

286

86

REGD. No. M. 3809

**JOURNAL OF
SOUTH INDIAN MEDICINE**



JANUARY & FEBRUARY, 1939

ISSUED BY THE SOUTH INDIAN MEDICAL UNION, MADRAS

VOLUME V

NUMBERS 10 & 11

LEPROSY

CHAULMOOGRADINE

While Chaulmoogradine tablets may not adequately replace injection treatment of Leprosy, they are nevertheless very useful for reinforcing injection of chaulmoogra preparations, as a maintenance treatment between courses of injections and as a precautionary treatment against relapse following the cessation of injections.

Relapse often occurs through treatment being stopped too soon. Sometimes a complicating disease may suppress the cellular reaction to the B. Leprae, as a result of which the disease may appear to be arrested, but actually is only quiescent.

The administration of Chaulmoogradine tablets at the cessation of injection treatment will serve to maintain resistance to the B. Leprae, and reduce the danger of relapse.

The tablets are composed of salts of the total unsaturated fatty acids present in chaulmoogra oil; they are convenient to take and remarkably free from any deleterious action on the stomach.

COMPOSITION: Gluten coated tablets each containing $\frac{1}{2}$ gram of the sodium salts of Chaulmoogric and Hydnocarpic acids.

ADVANTAGE: The gluten coating prevents gastric disturbances.

DOSE: One tablet three times a day, which may be increased to six tablets per day in some cases.

PACKING: Bottles of 100 tablets.

PHARMASOL CHAULMOOGRA

COMPOSITION: A colloidal preparation of Chaulmoogra oil.

Strengths	Ampoules	Vials.
0.1 per cent.	2 cc and 5 cc	25 cc
0.2 " "	2 cc	25 cc
0.5 " "	2 cc	25 cc
1.0 " "		25 cc
2.5 " "		25 cc

DOSAGE: Begin with $\frac{1}{2}$ to 2 cc of 0.1 per cent every 2nd day. Gradually increase the dose and interval till 5 cc or more of 1.0 per cent or 2.5 per cent is given once a week.

METHODS: Intramuscular or intravenous as convenient.

ADVANTAGES: No venous occlusions.

The Anglo-French Drug Co. (Estn.) Ltd.,
P. O. Box 460 — BOMBAY.

JOURNAL OF SOUTH INDIAN MEDICINE.

(Incorporating the Bulletin of the South Indian Medical Union).

VOL. V

JANUARY & FEBRUARY 1939

Nos. 10 & 11

TREATMENT OF FEVERS

By

P. S. VARADARAJAN, M.D., M.R.C.P. (Lond.).

Hon. Physician and Cardiologist, Govt. General Hospital, Madras.

A correct conception of the term " fever " is often lacking in the minds of the laity and it is such a pity that a considerable section of the profession is indifferent to the true significance of the term in that they place too much stress on the reduction of temperature rather than deal with the cause of the fever. While it is admitted that hyperthermia (temperature over 105°F.) does need immediate reduction, regardless of the causation factor, greater good will accrue if the aetiology of the fever in question is approached.

Though a rise of temperature is one of the most constant features of fever, yet fever can exist with normal or subnormal temperature. For example, a pneumonic attack in an old debilitated person may fail to induce a rise of temperature above the normal and yet the person should be deemed to have fever. Conversely, a naughty child crying his or her lungs out from some trivial cause, may register a temperature of 100°F. a shade below or above without any manifestation of bodily ailment. A rise of temperature of that type is not " fever ".

The thermometer is used to measure " fever " mainly because the rise of temperature is the most common indication of fever.

With this classification, it is easy to understand that the lowering of temperature is not always called for, while the causation factor is still obscure. As already mentioned, hyperthermia (as occurs in heat stroke, sun stroke etc.) needs early reduction as the vital centres in the medulla

oblongata may disintegrate rapidly in spite of the fact that the human heat regulation mechanism is one of the marvels of nature. The excess of heat produced is rapidly dissipated through the agency of the skin, kidney and lungs. But like all things in nature, an abnormal rise naturally dislocates this harmonious working.

Drugs employed to lower the temperature have but limited scope and some of them are even harmful. Simple alkaline salts are preferable to the coal tar derivatives.

Hydrotherapy:—It is such a pity that this mode of treatment though employed on a very large scale in hospitals and such other organised institutions, receives but a very casual notice in the management of fever cases in our homes. Instances are not wanting where it is considered to be the sole cause of some complication or other—this is made possible by the unwanted jabberings of the idle neighbours.

An ice bag to the head is thought to help in the reduction of temperature—but does it! The most that the ice bag can do is to make the patient feel that something is being done to him thus improving his morale. Further the astringent effect of the scalp veins may alleviate the headache.

A piece of lint made wet by cold water or breast milk placed on the forehead would suit the humbler lot of humanity and is in no way less effective than the ice bag. Further, addition of ammonia or vinegar to the cold water would augment the effect. The rich man's Eau-de-cologne is as good as the above.

In wet pack, iced enema and cold sponging, we have some of the most useful measures for controlling hyperpyrexia. In those dangerous forms of hyperthermia such as heat stroke, sun stroke etc., hydrotherapy is the sole saviour of life and in protracted and high fevers, such as the enteric group of fevers, there is no doubt, that hydrotherapy is most useful in controlling the temperature and modifying the course (actually mitigating in a good few cases).

"NEED FOR DENTAL LEGISLATION"

By

C. S. RAMAN. (SEETHARAMAN)

Honorary Assistant, Dental Department, General Hospital.

