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contents

EDITORIAL

The New Delhi edition of the Indian Express dated 9th December, 1983 had the following news with the heading: "one lakh children to die of hunger in three days!". "In the next three days one lakh children in the developing world will die silently of hunger, malnutrition and poverty. In the last 12 months, the equivalent of the entire underfive population of the United States has been wiped out. On a European scale, this is equivalent to the combined young child populations of Britain, France, Italy, Spain and West Germany.

Thirty per cent of the children born every year in the Third World do not live till the age of five. Of those who manage to survive, three out of four do not have access to proper health care facilities and three out of five do not get regular supplies of clean drinking water....."

Taken from the WHO source, the report also included the break up of the total child deaths from immunable diseases in 1980. Accordingly out of 50, 55, 000 children who died in the year 1980, 5000 died of diphtheria, 50,000 of polio myelitis, 12, lakh of neo-natal tetanus, 16 lakh of whooping cough and 22 lakh of measles. Yet we know today that with reasonable care most of these deaths could be prevented. But this is as though they had to die so that others may live in more comfort.

Two thousand years ago many a childern had to die, because one man wanted live in peace, because his life was threatened by a child. Those children who were killed at the time of the divine Child of Bethlahem were the silent victims of just one man's interest.

Coming back to the statistical report mentioned earlier, the question necessarily to be asked is: Why should these children die at this tender age? Yet we know that India has a major share of these silent victims. But they are not the only victims. What about the several millions who are killed every year, who have not even had the chance of seeing the light of the day, who are silent victims within the womb of their mothers? They have to die, so that others may live in 'comfort'. Then, at the time of Christ, there were only a few victims for the sake of one Herod, but now they run into millions in different places for the sake of many Herods.

What have we to do in such a situation ? Can we afford to be insensitive? Or can we do something ? Can we console ourselves saying "What can we do ? This is a very complex and huge problem?" Can we have that necessary political will, that radical commitment to the cause of these silent victims in response to the call of the Divine Babe of Bethlahem? This is the time to think over it. Christmas is a time of joy and happiness to all. Yet, can we have a meaningful Christmas, unless we have done our bit in defence of these millions of silent victims, both born and unborn.

Every year December 28 is celebrated as Holy Innocents' Day to commemorate the silent victims at the time of Christ. During Christmas season and particularly on that day, of Holy Innocents, let us make it an occasion to reflect on our responsibilities to be sensitive to the grave situation we are in today with millions of children dying of malnutrition and neglect, being killed before they are born, going blind after they are born. Let this year's Christmas celebration make us a bit more sensitive to such situations and lead us to a determination to DO something about it at our own level.

What does a Child need ?
Very simple things :
Enough food to eat and pure water to drink;
A house to live in, clothes to wear;
A school to study in and books to read;
Space to run about and play;
And a toy or two to play with;
Medical care and protection against sickness
AND MOST OF ALL THE KNOWLEDGE
THAT SOMEONE CARES

Courtesy : UNICEF

Retrieval from Retardation

What Community Can Achieve with Professional Help
—by Dr J L Kulkarni

Mental retardation is irreversible, at present levels of scientific knowledge and medical competence. But in most cases, it could have been avoided, even in an adverse context of poverty.

The extended arm of professional support enables a community to be aware of, and escape, the common causes of mental retardation, writes J L KULKARNI from his direct experience in prevention, detection and rehabilitation.

A mentally retarded child puts the family out of gear economically and psycho-socially. Even with advanced scientific research, no cure has been found for mental retardation. It continues to be among the most handicapping of childhood disabilities. The aim of this article is to show that there is an alternative to despair.

Defining the problem

Mental retardation is not mental illness. Rather, it is a state of arrested development of intelligence, because of factors affecting the developing brain. It is associated with a diminished capacity for adaptive behaviour. Broadly, the three main criteria which help recognize a mentally retarded child are : (a) low intelligence, (b) low standard of behaviour and (c) low achievement in relation to peers.

Global experience shows that a high incidence of mental retardation has strong correlation with poverty, malnutrition and poor health care. Which suggests a basic approach for preventive action; and also explains the large numbers of the mentally retarded, especially in developing countries.

Extent of prevalence

In India alone, there are about 15 million mentally retarded; or over 2.5 percent of the population. Of this 75 percent are mildly retarded; 20 percent moderately and five percent severely. As the data are based on hospital figures and sample surveys, it is likely that the total number may have been underestimated. Indeed, most of the time the mildly retarded go undetected if they get absorbed in jobs demanding relatively low intelligence, such as cattle grazing and helping on the farm. So too, if the child does not attend school. Once literacy spreads in India, it is possible that the country will be confronted with more cases of mental retardation than presently reckoned.

Any strategy against mental retardation must take into account its causes. Medical science identifies more than 2,000 of them. These causes could be grouped for convenience, as prenatal, natal and post-natal. Many of them are preventable, particularly those related to malnutrition and diseases caused by infection or environmental deficiencies of micronutrients such as iodine leading to conditions like cretinism.

Categories of causes

Among the pre-natal causes of mental retardation are a number of genetically determined disorders, foetal infections and irradiation and a number of unknown or indefinite causes associated with placenta-related abnormality, toxemia of pregnancy, prematurity, maternal medication, poisoning, nutritional deficiency, infection or trauma.

At the time of birth, mental retardation of the child could be caused by injury, infection haemorrhage, lack of oxygen, low blood, sugar, etc. In the post-natal phase, typical causes of mental retardation are cerebral infection, meningitis, encephalitis, abscess, trauma, poisoning, accidents and complications consequent on vaccination and diseases like pertussis, small-pox and rabies. This array of causes suggests that mental retardation is not inevitable. Most of the causes can be controlled.

The three elements in managing mentally retarded children are (a) prevention, (b) early detection and intervention and (c) rehabilitation.

Prevention is paramount

Prevention is a paramount concern because mental retardation is, at the present level of knowledge, irreversible. And the first step to prevention is educating the public on various causes of mental retardation, such as,

- — Ways to prevent or treat infectious diseases
- — Dangers of drugs, toxic factors, irradiation and blood group incompatibility;
- — The importance of immunization as well as nutrition; and
- — Removing misconceptions about mental retardation.

Genetic counselling

At the professional level, prevention starts at the time prospective partners in marriage are matched. Genetic counselling helps to discourage inbreeding. Consanguinous marriages are common especially in the south of India, where some studies have shown over 40 percent of mentally retarded children were first or second cousins. This proportion in North India was around 8 percent, as seen from studies in that part of the country. Screening for blood group compatibility of couples should be done as a matter of course. Genetic counselling should become similarly common for couples at risk, that is, those with a family history of mental retardation on either side.

Care and support

Once a mother at risk conceives, sound nutritional support and obsteric care are essential. More so if she suffers from diabetes. If complications are treated promptly and adequately, it would be possible to prevent low birth weight babies who are prone to mental retardation.

Obstetric care to prevent birth trauma and comprehensive advice after birth should prevent a major part of the continuing incidence of mental retardation in India. The health care system in the country gives low priority to preventing mental retardation. This situation needs to be corrected simultaneously with a step-up of public awareness about mental retardation. This dual thrust will be promoted by action at two levels—by a professional interdisciplinary team, and secondly, at the people's level.

What professionals can do

The professional team responsible for preventing mental retardation, is best located at a major hospital or a teaching institution. It should have facilities for detailed case work. Complete physical, neurological and psychological evaluations should be possible, leading to professional diagnosis and planned investigation. Facilities should be available for the team to carry out biomedical and chromosomal (heredity-related) studies. Ideally, the team should comprise an obstetrician, preferably with current knowledge of genetics and child neurology, psychologists

and social workers well-versed in child development, speech occupational, and physio-therapists, biochemist and cyto-geneticist. As mental handicap is usually associated with one or another of various other handicaps, the services of orthopaedic, ophthalmic and ENT surgeons as well as neurologists and psychiatrists should be on top.

A city experience

An example would illustrate. In Bombay city and suburbs, some 29 institutions and 8 special sections in municipal schools are involved in work relating to mental retardation, particularly the training of the handicapped children. Significantly, the majority of these institutions are voluntarily organised, though some are partially aided by government. The work of one of them (Shrimati Motibai Thackersey Institute of Research in the Field of Mental Retardation) may be briefly recounted to explain the value of a strong professional team in containing the problem of mental retardation among children.

