# Indian Journal

OF

# PUBLIC HEALTH

*Quarterly Journal of the Indian Public Health Association*

**CONFERENCE NUMBER**

**SYMPOSIUM**

ON

**INTEGRATED HEALTH CARE**

JANUARY 1960

VOLUME IV NUMBER 1

*EDITOR :*

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ANNUAL SUBSCRIPTION Rs. 8/- (INLAND) SINGLE COPY Rs. 2/8 (INLAND)

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# INDIAN JOURNAL OF PUBLIC HEALTH

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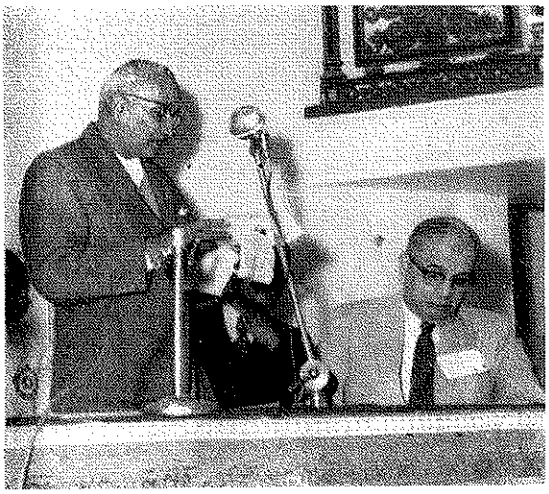
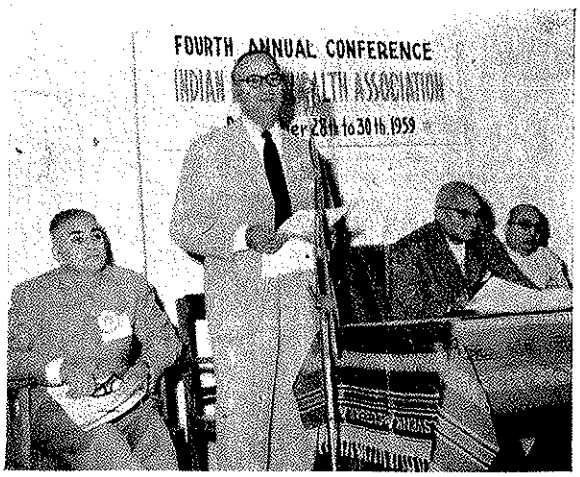
*Opening of the Fourth Annual Conference I.P.H.A. at Poona, December 28, 1599*



*Inauguration by Shri M. S. Kannamaswar, Health Minister, Bombay State*




*Address by the President Lt. Col. Jaswant Singh*

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## THE FOURTH ANNUAL CONFERENCE OF THE INDIAN PUBLIC HEALTH ASSOCIATION

The Fourth Annual Conference of the Indian Public Health Association was held between the 28th and 30th December 1959 at the Council Hall, Poona (Bambay). It was inaugurated by Shri M. S. Kannamwar Health Minister Bombay State, amidst large member of distinguished guests, delegates and members of the Association representing the different states and the national and international organizations. Besides, there were other invited medical men, health workers and scientists from the Indian Council of Medical Research holding their meeting during the same week at Poona, the total audiences numbering about 300 in all. Lt. Col. Jaswant Singh, Director General of Health Services, presided.

This annual session assumed a great importance for the Indian Public Health Association as it constituted the first session held under the auspices of a State Branch Association outside the city of Calcutta, the Headquarter of the Association where we had three consecutive annual sessions following its inauguration in 1956. This year the privilege belonged to the Bombay State Branch Association. It is, however, a very happy augury to state that under the able leadership of Dr. T. B. Patel, chairman of the Reseption Committee, the session had conspicious success, and the arrangement was appreciated by all concerned. It convinced us all that it would be worth-while to hold our annual session in different states in successive years, particularly to rouse enthusiasm among the Branch members and to give apportunities to the local members to benefit by full participation.

The Chairman of the Reception Committee Dr. T. B. Patel, Director of Public Health, Bombay State welcomed Shri M. S. Kannamwar Health Minister, Bombay State, the President of the Indian Public Health Association and various other persons assembled in the Hall from far and near.

He pointed out in this connection that the rapid urbanisation led to gross overcrowding increasing slum conditions, and insanitary habits. He was happy that the Association had the benefit of the guidance and advice of several stalwarts in public health in India, including Dr. B. C. Dasgupta.

Inaugurating the conference Shri Kannamwar, Health Minister of Bombay expressed his satisfaction with the progress and activities of the Association in spite of the handicap that India has as an under-developed country. For the progress of public health the people were faced with many new complex problems created by the age of nuclear fission, electronics, automation and speed and it would be the task of the modern health workers to help the public to adopt themselves to this new environment and to protect them from the new hazards to health. He suggested that the programme of health services should be closely linked with the improvement of general living condition which again was linked with the economic conditions.

He was happy to state that both the Central and the State Government had been tackling the problem of communicable diseases with as a top priority resulting in almost eradication of malaria—the biggest scourge of India, handling of leprosy, tuberculosis etc. on a national basis and recently the proposals for a nation wide control of smallpox and cholera has been accepted. But to effectively deal with these problems a team work involving trained physicians, engineers, sanitarians, public health nurses etc., would be necessary. He also mentioned in this connection the importance of the role of Primary Health Centres" where this team work had been actually put into practice. Considering the country's resources coverage of a large population of 60,000 by each health centre, could not be adoided but the provision of an extra medical personnel and a clerk was under active consideration. A pilot Scheme to study the benefit of the coverage of smaller population of 20,000 would be shortly undertaken in the state of

Bombay. The question of referral hospital and laboratory services were also under consideration.

Shri Kannamwar also specially referred to the problem of population growth and stressed on the need of family planning for which the Bombay State had established 113 urban and 155 rural centres. He also expressed his satisfaction with the various subjects of topical importance selected for discussion in the scientific session, but he wished to emphasise that for the success of health services of the desired pattern both with rural and urban areas, facilities for intensive training of all categories of personnel at all levels were necessary, particularly in regard to the preventive services.

In delivering the Presidental address Lt. Col-Jaswant Singh, referred to the changing political and socio-economic attitudes of our people and the impressive studies made in health rpogramme during the last 12 years and yet colossal grounds had yet to be covered before we could fulfil the obligations laid down by the constitution of India. With the limited resources in the first two five years plans emphasis had been on the preventive aspect, particularly to the control of communicable diseases, improvement on environmental sanitation, and training of health personned. Of the diseases being tackled on national basis mentioned about tuberculosis, filaria, leprosy venereal diseases and trachoma control programme.

In regard to the environmental sanitation, the emphasis had been laid on protected water supply and safe disposal of excreta, particularly in the rural areas, 232 Schemes covering 14,680 village at a cost of about Rs. 18 Crores having been brought under the scope of this programme. Besides, 307 Urban water supply and drainage schemes costing 69.05 crores were under execution in various states and were likely to be completed during the second plan priod. He mentioned that in every developmental scheme, material, personnel, organisation and finance were the limiting factors and the scheme should be spread over several plan periods.

He also stated that we were handicapped further due to food deficiences and malnutrition, as self-sufficiency in food was the foundation of preventive and promotive health.

He then mentioned about the necessity of improvement of health satistics which was the basis of all health planning and suggested a two-way approach for the same, viz, the establishment of statistical organisation at different levels of health administration and promotion of research in health statistics particularly in concepts, procedures, methodology, techniques applicable to our country. The importance of providing better M.C.H. services and of keeping the children healthy could not be overemphasized. School health was another service which deserved high priority but efforts so far made were negligible, and so also with the Industrial health, although the Employees' State Insurance Scheme had been promulgated.

The rate of population increae, he said, had already assumed alarming proportions. With the birth rate remaining undiminished and death rate falling the population was likely to reach, according to certain calculations, 430.8 million in 1561 or 527.8 million in 1971. He therefore stressed the necessity of family planning and free use of contraceptive methods. Although 48 lakh couples had been contacted for education and 12 lakh given advice, much greater efforts would be needed to achieve any tangible result.

Among the other developmental schemes, Col. Singh mentioned that the primary health centres occupied the key position. Over 1400 centres were already functioning and 1000 more were expected to function at the end of second plan period. Actually the health programme should go as the people's programme through decentralisation or by setting up village panchayats, block samities and Zilla parishads. For the success of health measures health education programme was also absolutely essential. The Health Education Bureau in the Directorate General of Health Services was making the necessary plans. Besides, the standard of living and the purchasing power of the people being related to health the planned development programmes in food and industry etc. would substantially increase our economic condition to provide means for the improvement of health of the country.

Col. Singh also expressed his gratefulness to the International agencies now in India and appreciated the co-operation given by the voluntary organisations in the country for the improvement of health then and expressed his satisfaction at the progress made by the Indian Public Health Association and the standard maintained by the Journal in guiding the policies of health work in India.

In the end, Col. Singh welcomed Col. Barkat Narain to take over the charge of the Association as its incoming President and wished him all success.

At the conclusion of the presidential address Dr. T. R. Bhaskaran, Joint Secretary of the Association offered a hearty vote of thanks to Shri M. S. Kannamwar, for very kindly agreeing to inaugurate the function in spite of his busy and multifarious engagements and also for his stimulating address as the Minister of one of the most progressive states in India in the matter of public health. He thanked Lt. Col. Jaswant Singh for his able leadership as President of the Association and for his very illuminating address with suggestions for future guidance. He also thanked the eminent scientists and public health chiefs who had agreed to guide and conduct the proceedings of the scientific sessions, those who wished to participate in the discussion and all the guests and delegates, particularly those sent by the International agencies. Dr. Bhaskaran then said that the management and success of the conference, in spite of short notice, were entirely due to the enthusiasm and efforts of Dr. T. B. Patel and V. N. Rao, the President and the Secretary respectively of the Bombay State Branch of the Indian Public Health Association and to its members to all of whom he extended his heartfelt thanks.

The programme of the session included besides the five panel discussion on the 28th, 29th and 30th December, a subscription lunch of the Association held at Poona Club on the 29th December in which about 100 members participated, and cultural shows in the evening of the 28th December which was well attended and appreciated by all members. The fourth panel discussion on Industrial health was held at the Armed Forces Medical College, Poona, through the courtesy of Major General Swaroop Narain, Commandant and Col. Karani, Deputy Commandant of the College. All participants were entertained to a tea party at break-up-time.

S. C. SEAL,
*Secretary*

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## WELCOME ADDRESS

**By**
**Dr. T. B. Patel**
**President, Bombay State Branch of the Indian Public Health Assosiation**
and **D.P.H. Bombay State**

Honourable Health Minister,
COL. JASWANT SINGH AND FRIENDS,

I have great pleasure in welcoming you all here on behalf of the Bombay State Branch of the Indian Public Health Association. We are fortunate in having the privilege to invite the parent body to our State. Now that the second Five Year Plan is shortly coming to a close, preparations are afoot to prepare for the third Plan.

In a country like ours which is on the threshhold of intensive industrialization leading to rapid urbanization of a large number of our population, problems of gross over-crowding and shocking slum conditions with all their dire consequences are growing up apace, even as poor environmental conditions in villages and towns, lack of knowledge and insanitary habits have become a fertile ground for breeding disease and illness in the community. I am sure, the All-India Public Health Association, having many stalwarts with long and rich experience like Dr. Das Gupta, in the many branches of Public Health practice will give its considered thought to these and many other simlar problems that affect the health and result in avoidable suffering to the Community.

I again cordially welcome you all on behalf of myself and my colleagues of the Bombay State Branch of the Public Health Association, to the Fourth Annual General Meeting of the Indian Public Health Association.

# INAUGURAL ADDRESS

**By**
**Shri M. S. Kannamwar,**
**Minister for Health, Bombay State**

It was very happy to accept the invitation for inaugurating the Fourth Annual Conference of the Indian Public Health Association as I felt when the invitation was extended to me that Public Health is a subject which deserves attention in a larger measure in this country which is still in the stage of development. I am informed that this Association, although it was opened as recently as 1956, by the then Union Health Minister, Smt. Rajkumari Amrit Kaur, in the course of 3 years has grown considerably not only in its membership but more so in its activities.

The problems of under-developed countries are too well-known to need any special mention to your Public Health workers and it is needless for me to enumerate them. But I feel that we should benefit ourselves from the considerable experience gained by other countries, which were also once under-developed, and passed through the same stages as we are and attempt to shorten the period of development instead of prolonging it to several decades. We are fortunate that the modern rapid advances in the last decade have made it possible to cut through this period of development still further and provide a measurable quantum of health services. At the same time while some old problems still remain to be solved, many new complex problems are created by this age of nuclear fission, electronics, automation and speed. For in this time of stupendous scientific advances man is finding it hard to keep pace and to adjust himself to the changing scene. It will be the task of the modern health workers to help the public to adopt themselves to new environments and to protect them from new hazards to health. The problem of ill-health is closely inter-linked with the economic conditions of the people. In fact, they form a vicious circle and give rise to a tendency for stagnating development unless concreted efforts are made to get away from this vicious circle by providing programmes directed towards improvement of health in particular. The programme of provision of improved health services is closely linked with improvement of general living conditions which again is interlinked with the economic conditions.

It has been the experience in many of the Western countries that the tempo of development of health services was accelerated after outbreaks of serious disasters like epidemics which led to progressive reforms and general awakening among the administrators and people at large demanding improvement of their conditions. In this country also serious epidemic outbreaks causing heavy loss of life in the past sometimes stirred the people and administrators to take some action in regard to particular health measures. I am glad to state that at the present time both the Central and State Governments have been seized with this problem of commuuicable diseases giving it a Top Priority in the programme of health to ensure that some of these diseases like Malaria, which were the major scourges and were taking a heavy toll of life in the past are being eradicated from the land. The question of taking up certain other diseases like Leprosy, Tuberculosis etc. as problems of national importance is also engaging attention both at the Centre as well as in the States in view of the fact that these diseases are causing preventable suffering among a large number of our people both in towns and villages. It has been accepted that such diseases be given the highest priority and treated as diseases of nation-wide importance.

As you are aware, the proposals for establishment of health programmes on a national basis for the eradication of Cholera and Smallpox has already been accepted both by the Central and State Governments. I feel this is a development in the right direction. However, as you are all well aware, the problem is enormous and requires large-scale efforts and whole-hearted energies of Government and the people to achieve success in this fight against preventable diseases. The practice of public health essentially needs a team work for its success, in which the specially trained physician, the engineer, the sanitarian, public health nurse and other members of the service work together for the well-being of the community.

Here I wish to mention an institution which has gained popularity in recent years and forms pivotal structure of our health services

viz. the "Primary Health Centre" which provides basic rural integrated health services both in the field of curative and preventive health care including Maternal and Child Health and where the staff works in a team spirit along with the staff of other development services in rural areas. There have been controversies in regard to the propriety of providing a Primary Health Centre for a population of 60,000 with only one doctor at the headquarters, which is no doubt quite inadequate to give full service to such a large population. Some feel that it would be better if such services were concentrated in smaller area in an intensified manner rather than spreading them out in wider areas covering such large groups of 60,000 population. In this connection, it may be stated that in these days one cannt afford to allow large masses of our people in villages going without any type of service or facility at the cost of few getting most of the benefits and enjoying all the services, which would be both discriminatory as well as inequitus. It should, however, be our endeavour to see that the services which we are now providing to cover a population of 60,000 should be at the earliest opportunity intensified and strengthened so that it may be possible to make available all the services in units of 30,000 population or even less, say 10 thousand, which will no doubt depend upon the finances available to the State as well as upon the availability of technical personnel. As you are aware, at present both these are in short supply and hence we have to make a compromise in such a way as to be able to provide maximum benefit to the largest possible number of people. A proposal to provide one more doctor for the Primary Health Centre has already been approved. Consideration is also given to reduce the work-load of the technical staff of Medical Officer, Public Health Nurses etc. at the Primary Health Centre by providing clerical aid for the purpose. Hence, I feel that the present unit of 60,000 population is well conceived and sound in principle. A concentrated service in a small area may, however, be thought of as a pilot scheme which the W.H.O., UNICFF and Government of India have included in their plan in the services already envisaged in the form of "Demonstration Districts" and is being taken up in each State. I may inform you that two districts in this State have been selected where services have been provided in an intensified manner, so that each primary health centre covers a population of about 20,000 in these districts. These are also provided other facilities such as referral hospitals and laboratory services so as to improve the standard of services to the people to a very high level of efficiency.

As you are well aware, the trend in Birth Rate in this country has remained almost steady at a high level as has been the case in many other under-developed countries according to demographic cycle. But the death rate has shown in rapid fall within the last decade due to tremendous advances that have taken place in the method of treatment of diseases as well as in the type of preventive services which are being employed on a mass scale e.g. the malaria eradication programme. This has created a serious and urgent problem, viz. the sudden spurt in the growth of population which is not able to keep pace with our production and economic development, in the matter of food and other necessities and is likely to lead to desastrous results if we do not take adequate steps to stabilise the population within the means of our resources. The Family Planning Programme was launched in the State in the year 1957 and since its establishment has made rapid progress, and today we have 113 urban and 155 rural centres. Apart from the usual family planning methods, this State has been trying to concentrate on the permanent method of sterilization of either the male or the female partners, which alone is likely to lead to tangible results in regard to the stability of the population in a measurable distance of time as required for the fruition of our national plans and ultimate prosperity.

I am glad to note that in your heavy Agenda you have rightly given importance to subjects like 'integrated health care', 'contributory health services', 'railway medical organisation', 'industrial health' and 'production quantum of biologicals in the country for preventive and curative health work', which no doubt are very important subjects and in a way topical to our present programmes.

I wish to emphasize one other point in regard to the rapid progress of health services we are trying to develop at present, viz. intensive training at all levels and reorientation training of various categories of personnel working in rural areas, so as to ensure that they are able to provide services of the desired pattern which you have in mind. In fact, some criticism regarding the unsatisfactory working of primary health centres might be due to this factor viz. lack of proper training

of the personnel. You are the better judges in this matter, but I would reiterate that there is need for greater attention being devoted towards training, both of the refresher and orientation type. As some of the medical officers in charge of such basic services as primacy health centre are still having the old tendency of only looking to the curative work and not giving sufficient attention to other aspect of the services, viz. Maternal and Child Health, Nutrition, School Health, Environmental and Personal Hygiene, which are equally important and of equal benefit, if not greater, in serving the people. In a welfare service, the medical practitioner needs to have a broad concept of his duties and he is expected to take an active interest in patients as men and women who lead the mother past their life in a certain kind of dwelling, as persons with famillities and obligations, with anxieties, hopes and fears. He takes into account social and economic factors, conditions of work and living, and standard of housing, clothing, diet and personal habits. As I have already stated above, in the present phase of our development and evolution, there is greater need to lay more stress on preventive services than curative services although the latter is more dramatic and immediately satisfying.

I am impressed by some of the health services such as Malaria eradication which are being rendered at present even in the remote and inaccessible areas practically at the threshhold of the remotest hut in the most backward interior village. In the ultimate analysis there can be no better health education than taking the services to the very doors of those who need it.

In Bombay State we have a very serious Filaria problem and perhaps ours was among the first State to have provided mass treatment on the largest scale as an adjuvant to other preventive measures. This has now been taken up in other parts of the country also. We have also been able to achieve good success in the mass BCG Campaign which is going on extremely well in regard to coverage. The State Public Health Department is also undertaking field research into some important problems which demand attention in the State.

The Department has also been taking particular interest in conducting field studies which would provide the basic data needed for both planning and future health programmes as well as for assessing the results of the programme already in existence.

A scheme for improving registration of vital statistics has been in vogue since 1954 and has succeeded to some extent in classifying births and deaths and also in better classification of the causes of death.

In the field of Family Planning also, certain basic studies regarding the acceptance of contraceptives and attitude of people towards different methods of family planning etc., have been conducted.

