

occurring and take part in discussions on topics that are important, vital and to the interests of all.

For some the holiday season is past and gone, others prefer to wait and have their vacation later on in the year. Why not combine your holiday with professional interest and pleasure. A trip to Madras in November will provide you with both. Try it and see.

The Editor still asks for some one who will undertake to contribute something on Dietetics for the journal. There is much to be desired on this line, and we challenge some one boldly to take up the subject and produce information that will be really interesting and useful.

WORK AMONG CHILDREN OF PRE-SCHOOL AND SCHOOL AGE

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I SHOULD like to endeavour to answer the question why in my opinion, work amongst the children of both pre-school and school-going ages is almost as necessary as infant welfare work. I have used the word "almost" advisedly, because it is a known fact that the percentage of mortality among children is highest during the first year of life and the only logical conclusion is, that work is of paramount importance during that period. If, however, merely to save life was the object of all endeavours, the work of child welfare might well be devoted almost exclusively to infancy and early childhood; but no one who has given the subject any thought at all, will but agree with me that the aim and object of all such endeavours must be so to care for the children of any nation, that they will have every chance of waging a successful battle against disease in its myriad forms, and of attaining *a robust manhood* and a fragrant *healthy womanhood*. In India, one must strive to rear a race strong in body, sane in mind, economically efficient and skilful, able to hold its own in the world, in the realms of agriculture, of industry, of science, and yet to retain its old traditions of intellectual achievement, of artistic skill, of wonderful manipulative dexterity, of poetry of music and of devotion to things not material but spiritual. If this, then, is our high aim, it behoves us to examine every period of the lives of the children to see what particular dangers are liable to confront them, how they may be best avoided or met, and what is particularly to be striven for, in each period.

I will deal first with the toddler stage which may be widely defined as the period between one and three years of age. I have a certain

amount of diffidence in venturing to express my views here, as what experience I have, is based on work in England, rather than in this country; but I believe that what is true of conditions there, will be true to a greater or less degree in India. First of all I would stress the extreme importance of trying to establish at this age a sound and efficient digestive system, as that is undoubtedly the basis of all future physical well-being, which, all other things being equal, is the foundation of a well-balanced life in which no one part either physical, mental or moral is developed at the expense of the others. To ensure this, an adequate and suitable dietary is the first essential. Certainly in England many children of this age, especially those who have been artificially fed in infancy, are far more difficult to feed than either infants or older children and it is during this period that a life-long weak digestion usually originates. It is very common to find children who have gained weight satisfactorily during the first year of life, not only cease to gain steadily but actually to lose weight; to find dentition which has been proceeding normally become a very erratic process; and to find signs and symptoms of either acute or chronic digestive disturbance. Pertaining to matters of food, is the necessity for active vigilance against fly contamination of food, for boiling milk and water, for seeking to secure pure food stuffs and for the observance of general hygienic principles. The need for skilled observation and expert advice in matters pertaining to feeding alone, quite apart from all other conditions, will not be denied, I think, by any.

Passing from the Digestive to the Nervous System one is forced to observe that very often children of the toddler stage are not provided with the opportunity of enough sleep, nor are their habits sufficiently regular. As in infancy, so in this stage, innumerable new impressions are being recorded, new muscular movements are being acquired, the various sensory organs are being daily adapted to the requirements of the ever-developing life and all this expenditure of energy requires a commensurate amount of rest and the avoidance of unnecessary strain by the daily repetition at the same hour of the daily routine. The fact that in England 12 per cent of the cases of epilepsy and all of tetany have their origin during this period is a proof of the irritability of the nervous system during this stage. To ensure a stable nervous system, with all it entails, toddlers must have about twelve hours of sleep—as a minimum, must be kept as much as possible to a clock like routine and must be protected from as much extraneous excitement as possible. How many mothers realise this?

Thirdly; this age is, in my experience, particularly liable to respiratory affections, such as common colds, bronchitis, broncho-pneumonia and whooping cough. Early teaching of the importance of a careful toilet

of the mouth and nose as a preventive of these evils, is very desirable; while efficient home nursing and very simple home treatment at the beginning of the above illnesses may prevent crippling complications and mitigate the attacks themselves.

