cleanliness is always acquired first.

If a latent affective conflict exists between the mother and the child, or if an untimely "training" triggers a reaction of revolt, refusal to acquire clean habits provides the child with an excellent means of expressing his disagreement. Toilet training is a typical example of a stage of development of the child which requires at one and the same time an adaptation, an encouragement, and a physiological maturing.

Speech. The acquisition of speech is one of the most important aspects in the child's development, in particular for learning to read. At the age of 6, normal speech is in principle acquired; moreover this is a necessary condition for primary school entrance.

There is often a lack of synchronization between the child's speech, that is to say the speech which the child uses as a medium of communication at home, and the speech used at the infant school or kindergarten. This lack of synchronization may involve both the quality of the speech and the number of words used. The speech employed by the child at home may be markedly different from that used at school, and from the experience of speech which the child gains at school. The result may be a veritable block. This is the whole problem of the utilization of "maternal" speech or "official" speech in kindergarten.

At the age of 2, the child can form short sentences of two or three words; he uses very few pronouns and articles, but he knows one or two hundred words.

At 3 years, the child can utter his name and first name, describe a picture, use pronouns and articles, and ask questions (when? why?). His speech is better organized, sometimes already quite well structured. Stress must be laid on the importance of pronouns, because they show that the child is capable of differentiating himself from others. The opposition<sup>(2)</sup> of the child of 2 1/2 to 3 years clearly shows this acquisition; he protects himself from the invasion of adults by taking refuge in his personality and saying "no". The advent of pronouns in speech is thus very important from the point of view of social and affective development, and in respect of the child's own image of himself.

At the age of 4, the child's vocabulary becomes richer, and embraces adjectives with shades of meaning, and liaisons. The child can compare large with small.

At 5, relative pronouns and conjunctions appear. The child can conjugate, and knows how to identify colours. Speech is handled easily; often there persist slight imperfections linked with grammatical blunders, and which constitute the charm of child speech. Normally they disappear by about the age of 6.

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(1) The sphincters are the smooth muscles controlling the functions of evacuation.

(2) Opposition: purposely doing the opposite of what is proposed, advised or ordered. It is the negative of reactions of imitation.



The child's mastery of speech finally comprises the enriching of his vocabulary, and grammatical construction. This is an important acquisition, because it gives the child the best chances of success at school, in so far as most school systems throughout the world give priority to spoken and written language. It is certain that the richness of a child's speech depends on the richness of the speech spoken in his family. Stress can never be too strongly laid on the need for parents to talk to their children a lot, even when they are young, and on the risks run in this connection by children in underprivileged circumstances in which conversation is poor.

The emphasis placed on cognitive development has centred attention on the child's capacity to generalize, to formulate ideas, and to solve problems. The development of these cognitive aptitudes depends closely on the mastery of speech.

Affectivity. From the age of 2 years, the child begins to realize that the almost exclusive relationship he has had with his mother has changed. This is seen especially in societies where the family unit is nuclear. In societies where the family unit is extended, the child realizes at a very early age that the mother's role is shared among several persons: the mother herself, and also grandmothers, aunts, etc.

It is certain that the mother's relations with her child are strengthened or adversely affected depending on the feelings which unite her with her husband. In industrialized societies, the father is traditionally considered as the custodian of authority and the pivot of family life from an economic point of view, though this is currently changing; at the present time there is increasing emphasis on the role of the father in the development of the child's personality. Maternal love has been greatly idealized, and insufficient emphasis has been placed on paternal love. Young people and parents need to be educated in this field.

At this time, brothers and sisters also occupy an important place in the child's life. With them also, the child must share his parents' love. The birth of a younger brother or sister is a trial for the child, and sometimes gives rise to a certain amount of jealousy or minor behavioural disorders; the elder child reverts to infancy in order to solicit the mother's attention, and expresses feelings towards the younger brother or sister ranging without transition from excessive affection to aggressiveness. A proper preparation of the older child as soon as the mother is expecting a baby, the child's active participation in all the family activities involved in preparing for the arrival and presence of a younger child, make it possible to overcome these difficulties.

Pregnancies which follow one another too closely deprive the mother of the joy of devoting herself to her job of child raising and of the time necessary for affective exchanges with her infant. This is particularly true in developing countries, where it is traditional to cease breast feeding when a new pregnancy occurs, because the old women say the milk is poisoned. In this case, weaning is very sudden, and sometimes the child is still very young; this deprives it of a series of ritual pleasures (the pleasure of sucking the breast, the gentle warmth of the mother's arms where the infant feels secure, at ease, and the unique concern of the mother), as well as depriving it of a nourishment which is particularly suited to its needs. At this time, or at the latest when the following child is born, the child is handed over to other persons, and this not only deprives it of the mother's milk, but also of the warm and stimulating presence of the mother. In addition to nutritional weaning, there is a veritable affective severance. The child then risks, especially if he belongs to an underprivileged socio-economic community, entering the vicious circle of malnutrition.

Socialization. For the infant, the world of personal relationships is essentially the family; he does not seek contact with other children of the same age except for brief periods of play.

From 2 1/2 to 3 years onwards, all children in all civilizations play in company with other children but not with them (they play in parallel) and often they manifest aggressiveness towards the others. But from the age of 3 or 3 1/2, they begin to play together, and this implies an affective maturing.

The 3 year old child also widens his world (the street, the quarter, the village, the kindergarten, the fields) and this is accompanied by the establishment of a network of relationships. Speech and collective play are good ways of establishing these contacts. But we must realize that the child also needs a certain amount of time to play on his own, and he needs to put into practice and to try out, alone, what he has seen or learnt.

Socialization is all the easier to the extent that the child feels loved and secure in his family. The child who, when entering kindergarten or school, most willingly accepts the temporary separation from his parents is without doubt the one who maintains the best relationship with them. Sure of his place in parental affection, he adapts himself much better to unknown surroundings, unknown faces and new rhythms.

Development of thought and moral sense in the child. The infant adapts itself to a new situation through a series of experiments, feeling its way as it were. The acquisition of speech marks a stage in this mechanism of adaptation; the child becomes able to conceive of movements to be made without trying them out in advance. He imagines the solution which he must find to problems commonly encountered.

The child's thought is initially subjective, because all his experience of the world around him comes from himself and those near him. With socialization and the interest which he becomes able to take in others, the child modifies his thought process, which becomes more objective, more realistic, and makes more allowance for external circumstances and not merely himself and his own pleasure.

Moral development begins when the child sees for the first time a gesture of reproof or a negative facial expression, or when he hears a verbal expression of disapproval. Moral development can be described as the process by which the child discovers and acquires the moral values which prevail in his community learns what is good and bad, and begins to make a distinction between his desires and instincts. This leads him to a knowledge of what has to be done when he has to choose how to behave in social life.

After the first year comes the period called "egocentric". This stage begins when the child receives the example of codified rules from external sources, that is to say between the age of 2 and 5, depending on individual cases. But while following the examples, the child plays, either alone without concerning himself with finding playmates, or with other children, but without trying to gain ascendancy over them or, consequently, to standardize the different ways of playing and codifying the rules. This is the twin characteristic of imitating others and individually following examples set, which is called egocentricity. Yet the rules are regarded as sacrosanct, emanating from adults and persisting throughout life. This period lasts until the age of about 7 or 8.

The acquisition of a moral sense is essentially linked with the attitude of the parents, and here again with the warmth of the affective link, but also with

the existence or absence of explanations given when things are forbidden. If there are no explanations, the moral code is black and white; if explanations are given, the child becomes more open, more capable of making distinctions, readier to cope with future changes.

The child's moral development is also linked with his knowledge of the "rules of the game". His sense of justice develops very markedly and clearly. Later, he learns that rules can be negotiated and sometimes changed.

### 1.2.3 The child's growth and development depend on his living conditions

At birth there exist between different children belonging to different social classes differences of height and weight which, in addition to the influence of their surroundings, condition their chances and risks in future life. This is even more evident among infants and young children.

Numerous factors influence the growth and development of the child, and it is quite difficult to dissociate them, because in practice they are closely linked: nutrition, housing, hygiene, living conditions, medical care, size of the family, spacing between children, health of the parents, economic level of the family, balance between activity, rest and sleep, etc. Unfortunately, the same families quite often accumulate unfavourable factors.

Living conditions have a determining influence; if they are propitious, they give the child the best chances of self-fulfilment; if they are adverse, they may keep him from realizing the potentialities which he possesses at birth. The younger the child, and the longer they are operative, the more important is the role played by these conditions. The handicap to which they can give rise may be indelible and hence definitively compromise the child's chances.

(a) Feeding and nutrition. Feeding obviously plays a major role in development. Not only does it condition physical growth - and notably the growth of the brain - but it also constitutes, in the early months of life, one of the essential media of exchange between the mother and the infant.

Nutritional needs. though they may vary slightly depending on climate, state of health, and even conditions of existence, are closely related to the rate of growth and development.

In relation to bodily weight, the younger the child, the more important are his nutritional needs (the needs of the young child are proportionally much greater than that of the adult).

The organism must have energy in order to sustain life when the body is at rest, maintain the body temperature constant at about 37°C, ensure the performance of muscular effort and - what is particularly important for the child - make possible the building of the tissue necessary for growth. All this is expressed in terms of calories<sup>(1)</sup> which are provided by food.

At the age of 5 a child's calorie needs (1,500 to 1,800 calories per day) correspond to more than half of those of the moderately active adult (2,500 to 3,000 calories per day).

(1) Calorie: the unit of energy employed by physicists, corresponding to the quantity of heat necessary to raise one millilitre of pure water from 14.5°C to 15.5°C at normal atmospheric pressure.

In order to meet the calorific requirement, food must provide glucides, fats and proteins; the important thing is to maintain a certain balance between these three major components.

Proteins are present in particular in meat, fish, poultry, milk, cheese, eggs, (they are called animal proteins); in pulses - beans, lentils, chick peas; and in certain grains like soja (they are called vegetable proteins).

Glucides are present in cereals, roots and tubers, for example wheat, millet, cassava, sorghum, rice, maize, and potatoes; and in sugar, honey and fruit.

Fats are present in butter, vegetable oils used for cooking purposes, and in food of animal origin such as meat, fish, milk and cheese.

Fruit and vegetables are mainly valuable for the vitamins and mineral salts they provide (calcium, potassium, iron).

During the first two or three years, protein requirements are 2 1/2 to 3 times greater than those of the adult. This is due to the demands of the building up of cells, tissue and organs corresponding to bodily growth, which is so rapid at this age. Any protein deficiency (whether quantitative or qualitative) results in a slowing down or stoppage of growth.