Over a period of five years, 1978-83 about 2,500 mentally handicapped children were investigated at this centre. Out of them 500 have been absorbed in the Special School and Vocational Training Centre. The remaining have either been absorbed in nearby schools or guided to get integrated in family business or farming. Cases from all part of India and also from neighbouring countries are received by the centre. On an average three new cases are investigated daily, by a multidisciplinary team led by a paediatrician. The 'developmental clinic' assesses infants at risk from birth to 30 months. An EEG unit detects disorders of the brain. A speech audiology unit detects hearing disorders. There is an infant therapy clinic and a unit for children who are professionaliy retarded or emotionally disturbed. A biomedical and cyto-genetic laboratory supports the system. Around 150 children received vocational training at the Sheltered Workshop. The Special School has 350 to 400 children who are trained and taught in four languages (English, Hindi, Marathi and Gujarati); the children being grouped according to language and intelligence quotient. The children working at the vocational training centre are given a stipend as incentive, Rs. 50 to 150 a month. This is feasible partly because the centre works at a profit from sales from its weaving, screen printing and carpentry sections. Once the child begins to contribute to the family income, the child, despite its disability, is no longer an economic burden and is accepted better at home. When the mentally retarded are no more entirely dependent on someone else, they are no more unwanted.

Work in the community

Professional team work at central locations must be reinforced by work among the people. This is principally a matter of raising awareness. The team planning to educate the masses should understand prevalent beliefs, attitudes and superstitions concerning mental retardation. This is the first step in clearing misconceptions and wrong beliefs.

The mainstay of this effort is the community health worker. He or she needs to be trained to convey messages, to differentiate between mental illness and mental retardation, and to detect a mentally retarded child and to bring the case to the notice of the doctor at the nearest health centre.

Means of communication

Messages on mental retardation are best transmitted to the community by the parent of a mentally retarded child. Once the parent realises the importance of early detection, treatment and training of the child, she will be able to motivate more people to collabo-

rate and work against mental retardation. This is so because what she conveys to the community is first-hand knowledge.

The village school teacher can play a key role in detecting a mentally retarded child, for nothing reveals the condition better than the subdued pace of progress at school

Among the ways successfully tried to enhance public understanding of mental retardation are films screened on market days and at village fairs, to emphasise achievements by the mentally handicapped. An exhibition of goods handcrafed by the mentally retarded has a decisive influence on public opinion about their potential for economic contribution.

Doctor in the locality

Public interest in preventing mental retardation and its consequences can be sustained only if the doctor at the nearby health centre has a complementing sense of social responsibility. For this he must have a high index of suspicion wherever factors in family, pregnancy and pre-natal period place the infant at risk. He should also be able to do periodic check-up of infants and school children to detect deviation from normal development indicating brain damage. It should also be possible for him to do simple screening tests for detecting metabolic disorders.

Experience shows that a strong link-up of professional and popular efforts make a difference in preventing, detecting and intervening in mental retardation among children.

Given the 'state of the art' as well as the human condition, mental retardation may not be eliminated altogether. Rehabiliation is, therefore, a necessary component of any strategy against mental retardation. A mentally retarded child or person is a member of the community as much as another, and has the basic right to live, to work and to leisure.

One with the community

Till 10 to 15 years ago it was thought that a prudent dispensation would be to admit a mentally retarded person (who could no longer be cared for at home) to an institution removed from the life of the community. Today it is accepted that the great majority of the retarded do not stand in need of any such institution and may indeed be harmed by it. Rehabilitation now aims at integration in the community. 'Normalising' does not mean ignoring the retardation or forcing normal expectations upon a mentally retarded person.

From dependency to acceptance

Community life for the mentally retarded depends on public support and public acceptance. In a country like India where the majority live in villages, rehabilitation should be oriented to simple repetitive tasks not involving much exertion of the brain. Weaving, cattle grazing, helping on the farm, etc. are areas traditionally open to the mildly retarded and should be recognised as appropriate options now and in the future. However, small the earnings or contribution may be, a mentally retarded person will be accepted by the family and community, if he shares in some measure the common economic burden. The fact that this is possible has been proved and is increasingly being recognized by voluntary organizations working in this field, with or without government help.

Dr. J. L. Kulkarni is a paediatrician and chief medical officer of Shrimati Motibai Thackersey Institute of Research in the Field of Mental Retardation. Sewri Hill, Sewri Road, Bombay-400 033

Courtesy : *'FUTURE', UNICEF*

Don't Measure Your Age by Your Years

— by Harold Shryock, M.D.

Physiologically, some people are younger at 55 than others at 45

Life is progressive. It moves on year by year regardless of whether the individual wants it or not. And there is no turning back.

Advantages and disadvantages come with the passing of time. Physically, the human body tends to wear out. This takes place at a faster rate if a person pursues a careless way of life and at a lower rate if he consistently follows simple rules of conservative living.

Mentally, emotionally, and spiritually, there are cumulative advantages with each year that passes. Life can become more meaningful and more rewarding for an optimistic individual who spends his talents and energies in worth-while undertakings.

It is in this sense that the later years of life can be the best of all.

Every human being is endowed at birth with a certain reserve supply of vital energy. The exact amount varies from person to person. The major contribution to this quota of precious dynamic force is made by one's parents through channels of heredity, some children being born with plenty of vigour and resistance to disease and others with a relatively meagre quantity.

The person who lives carelessly or who experiences serious illness during his lifetime or who falls victim to major, life-threatening accidents uses up his supply of vital force at a more rapid rate than the person who grows up under fortunate circumstance and who lives conservatively.

During youth and early adulthood, when vigour is abundant and life flows easily, it is hard for a person to be conservative in the use of his physical assets. Overwork, loss of sleep, and overindulgence all take their toll. But at this phase of life the individual is prone to reason, "I would rather live it up now even though it does take a few years off the end of my life."

But when this same person comes to the late 50's and 60's his attitude changes. Life is still sweet, and he chafes under the limitations of reduced vigour and a greater tendency to illness.

And so the question logically enters our thinking. Is it too late when a person passes his physical prime to redeem the past and regain what he lost by the indiscretions and wasted energies of previous years ?

It is not possible for an older person to have restored to him the same measure of vitality he possessed in his younger years. But he can husband the resources he still possesses, and, by using them wisely, stretch them out for a longer period of time. In the meantime he can reap the benefits of a planned health programme which will make life during his declining years more comfortable and more enjoyable than it would have been had he continued in his "don't care" attitude toward matters of health.

A prime example of what a carefully planned health programme can do for a person in his later years is provided by the late President Eisenhower. Dwight Eisenhower was never a weakling. As a military man he had kept himself in reasonably good condition. But the war years drew heavily

on his reserve of vital energy. As commander in chief of the Allied Forces in Europe he bore the strain of long hours of work, of excessive responsibility, and of intense anxiety over the welfare of those for whom he was responsible. Also, he was a smoker, which in itself had hastened the process of aging within the organs and tissues of the body. To his credit, Eisenhower discontinued smoking, on the recommendation of his physician, before he was called to the Presidency.

During his first term in office, President Eisenhower suffered two major illnesses, either one of which might have incapacitated an even younger man. In September 1955, he suffered a heart attack, and in June 1956, he was stricken with ileitis, which required major surgery. These ailments focused earnest attention on the President's state of health. Many would have said that it was too late for him to benefit from a health-building regimen. Nevertheless, the President's doctor, in consultation with the best medical specialists of the nation, instituted such a programme.

Dr. Howard Snyder, Eisenhower's physician, summarized the formula for maintaining the President's health as follows: "Proper diet, avoidance of excessive fatigue, plenty of rest, lots of moderate exercise, frequent physical examination, a controlled temper."

And thanks to his following such a programme, which did a great deal for him even late in life, Eisenhower was able to carry through a second term in the White House and thus, at 70 to become the nation's oldest President up to that time.

The rate of aging

One's effective age cannot be measured by the number of his birthdays. Even among friends one's age is judged by comparisons more than by chronology. The rate at which the human body ages differs with individuals. Some are younger at 55, physiologically speaking, than others at 45. And, except for serious accidents or major diseases, the person who is "young" at 55 will live longer than the one who is already "old" at 45.

