HEALTH

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A JOURNAL DEVOTED TO HEALTHFUL LIVING

Contents

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EDITED BY U. VASUDEVA RAU, M.B., B.S.

What's New in the News?

Smallest-sized hearing-aid

An American firm has developed what it claims to be the World's smallest hearing-aid The device is slightly larger than a match-box and uses vacuum tubes no thicker than a lead pencil The complete instrument weighs only 3 ounces (about 7 tolas or 7 rupees weight).—(*The Mail*, Madras, 3 1-'53)

●

Record number of births in a maternity hospital

The highest number of births in 1952 was recorded in the Government Hospital for Women and Children, Egmore, Madras The total number of babies born in this hospital during the year 1952. was 9920, (27 babies per day) which it is stated, is a record for any hospital in the Eastern Hemisphere.—(*The Hindu*, Madras, 2-1-'53).

●

A word to husbands

Dr. Abraham Stone, the American specialist who came in 1952 to India to advice on Family Planning, by the rhythm method is the Medical Director of the Margaret Sanger Bureau in New York. He has this to say to husbands "Remember that woman's enjoyment of sex is a slow diffuse emotion; not urgent and commanding as it is in men. Be patient with your wife; speak your appreciation. Keep right on being lovers even after marriage In trying more to give her satisfaction, you will not only keep her love but will have more satisfaction yourself."—(From *Parents' Magazine*).

●

Grafting of Human Kidneys

A youth aged 18 who had one of his mother's kidneys grafted on to him on Christmas day (1952) was stated on the New Year's Day (1-1-1953) to be making a good recovery. The young man lost his hold and fell off a scaffolding in a French Provincial town on the 18th December 1952 and he was found to have a crushed kidney. The kidney was removed by a surgical operation but the patient did not recover and so the grafting was performed after it was discovered that he had been born with only one kidney

The grafting of kidneys is believed to have never been successfully done before this.—(*P.T.I.*)

●

Arresting the Heart-Beat

Remarkable proposals for revolutionizing operations on the heart are described in the current issue of *Practitioner*, says the Medical correspondent of the *Times*

The surgeon is at present handicapped in his approach in dealing with contracted valves because he has neither unlimited time nor a clear field in which to work, with a highly mobile organ beating all the time under his hand.

The new suggestions involve the principle that by lowering the body temperature and thus slowing down the body's chemical processes it is possible to reduce the circulation and even arrest the heart beat for periods at a time.

Briefly, the procedure would involve opening an artery and allowing all the blood to flow through a cooling circuit and return to the body Oxygen supply would be maintained by high pressure machines acting on the lungs.

After opening the chest the surgeon would control the heart beat by electrical stimulation applied directly to the wall of the heart, thus being able to allow himself relatively long periods of complete arrest of all movement followed by controlled beats as required. At the end of the operation when the valves had been dealt with or other procedures carried out the blood would be passed through a warming circuit to restore the normal body temperature.

A few years ago such ideas would have been regarded as a wild dream. Today, with advances in which British workers have played a notable part, the suggested procedures are by no means impossible of realization.—(*Statesman*, 6-10-'52).

A Journal Devoted to Healthful Living

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Founded by the late Dr. U. Rama Rau in 1923.

Edited by U. Vasudeva Rau, M.B., B.S.

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MEDICINE AND PUBLIC HEALTH

IN INDIA'S FINAL FIVE YEAR PLAN

THE central objective of all planning as set forth by the Planning Commission is to raise the '*standard of living*' of the people and to open out to them opportunities for a richer and more varied life by reduction of inequalities of income and wealth. Sri Dr. JIVARAJ MEHTA speaking at the Sixth International Conference of Social Workers held at Madras on the 14th December 1952 said, that the cultural element is inextricably linked with the economic and material factors which go to make what we call "*standard of living*". "The scale of values of the middle classes in India" said Dr. MEHTA "their dress and diet, their housekeeping and their social participation, pattern of their education and choice of their profession all tend to show that they do not conform to the definition of the classical economic man". Srimathi RAJKUMARI AMRIT KAUR also expressed the same view when she said "in raising the standard of living, the emphasis will not, I hope, lie merely on the question of economic and material necessities, however simple it may be to theorise on them". We are now face to face with problems of changing values, conflicting ideals and unfortunate differences, prejudices and preconceptions. '*Standard of living*' varies with geographical, social, cultural and mental factors and so it is not possible to offer a ready-made formula which can be applied to all countries.

It is the experience of western countries, Great Britain for example, that the progressive equalisation of the standard of living, leads inevitably to a downward levelling

of the attainments in the arts and in the nationalisation of the sciences. As against this contingency, it may be argued that to the average Indian villager whose opportunity for engaging in cultural pursuits has been practically non-existent so far, any little raising of his standard of living will be welcome.

The villager in India, it is true, 'has had a raw deal, so far'. He has *now* a bigger voice in the administration and in choosing people's representatives to the legislatures; the Five Year Plan, aims at giving him the consideration which his importance in the national economy deserves.

The Finalised Five Year Plan differs from the interim plan of last year, in that an increase of 500 crores of rupees has been made and the entire revised plan has laid down Rs. 2069 crores (instead of 1493 crores) as the minimum total outlay. The broad pattern of development envisaged by the planning commission appears to be sound and the priorities are intended to meet the country's requirements to a large extent.

Transport and communications come first with 24%, while agriculture and community development come second with 17·5% of the total expenditure. Social services including rehabilitation occupy the third place in the priority list with 16·4% of the total outlay to be spent on them. Medical and Public Health Programmes have been allotted *only* a sum of 97·76 crores which represents *only 4·7 per cent of the total outlay.* It is needless for us to state that in a country like India where nearly 80 per cent of the total population live in villages, under the most insanitary conditions, and are consequently in urgent need of medical relief and preventive measures against infectious diseases, the provision of such a small proportion of the total outlay, will not go far enough to meet the country's needs.

The medical and public health plans of the Central and State governments amount to Rs. 97·76 crores of which the Centre's share is about 17·87 crores. The Centre will, it is gathered, aid the States in higher education and research and in certain other specified schemes. Out of the total expenditure on medical programmes of Rs. 47·38 crores, nearly one half will be spent on hospitals and dispensaries and nearly 40% will be allotted to medical education and training. Schemes for medical education and training cover, besides the establishment of the All India Medical Institute, the completion of the new medical colleges in Assam, Bombay, Madhya Pradesh, West Bengal and Travancore-Cochin, the upgrading of existing medical colleges and the provision for training of ancillary personnel like nurses, midwives and compounders. The increases expected to be achieved by the execution of the schemes at the end of 1955–56 are :—11·1% of doctors, 81·3% of compounders, 35·6 of nurses, 37·3% of midwives and 22·2% vaids, hakims etc.; the number of hospitals will increase by 2·4%, urban dispensaries by 24·8%; rural dispensaries by 11·6%; the number of beds in hospitals by 10·1% and in dispensaries (urban and rural) by about 10 to 11%.

The expenditure on public health programmes (*preventive medicine*) undertaken by the Central and State Governments is 50·38 crores. Water supply and drainage and anti-malaria schemes account for the bulk of the expenditure. The development expenditure in 1950–'51 will be increased nearly four times every year in the plan-period. Malaria control is assigned a top priority and out of 17 crores allotted for this purpose, 7 crores are earmarked for the States and 10 crores for the Centre. The erection of two DDT manufacturing plants is included in this item. Tuberculosis comes next in importance to malaria and the schemes relate to the provision of 46 Sanatoria with 5656 beds, 50 hospitals with 4814 beds and 2323 clinics with 2562 beds for Tuberculosis at the end of the year 1955-56. The plan also provides for control of venereal diseases, maternity and child-welfare, family planning etc. "The principal objectives to be achieved are integrity, efficiency, economy and public co-operation" says the finalised plan. So an appeal is made for public co-operation.