Absolute ignorance on the part of our Indian public in the matter of dental diseases is being exploited by quacks which has gone to such a great length that it has become imperative that these affairs should be checked to save the innocent public from being victimised by this growing menace. There are two ways of doing this. Firstly, the public must be educated in the line. Secondly, dental legislation must be brought into force forthwith. It is a pity that this civilised vast Indian continent with her 350 million people comprising nearly 1/5 of the world's population has no legislation to stop this quackery! The practice of dentistry in India is at present being conducted by anybody, whether he be a painter, carpenter, watch-maker or optician and causing much damage to our people with impunity. In these days of advancement when the whole world is speeding ahead, India stands still where she was several decades ago or perhaps receding back to put it rightly in this respect. This state of affairs does not prevail in any other country. It is the fundamental duty of the Government to do away with this evil and to protect its people from the ravages of unqualified hands. European, American and many other countries have enacted laws to save their people from this ignominious practice since long. But the condition here in India to put it mildly is really pathetic. There are many who have cried in the wilderness against this evil all to no purpose. In every civilized country there is dental legislation to prevent persons who have not undergone a prescribed course of study in some dental institutions recognised by the State, from practising dentistry. For example, a native of France is not entitled to practise in his country as a dental surgeon unless he has graduated from the institution of the State. But in India things run quite different. Not only quacks practice dentistry here but other people who have not the requisite qualification to practise in their own country finds refuge in India in abundance. On the other hand India and Indians seem to accommodate them quite alright. It is due to the absence of any law or legislation. So it is evident that there is nothing as yet by which this menace could be stopped except by public education and dental legislation and the initiative must be taken by the Public and the General medical practitioners. To

add to this, the influx of Chinese quacks in this profession in the by-lanes of Madras like mush rooms is becoming intolerable. I think there are about 50 Chinese practising in dentistry, who with the other quack dentists practising in the City are victimising the people. It is high time that these things should be put a stop to. It has been recently rumoured that in Madras, the Government is going to open a dental institute attached to the General Hospital. But nothing seems to have come out of it. I hope the medical authorities especially the present Government concern who are striding rapidly with various reforms will take up this question of dental legislation and thus set an example to other provinces by giving a lead in view of the importance of dental surgery forming part and parcel of other branches of medical science.

NOTES ON PUBLIC HEALTH

(Issued by the Principal Information Officer, Government of India.)

POOR QUALITY COD LIVER OIL

BIOCHEMICAL STANDARDIZATION, LABORATORY'S FINDINGS SURVEY
OF PREPARATIONS SOLD IN INDIA.

That the public can only be protected by the enactment of some legislation insisting on a regular and thorough testing of all brands of medicinal Cod Liver Oil imported, stored and distributed in India, is revealed by an examination recently made at the Biochemical Standardization Laboratory, Calcutta, of various samples of the oil used in India.

Ninety-five samples of medicinal Cod Liver Oil, obtained directly from the open market in Calcutta as well as from the various Provinces of British India through the courtesy of the Heads of Medical Departments, were subjected to analyses, and the findings show that quite a fair proportion of the samples are definitely of poor quality, some of them not even containing certain active principles which may be responsible for the medicinal properties of the oil.

Out of 95 samples analysed, 58 (61.05%) specimens were found not to conform to the standards laid down in B. P. 1932 and in the Addendum to the B. P. 1936. Forty nine (51.6%) samples gave a free fatty acid value in excess of the maximum limit, indicating that these oils were either old, rancid or prepared from partially decomposed livers. Twenty-three (24.2%) samples were deficient in vitamin A potency. Three samples (3.2%) were absolutely devoid of any vitamin A content. Sixteen samples (16.8%) failed to satisfy the requirements of the "Chill Test", indicating the presence of stearin.

COUNTRIES OF ORIGIN.

Twenty-nine samples amongst this lot were of foreign manufacture as evident from the labels on the original bottles or from the statements of the senders. Sixty-two samples had labels of Indian manufacturers and distributors. The source of 4 samples could not be traced. As Cod Liver Oil is not produced in India, it is presumed that these were imported from outside and bottled in this country.

The analytical methods employed were essentially those described in the B. P. 1932 and in the Addendum to the B. P. 1936. The vitamin A content was estimated both on the whole Oil as well as on the unsaponifiable matter, by the Antimony Trichloride Test, employing a Lovibond Tintometer with artificial light attachment. The readings obtained were converted into the Carr-Price 'Blue Values' for purposes of comparison with a standard Cod Liver Oil whose vitamin A potency was determined biologically in terms of International units at the college of Pharmaceutical Society of Great Britain. The vitamin D potency has not yet been determined.

The importance of Cod Liver Oil and its preparations in medical practice is too well known to need special mention. Cod Liver Oil is not only a rich source of vitamins, A and D but contains, in addition, a large proportion of unsaturated fatty acids, all of which are of definite therapeutic value. It is one of the few medicines universally used in diseases where a deficiency of accessory food factors is suspected. It is also used for its food value in wasting diseases and in increasing the general resistance of the body against infective conditions.

UNRELIABLE ANTI-TOXIC SERA

CONTROL NEEDED.

That reliance on anti-toxic sera sold in India in open Market might well entail the serious risk to the life of a patient, is revealed by the fact that, as in the case of the many pharmaceutical preparations recently tested, anti-toxic sera, too, purchased in the open market, have been found to be much below the indicated strength, while on occasions they are even wanting in anti-toxic action.

This shows once again how very necessary the control of drugs, especially of those whose potency has to be relied on for treatment of emergent conditions, is in case of therapeutic and prophylactic sera, which are the only powerful weapons available for the treatment of diphtheria, tetanus and other serious bacterial infections.

