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The Golden Age of Child Health

THE REMARKABLE GAIN achieved in controlling death and disease among young people constitutes one of the brightest chapters in the history of medicine.

Children born around the beginning of this century had prospect of an average length of life of less than fifty years; male babies born in 1969 may look for an average of 68 years and female babies 74 years.

Diseases which were untouchable ten or twenty years ago yield to enlightened chemical or surgical or other treatment. Today's parents expect their children to grow into adults: only a century and a half ago Napoleon wrote that every family should have six children, "seeing that, on the average, three are sure to die."

Life has become safer for children, but it is hardly correct to refer to the death rate in this or that disease as having "dropped" or "declined". It has been pressed down under the feet of advancing science, the outstanding services of medical men and women, and the enlightened good sense and co-operation of parents.

Miss Mabel Ferris, Assistant Director of the Health League of Canada, writes: "The children of today have a 'golden' outlook on health. The communicable diseases have, by and large, been mastered; dental care through fluoridation of communal water supplies will mean better dental health throughout life for the generation now being born; good nutrition, of which mothers are increasingly aware, the early diagnosis of congenital heart defects, and the early detection of flaws in hearing and sight: all these add up to something really wonderful in the health of children."

However, the number of lives lost among children is still large, and a considerable part of it results from causes that can be controlled. In 1965, the latest year for which figures are available, nearly 14,000 young people under 15 died in Canada, of these 9,862 were under one year of age.

Complete health care

Protection of children's health and the prevention

of untimely death start before birth. These involve prenatal care of the mother, quick detection of birth defects, proper nutrition from the earliest days, defence against communicable and infectious diseases, care of the teeth and other organs, prevention of accidents, and education in health habits from the time the child becomes able to understand.

The best sort of children cannot be raised by guess and by hearsay. Good will and good intentions cannot be substituted for expert skill and knowledge. Fine words do not take the pollution out of the water we drink, or the deadly bacilli out of infected milk.

The practical work of providing a healthful environment and adequate education demands informed activity by parents, teachers and those who are elected to serve communities, provinces and the country.

The penalty for neglect of health in childhood is very heavy. Horace Mann, the educator, said something for everyone to ponder: "All through the life of a feeble-bodied man, his path is lined with memory's gravestones which mark the spots where noble enterprises perished for lack of physical vigour to embody them in deeds."

What, then, is the target? It was stated in this way by the World Health Organization of the United Nations: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Judged by one criterion alone — preservation of life — Canada, one of the most affluent nations on earth, is still far down on the list of achievement. It is true that in 1965 the infant mortality rate was only 23.6 per 1,000 live births compared with nearly 70 thirty years ago, but other countries have rates as low as 13 and 14. Twelve countries have lower infant death rates than has Canada.

It is satisfying to say: "For every child who dies under today's conditions four would have died if the conditions at the beginning of the century had continued to prevail" but that is small consolation to the mothers of the 14,000 young people who die in a year.

Immunization

Unless they are controlled, children's diseases can be dangerous. Modern techniques are a bit more complicated than those of old, when a flannel band and goose grease played principal parts in child care. In those old days fewer than 800 out of 1,000 new-born babies lived to reach their twentieth birthday. The score today is about 950, attained by prevention of the diseases before they happen.

Immunity is nearly always an acquired state in which the body becomes resistant to disease. The likelihood of catching the infection against which one has been immunized is usually reduced to practically nothing, but in one disease, whooping cough, the protection is only partial in some children.

In Canada and other countries with high standards of medical and public health service, control of many diseases through immunization has become widespread, safe and effective.

Today immunization is routine in Canada against five diseases: smallpox, diphtheria, whooping cough, tetanus and poliomyelitis.

Perhaps the campaign against diphtheria best illustrates what can be accomplished by organized effort in behalf of child health. In 1924 there were 9,507 cases and 1,281 deaths in Canada. By 1930 the efficacy of diphtheria immunization had been conclusively proved, but large numbers of children remained unprotected.

The Health League of Canada threw itself into an intensive educational campaign, and many physicians and public health workers added their weight. Here is the dramatic record of their success.

	<i>cases of diphtheria</i>	<i>deaths</i>
1943	2,804	287
1947	1,550	139
1951	253	37
1955	139	15
1959	38	none
1963	76	7
1966	37	none

Because diphtheria has become so rare is not a good reason for neglecting immunization. Deaths from this disease are doubly tragic today when there is a safe, effective, readily-available measure to prevent them.

But this tragedy is likely to happen. A newspaper report in July 1968 told how an emergency inoculation service was given in London, Ontario, to more than a thousand children who may have been exposed to a patient with diphtheria in association at a local swimming pool.

A continuing programme

Complacency must be guarded against. It is not good enough to know that the safeguard is there

should an outbreak occur. It takes several weeks, for example, for diphtheria immunity to develop after the inoculation, but only five to seven days elapse between exposure and the onset of infection. Effective protection of children means planned inoculation before an emergency or exposure occurs.