Similarly, Leprosy and Tuberculosis have been taken up for and investigated from an epidemiological angle.

I am happy to know that the Indian Puclic Health Association is having its deliberations here in Poona this year. Poona this year has been the centre for many activities particularly conferences connected with medical and public health fields and I understand that for the first time the Association is having its meetings outside its headquarters, and we feel happy that you have selected Poona as the venue of the Fourth Session. It is gratifying to know that the Indian Public Health Association has a large membership and taking into consideration the various important health problems which are facing the country, there is wide scope for increasing the number of members. I hope other States will also join the Association in large numbers so as to be able to gather in strength and give momentum to the voice of the Indian Public Health Association in the field of Health in framing major health policies at the Central Governmental level and also at the State Govt. level which would be helpful in guiding the States in this regard.

I am informed that you are publishing a Journal which has been highly priced and valued even in other countries and has been a great help in providing the medium for imparting knowledge in regard to latest trends and developments taking place throughout the world.

Finally, it is my pleasant duty to inaugurate this Conference and I wish you all success.

# PRESIDENTIAL ADDRESS

By
**Lt. Col. Jaswant Singh**
**Director General of Health Services**

Fellow members and Friends,

As your retiring President, it is indeed a matter of privilege and great pleasure to me to address the public health workers gathered here from all over the country on the occasion of the Fourth Annual Meeting of the Indian Public Health Association.. I take this opportunity of expressing my gratitude to you all for the honour the Association conferred and the trust it placed on me.

Looking back over the short history of the changing political situation and socio-economic attitudes of our people, one is impressed by the strides made in health programmes in various fields of activities, service, research and training, during the last 12 years. Yet colossal ground has yet to be covered before we can ever hope to fulfil the obligations laid down by the Preamble to the Constitution of India to secure to all its citizens: i.e.

"JUSTICE, Social economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity of the Nation. The Constitution further enjoins that the "State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties....".

Owing to the glaring limitations of resources, our Five Year Plans have laid down that the motif of our health schemes should be predominantly preventive and that is as it should be. The plans have devoted largely to the control of communicable disease, improvement of environmental sanitation, provision of preventive health care to rural population, improvement of health personnel. By and large various programmes are problem-centred and have made considerable progress. Deficiencies and defects noted from time to time have been corrected. Health workers may like to consider what would be the future broad groups of programmes and whether certain and training centres.

Leprosy control programme is making a steady progress. Four treatment and study centres and 94 subsidiary centres established so far are covering a population of 11.1 million in participating States. Up to the middle of the year 6.3 million people have been surveyed, 0.4 million resurveyed, about 65 thousand cases detected, over fifty thousand are undergoing treatment and 0.2 million contacts are under observation. In addition, about 23 thousand cases from outside the project areas are being treated in these centres..

Venereal Diseases Control programme is maintaining a steady progress and 48 district clinics and three state headquarter clinics have been functioning.

TRACHOMA:

Trachoma Control Pilot Project has completed 3 years of activities. Surveys have been undertaken in various parts of the country to prepare a topographical map. A practical and economic treatment procedure has been worked out. It requires further testing particularly how the drug be distributed and administered at a minimum cost ensuring at the same time an effective minimum number of applications before the country can embark on a National Control Programme.

## 2. ENVIRONMENTAL SANITATION:

Environment plays an important part in the development of physical, mental and social well-being of the people. Of the various components of environment even the two most basic factors, namely protected water supply and safe disposal of excreta, are in extremely sorry state of affairs, particularly in rural areas. Under the National Water Supply and Sanitation Programme, 307 urban water supply and drainage schemes costing Rs. 69.05 crores are under execution in various states and are likely to be completed during the second plan period. In the rural areas 232 schemes covering about 14,680 villages at a cost of about Rs. 18 crores have been brought under the scope of this programme. The work to be done is colossal that the achievement made so far pales into insignificance, Material, personnel, organisation and finance are the limiting factors. At this rate it would take several

plan periods before a reasonable level is reached. A more concerted effort has obviously to be made to complete it within a reasonable period, say 10-15 years. A further scatter will be unrealistic. Training programmes of engineering personnel is making steady progress. Research activities have also received considerable attention. The recent establishment of a Public Health Engineering Research Institute will provide stimulus to research and training activities under the auspices of the C.S.I.R.

3. MAL-NUTRITION:—

Malnutrition and under-nutrition are widely rampant. To make the situation worse, prices of essential food commodities are rising spirally. The correction of this great deficiency is absolutely necessary for the foundation and promotion of positive health. Adequate steps are no doubt being taken by the governments to make the country self-sufficient not only in basic but also in protective food.

4. STATISTICS:—

Need for accurate and reliable statistics for planning, execution and evaluation of public health programmes needs no special elucidation or emphasis. Till very recently health statistics were largely composed of the returns of three major infectious diseases and a few other easily recognisable conditions, probably because sickness from all other causes seemed insignificant by comparison with the three major scourges. Significant advance in the prevention of malaria and plague is now changing the outlook and is bringing other diseases into greater prominence.

For planning, the need for accurate information on varied aspects of problems, administration and facilities is increasingly felt. A two-way approach was considered necessary, viz. the establishment of statistical organisation at different levels of health administration and promotion of research in health statistics, particularly in concepts, procedures, methodology and techniques which may be applicable to this country. A large band of statistical workers is required for the specialised job. The establishment of a Model Health Statistics Unit at Nagpur and training undertaken at the All-India Institute of Hygiene and Public Health, Calcutta, in medical statistics are efforts in the right direction. Also health surveys have been conducted in the Community Project Block, both for collection of base line data and for evolving techniques for field surveys. A pilot study on health surveys through para-medical personnel was conducted at Ramanagaram with the W.H.O. assistance. Those objectives should be pursued with greater efforts and vigour so that before long we would be in a position to have an efficient Health Statistical Service as an integral part of health administration in the country with adequate provision for statistical assistance and advice at the Centre, State, district and primary, health centre levels.

5. MATERNITY AND CHILD HEALTH:—

Although the work is in progress from pre-independence days, we have not yet been able to cover the total population of children and mothers. The importance of providing better services and keeping the children in the best of health cannot be overstressed for they will form the future citizens. M.C.H. work has been integrated in primary health centres. It is also noted with satisfaction that a greater emphasis is being gradually given to paediatrics and training of medical and other health personnel in the subject.

6. SCHOOL HEALTH:—

Our efforts have almost been negligible in comparison to the efforts made in other countries. School health deserves much high priority than that accorded to it now.

7. INDUSTRIAL HEALTH:—

As a result of the successive two plans, industries are being fast developed both in the public and private sectors. Although certain medical and other social security measures are being provided under the Employees' State Insurance Scheme, it is absolutely necessary to improve the environment of the places of work. Apart from a few progressive factories, this aspect of the work remains somewhat in the background.

8. FAMILY PLANNING:—

Population in India is increasing at a fantastic rate. According to a recent official estimate made on the assumptions that (i) the general fertility rate of 0.189 consistent with a birth rate of 42 around 1951 will remain unchanged during 1951-66, and (ii) the expectation of life at birth will steadily increase from about 32 in 1951 to 50 in 1966, the population will be 430.8 million in 1961, 479.6 million in 1966 and 527.8 million in 1971. Another estimate projects that the population will double itself by 1986 if the level of fertility in 1956 remains unchanged during the

period. 1956-86. This enormous growth of population will result in further draining of our resources which should have gone towards the improvement of living standards, in keeping pace with the population increase, unless it is stabilised within the resources of the country. The family planning programme has been steadily gaining ground. 691 rural centres are functioning mostly in association with primary health centres and 309 urban clinics attached to hospitals and M.C.H. Centres In addition, over thirteen hundred MCH centres offer advice and service in family planning. Contraceptives are given free to persons having monthly income less than Rs. 100/-. About 48 lakh couples have been contacted for education and 12 lakh given advice in the use of contraceptives. Sale of contraceptives in each of the years 1958 and 1959 is about 6 times that of 1957 and 12 times that of 1956. Much greater efforts are required to be made for many years towards this programme both in urban and rural areas.

## 9. PRIMARY HEALTH CENTRES:—

As you all know the programme for the establishment of primary health centres occupies a key position among health development schemes. These centres have been conceived as focal points for providing integrated preventive and curative health services to rural population with special emphasis on preventive approaches. Apart from the human values involved, prevention has an important socio-economic aspect. The staff of these centres in their visits to homes carry significant health care to villagers instead of villagers merely coming, only when sick, to dispensaries for treatment, as used to happen in the past. Over 1,400 primary health centres are now known to be functioning and it is expected that there will be nearly 2,400 centres by the end of the second plan period, covering a rural 2,400 centres by the end of the second plan period, covering a rural population of more than 150 million. The complement of personnel in a primary health centre is undoubtedly to small to do an adequate job, but with our present resources it is not possible to go further. After covering the entire country on the present basis, the next rational step will be either to reduce the coverage and increase the number of centres, or to increase suitably the staff.

With the process of democratic decentralisation and setting up of village panchayats, block samities and zilla parishads, health programmes for the rural areas will require to be orientated towards this new concept under which such activities will function as the people's programme, by the people for the people, with State participation. With this aim, the general public are being closely associated with health activities at the health centres.

## 10. HEALTH EDUCATION:—

For any health measure to succeed it is absolutely essential to enlist the understanding and co-operation of the community. This can only be done by health education which is concerned with the changes in knowledge, feelings and behaviour pattern of the people. It is a slow but a sure method. It makes people recognise heir problems, draw up their own methods of solution, relates results with their own ways of life and provides motivation for self help. It helps people to help themselves.

The Central Health Education Bureau in the Directorate General of Health Services, engaged in the formulation and planning of health education activities at different levels and in the production of health education material, is fast developing. Under the Government of India cchemes, state health education bureaus are likely to be established during this financial year in seven states and during the next year in three other States. I trust, before long each State and centrally administered territory will have a bureau.

Paucity of trained personnel, poor social conditions are other vital problems. Gigantic efforts are being made to produce more personnel to man the ever-expanding health programmes.

These problems cannot be tackled by one agency and cannot be solved without continuous long-range realistic and courageous planning. No health agency can escape the essential need for creating an effective organisation for community health planning. All the health development programmes cost money and unless the standard of living is raised, power of purchasing public health will be restricted. We have no doubt in our mind that the planned development programmes in industry, food etc., will substantially increase our economic condition to provide means to improve health of the country. The Community Development Programme, a dynamic programme in the general upliftment of the socio-economic condition, will also enable us to improve health along with education, communication, housing, industry etc.

11. INTERNATIONAL CO-OPERATION:—

We are grateful for the assistance we have received from international bilateral agencies in our health programmes. Assistance, technical financial, has played a highly important catalytic role and has been of inestimable value. Another type of international co-ordination is growing up in the form of collaboration with international professional organisations and there are many in the field with which we are closely associated.

One of the promising methods by which we can greatly increase the resources of public health is by integrating health organisation with the various puclic and private voluntary organisations working in health and allied fields. Some of the organisations other than health have interest and programmes in the various aspects of health, particularly in the field of food, industry, labour etc. Their programmes could be co-ordinated with our health programmes to mutual advantage. This may be difficult but still desirable. The mutual benefits and the stability of co-operative and collaborative effotrs will greatly depend on how we follow the established principles rather than in expediency.

The Indian Public Health Association has a great responsibility in providing leadership, guidance and consultation, specially in expanding fields of health administration and health needs. During the four years of its life, the Association has maintained a steady progress and its members have dedicated themselves to the improvement of health conditions of the country. Judged by any standard, the Journal of the Association has contributed much in keeping the administration on the correct path, in maintaining liasion between the workers and administration and between workers and the people.

119 new members have been added and one state branch has been opened during the year bringing the total of 1,133 members through three State branches. We have to strive hard to increase our membership. May I request you individually and collectively for assistance towards this objective.

I regret I have taken more time than I need have. I hope you will be forgiving me out of your generosity I now have great satisfaction in handing over the affairs and responsibilities of the Association in the able hands of my successor Lt.-Col. Barkat Narain. He is a man of wide experience and sound judgement. I feel amply confident that he will make a stimulating President of the Association.

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## VOTE OF THANKS BY DR. T. R. BHASKARAN

In proposing a vote of thanks Dr. T. R. Bhaskaran pointed out that the Association has been very fortunate in having its Fourth Annual Session at Poona. He said that, in Matters of Public Health, Bombay State has been one of the most progressive States in the country. This is in no small measure due to the enlightend Health Ministers of the State. Sri M. S. Kannamwarji is no exception to this and has een responsible for many forward health measures within the State. It is matter of great satisfaction to the Association that its Fourth Annual Session is being inaugurated by Sri Kannamwarji. On behalf of the Association, he expressed gratitude and thanks to the Health Minister for making it convenient to be present at Poona to inaugurate the Fourth Annual Session of the Indian Public Health Association.

He thanked Col. Jaswant Singh, President of the Association for his wise counsel and guidance in the management of the affairs of the Association throughout the year.

He said that the Association is particularly indebted to Dr. Patel but for whom it would not have been possible to hold the session in Poona at such short notice. He pointed out that Dr. Patel is dynamic and infects his dynamism to his associates who have really worked hard during the last few days to make the function a success. He thanked them all on behalf of the Association. He also expressed the Associstion's gratitude to the State Governments and Institutions in the country and particularly the international agencies W.H.O., T.C.M., UNICEF and Ford Foundation for deputing delegates to attend the Annual Session at such a short notice. In conclusion, he thanked all the members present for coming in such large numbers from different parts of the country to attend the Session.

INDIAN JOURNAL OF PUBLIC HEALTH

*Official Quarterly Journal of the Indian Public Health Association*

VOLUME IV JANUARY 1960 NUMBER 1

## INTEGRATED HEALTH CARE

"Integrated Health Care" was the subject of the Symposium held in connection with the Annual General Conference of the Public Health Association of India at Poona.

To one School of thinkers this phrase is an anathema and the sooner it is erased from the vocabulary of Health Administration the better for them. It is however not understood what counsel and logic render them so acutely allergic to the term. If comprehensive health care is the objective for which health workers all over the world are striving and still remains as their aim, Integrated Health Care is the means to achieve it. This is the view of the second School of thinkers. It is not merely because in vast and underdeveloped countries there should always be an earnest attempt made to conserve scientific manpower, avoid overlap and wastage of technical knowledge by activities in blind channels unco-ordinated with each other, but it is also because Integrated Health Service helps to bring into application in the field the balanced view of medicine as a whole such as the basic doctor had been taught in the medical schools by proper orientation and blending of cure with prevention.

It cannot be denied that an application of the processes both of the adjustment of man to his environment and of the environment to the development of man's health has thrown a good amount of new light on the evidence for multiple causation of ill health. In any organisation of Health Administration this has to be borne in mind carefully and constantly.

In India while some states have shown by actual implementation their policy of integrated health care there are good many senior states which are still continuing the policy of bifurcation into cure and prevention under two different heads independent of each other carrying on curative and preventive work on two different tracks hardly meeting at all in their course.

Integrated health care to be successful should manifest integration at all levels —the top, intermediate levels and at the periphery.

If one takes a closer view of the existing situation in the country one would observe that the process of integrated health care is at work only more conspicuously in some states or institution than in others. With the introduction of the discipline of Preventive and Social Medicine in the various medical schools in the country the integrated teaching of the future doctor has been provided for. With the expansion of hospital activities in the various disciplines through the out-patients departments as well as through care of family units, the institutions hitherto engaged primarily in curative work have now stretched themselves out for curative as well as preventive work in the community.

Independent organisations such as the Railways in India who maintain their own health organisation have gradually expanded their activities originally confined to treatment of the sick only into the fields of environmental sanitation, maternity and child health, school health, immunisation etc. This has been carried out by one and the same organisation undertaking both curative and preventive work with an overall benefit to the community under their care.

In India very few larger industrial concerns maintain their own health organisation. By and large the industries are now covered by the Employees' State Insurance. But the few that have developed their own organisation render integrated health service to their workers. The Employees' State Insurance though at present have laid stress on developing the curative service the medical benefits in operation and contemplation under the scheme cover preventive service as well.

The latest epidemiological approach to handling of different non-communicable diseases like the heart diseases, cancer, diabetes and rheumatism has clearly shown that apart from cure, which in some instances is not yet visible in the horizon, prevention is of primary importance and need be taken care of at the same time as attempts to find a cure are bein gmade.

Recent advances in the medical science and its technology coupled with the discovery of the chemotherapeutic and antibiotic drugs have undoubtedly contributed towards the decline in death rate in all countries, developed and underdeveloped. But in the under-developed countries, particularly in South East Asia the morbidity rates except of malaria show no significant fall. Much remains to be done by cure and prevention working hand in hand. In a vast country like ours whose population and economy are predominantly rural, this can only be achieved by integrated health care.

# THE FOURTH ANNUAL CONFERENCE OF THE INDIAN PUBLIC HEALTH ASSOCIATION

## *SYMPOSIUM ON*

## THE INTEGRATED HEALTH CARE

### PREAMBLE

The modern trend of medical practice and health services is based on integration of or partnership between preventive and curative medicine for the preservation of health. Although a broad concept of medical practice is not a new thing the new elements are the evolution of services which have made social aspects of therapy a practical reality and a wider recognition that prevention of disease and promotion of health are as much the concern of the practicing physician as of the community and the Government representing it. Even from the point of view of diagnosis, the physician has now to understand that a complete diagnosis include clinical diagnosis plus social diagnosis and therapy includes social therapy. So whether the service is rendred by a private practitioner or the State it should be as complete as possible.

The above philosophy takes an added force in the face of the spread of social welfare schemes sponsored by the State-controlled or semi-State controlled organisations which also give a social, economic and labour bias to the community activities. But the social welfare being indivisible any social service rendered to the community will fail in its purpose if given piece meal or on compartmental basis. This simple truth, is generally accepted without dispute, yet the gap which still exists between precept and practive is immense.

The evolution of various public health services in India, such as the Community Development Blocks, rural and urban health centres, State Insurance Scheme, contributory health services, railway medical services and other industrial health organisations etc are also based on the principle of social services and social security to the communities,—general or special. While it is true that services rendered in compartments when pooled together will cover the entire community the ideal service should have been one covering each individual in the community irrespective of his or her age, sex, race, occupation or social status, as envisaged in the National Health Service in the United Kingdom or some such all pervading service. Perhaps at the present moment, neither the resources of the community nor the cultural and, socio-economic standard would permit such venture in India. But what is perhaps possible at this juneture is to find out ways and means to improve the various services already in existence and to make it as complete as possible.

Based on the above principles a joint session of the Medical Education and Scientific sub-committees in their meeting discussed some of the health services which now cover large communities, from the point of view widening their scope so as to include both preventive and curative and if possible, also promotive aspects as fully as possible. It was also decided that before further action could be taken on this subject a discussion by the members of the Indian Public Health Association during their forthcoming fourth annual session in December 1959 in a symposium held for the purpose would give them the necessary lead.

The committee further discussed that of the various agents which are effectively employed for prevention of disease vaccines, antisera, antitoxins and other biologicals are the most important. But it is well known that the production and standardisation of the material produced in this country fall far short of our requirements.

This position is neither economic nor desirable for a free country like India. In order that the Association may give a lead in the above respects the committee recommended the following subject for the symposium, to be discussed under six heads mentioned below:

INTEGRATED HEALTH CARE with special reference to:

(1) Health Centres in C.D.P. Blocks
(2) Contributory Health Services
(3) Employees State Insurance Scheme
(4) Industrial Health
(5) Railway Medical Organisation
(6) Production Quantum of drugs and biologicals in the country for preventive health work.

