FROM THE EDITORS

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समुद्रहव गम्भीरं नंव शक्य चिकित्सितम् वनतुं निरवशेलेण श्लोकानामपुतंरिय ।। "The science of medicine is fathomless like the sea and cannot be exhaustively narrated even in millions of couplets"

(Sushrut-Samhita)

1. Medical Research.

Medicine is a very old art and a growing science. Like any other expanding science it requires constant search and research for further advancement. Unlike other scientific researches, medical research becomes in many conditions a local subject with its varying environmental socio-economical conditions in addition to what has been achieved in other areas. Consequently the local research is all important for ourselves in our country.

The sad point is that so far no such provision is available in this country. Besides, this section of work is mostly associated with teaching units and special institutions erected for it. One hopes that the future Medical School will be able to provide one such centre for the country.

The medical science has got separate sections to deal with. There is the theoretical side to learn. There is the laboratory side to be acquainted with. Thirdly is the clinical side where diseases are studied in different stages of progress. It is in the third stage that the theoretical

and the laboratory side are brought together. Each of these sections require special study and special personnel. Out of the three, two sections are wholly occupied with the academic work. It is only the third man-the clinician-who comes into contact with the general public, and the public carry the impression that he is the most important individual looking after their health. In fact it is not so. It is the research worker who is after the health problems of the present and the future.

It is these research workers who should be given sufficient incentives for their work, with adequate remuneration to compensate for their labour, as all of them are non-practising.

Unfortunately so far, there are practically no research workers in our country. But if such state of affairs is allowed to continue, there is a great chance of deterioration in the standard of the medical profession. The provison of a high class research centre will ensure us professional men of high calibre for the future. They will be the source of professional staff for the Medical School.

The question of finance for a research centre will be a head-ache to the Ministry of such a small country like ours. It will require donations from the public, aids from the friendly countries and equipment from abroad. There should also be some arrangement for training of high class really competitive students to take up research work. This outline for a research centre of the country is just a suggestion. The details will have to be worked out later when such a scheme is being taken up.

2. Infectious Disease

In our country the living conditions of even so called middle class families in towns are insanitary, and infectious diseases (communicable or contagious diseases, are very important because of the great threat they pose to our urban and rural communities. The country is developing fast but due to the low standard of living, required nutrition is not available to one and all, and the unhygienic conditions of living of people in the country, infectious diseases take great toll of valuable human lives.

With the advance in scientific methods and techniques of control and eradication of some of the dangerous infectious diseases, the threat of diseases like Smallpox, Trachoma, Tuberculosis, Leprosy and Malaria are gradually receeding even from Nepal where Control or Eradication of these diseases have already been started.

Infectious diseases are caused by Bacteria, Viruses, Spirochaetes, Protozoa, Mycosis, Rickettsia, Fungi, and infectious disease like Rhuematic Fever in which the aetiology is not known. Most of the infections caused by the various groups of microorganisms can now be treated effectively but specific effective treatments are not yet available against viral diseases.

Pneumonias, Tuberculosis, Diphtheria, Typhoids, Whooping Cough, Cholera, Leprosy, Gonorrhoea, Tetanus, are some of the diseases of great importance which are caused by bacteria. Viral diseases of importance are Chickenpox, Smallpox, Mumps, Measles, and Influenza and also Poliomyelitis, Herpes Zoster and Infective Hepatitis. Syphilis is a disease caused by Spirochaetes. Malaria and Amoebiasis are diseases caused by Protozoa. Rickettsial diseases are not common in our country. Actinomycosis is the most important disease caused by Fungi which too is not an uncommon disease in our country.

We think of infectious disease as a disease which means only those diseases which are not to be treated at homes or in the general wards of a hospital. Such diseases are best treated when completely isolated and be given adequate medical and nursing care. We know of Infectious Disease Hospitals or Infectious Disease Units in some hospitals of countries more advanced than us. Except for the Infectious Disease Unit at Tekku, which is a part of Bir Hospital here in Kathmandu, we have so far, no other infectious disease unit or hospital anywhere else in our country. Infectious or highly communicable diseases are more often than not, treated at homes of the patients and are easily communicated to others. The ravages caused by infectious diseases like Cholera, Smallpox, Typlicids, Trachoma etc. in our unhygienic, insanitary dwellings of the villages in the hills and Terai no less in the towns, are inestimable. We know that the Health Budget in the country cannot give us adequate organisation for all that should be there. The establishment of multipurpose health

posts though low is a process which will no doubt, give minimum comprehensive care to the people. The establishment of hospitals or health centres in each district will take long years and then it may not be possible for quite a number of years to have separate isolation wards or infectious disease units in each of these hospitals or health centres. The government has, however, spent considerable amounts for the purpose of acquiring vaccines for prophylaxis.