Children should have periodic checks by the family doctor or pediatrician so that they may be kept up to date with immunization shots. Good practice for all parents would be: ask your physician what immunizing procedures are available and when they should be administered to each of your children; have this immunization done at the right time; keep a complete record of all immunizations and dates; have a diary in which you note these things and also the dates when booster shots should be given.

Attacking disease in all its aspects, and suggesting means to improve health through action by authorities in community, school and legislature, the Health League of Canada has been operating since 1921. In these 48 years it has registered many triumphs as a result of its advocacy of immunization, pasteurization, fluoridation, and a dozen other preventive health measures.

As Dr. Gordon Bates, its Vice-President and General Director, said in December: "We are not out to give medical advice, but we do urge people to consult their medical people in time to avoid serious disease. We are out to prevent people from suffering from disease unnecessarily. We believe that an ounce of preventive medicine is worth more than a pound of curative medicine. We believe that in this age of revolutionary change in our environment, from the rise of an urban society with its attendant pollution problem to the use of nuclear energy for peaceful and war-like purposes, we face profound biological problems hitherto unknown. Our League urges every citizen to seize upon every possible precautionary measure for himself and his children."

Cystic fibrosis, which was not recognized as a disease until about thirty years ago, is reported to cause one in every fifty deaths in childhood. One booklet reports that it strikes one in every one thousand babies born in Canada. The Canadian Cystic Fibrosis Foundation, with 23 chapters, is engaged in promoting research designed to discover the cause of the disease, to find a means of controlling it, and to give information to parents.

Nutrition and exercise

Malnutrition may be prevalent in the homes of the wealthy as well as among the poor. The truth is that even when a family has advanced to the point where it can afford a wide choice of foods there is nothing to prevent its members from eating the wrong kind of food.

Children are taller and heavier than those of two generations ago. Full adult height is approached at a

somewhat earlier age than in the past, and the ultimate adult height has increased gradually. These facts, which have significance in considering nutrition, are attested by studies in the United States, Great Britain and Commonwealth countries.

Good nutrition does not consist in adding more calories or doubling the dose of vitamins. Attractive and adequate and regular meals in pleasant surroundings are needed. The mother who, pressed by the need to make ends meet, refuses her active boy or girl a second sandwich at lunch time is menacing the child's health. Savings should be made elsewhere than at the expense of children's food.

During adolescence boys and girls go through a period of rapid growth, which means that they need extra quantities of the foods that provide generous amounts of excellent proteins, calcium, iron and vitamins. Parents should guard against being coaxed or coerced by their children's tastes into providing meals largely composed of carbohydrates and fats.

Along with good food, everyone needs exercise. One purpose of physical training and 5BX Plans is to promote a strong body in which the muscles, because in daily use, perform their functions properly, giving support to the vital organs.

No one wishes to return to the austerity of the last century, when children started work at the age of nine and it was considered a great advance in England when the Factory Act of 1819 limited the work of children of that age to 12 hours a day. But in the interest of their health children should have adequate exercise to offset the physical enervation of this push-button age.

Rest of body and mind is also an important part of being well. We are inclined to be feverishly energetic, perhaps merely as an escape from being quiet. Our ears are assaulted by juke boxes and radio and television blaring the same handful of tunes over and over. Adults need to provide an example to children that tranquillity and silence are not bad things, but on the contrary contribute to physical health and mental peace.

Mind and body

The 17th century philosopher, John Locke, opened his treatise on education in this way: "A sound mind in a sound body is a short but full description of a happy state in this world."

The idea of purely mental and purely physical disease is a myth. There is no such thing as a disease of the body which does not affect the mind, and many an uncomfortable state of affairs physically has its origin in our thoughts.

This topic was discussed in detail in a *Monthly Letter* called "Mental Health's New Look" in August 1964, but it is worth reminding ourselves that the most radical condemnation of our society and culture is that one out of ten babies will enter a mental hospital or come under other mental care at some time in his or her life.

Here again, as in the case of physical health, it is not necessary to wait for a breakdown before calling on help. Children who are disturbed are entitled to professional service. The psychiatrist will try to ventilate the child's mind by giving him a chance to air out all his feelings in the presence of someone he can trust. Then he tries to get the patient to learn to move out of himself emotionally and look at the facts. After that he helps the patient to build up emotional strength to face threatening situations that have always been repressed and in the last step he gives the patient insight. When the patient has that he can free his mind from its load of emotional disturbance.

Health of the mind and spirit must not be neglected. We recall in sorrow the generation of young people brought up on the Nazi doctrine "Health, Strength, Joy" — it was the "health" slogan of a doomed youth.

The crisis of the teens

The early teens are crisis years. Life is an emerging phenomenon. We have grown from a wholly protected position before birth through twelve years of whole or partial protection. Now, suddenly, we face the world with all its perplexities and dangers which are doubly frightening because they are mostly unknown.