Certain factors speed up or retard the aging process. One authority in the field states that a young person may vary his life expectancy by as much as 30 years depending upon his pattern of life. The person who lives in the country has a five-year advantage over one who lives in town. Even being married has its influence, with a husband or wife being five years better off than one who is single, divorced, or widowed. Keeping one's weight at a normal level definitely helps. Overweight persons become susceptible to many of the diseases that shorten life. Being 25 per cent overweight carries a four-year disadvantage; being 45 per cent overweight, a seven-year disadvantage; and 66 per cent overweight, a 15 year disadvantage. A pack-a-day smoker pays the price of a seven-year shortening of life, and one who smokes two packs a day carries a 12 year disadvantage.

Let us make this comparison a little clearer by contrasting the situation of an unmarried, heavy-smoking taxi driver who follows a devil-may-care attitude toward healthful living, with that of his sister, who is happily married, lives on a farm, does not smoke and avoids, other forms of dissipation. The sister has a three-year advantage because she is a woman, a five-year bonus because she is married, another five-year lead because she lives in the country, and a 12 year advantage because she does not smoke. Thus the sister has a 25 year longer prospect of life than does her brother who lives carelessly.

Life expectancy has increased a great deal within the present century. In 1900, less than half (40 per cent) of live-born babies could be expected to live until age 65. Successful conquest of communicable and infectious diseases has reduced death in the younger years to the extent that now about three-fourths of live-born babies may be expected to reach age 65. This means that the number of older people in our population has increased both relatively and actually. In 1900, about 4 per cent of the population consisted of persons 65 years of age or older. This percentage has grown until, in recent years, more than nine per cent of the population is 65 or above.

Activity

As a person becomes older, his remaining store of vital energy declines. For this reason it is wise for an older person to slow down his pace of living. This does not mean that he must restrain his enjoyment of life or that he has to walk with a cane or even that he has to avoid the activities that he always enjoyed. Instead, it means that he should practice moderation. If his work is strenuous, he should work fewer hours per day. He should take more time for leisure and re-creation.

Many an older person, unable to do what he used to do, is tempted to fight back. But this does not increase his quota of energy. Rather it wastes it through unnecessary emotional expenditure. It is much better, as one becomes older, to stay within the new limitations of energy. By practicing a little self-imposed mental discipline, an older person can be just as happy as in former years and can become reconciled to slowing down by discovering that life can be just as enjoyable when taken at a slower pace.

Some persons, with a false understanding of the principles involved, try to preserve their supply of vital energy by being inactive. They feel they are in danger of wearing out. But by inactivity, both mental and physical, they are in greater danger of rusting out than of wearing out. Activity is necessary for continued health. Physical activity quickens the circulation of the blood and thus helps to maintain a favourable condition in all organs of the body, particularly the brain. Mental activity aids one in being optimistic. And with the continued use of the brain comes a magic response by which all other organs benefit.

Winston Churchill at age 60 reportedly announced his impending retirement from public office. Then came World War II, and Churchill rallied to what he considered a patriotic duty. Marvellously his vigour, both physical and mental, continued strong for another 20 years and made him perhaps the greatest statesman in the history of Great Britain.

It is easy to speculate on what Churchill's future might have been had he allowed himself to become inactive soon after the age of 60. Inactivity and a passive attitude would have brought about a physiological decline in all the organs of his body, including his brain, and very probably he would have died several years earlier. Extremes of activity should be avoided even more in later years than during one's prime. A moderate programme of exercise is good, but excessive exertion may overtax the heart. The desirable amount of exercise for any particular person depends on what has been his previous way of life. One accustomed to a great deal of physical activity needs only to practice moderation as he becomes older. But the elderly who have neglected exercise should now be cautious as they gradually build up tolerance for activity.

Referring again to President Eisenhower, it should be recalled that his doctor insisted

that he take regular physical exercise, but that he do it with moderation. The President liked to play golf, and this proved to be well-suited to his needs.

Walking is a good exercise, and so is bicycling; but playing tennis or sprinting a mile at a time is too strenuous for most persons past 60.

Nutrition

As a person becomes older, he needs fewer calories per day than when he was younger. There is danger now that he will continue to follow his same habits of eating and thus become overweight. Overweight is a handicap at any age, but particularly in later years. The more weight a person carries, the greater, are the physiological demands on his heart, on his blood vessels, on his kidneys, and on his other vital organs.

Certain food elements are more essential than others. Not so many calories are needed now, but the need for adequate amount of protein, vitamins, and minerals continues. In reducing the amount of food they eat, oldsters should therefore take precautions not to deprive themselves of nutritional essentials. They should seek advice, from time to time, of someone who understands the principles of nutrition to make sure that their reduced diet is adequate.

How a person lives

A person's life is not measured entirely by years. One who wastes his vital energies by careless living reduces his capacity to live buoyantly. Not only does he pay the penalty of a shorter life span, but his personal capacities remain at a lower level. The enjoyment that one derives from life is related to the amount of energy he possesses. With an adequate supply, he tends to be happy and optimistic. But if through carelessness in his pattern of living he dissipates his bank account of vital energy, he will be sickly, moody, and disinterested in life.

One's mental outlook has its influence on how fast he uses his quota of vital enegry. Cheerfulness, courage, faith, and humour all contribute to the efficient use of one's store of energy. The opposite emotions of sadness, fear, and anxiety use up energy unnecessarily. A person's outlook on life has an important influence on his state of health.

Courtesy: HERALD OF HEALTH

Vitamin A in Human Nutrition

by Dr. Savitri Yadav, Prof. B.N. Raman

It is a common belief that vitamins are a source of energy in our body. This is not true, for they do not provide energy themselves but help in release of energy present in proteins, fats and carbohydrates. Vitamins are essential food factors to be included in a diet for maintaining proper health and vitality. Term vitamin was coined by Casimir Funk in 1912 for a dietary factor, chemically a nitrogen containing substance 'amine', essential for life (Vita).

Vitamins are complex organic compounds required in a small quantity for normal growth and health. They play an important role in regulating numerous biochemical reactions in the cells of our body. These biochemical reactions are essential for growth and energy and catalysed by enzymes present in the cells. Vitamins are co-factors for these enzymes and essential for their activities.

Vitamin A was the first fat soluble vitamin to be discovered. It is related to yellow coloured vegetable pigment present in carrots, yellow corn, mangoes, green leafy vegetables, tomatoes and papaya. This pigment is known as carotene and is a precursor of Vitamin A. In animal foods such as liver, butter, milk, cheese and eggs Vitamin A is present in a larger quantity in ready-made form. Vegetable oils as such do not contain Vitamin A.

It is a heat stable Vitamin. In customary cooking practices such as boiling, heating, and frying and baking to a moderate temperature for a short time, it is not destroyed. It is also quite stable to prolonged storage, moderate heat, weak acids and alkalies. If fat is rancid or kept in open air or exposed to ultraviolet rays Vitamin A is very rapidly destroyed.

All animals and human beings, to a large extent, fulfil their Vitamin A demand from carotene produced by plants. In human body a considerable quantity of ingested carotene is converted into Vitamin A and therefore inclusion of green leafy vegetables, carrots, tomatoes and papayas in diet is significant in preventing Vitamin A deficiency. All kinds of dietary fats help in absorption of Vitamin A and carotene in the small intestine. Absence of fat in a diet minimizes absorption and leads to Vitamin A deficiency. The blood brings absorbed Vitamin A to the liver and all other cells. When available in excess the liver stores Vitamin A for future need.

Functions

Vitamin A performs several functions in our body. It is essential for maintaining vision in dim light. The rods of the retina in our eyes contain Vitamin A and help us in seeing in dim light. It is our common experience that when we enter a cinema hall from a region of bright light to dim light we feel difficulty in seeing objects especially if the movie is on. After a lapse of time our eyes adapt to dim light and objects start appearing more clearly. This is called Dark Adaptation. In Vitamin A deficiency the eyes take longer time to adapt. This Delayed Dark Adaptation is the first and earliest sign of Vitamin A deficiency. In severe Vitamin A deficiency the eyes fail totally to adapt and Night Blindness ensues.

In addition to its role in dark adaptation Vitamin A helps in keeping other parts of the eyes such as cornea, conjunctivae, and tear

producing organs healthy. In Vitamin A deficiency tear production stops making the eyes dry and prone to infection. Eventually, the cornea loses transparency leading to blindness.

Coverings of our skin, digestive, respiratory, genital and urinary tracts are made up of tiny epithelial cells. Vitamin A maintains integrity and health of these cells in outer covering and inner lining. In Vitamin A deficiency sweating stops altogether, the skin becomes dry and rough with full of cracks. A healthy skin is smooth and shining and offers a great resistance to bacterial invasion. Cellular resistance is greatly lowered in dry and cracked skin and the person becomes an easy prey for bacterial and parasitic infections. Doubtless to say, Vitamin A provides good protection against infections but excessive intake of it does not confer any additional immunity.