Preventive services form only a minor part, if at all, of most of the services mentioned above. The staffing pattern of the Health Centres in the C.D.P. Blocks also does not permit adoption of full Scale preventive measures in the community. The Railway medical organisation has however some provision of public health work, particularly in the control of malaria. In the Contributory Health Service, as adopted for the central government servants in New Delhi provides only curative medical care but covers the entire family. The Employees State Insurance Scheme mainly covers the treatment of sickness or injury of the employees and does not include the preventive work or home visiting nor covers the families of the employee. Industrial health organisations also offers only the treatment of their employees and gives certain special benefits to the workers. The Association was, however, fortunate enough to have eminent public health experts like Dr. B. C. Dasgupta, Lt.-General K. S. Master Major General S. S. Sokhey, Col. Barkat Naranin, and Dr. T. B. Patel to guide the deliberations of the different panels organised. A fairly comprehensive record or these delibrations along with the resolutions passed the members in the closing session are reported in this issue of the Journal.

S. C. SEAL
*(Convenor)*

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## HEALTH CARE IN C. D. P. BLOCK

*Chairman*—Dr. T. B. Patel.
*Opening speaker*—Dr. N. R. Ramakrishna.
*Other participants*—Col. Barkat Narain (New Delhi); Dr. J. K. Adranvala (Poona); Dr. V. H. Thakor (Nagpur); Dr. P. D. Bhave (Nagpur); Dr. B. K. Mahajan (Ahmedabad); Dr. S. R. Dasgupta (West Bengal); Dr. G. J. Ambawani (Poona).
*Other speakers*—Dr. Lopez, Dr. Ramadwar, General Chakravarti and Dr. C. R. Naidu.
*Raporteur*—Dr. V. N. Rao.

## HEALTH CARE IN COMMUNITY DEVELOPMENT BLOCKS

*By*

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*Pilot Health Project.*
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It is a privilege to be with you this morning and participate in today's discussion on "Health care in Community Development Project Blocks". Various measures have been taken in the past to assess and improve the public health administration. The recommendations made by the several committees set up for the purpose have been well documented in the form of detailed reports. A committee is at present engaged in formulating a Health Programme for the entire country for implementation in future plan periods.

In order to implement a Health Programme conditioned by the active participation of the people, one has to take into consideration the culture of the people, the education and the understanding faculty of the people, their existing health practices, prejudices, beliefs, value systems and prestige complex, favourable for the implementation of the programme, the leadership pattern and the philosophy of life.

The existing health conditions in India could be summarised by numerical expressions

under different heads. The density of population per square mile varies widely between different States, from 106 in Assam to 1015 in Kerala. On an average, a rural household has 4.91 msembers. 38.3% of the population are children.

| | | |
|---|---|---|
| Age group 0—4 | ... | 12.5% |
| Age group 5—14 | ... | 24.8% |
| | | 38.8% |

The expectation of life now is about 42 years. 16.6 % of the population (1951 census) are literates. The per capita income was Rs. 267.4 in 1952-53.

The recorded birth and death rates are 25.8 and 16.6 per mille and the infant mortality rate 115.9 per thousand live births for the decinnium 1941-50. The estimated birth and death rates, however, are 40 and 27 respectively for the same period. About 1.5 % of the population suffer from tuberculosis in India and one out of every ten of these die every year. As per data collected from house-to house survey in three endemic district in the Madras State, it is found that 3.4% of the population suffer from Leprosy in the surveyed areas and 15% of the cases amongst them are infectious. In Gandhigram area 3.7 % of the population have positive blood for Kahn Serological test indicating possible venereal infection.

Without going into great details as the evolution of the Public Health Department in various States and throughout the Country, it may be stated that the first Primary Health Centre in the Madras State came into existence in 1957 and served a population of about 80 thousand. The staffing pattern then was one Medical Officer, one Pharmacist, one male nursing orderly, one Health Inspector, two Maternity Assistants and two class IV staff (one Ayah and one Sevak). There were no sub-centres.

With the inauguration of the Community Development Project Programme, several Primary Health Centres throughout the Country have been set up in a phased manner in the First and Second Five Year Plans. These Primary Health Centres are of a set pattern. Each Primary Health Centre serves an area of 60 to 66 thousand population and has three sub-centres, apart from the main Centre. The staffing pattern of the Primary Health Centres has been—One Medical Officer, One Pharmacist, One Lady Health Visitor, four Midwives, one Sanitary Inspector and two Class IV staff. The duties of the various categories of staff have been fixed and the targets of work have also been fixed. Upto March 31st, 1959, 1400 Primary Health Centres had been formed and working throughout the Country. By 1961 it is expected that 2652 Primary Health Centres will be opened and working.

The principles embodies in the Rural Health Services may be briefly summarised as follows.

(a) The service should be of the best type and should reach every family in the area irrespective of their ability to pay;

(b) The emphasis should be equally on preventive and curative health services;

and (c) they should enlist the active participation of the people.

Considering the principle that service should be rendered at the door at all times with the existing pattern of staff, it will be well night impossible to cover the whole area effectively. The experience at Gandhigram has been that the effective area where service could be rendered satisfactorily is hardly 25 square miles. The area of service rendered by the midwives at the sub-centres is also very much restricted. Thus, in practice, the main centre serves a population of 20 to 25 thousands and the sub-centres serve a population of 5 thousands. In view of the terrific crowding at the outpatients in the dispensary at the main centre, the Medical Officer gets very little time to examine cases more thoroughly and to follow them up. There is therefore no continuity of care and no follow up. Often the patients come, again and again, for treatment for the same ailment, which is often preventable. This cuts at the very root of the practice of preventive—medicine. Much of the valuable time of the Medical Officer is taken up in the maintenance of reaords, which are at present too many. The provision of a clerk for the Primary Health Centre will certainly relieve him of this unnecessary burden. With proper screening of patients with the assistance of Health Visitor, it should be possible for the Medical Officer to carry out more detailed examination of really sick patients.

The Health Visitor while dealing with infants and children should pay adequate attention in detecting cases of nutrition deficiency diseases. This is not being properly attended to by Health Visitors in this respect. The

Health Visitor should also protect the vulnerable child population by immunisation by giving them vaccination and triple antigen at appropriate intervals.

The Sanitary Inspector has several duties to perform the more important of which are epidemic control work, improvement of vital statistics, immunisation against common communicable diseases and improvement of environmental sanitation. He is ill-equipped and has very little time to carry out improvement of environmental sanitation in such a large area allotted to him. Either the Sanitary Inspector should be given an in-service training in the techniques and know 'how' of the preparation of latrine moulds and casts, smokeless chulahs etc. or a separate Overseer should be engaged for attending to the sanitary engineering part or the work in the area. The Sanitary Inspector should also be given training in treatment of minor ailments, as by treating minor ailments the Sanitary Inspector will certainly raise his prestige in the area and thus will pave his way for smooth preventive health work.

At present, there are different agencies, both in the Revenue as well as Public Works Department dealing with various problems of environmental sanitation, including water supply. The Primary Health Centre staff are neither represented nor are consulted in the formulation of the water supply schemes. Better co-operation is what is urgently needed.

The system of registration of births and deaths varies from State to State. Much needs to be done to improve birth and death registration. In this regard the recommendation made by the Health Survey and Development Committee to utilise public Health Nurses and Midwives as registrars of births and deaths may be given a trial.

To provide service in the true sense, on the lines enumerated above, certain qualities in the staff are absolutely necessary. Briefly, the qualities expected will be:—

1) Quality of leadership in the head of the team,
2) Professional competence and principle of economy in the utilization of man power,
3) Team spirit and co-ordinated service,
4) Family as a Unit of service,
5) Health Education as the *sine qua non* of service,

and 6) Comprehensive service with continuity of care.

The success or failure of a Primary Health Centre depends largely on the Medical Officer. The Medical Officer has therefore got to be well versed in both curative health services. As envisaged by the Bhore Committee more than a decade ago, the need of the day is a "Basic Doctor". But the experience has been that Doctors who settle in villages are lured by private practice and spend most of their time in curative work. Compulsory service in the rural area for the doctors may not change the practice of dispensing in the centres, unless there is a simultaneous emotional change in the attitude of doctors towards rural service. There is need to pre-condition the mind of the medical profession, for a rural bias, a preventive medicine bias. There should also be a change in heart to tackle the source and treat the cause of disease. The Medical Officers should not be tempted to enlarge his sphere of activities on the surgical side. Minimum surgical instruments alone should be provided, and that too, diagnostic aids. Side by side an economic base and enthusiasm for work in the rural areas should be created.

There is an urgent need for intensification of Health Education Programme at Primary Health Centres. This requires re-organisation of the physical facilities, set-up and working of the centre, after intensive research.

Public Health Act has been found in practice to be ineffective in its operation. The statutory provision therefore, requires amendment to arm the Medical Officer with necessary powers. He may be even given powers to compound offences.

There are still many more questions for which answers have to be sought for. To enumerate a few:—

(a) Methods of operation of specific services like T.B., V.D. and Leprosy.
(b) Record systems and periodicals.
(c) Designs for buildings of main centre and sub-centres to suit the needs of the expanding services at Primary Health Centres.

In the light of the above observations an Action-cum-Research Programme on Primary Health Centres seems to be a necessity. By 1961, Community Developmen Blocks are to be converted into Panchayat Unions and the Block Development Officers would function as Commissioners of such Unions. Such Commissioners should have Public Health background. The relationship between the staff of the Primary Health Centre and the Commissioner requires careful definition.

Finally, there is no doubt that the Primary Health Centre has been accepted by the rural public as an effective instrument for rendering curative and preventive health services.

SUMMARY OF POINTS DISCUSSED:—

1. The modus operandi of Rural Health Services should be flexible and dynamic as to be adaptable in different regions.

2. The personality of the staff, carries much weight. Hence there is need for proper training and conditioning prior to posting of personnel in rural areas. This may seem a paradox.

3. Some suggestions for Rural Health Services to be effective and useful.

(i) The area of operation of the Primary Healh Centre should be limited to a population of 25 to 30 thousand in the present set-up.

(ii) The record system in the Primary Health Centre should be simple and it should be based on the family as Unit of service. The Doctor should be relieved of his clerical duties.

(iii) While at headquarters, the Health Visitor may assist the Doctor in the Out-patient section.

(iv) The Medical Officer should have espirit de corps for his work. He should have a public health background.

(v) The practice of therapeutic medicine should be encouraged in the minimum so that the Medical Officer can devote more time to Public Health work.

(vi) The Medical Officer should take the lead in Health Education work and assist the Health Visitor in organising pediatric and well-baby clinics.

(vii) The design of the centre should facilitate screening and natural flow of patients from entrance to exit.

(viii) Placement of public health nurses in the place of Midwives requires consideration.

(ix) Registration of births and deaths and vaccination may be entrusted to the Midwives or Public Health Nurses and their area of operation restricted to a population of 5000.

(x) The Sanitary Inspector should be a resourceful person. He may be allowed to treat minor ailments.

(xi) A mason may be provided to work under the Sanitary Inspector.

(xii) The equipment of the Sanitary Inspector should be standardised.

(xiii) Credit facilities, by way of supply of ready-made materials, should be provided to the public on subsidised basis to boost the environmental sanitation programme.

(xiv) The public health Engineer should be under the Health Department.

(xv) The Medical Officer may be given legal powers to prosecute compound offences.

(xvi) The relationship of the Medical Officer with the proposed Commissioners of Panchayat Unions requires to be carefully defined.

4. The setting up of an action-cum-research project on Primary Health Centres is considered absolutely necessary.

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## HEALTH CARE IN COMMUNITY DEVELOPMENT BLOCKS

*By*

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Health care in the Community Development areas is of an integrated pattern combining preventive and curative services with emphasis on the preventive aspect. This concept is in keeping with the recommendations of the COPP Committee set up by the Planning Commission. The World Health Organisation have also indicated that there should be integrated health care through the Primary Health Centre in the rural areas.

As envisaged above, a decision was taken at the commencement of the community Development Programme to establish one Primary Health Centre and three sub-centres to render integrated health care to the people in each Block. Unfortunately, a large number of Primary Health Centres are giving improved pattern of curative services. Unless some radical changes take place these Primary Health Centres may develop into glorified dispensaries.

ORIENTATION :—

To achieve the goal of integrated health care, it is of fundamental importance that Medical Officers in charge of the Primary Health Centres and other health staff should receive adequate orientation in the basic philosophy and concept of Community Development and rural health problems. In view of the fast expanding Community Development Programme, it is essential that each State Government should establish Orientation Training Centres in their own State in addition to taking advantage of the three Regional Orientation Training Centres at Najafgarh, Singur and Poonamalli. For this purpose, it will be necessary to develop one or two Primary Health Centres in a suitable district in each State by providing additional training staff, staff quarters and hostel accommodation. This inservice orientation should not be confused with the rural training for the internees which is being carried out at the Rural Health Units in association with the Chair of Preventive and Social Medicine of the Medical Colleges in some States.

It is expected that all the Medical Colleges will be establishing a Chair of Preventive and Social Medicine during the Third Five-Year Plan period and will also develop Rural Health Units, so that a young doctor is equipped with the new orientation as soon as he takes his University degree. It is essential that these Rural Health Units should be situated in a Community Development Block.

*Referral Services :*

A great deal has to be accomplished to develop this service. There must be a liaison between health services at the Primary Health Centre and the secondary health centre (taluk, thana or sub-divisional hospitals) and from here to the district hospital. For this purpose, it will be essential to develop diagnostic services at the referral hospital like X-ray laboratory services and in addition specialists services at the district hosopital where X-ray and diagnostic facilities are generally available. The State Health Departments will have to take early action to provide diagnostic facilities and special staff in those district hospitals where such services do not exist at present.

It will be the duty of the Medical Officer in charge of the Primary Health Centre to arrange to transport the patient to the referral hospital or district hospital as the case may be.

A number of Primary Health Centres have been provided with microscopes and have facilities for carrying out routine clinical laboratory examination of blood, sputum, urine, stool, etc. It is suggested that these facilities should be developed in every Primary Health Centres.

*Transport :*

A transport has been provided through the courtesy of the UNICEF in most of the Primary Health Centres. As such, it is essential that the Medical Officers in charge of Primary Health Centres should pay regular visits to the sub-centres and also supervise the programme for improvement of environmental sanitation immunisation, health education, etc. In view of the great utility of the transport, it is essential that adequate steps be taken for servicing and garaging of the vehicle.

*Supervision, Guidance and Co-ordination :*

For the effective development of integrated rural health services, it is essential that a single district health authority should be made responsible to supervise, guide and co-ordinate the health activities with other similar activities in the block irrespective of the fact whether they are administered by local bodies or voluntary organisations like Social Welfare Board, Kasturba Trust, etc. For the purpose of affording continuous guidance and assistance regular visits should be paid to the Primary Health Centres and sub-centres by the District Health Officer. His aim should be to analyse the work done, find out the weak point and remedy them.

In addition, he should study the quarterly progress reports from the Medical Officer-in-Charge of the Primary Health Centre and take adequate action if and when necessary, to bring the functions of the centres to expected standards.

Barring a few States the pattern of supervision from the district level varies from State

to State. In some States the District Medical Officer (Civil Surgeon) is responsible for the curative health services and the District Health Officer for the preventive health service. In other places, both the District Medical Officer and the District Health Officer are expected to visit jointly the Primary Health Centre and sub-centres. This dual control has not helped in improving the efficiency of the service. It is not fully appreciated that the District Medical Officer (Civil Surgeon) is a very busy man with his clinical work, hospital administration and private practice; as such he has very little time left to tour the rural areas. The District Health Officer is primarily a touring officer and has no such commitments as the District Medical Officer and can devote most of his time in touring. In any case, it is time that a decision is taken that a single authority from the district level will perform the duties of supervision, guidance and co-ordination and, as such, it is essential that the persons so chosen should not be burdened with hospital administration, clinical work or private practice, and that this person should have public health experience and qualifications. Further, all the health staff including the doctor should be under the administrative control of one authority.

*Status of District Health Officers:*

There are a large number of vacancies in the Public Health Department in the various States. To attract well qualified candidates for preventive work, it is absolutely necessary that the status of the District Health Officer should be at par with that of the District Medical Officer (Civil Surgeon) and he should be given an additional allowance in lieu of private practice. It may seem strange, but it is only in a very few places that permanent residential quarters have been provided by the State Governments for the District Health Officers while every District Medical Officer (Civil Surgeon) has a permanent residence. Permanent residential accommodation should be provided.

For effective development of integrated health care, it will be necessary to combine curative and preventive health services both at the State and the District levels and have a single cadre for Medical Officers in the State—after all there is the 'basic doctor' who can be trained in different fields of specialisation of health services according to the aptitudes he shows and can be employed accordingly. This pattern is developing successfully in West Bengal.

*Pay and Allowances:*

The pay and allowances of docctors and other health workers vary within each State according to whether the doctor is in charge of a government dispensary, Primary Health Centre, or employed in Malaria, B.C.G., Leprosy, etc. Similarly, there is lack of uniformity in the pay scales of the Sanitary/Health Inspectors, Health Visitors and Midwives. It is suggested that there should be uniformity in the scale of pay and allowances for all he Medical Officers and other health workers. In addition, the Medical Officers posted to the rural area should be given an adequate Rural Health and Non-practice Allowance. The staff employed in the heallth services in the C.D. areas should be drawn from the State cadre so that there is security of tenure.

*Residential Accommodation:*

Of all the extension staff employed in the C. D. Blocks, medical and public health staff are the only one that are required all the 24 hours and as such it is essential that high priority should be given for the provision of rent-free residential accommodation. This is a 'must' for attracting doctors and health staff to the rural areas.

*Democratic Decentralization:*

During 1959, an important development of very great significance took place. This is the programme of 'Democratic Decentralization' whereby people's organisations are being developed at the village, block and the district levels, i.e., Panchayats, Block Samithis and Zilla Parishads. This development has given a new orientation to the programme and as a result of this a good deal of health programme will have to be developed through these organisations. This naturally adds greatly to the responsibility of the Health Department because they have to give greater guidance, supervision and help in the training of the personnel of these organisations for the effective development of the health programme. This will gradually result in people's organisations taking over their rightful responsibility for participating in the activities for the promotion of their health and prevention of diseases.

*Training:*

Shortage of women personnel like Public Health Nurses/Lady Health Vistors and

Auxiliary Nurse/Midwives/Midwives still continues in spite of the fact that some of the exitsing training facilities for these workers have been augmented and some additional training centres have been developed. With regard to the training of Auxiliary Nurse Midwives some of the newly established training centres in different States are not able to recruit full quota of the training potential because girls with minimum basic qualifications, as required by the Examination Board, are not available. Another factor which has acted as a deterrent to the recruitment of girls is lack of adequae residential accommodation. In most of the training centres, there is overcrowding and lack of adequate ventilation and sanitary facilities. It is felt that if adequate hostel facilities are provided a large number of girls would be forthcoming. It means that hundred per cent Central assistance should be made available for construction of hostel accommodation and quarters for the teaching staff.

It may be emphasised that training of Auxiliary Nurse Midwives should be carried out at the district hospitals wherever adequate facilities for training are available, so that girls could be recruited from the same district and after training could be posted back to that district. To give the training a real rural bias it would be necessary to maintain a liaison with one of the Primary Health Centres in the district, so that girls after training could be posted to the Primary Health Centres and sub-centres for rural field experience particularly domiciliary midwifery.

*Discussion*

The Chairman called upon the members to open the discussion.

Professor Adranvala of the B. J. Medical College, Poona: disagreed with the remarks of Dr. N. R. Ramakrishna on the minimum provision of surgical instruments and diagnostic aids to Primary Health Centres. "He believed that the Primary Health Centre should provide the very best medical care within its resources, and if a medical officer was competent, drugs and instruments which the medical officer could put to good use, should be provided. Only by offering good medical care could the Primary Health Centre staff win the trust of the villagers. For public health work it is most important to gain the confidence of the villagers. In the last analysis the success of public Health work will depend upon changing certain habits and customs of the people and in order to change habits one has to possess some prestige and occupy a position of trust. Good medical care was logically the best way of obtaining prestige as a health educator.