CONTROL IN THE WEST

In England and many other western countries, sale of no anti-toxic sera either manufactured locally or imported, is allowed unless each batch is submitted for testing by a control laboratory established for that purpose. The tests carried out include not only the estimation of the number of

"International Units" which each serum contains, but also the sterility and innocuousness of the product.

Certain specified Institutes, such as the State Serum Institute Copenhagen, and the National Institute for Medical Research, Hampstead, maintain standard serum preparations which are identical and issue these at six-monthly intervals to testing and manufacturers' laboratories. Their use for comparison of potency of sera enables the unitage of products to be specified in an exact manner.

INTERNATIONAL STANDARDS.

The potency of anti-toxic sera can be measured by biological methods with a high degree of accuracy.

International standard for the different sera in use have been established by the Biological Standardization Committee of the League of Nations, and these enable the exact strength of any serum to be determined. Methods have been worked out by which tests can be made against the "International Standards" and the medical practitioner using a serum which has passed an official test and is declared to contain a specified number of anti-toxin units, can rely on the potency of the serum and also administer a correct dose.

WHY MOTHERS DIE?

MATERNAL MORTALITY ENQUIRY IN CALCUTTA DEATHS THAT NEED NOT OCCUR.

That in 96.3 per cent of maternal deaths investigated there was an avoidable factor present is one of the findings which has been put forward, as the result of a statistical inquiry into the causes of maternal mortality lately carried out in Calcutta for a period of one year by the All-India Institute of Hygiene and Public Health with a grant from the Indian Research Fund Association.

Cases of maternal deaths were collected from all female deaths between 10 and 50 years registered in the area under the control of the Health Officer, Corporation of Calcutta. Duplicate registration cards were supplied in the case of all female deaths between these ages and on these duplicates information was provided regarding the existence of pregnancy or the puerperal state. Considerable care was taken to ensure that duplicate registration cards were received in all cases, but questions relating to pregnancy were not answered in every case. Complete accuracy is not, therefore, claimed for the series of maternal deaths.

CAUSES OF DEATH.

Each maternal death was followed up by home visits, interviews with the doctor, midwife or dai who attended at the time of delivery, or visits to the institutions in which treatment had been given. The information collected was in most cases sufficient to make it possible to reach a conclusion regarding the probable cause of death and the contributory factors, and also regarding the preventibility of the death. But in some cases, these conclusions were largely conjectures based on the statement of relatives, for in 11 per cent of the maternal deaths investigated no trained person had been in attendance.

Eight hundred and eighty seven maternal deaths were investigated, of which 701 were found to be due directly to child-bearing and the rest, 186, due to diseases associated with child-bearing.

The following is a list of causes of deaths due directly to child-bearing:—

		per cent.
1. Septic abortion	33	4.71
2. Abortion (non-septic)	4	0.57
3. Ectopic gestation	6	0.86
4. Other accidents of pregnancy	7	1.00
5. Puerperal haemorrhage	74	10.56
6. Puerperal sepsis	224	31.95
7. Puerperal alb. and convulsions	126	17.97
8. Other toxæmias of pregnancy	15	2.14
9. Embolism and sudden death	11	1.57
10. Other accidents of child birth	26	3.71
11. Other or unspecified conditions of the puerperal state	10	1.43
12. Anaemia	165	23.53

Puerperal sepsis, anaemia and eclampsia stand out as the most important causes of death due directly to child-bearing in Calcutta, while pulmonary tuberculosis was responsible for 40 per cent of deaths from diseases associated with child-bearing.

ANAEMIA.

The importance of anaemia was greater than appears from the table, for in addition to those deaths from anaemia per se, there were many others, specially in the sepsis group, in which anaemia was an important contributing factor. Very little information was forthcoming regarding the etiological factors and the types of anaemia responsible for this mortality. A further enquiry was accordingly undertaken with the object of collecting information regarding factors which cause anaemia, e.g., diets, economic conditions, purdah, personal history and associated diseases, in a series of moderately and severely anaemic women attending the welfare centres, maternity homes and antenatal clinics in Calcutta. It is hoped to discover, by means of blood examination at intervals in pregnancy and after delivery, the types of anaemia which occur and the effect of pregnancy and lactation on the course of the anaemia.

It has been found necessary to collect a control series of specimens of blood from healthy Indian women in order that the normal range of absolute values may be available for comparison. The findings so far collected suggest that the blood of healthy Indian women conforms to accepted European haematological standards.

ETIOLOGICAL FACTORS.

Each case of anaemia and pregnancy needs to be followed up for several months and large number of cases must be collected before any conclusion can be drawn regarding the influence of etiological factors.

In 161 antenatal and 12 puerperal women examined there were 77 cases of macrocytic anaemia, 41 cases of microcytic anaemia and 55 cases of normocytic anaemia. Of the 77 cases of macrocytic anaemia only 23 were hyperchromic, the remaining being normo- and hypo-chromic according to European standards.

There were 40 cases of severe anaemia and of these 18 were macrocytic, 12 microcytic hypochromic and 10 normocytic normo- or hypo-chromic. The 18 macrocytic cases included only 7 with hyperchromia, the remaining being normo- or hypo-chromic according to European standards. In the series of 18 severe macrocytic anaemias there was a history of malaria in 6 cases although no parasites were found in any case. The spleen was enlarged in 10 cases and an indirect positive Van Den Bergh reaction was obtained in 12 cases.

DO RICHES MEAN MORE FAT?**FINDINGS IN NUTRITION SURVEY.****PUNJAB ARTISANS EAT AS WELL AS BENGAL RICH.**

The richer you are the more fat you eat. Investigations under a scheme approved by the Nutrition Advisory Committee of the Indian Research Fund Association have shown that a special feature of the Indian diet is a marked increase in the consumption of fat with the rise in economic scale.