Vitamin A is essential for both bone and tissue growth. In a severe and prolonged Vitamin A deficiency during childhood the growth retardation is more marked and lasting. Vitamin A plays a very important role in production of sperms in males and ova in females. Prolonged Vitamin A starvation in famine and war victims is invariably associated with sterility in both the sexes. During pregnancy Vitamin A deficiency affects foetal development very adversely and even may cause abortion.

Daily requirement

Recommended Daily Allowance of Vitamin A varies with age, sex and physical state of the body. An adult requires 5000 I.U per day. In early childhood the requirement is about 1,500 to 2,000 I.U. and it increases with age and reaches maximum during adolescence—a period of active and rapid growth when requirement reaches to 6,000 to 7,000 I.U daily. During pregnancy and lactation the body demands are higher; therefore, 6,000 I.U. for a pregnant female and 8,000 I.U. for a lactating mother is recommended.

Toxicity

If Vitamin A is consumed in larger quantity for a long period it is equally harmful to health. Once the liver and tissues get saturated and over-loaded, the excess of Vitamin A in the body produces toxic symptoms such as loss of appetite, drying of skin, falling of hair, irregular bone growth, pains in bones and joints. Thus if Vitamin A deficiency is harmful excessive intake is more dangerous.

Courtesy: Nursing Journal of India.

Bonded Labour System

PART II

Implementing Authorities

1. District Magistrate

The State Governments have been authorised to confer powers and impose duties on District Magistrates to ensure effective enforcement of the provisions of the Act. A District Magistrate is authorized to appoint an officer subordinate to him and delegate to him all or any of his powers and duties.

It is the duty of this official to promote the welfare of the freed bonded labourer by securing and protecting his economic interests so that he may not have any occasion to contract any further bonded debt.

2. Vigilance Committees

Every State Government is expected to set up Vigilance Committees at the district and Sub-divisional levels to assist the District/Sub-divisional Magistrate in the release and rehabilitation of the bonded labourer.

District Vigilance Committee shall have the following members :

a. The District Magistrate or his nominee as Chairman.

b. 3 Scheduled Castes and Scheduled Tribes representatives nominated by the Magistrate.

c. 3 nominated social workers.

d. 3 representative of the official or non-official agencies connected with rural development.

e. One representatives of the financial and credit institutions in the district.

Note

The Sub-divisional Magistrate or a person nominated by him is the Chairman of Vigilance Committee at the subdivisional level. Other members of the Committee are nominated as in the case of the District Vigilance Committee.

Functions of Vigilance Committee

The functions of the Vigilance Committee are :

1. to advise the District Magistrate or any officer authorised by him, regarding the effective implementation of the provisions of the Act;
2. to provide for the economic and social rehabilitation of freed bonded labourers;
3. to canalise adequate credit to the freed bonded labourers through rural banks and cooperative societies;
4. to maintain records and follow-up the cases in which cognizance of the offence has been taken under the Act;
5. to conduct surveys to detect cases of bonded labour;
6. to defend any suit instituted against a freed bonded labourer (or a member of his family or any other person dependent on him) for the recovery of any bonded debt claimed by a creditor;
7. to maintain registers containing the address of freed bonded labourers, their occupation, income and means of livelihood, etc.

Jurisdiction of Civil Courts Barred

To ensure that implementation of the provisions of the Act is not hampered by procedural delays and inequality of access to a court of justice, civil courts are barred from entertaining any cases pertaining to 't his Act.

No Civil Court has the power to grant any injunction with regard to anything that is done or intended to be done under this Act (Section 25).

Protection of Action taken in Good Faith

Section 24 bars any person from instituting a suit, prosecution or other legal proceedings against any State Government or any officer of the State Government, or any member of Vigilance Committee for anything done in good faith for the implementation of the Act.

Does the practice of bonded labour violate the Fundamental Rights of the workers ?

The bonded labour system that exists in India is an exploitative and unjust labour practice. It is a form of forced labour. Article 23 of the Indian Constitution prohibits all forced labour and hence the enforcement of such labour practice is a violation of a worker's Fundamental Right.

In the Asiad workers case (People's Union for Democratic Rights V. Union of India AIR 1982 SC 1473) it was held that :

"Article 23 of the Constitution strikes at forced labour in whatever form it may manifest itself because it is violative of human dignity and is contrary to basic human values . . . . Every form of forced labour 'begar' or otherwise, is within the inhibition of Article 23 and it makes no difference whether the person who is forced to give his labour or service to another is remunerated or not. Even if remuneration is paid, labour supplied by a person would be hit by this Article if it is forced labour, that is, labour supplied not willingly but as a result of force or compulsion."

"This Article strikes at every form of forced labour even if it has its origin in a contract voluntarily entered into by the person obliged to provide labour or service. The reason is that it offends against human dignity to compel a person to provide labour or service to another if he does not wish to do so, even though it be in breach of the contract entered into by him."

"Where a person provides labour or service to another for remuneration which is less than the minimum wage, the labour or service provided by him clearly falls within the scope and ambit of the words 'forced labour' under Article 23. The word 'force' must therefore be construed to include not only physical or legal force but also force arising from the compulsion of economic circumstances which leaves no choice of alternatives to a person in want and compels him to provide labour or service even though the remuneration received for it is less than the minimum wage."

Since the bonded labour system deprives a person of his choice of alternative employment and compels him to adopt one particular course of action, it violates his right to freedom under Article 19 of the Constitution viz., freedom to practice any profession and freedom to move freely throughout India. This practice also deprives him of his life and the liberty guaranteed by Article 21, through

an illegal labour contract and non-payment of just wage etc.

What are the legal remedies available to bonded labourers ?

1. Inform the District Magistrate/Sub-Divisional Magistrate or members of the Vigilance Committee, regarding the facts and circumstances of the bonded labour system practised in the locality, either individually or through an organisation. The information could be submitted in the form of an affidavit. A copy of the affidavit could be kept for future reference.
2. File a writ petition in the High Court under Article 226 or in the Supreme Court under Article 32 for the enforcement of Fundamental Rights. The State Government, the District Magistrate/Sub-Divisional Magistrate and Vigilance Committee could be made respondents.
3. Make a complaint, regarding non-payment of the statutory minimum wage in the labour court of the area.
4. File an F.I.R. in the nearest police station for harassment, threat, physical assault etc., by the creditor.

Who are entitled to move the court for the enforcement of the Fundamental Rights of a bonded labourer ?

According to the ruling of the Supreme Court in the Asiad workers case (AIR 1982 SC 1473), when legal rights of an individual or of a class of persons are violated and if by reason of poverty or disability they cannot approach the court for judicial redress, any public spirited individual or institution acting *bona fide* may approach the court for judicial redress even by addressing a letter to the court which shall consider it as a writ petition and take action on it. Thus the Supreme Court has enlarged the concept of 'locus standi' to enable social workers and social welfare organisations to take up legal issues on behalf of the weaker sections of society.

Note

Many cases regarding bonded labourers working in stone quarries in Uttar Pradesh, Andhra Pradesh and Haryana have been filed in the Supreme Court in the form of Public Interest Litigations by social activists and social welfare organisations. In such cases the Supreme Court has appointed commissions consisting of social scientists, judges and lawyers to verify the facts alleged in the writ petitions. In such Public Interest Litigation cases the Court generally exempts the petitioner from paying court fees and in case of need provides advocates to handle the case on behalf of bonded labourers.

Rehabilitation of bonded labourers

One of the most important provisions of the Act relates to rehabilitation of freed bonded labourers. The District Magistrate and Vigilance Committees have been entrusted with responsibility for the economic and social rehabilitation of freed bonded labourers. This proposed government machinery has an obligation to provide socio-economic development programmes for the improvement of their living conditions. In several places this administrative machinery has been found inefficient in the implementation of the provisions of the Act. As long as bonded labourers are not made aware of their exploitation and are not organised to demand their rights, social legislation of this kind will not make any substantial impact on their lives. Committed lawyers, social

activists, voluntary organisations and public spirited persons can play a major role in supporting ignorant and illiterate bonded labourers in their struggle to eradicate this exploitative labour system and to find the economic means to live with human dignity.