We think that the step already taken by the Directorate Health to have cases of infectious or contagious diseases reported by physicians is indeed a quick stride towards prevention of epidemics. Each physician has been issued case notification cards and we hope that the physicians do report cases that they come across. We must however point out that these cards seem to have been issued only to the physicians in Kathmandu and that so far, the same measures are not applied elsewhere in the country. The next thing that we have to point out is that these cards neither bear postage stamps nor any certificate for "free return postage". It seems obvious that the authorities did not think much of the amount involved and have omitted to organise simple and necessary "Free postage" of these cards in consultation and collaboration with the postal authorities. While we do not say that the physicians are prepared to spend the necessary amount for mailing each card, we know that if the cards are to be mailed from all over the country, many physicians will find it hard to find any postage stamp at all!

We, therefore, think that for the present we should organise prophylaxis, of individual, of the community and of the people of Nepal. The Government should supply and organise timely immunisation against specific diseases throughout the country through the already existing hospitals, health centres, and health posts and also where these do not exist, through private practitioners, or through the Panchayats. Once the step to protect the mass to immunise them, is taken and regular and timely immunisations are carried on, we can be sure that the epidemics of these disease will be few. So far, we know, such immunisations are carried on only hurriedly when epidemics occur. There is no arrangement to have tests done on susceptibility of children towards diphtheria. The

tuberculin tests are carried on only on those who go to the chest clinics in Kathmandu.

We suggest that a section for communicable diseases should be started in the Directorate Health and the first early steps to be taken by the section should be to have adequate health education of the people regarding the modes of infection and transfer of the communicable diseases and procurement of sufficient vaccines for the people and regular and timely inoculations. The section should ensure that the people understand fully the importance of voluntary reporting of cases of Cholera, Typhoid, Smallpox Chickenpox, Measles, Leprosy, Trachoma, Tuberculosis and Dysenteries. The people should also be educated adequately to understand the need of isolation of cases of these types.

We expect that the authorities will certainly give due consideration to our suggestions in these columns so that we of the "healing profession" will be able to keep on healing and also to bring about a situation in the country where the preventable diseases will be prevented.

3. Emergency Service.

Human life is precious. This plain and simple fact is not better realised by the public except in a medical emergency. It is then that one realises the short-comings of the medical service, more so when emergencies have to be catered for.

The emergency medical service is usually required for casualties, poisonings and also for exacerbation of existing disease. In some cases of casualties one may be able to find an excuse for the short-comings, but in the other cases the public wants the medical profession in tip-top condition. In such emergency cases, no matter whether caused by physical accidents or by the natural course of the disease, the sufferers (Patient) and the relatives or their parties want immediate attention in an efficient, sympathetic and in convincing way. It is the duty of the department concerned that it is forth-coming, but there are many factors which come into play—finance, accommodation, equipment, drugs, personnel and socio-economical status of the community.

As an example let us take the situation in Kathmandu. Everyone has to accept that it is in a very primitive stage and conditions will have to be improved to bring it up to a minimum acceptable standard. Everybody knows that efficiency and economy cannot go together. Where emergencies are concerned, economy has to be sacrificed.

If one analyses one finds that emergency medical service can be classified into certain fundamentals. These are ambulance service, medical staff, equipments accomodation and drugs. First let us consider the ambulance service. The present system of this service with special rules and regulations, for each such institution, with very short runs is not advisable. It will be much wiser and far economical to pool together all these different services into one service. This single unit will establish different branches at different places to suit local conditions. This will maintain efficiency and promptness without waste of energy and duplication of organisation.

Next comes equipment. If there are no proper equipments, even highly experienced people cannot work efficiently. Not only this but they must be in sufficient number so that there will be no delay in starting treatment. For the emergency service we must be ready to tolerate a certain amount of wastage.

Regarding medical personnel, there is first of all the shortage of doctors. In these days of specialisation, no medical officer in an emergency room will be competant enough to take up any type of emergency that may come in. His duty will be to immediately contact the right man and in the meantime to treat the cases. There is a similar shortage of nurses, so special nurses have to be provided for emergency service duties. Besides, the other non-technical auxillary staff, preperly trained must be on hand.

One can see therefore that to have a really efficient emergency service, a thorough organisation, complete staff and necessary paraphernalia will be necessary and then only the work will be appreciated both by the public and the ministry.