Four types of communities in different areas were selected for diet and clinical surveys, namely, industrial workers in Assam (the coolie class), the middle class agriculturists in Bengal, the well-to-do Calcutta households and a mixed middle class community in Ferozepore, Punjab.

The diet of the Assam coolies was found to be poor in total calories, in total proteins, in fat, in calcium, in Vitamin A and in carotene, also to a lesser degree in Vitamin C and in iron. Most of the families took no milk. Conditions were somewhat better among the middle class agricultural group though the fat and the animal protein consumption was low. The diet of well-to-do people in Calcutta was almost as good as that recommended in the European standards.

CHILDREN EXAMINED.

Together with the diet surveys, the children were examined for height, weight and deficiency diseases. The heights and weights of the Assam children were much below those of the well-to-do group in Calcutta and those of the rural children were midway.

While the absolute gain in weight per year was somewhat greater in the Calcutta children, growth expressed as a percentage increase in body weight per year was actually greater in the labour class in Assam. In spite of the poor diet the growth impulse appeared to be as good amongst this class as among the well-to-do. They had also probably a greater proportion of muscle tissue per unit of body weight than the better-off group.

These surveys show that Assam coolies live on a diet which is inadequate qualitatively and probably also quantitatively. To a lesser extent it is also true of the agricultural community in Barasat, Bengal, yet the inherent vitality as judged by the percentage rate of growth and grip per lb. body weight, appeared to be good.

Definite signs of vitamin A deficiency in the diet were seen only in Assam, the rural area in Bengal and Calcutta being exempt from them. Malocclusion of teeth of which the cause is obscure, was most common among the Assam children (23.2 per cent) and least in Calcutta (8.0 per cent). On the other hand the incidence of enlarged tonsils was greater among the well-to-do (42.3 per cent) and least among the coolies (12.8 per cent). Conditions of malnutrition were present amongst 38.7 per cent of boys in Assam and amongst 33.8 per cent in rural Bengal, and 16.3 per cent in Calcutta. These figures, however, fell with the rise in economic status.

The average number of children alive per family was 1.8 in Assam, 3.5 in rural Bengal, and 4.2 in Calcutta. In none of the groups were children sent away elsewhere; indeed in Assam they obtained employment in the industry from the age of seven.

BETTER DIET IN PUNJAB.

The families surveyed in Ferozepore, Punjab, included Hindus, Muslims, Sikhs of the artisan class, and a small group of sweepers. The diet of this mixed group was almost as good as that of the well-to-do people in Calcutta in calories, proteins and fat. Even the sweeper class were on a much better diet than the Assam coolies. Their main cereal was wheat and the quantity of milk available for consumption was about 8 ozs. per head per day. In spite, however, of their better diet, particularly as regards calcium, the incidence of caries was over 30 per cent. The number of those with enlarged tonsils was also high. The average heights and weights of the children were above those of the Assam and rural Bengal groups.

An increase in the cultivation of green vegetables and consumption of dals among the poorer classes, it is said, would be a cheap and simple expedient at least to prevent the appearance of xerophthalmia.

NUTRITION OF INDIAN POPULATION.**MILK CONSUMPTION INVESTIGATION.****LORD LINLITHGOW'S INTEREST, I.C.A.R. BULLETIN.**

That the lowest production and consumption of milk and milk products is shown by Bihar and the Central Provinces and the highest by the Punjab, and that only a fifth of the total population of India obtains the minimum physiological requirement of milk and its products, are among the facts revealed in investigations financed by the Imperial Council of Agricultural

Research to obtain precise information on the production and consumption of milk by Indian cultivators, so that measures may be adopted for better nutrition of the population through a proper breeding policy.

A close and direct enquiry on scientific lines was conducted in seven cattle breeding tracts: Hariana (Delhi-Gurgaon-Rohtak), Kosi (U.P.) Kankrej (Bombay), Ongole (Madras), Malvi (C.P.), Montgomery (Punjab) and Deltaic area (Bihar). The results of the enquiry are contained in the 126 pages of the Council's "Miscellaneous Bulletin, No. 22".

EFFECTIVE OPTIMUM.

The enquiry was conducted on the suggestion of H.E. Lord Linlithgow whose dictum is that "any race of men must be below par in direct ratio as the consumption of milk by the children) and to a great extent (particularly in a country of deficiency diets) by the adults falls below the effective optimum". He points out that the breeding policy which is recommended to cultivators should aim at producing a cow which would yield enough milk to rear a good calf and to provide a sufficient margin for human consumption. The enquiry embraced the consumption of not only milk but also of other dairy products and the tracts selected were those where working bullocks were also produced.

CONSUMPTION DIFFERENCES.

The Montgomery Tract records the highest consumption of milk and milk products, namely 15.53 ozs. per head per day. Hariana and Kankrej follow with 12.39 and 12.07 ozs. respectively. Kosi consumes 9.71 ozs. and Ongole 8.73 ozs. Central Provinces and Bihar are at the bottom (as they are in production) with 6.73 and 5.51 ozs.

Considering the seven tracts together 16 per cent of the families in India do not receive any milk or milk product, 36 per cent consume the equivalent of between 0 and 8 ozs. milk per head per day, 26 per cent between 8 and 16 ozs. and the remainder or 22 per cent receive over 16 ozs. Assuming that the minimum physiological requirements of the people large proportion of whom is vegetarian, is between 15 and 35 ozs per head per day the proportion of families which obtain this quantity is only a fifth of the total. This figure represents only the important breeding tracts and not the whole of India. Since breeding tracts should be expected to produce and consume more the all-India consumption is likely to be less.