Dr. P. D. Bhave, Deputy Director, Public Health from Nagpur, emphasised the need for greater publicity of the Public Health Schemes. He stated that the majority of the public were ignorant of health schemes. The same was true with private practitioners. For a successful implementation of health schemes he felt, it is necessary to take the masses into confidence. The contact with masses could be effectively established by contacting local leaders, social workers, doctors and other leading citizens. The development work of the department was being worked on two important principles, viz. peoples participation and meeting felt needs of the people. The felt needs should be the real felt needs of the people. In the existing pattern of Primary Health Centres the area served is too big. On an average, between 60-100 villages are to be served by the Centre. In some cases the villages are compact and easily accessible. In others the villagers are so scattered and the communications are so bad that it is hard to reach them even, particularly in rainy season. There is therefore great urgency for reducing the area served either by multiplying the centres so as to cover smaller area and population or by increasing the staff substantially. Due to pressure of work the single Medical Officer posted at each centre is unable to cope up with medical work, public health work, medico-legal work etc. The posting of a second Medical Officer at each of the primary health centres has hence become an immediate necessity. Dr. Bhave agreed with Professor Adranvala that the standard and efficiency of medical work should be of a high order if the centre has to gain the confidence of the people and also gain popularity. In order to keep the staff fit for the strenuous activities of the cenre, they should be given leave regularly as is done in the case of industrial workers. This will mean provision of leave reserve staff. There is also an urgent need for provision of accommodation for the staff with proper sanitary facilities. The sanitary facilities are lacking even in schools where school children are trained. The dictum "practice what you you preach" needs to be given effect to at the Primary Health Centre level. Then and then only will the primary health centre be a success as an instrument of service to the people.

Dr. V. H. Thakor of Nagpur while commenting on the remarks made by previous speakers mentioned that a generalisation from individual instances may not be correct and there is always a danger that a Medical Officer, who is very popular with his curative art may have no inclination or time for preventive work. It is probable that this is due to a complete lack of public health orientation in the case of most of our medical officers. A Medical Officer must be trained to use his proficiency in the curative science to build up prestige not only for himself but for his team of public health workers. He also mentioned that the Sanitarians will be able to achieve precious little on their own in the field of environmental sanitation and that this work should be entirely handed over to Public Health Engineers and the Sanitarians should only function as Health Educators in regard to provision of such sanitary facilities as latrines, smokeless chullas etc. and create a demand for the Public Health Engineers to construct.

Dr. G. J. Ambwani of Poona stated that the word "Integrated Health Services" was a misnomer in as much as the services under such a term have been included by W.H.O. Expert Committee under Medical Care. The Expert Committee defined "medical care" as follows: "Medical care is a programme of services that should make available to individual and thereby to the community, all facilities of medical and allied sciences, necessary to promote and maintain health of mind and body. This programme should take into account the physical, social and family environments with a view to the prevention of disease, the restoration of health and the alleviation of disability". Hence the main aim should be to co-ordinate curative and preventive services and to provide a comprehensive servive to the rural population. While there is substantial expansion in preventive health services, the curative health services have still remained at the level of "Outpatient" treatment. Integrated services imply equitable expansion of both—preventive and curative health services. In providing the integrated health services the emphasis should be not only on the individual but also on the family. Service rendered effictively will by itself create a climate for better co-operation both in regard to taking advantage of the services provided, and also in eliciting financial assistance and will in itself be a sort of health education. While the maternal services are receiving greater and greater attention, the child health services, which form part of the total Maternity and Child Health Services, are not receiving equal emphasis. There is therefore urgent need for expansion of pediatric services.

Dr. B. K. Mahajan of Ahmedabad discussed the problems faced in the working of Primary Health Centres as they are constituted at present. He however felt that in Bombay State with better co-operation from Block Development Officers it has been possible to work the primary health centres more satisfactorily. Some of the problems faced by the workers in primary health centres were summarised by him as follows:

(1) When Medical Officer I/c of a Primary Health Centre is not allowed private practice, he is called for home visits, free of charge, for minor ailments which is a constant source of nuisance and virtually amounts to harassment. Some rationalisation on the type of free service to be rendered by the Medical Officer is necessary.

(2) Attending to night calls by women staff like Health Visitor or Midwife may create problems if they are not accompanied by reliable attendants.

(3) Attending to Medico-legal work in addition to his other duties by a single Medical Officer I/c of Primary Health Centre is a terrific strain on the Medical Officer and certainly interferes with his efficiency of work.

(4) The inter-personal relationship caused by absorption of local body staff having different pay scales and service conditions into the Govt. managed primary health centres, often creates serious and knotty problems.

(5) Insufficient orientation training may leave the centres with ill-equipped and frustrated staff.

(6) In areas inhabited by Adivasis, the problem of finding accommodation for the Health Visitor and Midwife and making them stay with them assumes serious problems.

(7) School Health Service is not receiving adequate attention as it should.

(8) Apathy, time old habits and customs are some of the major obstacles in the rapid progress and popularity of the primary health centres. Even now, often people come to the centre only when they are seriously ill when other methods of treatment have failed.

Dr. S. R. Das Gupta of West Bengal who spoke next stated that usually agriculture and other schemes receive higher priority over health schemes and there is unnecessary in-

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Dr. S. R. Das Gupta of West Bengal who spoke next stated that usually agriculture and other schemes receive higher priority over health schemes and there is unnecessary in-

terference by the Block Development Officers in chalking out health schemes. With the taking over public health activities from the District Local Boards in West Bengal epidemic control has improved. But the Municipalities are still understaffed and poorly paid. The school health work at the primary health centres is still not fully developed. There is an urgent need for providing sanitary facilities in schools. The teaching of hygiene and elementary physiology to the elementary classes should be made compulsory. In order to have a voice in framing the policies of the schools the Medical Officer should be made a member of the School Committee. For making M.C.H. work a success, the staff should work in close co-operation with Gram Sevikas. The co-operation of Gram Panchayats should be enlisted in improving collection of vital statistics. A basic doctor with balanced views is the need of the day for manning the primary health centres.

Dr. C. R. Naidu mentioned that integrated health service is in vogue in different States in India, but the pattern of its operation is different. Instead of two services integrated, he posed the question, why not have one service only where both public health and medical staff at the supervisory level are suitably orientated. There is an urgent need for improving the status of the District Health Officer by raising his salary substantially, in any case above that of the primary health centre Medical Officer. In demonstration districts at least, there should be provision for rendering good medical and health services. But, often the Medical Officer has enthusiasm for curative work and not health wor. The primary health centres need to be strengthened immediately with an additional medical officer. The women staff like Health Visitors, Midwives etc. are reluctant to go to villages due to non-availability of suitable accommodation. Residential quarters should be provided even in sub-centres to obviate this difficulty. The training of Sanitary Inspectors and other staff should be done by the Health Department and not by the Social and Preventive Medicine department as they are still in their formative stage. As the Sanitary Inspectors are already burdened with such important and heavy duties as control of communicable diseases, mass immunisation, checking of vital statistics registration and enforcement of food adulteration act, etc. they should not be saddled with environmental sanitation work. It is the job of Sanitary Engineers. A mason will be more useful in improving environmental sanitation provided he is suitably guided. Sanitary Inspectors are required to treat minor ailments. This is actually the job of Health Visitors. On the other hand the Health Visitor should not be burdened with vital statistics checking work.

Gen. Chakravarti the Director of Health Services, West Bengal who spoke next gave a brief account of the recent organisation of curative and preventive health services in West Bengal State. He stated that there was complete integration of the two services at the District level. He, however, threw a warning that the present popular trend of democratic decentralisation at the block level should be carefully reviewed as it might affect the health services. He said, "this idea of democratic decentralisation is very fascinating, but I am afraid that it is rather impractical, at this stage, since the Block Development Officer would not have much idea of positive health. It is very nice to say that people should look after their own health. But, without adequate education this will not be possible". He laid emphasis on the immediate need for health education of the masses on a large scale. The conditions in a primary health centre should be such that a Medical Officer will be happy to go there. This is not so at present because of lack of accommodation, poor emoluments, want of education facilities for children etc. There is also need for giving opportunities for higher studies in any particular discipline wherever a Medical Officer shows aptitude towards the same.

Dr. Lopez de Nava emphasised the need for orientation at all levels, starting from the young doctor at the primary health centre to the District Health Officer or even higher. He also stressed the need for setting up small targets which could be achieved in comparatively short period of time. The integration of health services, he stated, need not only be an administrative integration, but also a real integration in outlook—what is now required most is a wider outlook.

Dr. Ramadwar of Nagpur Medical College, stated that the comprehensive medical care programme should be utilised for integrated care. He felt that the existing 3 months' orientation course was not adequate. Reorientation will have to be taken up soon.

Dr. T. B. Patel, Chairman, in winding up the proceedings mentioned that the subject was well covered and well discussed by all the speakers. In this connection, he recalled

the statement made by the Minister for Health at the time of the inauguration of the Conference and said that although there is a widespread feeling that existing staff of the Primary Health Centre, particularly the Medical Officer, is inadequate to cover the vast area and population coming under the existing Primary Health Centres, it has to be remembered that the pattern has been worked out after careful consideration of availability of staff and resources. One cannot get away from the fact that it will be unfair and inequitus to leave large sections of population without any service while a small section of the population receives all the benefits. Some sort of a via-media-policy has got to be adopted and that is what has been done in the existing Primary Health Centres. There is no doubt that the centres need to be strengthened by additional staff. The provision of an additional Medical Officer at each centre has become imperative. This is being done in Bombay State whenever more qualified personnel are available. The pattern of work has been different in different States, for various reasons. I am happy to note that in Bombay State we are having very good cooperation from the Block Development Officers. This has resulted in rapid execution of construction programme. This happy state of affairs is no doubt the result of a clear cut directive from higher levels. The Development Commissioner of the State has been showing keen interest in Public Health activities. In regard to the integration of the services so far as Bombay State is concerned, this integration has been achieved at the peripheral level and also to some extent at the District level. We have in this State all the Primary Health Centres functioning under the supervision and guidance of the District Health Officer who being a touring officer has been found to be in a better position to perform this function efficiently. In fact, I believe that if Primary Health Centres have to function properly, it is desirable that the officer guiding and supervising their work should have a Public Health approach and preventive outlook. In this connection, it is felt that each State will have to work out its own solution to achieve the above goal and one feels that the rigidity of the pattern about the set-up need not be insisted upon at this stage—of development. I am sure you will all agree with me that we are developing fast in the right direction. Let us not get lost in details. The smaller details and difficulties can be attended to in course of time and will get smoothened out with the gaining of more experience.

## CONTRIBUTORY HEALTH SCHEMES.

*Chairman*—Dr. B. C. Das Gupta.
*Opening speaker*—Dr. H. D. Mukherji and other participants.

## CHAIRMAN'S OPENING REMARKS

COLLEAGUES AND FRIENDS

I have been asked to take the chair in this morning session of the Symposium on "Integrated Health Care" as related to the "Contributory Health Scheme" and on the "Employees State Insurence Scheme" in operation in the country to day. I must confess at the very outset that my acquaistance and experienc with the "Contributory Health Scheme" is extremly meagre. Except. some of the broad principles and features as indicated in

the name I am not familiar with the details of its working. In the first place the scheme is in operation in New Delhi only and it covers a selected group of population, the central Government servants located there,.. The scheme contemplates giving medical relief only and that to a selected group of people. To my mind in its inception or even after its operation for the last few years no attempt has hitherto been made, at least not to our knowledge, to asses in what respects as a results of the medical care given to the selected group there has been a change in the morbidity rate of the group as compared to the general population under the state health services, nor has its scope been ascertained as to whether integration of the curative service with preventive could be carried out to render the service more effective.

We fervently hoped Dr, Tewari in charge of the scheme would be present and give us some details for its work, progress and scope of expansion. Unfortunately neither he nor any of his representatives has come who could have enlightened us on these details. I have therefore asked Dr. Mukherjee who is expected to open the discussion on the Employee's State Insurence Scheme to give some idea of the working of the contributory Health Service scheme as far as he is aware of Being closely associated with mesaures of social security based on prepayment he would be able to give us some idea of devising integrated health care under these schemes. Having had the previlege of initiating the Employees State Insurence Scheme in West Bengal I may be permitted to say that this scheme is the only one so far in the country which, even though it covers again a specific group of people, the factory workers, has in it the seed of general health insurance on a prepayment basis and in the services rendered there is a fair scope of integrated comprehensive health care.

I shall not anticipate Dr. Mukherjee who being the administrative Medical Officer of the Scheme in West Bengal is well posted with the latest details of its work, achievements and the scope of expansion into the various avenues of the preventive and social field, will give us his views and experience.

## (i) EMPLOYEES' STATE INSURANCE SCHEME

By Dr. H. D. MUKERJI
Calcutta

Of all the acts and schemes that have been introduced after independence, E.S.I. Act of 1948 is one of those acts which have come under public attention much more than others. Perhaps because it is considered to be the first step towards generalised social security measures or perhaps because it is meant for those groups of people who are more vociferous or better organised. They see that the E.S.I. Act does not lose the interest of the public.

To define the act, I can do no better than to quate the very preample of the act proper. It is an act to provide for certain benefits to employee's in case of sickness, maternity and employment injury and to make provision for certain other matters in relation thereto. In other words, the act visualixes a comprehensive social security measure i.e., a scheme to provide security of income against involuntary loss of earing capacity of the wage-earners.

During the later part of the last war the then Govt. of India felt the need for creating a sense of job satisfaction among the factory workers as a means to better productivity. So in 1943, they founded a committee under the Chairmanship of Prof. Adherkar to examine the possibilities of providing an enactment for the social security of the industrial workers. The outcome of the recommendations of this committee is the present E.S.I. Act of 1948.

But unfortunately, from the time the act

was thought of to the time that it realy saw the light of the day many years passed. India in the mean time became independent and with independence came a complete change in the administrative set up in the country. The great war also brought in a far reaching change in the concept of the medical services. Insteal of two water tight compartments of preventive and curative medicines, integrated medical services became the order of the day. The act which was considered quite comprehensive in 1944, was no longer so in 1950 when it was put into operation. Therefore, several loopwholes and defects remained in the act proper.

However, before discussing the short-coming of the act, it is necessary to give a short description of the Act proper.

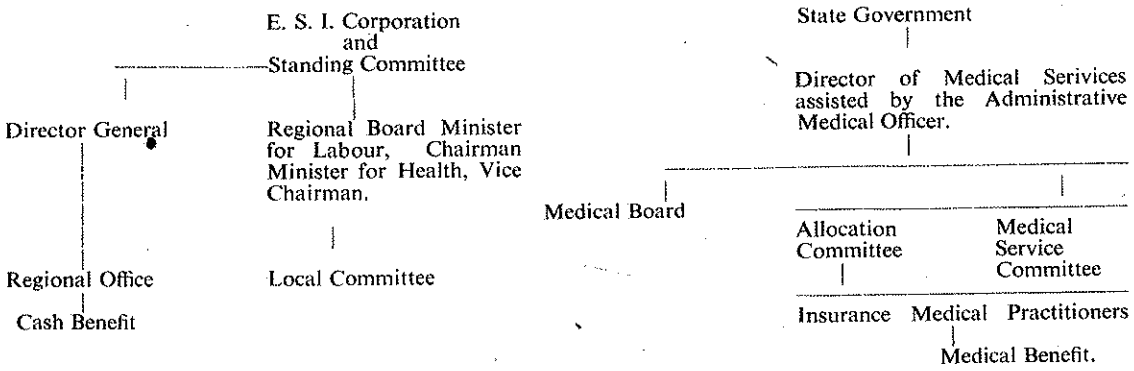
The E.S.I. Act may be divided into three sections: Administration, Finance and Benefits.

Administration:—The administration of the act is rather complicated and three organisations namely the Central Govt., the State Govt. and the E.S.I. Corporation are responsible for administration of different sections of the act. For overall administration a Semi-Govt. Corporate body, the E.S.I. Corporation has been formed under the authority of Section 3 of the E.S.I. Act. It consists of 39 members including 5 members each of the employers and employees. It also includes representatives of the Central Govt., State Govts., Lok Sabha and medical profession with the Minister of Labour in the Central Govt. an ex-officio Chairman. Though the the E.S.I. Corporation is the administrative authority, the real administration is carried out by a much smaller body called the Standing Committee of the E.S.I. Corporation. Subject to general superintendent and control of the Corporation, the Standing Committee administers the affairs of the Corporation and may exercise any official purpose and can perform any of the functions of the Corporation.

Central Govt:—Central Govt. has no direct responsibility in the administration of the act but the Labour Deptt. of the Govt. of India is the overall controlling department and is responsible to the Parliament on behalf of the Corporation. State Govt:—The State Govts. are responsible for the administration of medical benefits in their respective States.

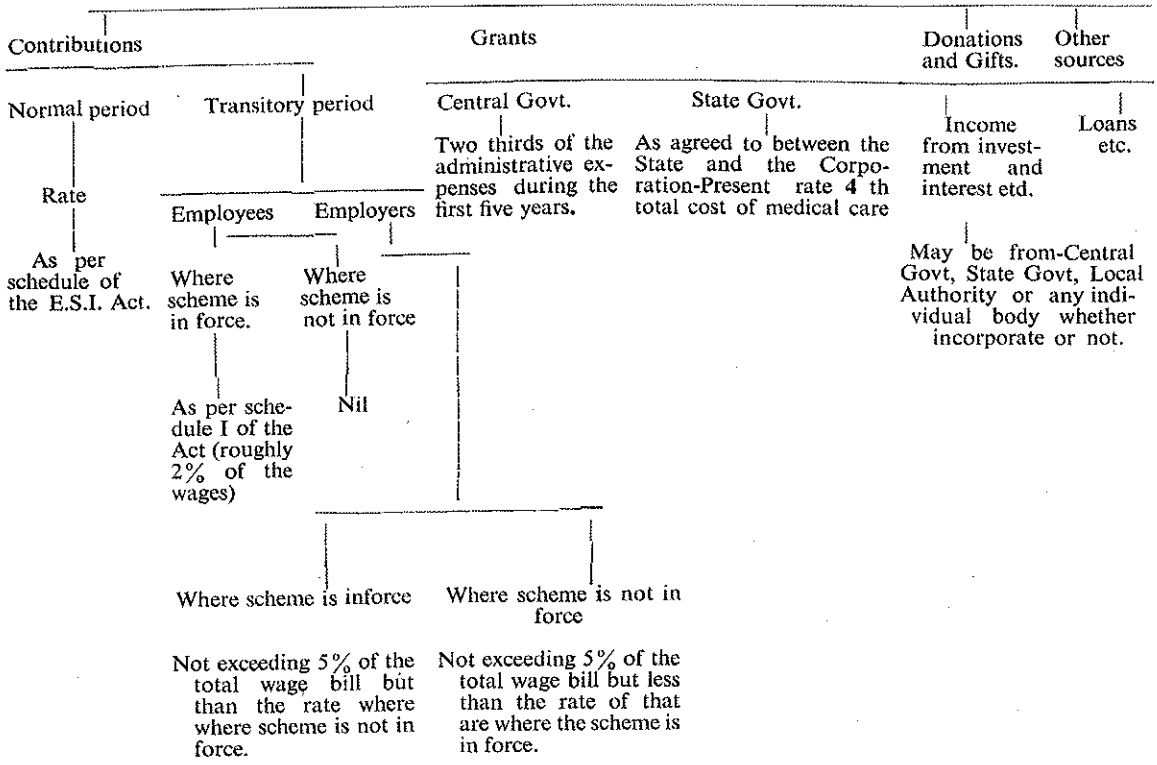
The whole administrative set-up can be conveniently resproduced in a form as below:—