Water requirements. Of all substances which the body takes in, water is the most essential to life; and it is essential in greater quantities, proportionally, for the infant than for the older child, and the more so in very hot zones or during hot seasons. The infant must receive 100 to 150 grams of water per kilogram of weight per day (an adult needs only 35 to 50 grams per kilogram per day). In many countries the problem is to provide the child with "pure" water, that is to say uncontaminated by germs or parasites or by polluting agents of any kind.

The mother's milk. Among the different types of food, the importance of the mother's milk needs to be stressed. It is the ideal food for the newborn child and the infant.

In quantity and in quality, it provides most of the essential elements, notably protein. It is perfectly adapted to the needs of growth, notably the growth of the brain, and gives the child the best chances of satisfactory development. It is perfectly digestible. It comes out ready for consumption, at the required temperature, free of pathogenic microbes; and it is economical.

Furthermore, breast feeding favours close physical contact between the mother and the infant, and is a privileged means of establishing a satisfactory relation between the two. Failing the mother's milk, a feeding bottle handled with tenderness also has a favourable effect on the child's development; but in many underprivileged countries the risks involved in the use of the feeding bottle are so great that the deprivation of the mother's breast markedly diminishes the child's chances of survival.

The weaning period extends from the time when the mother begins to give the child food other than her own milk until the months following the final cessation of breast feeding (ablactation).

Weaning is a period of capital importance, and a very tricky one, particularly in developing countries. If it occurs too early or if it is badly managed, it gives rise to most of the nutritional problems of childhood, especially malnutrition. In most cases this occurs in the months following partial or final weaning.

Weaning must conform to several broad principles:

it must be gradual;

the substitute food must be balanced (notably the provision of a sufficient quantity of protein of adequate quality and easily assimilated);

the first nourishment other than milk and its derivatives must be introduced not later than 4 to 6 months;

final weaning must be as late as possible;

nutritional weaning must not be accompanied by an affective severage.

The social aspects of feeding. Among family activities, meals have a very great influence on the child's psychological development, yet insufficient attention is paid to them. In many types of societies, the meal is one of those times of day when the whole family assembles (whether the nuclear family or the extended family unit). These family meals promote the development of the young child, particularly from the affective point of view, and also favour exchanges with its parents, brothers and sisters. Furthermore, it is one of the privileged moments for learning speech and for nutritional education. But in some countries the meal has a different significance, and it is worthwhile analysing this from the point of view of conforming to traditions in respect of the education of young children.

(b) The sanitary conditions of the surroundings. When he leaves the cradle, the playpen, and the arms or the back of his mother, the child who begins to walk and shortly afterwards to run explores the world. He encounters microbes, viruses and parasites. These encounters are more or less early and more or less intense depending on ecological conditions, <sup>(1)</sup> the hygienic conditions of the home and the family, characteristics of the local epidemiology, and above all the relationship between child and adults and other children.

The influence on human health of the various factors in the physical environment (air, soil and other components) is obvious. The human being cannot retain his physiological wholeness in an unhealthy medium. This is true for adults, and even more true for children, whose organisms are not yet immunized, <sup>(2)</sup> and hence are more vulnerable to attacks by external agents.

Furthermore, the child is a developing being, and any pathological attack, even if it does not immediately threaten his existence, may compromise his development, lead to a more or less serious infirmity, or trigger a pathological process which will produce effects sooner or later. It is therefore essential to ensure that the child lives under the best possible ecological conditions. The many adverse factors may be classified under two headings:

the "traditional" factors of insalubrity: poor quality drinking water, deficiency or total absence of latrines and sewers, infestation by insects and vermin, close contact with animals, etc. This series of ecological factors easily explains the mediocre sanitary conditions under which some populations live, especially rural populations, among whom infections and parasitoses are chronic;

- (1) Ecology: the study of all the mutual influences of the ambient medium (climate, soil, water, air), on animal and plant life on the one hand, and human life on the other.
- (2) Immunized: Protected, e.g. by vaccination.

contagious diseases: young children are particularly prone to the common contagious diseases (measles, chicken pox, mumps, rubella, whooping cough) which they contract through contact with others (older brothers and sisters, playmates or classmates). For example, more than half of all children up to 6 years old catch measles, even in developed countries.

Furthermore, an organism which is already deficient has less defence against illness and its complications.

The young child is also prone to many digestive and respiratory infections of viral and microbial origin; their frequency is difficult to assess. No child is completely immune, but their frequency diminishes markedly between the ages of 2 and 5. They do not seem to have any effect on the development of the healthy and well-nourished child, in contrast to their effects among undernourished population groups.

But it would be extremely dangerous to rely only on the occurrence of benign illnesses, or even those whose symptoms are not apparent, for the acquisition of definitive immunity. The child is threatened by too many serious infections for us to neglect taking preventive measures against those where a safe and effective vaccine is available.

There are a number of vaccinations to be performed from birth onwards at reasonable intervals; especially during the first year of life, in accordance with a schedule established in the light of knowledge of the local situation concerning infectious diseases.

(c) Affective ambience. The psychological atmosphere in which the child lives is of capital importance, especially in the first days of life, and doubtless even before birth.

During the first year, the child's principal relationship is with his mother. We know only too well the developmental troubles to which children deprived of maternal care are exposed. A similar situation is observed among children who are hospitalized for more than one week, and whose substitute maternal care is not provided by the hospital staff. For this reason it is important to avoid pointless hospitalization through the provision of home medical care and to promote by every possible means, should hospitalization be unavoidable, the presence of the mother beside her sick child. This is an absolute necessity for breast fed children.

The child who is deprived in this respect is too calm, apathetic and sad; he does not try to sit up or catch hold of objects. Why and for whom should he do so? He is closed in upon himself, his expression is vague; he spends his time rocking his cradle or munching regurgitated food. This turning in upon oneself is the contrary of development; development can only occur harmoniously if the child establishes a contact and a mutual exchange of communication with those around him.

After the age of 2, development is unquestionably less affected by the ambience. Even if affectively deprived, the child will eventually walk and talk. But the consequences will be seen in behavioural disorders (enuresis, personality disorders), and in the risks of a future social maladjustment. It is in his family, whether an extended family or a nuclear one, that the young child learns to live and to grow up.

To a very large extent, adult behaviour has its origins in the affective life of the young child, in his relations with his father, mother, brothers and sisters.

The quality of the ambience influences the value and existence of a whole series of stimulations, which for the child are so many encouragements to advance.

It has long been known that the ability to sit up is not merely a muscular performance. The child must want to have a different field of vision from that which he has in the lying down position in his cradle; he must want to establish a fresh contact with his surroundings. This desire can only come into being if the child is cared for, if he feels encouraged, reassured and stimulated to widen his knowledge. When sitting up, the child enjoys a fresh view of the world; he enriches his knowledge and his contacts. The mother's role in this acquisition is also very important, because her knees represent something comfortable and encouraging, favouring the earlier development of psychomotor performances. In any learning process, there is a progression in the relationship between dependence (the child being helped to do something a little earlier than he otherwise would) and independence (the child acquiring this same capacity on his own).

If the desire for knowledge is lacking, through want of encouragement, contact or verbal interaction, the infant's acquisition of the capacity to sit up is "retarded" and his muscles remain flabby. It has been observed that a child left to himself, without any contacts other than those with the person attending to his bodily needs and his nourishment, without warmth or affection, does not develop satisfactorily. Not only does he not make the progress which another child makes, but he does not grow and put on weight normally. We see the advantage of children being carried on the mother's back and thereby participating from a very early age in day-to-day family activities.

The means of stimulation are numerous: physical contact, caresses (essentially in the case of the newborn baby and the young infant), passive mobilization, early "gymnastics", speech (from birth onwards), games of all sorts, objects to look at or handle, noises to hear.

But stimulation must not be confused with drilling. Nature must not be forced; the effect would be null, if not harmful. As we have seen, the acquisition of a capacity presupposes the maturing of the body. Normal development is harmonious; it is useless to put a child "on the pot" at 6 months; the results may be disastrous. It is useless to try to cut corners. The child must never lose the confidence or affection of his parents because he does not meet their demands, which are sometimes excessive for his age. This plays a negative role in his development.

The best way of helping the child to develop is to favour his familiarization with the world, make him want to know and discover, and to help him to do so without risk. This irreplaceable stimulation on the part of attentive and available parents must make allowance for the child's motivation, values, his idea of himself, the possibilities of controlling his instinctive activities, etc. All this depends of course on the type and behaviour patterns of the society in which the child develops.

(d) Play. This is a fundamental activity of the child, a means of exploring, learning, and developing. Play does not involve toys alone. Playing hide and seek with a child, showing him this or that part of his body, telling him how to hop on one foot, stage a puppet show, etc. constitutes an extraordinary means of awakening and stimulation, and an introduction to social relations. The child on his mother's back can observe and in his own way participate in certain activities (pounding millet, drawing water from the well, cooking, etc.).

Toys are just as important, provided they are suited to the child's age and that they are not dangerous. First comes the mobile (a suspended light-weight object which moves under the effect of draughts); then come coloured objects hung over the cradle (3 months), toys which may be grasped or nibbled (4 months), supple animals which are not frightening and not unhygienic, cups to be stacked one on the other or fitted into one another (1 year), etc. Among the most useful playthings, mention should also be made of sand, water (caution!), paper and pencils, modelling clay or similar, balls, old clothing for dressing up (4 to 5 years), picture books, boxes which can be used to make receptacles, etc. Through the choice of toys the child can be taught to acquire a feeling for beauty, harmony, form and colour. Why are there so many toys in gaudy colours, and so many grotesque animals and other figures? Also under the heading of "toys" can come pebbles, shells, boxes and miscellaneous and surprising objects which become symbols, exercises of the imagination, and sources of pleasure just as much as the most complicated and costly toys.

Play in its broad sense should include activities which tend to develop muscularity (locomotion, for example) and the co-ordination of delicate movements as well as physical capacities of value from the working point of view. The use of substances which have no shape such as sand and water promote imagination and whimsy, while the handling of things which have volume, colour, weight, shape and size develops sensory preception, the comparison and recognition of similarities and differences. With these principles in mind, any natural substances which come to hand may be used as playthings, such as pieces of wood, pebbles, modelling clay, water (pure if possible), sand, boxes to fit into one another, small receptacles, and toys made with local materials. Simple toys are generally of more value than complicated ones.