I need only further mention that between the ages of one and three years, syphilis, rachitis, tuberculosis, ankylostomiasis, malaria and kala-azar may all manifest themselves and that early diagnoses and adequate treatment may prevent not merely death but a large amount of chronic ill-health, of lowered vitality with subsequent economic wastage. But where are the toddlers to have the chance of being scientifically observed or abnormalities, especially slight ones, detected? The average mother who has not had the advantage of instruction in matters hygienic, in home nursing, in mother-craft, cannot know by instinct what is good and what is bad for the child, neither can she be expected to seek medical advice unless the child is obviously ill. At present there is only the Child Welfare Centre and in some of these, only children up to two years of age are systematically observed. Even where there is such an institution, especially among classes other than the poor, much has to be done to educate the women to avail themselves of the facilities offered by such an institution and to teach them how infinitely better prevention is than cure, in matters of health.

We pass on to the period of life between three and five or six years of age and it may be profitable to glance at the physiological changes that are taking place. The Digestive System is daily becoming more stable; more complicated foods can be digested without difficulty; but one has to bear in mind that the foundation is then being laid for the final moulding of the jaws, for the permanent teeth and that improper feeding at this period will result in the formation of narrow jaws, overcrowded teeth with a consequent predisposition to adenoids and enlarged tonsils with all the evils resulting therefrom. At this age too, the pernicious habit of eating between meals is apt to be contracted and the still more vicious one of eating such substances as mud, earth, etc. with a consequent infection of round worms, ankylostomes or other helminthes, whose reflex effects on the health are almost as injurious as the toxic, though the latter may result in death itself.

The Nervous System also is becoming more stable. All the primary and even more complicated muscular movements have been acquired and all the sense organs are actively functioning. Yet one does observe, not seldom, such nervous manifestations as twitchings, tendency to stammer and awkward uncorrelated movements. Very often these pass off when the child grows older and its attention is more completely occupied in pursuits which interest and amuse, but in all cases they indicate the

necessity for a quiet well-ordered life, abundance of sleep, fresh air and easily assimilated food. At this age also, children are mingling more freely with older brothers and sisters and other children, and are thus more liable to infectious diseases. Now as these are definite illnesses and either a doctor is in attendance or the child is taken to hospital, we are not concerned for the moment with them but with unfortunate sequelae, which may develop soon after the child has ceased to be under professional observation and may thus escape detection *e.g.* a heart lesion, a toxic focus in nose or throat, an otitis with or without deafness, which untreated, in small children may even lead to deaf-mutism : nephritis, anæmia, etc.—all conditions giving rise to a state of health far below the ideal and leaving the child an easy prey to the entrance of bacteria or parasites.

Even a careful medical inspection twice and thrice a year would bring to notice many remediable ailments, such as have been mentioned above, and make all the difference to a child between good health with its glorious capacity for enjoyment of work and play and a state of existence entailing real suffering or an apathy almost more pathetic, in a child.

With the attainment of school age and attendance at school, the child is placed in a new environment which involves a radical change in the routine of life which has hitherto been followed, and imposes a whole series of new conditions and requirements to which he must adapt himself. The response of a normal child will be such that in a remarkably short time he will settle down to the new order of things, having experienced little, if any, conscious strain but not without the exhibition of certain emotions. With the highly nervous child it is often otherwise, and, unknown to him or her, the child ought to be for a time under skilled, unprejudiced observation. In some cases, all that is needed is a little time for readjustment and intelligent encouragement on the part of parent or teacher but, in others, if permanent injury is not to be done to the nervous system of the child, special arrangements and modifications have to be made.

But even in the case of apparently normal children in regard to nervous susceptibility, the experience of countries where systematic medical inspection of schools has been undertaken for many years (as far as I know no such work has been done in India) goes to show that if the ideal of raising up a race, which shall be physically and mentally efficient and alert, is to be realised, one cannot neglect the health of the school child.

In the United Kingdom, amongst the poorer classes, a large number of cases of malnutrition come to light. Its widespread prevalence, the obscurity of its origin and the insidiousness of its onset combine to make it a problem which could not be ignored and which has led to the establishment of the school canteen. The number of cases in which the

malnutrition has been traced to a previous acute illness where good nursing and nourishing food have been wanting, has led to the proposed establishment of a home nursing service, whereby fully trained nurses on the staff of the Medical Officer of Health should, under his supervision, attend cases of bronchitis, pneumonia, measles, whooping cough, ophthalmia and many other diseases.