While we appreciate Government's intentions to implement the medical and public health improvement-plans outlined in this scheme, we feel called upon to say that the allotments for 'Health' are totally inadequate and we repeat what we have so often stressed *viz.*, the necessity for our Governments to realise that the success of all improvement schemes and projects intended to advance the welfare of the nation, depends almost entirely on the physically and mentally sound and healthy state of the mass of the people whose co-operation, so vital for success has rightly been demanded in the appeal made by the Commissioners of the Five Year Plan. Our Union Health Minister RAJKUMARI AMRIT KAUR stated on the 4th January 1953 at the Chittaranjan Cancer Hospital at Calcutta, "I am disappointed because so little has been allotted to health in India's Five Year Plan. I regret that sufficient funds are not provided in the Central and States budgets for the expansion of the health services. Our Finance Minister Mr. CHINTHAMAN DESHMUKH tells me that he wants to give more money for Health Services but he is very sorry because he has not enough to give me. But money has to be found somehow for these essential services. *Medical men are not vocal enough and I find that I am fighting a lonely battle.*"

It is therefore, necessary that the public and the medical profession should become sufficiently loud and insistent in their demands for larger allotments for preventive and curative medical relief than what the Final Five Year Plan has provided.

World's Lowest Tuberculosis Mortality

• The mortality from Tuberculosis in Denmark is the lowest ever recorded namely 19 per 100,000 population (A death rate of less than 15 per 100,000 population is considered by the International Anti-Tuberculosis League as indicating the non-existence of tuberculosis as a social problem). The credit for this achievement is chiefly due to the Danish Anti-Tuberculosis Association which recently celebrated the fiftieth anniversary of its foundation.—(Danish News from *Med. Digest*).

Deafness Cured by Surgery

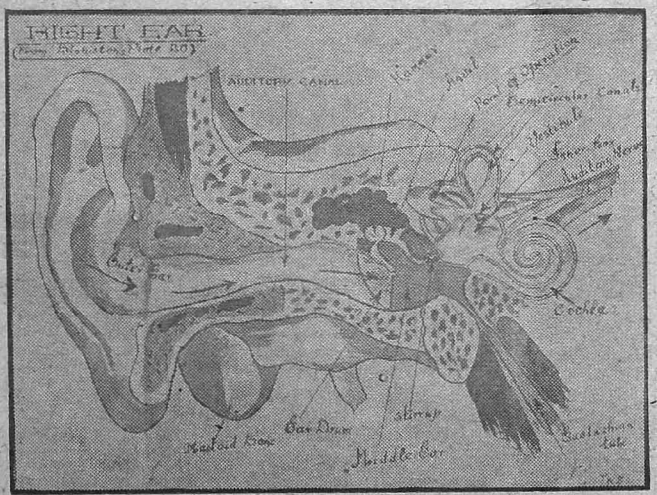
(FENESTRATION OPERATION)

J. D. RATCLIFF

MOST cases of deafness are caused by bony tissue growing over and blocking the tiny little oval opening—the fenestra—which separates the middle from the inner ear (*see picture*). On account of this blocking of the passage, sound is unable to enter the ear. Deafness is indeed even a greater handicap than even blindness. It can now be cured by a most remarkable surgical procedure which is known as the "Fenestration" operation. When patients are carefully examined and suitable cases selected and the operation is performed by a competent first-class ear specialist, there is a 90 per cent chance of the hearing being restored. The operation is of no value in cases where the auditory nerve (the nerve of hearing) has been badly damaged or destroyed; when a bony overgrowth has shut out sound for many years, degeneration of the nerve occurs and in these cases surgery cannot help.

The late Dr. Garnett Passe, one of London's famous leading ear specialists (who died quite recently) had performed over 1000 fenestration operations; and his class fellow Dr. Lempert of New York, who is now 59 has devoted the best part of his professional life, to perfecting the fenestration operation and making it a workable procedure in competent hands. He has now performed over six thousand operations and taught the technique to over 600 surgeons, in different parts of the world. Dr. Lempert conducts 4 classes each of the six weeks' duration every year and in each group there are ten surgeons who come from clinics and hospitals in nearly every country in the world. He has elaborate teaching equipment *e.g.*, 18 models of human heads showing each stage of the fenestration operation.

This operation represents a high point in surgical artistry. At one stage the work is so exquisitely delicate and fine that it can be done only with fine dental drills under a magnifying lens. Lempert wears,



RIGHT EAR (From Blakiston's Plate 20)
Top: Auditory canal; Hammer; Anvil; Point of operation; Semicircular canals; vestibule; Inner Ear; Auditory nerves. *Left side*: Outer ear, *Right side*: Cochlea. *Below*: Mastoid Bone; Ear drum; Middle ear; Stirrup: Eustachian tube.

a special lighting apparatus, like a miner's lamp, which focusses a powerful pencil beam of light into the ear. The writer of this article watched Dr. Lempert perform one of these operations on a woman of 44 who had been nearly stone-deaf for 20 years. She lay on her side on the operating table under the spell of an anæsthetic. Two dental drills covered with sterile linen sleeves hung over the table. Dr. Lempert cut into the outer ear to make an opening large enough to permit surgery. When this had been made, retractors (instruments for holding back the edges of a wound to enable access to the deeper parts) opened the cavity to the size of half a crown. To reach the inner ear, he drilled and cut his way through the ivory-hard mastoid bone (*see picture*) detouring behind the tympanum (ear-drum). It took about half an hour to reach and expose the semi-circular canal where the window was to be made, by removing the block. At this point, the nurse handed him the magnifying spectacles. From the skin of the auditory canal, Dr. Lempert cut a delicate flap of tissue, leaving a thread-like attachment to the ear-drum enough to provide a blood supply to keep the tissue alive. This flap was to become the covering for the new window which he was now ready to cut in the semi-circular canal. With his delicate steel burr (a special cutting instrument) he made a tiny opening —constantly washing away the bone-dust with a syringe and picking it up with a suction tube.

The doctor next trimmed the delicate tissue flap that was to cover the new opening exactly. After years of research and careful study Dr. Lempert found that by making a slight depression in the tissue flap, he could prevent bone growing again and blocking the window. He now did this. Only one step remained; to pack the wound with paraffin gauze which would hold the tissue flap in place until it attached itself. Lempert then gave the patient a gentle tap on her face. "Feel all right" he asked in a low voice. Sleepily the woman mumbled something. That told Lempert what he wished to know. She could hear inspite of all the packing within the ear. The operation had taken an hour and ten minutes to perform.

After surgery the patient remains in the hospital for a week or ten days—an anxious period. The ear is lightly stuffed with gauze and little sound gets through. The patient may even think surgery has failed. But when the packing is removed, a whole new world opens up—voices, the clatter of bed trays, the sound of taxi horns outside. The operation thus means for the patients, a return to life after being shut away behind prison walls of silence. As a rule this operation is performed on only one ear—the poorer one. When both ears are opened, a year is allowed to elapse between operations—to be sure the first is a success.

For this most valuable contribution to human welfare, Dr. Lempert has been showered with medals, degrees and membership in societies—from all countries Sweden, England, Austria, Greece, Brazil and Hungary. None of these is as rewarding as the

expression on the patient's face, when the packing is removed from an ear and the magical world of sound opens up!–(Condensed from *Parade* for the *Reader's Digest*, Nov. 1952). (The diagram of the ear was made from plate No. 20, *Blakiston's Medl. Dictionary*).