### Conclusion

This analysis of the different factors influencing the overall and continuous development of the child clearly shows the existence of a close relationship between the physical aspects of growth (weight, height) and the affective and intellectual aspects of development. We now know that certain factors such as nourishment, which used to be considered as primarily or exclusively influencing the physical aspects of growth, have an influence at the intellectual level.

The effects of stimulation are seen not only at the level of psychological performances, but also at the level of the endocrine system, (1) and through this system they have an effect on the rate of general bodily growth.

There are also relationships between maternal anxieties and the cries uttered by infants, between the mother's irritability and the frequency of gastrointestinal disorders in newborn babies.

All this leads us to the conclusion that whenever a disorder is detected in a child there is a risk of its having overall repercussions; this points up the fact that the child is a whole being and must not be considered piece by piece, even if the disorders in question are of a purely physical nature. The child is a member of a family and a community, and it is essential to study his problems in this wider context.

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(1) The endocrine system is made up of all the glands of the body whose secretions control the activity of the different organs and tissues.



## 2. THE CHILD IN THE COURSE OF DEVELOPMENT

### 2.1 Some reference points

The acquisitions listed below are not milestones which a child is obliged to pass exactly at the age stated. They are points of reference in the development of motor activity, sensory perception, speech, and relations with other people. Many others could be cited; childcare personnel and parents will discover them for themselves through observation and experience. In a third section we shall mention some activities which can favour these different acquisitions.

#### From birth to 3 years

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<u>From birth to 3 months, the child:</u>	<u>Observations</u>
spends most of the time sleeping	The newborn baby is often thought to be a vegetative being who does not see or recognize anything. This is untrue. The newborn infant communicates with those around him, reacts to the psychological state of his mother (calm, excited); from the age of 3 months, the child of an anxious mother also manifests his anxiety by cries resembling cries of pain.
learns to raise his head and then to hold it up	
learns to follow a moving object with his eyes, look at a face, and smile in response	
visually discovers the world around him	
reacts to noise	
recognizes his mother (visually, but especially by sense of smell and hearing and perhaps by sensory perceptions difficult to define)	
refines and adapts his primary reflexes such as grasping; he involuntarily holds on to an object placed in his hand	
burbles spontaneously and responsibly	

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<u>From 3 to 6 months, the child:</u>	<u>Observations</u>
holds his head up perfectly well and can remain seated for a few moments with support	At this age the child catches hold of objects not between thumb and index finger, but between the palm and the last four fingers. The mouth is an important way of getting to know things for the infant.
begins to catch hold purposely of an object within reach and holds out his hand to an object offered him	
brings objects to his mouth	
tries to widen his field of vision, for example by resting on his forearms if he is lying on his stomach, or raising his head and shoulders if he is lying on his back	
laughs heartily and utters shouts of pleasure in response to adult's play	
begins to look for a lost toy	

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From 6 to 9 months, the child:	Observations
<p>sits up alone for a short while when lying on his back, turns over to lie on his stomach can crawl towards an object or a person begins to be able to remain upright if he is held in position passes an object from one hand to the other and grasps an object in either hand grasps small objects between thumb and index finger amuses himself by throwing objects utters several syllables without verbal meaning recognizes the faces of members of his family and may be afraid of strange faces begins to participate in relational games (hand patting, hide and seek)</p>	<p>In some countries the ability to sit up is acquired earlier.</p>
From 9 to 12 months, the child:	Observations
<p>can get to its feet alone (for example by holding on to a piece of furniture) and walk held by two hands, then by one hand or catching hold of a piece of furniture imitates a noise (for example by striking two objects against one another) repeats a sound which he has heard learns to pronounce two or three words understands a prohibition or a simple order shows great interest in exploring the world, looking at everything, touching everything, and bringing everything to his mouth collaborates intensely in play with adults</p>	<p>The child repeats the syllables which he has pronounced and to which those around him have given a meaning.</p>

From 12 to 18 months, the child:	Observations
<p>walks on his own and explores the house and its surroundings</p> <p>stacks two or three cubes one upon another</p> <p>fills a receptacle (a cup with small objects, cubes, pebbles)</p> <p>can pronounce five to ten words</p> <p>manifests jealousy (tears or gestures of anger) and reactions of rivalry in play with his older brothers and sisters</p>	<p>The young child's socialization and his introduction to group life begins with these normal manifestations of rivalry and even aggressiveness.</p>
From 18 to 24 months, the child:	Observations
<p>walks up and down stairs first held by the hand, later alone, supporting himself</p> <p>stacks six cubes</p> <p>indicates his eyes and nose</p> <p>puts two words together and enriches his volabulary</p> <p>learns to eat alone</p> <p>imitates a line on paper or in the sand</p> <p>begins to be toilet trained in the day-time (stools, then urine)</p> <p>shows great interest in the actions of adults and tries to imitate their movements</p> <p>shows a growing interest in other children, and wants to play with them, but in a very personal way (taking their toys, for example)</p>	<p>Toilet training greatly depends on cultural habits; the age may vary.</p>
From 2 to 3 years, the child:	Observations
<p>learns to jump, climb, and hop on one foot</p> <p>can arrange three cubes in a "bridge"</p> <p>develops his speech considerably, using "I" and "me", begins to ask questions, understands most words and phrases spoken to him</p> <p>can reproduce a circle on paper or in sand</p> <p>begins to play properly <u>with</u> other children and to understand that there is another world outside the family nucleus</p>	<p>The age of 2 really marks the beginning of socialization.</p>

From 3 to 6 years

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From 3 to 4 years, the child:

walks around on his own, visits neighbours  
can walk on tip-toe  
learns to dress and undress alone  
acquires toilet training at night  
imitates a cross, draws a figure with a head and trunk, sometimes other parts of the body  
recognizes two or three colours  
speaks intelligibly, but still using childish language  
can state his name, sex and age  
asks many questions, and is interested in how children are born  
recognizes top and bottom, front and back  
listens to stories and asks for those he likes to be told again  
plays with other children, begins to share things  
shows affection for younger brothers and sisters  
becomes able to perform simple tasks

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From 4 to 5 years, the child:

leaps, jumps, swings  
walks downstairs putting one foot on each step  
draws a figure with head, and principal limbs and parts of the body  
copies a square and a triangle  
speaks quite intelligibly  
knows how to count his fingers  
knows his age and the day of the week  
listens to a story and can repeat its substance  
still asks many questions, takes an interest in new words and their meaning  
protests vigorously when prevented from doing what he wants  
can recognize four colours  
can assess shape and size, distinguish large from small  
takes an interest in the activities of adults

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From 5 to 6 years, the child:

knows how to climb trees and dance to music  
can catch a ball thrown from a distance of one metre  
can remain motionless for one minute  
speaks correctly, relinquishes childish language  
draws a figure with head, trunk, limbs and hands  
begins to distinguish right from left, yesterday from tomorrow  
asks for the meaning of abstract words  
takes an interest in the activities of the home and the quarter  
takes an interest in the age of young people and old people  
distinguishes between sweet, salt, sharp and bitter flavours  
invents games and changes the rules while they are proceeding  
detests authority imposed on him, and carries out orders slowly  
performs simple tasks with interest

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2.2 Obstacles on the way

If the development of the child is to be optimal, a number of conditions must be combined: a family providing the child with affection and security; united parents; an encouraging ambience; satisfactory physical health; instructive games and interesting activities.

Unfortunately, it quite frequently happens that some of these conditions are not met. There is then a risk of some of the child's faculties of development being compromised. This does not mean that he is condemned not to realize his possibilities. If the existence of a deficiency in the young child's environment is recognized, it is often possible to remedy it and to reduce the risks by adequate and early measures.

2.2.1 Malnutrition and psychological and social development

The effects of malnutrition on the young child - deficiency in proteins, in calories, or both - are many. We must distinguish the "acute" effects of such deficiencies, which may involve a variety of diseases (whether it is a question of marasmic malnutrition or oedematose malnutrition, otherwise known as kwashiorkor),<sup>(1)</sup> and the more long-term consequences which may persist for months or years, or even permanently, constituting a handicap for the child.

Foremost among these sequels are retarded growth (responsible for the small stature of many people who have been undernourished in their early childhood) and mental underdevelopment. The harmful consequences of malnutrition on cerebral and mental development have been revealed only the the last ten years.

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(1) In the case of marasmus, the child is thin and gaunt, no more than a skeleton. In kwashiorkor, on the other hand, he is swollen and bloated because of oedema (accumulation of water under the skin).

One of the characteristics of infantile malnutrition is the reduction in the child's physical activity; he does not play much, tires easily, turns in upon himself, and takes little interest in his surroundings. And this reduced activity does not facilitate his contact with other people or the deriving of benefit from all the experiences of those around him. These children are less advanced because they do not have the same possibilities of acquiring experiences on their own, of exploring, finding things out and plaguing adults. It is understandable that this should have lasting effects.

When it occurs in the very young child, serious malnutrition due to protein and calorie deficiency can in itself, it seems, lead to a slow-down in cerebral development, which is reflected in a lag in the acquisition of various mental functions. This can have serious consequences on the child's future (failure at school, social maladjustment, etc.).

But if moderate malnutrition occurs in an older child - which is much more frequent - the problem is less serious, though more complex. It is indeed extremely difficult to make a distinction between that which results from malnutrition itself and that which can be attributed to insufficient affective and intellectual stimulation deriving from the environment in which the child lives.

It seems clear that the resumption of normal feeding of undernourished children attenuates the delay in psychological development, but it must always be complemented by a cultural and affective enrichment of the environment. A veritable transformation of the environment in which the child lives is therefore necessary to ensure that he is adequately fed and receives the mental stimulation essential to his satisfactory overall development and subsequent social adjustment. This is the only way of enabling him to escape the vicious circle of poverty.

### 2.2.2 Accidents

The exploration of the external environment involves, particularly when the child begins to walk, a major risk of accidents. In countries where the risk of infection and malnutrition is high, mortality resulting from accidents between the ages of 1 and 4 accounts on the average for 3% of total deaths. In countries where these risks have almost completely disappeared, the absolute number of deaths is less, but accidents account for 30% to 40% of them.

Below the age of 1 year, accidents are not rare, though they are relatively less important than other causes of infantile mortality. The usual causes are heat stroke, choking due to food in the windpipe, suffocation, falls, burns, poisoning, etc. Frequently they are attributable to lack of supervision and attention on the part of parents.

Between 1 and 4 years, accidents most frequently occur at home or in the vicinity of the home, the most dangerous place being the kitchen and, in general, all places where there is a fire (the risk of burns). Traffic accidents are also frequently to blame, together with drowning and accidental poisoning.