Those who come to this significant period prepared by family life and school education are not affrighted. They know how to handle their desire for independence, achievement, emotional security, social approval and self-esteem. Their parents have seen to it that they have grown up accepting as normal the need to select ways of living which contribute to their needs as developing persons. The children have been accustomed to recognition as individuals and they behave with self-respect and personal dignity.

What has this to do with health? Dr. Griffith Binning, Medical Director of Schools, Saskatoon, gave the answer in an article called "Peace be on Thy House" which he wrote twenty years ago: "If emotional maturity consists in the ability of the individual to meet the storms of life alone efficiently, then the attainment of emotional maturity would result in cutting the doctor's work to one third of its present level."

Very well, then: let's give the children ideals and show them by personal example how the ideals work out. The burden of developing his values falls on the child, but parents and teachers create the atmosphere and set up the situations in which the children can discover for themselves the values that nurture human happiness.

Looking ahead

It is notoriously difficult to persuade people to plan, to look ahead, but surely the well-being of their children should be sufficient incentive to persuade them that, even if they neglect their own health, they have the duty and the responsibility to prepare their children today to live well tomorrow.

The aim of parents should be a high level of wellness and not merely the prevention and treatment of disease and physical defects. They will be alert to note significant symptoms or changes in behaviour or appearance.

Maimonides, the Jewish philosopher, said that symptoms are beneficent messengers which warn of approaching danger and urge us to avert it. Illness usually begins as a slight deviation from normal functions, and the earlier we detect this divergence the greater chance we have to avert dangerous development.

Children are maturing at earlier ages, and parents must step up the speed of their own maturation so that they understand their children's needs. Whatever a child learns of health elsewhere, he can practise at home only what the home will allow or the family accept.

There can be no gainsaying the fact that the example of adults in hygiene and safety can be the deciding factor between life and death of their teen-age children.

The office of Medicine

The medical profession realizes the new challenge. In earlier years the problems were more obvious, more on the surface and clear-cut. Science has now reduced the toll of disease in all but the most difficult areas. The remaining problems in health are complex and far-reaching.

Beginning with Hippocrates, the "Father of Medicine", the Greeks initiated the progress of civilization toward a broad humanitarianism. We are still trying to expand and make this more useful, and when some day history is written with a clearer perspective than we now seem to possess the physician will be seen to have improved the world rather than the politicians or the soldiers whose statues adorn the pedestals in our public places.

Medical research and medical science have become major factors in unprecedented declines in death rates and in associated increases in life expectancy, and they continue to press forward. In its brief to the Royal Commission on Health Services in 1962 the Canadian Medical Association included this paragraph: "Improvements in therapeutic medicine have been so spectacular in the past quarter-century that more emphasis should now be given by the medical profession to preventive medicine."

Medicine is the art of understanding diseases and preventing them or curing them or relieving them when possible. Its practice involves not only acquired knowledge, association with the developing environment, and accommodation to change, but, most of all, a certain close relationship with patients. Its inner personal satisfactions arise from services given to human beings.

On the other hand, the people served by the physician have duties toward him: to consult him in time,

so as to give him a chance to do his best; to trust him, telling him truthfully about their symptoms; to do what he says they should do in their own interests.

In a physician's prayer ascribed to Maimonides there occurs this petition: "Grant that my patients have confidence in me and my art and follow my directions and my counsel. Remove from their midst all charlatans and the whole host of officious relatives and know-all nurses."

The community

Every community, whether it be a cross-roads village or a metropolis, has an unescapable duty to provide certain things necessary to the healthful living of its people.

Public health is the science and the art of preventing disease, prolonging life, and promoting physical and mental health and efficiency through organized community efforts. That is a high ideal that is often not within the sight of local and provincial boards of health, and even the minimum responsibility to provide immunization and efficient sanitation, eliminate poisonous pollution, safeguard water and milk — even these are not thoroughly attended to in every community.

Children are entitled, in our well-to-do society, to the full benefits of existing knowledge and all the facilities of public health, and nothing less will do.

Let us advance

Now that we have all but eliminated the diseases which formerly carried off children in great numbers, we must turn to protective and educational measures which will save the children from diseases and practices that are likely to prove injurious in their later years, and we must condition them to face the world in such a way that their prolonged lives will be happy.

Disease is not caused exclusively by gremlins, germs and viruses. Some of it can be averted if we give over our neglectful carelessness and take positive actions. The only limitations are the bounds set by the growth of scientific knowledge, the willingness of those in authority to introduce advanced ideas, and the readiness of the people to play their part intelligently.

We had an International Geophysical Year in 1957, joined in by 66 nations, seeking the answers to questions connected with a dozen earth sciences. We are now part way through an International Hydrologic Decade, with nearly 60 nations participating in the search for solutions to problems of preserving water, the most essential natural resource. We had, in 1968, an International Year for Human Rights, promoting individual freedom and communal care.

Why not have a year or a decade in which all nations would co-operate energetically to plan a society in which it would be worthwhile for our children to live long?