For further information in legal matters contact :

Director, Legal Aid
Indian Social Institute
Lodi Road, New Delhi 110 003
Tel. 622379, 624760
Gram. Insocin

Medical Ethics Forum-31

by Fr. George V. Lobo. S.J.

Medicine as Profession

Common usage today applies the term profession to any activity that is done competently. If one is trained for a job and does it well we say: "He or she is a professional." This use distinguishes such activity from that of the amateur who often does not get paid for the activity and is also, less skilled as compared to the professional. While this usage may be valid, it would be helpful to see the deeper meaning of the word, especially as it applies to the traditionally respected professions like medicine and law.

A medical professional is not only specially skilled. He *makes public profession of a devotion* to his particular sphere of activity. He or she knowingly and freely professes his/her devotion to the task of healing. This has been well expressed in a recent article: "It is a matter not only of the mind and hand but also of the heart, not only of intellect and skill but also of character. For it is only as a member of a community and as a being willing and able to devote himself to others and to serve some higher good that a man makes a public confession of his way of life. To profess is an ethical act, and it makes the professional a moral being, who prospectively affirms also the moral nature of his activity." (Leon Kass "Professing Ethically: On the Place of Ethics in Defining Medicine" in the *Journal of the American Medical Association* March 11, 1983, p. 1306).

All trades and human activities are expected to be honest, industrious, reliable and disposed to secure the good of persons. But medicine has a special claim to be a profession since it touches the most basic human values of life and health. Moreover, the patient turns for help in matters that are often private, intimate and at times even shameful. The patient is confronted with his or her vulnerability and mortality and the medical professional is called upon to help in his or her struggle for survival or revival. Human freedom and dignity are at stake.

The doctor or nurse should stand in awe before the mystery of life and death, health and sickness. In spite of his drugs and gadgets he or she is to be neither a proud master nor servile technician. He or she is at the service of the powers of healing inherent in the human person or at the mysterious passage from earthly life to eternal life.

Hence technology should not be the dominating factor in the physician-patient relationship. It should be entirely at the service of the process of integral healing. It should never be used to unduly manipulate the patient but should promote his freedom and well-being. Thereby, the profession of a doctor or nurse becomes a true vocation.

Diocesan Level Celebration on "Respect Life"

I Celebration of Pro-Life Activities in Ambikapur Health Association

A meeting of Ambikapur Health Association was held in Ambikapur Bishop's House on September 22 and 23, 1983. The subject of the meeting was "Promotion of Pro-Life Activities and Celebration of the Theme Respect Life". There were 32 participants from 16 out of 17 health centres. Among them were 14 sister Nurses, 8 lay Nurses, 19 Village Health Promoters, 12 Catholic Sabha members, 14 Mahila Sangh members, and 5 others.

The Seminar started in the evening with a Bible Seminar. It was followed by slide show in two parts; (1) Now life begins, (2) Abortion: how it is. The participants were much impressed with the slide show. The chief guest was Rt. Rev. Bishop Philip Ekka.

The next day there was a very meaningful Concelebrated Mass. After Holy Mass the Bishop inaugurated a small exhibition. Twenty eye-catching, colourful and impressive charts with appropriate Hindi texts were displayed.

After the inauguration of the exhibition, there was a talk by the Bishop. He stressed chiefly three things in a very simple and effective way. He said :—

1. Only God is at the beginning of our life and the Lord of us all.
2. Abortion is the rejection of God's plan.
3. The right path is Natural Family Planning.

The following questions were given for the group discussion which followed :—

1. When does human life begin ?
2. Is killing through abortion and killing a big person the same ? Why ?
3. What methods are adopted for abortion in the villages ? Why is the foetus aborted.
4. How can you prevent abortion ?

In the discussion, one very striking answer given was that many people think that human life begins after five months of pregnancy, when the mother feels the movements of the foetus. They believe that before this period, they can do anything to it, as if it were a mass of flesh or blood.

The participants were much impressed by the seminar and asked to conduct the same type of seminar in all the health centres as soon as possible. They went home with a resolution :

1. To pass on the knowledge regarding the beginning of life and the dangers of abortion to the Catholic Sabha, Mahila Sangh, group meetings and to individuals.
2. They will try to prevent abortion and allow pregnancies to continue.

II Celebration of Pro-Life Activities in Ooty Diocess

The Catholic Hospital Association of India, Ootacamund Diocese unit, celebrated the 'Pro-Life Activities, day on September 12, 1983. About 25 members consisting of doctors and persons in charge of all hospitals and dispensaries of Ooty Diocese participated. The meeting started with a prayer by Rev. Fr. Patrick.

Rev. Fr. Joseph Antonysamy, Treasurer of CHAI, welcomed all present and in his

inaugural address emphasised on responsible parenthood. He said that couples must be responsible. Normal families are unable to decide the norms of their family with regard to pro-life activities, but under all circumstances abortion must be avoided and unborn baby must be protected since life begins from the moment of conception. We can eliminate human problems but we cannot eliminate human life.

Mr. N.P. Ralph, Project Officer, USSS, who spoke on 'Respect Life' quoted III John verse 2 'Beloved I pray that in all things thou mayest prosper and be in health even as thy soul prospereth," and said that God created man in His own image and loved him as His own body. So God's creation must be respected and killings and belittling of beings must be avoided. Social institutions must enter into motivating people to create love and affection to respect life in all circumstances.

Rev. Fr. Joseph Patrick in his keynote address expressed that in marriage man and woman are given a share in the creative activity of God. Man and woman are co-redeemers, as God made man in His own image. The Church is Christ's body. Jesus wants to sanctify His body and submit it to the Father without pollution. Conscience is the voice of God and everybody must act according to His conscience. He mentioned that procreation is not recreation. He referred to Pope's exhortation on family life that abortion must be prohibited. He said in Pro-Life activities and NFP the Catholic hospitals, institutions and societies are not much co-operative.

Rt. Rev. Dr. Aruldas James, Bishop of Ootacamund, who celebrated Mass at noon, in his message, emphasised that as God created man in His own image, infant killing is a sin and His creation must be respected. God wants man to glorify Him. God lives rn man and His life is in abundance in His creation. God said 'thou shalt not kill' and man had no power to kill. He said that the Centurian's child was cured in one word by Jesus, and therefore especially Sisters in hospitals should show compassion towards the sick. We must also have a consoling ministry as Jesus taught us, since everyone, good or bad, had Christ in him.

In the group discussion held in the afternoon session, it was felt that hospitals could help couples with problems and social workers can help NFP and pro-life activities. Abortion must be prohibited at any cost. It was also desired that orientation and training have to be given in marriage counselling, marriage, ante-natal and post-natal care.

The Diocesan Co-ordinator of NFP said that 46,000 couples are following NFP in Tamil Nadu for limiting and spacing of births. In Uthagai Diocese alone, about 1634 couples are currently following NFP in ovulation method.

The meeting ended at 4.30 p.m. with Vote of Thanks.

III Report on Respect Life Seminar held on October 18, 1983 at St. Joseph's Cathedral premises, Mysore

A Motivation Seminar on Respect Life was held on October 18, 1983 at St. Josephs, Cathedral Campus, Mysore, as per programmes printed in the leaflet and circulated

earlier with a brief introduction. As soon as the registration was over, an invocation hymn was sung and relevant scripture from Genesis was read out, followed by a prayer. Then Bishop M. Fernandes inaugurated the Seminar by lighting the lamp. Sr. Rose Mary, Karnataka Regional Co-ordinator, welcomed the distinguished guests, the speakers and the participants.

The first talk was given by Fr. Santosh Ravi Kamath, S.J., on Respect Life from the point of theological aspect. It was also summarised in Kannada by Fr. Prabhu.

Dr. G. Pais, M.D., who is actively involved in social service spoke in Kannada on the subject at the family and social level in the growing modern world. He explained down-to-earth situations the crucial burning problems of the family and society of today, the fast perishing values of life and the means of preserving them.

Miss Padmini, M.S. Ph. D., addressed the audience on Respect Life at the level of educational institutions. Her talk was also summarised in Kannada by Fr. Prabhu.

Dr. Richard Fernandes, M.B.B.S., presented the topic at the level of health institutions. He explained at length how the patient becomes taken for granted and what should be and could be done so that he becomes a person in the sight of medical personnel. His talk was summarised in Kannada by Sr. Texera.

Before a 15-minute coffee break the participants were asked to look around, go through the posters and come back with questions, if any.