Above the age of 5 years, accidents occur mainly outside the home. The psychomotor characteristics of the child at a given age mean that situations which are harmless for a child of another age are dangerous. The more headstrong temperament of boys from the age of 1 year onwards makes them more liable to accidents than girls, but all children are exposed to accidents. The main cause is the fact that the environment is not matched to the child. It is organized by adults, for adults, and the child encounters dangerous traps.

### 2.2.3 Retarded psychological development

A child who does not progress normally, that is to say in accordance with the indicators of reference, is often a source of worry to parents and educators.

In point of fact, a delay in acquisitions, whether it is markedly apparent or simply suspected, justifies neither extreme worry nor indifference. There are considerable differences in development between one child and another; for example, some children cannot walk until the age of 20 to 22 months. We have already seen that development must be overall and harmonious, but it is none the less true that delay in the capacity to achieve an isolated performance may have no great significance in a context which is otherwise normal.

In cases which give cause for concern, the child must be examined completely, carefully and repeatedly.

If there is a delay in speech, we must first seek a defect in hearing, an affective delay, or an overall intellectual delay. If it is isolated, things will no doubt work out satisfactorily. The child must be trained, if possible with the help of a specialist, who will tell the parents what exercises to give the child. The same applies to defects in articulation, leading to the deformation of certain consonants.

The child who does not possess the physical capacities of other children of his age risks being hindered in his development. Extreme situations are blindness, deafness, defective vision or defective hearing, which have not been detected early enough. Such conditions must be detected if possible in the first year of life, so as to try - in the light of local resources and preferably within the family circle - to educate the child in such a way as to enable him to overcome the handicap and ensure normal physical and psychological progress. Children who have psychomotor troubles must also be closely supervised and if necessary receive special care, but preferably without leaving their family. The handicapped child must first and foremost receive pre-school education, which is the best way of preparing him for school life and facilitating his entry into society.

### 2.2.4 Minor behavioural disorders

In the young child, anxiety phenomena are frequent, but usually benign. For instance, at the age of about 6 or 8 months, a face strange to the child may trigger a reaction of distress, which is quickly calmed when the mother re-enters his field of vision. Later comes fear of darkness, fear of being alone, and fear of being abandoned.

The child who feels secure manifests little anxiety. The child who lives in an unstable, disruptive environment, or who feels himself threatened and insufficiently loved, is much more frequently the victim of anxiety, as is the child who is pushed around from one living environment to another.

The persistence of anxiety states beyond the age of 3 years means that we must look for a cause of excessive insecurity in the child's life.

Manifestations of aggressiveness and opposition are also banal, and it can be said that between the age of 2 and 4 years the child passes through a period marked by violent fits of anger and aggressive attitudes. These fits of anger are not abnormal, but they sorely try the patience and the educational principles of the parents.

Aggressiveness enables the child to assert himself, but he must encounter a certain degree of firmness in order to accustom him, and prepare him, to face up later on to the aggressiveness of others and to control his reactions.

#### 2.2.5 The child of the socially underprivileged family

Many children live in families whose cultural and socio-economic level is low, where there is not much conversation, where stimulation is inadequate, and where the infant is left to himself. Warm affection may indeed be felt for him, but nevertheless the child brought up in this way develops differently from the majority of children; his type of intelligence is different. Later in school, a superficial examination risks placing him in the category of "misfits" or "weaklings", and this is usually a mistake.

Such children need to receive a complementary education which the family cannot give them. In such cases, every effort must be made to help the parents to perform their duty of encouraging their children, and the institution in which the children are placed (crèche, kindergarten, day nursery, infant school) plays a prime role in helping them to develop those faculties which have remained dormant and to bring them up to school age with the maximum of chances of achieving satisfactory adjustment.

#### 2.2.6 Children from one-parent families or broken families

It is certain that the child who is brought up by his mother alone (unmarried mother, widow, or separated from her husband) can encounter difficulties in forging his personality, for which affective parental relationships are necessary. The child must be able to form an image of the absent parent through the way his mother refers to him, or through direct contact with a male person with whom he is in contact. Usually, the mother succeeds in performing her maternal role and giving the child a satisfactory image of his father. Her social environment is a major factor in the success of this tricky task.

The situation is frequently less satisfactory when one of the parents has personality problems or mental aberrations, or when the child is aware of the consequences of conjugal disagreement, to which he is extraordinarily sensitive.

The child's most serious troubles are linked with what is called maternal inadequacy. Everything must be done to ensure that the child grows up in a family, his own family or a satisfactory substitute family environment. If the mother has affective difficulties in bringing up her child, she must be given special help, without any blame being laid upon her; on the contrary, she must be reassured and given all necessary confidence. The same situation arises in the case of mothers who have several young children; already fatigued by successive pregnancies and periods of breast feeding, such mothers may become exhausted in caring for several young children who have followed one another too rapidly. Here again, understanding and encouraging aid is necessary on the part of specialized institutions as a whole.



### 3. HELPING THE HARMONIOUS DEVELOPMENT OF THE CHILD

#### Recommendations

#### 3.1 Introductory remarks

We have emphasized the importance of the role of the parents in the child's overall development. This role is practically exclusive during the first two years of life. From the third year onwards, the child moves around and receives stimulation from sources outside his own family (neighbours, playmates). If there is a crèche, a health centre, a kindergarden, or an infant school which the child may attend, the staff must contribute to the child's harmonious development and at the same time detect as early as possible any difficulties of any kind which may hinder that development.

While the harmonious development of the infant and young child depends on affectivity, relationships and play, factors of risk and chance are also involved. There are many risks against which the child must be guarded. But this is not enough; the child's chances must be positively increased in order that none of his possibilities may be neglected.

From this point of view, the relevant personnel must work in close collaboration with parents. Co-ordination with parents must be the basis of any valid measures enabling the child to achieve complete self-fulfilment. But parents must not hand over total responsibility for the development of their children to child welfare personnel.

In order to work in conjunction with parents, the responsible personnel must conform to certain principles:

Consideration for the parents and family: it is important to help them by giving them confidence in themselves.

Consideration for traditions and customs, so long as they are not positively harmful; this supposes a thorough knowledge of the environment.

Consideration for the child, his rate of development, his particularities; it is not a question of drilling him, of achieving exceptional performances, or producing infant prodigies.

Receptiveness: genuine upbringing is not a question of recipes, it enables the beneficiary to discover for himself how to act and how to participate. Parents must be helped to understand and satisfy the needs of their children themselves, without the responsible personnel taking their place in this respect. It is the personnel, and not the parents, who must adapt themselves to circumstances.

Top priority for child-parent relationships, this includes physical and affective contact between mother and child, spontaneity of methods of upbringing, and any factor which may promote communication in any form.

Lastly, parents must be enabled, in the way they bring up their children, to retain whatever constitutes a stimulating environment for the child, and one in which he feels secure.

### 3.2 Helping to improve the child's physical health

All data gathered during the child's growth must if possible be recorded in written form on a data sheet available to the responsible personnel, and on a record sheet or a booklet which remains in the possession of the family.

This latter record, dating from the period of pre-natal supervision, may be continued to cover the period of schooling. It reflects the history of the child's development, from his conception to his adolescence: curves of weight and height, feeding, infectious and parasitic diseases, vaccinations, handicaps, accidents, etc.

Regularly weighing and measuring height from birth onwards is one of the fundamental components of the child's health record. It makes it possible to seek at an early stage the causes of a slow-down or halt in growth, and to take remedial measures.

Plotting curves of weight and height is a way of making the parents aware of the importance of these two indicators. In a child of 5 to 6 months, a sag in the curve may indicate inadequate nourishment; a discussion with the parents will make it possible to take stock and to give nutritional advice.

Explaining the weight curve to the parents makes them realize the need for regular surveillance of growth. Many parents think that after the age of 2 years this check is no longer necessary.

Let us take the weight curve proposed by WHO (Figure 1). The two continuous lines demarcate a zone inside which children whose development is normal must lie. The path traced by these two lines is the path of life and health; any weight lying outside this path must be considered as a warning signal, and any line joining two successive measurements of weight which lies underneath the lower line is definitely a danger signal.

Use of the weight curve: calculation of age and recording of weight. The weight at birth must be indicated whenever possible, because it is a very important reference point, especially in the case of children who are supervised irregularly. For other controls, we calculate the child's age at the time he is weighed from the date of birth. The weight is then recorded at the point where the line corresponding to the weight (rounded off to a multiple of 250 grams) intersects with the line corresponding to the age in months. It is essential, at each weighing, to record the weight in figures on the data sheet or the health record booklet and to plot it (with a cross or a dot) on the reference curve.

"Reasons justifying special surveillance" must be noted in the space provided, so as to show clearly the risks of illness or difficulties of growth detected in a given child, for example low weight at birth, feeding difficulties, inadequate development, death of one parent, recent and/or too early weaning, hospitalization separating the child from his parents, maladjusted child, child suffering from emotive disturbances within his family, and in certain traditional societies, the child who has difficulty in partaking of the family meal.

In some cases, bottle feeding may be considered as a justification for special surveillance.

REASON FOR JUSTIFYING SPECIAL SURVEILLANCE

Name .....