Nail Biting: Cause and Cure

NAIL biting, like many other habits in childhood, has its roots in an emotional upset often due to frustration. Every child has within himself the urge to express his own physical and mental capacities. Parents and teachers have their own ideas on what the child should do, and consequently the "I am" and the "I want" in the child come into conflict with the adult's sense of right conduct. In every person there are deep instinctive tendencies, all of which are vital to the development of fine personality—tendencies to be active, to be curious, to collect things, to react with fear when the mind recognises a threat to the self or what one counts precious, to react with anger when frustrated, etc. Civilized life does not allow for the crude expression of these tendencies and so some control and discipline become necessary. It is when there is unwise discipline, or damaging repression, that a child uses a habit such as nail biting to express his urge "to get his teeth into something." Parents may find that they restrict physical and mental activities of a child for various reasons, *e.g.*—

(1) Lack of space in the home, or the attempt to keep the child quiet because of other tenants—housing difficulties account for much unhappiness.

(2) Fear of a child wandering on to busy roads.

(3) Refusal to have untidy rooms. (Children require lots of activity with simple things—"old junk" gives great scope for free play and exercise of all the faculties).

(4) Lack of imagination when a child creates his fantasies in play. (How many children are punished for lying because adults do not appreciate the value of fantasy play!)

(5) Repression of instructive tendencies like curiosity and the acquisitive tendencies. (The brilliant scientist is one who uses these tendencies constantly).

(6) Refusing a child companionship with other children. (A "grubby" playmate can save a child from neurotic troubles in later life).

And of course, the "don'ts" and "sit still" are responsible for much frustration.

The cure of nail-biting demands that we endeavour to understand these deep needs of the child and then give scope for the exercise of bodily and mental activities according to the child's age, and use wise discipline. Play therapy—healing by playing happily—is most valuable, and helps to build up the mutual understanding under which a child develops towards wholesome personality. —(*Mother and Child*, Nov. 1952).

Smoking Injures The Heart and Lungs

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St. Thomas Mount, Madras-16.

INFORMED medical opinion all over the world appears to be unanimous in asserting that smoking,—particularly excessive smoking of cigarettes—is very injurious to health in many ways. This being so, it is passing strange that a responsible doctor of Bombay, is recently reported to have made statements like "Tubercular patients need *not* give up smoking," Smoking does *not* affect the lung" and "Tubercular patients *can* smoke merrily."

Let me say they '*can*' but they '*may not*', if they do not wish to die early. One would not have taken such statements at all seriously, had they not emanated from one who is intimately connected with the B.C.G. campaign designed to prevent the spread of Tuberculosis. Mr. Kshitindra Kumar Nag wrote in the *Hindu* of the 6th December 1952, pointing out with authentic references the untenability of and the positive harm that may accrue from the above statements reported to have been made by Dr. B. Patel of Bombay who happens to be the Secretary to the B.C.G. Vaccination Committee. Although nearly two months have elapsed since Mr. Nag wrote in the *Hindu* there does not appear to have been any refutation or protest from any responsible person nor any authoritative contradiction issued by the Tuberculosis High Command at Delhi in charge of the nation-wide B.C.G. campaign and of other measures for the control of Tuberculosis in India. It may be that they did not consider it necessary or worthwhile to refute the unfortunate statements made in the face of the generally accepted universal opinion—among even the most confirmed chain-smokers amongst medical men, who have become victims to the habit and cannot get out of it—that smoking is not good to health, and that it is particularly injurious to sick people and people with weakened hearts and lungs; or it may that the authorities themselves think that occasional or very light smoking by those T.B. patients who have been chronic confirmed smokers, may be permitted as a psychosomatic adjuvant to the intensive natural and medicinal and other therapies administered to them. In either case, it would appear very very desirable that an authoritative statement from the Tuberculosis Adviser to the Government of India or from the Indian National Tuberculosis Association is issued at once for the guidance of all concerned with the prevention and treatment of the disease including the unfortunate patients themselves.

Mr. K. K. Nag has cited authoritative opinions from leading members of the medical profession in England and America, to show that smoking tells upon the heart and lungs and considerably shortens the average expectation of life. It will not be out of place if some additional valuable and specific data are furnished to show how very dangerous and disastrous smoking can be to people in general and to the patients who are ill with a weakened or diseased condition of the lungs or/and heart, in particular.

Analysis of various popular brands and blends of tobacco shows that cigarettes contain between 1·5 and 6 per cent of nicotine, and that the so-called nicotine-free brands contain 1 per cent. Benzopyrene and other tar-products, which have been shown to be capable of producing cancer, are some of the other ingredients of tobacco smoke. These are definitely irritating to the respiratory passages. The most poisonous ingredient however, is *Nicotine.* In the act of smoking, nicotine is set free by the formation of ammonia and owing to its great volatile nature it is rapidly inhaled. "By smoking one cigarette, 2 milligrams of nicotine are absorbed into the body. The fatal single dose of nicotine is 0·05 gm.; about 35 per cent of the nicotine in the cigar or cigarette smoked gets into the mouth and a little of it is absorbed every time. The lungs absorb 20 per cent of the inhaled nicotine. If the nicotine from 2 cigarettes is injected into the blood stream of a man, he will soon die. He who smokes 20 cigarettes a day inhales 400 mg. of nicotine per week. If this quantity is injected intravenously it would kill a human being as quickly as a bullet shot through the brain"

Symptoms of chronic nicotine poisoning are: "mental depression, loss of appetite, nervousness, diarrhœa alternating with constipation, palpitation of the heart, irregular pulse beats, chronic cough, chest pain, excessive perspiration, gastric acidity and later gastric ulcer, loss of weight, loss of smell, hearing and taste, tingling in the hands and feet and insufficient circulation in the extremities." The arterioles of the brain contract and cause dizziness. Needless to add that the lungs and heart also suffer in consequence. Dr. Graham of Washington University in the course of an extensive research conducted by him on the effect of smoking on the heart, lungs etc. found that 95 per cent of all cases of cancer of the lung is due to smoking of cigarettes and that pipe smoking produces in addition cancer of the lip. Nicotine initially stimulates the vagus nerve and consequently the heart beat is lower, but later on it paralyses the nerve, and thereafter a too rapid heart beat occurs. This chain of events, continues to exert its baneful influence on the smoker and ultimately leads him to an early grave".—(*S. Afr. Med. Jour.*, 1950).

Dr. H. J. F. Maisin, the Belgian Cancer Specialist who visited India in December last, to attend the meetings of the International Cancer Research Committee. (I.C.R.C.) told pressmen in an interview he gave them on the 27 December 1952 that, of all the forms of smoking, cigarette

smoking was the most harmful. He said that recent controlled researches into the effects of smoking had led to the definite conclusion that **Cigarette smoking was a major cause of Cancer of the Lungs.** Chain smokers contracted this disease invariably after about 20 years of the habit. Dr. Maisin stated that while living in smoky surroundings increased the incidence of cancer of the lungs, tobacco smoking was the direct factor. Cancer of the lungs was increasing at a fast rate in Europe and America. (*The Statesman*, 31-12-1952) Dr. J. H. Burn of Oxford found that smoking of even one or two cigarettes may cause constriction of the coronary arteries, supplying blood to the heart muscles. "Smoking of tobacco has been shown by independent observers in many countries to release a hormone from the pituitary gland which acts on the blood vessels. Statistics from all over the world show that coronary diseases are on the increase everywhere and sad to say smoking has also tremendously increased."—(*Br. Med. Jour.*, 28-7-'51).

Dr. W. Dock of the University Medical Centre, Brooklyn, says (*Amer. Jour. Med.*, 2, p. 730): "The cumulative effects of smoking contribute to the reduced life expectancy reported by Pearl but *a few greater contributions to the mortality may be due to its effects on the respiratory system.* Not only cancer of the lung, but chronic sinusitis, empyema (swelling due to the pressure of air in the connective tissue of the lung) and reduced resistance to pneumonia and other lung infections could be cited." Instances of specific baneful effects based on expert medical opinion could be multiplied, but are not indeed necessary to emphasise or demonstrate the obvious. It may be argued by interested persons that smoking may produce cancer of the lungs in non-tubercular patients but need not be harmful to the lungs of Tubercular patients! Though it is manifestly a specious argument it will have to be met and disproved. Therefore, an early expression of authoritative opinion from the Central Tuberculosis High Command, is urgently required to dispel such wrong notions, on smoking by tubercular patients.