ADMINISTRATIVE MACHINERY



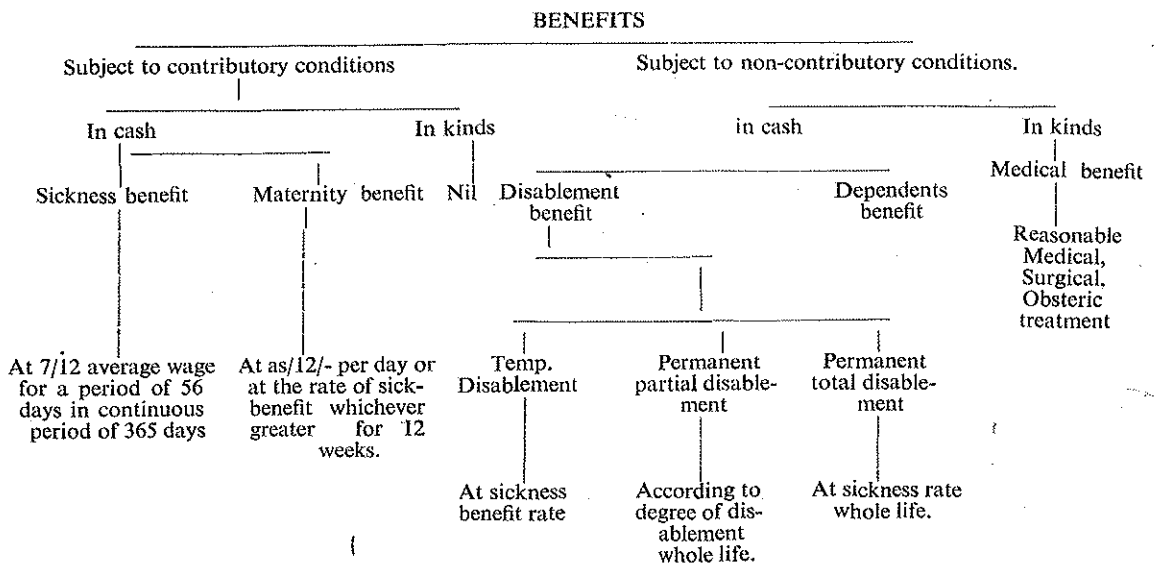

Finance : The finance of the scheme is mainly derived from the contribution paid by the employer and employees. For this purpose the employee's have been grouped into 8 categories on the basis of their daily wages from below Rs. 1/- to Rs. 8/- and above. And the total contribution works out roughly 2% on their wages. The employee's contributions on the other hand varies from ¾% to 5% of their total wage bill depending upon areas where the scheme is in operation or not. Cenrtal Govt. contributes 2/3 of the administrative cost of the Corporation for the first 10 years. The State Govt. at present bears ¼ of the total cost of the medical benefit in the State. The Corporation has also been authorised to receive the contributions and donations from both Govt. and non-Govt. bodies. The different sources from which the E.S.I. Corporation fund is derived may be reproduced in a tabular form as below:—

FINANCING OF THE EMPLOYEES' STATE INSURANCE SCHEME




**Benefits:** The benefits and the act may be conveniently expressed in a tabular form as follows :—

From the Chart above it may be seen that the benefits may be grouped into two major heads:



(1) Cash benefit
(2) Medical benefit

The cash benefit is administered by the E.S.I. Corporation directly and cinsists of (i) Sickness benefit (ii) Maternity benefit (iii) Disablement benefit and (iv) Dependant's benefit. In case of death of the insured person arising out of employment injuries. All these benefits are in the form of periodical payment in cash and is equal to 7/12 of daily wages of the insured persons.

Medical Benefit on the other hand is the responsibility of the State Govt. In the present form it consists of :

(1) General medical services which shall include treatment at the clinic of an Insurance Medical Practitioner or other institution and shall consist of :—

(i) all tratment other than treatment involving the application of special skill or experience ;
(ii) such preventive tratment as vaccination and inoculation ;
(iii) ante-natal and post—natal treatment of insured women ;
(iv) the free provision of all drugs and dressings that may be considered necessary according to the provisions rule 18 ;
(v) provision of certificates, free of cost in respect of sickness, maternity, employment injury and death, required under the Employee's State Insurance (General) Regulations, 1950, or as may be required by the Corporation or the Director of Health Services, West Bengal ; and
(vi) domiciliary visits, where necessary.

(2) Maternity medical services for insured women in such manner as the State Government may specify from time to time.

(3) In-patient's treatment in the general ward of a hispital which is established or specified for the purpose by the State Govern- if accommodation is available therin, and if such treatment is considered necessary by the Insurance Medical Practitioner. The treatment provided for the partient shall include free maintenance and such specialist and general treatment including treatment confinement, as may be available at the hospital to which the iasdred person is admitted, as well as those desirable and for which fecilities exist at the hospital or at an associated laboratory.

(4) Facilities for the removal, free of charge, of insured persons to hospital, where necessary by ambulance or otherwise.

In the earlier part of this lecture I have mentioned that the Act has several defects and cannot, in the modern concept of medical serices, be considered as comprehensive.

The first defect in the act is that it does not provide for all the social security measures. Two important aspects of social security have been left out of its purview namely (i) to provide for the period of involuntary unemployment and (ii) for infirmity due to old age.

I think these two provisions are the most important as par as sense of security in the mind of the wage earners is concerned and without them no scheme of Social Security can be considered adequate and comprehensive.

The other important defects in the Act is that the medical benefit provided under this Act is only curative. The preventive aspect of medicine has been completely neglected. No provision has been made for propagation of positive health nor health education. The industrial service which is an essential part in the maintenance of positive health amongst the industrial workers has not been included in the Act.

## (ii) CONTRIBUTORY HEALTH SCHEME

BY DR. H. D. MUKHERJI

CHAIRMAN SIR AND MY COLLEAGUES,

At the last moment I was asked by the Chairman to open the discussion of "Contributory Health Scheme" of the Central Government. I not being a Central Government servant myself and at the same time not very conversant with this subject, was at first hesitant to come forward. But I am so much indebted to the Chairman that his very wish, is a command to me and I could not refuse it.

One of the conditions of Government of India Service is provision of medical treatment to its servants. Prior to introduction of this scheme in Delhi, the Central Government Servants used to get re-imbursement of their medical expenses on different scales depending

upon their pay and status as a Government Servant. Each grade of Government servants has authorised medical attendants and the scale of re-imbursement also varies with the grade. Thus grade I Servants' authorised Medical Attendant is any of the Presidency Surgeons whereas other grade officers have Assistant Surgeons and Private Medical Practitioners as their authorised medical attendant. The Grade I Officers are authorised re-imbursement to the extent of Rs. 16/- for the first consultation and Rs. 10/- for subsequent consultations. Other grades get lower re-imbursement according to the class of service they belong. As regards medicine there is such authorised scale too.

A few years back, Government of India introduced a scheme called 'The Contributory Health Scheme for the Central Government Servants". Under this scheme Central Government Servants stationed in Delhi and New Delhi are entitled to free medical service including medicines and hospitalisation. Services included in this Scheme are:

1. General Medical Care at the specifically established dispensary.
2. Domiciliary attendance in cases of seriou illness.
3. Hospitalisation in reserved beds of the hospitals either in cabins, paying beds and free beds depending upon the status of the Government Servant.
4. Free supply of medicines from the dispensaries on the prescriptions of the Medical Officers of the Scheme.
5. Specialists examination and advice when requisitioned by the Medical Officers.
6. Diagnostic Services from specified hospital when recommended.
7. Preventive inoculation at the dispensary.

*Medical Officers or Specialists*

The Scheme has established special cadre of Medical Service with general duty of Medical Officers, Specialists, Compounders and other staff. They are employed by the Scheme and paid by the Scheme.

*Beneficiaries:*

The following persons are entitled to get benefit from this service:

(1) Government Servants of all cadres posted in Delhi and New Delhi and some adjoining areas.
(2) Minor and dependent children of such Government Servants.
(3) Dependent parents of such Government Servants.
(4) Minor dependent brothers.

*Finance:*

The Scheme is financed by:

(1) Contribution from the Government Servants stationed in Delhi, New Delhi and and ajoining areas.

The rate of contribution depends on the pay scale of the servant and is deducted monthly from the pay directly. The amount varies from -/8/- as a month to Rs. 12/- a month.

The Scheme is no doubt an improvement over the so-called medical facilities given through re-imbursement of medical expenses. All Government Servants in the operation area receive almost the same standard of medical service and very little distinction is made between the different grades of Government Servants except perhaps in the hospital accomodation which is justifiable and understandable.

But the greatest drawback of the Scheme in spite of full facilities, is that no provision has been made for preventive medicine nor for health education. With little more imagination these dispensaries instead of only curative centres, could be converted into Health Centres with positive health as the primary intention.

Even then, the Scheme is located in a very small area, whereas Central Government Servants are distributed all throughout the country.

I hope, Sir, I have just given a bare skeleton of the Scheme. There are many high ranking Central Government Servants in this meeting. They will certainly be able to enlighten us better on this subject.

## INDUSTRIAL HEALTH

*Chairman*—Lt. General K. S. Master.
*Opening Speaker*—Col. A. N. Roy.
*Other participants*—Dr. A. L. Saha, Dr. C. R. Naidu, Dr. S. K. Chatterjee, Dr. T. R. Bhaskaran, Dr. Rawal and Dr. P. A. Menon.

# HEALTH PROBLEMS IN ORDNANCE FACTORIES

Col. A. N. ROY
*Chief Medical Officer, Ordnance Factories,*
Government of India

I feel deeply honoured for the privilege that has been given to me of being the Opening Speaker of the Panel on Industrial Health, by the Scientific Sub-Committee of the Indian Public Health Association.

I approach the honour with some trepidation. I recollect another occasion, just over two decades ago, when I submittetd my first Report as Anti-Malaria Officer of amilitary station called WANA in the North-Western Frontier of undivided India, to my first Commanding Officer, Lieut. Colonel K. S. MASTER, who gave it a very searching scrutiny before passing it on to higher authorities. I had little experience of Anti-Malaria work then, except what I had learnt from my able Commanding Officer whose guidance earned me a commendation inspite of my inexperience. I notice now that LIEUT. GENERAL K. S.MASTER is in the Chair today. I would, therefore, like to point out, at the outset, that my practical experience in the field of Industrial Health also is, almost entirely, limited to the Ordance & Clothing Factories under the Government and hope that my remarks that follow will bear the scrutiny of the great Master.

While it is true that the Ordinance Factories are of various types, ranging from heavy industry to light, producing and handling ferrous and non-ferrous metals, chemicals, precision machinery and tools, wood, textiles, leather, etc. the working and living conditions of the workers are, in certain respects, different from those of workers in similar factories under private management. My remarks and observations that follow may not, necessarily, be applicable, 'in toto', to workers in similar industries in privately owned factories, and, possibly, even in semi-Government undertakings.

## (a) Historical Background :

The Indian Ordance Factories Organization has grown from modest beginnings. The first factory to be established was the Gun Carriage Agency at Cossipore, near Calcutta, which started as a Government owned factory in 1801. Since then factories have been started at other stations in India with the main function of manufacturing equipment and stores for the use of the Defence Forces of the country.

Care of the industrial worker in these factories is, comparatively, a recent concept and came into prominence during World War II when it became necessary to keep them working efficiently at maximum capacity and, consequently, to conserve essential man-power and to prevent loss of trained and skilled hands due to ill-health or injury, comprehensive and efficient medical cover—both preventive and therapeutic—became essential. It became necessary to introduce preventive measures against industrial diseases and accidents and to introduce a number of 'ad hoc' welfare measures which would not have been considered under normal peace-time conditions. After the advent of Independence, the average industrial worker in the Ordnance Factories has, I dare say, gained more in the way of welfare benefits than his counterpart working in non-Government Industrial undertakings in the country. In a State wedded to the socialistic pattern of society, State-owned industrial undertakings have to be ideal and the State has to be a 'Model Employer'. Much progress has been achieved in this direction and the worker has benefitted without much effort or agitation, as must happen under progressive management, where due consideration is given to the human being. Except for some very big private enterprises in India which may be offering similar advantages to their workers in the way of monetary or welfare benefits, the benefits enjoyed by the Ordance Factory workers are, definitely, not below any reasonable standards one would desire in a country developed to the extent India is at present. For example, only a decade back the worker who suffered from a prolonged illness like Tuberculosis was doomed to an early grave. He lost his job at once and, if he was not well off monetarily, he died of the illness, much before his time, due to lack of treatment and nourishment. Today a humane and rational attitude is being adopted by Government. The workers of the Ordnance Factories are not debarred from re-assuming their jobs if fit for it at the end of treatment, and a special effort is made to find suitable work for them if they cannot re-assume their original duties. More

than ever before, the worker is treated as the most important link in the industrial set up, and the profit motive is only secondary or even last. ...

Machines are built by man and their working is predictable. The unpredictable factor in any industrial set-up is the man working there and the way he reacts to various types of environments in which he finds himself and has to work. It is only through observations over a period of years that one can hope to understand individual and group reactions, and through the application of the knowledge so gained one may hope to improve the physical health and mental make-up of the factory workers.

(b) **Evolution of the Factories' Act 1948 :** . .

India, which is, predominantly, an agricultural country, is, by stages (through the 5-Year Plans), passing through an Industrial Revolutions of the 19th century in Western countries, with the advantage that the Factories Act, places the industrial worker in India in a privileged position as compared with other types of workers. Besides ensuring the health and safety of the worker in the factory, the Act safeguards against gross exploitation of the workers by the employer (which occurred in the 19th century in the Western Countries) by insisting on the provision of certain basic amenities. Out of the observations of the sufferings and miseries of the worker during the industrial revolution arose the Health and Morals of Apprentices Act of 1802 in England, a fore-runner of the present legislation there, on the model of which the Indian Act has been framed. Thus, as a result of the social experiences of many countries, a peaceful and gradual change in Indian society through Industrial development, is in progress.

Ordnance Factories, being Government-owned, conform to the letter as well as the spirit of the law and, consequently, the factory workers enjoy, in general, greater amenities than their fellow-workers in privately-owned factories in the same locality. Housing colonies known as 'Factory Estates', recreational facilities, leave and transport concessions and, above all, medical facilities as good as those provided for the Defence Forces of the country, have already been provided by a gradual process of evolution, as a result of which there has been no bitterness resulting from a 'demand', an 'ultimatum', a 'strike' and a 'settlement' after severe conflict. One of the main remedies of the industrial disputes and discontentment, we have found, is to make the worker feel that there is conscious effort on the part of the employer (Government in our case) to safeguard his health and well-being and the health and welfare of his family.

Provision of a medical and health service for an industrial undertaking should not, therefore, be looked upon as a burden or an unnecessary addition to production costs but should be accepted as an insurance against fall in production and lack of efficiency due to sickness, ill-health and epidemics among workers, and their families, and general apathy or pre-occupation resulting from these.

(c) **Health Problems :**

It has been noticed that workers residing outside Factory 'Estates' have higher sickness rates compared to those living in them, although the general pattern of sickness usually follows that existing in the population of the area in which the factory is located.

Some of the workers and their families in certain backward areas of the country are resistant to preventive vaccination or inoculation because of apathy or superstitions ingrained in them. This attitude, not infrequently, results in a dilemma for the Medical Officer and the administration, specially during epidemics, when children are hidden away from vaccinators/inoculators, and small-jox cases are hidden away for fear of their being forcibly removed to Infectious Diseases Hospitals. Vaccinating against small-pox and inoculation against typhoid of the worker while at work in his Section in the Factory, is now being resorted to with considerable success. However, workers' families, usually, do not come forward for protective vaccination/inoculation unless there is and, sometimes, in spite of intensive propaganda. The only solution has been the laborious 'house-to-house' drive; and even then point blank refusals or surptitious escapes are, sometimes, encountered because of the fear of the injection needle or the supposed anger of the guardian spirit of the disease. It has been found, however, that the personality and tact of the Medical Officer Incharge of these duties plays a decisive role in achieving satisfactory results, and a reasonably high rate of protection of the community by vaccination and inoculation of all children attending Factory Schools run by Government is achieved. Slow process of education, without force but loaded with conviction, has been more eoffec-

tive than a sudden drive, after a few cases have already occurred in a locality.

(d) **Child Mortality :**

Two of the greatest killers of the workers' children in the age group 0-5 years are Gastro-Enteritis and Broncho-Pneumonia. The nutritional state of the average child of the working class family is often unsatisfactory in these days of high and steadily rising food prices; except in the Factory Estates, living condi tions in nearby bustees and shacks are most unsatisfactory. A rough survey showed that 90% of deaths among affected children occurred within 24 to 48 hours of admission to hospital. Most children were found to have been ill at home received some sort of treatment from private practitioners of all types of medicine or quacks. Hospital admission was considered by the parents only as a last resort when the condition of the child had been declared "hopeless". The late admission of babies was often due to ignorance of the seriousness of the situation on the part of the parents, the possibility of upsetting household routine, pre-occupation with the care of other children in the family and lastly, but not least, reluctance to incur even the small expenditure of 50 nP per day on admission to hospital.

(e) **Industrial Diseases :**

In the course of the past few years occasional cases of jaundice and skin rashes have, presumptively, been diagnosed as due to industrial causes. Acid workers, in some factories, have suffered from damage to dental enamel for which free dental treatment has been provided by Government. Sand Blasters are X-rayed periodically, regularly, for signs of early lung damage. However, there appears to be no significant incidence of diseases due to purely industrial causes. Most machines which process chemicals are imported, and the hazards, if any, to workers have been carefully assessed and, where possible, eliminated. Experimental industrial development has hardly started in this country; therefore, the hazards of untried machines or processes, by and large, do not exist. Moreover, due to peace-time conditions, most factory employees on hazardous occupations are experienced hands with years of experience at the same occupation. As the country advances industrially, imports of well-tried and safe equipment are likely to be reduced progressively in favour of laudable attempts to develop indigenous machines and processes. One may expect industrial diseases to occur in significant numbers if proper protective measures are not devised, incorporated and enforced in these.

Ordnance Factory doctors are being trained in Industrial Health, in batches; their observations and preventivve work will, no doubt, also help in the future.

(f) **Accidents & Accident Prevention :**

The Ordnance Factories have foundries, steel and non-ferrous metal smelting shops, chemical and explosives manufacturing groups, clothing, leather work, optical and fine instruments manufacturing factories.

Machines work in accordance witth a fixed pattern and their behaviour is, normally, predictatble. The unpredictable factor is the man, and it is his behaviour with the machine with which he works, which leads to accidents.

The majority of accidents occur with machines which cut and pierce i.e. those with fast moving parts; and skilled or semi-skilled workers' hands suffer most from these accidents.

The majority of accidents due to loading and unloading, false and clumsy handling of goods are suffered by unskilled labourers. Besides their hand, the foot and the back also suffer injury in this category.

Study of 'major', 'minor' and 'trivial' accidents revealed that :—

*a*) *Major accidents*: i.e. those requiring hospitalization of 21 days and over, are suffered mostly by metal smelting, metal rolling and the heavy carpentry group of workers. Their rate is well over 2 per 1000, while clothing, leather-work, chemical and ammunition manufacturing groups are well below that rate. The causes of these accidents are more or less the same in all factories.

*b*) *Minor & Trivial Accidents :* i.e. those involving absence from duty for 1 day or more and those involving less than one day's absence respectively—show that there is a sharp fall in incidence after the young age-group 15-30, with a degree of stabilisation at 30-35 years and a gradual fall thereafter, upto the age group 50-55 years.

The highest accident incidence in all factory groups is shown by the age-group 21-25 years due, probably, to imperfect development of skills and youthful impetuosity.

Workers between the group 30-50 years appear to be the least prone to accidents. This group, which forms approximatetly 50 per cent of the factory labour force, is, therefore, the most productive and least expensive, since time lost due to accidents and medical treatment expenses is not so great in this group as in the others.

'Piece workers' are least likely to report 'trivial' accidents during working hours. Such employees are also more productive than fixed-wage workers who tend to seek a break in work, at the slightest pretext, to attend the dispensary.