NO CONSUMPTION.

Kosi shows the largest proportion which does not consume any milk or milk products, the percentage of non-consumers being 32.2 per cent or

about a third of the total. The lowest proportion of non-consumers is in the Kankrej tract where there are only 5.9 per cent who do not receive any milk or milk products. The other areas are in the following order: Hariana, 6.9 per cent; Ongole, 9.9 per cent; Montgomery, 13.1 per cent; C.P., 21.7 per cent; and Bihar, 23.2 per cent. Ongole, Bihar and C.P. are below and Kankrej, Kosi, Hariana and Montgomery are above the all-India average proportion of 22 per cent which receive the minimum physiological requirements of milk and milk products. The model consumptions in the different areas also vary.

The above figures of total consumption of milk and milk products do not include Skim-milk (*lassi*), figures for which also are given in the Bulletin.

MILK YIELD.

The highest average for cows is in Montgomery with 4.72 lbs. per day in the 7th month of lactation, the Ongole cows follow with 4.64 in the 6th month and then comes Hariana with 4.46 in the 5th month. The differences between these are not, however, large and it may be safely stated that these three are approximately at the same levels of production, yielding 4 to 5 lbs. per day on an average. Cows in Central Provinces are the poorest yielders, their yield being only 1.67 lb or a little over a third of the Montgomery cows. Kosi and Bihar are between these two extremes, the former (3.89 lbs.) approaching the Hariana and the latter (2.74 lbs.) approaching Central Provinces.

In the case of buffaloes the order of merit is different. The Hariana tops the list with 11.21 lbs. per day. Montgomery and Kankrej which follow with 8.24 lbs. and 7.97 lbs. respectively are only about 75 per cent as good as the Hariana. The next respectable yields are Kosi 7.05 and Ongole 6.53 lbs. Bihar and Central Provinces are again at the bottom with only 5.4 lbs. each per day. Generally speaking, these two areas are the worst in point of milch animals.

The large majority of cows in India, or 63.3 per cent of the total, yield less than 4 lbs. of milk per day 30.8 per cent yield between 4 and 8 lbs. and only about 6 per cent yield more than 8 lbs. Amongst buffaloes the low yielders form only 19 per cent while 66 per cent yield between 4 and 12 lbs. per day and 15 per cent over 12 lbs. In the individual areas the modes and means generally coincide vide frequency distributions.

Interesting data on the consumption of milk and different milk products separately by the two sexes and at different ages, the relation between production and consumption of milk, the rate of decline in milk yield, proportion of cows and buffaloes in milk, and the size of holdings, number of work animals, milch animals, and dependants per holding, are included in the Bulletin.

The Council's Advisory Board has accepted and the Governing Body has approved of the Standing Breeding Committee's recommendations designed to secure better supply of fodder, better organised marketing for live-stock and milk and milk-products laying down a breeding policy so as to increase milking capacity of females of draught breeds and urging efforts for the production of milk cheaply in India.

PUBLIC HEALTH—THE FOUNDATION OF NATION BUILDING.

(Broadcast talk by Sir Colonel A. H. Russell, C. B. E., K. H. S., I.M.S.,
Public Health Commissioner with the Government of India.)

Many of you no doubt are acquainted with the Biblical story of the wise man who built his house upon a rock in contradistinction to the foolish one who built upon sand with disastrous results. Similarly in nation building, we must be sure of our foundations and it is my purpose tonight to try to demonstrate to my listeners that the one sure foundation on which to build a happy and prosperous nation is that of health,—not only health of the individual but health of the community. We are all so apt to leave community health, or public health as it is usually called, to the other fellow, forgetting that it is the cumulative effort which counts so much. So it is that I have no hesitation in claiming that public health, and all that that phrase implies, is *the* sure foundation on which to erect the structure of national health. Without that foundation, no nation can hope to be strong enough to resist successfully the strain of economic and social storms.

The purpose of all nation building activities is to make the life of every citizen fuller, richer and happier. This implies that the individual citizen should be provided with suitable opportunities for desirable self-expression, in respect of his physical, intellectual and emotional equipment, because only by that means can he hope to enlarge his experience and his capacity for enjoyment of life. Modern public health development stands for the creation and maintenance of all those conditions which will enable each individual to attain these objects. Sickness, pain and suffering, poverty, malnutrition, maladjustments in his home or in his work or in his social

environment, these are largely responsible for depriving the average citizen of his inherent right to enjoy life. A well-organized public health campaign must take cognizance of all those deterrents to happiness and I for one believe that in the advance of public health we have the solution.

For many centuries past, human society has recognised the necessity for treatment and care of the sick, but the conception of prevention of disease and sickness by means of an active programme of ameliorative measures intended to render it possible for the people either to maintain health, or, at least, to leave more healthy lives, is one of much more recent origin. In fact, it is not yet 100 years since in England the importance of preventive medicine came to be recognised and was made the foundation of the many-sided social and health services now in existence in that country.

But, you may ask, how does the public health worker seek to bring greater happiness to the individual and to the community? It is by no means easy to summarise in a brief talk the many different directions in which health work should be planned, because it has become obvious,—at least to those who have real vision,—that preventive medicine includes in its range of activity "the whole nature of man, as shaped by his home, his surroundings, his work, his recreation, his struggles and his aspirations". This, as you will appreciate, is a formidable task, but for my purpose tonight, it might perhaps be divided into four parts:—

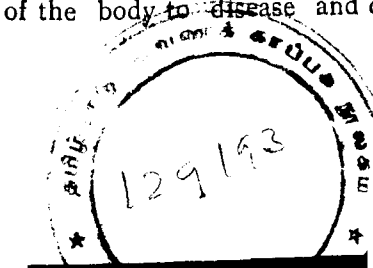
(1) State-aided health services capable of providing care for every individual, from the pregnant woman and unborn child to the adult and the aged. These services would also include separate branches for special health problems such as those associated with tuberculosis and leprosy.