[**Note**:—"Dr. P. V. Benjamin, the Tuberculosis Adviser to the Government of India, whose advice we sought on the subject of smoking, states that smoking does not do any good to anyone, much less to tubercular patients. Because of this, he would advise every tubercular patient not to smoke."—Ed. HEALTH].

The Lawyer

"A lawyer is a man who is brought in to assist those who have been persuaded by persons they do not know, to enter into contracts which they do not understand, to buy things which they do not want with money they have not got."—(*The Rt. Hon. Sir Raymond Evershed, P.C.* in *The Broadway*, Dec. 1952).

The Doctor of old

"A physician is a person who pours drugs of which he knows little into a body of which he knows less."—(*Voltaire* quoted by *Judge Evershed, P C.*).

BODY RESISTANCE AND TUBERCULOSIS OF THE LUNGS

Dr. JOHN G. DAVID, Medical Superintendent,
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IF we study Nature with an open mind, the beauties of God's creation and the many wonderful things, that we see with our eyes will be manifest. We find that every living thing on the face of the globe, plant or animal, exhibits the instinct of self-preservation; and we also see that the fittest alone survive. God in His Infinite Mercy has endowed us with special senses with which we are able to sense dangers and avoid them. Our body tissues possess the power to resist infections that cause disease and this power is known as 'the body-resistance'. How does this body-resistance help in the prevention and treatment of Tuberculosis ?

Tuberculosis is an infectious disease caused by a tiny invisible germ called "the tubercle bacillus." The human body possesses several defensive mechanisms, against infective diseases and when we neglect to build up body-resistance by utilising these, we fall victims to the disease.

When a disease-producing germ enters our body, the poisons produced by them stimulate certain blood cells into activity and these cells (phagocytes, as they are called) rush into the blood stream and give battle to the invaders. The ultimate victory rests naturally with the stronger of the two opponents. If the man has sufficient resisting-power the phagocytes devour the germs and win the battle, leaving the man in good health. In this battle between the body-cells and the disease-germs, an antitoxin [an antidote to the poison (toxin)] is produced which if, of sufficient quantity protects the person against the disease either permanently or for some long enough period.

We have harnessed this phenomenon to prevent diseases, *e.g.*, small-pox by vaccination, diphtheria and tetanus by injection of antitoxins. When a person is vaccinated against small-pox, he actually gets a small quantity of the virus causing the small-pox into his body. This dose is so adjusted that it causes a very mild modified attack of the disease itself just sufficient to stimulate the blood and tissues to prepare a protecting agent in the form of what is called an '*antitoxin*' for neutralising the poison caused by the disease causing germs. This is called artificial immunity and lasts for a relatively short period; but on persons who recover from a

regular attack of small-pox, a permanent or natural immuntiy is usually conferred.

B.C.G. vaccination is given to those who are found negative by the tuberculin test, in order to produce an immunity against tuberculosis. This is a cheap and efficient method of preventing tuberculosis and Governments have made it possible for every one to get it free of cost. Those who have not yet had the test should take the earliest opportunity to get themselves tested and if negative, get protected by B.C.G. vaccination. As stated already when one loses his body-resistance he is liable to become a victim to the disease and if this resistance is totally absent or lost, the patient is unable to fight the disease and so ultimately succumbs to it.

Davidson, a well-known expert in tuberculosis says "Every individual born into the world and dwelling under ordinary conditions of civilisation, is infected with the tubercle bacillus after birth, and at some period between birth, and adult life. Although such infection may produce a definite reaction in the body tissues, it need not necessarily produce the disease. The vast majority of people who catch the infection are able to deal adequately with it, the primary lesion resulting from the reaction of the tissues to the entry of the bacillus remaining as a minute healed focus; more obvious evidence of infection may become manifest in the associated lymph glands. In a certain percentage of cases, however, manifest disease develops at a much later period, mostly as a result of reinfection with the tubercle bacillus, either from within or from outside the body; such reinfection is commonly preceded by a lowered resistance on the part of the individual." And this "*certain percentage*" of persons who develop the disease is indeed very small. It is obvious that body-resistance plays a very important role in the prevention and treatment of tuberculosis. It is therefore, very important to build up our natural body-resistance and to preserve it intact, by a properly regulated mode of life and conduct.

The drugs one is advised to take when he is actually sick, are only helps, and cannot by themselves cure the disease. The best they will do is to help the individual to fight the disease through his own body-resistance, which he should build up for himself, by work, exercise, diet and rest at the proper times.

We often come across persons whose X-ray pictures reveal extensive disease, but who still carry on their daily work, while certain others with comparatively very little disease are unable, even to get out of bed. Why is this? Because the former have enough body-resistance and vitality and the latter haven't. Those who suffer from tuberculosis should not get depressed or downhearted. There is an inner force bestowed on everyone by the Creator, called '*The Body-Resistance*' which can fight disease with success. Every one is thus gifted but "is everyone giving it a chance?". Cares, worries and anxieties are the worst enemies which use up and deplete this inner force. Stop worrying; preserve a cheerful frame of mind;

have abundant faith in the Creator, try to do your part by regulating your life, with proper food, work and rest. The inner power, the body-resistance, will not then desert you.

A New Attack on
CANCER OF PROSTATE AND BREAST

PAUL DE KRUIF

DR. ELMER L. HENDERSON, a former President of the American Medical Association, and a distinguished surgeon, is the Chairman of the A.M.A's. Co-ordinating Committee on Public Relations. He says "The operation developed by Dr. Charles Huggins of the University of Chicago is practical and may bring in time a new chance for relief to many sufferers from hopelessly far advanced breast and prostate cancers."

Years ago Dr. Huggins removed the sex glands of men suffering from cancer of the prostate and found that many of them lost pain, regained vigour and lived usefully for five and even ten years without recurrence of cancer. Some however, though improved had recurrence.

In September 1951, the *Journal of the American Medical Association* published the historic report from the Ben May Laboratory for Cancer Research and the Departments of Medicine and Surgery of the Chicago University, on the use of cortisone. Dr. Huggins and Dr. Bergenstal injected desoxycorticosterone acetate—(DOCA as it is generally known) and cortisone into two of their patients when their adrenal glands were removed. These two men were advised to take extra salt and two little pills of cortisone every day. Their terrible pain vanished, strength surged, cancer faded from their bones and they were able to return to work in a healthy state.

The American Cancer Society helped Dr. Huggins and his colleague with funds and they pursued the researches further. They found that total removal of the adrenal glands did not always arrest the progress of the tumour-growth; sometimes there was improvement followed by relapse and the results were really good in all the cases of cancer of the prostate, which had been given up as hopeless

Dr. Huggins and his coworkers turned their attention to cancer of the breast, which is dreaded by women and which recurs after removal and even spreads into wider areas in many cases, inspite of the treatment. In these cases, the Chicago experts performed an operation and removed the ovaries, which secrete a certain hormone, and also the small adrenal glands situated above the kidneys. The patients were then advised to take two little pills of cortisone every day. The vast majority of patients thus treated felt remark-

ably relieved of the intense pain, and were able to take to their normal routine life, with a feeling of optimism about their future. The X-ray pictures taken after this treatment showed that the cancer was vanishing in 80% of cases; and in none of them has there been any evidence of recurrence, so far. It is perhaps too soon to assess the results finally, but the available data point to the fact that the cancers have been inactivated and cannot resume growth.