While all accidents are closely investigatted by the administration and causes are eliminated as far as practicable, minor and trivial accidents have many psychological aspects besides the actual disability which is frequently negligible, and therefore, prevention presents a difficult problem; however, one can generally suggest improvement by better education, inculcation of the sense of responsibility, better group leadership, and example by Section-Heads.

(g) **Sickness Medical Certificates :**

A sickness certificate from a private practitioner produced by a factory worker in support of his absence from work is not necessarily proof positive of his having been ill. It may be that he was really ill during the stated period or it may mean that he has felt it necesary to attend to some private business and finds it convenient to obtain the required leave by approaching a private medical practitioner of any of the recognised systems of medicine. Even though a worker obtaining a certificate from private sources has to pay a fee while he has the facility of obtaining sick leave from the factory medical officers free of charge, it is interesting to note that the rate per thousand, workers, of sickness certificates during 1958, issued by registered private practitioners was 1012.4 while the rate of certificates issued by the factory medical staff was only 596.3 per thousand workers. Sickness certificates obtained from private practitioners, for reasons other than genuine illness, are not always based on the intention on the part of the worker to outwit the authorities or to dodge work. Sometimes there are genuine domestic difficulties such as the wife being admitted to the hospital, and, due to non-availability of anyone to look after the children at homse, the husband has to stay there. He, therefore, produces a medical certificate to cover his absence from work.

Harvesting of crops, marriages, festivals and, only occasionally, the simple desire for a day off are the usual reasons for so called 'sickness' absence in many cases.

The system of acceptance of medical certificates from the factory medical officers only, within two miles of the factory or its hospital, or that of a Government Civil Hospital or of the Civil Surgeon, if living in the town or a village further away, has much to commend it in the case of Government or quasi-Government factories, even if it does appear to impinge on the freedom and integrity of the individual or that of the medical profession. The country cannot lose potential working capacity on grounds of so-called sickness under present conditions—and more so in times of national crisis. If this restriction on freedom to choose is not acceptable, it is for consideration whether certificates from private practitioners be acceptable for sickness upto, say, one week. For any periods longer than this, the worker's illness should be confirmed by a medical officer of the factory if he is residing within two miles of it.

(h) **Tuberculosis :**

Tuberculosis and industrialisation have been known to go hand in hand, in the past, in the initial stages of development of nearly all industrialised countries of the world. Non-immune rural populations move from their healthy surroundings to urban areas in search of work. Urban living conditions for workers, unless well-planned, before the factories are established, are far from satisfactory and, usually, slums develop around places of work, as has happened in the case of the old established Ordnance Factories prior to the establishment of 'Estates'. Stress of unaccustomed heavy manual work, poor food and, perhaps, sharing a room with a number of fellow-workers, one of whom may be a source of infection of Tuberculosis, is not uncommon in such circumstances, with resultant unhindered spread of the disease.

The rate of incidence of Tuberculosis has steadily risen from 2.4 per 1000 in 1955 to 2.5 in 1956, 2.9 in 1957 and 3.1 per 1000 in 1958. While a few factories have shown fractional reductions in the rate of incidence of the disease, the rest show increases to varying extents, highest incidence being at Kanpur.

The existing leave rules permit an Ordnance Factory worker suffering from Tuberculosis to avail upto 18 months 'Extraordinary Leave' WITHOUT PAY. At best this helps the afflicted person to get some physical rest, but due to stoppage of wages he and his family are thrown on their own meagre resources, if any at all, at a very critical period. The family, deprived of the wages of the only earning member in most cases, has to live on charity because of lack of financial resources. A recent survey of the incidence of active cases of Tuberculosis by income groups has shown: that among those with an income of Rs. 850 and above per month the rate of incidence per thousand is Nil, among those with income of Rs. 500 to Rs. 800 the rate with Rs. 61 to Rs. 400 the rate of incidence is 2.4 per thousand, and those with an income below Rs. 61 per month have a rate of incidence of 2.3 per thousand. It will be noticed that the lower income groups are more prone to get Tuberculosis. However, the actual number of employees in the higher income groups of Rs. 500 and above per month is small and, therefore, the 'Nil' incidence among them may not be of great significance.

In order to get over the financial difficulties for employees in the lower income groups, the Defence Civilian Welfare (TB) Fund has been started by Government. It is a voluntary co-operative effort and factory employees contribute as little as 12 nP per month at the lowest scale of pay, going upto Rs. 2/- per month at the highest, on a sliding scale, based on income. In return the individual, if he has the misfortune of getting Tuberculosis, receives financial assistance towards the cost of medical treatment while undergoing domiciliary treatment and is provided with a free bed in a T.B. Sanatorium within 2 to 3 months of applying, from among a number reserved for Defence Civilians in different Sanatorium in country. Families of members of the Fund, not eligible for the allotment of a bed, get the same assistance. Members are also entitled to travelling expenses to and from the Sanatorium/Hospital, a small monthly contribution while undergoing treatment at a Sanatorium to meet incidental expenses, aftercare allowance for a period of six months after discharge from Sanatorium duly cured, and a special allowance, extendable upto a year, to a worker who is discharged from Sanatorium as unlikely to benefit from hospitalization, or who is otherwise unsuitable for further treatment.

An out-patient T.B. Clinic has been established for the Defence Establishments at Kanpur where members of the Fund are provided free domiciliary treatment on the advice of specialists while non-members are treated on payment of cost of drugs only. Efforts are being made to extend this system to other factories also.

Efforts are being made to persuade factory workers and their families to avail of B.C.G. vaccination and to volunteer for Mass Miniature Radiography. However, there seems to be a strong tendency among workers to postpone the day of final diagnosis lest calamity in the form of loss of livelihood may have to be faced on revelation of the presence of the fell disease.

The small but steady rise in the incidence of this disease among factory workers in the last three years is in marked contrast with the position with regard to other diseases which show steadily downward trend of incidence—thanks to improved hygiene, sanitation and preventive measures. It appears that the rising cost of living, with ever increasing prices of nutritious items of food like meat, fish, eggs, milk and even vegetables, is placing these beyond the means of the average worker, with an average-sized family, as also of the middle-income groups of the population —with consequent chronic malnutrition among them. The incidence of T.B. among factory workers and their families cannot show a downward trend in the immediate future unless concrete steps are taken to prevent the spread of the disease from the infected to the uninfected susceptible population around them. This can only be done by further emphasis on good living conditions, including spacious and well-ventilated living quarters, proper hygiene and sanitation of their surroundings, decent nutritious food at reasonable prices which workers can afford, B.C.G. vaccination of the susceptible population below the age of 18 years and free facilities, including drugs, for domiciliary treatment of those infected, until such time as the case can be placed in a Sanatorium or Hospital.

This is a 'Welfare State'. If so, a major drive to tackle the menace of Tuberculosis is an urgent necessity, to prevent the problem from becoming completely unmanageable. It amazes one when one comes across procrastination in the matter of provision of atleast free domiciliary treatment to those afflicted when it should be obvious that such treatment not only benefits the individual being

treated but those around him. We are trying to convince Government of the urgent necessity of reducing the chances of infection of the healthy but susceptible adults, but domiciliary treatment of those found suffering from the disease, with a view to rendering them non-infectious until their hospitalisation. I have no doubt that this will be agreed to in due course.

(i) **Mental Health :**

The Industrial Medical Officer in India, in addition to his routine medical duties, is situated in a unique position to observe human behaviour in a rapidly evolving economy, which, while retaining its predominantly agricultural character, is diverting its growing population towards the field of industry.

In the next generation or two, given suitable conditions, the country will be considerably industrialised; with increased industrialisation will arise a host of human physical and psychological problems, adjustments of human relations, neuroses, industrial fatigue problems, wage disputes, and probably, stoppages or retardation of work resulting from these. The Industrial Medical Officer and his staff, who are meant to aid and augment production by preserving the physical and mental health of the worker, and to minister to his needs when he is sick or injured, has, therefore, a vast, practically unexplored field, in which to study the mental workings of the Indian industrial worker. Such studies, if pursued over a number of years with an unbiased and scientific outlook, are liable to prove of the utmost value to the worker and management, which, in the case of Ordnance Factories, is the State.

In India, generally speaking, the subject of Mental Health, if realised at all, is in its infancy. In fact, management as well as labour regard psychological studies, co-relation of man to machine, studies of mass labour reactions to certain conditions, with a certain amount of suspicion and, therefore, a subject best left alone. Unlike the Private Sector of Industry in the country, after Independence, the Ordnance Factories had only a handful of trained and experienced Indian administrators, for practically all key posts of responsibility were held, till then, by British nationals. The management in the Private Sector was entirely dependant for its livehood and survival on the profit-making capabilities of the factory and had to show concrete results to hold positions. The new management of Ordnance Factories on the other hand was young, enthusiastic, drawing an assured salary, with some degree of man-management experience in some cases and a degree of technical skill in others, wholly devoted to service but somewhat baffled by legislation curbing managerial power. The mental attitude of every human being when faced with difficulties on many sides is to take the course of least resistance. The local voice of authority, for or against a particular situation, in some of the factories, has, to some extent, become shy of expression and 'the Labour Union wants so and so' has become a recurringly frequent statement.

General education of the worker did not receive the attention it deserved. The illiterate worker was, therefore, not able to judge the pros and cons of any labour-management dispute. Such material often proves excellent medium for achievement of personal or political ends of ambitious and intelligent labour leaders, for, to the peasant, who, has recently turned to industry for livelihood, and whose memory of the autocratic Zamindar or Government Official is fresh, the Management of a factory, even if it is State-run for his own or National benefit is the natural 'oppressor'. Whether it was actually tyrannical or not was for the interested agitator to present as it suited him.

No organised unit can ever hope to function smoothly, efficiently and equitably without proper discipline; on the other hand, the health, contentment and physical and mental fitness of the worker should be the primary concern of those who seek discipline and efficiency. Management has to remember that every welfare benefit offered by the State is a legitimate entitlement of the worker and must be given for his benefit, without stint, however ungrateful individuals and groups may appear to be towards members of the staff.

The factory management, at all levels, needs to be convinced that every individual worker possesses immeasurable potentialities for co-operation as well as non-co-operation and that their own methods of understanding and control of the human element must ultimately influence the attitude of the worker one way or the other.

The average factory labourer from the villages usually has the village 'group' mentality with its patriarchal system and its bias towards caste, creed and custom which must be studied, respected and channelised adequately

to meet modern industrial needs of the country.

The factory labourer has to be encouraged to develop the collective sense of ownership of a factory in a socialistic society, and also to feel that he has a claim to the enjoyment of the fruits of his labour; he has, however, also to be made to realise, through proper leadership and education, that unless he makes an all-out effort towards greater and cheaper production his hopes of enjoying the fruits of his labour, under a liberal democratic society, where he can openly voice his grievances, may not be realised.

I have presumed to talk to you at some length on the Industrial Health problems in certain Government—owned factories which, I believe, represent a good cross section of various types of industries under public ownership, in different parts of the country. I hope I have not over-taxed your patience and have endeavoured to avoid doing so by not giving elaborate tables or percentages. I hope the Panel on Industrial Health of the Indian Public Health Association will find these observations—and any others that may be at my disposal to give—of some use in furthering the cause of Industrial Health and efficiency in this country.

I thank General MASTER and all those present, again, for extending to me the honour of being the Opening Speaker of the Panel and for giving me a patient hearing.

## DISCUSSION

The Chairman then requested the members to ask questions, if they had any, on the subject discussed by Col. Roy.

Dr. A. L. Saha stated that Col. Roy gave an excellent and comprehensive account of the Industrial Health connected with Ordnance Factories. As mentioned by the speaker, many of the workers live outside estates and the sickness rate is high amongst them. If that be so, what about the family members who are dependent on the worker and also live in larger numbers outside the factory estates? In view of the fact that the prevalence of tuberculosis shows an increasing trend throughout the country, what steps are being taken for detecting cases occurring in the families of patients amongst workers detected in factory T. B. clinics?

In replying the questions of Dr. Saha, Col. Roy mentioned that he appreciated the importance of contact case tracing among relatives of workers living outside the estates, but it was not done in Ordnance Factories. However all facilities for treatment was extended even to the relatives when once they reported to the clinic.

Dr. C. R. Naidu pointed out that while the hazards in various industries are being reduced, there is no programme for rehabilitating cases which require to be rehabilitated. If such a case goes out, it becomes a State problem and responsibility.

Dr. Chatterjee emphasised the need for introducing a contact case tracing programme as a good proportion of some of the old factories located in Calcutta, live outside the estate, in appalling conditions due to non-availability of space.

Dr. T. R. Bhaskaran who spoke next stressed on the need for considering the physical environment like housing conditions, proper disposal of effluents etc. Environment is equally important and all Industrial Health Engineers should be properly oriented to the principles and practice of industrial health programmes.

Dr. Rawal, who spoke next, posted the question—is industrial medicine a separate problem? He felt that the worker spends only 8 hours in the factory premises, but most of the other time he spends outside. Cases of Byssinosis are often treated as cases of Asthma or bronchitis, by outside doctors as they are not aware of the working conditions of the workers. Conditions like Silicosis, pneumonoconiosis etc. are not considered to be existing amongst workers working in Gold mines etc. But recent enquiries have shown that these conditions are as common as in other countries. In manganese and mica mines more and more poisoning cases are found. All this emphasises the need for intensifying basic training in industrial medicine to all undergraduates so that all general medical practitioners and other doctors will become aware of the problem and not only detect cases early but also view the cases in their true perspective. Dr. Rawal also suggested the opening of Industrial Hygiene Units at all major factories. E.S.I. Act should be suitably modified to encourage medical workers.

Dr. P. A. Menon (Madras) observed that the incidence of T.B. in railways was higher. But, he expressed his doubts as to how much of this increase is real and how much could be due to better diagnostic facilities provided. In addition to nearly 1,000 beds for T. B. patients provided in Southern Railway Hospitals, Domiciliary treatment is also encouraged.

The treatment is entirely free for those drawing pay less than Rs. 300/- p.m. To detect early cases a mass radiological survey has been planned in Madras. Dr. Menon also mentioned that injuries form another problem in railways. Hand is the most common part of the body injured. Special effort has to be made to reduce the occurrence of these injuries. Industrial psychology is important in this context.

Dr. C. R. Naidu (Hyderabad) gave instances of difficulties encountered in the civil-side, in regard to disposal of trade wastes and effluents and the enforcement of Factories Act. Dealing with trade effluents of offensive trades particularly, he stated, created serious problems. As regards the teaching of industrial medicine, he was emphatic that it should not be included in the undergraduate curriculum as it is already too crowded.

In winding up the Seminar, General Master observed that the subject was too vast and could not therefore be thoroughly discussed. He, however, mentioned that the curative side of industrial health has been receiving more attention than the preventive side. The Factories Act only reduces the hazard during the hours the worker is working in the Factory. On the other hand the worker spends more hours outside the Factory and it should be the responsibility of the Government to look to the basic amenities of these workers, i.e. Water Supply, Conservancy, drainage of wastes, housing, etc. He urged the Indian Public Health Association to approach Government to look into this problem. Unless the environmental conditions in villages, from where the workers are mostly drawn, is improved the situation is not going to change. General Master suggested the formulation of comprehensive recommendations which would lay down in clea-out terms, the responsibilities of the employer, the employee and the State, in this respect.

## RAILWAY MEDICAL ORGANISATION :

*Chairman*—Col. Barkat Narain.
*Opening Speaker*—Dr. A. L. Saha.
*Participants*—Dr. M. L. Chugh and other railway medical officers.

In the absence of Dr. Lakshminarayan, Col. Barkat Narain was voted to the chair for conducting the proceedings and of Dr. I. B. Chowdhury, Dr. A. L. Saha formerly Railway Medical Staff opened the discussion.

## PROSPECT OF INTEGRATED HEALTH CARE IN THE RAILWAY MEDICAL ORGANISATION

By
DR. A. L. SAHA (Calcutta)

From the origin of the existing rules and arrangements in the Railway Medical Organisation it appears that integrated health care was conceived by the Railway Medical Organisation from its very inception. As such the subject is an old one for their consideration. That the Chief of the Medical Organisation that is the Chief Medical Officer should be a public health qualified person is provided in the railway establishment code. In the existing arrangements in one railway zone there is provision for comprehensive health services namely hospital services for both indoor and outdoor patients, special clinical services particularly for tuberculosis, provision for control of communicable diseases including immunisation programme and isolation of infectious cases, maternity and child welfare services, school health services, efficient disposal of night soil and refuse, safe water supply and control of food stuff, provision for control of stray cattle nuisance, anti-rodent measures and destruction of stray dogs, extensive anti-malaria measures, accident relief equipments including an ambulance van etc.

As regards the personnel in that railway zone, it is found that for about 1 lakh 20 thousand railway employees there is provision for 170 medical staff. If the employees' family members are taken into consideration the total number of railway population estimated in that particular zone will be about 6 lakhs; so there is a doctor for less than 4,000 population in areas which are almost urban in nature. Regarding para-medical personnel it is seen that the same railway zone has a provision for 52 sanitary inspectors, 22 malaria inspectors, 56 mid-wives, and 5 health visitors in addition to the hospital staff. As regards

finance the picture is quite favourable in comparison with other civil organisations. It is learnt that the cost per head of staff per annum on medical service comes to about Rs. 23.7 rupees, excluding the expenditure on sanitation etc. If the whole amount is distributed on population basis, the per capita medical expenditure comes to about Rs. 4.7.

But the cost on public health is stated to be Rs. 22.5 per head of staff per annum. On population basis the per capita expenditure on account of Health Service as they call it comes to about Rs. 4.5/-.

As such the per capita expenditure on Health Care if we include both is about Rs. 9/-.

It may be mentioned here that the expenditure from the peoples side has not been taken into account, who often take help of the private practitioners as usual for medical advice as well as for drugs.

In a workshop colony under the Railway management there are 15 doctors for a population of about 35,000 giving ratio of one doctor per 2,333 population along with well equipped Hospital Services.

As regards hospital facilities:

There are facilities for indoor treatment at district level and the total number of beds in the zone is about 400. (i.e. one bed for nearly 1,500 people. In addition to this, the particular railway organisation subsidise other institute for reservation of 84 beds. Besides that the zone has got about 48 dispensaries scattered throughout the zone.

If the railways facilities are compared to the state facilities viz. West Bengal, vide Table-I we can easily understand the situation and probably agree to the suggestion that if integrated health service is to be introduced the earliest it can be done in the railways.

The question will be naturally raised as to

**Table—I.**

*Comparative statement showing population ratio for medical personnel and per capita medical expenditure on Health Care between a Railway zone and other organisations :*

| | *Population served by each* | | | | Per capita medical & health expenditure |
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| | Doctor employed. | Nurse | Midwife | Bed. | |
| West Bengal (1958) .. .. | 13406 (1552 on the basis of all doctors registered | 3571 | 7143 | 1133 | 2.95 |
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what percentage of railway employees avails of private services. The answer can be given only on the basis of a survey.

With all the facilities available at the moment it may be suggested that integrated health care can be introduced without much difficulties. Of course there are certain features of railway medical organisation not usually found in civil organisation, which need special consideration viz:

(1) Pre-employment medical examinations.
(2) Periodical medical check up for certain staff.
(3) Emergency duties particularly if there is any accident.
(4) Treatment of passengers falling sick during journey.
(5) Treatment of employees according to workmen's compensation acts i.e., persons injured on duty.
(6) Compulsory domicilary visit to sick employees' house on receipt of information.
(7) Rendering medical relief to far off wayside stations for which usually a line duty medical officer is provided.