(2) Improvement of environment by the provision of sanitary houses, fresh air, pure water and nourishing food, both for humans and cattle.

(3) Education of the people,—especially the wives and mothers,—in the principles of health so that the active co-operation of every individual may be obtained. The search for health demands the abandonment of many undesirable habits and the practice of others which science has shown to be necessary to man's well-being, but here perhaps we are faced with our greatest problem because "all our life, so far as it has a definite form, is but a mass of habits", good, bad and indifferent and the inherent inertia of man always acts as a serious handicap to change.

(4) Promotion of physical and mental welfare with the object not only of increasing the resistance of the body to disease and of promoting

32
Long 21/12/1933
129/193



happiness in bodily activities, but also of assisting the individual to secure harmonious development of his intellectual and emotional faculties.

Such a comprehensive programme must of necessity lay a heavy burden of expenditure on the State and, even in the wealthiest countries, it has been found impracticable to carry it out other than by successive stages, and, then only, as and when the necessary public funds become available. It is not sufficiently realised, however, that all social and economic progress is seriously hampered by sickness and a low level of physical fitness, and this is particularly true of India. Improvement of public health is essential if, for instance, the working capacity of the agricultural or industrial labourer is to be raised; and those acquainted with existing conditions in this country are only too well aware of the handicap to efficiency which is caused by bad health and poor physique. The fact that the deaths from malaria in British India alone total 1,250,000 yearly indicates the amount of suffering, incapacity for work and loss of income caused by this one disease especially among the rural agricultural populations, on whose productive capacity the prosperity of this country so very largely depends. Another striking illustration may be found in the large numbers of deaths among young mothers and their infants, and these, of course, represent only a small fraction of the amount of ill-health and suffering which is borne by the women of India. Whilst no estimate can be made of the economic loss these and other mortality figures represent—although it must extend to many crores of rupees each year—they certainly point to the necessity for progressive health work as the essential foundation for sound and secure nation building.

Another aspect of the economic question is that State action directed towards improvement of health has undoubtedly beneficial repercussions in many other directions. Take, for instance, the question of nutrition. During more recent years, we have been able to obtain a more accurate picture of the amount of malnutrition from which the people of this country suffer, and it has also been shown that an adequate state of nutrition is of the greatest importance, not only in the prevention of disease but also in increasing man's resistance to infection and his sense of well-being. Solution of the nutritional problems in India, however, depends on improved agricultural and animal husbandry practices, the development of trade and industry, the encouragement of co-operative enterprise, banking and other activities. There is no shadow of doubt that every step towards better national health will lead to the development of all these activities which are so fundamental in any nation building campaign.

Improvement of public health demands that every individual should develop a sense of responsibility in respect of his neighbour's welfare in addition to his own. It is not enough for the house-holder to keep his own restricted environment tidy and clean, if by doing so he creates afresh conditions favourable for the development of ill health in his neighbour or in the community. Modern science has shown that, in matters relating to health man is his own worst enemy and much of the disease which now works havoc over large areas could be avoided if the community sense were better developed and if the individual were brought to realise the danger of his own actions to community health.

The remedy for these errors,—which are usually,—but not always,—the result of sheer ignorance,—lies in health education, that is, in teaching the people how to avoid actions which assist in the spread of disease. Such instruction is essential for real citizenship, because it is only when the individual comes to realise that his interests and those of his neighbours are identical in respect of health matters that he develops the wider outlook which is so essential if his actions in other spheres of life are to be to the benefit of the State and to his fellow-citizens.

The history of the public health movement in England and elsewhere clearly indicates that the initial stimulus towards necessary reform has repeatedly come from private individuals or from voluntary organisations. Whether it be in respect of factory legislation for the improvement of the conditions of factory workers, of measures for saving the lives of mothers and infants, of prevention of tuberculosis or of other efforts for alleviation of human suffering voluntary effort has led the way to State action in practically every civilised country. Even when Governments have assumed responsibility, there always remains room, however, for the resources in time, money and labour of humanitarian individuals and voluntary organisations in supplementing official activities. It has been remarked that "to save and prolong man's life, there is nothing so effective in the long run as collective humanism." There is no doubt that "Collective humanism" is a living force in this country, as the recent result of Her Excellency's appeal on behalf of the tuberculous sufferer has indicated, but the urge towards high human endeavour requires a much wider development if it is to meet adequately the heavy and urgent demands which must be obvious to all thinking men and women in this country. In so far as the public health movement can help to foster man's fellow feeling for man, its contribution towards nation building will be of an enduring and beneficent nature, resulting in a vastly desirable increase of human happiness and well-being.

EDITORIAL NOTICE.