This operation has not been found to be effective or successful in cancers of organs other than the prostate and the breast. This operation must be considered, by and large, as the last resort after all other treatments have been tried and found to fail as for instance, in the thousands of women who are doomed to die every year, after removal of the breast, without relief. The operation, for removing the adrenal glands does not involve any great danger. Dr. Huggins and his collaborators have carried out 60 such operations, with 56 successes. It is understood that this operation has been done safely at the Mayo Clinic and other places. This operation is the result of patient and presistent research extending over several years, carried out in many laboratories, which had proved that even far advanced cancers of the prostate and the breast could be influenced by controlling the hormones which control the growth of the breast in the female and the prostates in the male.—(Condensed from *To-day's Health* and *Reader's Digest*, Dec. 1952).

Acute Insomnia (Sleeplessness)

Doctors have their own ways of handling chronic insomnia usually with sedatives and with the recognition that insomnia is a symptom of an emotional disorder, requiring investigation. Even in the acute insomnia with the anxiety accompanying hospitalization, the customary use of sedatives may be the most expedient method of handling the problem. But what about the patient who phones the doctor at night from home, or sends a messenger to fetch him because of being unable to sleep on that night ? If the doctor's sleep is disturbed by the call he may be particularly non-plussed as to how to handle the situation without a punitive attitude to the patient; yet psychological handling of the patient may give sleep to the patient and keep the relationship with the doctor in a state, such that can be of further help to the patient in the future.

An example: A pregnant woman who was in psychotherapy by a psychiatrist had sprained her ankle and had had a cast applied by a surgeon. She had taken a sedative prescribed by her obstetrician but being anxious and unable to sleep, phoned her psychiatrist at 1 a.m. The psychiatrist understanding his patient suggested that her husband prepare her some warm milk to drink. With this "mothering" from her husband she slept like a baby and she did not disturb the psychiatrist on any future occasion. The doctor who responds with irritation at a patient's special request is more likely to find his patients more loath to bother him. Other psycho-physiological advice on such occasions include the tepid bath or reading by a dim light instead of trying so hard to go to sleep in the dark.—(W. Donald Ross : *Bull. Vanc. Med. Assoc.*, 1951).

RESTFUL SLEEP

R. DWARAKANATH, B.A. (Hons.),
"Chandrika," Madras-16.

".....Weariness
Can snore upon the flint, when restive sloth,
Finds the down pillow hard."—(*Cymbeline, III, vi, 34*).

ONLY when the muscles of the body reach a point of exhaustion at which relaxation becomes imperative, we fall asleep. Sleep has, by some, been called "death's twin-brother", but death supervenes only when the organs of the body reach the point of complete exhaustion.

To some "insomnia" means ever so many things: It may mean that they find it hard to fall asleep; it may mean that sleep, though of sufficient duration, is not deep or is not r e f r e s h i n g enough. It may mean that if they wake up in the middle, at some hour of the night, they cannot get to sleep back again. It may also mean that their sleep is disturbed by dreams "right-through".

"I hug myself to sleep but I simply *can't* sleep", is a common complaint with many. They do not realise the fundamental fact regarding sleep *viz.* sleep cannot be got by sheer force; it must come of its own accord. The act of falling asleep consists of some stages of transition through which we have to pass everytime. The patient suffering from sleeplessness, is painfully conscious of every phase of transition, from "*wide-awakeness*" through a feeling of '*drowsiness*' to the point at which he should '*sleep*'. If a conscious effort is made to obtain sleep, the person anticipates and expects every succeeding stage to follow the preceding one, with the result he gets no further than the very first stage of "*wide-awakeness*"; and fails to reach the final stage.

There are certain rituals which some go through, in order to reach the penultimate phase of "drowsiness" before getting into the bed and off to sleep. Some read books, till the letters on the page become blurred and get out of focus, when their eyelids feel heavy and droop. At this point they keep the book aside, put out the light, cover themselves up, if it is a habit, and then feel ready to hug themselves into their wonted sleeping posture–but only to find that the drowsiness they felt a little while before, had been replaced by "*wide-awakeness*". The ritual is repeated again, often with the same result and well-nigh mid-night is reached by then.

Some people follow the ritual of snuffing or smoking a cigarette or chewing betels and tobacco. When they feel drowsy they throw the cigarette away or spit the chew out or blow the nose, take a glass of water and then retire to bed, only to find they are unable to compose themselves to sleep.

They feel desperate after some amount of tossing and turning on

the bed in an attempt "to drop off" again. They sprawl on the unyielding bed in anger, and with a sense of frustration. In such a state of mental tension, the normal mechanism of sleep cannot be expected to function. It would therefore, be a source of consolation and comfort to the terrified blear-eyed man who suffers from insomnia, to know that sleeplessness has but few ill effects upon the physical health; for, Nature, the perpetual guardian of man's health, will not allow him to go without sleep, when he is in real need of it. Sleep is but one of nature's safety valves against physical over-exertion and fatigue.

It is not for the brain so much as it is for the body, that rest is necessary, for the brain is never known to be at *complete rest.* It enjoys only a comparatively mild relaxation even while we sleep soundly.

Sleep is described by the poet as the "balmy restorer of tired nature." If the body is very weary and the muscles very tired, then sleep overpowers us whether we like it or not. The trouble with people who can't sleep is that they desperately attempt to force the body to take rest when not needed and often more rest than necessary.

A cause of action for divorce, arose in a case in which the husband insisted on reading till late into the night and refused to switch off the light, which the wife contended, interfered with her sleep. This illustrates a prevalent notion that absolute darkness is necessary for sound sleep. As has been shown already, physical weariness and fatigue alone induce sound sleep. Light or no light does not matter at all! Were it not so, how would people doing night-shifts, sleep soundly during the day time ?

Another common notion about sleep is that sleep is possible only in a particular posture. This again is not true, because one is not aware of the posture his body assumes when he has gone off to sleep. We are reminded of the ubiquitous school boy, who explained to his teacher the theory of earth's rotation, saying, "I go to bed with my head to the East and on rising in the morning I find that my head is to the West!" During sleep, it has been reckoned, moreover that we change our postures atleast a dozen times, without knowing that we do so.

Some people develop a habit—and they appear to be proud of it —of keeping a check on the time whenever they wake up during their sleep in the night. Thereby, they say, they are able to calculate the time they have slept! This habit may ultimately lead to breaks of rest at irregular times and intervals, throwing the whole system out of gear. A variation of this habit lies in the setting up of an alarm-clock, for an early hour and attempting to rise *before* the alarm is sounded. This is also a needless and unhealthy practice.

"Fashionable folk," who are generally victims of insomnia, carry a stock of sleeping pills and draughts, which they keep on a shelf near the bed and which they use regularly. If one has not the will and determination to fight out his insomnia successfully, pills and draughts will be of no avail in inducing sleep. *There is*

nothing like natural sleep, for keeping us healthy and refreshed.

At one extreme we have the hibernating dormouse, the perpetual sleeper, and at the other, there is the man who cannot sleep at all—cannot have even a wink—for days on end. These latter need not be alarmed at their "unnatural wakefulness." Cases are on record, where the sleeping centre of the brain has been destroyed by injury or disease rendering sleep impossible. Napolean the Great, is said to have kept awake attending to war manœuvres, for days together! Reclining in an easy chair for an hour or so, in a state of relaxation is enough for such people–it is not necessary for them to lie down and sleep.

The famous Madras Surgeon the late Dr. S. Rangachari, whose statue adorns the entrance to the Madras General Hospital, was very popular with rich and poor and enjoyed an extensive practice; he was constantly being called to see patients, by day and by night at all hours. He was the poor man's and the richman's doctor alike. Fees never weighed with him. He slept for scarcely *two* hours on many nights and was still able to carry on merrily for years like that. In addition, he drove a huge big phantom Rolls Royce himself, all the time, with the chauffeur sitting in the rear and he was still in the best of health, ever active and agile till an attack of enteric fever carried him away. He used to say that he could manage comfortably with a couple of hours' rest and sleep in between his extremely heavy and active duties as a surgeon and physician. His mental alertness, acuity of vision and physical stamina were not in the least impaired by the want of adequate sleep, for days on end. A high sense of duty to help suffering humanity, kept him buoyed up with only the needed minimum of repose and rest. Many more instances of such selfless devotion to duty can be given from the medical profession.