A good lunch with chicken biryani was served, after which the participants assembled in the hall. Eight groups with their respective questions were announced for discussion in separate rooms. The groups were asked to have their own Secretary to report back their group findings to the general session. The groups then gathered for the general session and reported their findings for discussion. Fr. Santosh Ravi Kamath, S.J., functioned as a moderator and kept the whole audience very lively.

After tea at 4 p.m. a movie on 'Abortion is a Woman's Decision' was presented on the screen with a very good impressive moral lesson. The story of the movie was summarised in Kannada by Mr. Susairaj.

Bishop Fernandes then gave a message to the audience to be committed people for the cause of Respect Life in their own area according to their capacity. He also announced that he would buy the particular film, have it translated in Kannada and sent it everywhere for the benefit of the public.

Finally Sr. Beatrice gave a Vote of Thanks and before the Seminar ended at 5 p.m. all were given cyclostyled copies of the speeches an d questions in a file.

Hospital Sunday Celebrations

IV The Archdiocese of Madras-Mylapore together with the Church of South India celebrated Hospital Day at the diocesan level at Good Shepherd Convent Auditorium, Madras, on Sunday the 16th October, 1983, The theme chosen for the celebrations was

12th September was the final day. The culmination of the weeklong celebrations brought all around the altar of the sacrifice, beautifully decorated with lights and flowers. Loudspeaker arrangements were made for carrying the sentiments of praise and thanks to the good Lord, as the congregation prayed in hymns and Bhajans. In his homily, Fr. Charles Almeida stressed the essential role of faith and prayer in the process of healing and health. Refreshments were served to the guests and well-wishers of the hospital.

'Respect Life'. Forty-two hospitals, dispensaries and health centres of the Archdiocese along with other health institutions belonging to the Church of South India participated in the programme.

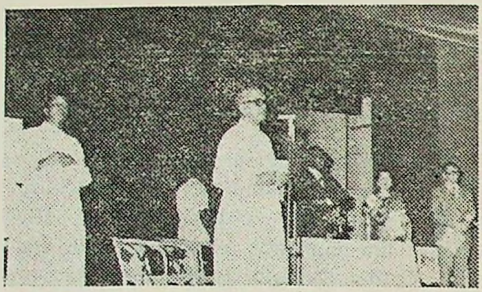
The various health institutions in the diocese started by putting up a colourful, educative and illuminative exhibition on the theme 'Respect Life'. Various aspects and stages of life were brought out and illustrated on the exhibition. People visited the exhibition in large numbers.

The public meeting was presided over by His Grace Archbishop R. Arulappa of Madras-Mylapore. Dr. John Iype of Vellore Dist. Hospital spoke about the preciousness of life and how life has become cheap by the misuse or abuse of life. Dr. Saulina Arnold, Director of Madras Counselling Centre, emphasised on the personal and human approach while visiting the sick in the hospital.

The public meeting concluded with cultural programmes and a Vote of Thanks by Rev. Kurian Thomas, Director of Madras Social Service Society, on behalf of the Dioceses and Churches in Madras.

Some medical institutions could not keep up the Hospital Sunday Celebrations on the 3rd Sunday of March, this year. They celebrated later on a convenient day. Some reports received are given in brief below:-

St. Thomas Dispensary, Gengapattu Village, N.A. Dist., had their Hospital Sunday Celebrations on the theme 'Respect Life' on 23rd October, 1983. The celebrations started in the afternoon at 3 p.m. with Holy Mass. In his homily, Fr. Johnson mentioned Jesus Christ as the healer of body and soul and that the healing ministry is being continued in the Church through the Holy Spirit. He appealed to the people not to indulge in any activities against human life. Dr. J. Pathi-



nathan, M.B.B.S., spoke at length on 'Respect Life' to the big gathering, pointing out the dangers of abortion which destroys human life created by God. He requested the people to follow NFP. This gathering was then divided into ten groups and there were serious group discussions on abortion, birth control, sterilisation, laproscopic method and NFP. Several questions were raised, doubts were cleared and people agreed to observe NFP. There was also a film show on NFP. The function ended with the Papal Anthem at 8 p.m.

In *St. Joseph's Health Centre, Lourdepuram, Trivandrum*, it was a short programme which started in the afternoon with an hour of prayer on the theme 'Respect Life'. There were about 200 participants, mostly (MCH) mothers and a few patients. A talk was given on abortion, questions were allowed, and doubts were cleared. After refreshments, there was a drama on the theme 'Respect Life' with a good moral lesson.

Hospital Sunday Celebrations in *St. Ann's Dispensary, Mallapuram, Hyderabad*, were held on 10th September, 1983. After the Holy Mass, a talk on the importance of God-given life of human beings was delivered. People were convinced that abortion is murder and is a crime against God's commandment of love. None likes to be mur-

dered and surely none likes his her own child to be murdered. The people hoped and prayed that this dreadful evil and cruelty will come to an end for the love of unborn children and for the love of God the Father.

Our Lady of Providence Hospital, Basna, (Raipur Dist.), celebrated Hospital Sunday for the first time on 18th September, 1983, with all the jubilation which it could have had. Catholic as well as Hindus participated in the celebrations with great enthusiasm. The hospital varandah was well decorated with a holy picture of Jesus, the great healer. The Catechist gave a talk in the local language Oriya on the theme 'Respect Life'. Euthanasia was also explained by him. Then followed a bhajan, reading of the relevant Gospel, a short explanation on Jesus's healing ministry and a shared prayer. The hostel girls put up a little entertainment and showed the healing ministry of Jesus in a dramatic form. Some film strips on health education were also shown. Finally, there was a resolution to respect life more than ever.

Colourful celebrations were held on the 18th October, 1983, by *Holy Redeemer Health Centre, Chuekedema, Nagaland,* beginning with Holy Mass. In his homily Fr. Sebastian well brought out the theme suggested by CHAI 'Respect Life'. More than 400 Christians and non-Christians participated in the Service. Participants brought their children and Father conducted a special blessing ceremony for them during Holy Mass.

September 12th was a day of rejoicing for all at *Mariampur Hospital, Kanpur.* The hospital is named after Mary who is the patron and protectress of the Hospital. Each year's celebration is different and new, and novelty is the norm of change and growth. This year's celebration lasted for one whole week commencing on 5th September '83 with an hour of prayer in the Hospital Chapel by the hospital staff and all its inmates. September 6-11th were devoted to fun and frolic, games and sports, singing and dancing, fashion parade, followed by prize distribution. On the 11th there was a sumptuous dinner.

TIMUC

(Training Institute for Mentally Under Developed Children)

It was a long cherished dream of the Social Welfare Society, Thathampally, to start a shelter for the mentally under-developed children. Considerable thought and encouragement have been given and efforts have been made for realising this dream by

Shri M. K. Joseph Malayil, the oldest member of the Board of Directors of the Social Welfare Society;

His Grace Most Rev. Dr. Antony Padiyara, patron of the Society and Archbishop of Changanacherry; and

Rt. Rev. Dr. Michael Arattukulam, patron of the Society, and his Co-adjustor Bishop Rt. Rev. Dr. Peter Chenaparampil. Rt. Rev. Dr. Peter Chenaparampil has been the motive force for the immediate starting of the TIMUC and has been closely associated with this

On 28th September, 1983, TIMUC was inaugurated by Mr. K.P. Ramachandran Nair, Honourable Minister for Health of the State.

Rt. Rev. Dr. Peter Chenaparampil blessed the institute and presided over the meeting. He declared that he would always be happy to help the training institute in any way possible.

Among others who were there to witness the happy inauguration of the TIMUC were Mr. E. Shahulhameed, I.A.S., Dist. Collector, Rev. Fr. Thomas Felix, C.M.I., Director of the ASHA KENDRAM at Ernakulam and the Institute for Mentally Retarded at Trivandrum. The students were there with their parents who gave bouquets to the distinguished guests.

The TIMUC has been fortunate in having the services of Rev. Sr. Betsy, S.A.B.S., who completed her training in Trivandrum and Ernakulam and is very happy to work for the Mentally Under-developed Children.

TIMUC is obliged to the Vineetha Conference for the help and guidance given so far and their continued advice and help are earnestly solicited.