4. Water Supply

In the "World Health" (July-August 1964) an Editorial mentions that 500 millions people suffer from disabling diseases associated with unsafe water supplies". It also mentions "The annual number of deaths from diarrhoeal diseases among infants under one year of age is estimated at nearly 5,000,000. This tale is largely due to poor water supplies." Again in an article, in the same publication it has been mentioned that in U.S.A. "In 1885 only 70% of the population enjoyed piped water services, the Typhoid death rate was 40 per 100, 000. When in 1930 96% of the people were using piped water, the Typhoid death rate dropped to 1 per 100,000, persons". Thus it clearly signifies how water acts as vehicle of human diseases and at the same time it also teaches us if water can be made safe a number of human diseases are controlled and prevented. Hence necessity for adequate and safe water need not be overemphasized. Easy accessibility to water provides in addition to physiological need, a chance to maintain cleanliness of one's own environment. So, it is not surprising to note that with the provision of water, the morbidity rate in the society is decreased. Probably in realisation of these facts, due attention is also being paid by HMG in this direction. The recent inauguration of Sundarijal water plant helped to solve to some degree the long felt water requirement of the capital Kathmandu. In addition to this, to note that the water at Kathmandu (approx. 52,00.000) Gal per day supplied from three units ie Maharaigani, Balaju and Sundarijal and serves 1,61,000 population of Kathmandu) is also being chlorinated, gives us a sense of satisfaction and security. Similarly, drinking water supply project, in addition to maintaining of water supply units, are working to provide new water supply units in different parts of the country. One hopes that this work will not be slackened down but rather will improve and more work will be done in future years to remove the thirst and cause of health hazard of the people of our country as a whole. But here the question comes as to when we will reach this stage? Treatment as we mentioned already is not being carried on in other parts except Kathmandu town. Even in Bhaktapur and Patan, it is only piped, and not treated water that is supplied. So, to reach the state of safety it may take a long time due to various difficulties eg.

technical. Even for adequacy it may take long impatient years. Such schemes can only be tackled at government level.

Kathmandu though still not adequately supplied, is not the only place to be thought of. Our goal must be wide to cover every nook and corner of this country. It is not an easy task in itself. We have to seek the methods by which we can implement this programme in a very reasonable low cost and in a practicable way and without much difficulties. For this every Panchayat village or town, should be entrusted to tap, the possible sources of water and maintain its safety and supply according to requirements.

A difficulty encountered is that local Panchayats may suffer from want of fund and technicians for the development of huge units. Thus, it would be to the Government to provide necessary cooperation to overcome such difficulties. But, once it is complete, to maintain and to keep it running is to be the local task and this maintainance should be much more emphasized. Thus, if a local Panchayat undertakes the responsibility of mantainance and development of small water sources, the government would be relieved from this burden and would be free to handle other developmental works needed in the country. At the same time it would give a lesson of self-help to the people and they may realise to lend a helping hand in national development.

5. Food Borne Diseases.

Among the numerous health problems, food borne diseases are also one of the out-standing problems of our country. Specially in our country where intestinal diseases like Typhoid, Cholera, Dysentery and worm infestation are much common and affect a majority of countrymen, food as a vehicle of infection, cannot be denied. The chance can be accessed because of the epidemiologic characteristics of the occurance of disease. Besides, illiteracy in a majority of the mass, lack of knowledge as to communicability of diseases and unhygienic habits further strengthens the occurance and spread of such diseases. Still more, the increasing number of food selling and service establishment where common sanitary

requirements are not available, are of course adding another point to the problem of communication of the diseases.

To deal with food selling and service establishment is necessary. No specific sanitary rules and regulations have been defined and enforced. It already has become a problem and if we still ignore the fact it is sure to ruin the health of the people and hence lead to the loss of national wealth.

As to existing situation of restaurants, business profit without any due attention to hygiene, service and security is the main practice of the owner. Adulteration of food, employment of sick personnel, selling exposed and even stale or putrified food, serving in dirty premises with dirty utensils handled by dirty hands are the common events, one ever finds in any food establishment.

The main causes of the problem is the lack of well defined and enforced necessary rules, regulations, laws and bye-laws, well trained personnel to the concern and proper laboratory facilities for checking.

So, at least now, in view of protecting the health of the public, it is necessary to come forward with the necessary action and the management to solve the problem.

To approach the goal the following points shall be considered:-

- 1. Well defined rules and regulations, having effective bye-laws, which shall comprehensively cover the (a) hygienic maintainance of premises, (b) its employees, (c) facilities required, and (d) condition of food to be sold, shall be defined, enforced, and issued to all food establishment.
- 2. Adulteration of food which, decreases the nutritional value of food or may deteriorate the health of the public, shall be made illegal and punishable.
- 3. Frequent inspection of establishment, collection of sample and analysis shall be carried out to check malpractices.
- 4. Slaughtering of sick animals, selling diseased animal's meat shall shall be banned. Stamping of careass to insure safety shall be practised.
 - 5. Selling exposed food and cut fruit shall be checked.
- 6 Health education and propaganda by means of different media shall be made, to bring about mass consciousness concerning food-borne diseases and the possible means of getting rid of them.