So sleep, being Nature's safeguard against over-exhaustion, will come to you when you need it; if you cannot sleep, you are not sufficiently tired and so do not need it. You will not lose health, thereby. Sleep influences health to the extent it affords a brief respite during which the musculature could replenish its spent vigour and energy. If the musculature does not need such a replenishment, sleep does not come and sleeplessness can have no ill effects on health under those conditions. Exercise and active habits will give peaceful sleep, restful repose and sweet slumber.

WISH YOU A GOOD-NIGHT'S REST.

Starch in Infant Feeding

The use of starch in the feeding of infants was the subject of critical investigation by Dr. Lust in Germany in 1951; he considers that rice starch is most suitable, as it is almost pure and good starch. Heated suspensions of the starch yielded a colloidal solution (*kanjee-porridge*) which aided digestion; hydrolysis with maltose (sugar from malt and starch) yielded a useful product. Starch is held to be preferable to sugar for adding to cow's milk in the feeding of infants.—*Nutr. Abst. Rev.*, 1070, published Sep., 1952.

Random Notes on Health Topics

MADAN MOHON GHOSE, M.B. (Cal.),
Nakunda, Hooghly Dt.

I. Exercise.—Helps one (1) to have a vigorous mind in a vigorous body; (2) to keep the organs and cells in an active and healthy state; (3) to eliminate the waste products; (4) to avoid constipation and keep his digestive system in good condition; (5) to have sound and refreshing sleep; and (6) to keep his mental faculties intact.

II. Development in children is to be deemed normal if the child (1) begins to see objects and starts at a sudden noise in the 1st month; (2) is able to lift his head while lying down, in the 3rd month; (3) sits up between the 6th and 9th months; (4) stands and walks a few steps and lisps simple words like Ma-Ba-Pa at 12 months; and (6) strings together 2 or more words to express his ideas and also follows clean habits in his 2nd year.

III. Physiological and other data relating to normal adults (male and female).

(1) Duration of pregnancy is 273 to 285 days.

(2) Menstrual cycle is 28 days.

(3) The pulse rate is 72 per minute in normal health, while at rest.

(4) The respiration is 18 per minute in normal health, while at rest.

(5) The normal body temperature is 98·4°F in normal health, while at rest.

(6) The number of bones in the adult body is 205.

(7) The weight of the brain is about 50 ounces.

(8) The weight of the liver is 50 ounces.

(9) The quantity of urine excreted in 24 hours is about 50 ounces.

(10) The chest girth of a person 5 feet 6 inches in height should be 34 to 35 inches and should expand by about 2 inches with deep (breathing) inspiration.

(11) Puberty is attained by Indian girls at 12 or 13 years of age.

(12) Menopause occurs usually in Indian women between the ages of 45 and 50 years.

IV. *Average height and weight of normal children at different age periods—*

Age	Height (inches)	Weight (pounds)
At birth	20	7
End of 1st year	29	21
2nd ,,	33	23
3rd ,,	37	33
4th ,,	40	37
5th ,,	42	41
6th ,,	44	45
7th ,,	46	49
8th ,,	48	55
9th ,,	50	61
10th ,,	52	67

Women are said to control 80 per cent of the nation's wealth: the balance probably being held by bachelors.—(K. L. Krichbaum in *N. Y. Times Magazine*).

The Art of Medicine

THE average intelligent patient of to-day has considerable knowledge of the commoner ailments with which he may be afflicted. He gets this learning through newspapers, radio programmes, and the magazines. Yet with all the dissemination of medical lore to the public, the individual patient requires more than a superficial explanation when he is faced with a major illness. This is particularly true with chronic diseases, where the co-operation of the patient is essential to successful treatment. The new diabetic, arthritic, or cardiac patient, while perhaps having some knowledge of these diseases from lay sources, suddenly is confronted with the fact that he himself has diabetes, arthritis, or heart disease. This produces a mental hazard which is sometimes more difficult for the physician to treat than the actual organic condition. The doctor must spend as much time as is necessary in gaining the confidence of the patient, then guide him through the long process of getting well.

Or, the patient may have to undergo a major surgical procedure. He may have glibly accepted the fact that his next-door neighbour had his gall-bladder removed, but when it comes to his own operation, that is a different matter, and he develops a fear complex that may seriously interfere with his recovery.

All of us are afraid of the unknown. The medical profession is still surrounded by an aura of mystery, and the average patient has a fear of medical procedures about which he knows nothing, This is where the art of medicine comes into its own. The patient who is to have an appendix removal or a hernia operation cares little about the anatomy or the techniques of the procedure, but he does want to know what will happen to him between the time he enters the hospital and the time he leaves. A few moments at the first examination can be used to explain that a little blood will be drawn from a vein for various tests, how he will be prepared by the attendant, that various medicines will be given before the operation, and approximately what time the operation will be. Knowing these things, he accepts them with confidence.

An occasional patient is curious about specific instruments that will be used. It does no harm to let him see the instrument if he so desires. For example, the invariable response on seeing a bronchoscope is, "I thought it was much larger than that !"

The day is past when the family doctor was God Almighty, and his decisions were accepted without question. Patients to-day realize that physicians are humans with above average intelligence and training, but *after all only human.* The doctor who adopts a brusque and hurried attitude towards his *clientele* will soon be watching his practice going down the street to the man who takes time to listen and talk to his patients.

It is even more important for the specialist to practise the art of medicine, because he depends for his livelihood on cases referred to him. Not only must he satisfy the patient but also the referring physician, If the patient returns to the family doctor saying, I don't like Dr. So-and-so because he was too curt," the next referral will probably go to So-and-so's competitor.

The people in the waiting room. don't know where the doctor stood in his medical school class, and they don't care if he is certified, but they do have a definite opinion of his personality. Physicians have only one thing to sell, and that is service. The more attractively that service is packaged, the bigger the practice. A satisfied patient is the doctor's best advertisement. An investment in the art of medicine will pay big dividends for 1953.—(*The General Practitioner*, Feb. 15, '52—From *Pittsburgh Medical Bulletin*).

Increasing the Ascorbic-Acid Content of Vegetables and Fruits

Work is progressing in several laboratories on the problem of increasing the content of ascorbic acid in vegetables and fruits. These are very worth-while enterprises, since vitamin C is a major constituent of vegetables from the point of view of human nutrition. Any improvement that can be made in the inherent ability of our common varieties to synthesize and store ascorbic acid, is a permanent contribution to our food supply.

Tomatoes have been the subject of special efforts at Purdue University Lafayette, Indiana. A survey of the genus *Lycopersicon* demonstrated a wide range of vitamin C contents, from 100 to 1050 parts per million, the highest values being found in *L. peruvianum and L. pimpinellifolium*, both small-fruited species. From this field-grown material, selections were made for the breeding programme, which had several objectives.

The influence of nitrate supply upon the ascorbic-acid content of tomatoes was reported by Somers, Kelly, and Hamner (*American Journal of Botany*, 38, p. 472 (1951). Tomatoes were grown in sand culture with varying supplies of nitrate. High nitrate supply for the month prior to the ripening of fruit was associated with high fruit production, but with lower ascorbic-acid content by about 10 per cent. Fruits in full shade contained about 12-per-cent less ascorbic acid than those fully exposed to sunlight.—*Nutrition Newsletter*, August. 1952.