Bethany Nature Cure and Yoga Centre, Nalanchira, Trivandrum-15

Bethany Fathers started a Nature Cure Centre in 1976 at Bethany Hills in Trivandrum. On August 19, 1982, this

Centre was shifted to Bethany Nagar (Mekonam), equipped with modern amenities and facilities. A little beyond the outskirts of the Trivandrum City (about 8 km. away from the railway station) the centre is easily accessible to all. It has a peaceful atmosphere. This centre provides nature cure treatment, counselling and yoga classes. The centre has a newly-built beautiful building with general and special rooms and a small library consisting of books on naturopathy.

The following are the prominent treatments:

1. Hydrotherapy: Steam bath, spinal bath, immersion bath, hot/cold neutral alternative bath, foot bath, packs and fomentation etc.
2. Mud therapy: Mud bath full and local.
3. Massage therapy: Full and local massage with oil and powder.
4. Helio therapy: Sun bath, green leaves baths.
5. Chromotherapy: Thermolen, other colour treatment.
6. Electro therapy: Infrared light, vibrators.
7. Magneto therapy: Local magnetic application.
8. Diet therapy: Strict natural diet is observed. No outside food is allowed. Smoking, alcohol and non vegetarian food are strictly prohibited.
9. Yoga therapy: Yogasanas, pranayana, surya namaskara, bandhs, relaxing techniques.
10. Prayer: Meditations, bhajans, counselling.

(For more details, please write to the Centre).

Report and Recommendation of the Seminar on Leadership Training for Integral Development Organised by Tamilnadu Social Service Society in collaboration with Coady International Institute, Canada, from 28.2.83 to 11.8.83 at Jeeva Jothi Ashram, Coimbatore.

God desires us to develop the faculties He has given us and live a full life in a Society aiming at physical, spiritual, intellectual, cultural and social development of man, in spite of several constraints. It is in this context we have to view the Mission of Jesus Christ who came to announce the Good News to the poor. The Church has committed itself to continue the Mission of Christ keeping in mind this final goal of God's own creation and salvation and establishing a just Society as envisioned in the sacred scriptures. Recent Popes and the Second Vatican Council have contributed to shape this awareness through various encyclicals and documents. It is in this mission of the Church for the growth of the disadvantaged that prompted the establishment of Social Service Societies in all dioceses of Tamil Nadu and Pondicherry aiming at attaining fullness of life for all men. The objectives which the Diocesan Societies set for themselves were many varied such as performing work of charity to the poor and needy irrespective of caste, creed or race, undertaking welfare activities in order to improve the living conditions of the weaker sections. Over the past two decades the Social Service Societies in Tamil Nadu and Pondicherry were involved in implementing various socio-economic welfare activities, mostly charity-based and relief-oriented, with government resources and aid from various donor agencies in India and abroad.

A new thinking has evolved aiming at people-based community development action. Hence motivation programmes were conducted at the Diocesan Parish and Village levels in order to enable the local communities to organise themselves and to take up leadership roles in the people-based development activities.

The need of a common forum to promote concerted action in the field of development in Tamil Nadu led to the establishment of Tamil Nadu Social Service Society (TSSS) with membership restricted to 13 Diocesan Societies. This society aimed at formulating common plans of action and rendering training and evaluatory services to member societies, besides serving as a liaison and representative body of member societies and the govt. or local bodies or funding agencies.

To achieve a unified approach at the regional level it was decided to conduct a Regional Seminar on Leadership Training for Integral Development in collaboration with Coady International Institute of Canada with definite objectives. While the talks on various topics provided the necessary ideas, the workshop enabled the seminar participants to study critically the present development action undertaken by the Social Service Societies, their structures, their past experiences in the field and their mode of funding. Keeping in mind the main objectivies, it was decided among other things that the goal of the Societies must be to enable the disavantaged to achieve their integral growth as a necessary condition for the establishment of a just society.

To achieve this goal the Seminar proposed a 15-point Plan of Action.

Meals Without Meat

If you are looking for vitamins
look at the vegetable kingdom.

— by Lloyd K Rosenvold

During the World War II meat shortage, many housewives learned about tasty, nutritious meatless dishes. Because animal fats began to be suspected of playing a part in producing hardening of the arteries — arteriosclerosis — and coronary heart disease, these women, and their daughters, have taken another look at meatless menus to avoid the harmful effects of meat fats.

Can good health and adequate nutrition be maintained on a meatless diet? Even today some people doubt this, but they can. Multiplied thousands of Indians are doing that very thing. What do they eat? Can they possibly get enough protein and iron in their diet? What about vitamins?

Let us check a few facts. It is true that beef protein is a good-quality protein, nutritionally speaking. But most people overload their system with it. The average American man needs only about one ounce of protein daily. For good measure two ounces is plenty. It is easy for him to get this amount and the proper kind of protein from sources other than meat.

Eggs have an even better protein than meat, and milk protein is as good as beef protein. But let us look to the vegetable kingdom for high-quality protein.

Soybeans and channa (chickpeas) contain perfect protein. Most other legumes (beans, peas, lentils, peanuts, and the like) contain slightly less perfect protein. Interestingly enough, the protein fractions that legumes lack are abundant in whole grains. The normal use of whole grains in the diet supplies that slight lack and balances the legume protein into a perfect protein. The resulting protein is every bit as nutritious as that of meat.

Whole grains furnish a good form of protein. In the United States of America we depend largely on wheat as our staple grain. Whole-grain wheat has an excellent grade of protein. So do whole-grain rice, whole-grain rye, and whole-grain oats. Most grains are a little low in certain protein components, but the very things they need are supplied in abundance by legume proteins. Legumes and whole grains complement each other into perfect proteins. Our Creator thought of everything when He planned provisions for the human race.

Nuts are one of the finest souces of protein in the world. Many people eat them after they have been made hard to digest by deep-fat frying and heavy salting. Try them fresh and without salt. Enjoy the natural nutty flavour.

Fruits and leafy vegetables contain excellent proteins, although in small quantities. Potatoes contain a high-quality protein. Irish potatoes were a staple food of the husky Irish immigrants who came to America's shores a century or so ago.

Hulled sunflower seeds are a delicacy enjoyed by many people. The Russians have used them for centuries. Sunflower seeds contain 17 per cent of high-quality protein.

Other sources of the best protein are various food yeasts (brewer's yeast, torula yeast, and others) and wheat-germ flakes. Wheat germ is the heart of the wheat berry, that living part destined to reproduce its kind. Most people never taste the wheat germ, for they eat only white bread. Many health-conscious men and women are using this millers' castoff food as a delicious food supplement — truly the best part of the wheat.

A fact many people are not aware of is that meat is one of the poorest food sources of all minerals except phosphorus, which is also abundant in grains and legumes. A laboratory analysis of beef might reveal a fair iron content (most meat contain much blood), but it is not in a form readily available to the human body.

Dried beans contain three times as much iron as does beef. Peas, wheat, and oatmeal contain twice as much. Beef iron is only about 11 per cent available to the human body, whereas iron from vegetable sources is largely digestible and available as human nutrition.

A few years ago some nutritionists discovered what vegetarian physicians have long known — that meat in the diet will not prevent anaemia. One writer on nutrition said : "It comes as somewhat of a surprise to learn that a diet composed entirely of meat will regularly cause severe anaemia in mice." "Beef induced the most severe anaemia, but pork had a similar effect. Chicken muscle was slightly less effective in causing anaemia."

People mistakenly believe that they need what they call good red meat to build red blood. The truth of the matter is that ordinary muscle meat is an exceedingly poor blood builder and, in view of the animal experiments cited, may actually be a cause of anaemia. Food from the vegetable kingdom is still our best blood builder. Actually, the iron of whole wheat and bran is more effective for haemoglobin formation than lean beef, liver, and egg yolk.

People think that meat is a good source of vitamins. Actually, meat (except for liver, kidney and entrails) is a poor source of vitamins. Muscle meat is a fair source of some of the B vitamins, but whole grains and legumes are far superior sources. Vitamin E is most abundant in seeds. Vitamins A and C are lacking in steak, but are amply supplied in fruits and vegetables. If you are looking for vitamins, look at the vegetable kingdom.

The fat of meat is mostly of the saturated kind, which has been incriminated as a cause of hardening of the arteries. The natural fat of the vegetable kingdom is largely the unsaturated fat, which tends to prevent hardening of the arteries—an added dividend enjoyed by people who prefer a vegetarian diet.

Most meat is highly seasoned by the cook and by the gourmet at the table. Many people would not enjoy meat unless it was highly seasoned with salt, spices, and fat. Studies show that it is the fat flavours of meat that people crave, not the protein.