Weight at birth .....kgs

Spacing of births	Mother	
	Father	

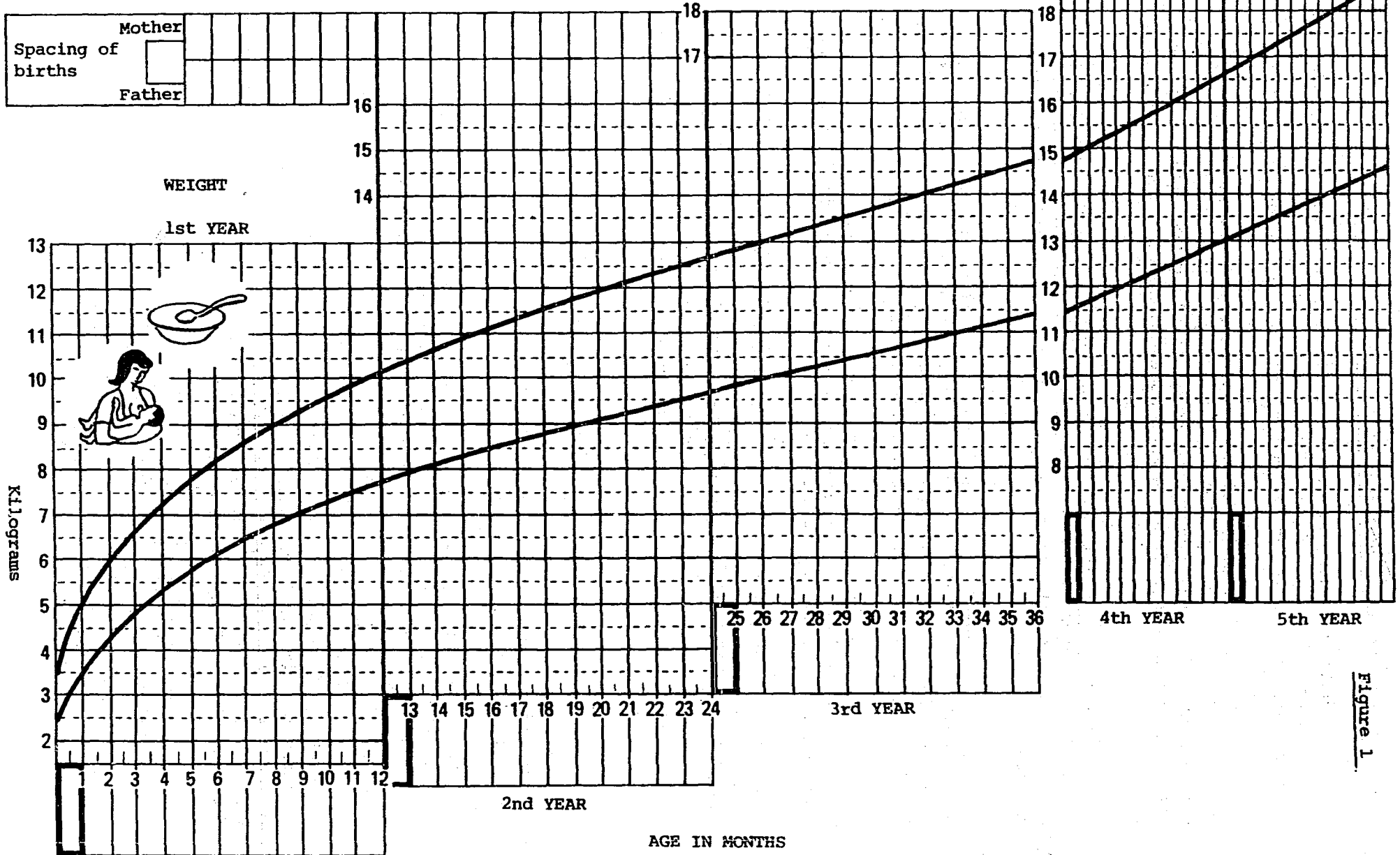
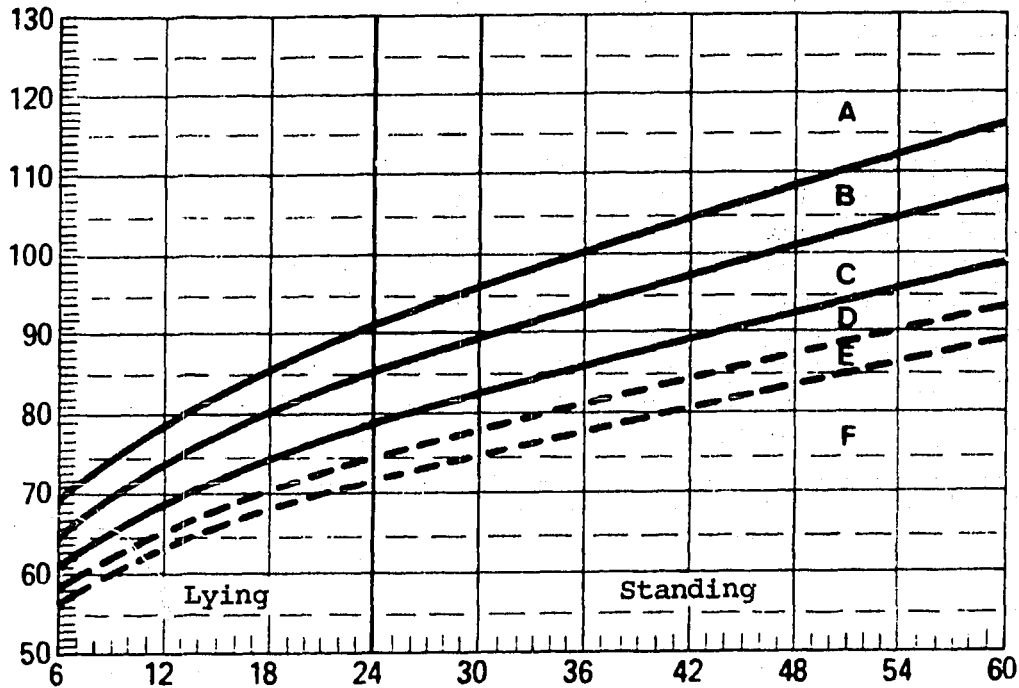


Figure 1

Associated events: important events and incidents which may affect the child's health and growth must be noted on the graph. For example, infectious diseases (measles, diarrhoea, infection of the respiratory tract, etc.) and changes in diet (introduction of new foods, final weaning, etc.). These can be entered at the top of the columns corresponding to months, vertically so as not to take up too much space. Care must be taken to enter a given event in the column of the month in which it occurs and not in the column corresponding to the date of the examination, unless these two dates coincide.

The height curve is based on the same principles, and its utilization is in accordance with the same rules (Figure 2 below).

Figure 2



Supervision of feeding progress from birth onwards

Encourage breast feeding and oppose the present trend towards replacement by bottle feeding, which can be dangerous in some parts of the world where living conditions are such that the rules of hygiene cannot be adhered to.

Taking advantage of weighings to educate and inform the parents of the need for complementary feeding from the age of 4 months onwards, and the importance of a balanced and diversified diet. This information and education are necessary anywhere, in developed countries where plenty gives rise to imbalance due to a surplus of food, as well as in developing countries where inadequate resources and lack of variety in meals due to monoculture cause imbalance through lack of availability of food.

In these underprivileged countries, parents must be taught to select locally available foods which ensure a balanced food ration in terms of quality and quantity. They must be made to understand, through the weight curve, the close link between a balanced diet and normal growth. Child welfare personnel must inform parents of the prime role of nourishment in the cell construction of the human body. The rate of growth is extremely rapid during intrauterine life, and during the first years

of life, and it depends to a large extent on nourishment. Furthermore, a child who is not properly nourished is more exposed to all kinds of infectious and parasitic diseases, which in their turn have repercussions on his growth.

From birth onwards, parents must be informed of the utility of vaccinations

Take advantage of village gatherings, weighings, and sessions of nutritional education, to tackle this subject of transmissible diseases in close co-operation with those responsible for the hygiene of the environment.

At the present time, WHO considers that there are six diseases which endanger the health of the child and against which vaccination must be performed during the first two years of life. These diseases are diphtheria, tetanus, whooping cough, poliomyelitis, measles and tuberculosis. Parents' attention must be drawn to factors of insalubrity, and sessions must be held with them on how to take joint action to improve the purity of water, the evacuation of excreta, the destruction of disease-bearing insects, etc.

A weighing session, a session of nutritional education or a vaccination should facilitate communication between health, social, or educational personnel and parents. In the course of these encounters, the personnel must not overlook another essential task: the prevention of handicaps. A child may be born with diminished mental or physical capacities: a motor, visual, or auditory handicap is not always detectable during the first three months. Consequently, during these various contacts, the parents' attention should be drawn to this problem. They should be asked to be extremely vigilant in observing their child's behaviour, and to state any suspicions they may have in the course of various conversations.

There exist means of detecting motor, visual and auditory handicaps during the first year. The personnel must take parents' suspicions seriously, and use and teach them to use simple means of detecting the suspected handicap; and they must be informed of the possibilities of a more thorough examination.

Many other handicaps can be prevented, either by specific means: vaccination against poliomyelitis (a disease which may cause serious paralysis); eye-drops to protect against infections which may lead to blindness; or by non-specific means requiring the information and education of families by social workers: the improvement of conditions of hygiene at birth, and also during pregnancy; the improvement of nutrition, and hence an attenuation of the gravity of transmissible diseases and their complications.

The important thing is that social workers should inform parents sufficiently early in order to give the child every chance of full normal development.

Accidents

The parents' vigilance in the detection of handicaps must be paralleled by an equal vigilance in the prevention of accidents. Lack of supervision, order and authority in the family circle is just as much a factor of risk as problems relating to the locality of residence, the region, the climate, seasonal variations, etc. But there is also a positive aspect to this relationship between the environment and the risk of accidents. That is the time of early training in prudence through experience, a stage which may have great educational value, if well conducted.

Social workers must inform parents of the child's need - especially during the first year - of complete protection in the home or in the environment in which it lives. When the child begins to move around and explore his environment, he must be allowed to acquire a limited amount of experience, during which he learns, for example, that fire burns, that certain objects can cut or hurt him, etc. As soon as the child reaches the age at which he can be educated, the family must gradually substitute active training for a protective attitude, avoiding negligence just as much as overprotection, and gradually leaving the child to realize the risk for himself, so that he knows how to avoid it or to cope with it. Home visits are key opportunities for informing parents in this respect, because the educational message can be adapted to environmental conditions.

### 3.3 Helping the child's mental and social development

In what follows, we have reverted to the age brackets listed in the second part, giving as an indication some ways of promoting the acquisitions dealt with in that section. These should be regarded with circumspection, not as imperative rules but simply as ideas, among others, which the family discovers for itself, or which others put forward as they observe the way the child lives. It is obvious that many of the measures cited at a given period of time remain valid subsequently; they are not repeated.

Above all, from birth onwards and at every age, it is important that the child should feel accepted, secure, loved, and that he should form part of the family as an individual.

#### From birth to the age of 3 years

##### From birth to the age of 3 months

The child should have the greatest possible contact with his mother (breast feeding, being carried on the mother's back if it is the custom of the country, and often taken in his mother's arms, and caressed).

He should be given freedom of movement: clothing not too tight, and plenty of time for bathing and changing.

He must be talked to frequently (during feeding, washing and dressing).

He must be able to see what is happening around him. This is easy if he is carried on the mother's back; if not, the cradle should allow him a free field of vision, he should be allowed to lie on his stomach, and his waking moments should be spent in the room where the mother or members of the family are present.

When in his cradle, bright moving objects should be placed in front of him, so that he can follow them with his eyes.

Toys: brightly coloured pieces of paper or fabric and objects in wood or flexible material easy to handle.