To start with implementation of integration programme it is advantageous to convert the dispensaries into primary health centres without much alteration and financial involvement. If all the functions are to be introduced it is feared there will be some reaction from the existing staff who are not used to preventive work as a routine programme. If any Railway Medical Officer is asked whether there is regular vaccination programme in his colony, he will definitely answer—yes. But the work is under the sanitary inspector who normally does not enter the houses. But the doctor having a closer contact with the people is in a position to study the vaccination

status in the community. If it is decided to convert the dispensaries which were mainly functioning for diagnosis of diseases and giving treatment, into Health Centres they will have to function beyond these, for prevention, health promotion and rehabilitation etc. The staff therefore have to understand the community in its different features namely, structure, behaviour, social security and well-being. The first step as suggested will be integrated preventive and curative service keeping an objective of reducing sickness rate in the community by infusing health practices in the people. The unit of service will be a family of the employee instead of an individual employee requiring more domiciliary care. Well designed family folders are to be maintained where all the basic data of family composition, and socio economic condition will be recorded including vital events of birth, death and morbidity record etc. Of course doctor patient relationship will not be disturbed by the scheme. The dispensary outlook has to be changed. Of course treatment of sick persons must be given the top priority. To summarise, the main functions of such a dispensary (Health Centre) should be:

(1) Medical relief.
(2) Maternity and Child-welfare service,
(3) School Health Service,
(4) Control of Communicable Diseases.
(5) Environmental Sanitation, including safe water supply, disposal of refuse and night soil, housing, control of foodstuff, etc.
(6) Collection of Vital Statistics, and
(7) Health Education.

The minimum staff as recommended for a Health Centre are always available except one viz. P.H.N. in a railway colony having a population between 5 to 10 thousand, viz.;

Staff:

| | | |
|---|---|---|
| M. O. | .. .. | 1 |
| Compounder | .. .. | 1 |
| P.H.N. | .. .. | 1 |
| Midwife | .. .. | 1 |
| Sanitary Inspector | .. | 1 |

Other contigy staff.

I want to conclude by presenting an ideal situation in regard to facilities for health care which is existing in a railway town of a population between 65,000 and 70,000 in an area of less than 5 sq. miles.

The town is situated on a high ground in the district of Midnapore in West Bengal with excellent lay out and planning. There are 18 medical staff excluding a number of private practitioners available to the people, one general hospital of nearly 150 beds (of course, it also admits patients from outside stations), one well maintained Infectious Diseases Hospital, 5 dispensaries 4 of which having 2 M.O. in each. There are 12 sanitary inspectors including one for the workshop and another for the Rly. Station platform and yards.

| | | |
|---|---|---|
| Health Visitor | .. | 1 |
| Vaccinators | .. .. | 2 |
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Provision for a T.B. Clinic, and with X-ray machine, Maternity Child Health Clinic, School health clinic, a well equipped laboratory, and 685 conservancy staff.

Yet we can not say intigrated health care system is existing there. If the railway authority is pleased they can surely introduce the same with addition of a few Public Health Nurse or Health Visitors to start with. Of course those who are in charge they may tell us the difficulty.

## DISCUSSION

The chairman then requested the members present in the meeting to participate in the discussion. One medical officer discussed the position of the Railway Medical Services in another zone as follows:

The Indian Railways is unique among the railway systems in the world in that it provides a very comprehensive medical care for its employees and their families. The railways employ approximately 1.2 million workers and taking the size of a family as 5 on the average, the medical services cater to a population of approximately six million people.

In the early days when the railways were managed by private companies the medical service was mainly for purposes of sick certification and for pre-employment medical examinations and periodical re-examinations. The medical care available was not of a high standard and not much attention was paid to medical care because the companies looked upon the medical department as a spending department which did not bring in financial return to the shareholders. Later on, hospitals were provided at the headquarters of the railway organisations and also at stations

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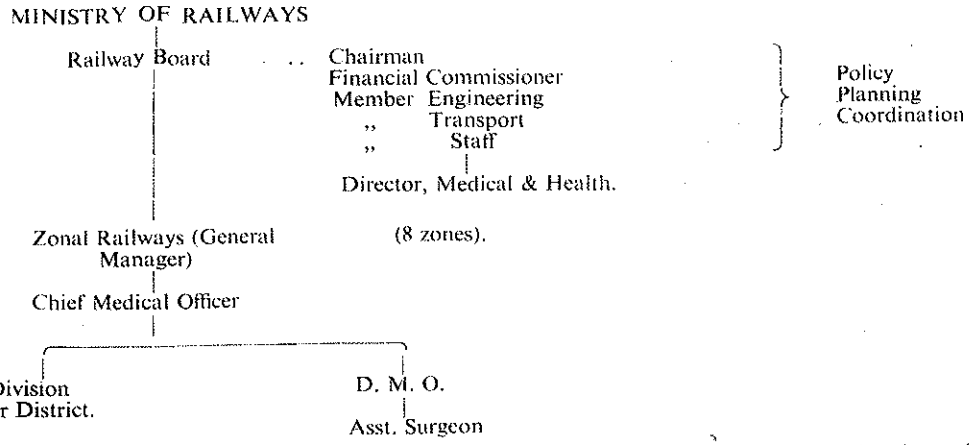
where there were workshops employing a large number of staff. With the outbreak of the Second World War they realised that it was necessary to provide adequate medical care if the services were to be kept going without interruption, but very little was achieved due to limitations of a global war. With the achievement of independence there was a complete change in outlook and great emphasis was laid on welfare of staff in all its aspects. An appreciable percentage of the employees have to be on the move most of the time and it was realised that if the staff have to be kept happy and contented they have to be provided with proper housing, medical facilities, educational facilities for their children and recreational facilities. A certain amount of expansion of medical facilities took place during the first Five Year Plan, but real planned expansion started with the Second Five Year Plan.

**ORGANISATION.**




The Medical Services come under the Member for Staff Railway Board and there is a Director for Medical and Health to coordinate the activities of the various zonal railways. The railway system in India is divided into 8 zones each under a General Manager and each railway has got a Chief Medical Officer who is the head of the medical services. Each railway zone is further subdivided into Divisions or Districts depending on the mileage, volume of traffic etc. For each Division or District there is a Divisional Medical Officer assisted by one or more Assistant Medical Officers. Each division is further subdivided into sections under the charge of Assistant Surgeons who are posted at important stattions.

Since its inception there has been integration of curative and preventive services on the railways and only a person with Public Health qualification can be appointed as a Chief Medical Officer. At the periphery the Assistant Surgeon is in charge of the preventive service also assisted by Sanitary Inspectors and other staff.

**Duties**

Unlike other services like the State Medical Service and Medical services in various industries, medical officers in the railway medical service have a variety of duties to perform. Briefly they are:

(1) Medical examination of recruits and employees.
(2) Curative services.
(3) Preventive services.
(4) Industrial Health.
(5) Maternity and Child Welfare.
(6) School Health.
7) Services to the public.
(8) Accident services.

From the point of view of the public, probably the most important is medical examination of recruits and employees. All recruits are examined before they are employed and the employees are examined periodically during their service, depending on the nature of their duties. For purposes of medical examination railway employees are broadly divided into three classes A, B and C. Under Class A come those employees who are connected with the working of trains like Drivers, Guards, Station Masters etc. A high standard of physical fitness, perfect eyesight and ability to recognise colours are demanded of these staff in the interest of public safety and these employees are examined once in three years

up to the age of 45 and every year thereafter. Under Class B come those employees who require a reasonable standard of fitness for their work and for the safety of their co-workers—Staff employed on maintenance of railway lines and many of the workshop staff come under this category. These staff are re-examined at the age of 45 and again at 50. The last category consists of the remaining workshop staff and office staff. They are not subjected to re-examination during service.

**Curative Service :**

**Curative Service.** According to the Railway Medical Attendance Rules all employees and their families are entitled to free medical attendance at the railway hospitals and health units irrespective of class. If they are bedridden and cannot attend the hospital/health unit, the doctor attends on them at their residence. Hospitalisation is arranged where it is necessary, if there is no accommodation at the railway hospital or if the facilities available are not enough. Empoyees and their families are eligible for treatment in a Government hospital where necessary facilities are available and the cost of treatment is reimbursed to them.

Hospital treatment is free for all employees and their families and those drawing salary up to Rs. 130/- are dieted free. There are hospitals at the headquarters of the railway as well as at the Divisional or District headquarters. A few sub divisional hospitals also exist at centres where there are large concentrations of staff. Specialists' services are provided at the railway headquarters and at the Divisional headquarters hospitals.

There is a Chest clinic at each divisional headquarters and a few beds for the treatment of Tuberculosis have been provided at the railway hospitals. In addition, beds have been reserved in the various sanatoria for treatment of railway employees and their families. On the Southern railway where there are about 160,000 employees, approximately 300 beds have been provided for the treatment of tuberculosis. Those who cannot be admitted to sanatoria are given domiciliary treatment and again the treatment is entirely free. Employees drawing a salary of less than Rs. 300/- per mensum are dieted free if they are admitted to a hospital for tuberculosis. In addition they are also given financial assistance from the Staff Benefit Fund to cover part of the loss in emoluments due to sickness.

There is approximately one doctor for every 3,800 railway population and one hospital or dispensary for every 10,000 of the population. The aim is to provide hospital beds at the rate of one bed for every 1,000 of the railway population by the end of the Second Five Year plan period. It is also the aim of the Railway is to provide services of specialists in Tuberculosis, Ophthalmology, E.N.T. surgery, obstetrics and Gynaecology etc. at all the divisional headquarters, but it takes time to get the staff trained in the specialities.

**Preventive Services.**

The Medical department is responsible for the maintenance of environmental sanitation for station premises and railway colonies at those stations which are the headquarters of Assistant Surgeons or Sanitary Inspectors. At wayside stations the Transportation department is responsible for sanitation and the medical department supervises the work and gives technical advice.

Water supply is mostly the responsibility of the Engineering department. We do not have a satisfactory Sanitary engineering organisation. Water samples from the various stations are examined periodically by the laboratories attached to hospitals.

Immunisation work within the railway colonies is done by the staff of the railway medical services. Systematic immunisation is being done only against Smallpox. A close watch is kept of unprotected persons within railway colonies and during epidemics it has been found that the attacks have been mostly among families of employees who live outside the railway colonies and thus escape immunisation. During epidemics immunisastation against cholera and typhoid is undertaken and a close liaison is maintained with State Public Health authorities.

**Industrial Health Service**

The Raailways have workshops for manufacture of locomotives and coaches like the Chittaranjan Locomotive Works and the Integral Coach Factory. There are also workshopshops distributed over the sections for repairs and maintenance. Approximately 30 per cent of the railway employees are workshop staff and safeguarding the health of the staff working in these workshops and prevention of industrial hazards are also included in the duties of the medical services of the Railways.

**Maternity and Child Welfare**

Many of the Divisional headquarters have Health Visitors. Midwives are located at all the larger colonies. Facilities are provided for confinement at the hospitals and many of the health units. The aim is to provide such facilities at all the Health units. We do not have public health Nurses.

**School Health**

The railways maintain a large number of schools for the children of railway employees and all the children are examined and action taken to correct any defects noted.

**Services to Public**

The medical services are responsible for ensuring that sanitation of stations and trains is maintained at a reasonably good standard and that proper sanitary standards are maintained in the catering establishments at railway stations. They are also to arrange for attendance on passengers who are taken ill during their journey.

**Accident Services**

Minor accidents occur frequently in workshops and yards and occasionally there are accidents to trains. To deal with these the railways have to maintain a well organised accident service. Most of the staff connected with train working and all supervisory staff in workshops have to be trained in First Aid so that a large number They have to be given refresher courses periodically. First aid boxes have been provided in passenger trains, in the larger stations and all the workshops. Specially equipped ambulance coaches are located at strategic points. First Aid materials, stretchers and blankets are provided at stations about sixty miles apart. The medical staff have to ensure that all these equipments are properly maintained and that the staff who have to handle them are in a constant state of preparedness.

**Integrated Health Care**

Although the Medical Officers are responsible for both curative and preventive services, in actual practice, enough attention is not being paid to preventive work as most of the staff have not had public health training. To remedy this defect we propose to send our staff for orientation training. Unfortunately there are very few centres for imparting this training and these centres are fully booked up with trainees from the State Health services. The Poonamallee Health Unit has agreed to take one team from the railways for each course. It will be many years before we can get enough staff trained, but we hope to have trained staff in the health units in the larger colonies in the near future.

**Finance**

As said before there is a lot of emphasis now on staff welfare and we are fairly well off, with regard to finance. The per capita expenditure varies slightly in the different zones. On an average we spend about 8.2 rupees per head of the population on medical and health services.

The railway population is distributed in a linear fashion along roughly 36,000 miles of railways. Many of the staff are at small wayside stations and it is very difficult to provide comprehensive health care for these isolated communities. For the same reason maintenance of environmental sanitation is also a difficult problem.

## PRODUCTION QUANTUM 0F DRUGS AND BIOLOGICALS IN THE COUNTRY FOR PREVENTIVE HEALTH WORK

*Chairman*—Major General S. S. Sokhey.
*Opening Speakers*—Dr. A. K. Hazra, Dr. V. N. Rao, Dr. A. L. Saha and Col. Karani.

In the absence of Major General Sokhey, Col. Karani was voted to the chair to conduct the deliberations.

## PRODUCTION QUANTUM OF DRUGS AND BIOLOGICALS FOR PREVENTIVE WORK

BY
MAJOR GENERAL SAHIB SINGH SOKHEY,
*Chairman of the Panel.*

Dear Friends,

I am sorry I cannot be with you in today's discussions, but if you permit me I should like to take the liberty to put a few ideas before you so that you may take them into consideration while you are discussing this

very important matter.

You have set yourself the problem of "Production Quantum of Drugs and Biologicals for Preventive Work". But you will agree with me that the quantum of drugs cannot be very usefully discussed without considering the production of drugs in the country at all. So you must pay some attention to the actual production of drugs in the country.

You know that the Pharmaceutical Enquiry Committee of Government of India in 1954 made it clear that no essential drugs were being manufactured in the country at all and said that

> "the drug industry in India may be considered as non-existent".

More recently still in 1956 the Soviet experts who were invited by the Government of India to survey the drug industry in the country observed after a thorough study of the drug industry:

> "The Phaamaceutical factories in India are mainly occupied in processing (preparations of mixtures, tablets, injections of solutions, ampules, etc.) of drug imported mainly from abroad and almost all the essential drugs, the availability of which determines the effectiveness of medical attention in the treatment of the most serious and common diseases in India are not being produced in the country but imported from outside in 'bulk' form or in the form of completed penultimates from which essential drugs can be produced by methods of simple and easy technological processes".

Since then the position has not changed materially except for that Hindustan Antibiotics is producing about 20 tons of penicillin a year, which is quite inadequate for the needs of the country, and that Hindustan Insecticids is manufacturing a certain quantity of D.D.T.

You will be told that a number of other drugs are being made in the country. But this is not strictly correct. It is true that licences have been given to a number of firms to make drugs in the country, and they are pretending that they are making them in the country. But that is not the case. Take for instance, the example of a foreign firm which was given a licence to make chloramphenicol several years ago. They agreed to make the drug in the country, but it remains a fact that no such attempt is being made. Almost ready finished product is being imported into the country at low custom rates and being just purified or final process done before it is passed as 'Made in India'. A number of other firms are doing the same regarding sulphonamides.

This state of affairs is of no particular benefit to the country. It is not drug industry, and what is equally bad, the prices remain as high as the prices of the so-called imported drugs. You know as well as I that the profits of the drug industry are almost the highest of any industry. A very distinguished American Professor who was on the staff of one of the leading American drug firm says:

> "I wonder how many people realise that in the Pharmaceutical industry of Europe and America it is customary to charge exactly 10 times the actual cost of a drug. Thus the Indian patient must support the foreign manufacturer, must pay for his lavish advertising campaigns, must pay for past, present and future research in those foreign countries, must pay for the extension of the plants and for so many other things."

The slate is clean and a fully integrated drug industry can be put up. It would only need six or seven plants beginning with the manufacture of intermediate chemicals, synthetic drugs, antibiotics, alkaloids and other vegetable drugs. But this can be done only as a State venture. Private enterprise cannot have the large funds needed for the purpose, and what is equally important, since our private enterprises do not have the 'know-how' they will have to go to foreign firms to get this assistance. And in the Western countries the unplanned development of drug industry during the last 100 years or so a very large number of specialist firms have grown up, and those do not work with each other. Supposing, for instance we take up the manufacture of antibiotics. For this we will have to go at least to four different firms and put up four different plants to make antibiotics, because the different firms in the West do not collaborate with each other; in fact they are at war with each other. While State can put up one plant to make hundreds of tons of all antibiotics. This thing is easy for the State, and it is possible because we have the required talent and we can get the 'know-how' on a non-commercial basis. And to use this aid we must also put up non-commercial plants for the people without any element of profit element. In this arrangement the private firms can also continue their

work, as the State drug industry would be furnishing them with the required intermediates and basic chemicals on non-profit making basis, and there will be a healthy rivalry between the State and the private industries.

Such technical assistance to put up a fully integrated drug industry with five or six plants can only come from a socialist country. We realised that long ago, and in 1955 Government of India invited a team of Soviet experts to survey the drug industry and recommend projects to make India independent of imports of essential drugs. As most of you know they submitted a very comprehensive report, in two volumes, which very carefully described how the drug industry in India stands and I have quoted their view above and what India should manufacture and why. This is a very valuable report; all of you can get copies of it, and you should read it as it is very instructive.

## DISCUSSION

1. Dr. A. K. Hazra (Haffkine Institute, Bombay)

For fixation of quntums of various preventives the items taken for consideration were under "*Vaccines;* Calf Lymph, Cholera Vaccine, B.C.G. Vaccine, Tetanus, Diphtheria Toxoid and Triple Toxoid. *Prophylactic Sera:* Tetanus and Diphtheria Antitoxins and amongst *Drugs:* Antibiotics, Sulfa Drugs, INH & PAS. Lastly, *Hormones:* In fixing the quantum, case was made out to study the present consumption position under different health programmes and considerations of imports of these various preventives as well as the case made out in the Pharmaceutical Enquiry Committee. It was also pointed out that in fixing the quantum it would be advisable to decide on immediate objectives and also for actual consumption to guide the different production plans.

Regarding considerations of statistical data it was pointed out that they are not very dependable for deciding the quantum question. More so, the index of morbidity and mortality needs further improvement. A case was also made regarding the potency period under the Drugs Act with a view to modify the Drugs Act to enable different manufacturers to suitably fix the potency period in view of the studies on keeping properties of various biologicals. In this connection it was suggested that suitable recommendations be made to Drug Technical Advisory Board for the considerations of necessary alteration in the Drugs Act.

It was also pointed out that proper facilities for transport of various biologicals and with refrigeration facilities and other helpful methods be developed in order to ensure the proper utilization of the preventives. It was also suggested that under proper controlled conditions field trials may be taken out for the assessment of various tests recommended for the popularization of the utility of these preventives. It was also stated that though Antivenin does not strictly come under the preventive heading, but it is noted that about 1500 people died in Bombay State only by snake-bite every year. And that 40% of the total snake-bite deaths in India occur in Bombay State. In view of this it was suggested that a target for antivenin production should also be considered. It was further pointed out that calf lymph should be issued in lyophilised form for its proper utilization. As for Polio and Yellow Fever Vaccines, it was stated that a case does not exist for the production at the present stage.

For any programme of fixing a target in view of the above considerations a case was made out for augmenting the present production of various centres in the country. In this regard efforts of the Haffkine Institute to increase its production 2/3 times of the present level in the next Five Year Plan was also mentioned. Finally, suggestion was made that various health schemes should work out the proper control, utilization of various preventives and recommend figures for fixing up of targets which may finally be combined to arrive at the final production figure. This should also take into consideration the requirements under the proposed Industrial Health Schemes.

A very strong case was made out to stress the necessity of proper standard and quality control of various biologicals for the purpose without which it is feared that the aim set in view may be defeated.

2. Dr. V. N. Rao: (*A. D. P. H., Bombay, Poona*)

I wish to emphasize on three important aspects in the use of biologicals in the field for preventive health work.