Food from the vegetable kingdom has its own delicate flavours and needs little seasoning. When you choose the meatless way of life, you learn to enjoy natural food flavours, you avoid many diseases that are found in or are transmitted by meat, and you largely avoid the saturated fats, which produce damage to the blood circulatory system.

There was a day when some people regarded vegetarianism as a passing fad. It is not a fad and it certainly is not passing, but is a continuing way of life. It is the oldest diet known to the human race. Man's anatomy is quite different from that of the carnivores.

Are you looking for a diet to give you better health ? A better way of life ? Less illness ? Try a diet without meat. You will be pleased with the results.

Courtesy: *HERALD OF HEALTH*

Tears

— by Dr. Mervya Hardinge

Tennyson, the English poet laureate of the past century, wrote : "Tears, idle tears, I know not what they mean." At that time little was known of the function of tears, but in today's intense search for knowledge, even tears have come in for some serious consideration. The findings are intriguing.

Everyone knows that crying makes copious tears flow from the eye. But not everyone is aware that our eyes are moist with a film of tears all the time. The source of tears, whether spasmodically copious or a continuous film, is not in the eye itself. They are mobilised in thin, five-cent-sized glands tucked away just above the outer corner of each eye. These are the lachrymal (tear-producing) glands, the tear-manufacturing centres where fluid is extracted from the blood and discharged over the eyeballs.

We are not ordinarily aware of the tears that moisten our eye surfaces continuously, unless they come so copiously that they fill the eyes to the brim or overflow down the cheeks. But it is the tears that pass unnoticed to which we owe much of the comfort and the sight of our eyes. As the glands pour out their continual flow of moisture, the eyelids, flicking with the speed of lightning, act as windscreen wipers using the invisible tears as "water" with which to cleanse and moisten the eyeball. Dust particles are swished away, and drying of the corneal membrane overlying the pupil is prevented. If it were not for this constant moistening, the exposed eye surfaces would become dry, irritated, and painful. Before long, injury to the delicate tissues would cause blindness.

Tears not only lubricate the cornea, the transparent layer covering the iris and pupil of the eye, but they fill in the irregularities of its surface and this improves its optical efficiency. They also act as a disinfectant solution due to their content of lysozyme, an enzyme that breaks down cell walls of many germs.

It is of interest that the presence of lysozyme in tears was first reported by Sir Alexander Fleming, the discoverer of penicillin.

Composition of Tears

Tears are not just plain water, as we all know from their salty taste. They contain a number of minerals, a trace of protein, and a little glucose. Actually, the film of tears that covers the front of the human eye is said to consist of three layers laid down by different types of glands. Next to the cornea is a protective mucoid film produced by glands in the white of the eye, then a watery one secreted by the lachrymal, glands proper, and finally, a superficial oily layer attributed to glands located in the lining of the eyelids. As the eyelids flick the tear fluid across the front of the eye, they sweep it toward small openings at the inner corner of the eye next to the nose. Here the tears are sucked down the nasal tear duct where they moisten the inside of the nose. This is why your nose runs when you cry.

Besides a continual invisible flow of tears, human beings at times give away to an unrestrainable outpouring termed "crying" or "weeping". Crying by adults is usually the result of deep emotion. It may be

triggered by a heart-rending bereavement, grief, sorrow, disappointment, regret, or even frustrated anger. Sometimes tears overflow with a sudden relief from anxiety or in response to great joy.

Infants cry with their first breath, but they usually shed no tears for two or three weeks. A baby's first cry gets air into its lungs. After that it cries when it is hungry, uncomfortable, or when it wants attention for any reason, sometimes just to be noticed and loved. As a child learns to speak, it cries less, but still finds that crying usually gets a quicker response from grown-ups than a quiet request.

In most cultures women and children are more free to cry than the male members of the family, even rather young boys. For men and boys it is considered unmanly to give way to tears. Dr. E James Lieberman, assistant clinical professor of psychiatry, Harvard University, questions the wholesomeness of this antigrief psychology. He suggests, for example, that failure to weep at the funeral of a loved one may be a sign of blocked grief. A stony-faced emotional paralysis helps no one, and neither does a chaotic hysteria, but a reasonable expression of grief gives an outlet for the emotions and eases the tension.

Healing Element

It is said that grief comes in waves of distress lasting from several minutes to an hour, followed by a period of relief. The healing element of time lessens the frequency of the grief spells and lengthens the periods of calm until the emotions stabilise. In blocked grief, increased emotional problems may be prolonged. Whether in men, women, or children, a bottled-up agony is traumatic. Now that women's lib is striving to equalise the differences between the sexes, perhaps women will permit men and boys to share their relief through tears by allowing them an untainted liberty to weep their heart's anguish away !

Tears, far from being an idle waste of unknown value, are being recognised by science as complex solutions having specific functions to perform. Physiologically, they protect, moisten, disinfect, and wash the eyes and moisten the lining of the nose. Emotionally, they act as an overflow outlet for relief of feeling strained to the bursting-point. To give way to tears is neither unwomanly nor unmanly; it is normal.

We live in a world stalked by tragedy. Wars, earthquakes, cyclones, tornadoes, floods, famines, accidents, bereavements, illness, calamities by land, sea, and air are ever with us. As long as these conditions exist, we shall have floods of tears. But let us look up and live for a better day. The Good Book promises a change in conditions on our earth when "God shall wipe away all tears from their eyes; and there shall be no more death, neither sorrow, nor crying." Revelation 21 : 4.

Courtesy: *HERALD OF HEALTH*

Food Preservation

—by Miss Surindra Jain

There is nothing like consuming fresh foods; they have better taste, appearance. colour, etc. But foods like milk, meat, fish, poultry, vegetables and fruits, etc., the so called perishable foods tend to get sploit soon. Even under most cautious conditions, we cannot manage to keep them fresh for too long and that is why these foodstuffs are often preserved to lengthen their shelf life.

Preservation of foods has many advantages like preventing the spoilage of foods, easy availability, easy transportation and storage, economical and these foods also add variety to our meals.

Have you thought of what the effect of food preservation is on the nutrient content of those foods? Well the handling storage and preservation of food often involves changes in nutritive value, most of which are undesirable. However, these depend mainly upon the type of foodstuff, its nutrient content, method of preservation it is subjected to time and temperature of cooking food, additive and other things added to lengthen the storage time, etc.

There are various method of food preservation. The freezing process, if properly conducted, is generally regarded as the best method of long-term food preservation.

Drying Process

It appears to offer good nutrient retention with the exception of ascorbic acid and B-carotene losses. Protein quality deterioration due to drying or evaporation are minimal. The losses of water-soluble vitamins other than ascorbic acid, during drying average 5 per cent. Oil soluble vitamins in milk are not lost in either drying or evaporation.

Blanching and Cooling

Losses of Vitamin C and thiamine that occur during water blanching and water cooling of vegetables, Vitamin C often amounts to about 10 per cent to 50 per cent and losses of Vitamin B-1 are often about 9 per cent to 60 per cent depending upon the product and conditions. Loss of water-soluble vitamins occur primarily by leaching. One purpose of blanching is to render the product more resistant to vitamin losses during frozen storage (inactivate enzymes). Vitamin C, B-1, B-2 and carotene from vegetables during frozen storage is saved.

Chemical/Additives

Food additives are substances other than the basic foodstuffs which are put into foods during production, processing and packaging.

Potassium Metabisulphate

It has great effect on thiamine. In fact these are not allowed in meats or foods recognized as a good source of thiamine.

Acids

Citric acid, tartaric acid, lactic acid, etc., when used in the preserved foods, lowers the pH of the medium which converts the Vitamin A to its biologically less active form. Vitamin B_{12} is also inactivated in the presence of mild acids. The enzymatic properties are also lost. However, there is no adverse effect on the utilization of proteins.

High Sugar Processing

Jams, Jeliies, preservatives, etc., have app. 2/3rd portion as sugar. Only a small portion is having fruits and vegetables which does not appear to have a significant loss of nutrient.

Though there are nutrient losses during preservation and storage of foods, nevertheless, in the modern era, when the social responsibilities of man and especially housewife have increased so much that she cannot devote herself fully towards food, she has to but (depend upon) bank upon the great variety of preserved foods which are often available at hand. In other words in spite of all these nutrient losses which occur while processing food preservation is a boon for the housewife. Food processing is also essential to feed the population.

Courtesy : HOME SCIENCE