- Manuscripts for publication, books for review, and correspondence relating to the editorial management should be sent to the EDITOR, JOURNAL OF SOUTH INDIAN MEDICINE, FLITCHAM, MARSHALL'S ROAD, EGMORE, MADRAS. Communications regarding subscription, reprint, etc., should be addressed to the Secretary, South Indian Medical Union, 14, Ritherdon Road, Vepery, Madras.
- Articles are accepted for publication on condition that they are contributed *solely* to the Journal of South Indian Medicine. Manuscripts *must be typewritten* preferably double spaced, and the *original* copy should be submitted. Zinc etchings and halftones of illustrations will be supplied by the Journal when the original illustrations warrant.
- Contributions to the regular issues of the JOURNAL should ordinarily be limited to ten printed pages, not counting the spaces occupied by illustrations, and it is understood that they have not been published elsewhere.
- MATTER APPEARING IN THE JOURNAL OF SOUTH INDIAN MEDICINE IS COVERED BY COPYRIGHT; but, as a rule, no objection will be made to its reproduction in reputable journals, if proper credit is given. However, the reproduction for commercial purposes of articles appearing in the JOURNAL OF SOUTH INDIAN MEDICINE will not be permitted.
- Authors of articles and case notes will receive twenty-five re-prints free; additional re-prints may be obtained at cost.
- REVIEWS. THE JOURNAL will make an especial feature of the reviews of monographs and books bearing upon the field of medicine. Authors and publishers wishing to submit such material should send it to the EDITOR. While obviously impossible to make extended reviews of all material, an acknowledgment of all books and monographs sent will be made in the department of reviews.
- Cheques, etc., should be made payable to the SECRETARY, SOUTH INDIAN MEDICAL UNION, 14, RITHERDON ROAD, VEPERY, MADRAS.

JOURNAL OF SOUTH INDIAN MEDICINE.

JANUARY AND FEBRUARY, 1939.

ECONOMICS OF RURAL MEDICINE.

"Back to the villages" is the slogan of the day. There is cry all around of unemployment. Young men who have equipped themselves to be teachers are without work. Great statesmen tell them that illiteracy is appalling in the country. And they are exhorted to settle down in the villages to establish schools under banyan trees and to spread enlightenment leading up to Nirvana. The overcrowding and unemployment in the legal profession is the talk of the bazaar and the subject of gossip round the village well. They are also advised. But the advice is conflicting. One school advises these lawyers to go to villages to help the people to avoid litigation. Another school advises them to keep to the towns so as to circumscribe mischief and litigation. What about the medical profession in Madras? The practitioners are agreed that there is overcrowding and unemployment in the profession. But everybody else avers that there is a dearth of medical men in this country. Statistics are reeled off. Figures in other countries are quoted and the conclusion is reached that there should be so many medical men per so many thousands of the population. And since we are far from correct ratio, there are not enough medical men and therefore there could be no unemployment. In spite of all this magnificent logic unemployment among medical men is real. And when young and middle aged medical men reach out in anguish for work and remuneration, the cynic and successful leach smugly advises them to look around and settle down in villages. The villages are said to be crying for medical relief. And if only medical men could have the imagination and pluck, what an *El Dorado* they will find in the villages!

What are the realities? The victims of this lying propaganda discover all too soon how bitterly they have been tricked. What the villager urgently needs is not medical relief, but water to drink and some food to mollify his starvation. If these primary needs are satisfied, then he may welcome the luxury of a laxative pill or a fever mixture. But are we anywhere near satisfying his primitive needs? The prospect is not bright.

This advice to go to the villages is given from so many platforms and by eminent men and others who are fortunately placed in life. It is further fortified by appeals to the scriptures and by extracts from the Gita. And instances are given of foreign missionaries working, not for a comfortable living, but from overwhelming feelings of self-sacrifice and sympathy. But have rural practitioners no needs? Is there no standard of living for them and are they not entitled even to a fraction of the amenities of civilised life? The January number of the *Medical Times* which is the journal of the American Medical Profession has an interesting short article on the economics of Rural Practitioners in America. Those of our readers who are interested in the welfare of rural medical practitioners would benefit by a perusal of that article. The writer of the article Dr. Warren discusses the needs of the practitioners, their sources of income, their difficulties and the dangers that threaten the rural practitioners. Conditions which are said to obtain in the rural areas of America, might cause envy even among our city practitioners. For instance, the usual fee for an office call in rural areas of America is \$1.00 and the fee for a house call *i.e.*, a visit to the patient's house is \$2.00. In Madras the corresponding fees would be Re. 1. and Rs. 2. Even in the city of Madras many practitioners are not paid such fees. In addition, the rural practitioner in America has a certain amount of insurance work, school medical inspection and other institutional work which yield about 40 per cent of his income. Much of this type of work simply does not exist in the villages of this country. In this connection, the new policy of making subsidised rural practitioners responsible for rural public health and giving them an additional remuneration is a praiseworthy one. But only one practitioner in the village can be health officer, so that the rest of the practitioners settled in an area cannot count on such additional sources of revenue.

Further "the economics of rural medicine is affected by trends. The fat years and the lean years, that the Bible tells us of reflect upon the *rural practitioner* as well as the rest of the country." There is no need to labour this question further. It is the duty of the State to make it worthwhile for the practitioner to settle down in villages. This does not necessarily mean a State subsidy or other expenditure on the part of the State. But it certainly implies that the State should think out ways and means by which this could be achieved.

ASSOCIATION NOTES.

The South Indian Medical Union, Madras.

Minutes of the Meeting of the Council of the Union held on Monday the 30th January 1939 at 6-15 p. m. at 32, Broadway, Madras.

Members present :—

Dr. T. Satakopan.
 „ E. V. Srinivasan.
 „ V. D. Nimbkar.
 „ C. R. Krishnaswami
 „ C. L. Charles.
 „ G. Zachariah.
 „ S. Rajagopalan.
 „ M. Krishnamoorthy.

Dr. E. V. Srinivasan was in the chair.

1. The minutes of the last meeting were read and confirmed.
2. The Financial Statements for the months of November and December 1938 were presented and approved
3. Dr. S. S. Ramaswami, L M & S, Madras was enrolled as member of the Union.
4. It was resolved that the Journal of South Indian Medicine should be continued in its present form for another 6 months.