Leprosy Patients in the World

It is estimated by the World Health Organization that the number of leprosy patients in the world ranges between two and seven million. Most of the cases are not registered. India and China each are estimated to have 1,000,000 cases, but only 10,000 are registered in China and none in India. It is pointed out that French West Africa has only 80 registered cases out of a probable total 200,000, while the Belgian Congo reports 58,822 registered out of a possible 100,000. In the Western Hemisphere, Brazil has the most cases, 37,547, all registered. There are 390 cases in the U.S. and only 8 in Canada —(*Med. Digest*).

On Grumbling

OF all the rights and privileges that I as a citizen of a democratic state enjoy, the one I appreciate most is the right to grumble. It is grumbling that has made the world the good world it is, and moroseness and taciturnity that have made it the bad world it is. If Cain had resorted to grumbling he would never have entertained the slightest thought of harming his brother; it was brooding that made him a murderer; where there is grumbling there are no knife-stabs in the dark or bombs laid in unsuspected corners. Fortunately grumbling is natural to man, or a sort of human trait. To grumble is a sign of mental health. Not to grumble is a symptom of something gone wrong somewhere, just as not to chew the cud indicates a sick cow. The baby grumbles as soon as it sees the light of day; the crying child gets the milk. In most cases grumbling goes on all one's life, and very often in most expressive words. The husband starts grumbling two days after the wedding; the wife takes up the refrain. Grumbling is the spice of social life, whether limited to the family or extended far beyond it. The sign of a happy married life is the free exercise of the privilege of grumbling from baby to big brother. The sign of a stable state is the constitutional right to grumble.

Grumbling, though a natural expression of feelings that must not be pent up, can be a fine art. Moreover, each nation has its own style of domestic and public grumbling, just as it has its own styles of painting and music. Public abuse adds spice to it in the U.S.A. In England this is considered unsporting; but a dignity is given to it by mixing it with moral aphorisms. In France it is just as exciting a sport as racing or betting on the new government. It is *a la mode*, when words fail to finish off the grumbling with challenges in husky voice. The climax is provided by a duel with blank rounds. The loud reports of the pistols atleast make up for the want of words, and is considered the fitting termination of a glorious grumble. At the end of the duel the wordless opponents embrace and kiss each other, and all's well that ends well.

In India we favour the American style; but we improve upon it by bringing fathers, mothers, and ancestors into the fray. We are never at a loss for words. Thus we are by our national heritage the best suited for grumbling. Among adults grumbling is a matter of words only, not of pistols or knives or bombs. Where man can let off steam by safety valves, on the platform or through the press, there is a feeling of security, of exhilarating freedom, and of national oneness and brotherhood. Let us then grumble cheerfully, and the world will go on and on, and, the nation progress and be safe. The greatest source of national and international security lies in grumbling.—(Liber. in *Democracy*, 29-10-1950).

Patient-Doctor Relation:

(The Psychotherapeutic Approach)

WHEN a doctor is asked by a friend if he cannot take a little more trouble to assure his patients that he is doing everything required to benefit the patients, he is often heard to say "But I don't have the time to do psychotherapy on my patients; they want to talk to me when I am rushed, with all sorts of emergencies to meet and *I just can't do it.*" The psychotherapeutic approach need not take much more time than he can spare; it can save time by saving efforts which would be wasted with those patients who require repeated examinations or develop unnecessary illnesses, if they do not have someone who understands them and in whom they have confidence. Apart from the economic waste in unnecessary laboratory examinations which involve expense, which could be better directed to compensating the physician for his time spent with them, there is the economic waste and actual risk to health among sick people shopping around to irregular practitioners, because doctors have not taken the trouble to understand them and give them emotional support, while keeping the trained medical eye on them and preventing the oversight of serious physical disease, which can occur if they put their trust in a quack.

Basic to having a psychotherapeutic approach in one's practice is an understanding of what the doctor means in the patient's emotional economy, even if the patient is not consciously aware of this meaning. The sick person regresses to some extent, unconsciously to childhood days and feels like having someone like the parent, on whom he can depend and by whom he will be protected and made well The act of seeking a doctor when one is ill, is really the act of seeking out one who will, like a father or mother, look after him either continuously or long enough, until, with the restoration of health, they are able to function as an independent adult without the special dependency on the doctor. It is not necessary or even advisable for the doctor to make the patient aware of this. It is however, necessary for the doctor to keep it in mind, if he is not going to disappoint the patient and behave like a rejecting or punitive parent. The doctor should be free to recognize the anxieties in the patient and give the appropriate help by medical examination, by physical treatment, by advice or just by listening.

Value of listening:—Many doctors fail to realize the full emotional value to patients of having someone important who will listen to them. The doctor may be accustomed to doing something whenever anything is wrong and may feel that just listening is not doing anything. *This is not so.* When a person is talking out, with the one exception of compulsive talkers, who use talking as a defence, he is reorienting his feelings and becoming more able to

solve problems for himself. Psychotherapy begins with history-taking and physical examination, for during this phase the relationship is built-up between patient and doctor. It should also be realized that all the physical methods of treatment including medications and even palliative sedatives, have a psychological, as well as a physiological value to the patient. To rely on 'suggestion' alone, is not good psychotherapy. The use of inert 'placebos', is not good or proper, because of the insincerity involved. If the doctor gives a drug with some little pharmacological action, he feels confident of having given something useful to the patient and this is imparted to the patient in his manner of doing, so that the patient feels the doctor's interest in him and responds to this.

What the doctor does more than listen, as far as his verbal contributions to the patient are concerned includes, *education, reassurance, and active advice.* (1) *Education* may be necessary to dispel false ideas about health which are increasing the patient's anxiety, *e.g.* the fear of the adolescent boy that masturbation causes impotence or insanity, or the fear of the menopausal woman or the woman whose uterus had to be removed for some ailment, that her sex-life is over. (2) *Reassurance* can be given on the various anxieties of the patient which are out of all proportion to their supposed causes. The calm and unanxious attitude of the doctor is of greater importance than the particular words he uses to reassure. (3) On *active advice,* one must be careful and not make the mistake of assuming that a solution which works for oneself is the best one for the patient. This is a common error in amateur psychotherapy. One must be careful not to use the patient to talk out one's own experience. If ever you catch yourself saying to a patient "That reminds me of when I..... .....". Stop please and think twice about it.—(W. Donald Ross, Professor of Psychiatry, Cincinnati University. writing in *Bull. Van. Med. Assoc.*, Aug. 1951).

Vision Testing in Schools

"Apparently perfect 20-20 eyesight is no guarantee against eye disease" said Dr. Ralph. C. Lanciano head of the Department of Ophthalmology, Philadelphia Board of Public Education, during the Annual Conference of the National Society for the Prevention of Blindness, held at Pittsburgh in March last. He declared that "as a means of testing visual acuity the Snellen chart, properly used and correctly interpreted is without doubt the most practical. Most efficient and most economical method at our disposal at the present time". However, Dr. Lauciano added that too frequently school health departments carelessly take for granted that the eyes of a child are free from disease or abnormality when the visual acuity is found to be normal. Actually in many cases, children have passed the vision test by the Snellen chart method, while actually suffering from eye diseases —(*Proc. Nat. Soc. Prev. Blindness*, 1952).

The Inflammability of Plastic Spectacle Frames

A case of facial burns directly attributable to the ignition of plastic spectacle frames, is reported by Doctors Portfliet and Fralick, in the December 1951 issue of the *American Journal of Ophthalmology*. A woman had accidentally set on fire her plastic frame while lighting a cigarette in bed. She quickly snatched the frame and flung it out but it fell on her lap and set fire to her night gown and bed-clothes. The flames were extinguished by her husband who rushed her to hospital. She died there a few days later.