From 3 to 6 months

The same applies as for the period between birth and 3 months.

Keep the child sitting on the mother's knees for lengthy periods (unless he is carried on the mother's back), or place him in a half-seated position in a small baby-seat, propping him up with cushions.

Place within his reach objects which he can grasp and bring to his mouth without danger (toys made of wood or flexible materials, wooden spoons, etc.).

Laugh, sing and play with the child, and tell him stories.

Toys: small, safe objects: wooden rings, spools, shells, toys that make a noise (rattles, gourds filled with seeds and suitably enclosed, boxes, etc.).

From 6 to 9 months

Seat the child on a mat in a safe spot.

Help him to get up, sit up, crawl, move around, and encourage him to make progress.

Keep him as near as possible to the mother, and have him participate in family life.

Make sure that any objects which he will necessarily bring to his mouth do not entail a risk of suffocation or poisoning.

Gather up and return objects which the child constantly throws on the floor.

Speak to him in simple terms, but correctly. Avoid baby talk.

Take advantage of dressing and mealtimes to play with the child and talk with him. Try to find enough time so that these day-to-day activities are relaxed and enjoyable.

Play hide and seek, and make signs of encouragement.

Toys: soft ball, coloured cubes, plush or rag animals, pieces of wood, small kitchen utensils.

From 9 to 12 months

Help the child to walk, holding him with both hands.

Take the necessary precautions so that the child may explore the home and its surroundings without danger.

Teach him simple words, and repeat the syllables which he utters.

From 12 to 18 months

The remarks relating to the preceding periods remain valid.

Show the child how to fill up a small receptacle and empty it (pebbles, cubes).

Talk to him, tell him short stories, use relational words (before, after, behind, in front, etc.).

Toys: cubes or boxes to be stacked or juxtaposed, cubes or pebbles to be manipulated or to be placed in a receptacle, toys on wheels to be pushed or pulled, balls, pictures.

From 18 to 24 months

Help and encourage the child to overcome an obstacle and climb a few steps; congratulate him when he succeeds in doing so.

Have him show his mouth, his nose, his ears.

Let him eat on his own and make a mess.

Let him play with water or sand, and get himself dirty.

Talk to him, give him simple explanations.

Show him pictures, and tell him what they are.

Toys: water, sand, books (old catalogues, for example), balls, dolls.

From 2 to 3 years

Encourage the child's capacity for observation (pictures, books); help him to recognize and name everyday objects, to identify the parts of the body, and to compare sizes (small, large), and positions (standing up, sitting down).

Give the child simple orders and have him take part in household tasks so far as his capacity allows.

Toys: paper, pencils, chalks, constructional toys, models (figures, vehicles), household utensils.

From 3 to 6 years

In many countries the child between the age of 3 and 6 years goes to infant school or kindergarten. In this case an attempt should be made to harmonize home activities with those engaged in at school. The child who remains on the average from six to eight hours a day in a community environment needs time at home to rest and put into practice the things he has acquired at school. If the child is excessively stimulated at home, he quickly tires and will show evidence of temperamental disorders: irritability, aggressiveness, or on the contrary apathy and grumbling.

At school, the child undergoes alternating periods of free activity, directed activity, and rest; he quickly learns to establish a balance between his desire to explore things and to do whatever he feels like doing, and the authority exercised wisely and gently by the mistress. In any event, the child knows that he is supervised, that his freedom is not unlimited, and that he must fit into an established socio-cultural context. Allowance must be made for this in the home, and complete unsupervised freedom, without bringing the child into conformance with the rules of family and socio-cultural life, is most inadvisable.



From 3 to 4 years

Encourage the child to run, jump and climb, while avoiding any dangerous circumstances. Congratulate him when he succeeds.

Listen to what he says, listen to his stories, reply to his questions, and use a varied vocabulary in speaking to him.

Give him some responsibilities (carrying a bag or basket, or an object that is not too fragile, and thank him when he carries out his task).

Require him to wash himself, dress himself, helping and encouraging him in doing so.

Assign him simple and pleasant tasks.

From 4 to 5 years

Teach him to jump with feet together or to hop from one foot to the other, to skip with a skipping rope, to change position (standing, sitting, crouching), to walk in a straight line, carry a receptacle filled with water, and throw and catch a ball.

Have him count objects and recognize colours.

Teach him to recognize animal noises, fruits, foodstuffs and trees.

Teach him to sing and to recite counting rhymes. (1)

Teach him to reply to simple questions.

Teach him to sort objects by their shape, size and colour.

Teach him to play simple musical instruments (drum, xylophone, balaton, etc.).

Ask him to perform a certain number of interesting and simple activities.

From 5 to 6 years

Teach him to jump as high as possible, to leap, to run for a short distance, to tightrope walk on a bar close to the ground, and to dance to time.

Allow him to think up games, to create toys out of miscellaneous objects, and to collect things like pebbles, bits of wood, pictures, and other miscellaneous articles.

Allow him to observe things, and listen to him describing things and situations.

Reply to all his questions, even if they are sometimes embarrassing.

Let him play with safe tools, allow him to "cook" occasionally, and to assume greater responsibility in household tasks.

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(1) "Eeny meeny miny mo" doggerel, and also popular songs which mothers hum to their children.

Remember that the best toys are those that the child thinks up or transforms himself, and that expensive toys are no better than simple materials. So-called "educational" toys are often the contrary of educational when they do not make demands on the child's creativity and active participation.

Have the child carry out interesting and simple activities and tasks.

### 3.4 Some examples of programmes for young children

There are different services and organizations for caring for and bringing up children. None of them is perfect; we shall suggest some of them, but they may of course be adapted in accordance with available resources and socio-economic conditions.

#### (a) Some institutionalized systems

Day care centres. The day care centre is designed to take care of healthy children under the age of 3 years, but in some countries they accept children up to the age of 6. The present form of a day care centre is much more frequently a local one than one run by a factory or place of work. It is in the child's interest that the journey between the home and the centre, early in the morning and late in the evening, is as short as possible. Weekly day care centres, which receive children from Monday to Saturday, night and day, with the child returning to his family only at week-ends, and night nurseries, are not recommended; they deprive the child's pattern of living of regularity and stability. Placing in a foster family seems preferable to such systems.

From the social point of view, the day care centre provides equal care whatever the social circumstances of the child; children from underprivileged social categories enjoy a certain compensation and a greater stimulation for achieving a more normal development. From the health point of view, the day care centre often provides conditions of hygiene and material conditions superior to those of the home.

These advantages must not be allowed to mask the drawbacks of the day care centres, chief among them infectious and psychological factors. It is important to be aware of these drawbacks. The child's age may give rise to problems, because very young children are delicate and their needs are difficult to meet. The lengthy absence of the mother may also be an upsetting factor, especially if it is accompanied by inadequate intellectual stimulation or inadequate affective satisfaction, whether this be the fault of the personnel or of the mother. From the relational point of view, relations between parents and the day care centres are not always easy, and there may exist a certain amount of rivalry between the day nursery staff and the mother, especially in the case of mothers in underprivileged circumstances and those who, going out to work by force of circumstances, sometimes have feelings of guilt about handing over their children to the care of other people and feel less capable of taking care of them than the "specialists" of the day nursery. Life in a day nursery also requires a more or less difficult adaptation on the part of the child. Furthermore, mention should be made of negative factors such as insufficient staff, inadequate equipment (notably in respect of play facilities), the behaviour of the mother at home (not always being able to compensate for the short time she can devote to her child by her affective capacities), and the absence of educational continuity between the family and the day nursery.

Home care. This means supervision in family surroundings during the day; it is a more flexible and less costly solution, but the selection and training of those responsible for the child's care poses difficult problems.

Nurseries, kindergartens and infant schools are establishments for taking care of children who do not yet have to attend primary school, and ensuring the development of their physical and mental capacities through exercises, play and other activities. They may receive children from the age of 2 years onwards, when they appear likely to benefit from the methods employed in such establishments. The staff is usually qualified, and in most countries these establishments are the major ones concerned with the young child at this stage.

Placing the child under foster care. This is the most old-established and widespread of systems of child minding. It takes many forms, ranging from taking over the child by the day or part of the day, to permanent and definitive foster care.

This description takes no account of systems which operate and are institutionalized in many countries, but there are other possibilities which may achieve the same objectives in the light of local resources and social organization. For instance, in some countries attempts have been made to obtain the participation of certain population groups in taking care of children between birth and the age of 6 years.

#### Participation of parents

Apart from their role as educators, parents can participate in pre-school education in various ways. They can be employed as paid personnel, they can have a voice in decisions concerning pre-school education programmes, or they may be considered as resources in the educational process.

Parents in their role as educators of their own children. In this form of participation, parents, and more generally mothers, are given training (or information) enabling them to enhance the development of their own children. During group sessions, mothers discuss the various ways of stimulating their children so that the latter may acquire capacities and attitudes enabling them to succeed at school, and adapt themselves to living conditions. Home visits are another way of preparing mothers for their role: social helpers teach mothers of modest means how to bring up their children and care for them, feed them correctly in function of available resources, talk to them, play with them, etc. Mothers learn, for example, to make different uses of the objects within their reach in order to provide their children with opportunities for play. Other programmes place emphasis on the principles of disciplinary training, such as the importance of conversation, stimulation, and obedience.

In England (United Kingdom). Pre-school educational experiments have been undertaken for "underprivileged" children (those born of parents in the very lowest social category, that is to say living in a condition of chronic poverty; or of parents belonging to the working classes, whether skilled workers or not, farm workers, and junior employees).

Numerous projects and programmes have been launched. For instance, small groups have been set up in an area where no facilities for pre-school training previously existed. An individualized programme for speech development has been initiated, together with a recreational group in which mothers are encouraged to participate, a programme of home visits for pre-school children in order to provide mothers with educational material and show them how to help their children to use it easily.

In Colombia, in some areas, this education of mothers begins in the early stages of pregnancy. Confidence is established between the mother and the social worker; the latter pays her regular visits and guides her through the different stages of the child's growth, first while he is still in the womb, then during delivery, and subsequently during the first years of life.