With a vote of thanks to the chair the meeting terminated.

The Tinnevely District Medical Association, Palamcottah.

(Tinnevely Branch of the Indian Medical Association)

The monthly meeting of the Tinnevely District Medical Association was held at the Government Hospital, Nanguneri on Saturday, the 28th of January 1939. Members numbering 30 were present at the meeting

After Tea Party and music by Mr. G. B. Ramakrishnier, the meeting began under the Presidentship of Lieut.-Col. T. S. Shastry, I M S., at 5 p m.

The Secretary & Treasurer read out the minutes of the Annual Re. Union which was celebrated on the 3rd of December 1938, which were passed.

It was decided to invite Madura, Ramnad and Travancore Medical Associations to hold a joint meeting with us at the next monthly meeting at Palamcottah.

A resolution was unanimously passed congratulating the Honourable Dr. T. S. S. Rajan, L.R.C.P., M.R.C.S., etc., Public Health Minister of the Government of Madras, on the passing of the Public Health Bill by the Madras Legislature.

Resolved that the Indian Medical Association should be officially recognised by the Government of Madras and that orders may be issued that the Association must be consulted on all important matters relating to Public Health and medical profession as well.

Dr. M. Vaidyanathan L.M.P., of Nanguneri showed a child of 3 years who was suffering from a very complicated state of congenital syphilis.

Dr. T. K. Nilakanta Iyer, L.M.P., Selection Grade Sub-Assistant Surgeon read out the following cases, which were successfully treated at the Government Headquarters Hospital, Palamcottah :—

1. A case of Acute Abdomen.
2. A case of fracture of Pelvis.
3. A case of Myelitis.

The skiagrams relating to the above were demonstrated. Each case was fully discussed by the members.

Thereafter Lieut.-Col. T. S. Shastry, I.M.S., summed up the salient and important features of all the cases and their differential diagnosis in detail. He offered his cordial thanks to Dr. M. Vaidyanathan, L.M.P., for the arrangements.

Thereafter an excellent Dinner Party brought the happy gathering to a close at 10 P.M.

ASSOCIATION NOTES

xlv

HEALTH EXHIBITION.

Under the auspices of the Tinnevely District Medical Association in connection with the monthly meeting, a Health Exhibition was arranged at the Board High School, Nanguneri on the 28th of January 1939 at 10 A.M.

Lieut.-Col. T. S. Shastry, I M S., welcomed the guests and declared the Exhibition open.

Sri. G. B. Ramakrishna Iyer, Teacher, Board High school, Nanguneri, reproduced in Tamil what Colonel Shastry spoke, viz, Sanitation, Small-pox, Cleanliness, Nutritious food, etc, for the benefit of about 200 boys and girls.

The Exhibition was kept open till 1 P.M. The Exhibits consisted of Posters on Tuberculosis, Small-pox, Fly Danger, Cholera etc. The Exhibits of the school were also exhibited.

The Kistna District Subsidised Rural Medical Practitioners' Association

(Affiliated to the Provincial P. R. M. P. A.)

An ordinary meeting of the above Association was held at Masulipatam in the District Medical Officer's Office premises on Saturday 28th January 1939 at 3 P.M., when Dr. A. V. Subbarao, Rural Medical Practitioner, Kondapalli presided. N. Rama Rao, Secretary read the minutes of the previous meeting and they were accepted by the members. He then exhorted the members to remit subscriptions for the Provincial Association and join as members and said that no one should be left out as a non-member. Dr. S. S. Rama Rao stressing upon the above, said that he, as a representative on the Provincial Committee of the Provincial Subsidised Rural Medical Practitioners' Association attended the Committee Meeting held at Madras on 31st December 1938 and narrated all the proceedings and discussions that took place at that meeting; that it is deplorable to learn that the Government's proposal to introduce Honorary Scheme for Rural Dispensaries is probably based upon the false impression that the Rural Practitioners are quite well-off earning a decent private practice as expressed by the Parliamentary Secretary who inaugurated the Provincial Committee Meeting. The meeting then passed the following resolutions :—

1. This Association resolves to request the Government to condemn the action of Village Panchayats who sanction contributions to private medical practitioners practising in the same or near villages where Subsidised

Rural Dispensaries exist and respectfully invites their attention to the case of Thota Vallur Panchayat Board as an instance.

2. This Association while reminding the Provincial Association of its resolution No. VII passed on 22nd September 1935 requests the Provincial Secretary to place the same before the next General Body Meeting for consideration since the L.I.Ms are almost as many as L.M.Ps in the Andhra Districts.

Resolution No. VII referred to above goes thus: "This Association resolves to entertain as members all the Subsidized Medical Practitioners in this District both L.M.Ps and L.I.Ms whether subsidised by the Government or the Board".

The meeting then terminated at 4 P.M. after which the Kistna District Medical Association held its meeting.

NOTICES.

Paluri Subba Rao informs us that The Andhra Ayurvedic Provincial Conference held at Gudivada recently has decided to celebrate the 60th Birthday of Dr. A. Lakshmipathi on the 3rd of March 1939. Arrangements are being made in different towns in Andhra Desa to celebrate the event.

Messrs. Martin and Harris Ltd. have sent us a notice stating that a Milk of Magnesia manufacturer has arranged for the distribution of 10 lakhs of "Booklets for Mothers" attractively printed in two colours and in eight languages covering every point of mother and child health from conception to the time the child becomes grown.

In this booklet are given short notes on diet during pregnancy, hygiene during pregnancy, care of the mother and the child, and notes on proper infant feeding. It contains also information regarding training for correct bowel habits and notes on contagious diseases