In order to assess the inflammability of plastic frames, thirty samples of plastic frames dating from 1930 to those in use in 1951, were individually suspended on a wire hook and ignited with a safety match. Of the 30 samples 26 burned violently enough to be considered a source of danger to the wearer in such a common act as lighting a cigarette. Most plastic frames are made from one of the following materials:— (1) cellulose nitrate (2) cellulose acetate (3) cellulose acetate butyrate or (4) acrylic plastic. The high inflammability of nitrocellulose plastics, once the chief material used in plastic frames, has caused their gradual replacement by more recent plastic products–cellulose acetate, cellulose acetate-butyrate, both of which possess the advantage of greatly reduced inflammability. Acrylic material is somewhat brittle but is noted for its beautiful colour and slow burning qualities. Its low degree of inflammability makes it more suitable for use in industrial safety frames.

Constant search for new and more suitable plastic materials is being made by manufacturers of plastic frames and other products; all the materials tried, have lacked one or more of the essential requirements for plastic frames. Portfliet and Fralick suggest that dispensers of spectacle frames must advise purchasers of the inflammability of plastics.—(*Sight-Saving Rev.*, Fall 1952).

Rapid Delivery and Diminution of Pain with Vitamin B_1 (Thiamine)

Dr. Bremer gives a brief review of the literature dealing with the action of vitamin B_1 in shortening labour and relieving pain. From a tabular summary of the results it is seen that doses of thiamine hydrochloride (vitamin B_1) ranging from 40 to 300 mg. produced some relief of pain in over 50% of 622 women in labour; in 237 of them the duration of labour was recorded and was found to be shortened in 90% of them. Bremer treated 46 cases with a total dose of 200 mg. of vitamin B_1, (50 mg. orally and 150 mg. by injection). In comparison with the mean duration of pregnancy in similar untreated women, labour was appreciably shortened in 90%. But as regards relief of pain, only about 30% of his cases had relief. Vitamin B_1 produced regular and strong pains. With the dose used there was no contra-indication for mother and child.—(*Eng. Abst. Nutr. Rev.* from *Zentral. Gynaecol.*, 73, 1951).

Differences in the Distribution of Subcutaneous Fat (Fat under the Skin) with Sex and Maturity

THE distribution of fat over the human body was studied by Dr. Edwards in a large series of persons. In both sexes and at all ages studied, the subcutaneous fat was thickest over the upper part of the thigh, the lower part of the anterior abdominal wall and the lateral and posterior surface of the upper arm; it was thinnest over the front of the neck and upper chest and the lower part of the forearm. Patterns of fat distribution were the same in girls and boys before puberty, but after puberty the proportion of fat on the trunk increased in males; and in females the proportion of fat on the posterior and lateral surface of the trunk and on the legs increased and that on the anterior of the trunk and on the arms decreased. The greatest difference was that women had 1¼ times as much fat on their legs as men. There was no significant difference between women who had never been pregnant and other women who had borne children.—(*Clinical Science*, 10, 305—315, 1951).

Reaction of Children to Films

A GREAT deal has been written and said about the influence on children of the films which many of them see now-a-days almost as a matter of ritual It is interesting to learn, therefore, that it was arranged to show at the Edinburgh Festival of Music and Drama, an exhibition of photographs recording the reaction of children to films made for them. This method of research, undertaken for the Carnegie United Kingdom Trust by Miss Marry Field, has made it possible to study and compare the expressions and gestures of some 120 children from ten different social backgrounds, and provides objective evidence of the reactions of these children, aged from 7 to 12 years, to specially selected scenes and methods of screen production. How much will be disclosed by this method as to the psychological influence of films on children remains to be seen, but any method which promises a scientific approach to a subject so liable to be clouded by prejudice is at any rate worth a trial.—(*J. Royal Soc. Hyg. Trop. Med.*, 1952).

News and Notes

India invites 19th International Red Cross Conference

AT its closing session, the 18th International Red Cross Conference which was held at Toronto on 26th July 1952, was asked to select India as the meeting site of the Conference four years from now. The proposal of the Indian Red Cross was made by Sardar Bahadur Balwant Singh Puri, Secretary General of the Indian Red Cross Society, who has been associated with the Red Cross in India for thirty-five years.

The Conference voted unanimously to accept the gracious invitation of the Indian Society, which subsequently indicated that the Conference site would be the National Parliament building in New Dehli.—*Red Cross World*, July-Sept. 1952.

Medical and Health Topics from Periodicals

Value of Prayer

Real prayer always does one of two things:—It either frees us from the trouble we fear *or* else it gives us the strength and courage to meet the trouble when it actually comes.

●

A Churchillism

Friends of Winston Churchill on the eve of his 75th birthday recalled a recent Churchillism "I am ready to meet my Maker. Whether my Maker is prepared for the great ordeal of meeting me is another matter."—(*Time*).

●

Next question

During a discussion in my high school English class the question of choosing colleges came up. One bright young girl contributed her bit: "Well" she said, "first you have got to decide whether you want to go to a co-educational school!"—(B. Hodges in *R. Digest*).

●

Law and fact

Said the law professor:—"If you have the facts on your side, hammer them into the jury, and if you have the law on your side, hammer it into the judge."

"But if you have neither facts nor law?" asked the student.

"Then hammer on the table" answered the professor.—(Somerset Maugham, *Writer's Note Book*).

●

The Best Medicine

Chatting with the proprietor of a curio shop in the China-town of the San Francisco a tourist asked if China had good doctors. "We get plenty good doctors in China," the Saffron sage replied. "Hang Chang is best. He save my life." "How was that?" asked the tourist.

"Me Velly sick, call Dr. Hang Kin, he give medicine, make me sicker; call Dr. San Sing give more medicine make me more more sick. I feel I gonna die. Bimeby call Dr. Hang Chang. He gone somewhere else. No come. Save my life!"

●

Care-Taking: Statistically Studied

Mother wanted to spend Saturday afternoon shopping, and father, a statistician reluctantly agreed to give up his golf and spend the afternoon with the three small children, looking after them during the mother's absence.

On the return of the mother, father handed her the following statement:—

Dried tears—9 times.

Tied shoes—13 times.

Toy balloons purchased—3 per child.

Average life of balloon—12 seconds.

Cautioned the children not to cross street—21 times

Children insisted on crossing street to go to balloon shop—21 times.

Number of Saturdays father will do this again—0 times.

●

Soporific Par Excellence

On the maid's day out, a prominent publisher volunteered to relieve his wife and tackle the herculean task of putting their four year old son to bed. The exhausted wife threw herself on the lounge and picked up the evening paper. An hour later the four year-old stole into mummy's room and gently whispered "Daddy's asleep at last"

●

"The thing that impresses me most about America is the way parents obey their children"—*Duke of Windsor*.

* * *

Blessed are those who can give without remembering and take without forgetting.—(*R.D.*, Dec. '52).

* * *

George Bernard Shaw, asked if he was doing well, said 'At my age, young man! You are either well or dead".

* * * *

W. Somerset Maugham, British author said: "Considering how foolishly people act and how pleasantly they prattle, perhaps it would be better for the world if they talked more and did less".

* *

Deft Definitions

Diplomat:—A man who has learned that you can't bend a nail by hitting it squarely on the head.

Bus:—A vehicle that always has empty seats when going in the opposite direction.

Conference—A place where conversation is substituted for the dreariness of labour and the loneliness of thought.

Adolescence:—The period in which children begin to question the answers.

Marriage:—A special form of friendship recognized by the police.—(*I.W.I.*)

Platonic love:—Warming chairs, burning lamps, playing victrolas, sitting around a sorority house (*a Woman's Club in American Universities*) and leaving at 10-30.—(*I.W.I.*)

Keepsake;—Something given to us by some one we have forgotten.

Widower:—A man who yearns to get married again and take a new *leash* on life.—(*I.W.I.*)

Bachelor:—An individual who is cheating some poor woman out of her alimony.—(*I W.I*).

Racehorse:—An instrument designed by God to redistribute wealth among mankind.
—(*I.W.I.*).

Bigamist:—One who commits the same mistake twice.—(*I.W.I*).

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