In other areas, a different system has been tried. Observations have shown that mothers were not inclined to confide their children to kindergartens, because they were too far away and too costly, and the activities in them did not correspond to the local culture. Mothers were more willing to confide their children to neighbours, older relatives, etc. As a result, sorts of co-operatives have come into being: mothers group themselves in teams of six, living if possible in the same quarter (though the problem of mutual confidence and friendship arises). One of them, selected by the group, agrees to remain at home and receive the other mothers' children while they are out at work (in factories, workshops, domestic service, etc.). The mothers provide financial aid for the woman who looks after their children. The mother chosen to do this must provide certain guarantees as to her personality and the cleanliness of her home. She follows an introductory practical course in child development and training, and is subjected to regular health checks. She is regularly supervised by a female educator who ensures that the group of children is getting along satisfactorily, solves any problems, evaluates progress, and widens the mother's knowledge by introducing her to new techniques of activity leadership. Each educator, helped by the nearest doctor or health centre, is responsible for several mothers.

In some countries, substantial aid is provided by old people (grandparents for example). They can pass on aspects of local culture (stories, dances, songs, etc.) to the children. It is desirable for them to be supervised from the point of view of both health and education.

Parents (or certain other members of the community) in the role of paid assistants. In this case, the parents work under the supervision of those responsible for pre-school education. They can perform non-educational tasks, or help educators in the kindergarten as assistants, or again work outside the classrooms as social workers or co-ordinators between the school and home. Their role is to activate other parents, and their principal mission is to facilitate communications in both directions by providing parents with information and assistance, and keeping teachers informed of parents' wishes and difficulties.

Experiments have been tried in this field, in particular in certain Latin American countries. Low income groups were annoyed by the fact that personnel from outside were being paid while their own members were unemployed. This process of finding a paid occupation for certain parents in the kindergarten helps families economically, and also raises their social and cultural level. Parents become agents of change. They thereby acquire capacities which can enable them to do more interesting work and which give them a feeling of their worth and their personal efficacy.

In Cameroon. Kindergartens are not new to Africa, but they exist practically only in towns. Any town of moderate size in Cameroon has several kindergartens. The teachers are recruited by the municipality, and they hold the elementary school leaving certificate. Frequently the kindergarten, along with the home centre, constitutes a social centre under the responsibility of a social worker or helper. In large towns, demand for kindergarten facilities is such that children are divided into two sections: one section comes in the morning, and the other in the afternoon. In rural areas, very few facilities exist; people are often underprivileged. The creation of kindergartens in villages in the west of Cameroon has met certain needs:

Preparing the village child for school: the 6 year old child who lives in a village is by no means ready to receive teaching in primary school. After having been allowed to do what he likes up to the age of 4 years, the child receives a social education in the large family; he is taught politeness and respect for his elders, and to share things with his playmates. He merges into a community world which is not without its value, but knowledge of himself and of the world, observation and reasoning, are in no way developed by this family education.

Combating belief in magic: the child brought up in traditional surroundings hears the explanations which adults give of untoward events; whether these affect a harvest, an animal, or a person, everything is attributed to a failure to conform to custom, the wrath of ancestors, or an evil spell cast by a witch-doctor. When he grows up, the child never completely loses this magical-religious mentality. It is desirable for young children to be able to observe the phenomena of day-to-day life, study the properties of objects and classify them, establish relations of cause and effect, develop their reasoning powers and their sense of responsibility, and acquire habits of cleanliness.

Helping to achieve progress: a profound modification of the mentality must be attempted. And a kindergarten is a community where ideas of hygiene, cleanliness and nutrition can be put into practice, explained to parents, and thereby contribute to their education.

In this region, the woman has always provided subsistence for her husband and children by growing essential foodstuffs. She goes out into the fields and leaves her young children in the care of an older child of 10 or 12, the "cradle-rocker". But with the increase in school attendance, the elder children of the family are at school, there is no longer a "cradle-rocker", and help in the fields is also lacking. The child of 4 now looks after his younger brother or sister of 2. This proved to be very undersirable, and the parents in the village had the idea of grouping all the children together in day nurseries. A village worthy lent a house, and a body of eighteen who had left primary school was taken on at a salary. Other people were trained subsequently (34 of them, including 4 women); in the morning there was a practical course in the kindergarten under the direction of the social welfare service; in the afternoon, accelerated training; and in the evening written work, copying from the guide for kindergarten teachers in Cameroon. This personnel also received instruction on children and their needs.

Two thousand children have benefited from this experiment. The parents have the responsibility of building suitable premises, a latrine, a surrounding fence, open air play facilities (balancing beam, swing, ladder, pole) and small bamboo chairs and tables. Local clay serves as modelling clay, raffia fibres are used for string, and bamboo is hollowed out to facilitate assembly. Wooden cubes of decreasing size are made by the local craftsmen, glue is made from cassava flour, and mixed with ochre to make paints. Brushes consist of twigs with chewed ends, and maize and other wild seeds are used as beads for threading. For musical instruments, there are small drums, cymbals, bamboo whistles, and gourds filled with seeds. Only paper and coloured pencils are not produced locally.

In Senegal. Day nurseries are to be found in rural areas; they were set up in 1962 at the instigation of the women's rural leadership centre, and operate during the two months of intensive work in the rice fields, a period when infant mortality is higher. The women leaders in the villages tried the experiment of a day nursery whose costs were partly met by procedure grown in a collective field. The establishment was run by the director of the leadership centre, and the mothers took on the task of organization.

They took it in turns to provide the supervision of children, leadership of their activities, cleaning and maintenance, and the preparation of the midday meal, each child bringing its own ration of rice.

They brought the money necessary for purchasing meat, fish and vegetables.

After one year of operation, the mothers realized that this day nursery could be more than just a practical means of taking care of children during a critical season of the year.

It gave children better living conditions during the time they were there (they put on weight while they were there).

It was a school for young mothers; they became aware of a number of health and teaching requirements with which they were not previously familiar. They were led to introduce notions of hygiene and nutrition into their family life; they learned to establish a budget and to put it into practice. In matters of health, they realized the dangers of contagion, and the efficacy of preventive measures; they discovered that children must be stimulated, and that this was an age when children learned things.

The participation of mothers was followed by that of fathers; first they gave their consent, then their advice, and finally their effective collaboration; they built and fitted out day nursery premises, collected small sums of money, made a few toys, and worked in the collective field.

Parents in the role of counsellors and decision-makers at the kindergarten level. The role of the parents as sources of information for educators is a prominent feature of many experiments concerning relationships between families and the school in the context of pre-school education. Educators must take account of everything parents can contribute in the field of family experience, and promote collaboration between parents and kindergarten. Programmes which give parents a role in decision-making often result in improving pedagogic practices. It is also a means of strengthening confidence and assurance in the educational capacity of the parents, when they see that they are able to help their children.

The important thing is to persuade parents to come to the kindergarten, use their skills in helping various activities (gardening, do-it-yourself activities, making toys), help in the organization of the programme, match activities more closely to the children's needs, pass on the children's reactions to educators, etc.

In Italy, a legal form of joint management has been established, and in some areas parents directly collaborate in the education of children within the infant schools.

(b) Some trends and programmes in different countries

In El Salvador, the education law provides for the following activities:

Exercises in speech and expression (poems, stories, riddles, descriptions, play acting, puppet shows, etc.).

Activities involving rhythmic and plastic expression: singing, games, roundels, playing and listening to music, musical games, painting, drawing, modelling, using earth, sand, etc.

Observation of nature (animals, plants, physical phenomena); carrying out small-scale experiments, cultivating small plots of land, etc.

Exercises in elementary logic: completing stories that have been started, classifying and arranging objects by size, colour, etc.

Training in mathematical concepts, notions of sets and one-to-one correspondence.

Activities connected with the development of patriotism: visits to important places, respect for institutions which protect the community, celebration of social and civic fetes.

Activities which develop a moral sense: activities involving responsibility, the protection of smaller children.

Recreational play, dolls, construction sets, etc.

Creative activities.

In France, great stress is laid on the value of educational toys and the notion of "centres of interest", the latter being linked with the life of the child: food, work, leisure, the home. The pedagogic principles of many kindergartens are:

Mobilizing the child's activity.

Training him rather than teaching him.

Taking the child's deep-seated interests as a starting point, and involving the child community in life.

Combining mental work and manual activity.

Developing the child's creative faculties.

Giving each child his fair share and helping to give everybody an equal chance.

Replacing discipline from above by a freely accepted self-discipline.

Pre-school education lasts all day long. There is no fixed schedule, but this is the programme often developed:

1. Morning. Arrival at school; this is an important social activity, everyone being happy to meet again.

A certain amount of familiar ritual giving the child a degree of psychological security necessary for a satisfactory resumption of his activities; for example:

the treasure chest: things which the children have brought from home are gathered together: used boxes, drawings, miscellaneous objects, etc., so as to decide to what use these can be put in the course of the day (they can be admired for their beauty, used for an exercise in speech, transformed into something else, etc.);

who is present? Who is absent? Community awareness. Those present can picture those who are absent, and state reasons for absence or lateness. All this provides an opportunity for valuable exercises in speech;

observation of the weather. What is the weather like today? Let us observe nature. By means of small pictures, the children are asked to indicate sunshine or rainfall. These regular observations promote the development of a child's notion of sequence, continuity, and the passage of time;

looking after plants, flowers and animals. Along the same lines as above, daily observation and regular attention to plants and animals help to give the child notions of continuity, regularity, and periodicity. Furthermore, looking after plants and familiar animals provides simple contact with nature, which children need.

Singing and chanting. This is an activity which helps to create a gay atmosphere and provides an opportunity for education in breath control and the development of a social sense through choral singing.

How to take advantage of each opportunity. The educator must be able to take advantage of every opportunity, from the educational point of view, of initiating and organizing exercises in oral expression, drawing, graphics, sensory enrichment, and activities of a mathematical nature (simple classifications, putting things in order, etc.). In this connection, an educator must be properly trained to take advantage of all opportunities that occur to encourage the child to make use of his whole range of self-expression.

Motor activities, of various kinds depending on the weather and circumstances. These can be engaged in:

with individual material;

with collective material;

in the garden or courtyard;

through roundels, dances or rhythmic exercises;

through exercises in bodily expression.

Such exercises, though they involve no constraint, are fatiguing. Consequently the child must be able to engage in free play, and this is the period which is customarily called "recreation".

Free activities. When they return to the classrooms, the children must be able to engage in their favourite activities, either individually or in small groups, in different sections of the classroom (kitchen, bedroom, shop, puppets, dressing-up, construction games, educational toys, etc.). Through free play, playing certain roles, or repeating certain day-to-day movements, children initiate themselves into social life. This period is also valuable for the educator, who observes the children's behaviour and gathers a rich harvest of psychological observations. Before they leave the premises, the children are told a short story, or required to sing in chorus or engage in some brief activity which requires their attention.



2. Afternoon. After a period of rest (a nap if possible) the afternoon is given over to creative activities and poetic and musical expression.