Among the children of both poor and well-to-do classes, dental diseases are very common and dental clinics have been established by no fewer than 150 Educational Authorities in Britain where the teeth of children and young persons up to the age of 18 years are attended to. Again, amidst both rich and poor medical inspection of school children has revealed the prevalence of much defective vision, which is a serious handicap even in comparatively minor degrees, not to mention the intolerable burden which blindness is to an individual and the heavy loss to the community. Prevention is directed to the removal of those dangers to eye and health embraced in the word insanitation, while arrangements are made for the prompt and efficient treatment of the minor diseases of the eye in the school itself. Errors of refraction are referred to an ophthalmic surgeon for correction by spectacles. In England, a child unable through defects of vision to benefit by the instruction usually given at a public elementary school becomes eligible for admission to an institution for the blind, where he or she has an opportunity of becoming proficient at a trade in the hope of becoming a self-reliant and self-supporting member of the community.

Another discovery has been the prevalence of deafness, which is a serious handicap both during school life and in after years. It deprives a child of most of the advantages to be derived from oral teaching and even when present in a slight degree, lead to dulness and inattention. When the medical inspector of schools finds on a child's entry into school any degree of deafness the case is referred to an aural specialist. Slight deafness can at times be cured by pocket handkerchief drill: removal of tonsils and adenoids may be needed—in a few instances of middle ear disease, operation may be necessary, but whatever treatment is adopted, regular persistent following up is given, to observe progress made and to watch for signs of relapse. In the case of adolescent boys and girls it is the duty of the medical inspector to give advice as to the hygiene of puberty and in the schools where the children of fairly well-to-do people attend, many parents of their own accord come to the school to ask the advice of the doctor there, relative to the problems of adolescence, and gladly co-operate as far as they possibly can in the carrying out of the suggestions made.

Time prevents my going into details regarding other defects found in school children—defects of speech and stammering, affections of the heart

necessitating some modifications in the matter of school games and careful consideration of the choice of a profession or occupation; disease of the lungs especially tuberculosis; minor ailments such as skin diseases, infestation with vermin and intestinal parasites. Nor can one go into details concerning the special schools which are in existence, for cripple children, for the mentally abnormal, for those suffering from tubercular bone and joint diseases and for the blind and deaf.

As I said before, I have based my remarks on experience in England and most of you are better equipped than I am to estimate to what degree similar conditions might be expected in this country. It is, however, surely reasonable to suggest that if Educational and Health authorities in a country with a temperate climate like that of Great Britain, think that it is advisable for the good of their race to follow up the work of the child welfare centres with that of Medical Inspection of school children, it is still more advisable in this country where a tropical climate makes more severe demands on vitality, where devastating diseases such as Dysentery, Enteric, Malaria, Cholera, etc. are common, and where there is still great ignorance on matters hygienic among the masses of the people. Happily much has been done in regard to infant welfare during the last few years and it is, in my opinion, only one step further and a continuation of the same work, to advocate periodic medical inspection up to, and during, school life. I admit that behind the medical school inspector or inspectress there must be the specialist—the optician, the aurist, the throat and nose surgeon, the dentist and not infrequently the psychologist or psycho-analyst but I am quite sure that in the large centres of population at least there will not be wanting men and women with the necessary qualifications and experience, whose professional sympathies and skill could be enlisted.

HEALTH VISITOR'S LEAGUE PAGE

DEAR FELLOW MEMBERS OF THE HEALTH VISITOR'S LEAGUE,

I have had an interesting letter from Mrs. Lyall, who is working at Mardan, in the Indian Army. As you all know Welfare work in the Indian Army is rapidly increasing, so much so that it is difficult to find sufficient workers. This is what Mrs. Lyall writes about her work?

“Report of the Health Centre”

(From 15th September 1928–30th April 1929).

I arrived here at Mardan on September 14th, and took charge of the work from the 15th September. As the work had not started before, I had to go round with a guide, to make acquaintance with the wives and children of the officers and men of the Indian Regiments. Several days were spent like this