Introduction to poetry and music:

listening to records together. The children are asked to say what the music makes them think of. This is the subject of an exercise in oral, graphic or bodily expression;

listening to a few simple poems of literary merit. Some children enjoy repeating verses which have a catchy rhythm; others remember them easily. Without any systematic teaching on the part of the educator, it is always useful to develop this form of verbal memory in the child;

painting and miscellaneous creative activities. In order to enable each child to discover or choose the form of expression which suits him, the group splits up into "workshops": scissors and paste work with paper, modelling with clay, wicker-work and decoration, etc. After a recreation period during which the child is allowed to play freely, the afternoon ends with games involving rhythms, playing children's instruments, play acting, etc., all of them activities which take account of the young child's fatigue and lassitude.

In Hungary, the home care and education of pre-school children is largely up to the mother, but fathers are beginning to share more and more in these tasks. This new trend is evident chiefly in the families of younger mothers and of mothers with more schooling. On the other hand, paternal participation is usually regarded as extra help graciously offered to the mother and limited to play and taking walks. None the less, there has been an increasing tendency on the part of fathers to insist that both parents should take an equal share in raising children. Such families regard children's institutions as extra help for the parents rather than for the mother alone.

Efforts are made to encourage this trend, not only to make things easier for working women and relieve them of some of their tasks at home, but in the first place because it is held that this is the best and most meaningful way to socialize children. Society begins to assume part of the responsibility for the child in the broadest sense before the child is born. Starting with an up-to-date system of pre-natal care, social responsibility extends to the entire duration and all aspects of socialization (State contribution to material maintenance, help in physical conditioning and intellectual and personality development).

Industrial and commercial undertakings play a very important part in this broadly interpreted sense of social responsibility. In a Socialist society they cannot remain indifferent to the personal problems of employees. They must be ready to accept their own responsibilities in regard to the implementation of compulsory, centrally-prescribed measures, as well as in matters not regulated centrally requiring local decisions; and also in shaping public opinion in general. The same holds for social organizations.

In India, the following options have been adopted where the national policy with regard to the child of pre-school age is concerned.

1. The group which must receive priority attention is that formed by the children of the most economically and socially underprivileged families.

2. Priority must be given to hygiene and nutrition.
3. The family in which the mother plays an essential role is a more favourable environment for the child than an institution.
4. The age group from 0 to 3 years deserves the most attention with regard to health and nutrition, and the age group from 3 to 6 years is no less important from the point of view of cognitive development.

A series of services is recommended at two levels:

1. Minimum series: if a qualified person and a basic infrastructure are available, it should be possible to provide the following services, which will prove effective in the short term:

distribution of additional food;

vaccinations;

educational measures or pre-school education, including the education of mothers and children in the principles of nutrition and hygiene, and the education of parents.

This series of services is effective up to a point, but full use is not made of the person responsible and the installations.

2. Optimum series: with a little more effort, a better series of services can be offered comprising, in addition to those enumerated above, supervised play and educational activities using appropriate facilities and equipment, so as to ensure the mental, social and emotional development of the child.

The components of this latter series reinforce one another mutually; it is effective in both the long-term and the short-term, and there is no waste of resources since full use is made of the person who is in charge of the children.

### CONCLUSION

The different stages in the child's overall development constitute markers providing parents and educators with essential elements for assessing the child's progress and providing him with the necessary care and stimulation.

All children throughout the world go through the same stages, but with a certain relativity due to their specific personal and socio-cultural characteristics. But a single observation, however detailed it may be, is no more than a simple photograph; account must be taken of the progress made between several successive assessments, and it is a series of several photographs, taken neither too close together nor too far apart, which best gives a dynamic view of the process of development.

Parents and educators must be capable of a certain flexibility in order to avoid transforming education into an obsessional technique applied in conformance with set rules and recipes. Nevertheless, the landmarks referred to above constitute valuable reference points for early detection of deviations, and make it possible, thanks to adequate measures taken in time, to give the child every chance of achieving optimal development.

Everyone concerned with the care of children between birth and the age of 6 years, whatever his or her occupational category, must share this knowledge of development in order to provide opportunities and facilities for appropriate activities, observe children in the course of these activities, inform parents, and take the latter's remarks and observations into account. It is therefore important to make provision for the training of this personnel at all levels, allowing for new requirements of versatility and a sense of the practical. This training must also take account of the cultural aspects of the environment, meet the needs and aspirations of the family and of the community in which the child lives, and provide the possibility of compensating for any possible psycho-social deficiencies in this environment; a compensating effect which will be all the more valuable and lasting in proportion as active education is provided simultaneously for both children and their families. This is the essential role of all those whose occupation brings them into contact with young children; and as a corollary this must be the permanent concern of those responsible for the training of such personnel, both during training and during subsequent employment.

ANNEX

MEETING ON PRE-SCHOOL EDUCATION AS THE  
FIRST PHASE OF LIFELONG EDUCATION

(Unesco Headquarters, Paris, 5-9 January 1976)

WORKING DOCUMENT

(Extracts)

The present meeting brings together specialists in pre-school education, policy makers, administrators of pre-school education programmes, psychologists, etc. It should provide an opportunity for discussing existing conditions and new trends of lifelong education in the light of the participants' experience; and making suggestions for new approaches required for expanding pre-school education and adopting it to diverse situations.

It is felt that pre-school education, as is now increasingly recognized in most countries, should be an integral part of complete educational structures and should therefore in no way be viewed as a luxury. It takes on a new significance in the perspective of lifelong education and has a special contribution to make towards the democratization of education. However, it cannot be generalized in many countries with limited budgets without a drastic effort to reduce its costs. This requires new approaches and imaginative formulae which should be sought through fully using the educational resources offered by the community and relation of pre-school education to the social and cultural context.

The purposes of pre-school education are not entirely aimed at the intellectual development, but are also intended to help the overall total development of the child, which includes his emotional development. This affective factor is, in particular, important with reference to the mother, father, friends, the family and community. Attention needs to be given to the affective development of the child if he is to grow up to react and interact with the community in an environment that will contribute positively to his development.

Children vary all over the world but the stages of development outlined by Piaget seem to occur in the same sequence from whatever region of the world children come. This probably has not been researched thoroughly in all areas and perhaps further research would be relevant. The effect of the environment, its physical and cultural aspects - at home, in the community, etc. - is clearly important in determining the ages at which children reach certain stages of their development and the particular skills which they may develop.

Pre-school education programmes as a form of intervention are clearly important in particular for children who suffer from some kind of deprivation including poverty.

In some cases, the rather low unit costs of pre-school education indicate a level of expenditure which is below the requirements of efficient pre-school education. In many countries, pre-school education programmes are operated with inadequately trained personnel, if not completely untrained. In other countries, in small numbers, the teachers assigned to pre-school institutions can be considered as perhaps the best qualified and pedagogically prepared of the whole educational system.

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The concept of lifelong education is bound up with the desire to meet the growing demand for education which is characteristic of our age and with a movement in favour of democratization which entails not only general access to education but also equality of opportunity, to be achieved through education which is adapted to the aspirations, characteristics and needs of the different age groups and the various socio-economic and occupational categories.

Secondly, just as education is not mediated solely by the scholastic institution, it is also not restricted in time to the period of full-time schooling but, on the contrary, extends over the entire span of human life and is thus, in temporal terms, a continuing process as well as being in social and spatial terms, a global process.

The education of the "complete man", as outlined in the report of the International Commission on the Development of Education, is therefore a global education as well as being a lifelong education: its aims must be systematically to attain the ideal which, in fact, has always been that of educators and philosophers even though it has generally been betrayed in actual educational practice, the ideal of the harmonious and balanced education of the individual within the polis.

The concept of lifelong education is recalled only in view of its implications for pre-school education. Five of them seem to be of particular relevance:

(i) lifelong education is, first of all, a continuous process and its organization requires vertical integration of its components - as well as horizontal integration. However diverse the sequence and combination of educational experiences may be, each learning experience will obviously be all the more fruitful if it can build on previous experience which has prepared the learner for it. In this perspective, the importance of the initial phase of education becomes essential, as it provides the foundation for ensuing learning, and it should be conceived in view of this function. This question was discussed, among others, by a meeting of experts on the basic cycle of education organized by Unesco in June 1974. One of the recommendations was that pre-school education should be part of the basic cycle of education. At the same time, while it should be articulated with the other components of the system, it should play a specific role in it - as all others;

(ii) lifelong education is committed to the democratization of education. Democratizing education, however, cannot be achieved only in terms of access of education. It also requires equalizing the chances of access. From this point of view, pre-school education has a considerable role to play, which has already been mentioned: compensating and reducing the social cultural handicaps, from which many children suffer and which range from less ease and fluency in verbal expression, inability to use the language of teaching and lesser ability to use abstraction, to difficult housing conditions, lack of medical care including lack of detection of physical handicaps, inadequate food and poor diet, etc. The whole development of the individual may depend on the compensatory function which pre-school can play in this respect, not in the form of a corrective and remedial type of education, but as a means of equalizing conditions. Despite such argument in this respect, it seems that the importance of this role cannot be denied.

(iii) lifelong education aims at enabling the individual to perform his or her various roles and function in life, and at ensuring the harmonious, well-rounded development of the "complete man". Therefore, this requirement should be reflected in the education which the child receives in his or her most formative years,

which are the years of life. Pre-school education should be conceived in such a way as to foster cognitive, emotional, physical development, to reconcile individual development and creativity with socialization, to impart moral and social values, to make the child part of the human and physical environment;

(iv) lifelong education is education for a world of change and for changing the world: pre-school education should give the child the sense of emotional security which he or she will need to accept change, welcome it with confidence and participate in it;

(v) in a lifelong education perspective the individual receives his or her education as a member of the community and through life in the community. The whole community tends to become educational. Therefore, all the educational resources of the community should be used for pre-school education, not only in the interest of economy and greater efficiency, but also because it will make pre-school education more relevant to the environment and will thus better prepare the child for living in it.

Continuity is also necessary between the education which a child receives from the home and the community, and pre-school education where it exists in an institutional form: one of the characteristics of lifelong education is the assumption that education takes place both in school and in the community at large and the plea that pre-school education be the very first phase of lifelong education in no way implies that the role of the family and the social environment of the child should be decreased.

If pre-school education is to be generalized in the developing countries, two main requirements must be met: the costs of pre-school education should be reduced; and pre-school education should be more closely related to the social and cultural patterns of the community which it serves. In fact, the problem is very much linked to the one previously discussed of the supportive role of the home and the community.

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