(1) There is an urgent need for defining the size of the problem. Unless the size of the pdoblem. Unless the size of the problem is known it will not be possible to assess to any degree of accuracy the requirements of biologicals for preventive health work. To take a concrete example, very often you hear Medical Practitioners and sometimes public health workers talk loosely on the institution of mass immunisation against Diphtheria, Whooping cough and Tetanus in both urban and rural areas as a blanket public health measure. This is done in the spirit of "let us do something for the people in the rural area". While it is laudable to think of tackling problems in rural areas, we should also think in terms of the size of the problem and its priority. In a developing country like ours where economic conditions are still low it is absolutely necessary to think in terms of priorities. For laying down priorities, as already mentioned, we need to define the problem, if not very accurately, in some measurable terms. There is therefore an urgent need for conducting surveys in different areas in the country, to determine the incidence of the diseases like Diphtheria, Whooping cough, Tetanus etc. in terms of death, disease and deformity. The study of time, place and persons involved is equally important. The determination of the time when the vaccination and inoculation programme is to be launched is equally important. The secular trend and seasonal variation of the disease requires to be studied very carefully. Thus I would earnestly commend to all health workers to institute surveys throughout the country to define the problem and approach it in a more rational way.

(2) While vaccines are an useful tool in the prevention and control of some of the major diseases of public health importance, it is imperative that the biologicals used are of the best quality both in regard to its purity as well as its potency. Every effort is being made at the production centres that the biologicals are of the best quality. But real test of the biological will be in the field. Its capacity to protect against infection and limit the severity of the disease, whatever might be the qualities of the biologicals, can only be tested on the face of an epidemic. This brings us to the question of field trials. The field trials conducted for testing Salk Vaccine in the case of Poliomyelitis and Whooping Cough Vaccines are too well known to need any repitition. The recent field trial of Typhoid vaccine in Yugoslavia, although Typhoid vaccine has been in use over a number of years, emphasizes the need for field trials. We are now thinking of cholera and small-pox eradication. Before launching on the eradication programme it is earnestly hoped that the cholera vaccine will be given field trial. There are however many indirect evidences to show that the existing cholera vaccine is effective. Even so, there is need for a field trial of cholera vaccine before launching on a Nation-wide eradication programme. The same will be true with regard to Small-pox lymph.

(3) One other important aspect is the proper transport of biologicals. Communication in rural areas is still far from satisfactory. The vaccine production centres although scattered all over the country are still few and far between. Thus problems of transport of biologicals assumes serious proportions. We need an efficacious and potent vaccine in the field. There is no easy solution to the problem as it bristles with many difficulties. However, the provision of refrigerators for preserving the blologicals at District, sub-divisional and even primary health unit headquarters will ease the situation to some extent. The use of ice boxes and the quick transport of biologicals by special messengers may also improve the situation. However, there is an urgent need for further study in this respect for evolving an easy method which will suit local conditions and will also be economical.

### 3. Dr. A. L. Saha

*(All India Institute of Hygiene and Public Health, Calcutta)*

While supporting the view of Dr. V. N. Rao about Diphtheria Dr. Saha said, as incidence of diphtheria in certain areas was increasing, some administrators raised the question of mass immunization and they thought of starting immunization in schools but actually it was found that the maximum susceptibility was in age group between 1 and 3 years and in some cases even a 1 year child was found to be schick negative. As such to define the population at risk in diphtheria it was necessary to carry out Schick test and to decide which group of population should be immunized in a mass scale.

Dr. Hazra mentioned that he found the same age distribution in Bombay.

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# ASSOCIATION NEWS

## REPORT OF THE GENERAL SECRETARY

Mr. President, Members and Friends,

Our Association has just passed through the fourth year of its existence. As is usual with infancy, it had to face certain difficulties and undertake some risk but there is sufficient indication that it is growing as a healthy and active child and will continue to move unhampered in its path of progress in future. During the year under review we had the good fortune of having the advice and guidance of Lt. Col. Jaswant Singh, Director General of Health Services of India as our President, and of Dr. B. C. Das Gupta, Ex-Director of Health Services, West Bengal, and also an Ex-President of our Association as the Editor-in-Chief of our Journal.

Looking back through the years of its short existence, we have every reason to be proud of our achievements although it may not be considered phenomenal. In the very first year we had a very successful symposium on "Rural Health" jointly with the Alumni Association of the All India Institute of Hygiene & Public Health, Calcutta in which we were able to mobilize the opinions and suggestion of a large number of Indian as well as foreign experts. The recommendations made were appreciated by the Government as well as others concerned. In the Second year, we chose the teaching of Preventive and Social Medicine in the under and post graduate Medical colleges of India, as the lively subjected for deliberations. In this Symposium we were able to harness the opinions of a large number of teachers of the subject all over India as well as of local and foreign experts. The final recommendations made and the curciculum prepared were accepted by all concerned as the base line for adoption and future guidance. In fact, the Central Health Ministry, on the recommendation of the Association inaugufated a course of training for the teachers of Preventive and Social Medicine at the All India Institute of Hygiene and Public Health, Calcutta.

Last year, the scope of Scientific Session was further enlarged during the annual conference, and the Association was able to organise symposia on three vital problems of public health, namely; (1) Training of Auxiliary Health Personnel, (2) Immunization Programme and (3) Collection of Vital Statistics in India. In addition, there were other papers of public health interest. All these sessions were supported by a large number of participants and very useful documents were prepared and collected and made available to our members through the Journal. Out of the deliberations the panels made several useful recommendations which were circulated. A Subcommittee was formed to draw up a uniform syllabus and curriculum for the Health Inspectors' Course, which has been completed and published.

For this Fourth Annual Conference also, a very important and topical subject has been chosen, namely—Integrated Health Care, to be discussed under five pannels, namely (1) Health Care in C.D.P. Blocks; (2) Contributory Health Services—(i) C.H.S. for government employees; (ii) Employees' State Insurance Scheme; (3) Industrial Health, (4) Railway Medical Organisation and (5) Production quantum of Drugs and Biologicals for preventive work. Inspite of short notice, I am very happy to announce that it has been possible for the Association to obtain the active cooperation and consent of the most eminent authorities in the country to guide the discussions by each panel. The ready and spontaneous response of these eminent persons inspite of short notice not only gives our Association a great encouragement but also indicates the importance and need for public health work in India. I do not know of any scientific organisation in India which could create this atmosphere in such a short period of existence. The recent annual session of Bihar State Branch, which has been given a good publicity by the newspapers also supports the hope for a great future of this organisation and no pains should be spared at this critical juncture to keep the organisation going and to gradually enhance its constructive activities.

The Association's other activities during the year 1959 were limited to the following aspects:

I. Opening of Branches;

II. Activities of the State Branches;

III. Running of the Journal of the Association;

IV. Meetings of the Central Council and activities of the Sub-committees.

V. Membership position;

VI. General administration;

I. *Opening of Branches:*

In the first meeting of the Central Council a Sub-committee under the name "Formation of Branches Subcommittee" consisting of the folowing members was formed: Dr. T. B. Patel, (Poona), Dr. K. C. Patnaik (New Delhi), Dr. S. E. D. Massilamani (Calcutta), and Dr. T. R. Bhaskaran (Calcutta)—Convener. Unfortunately this Sub-committee did not function. The little effort put up by the General Secretary among his multifarious work naturally yielded poor results. However, I am happy to report that at least Dr. T. B. Patel who was a member of this Sub-committee, has not only succeeded to form a Branch in the Bombay State but has shown considerable organising ability by inviting the Association immediately after the approval of the Branch by the Central Council, to hold its fourth annual Session at Poona, and for which all credit should be due to him.

The second state which has progressed sufficiently in this direction is the Andhra State, and we hopefully expected the final move from Dr. C. R. Naidu for due approval of the Central Council, but so far we have not received it as yet. The Secretary also received certain questions from the Secretary of the U.P. State Health Service Association, but the formation of this state Branch was not also materialized. Some efforts have also been made in the Madhya Pradesh and Madras with similar results. Thus although the progress has not been satisfactory, there is every hope that these states will form their Branch Associations during the coming year. The real strength of the Association will be the State Branches all over India and our health activities among the public can then be made operative all throughout the country.

II. *Activities of the State Branches:—*

We have now three approved State Branches —namely (1) West Bengal (2) Bihar and (3) Bombay. The West Bengal Branch will have its annual session on the 11th January 1960 and the Bihar already had its first annual session on the 13th December 1959, inaugurated by Sri B. C. Patel, Minister of Health, Bihar and it was apparently a great success. The proceedings have been received and will be published in due course. The present membership strength is as follows. Ordinary members—65, Associate members—239; total 304.

III. *Journal of the Association:—*

Four issues of the journal have been published during the year. There is an increasing popularity of the journal both in India and foreign countries and there is a heavier demand for the publication of Scientific contributions from amongst the members. The total pages published had to be progressively increased as will appear from the records given below:—

| | | | |
|---|---|---|---|
| 1957—294 pages | ... | 74 pages per issue | |
| 1958—356 ,, | ... | 89 ,, ,, | ,, |
| 1959—418 ,, | ... | 105 ,, ,, | ,, |

The advertisement position on the other hand, has deteriorated due mostly to the withdrawal of advertisement by foreign firms on account of restriction of import of foreign drugs. While on the one hand the cost of publication has increased, the revenue has fallen on the other, due to loss in advertisement, leading to progressive deficit in the publication budget. To overcome these two difficulties the Journal Committee had set up a special Committee to go into the question thoroughly and to suggest ways and means. They discovered a third reason for the deficit, namely, the loss of one-third of the revenue from the membership subscription to the Central fund due to the formation of state Branches. After going into the matter this Committee proposed that the journal might be converted into a monthly one to increase the income from advertisement, as well as to accommodate publication of larger number of scientific articles, the total pages provided being not exceeding 720 in 12 issues including advertisement. The conversion of the quarterly to monthly issues will also permit us to avail of the concession on postage. The second proposal was to increase the central contribution of the ordinary member of the Branch from Rs. 8/- to Rs. 10/- and of the Associate member with Journal from Rs. 2/- to 4/- or to increase their Journal subscription from

Rs. 6/- to Rs. 8/-. It may be incidentally mentioned that the cost of journal fluctuates between Rs. 2/8/- to 3/- per copy.

Both the journal committee and the Central Council were reluctant to embark upon the adventure of starting monthly issues, particularly in view of the fact that it would need regular editorial work and some permanent and paid staff to look after the printing and publication, which the financial condition would not permit. But the second proposal was considered worth while. It would however, be realized by our members that the Journal is the heart of the Association and as such the life of the Association depends on how this heart works.

It may be appropriate here to quote what the H.R.H., The Prince Philip, Duke of Edinborgh said recently about the British Medical Journal in his Presidential address, namely "The most severely practical function of the B.M.A. and the one least likely to cause controversy, at least outside the World of Medicine, is the collection and publication of reports and researches into all kinds of medical matters both general and scientific and the discussion of these matters at general and scientific meetings. In this the British Medical Association has achieved a number of notable success. There are too many to mention, but perhaps ..... In fact, it has had the foresight and temerity to look into any question which remotely affects the health of the individual. This is the democratic process on a larger scale, the public exposure of wrongs and abuses and the remedies brought about the pressure of informed public opinion. This is a function which is absolutely essential in a free community which attempts to run its affairs by co-operation rather than by dictation".

It may also be worth-while to mention that we have followed the same ideas in our editorials. Among the many reforms suggested the very first issue discussed the question of Hydrogenated fat as definitely detrimental to the health of the people and it was also followed up by another editorial in subsequent issue, but we have not yet been able to mobilize sufficient momentum to our suggestion of banning the production of hydrogenated fat in this country to be given any due credence. But the hopeful sign is that our own Health Minister has recently viewed his opinion against it. If we pursue we are sure to succeed.

Furthermore this is the only journal of its kind in India on public health matters. This is used as the only yardstick to judge the standard of our activities and scientific achievement on the subject by the people of our own as well as foreign countries. The Central Council, therefore, in their last meeting held in October, proposed to approach our Central Health Ministry for a permanent grant.

IV. *Meetings of the Association*

(a) Meetings of the Central Council:

The Central Council met three times including its annual meeting. These were held on the 31st March, 6th October and 28th December 1959 respectively, and were fairly well attended. The proceedings of the first two meetings have already been published. Like last year the council approved of the formation of the following subcommittees:

(1) Formation of Branches sub-committee—already mentioned.

(2) Medical Education sub-committee, and

(3) Scientific sub-committee.

The Council in their second meeting approved of formation of the Bombay State Branch provisionally subject to a few changes in their memorandum to which they subsequently agreed. It also accorded their approval to the recommendations of the subcommittee regarding the syllabus and curriculum of the Health Inspector's Course drawn up by its members.

(b) Meetings of the Medical Education and Scientific sub-committees:

The medical education and scientific committees jointly held only two meetings during the year, to deal with the curriculum of the Health Inspector's Course and to plan and organise symposia for the scientific session of the Fourth Annual Conference at Poona. The subjects chosen and the Chairmen and opening speakers of different panels proposed and selected have been already announced.

(c) Meetings of the Journal Committee:

There were 4 meetings of the Journal Committee during the year mainly in relation to the publication of the quarterly issues of the Journal. The committee also discussed about the suggestion of the journal committee for converting the journal into a monthly one. They decided to proceed with caution and approved of a plan to send the advertisement agent to Bombay for examining the prospect and extent of co-operation of the different

chemical and pharmaceutical firms likely to be offered by them in this enterprise. This action was taken and the results seem to be hopeful but it can only be put to crucial test after the conversion has been announced. No firm is willing to commit any thing by writing in anticipation. In other words the enterprise would involve us to certain amount of risk which the members were reluctant to undertake at the present moment. In connection with the publication of the journal the managing Editor wishes to mention that excepting the editorial part no other tangible help was received by him. It is high time that some members should now volunteer to help him in the job.

V. *Membership Position.*

The membership position has always been unsteady and rather unsatisfactory. In 1957 although the membership stood at 670 only 345 members paid their subscriptions. In 1958 also one hundred new members were registered but the total number of members of good standing were only 324 on 30th September 1958, and this number includes 37 Life members. This year the total number of members in the Register is 705 of which only 303 including new Life members paid their annual dues by the 30th September 1959. The corresponding figures for Associate membership are 495 and 250 respectively. This is undoubtedly not a very happy picture but the only way is to have the State Branch Opened in every State so that the members can get more tangible benefit other than the Journal and annual session. It is gratifying to note that Bihar Branch has been doing well regarding membership since its opening. It is expected that other branches will be similarly helpful. The Central Council has also approved of the plan of sending the journal in a bunch to the Branch office for distribution so that they get the opportunity of realising the subscription through this journal distribution.

In view of the large number of defaulters it is highly desirable that the Central Council might devise some means to overcome the attitude of the defaulting members. As proposed earlier sending of the journal by V.P.P. has also practically failed, with large number of refusals and some extra loss in postage.

It is proposed that an admission fee of Rs. 2/- may be levied from the year 1960, so that any member defaulting after a specified date may be charged the readmission fee. This principle is followed in our sister organisations.

VI. *General Administration:*

With increasing age of the Association the responsibilities and administrative work have also progressively inereased without any improvement of the financial position. The progress would have been much more if certain paid staff could have been engaged as proposed last year. The financial gap having further widened this year, extreme economy was enforced in all our expenditures and no new expenditure was allowed. The same part-time clerk and a peon were the only staff on regular salary and one part-time typist was employed for journal work on meagre allowance of Rs. 50/- per issue of the journal. On the other hand, along with their administrative work the journal work has also steadily increased as already mentioned. The services rendered to the members were accordingly not very satisfactory, particularly in the matter of receipt of the journal, the fault having been shared between the member himself, having not notified his or her change of address in time, and the secretary's office—due to shortage of working hands. The default has been noted regarding the issue of notices and replies etc. All members must have noticed that all their correspondences and communications have been dealt with by one person so far, and the reason need no further explanation. The Central Council is therefore requested to select some active Joint Secretaries this time from among those who voluntarily wish to offer their services for this honorary work for the sake of the Association.

*Accounts and Budgets*

*The AUDITED ACCOUNTS:*

For the period between 1st October 1958 and 30th September 1959

## INDIAN PUBLIC HEALTH ASSOCIATION CALCUTTA

Receipts and Payments account for the year ending 30th Sept. '59

*Receipts*

To

| | | Rs. np. | Rs. np. |
|---|---|---|---|
| Opening Balance:— | | | |
| Cash at Bank | ... | 4,058.92 | |
| Cash in Hand | ... | 656.49 | 4,715.41 |
| Subscription (Mem.) | ... | | 3,270.30 |
| Receipts from Advt. | ... | | 5,868,07 |
| | | | Rs. 13,853.71 |

*Payments*

By:—

| | | Rs. np. | Rs. np. |
|---|---|---|---|
| Establishments | ... | 2,134.00 | |
| Conveyance | ... | 327.51 | |
| Postage | ... | 846.28 | |
| Stg. & Ptg. | ... | 6,101.29 | |
| Audit Fee | ... | 100.00 | |
| Commission (Advt.) | ... | 1,076.24 | |
| West Bengal St. Br. | ... | 140.00 | |
| Miscl. Exp. | ... | 293.88 | |
| Bank Charges | ... | 1.32 | |
| Closing Balance | | | |
| Cash in hand 725.08 | | | |
| Cash at Bank 2,108.18 | | | |
| | | 2,833.26 | |
| | | | Rs. 13,853.78 |

In terms of our separate report even dates.

3/1 Bankshall St.
Calcutta-1.
Dated 6.10.59.

Sd./- M. K. Mukherjee & Co.
Chartered Accountants.

The Budget Estimate for the year 1960, is presented below:—

*Budget for 1959-60*

*Income*

| | | Rs. |
|---|---|---|
| Membership Subscription for 400 members at 10/- per member | ... | 4,000 |
| Membership subscription for Associate members (300) at Rs. 2/- | ... | 600 |
| Subscription from Journal | ... | 200 |
| Advertisement Bills | ... | 8,000 |
| | | 12,800 |
| Deficit | | 1,800 |
| | | 14,600 |

*Expenditure*

| | | |
|---|---|---|
| Establishment | ... | 3,000 |
| Postage including that of journal | | |
| Printing | ... | 6,500 |
| Auditor's fee | ... | 100 |
| Advertisement remuneration | ... | 1,500 |
| Miscellaneous | ... | 500 |
| Expenditure for Annual General Meeting | ... | 1,500 |
| Typewriter & furniture | ... | 1,500 |
| | | 14,600 |

The assets and liabilities up to the 30th September 1959 from the time of establishment of the Association are given below:—

*Assets*

| | | Rs. np. |
|---|---|---|
| Cash in Bank and Hands | ... | 2,833.26 |
| Advertisement bill unrealized | ... | 2,333.25 |
| Value of paper in Stock | ... | 700.00 |
| | | 5,866.51 |
| Excess of Expenditure over income | | 7,862.09 |
| | | 13,028.60 |

*Liabilities*

| | | |
|---|---|---|
| Commission payable to agent | ... | 466.44 |
| Press bill unpaid | ... | 7,077.78 |
| Block & Photographic bills unpaid | | 699.00 |
| Papers & Stationary bills | ... | 560.38 |
| Loan from life membership | ... | 4,925.00 |
| | | 13,728.60 |

The deficit up to the 30th September 1958 was Rs. 2,951.67 n.P. This year it has increased further by Rs. 4,910.42 n.P., the total liability being Rs. 7,862.09. Excluding the loan from life membership the liability in the market is Rs. 2,937.09 n.P. The excess of deficit is due to the fall of membership subscription by Rs. 929.20 n.P. and of the advertisement bills by Rs. 4,027.93 n.P.

The position was brought to the notice of the Central Council and one of the remedies proposed was to approach the Ministry of Health for a permanent grant for the publication of the Journal. On the other hand, there should be a serious campaign of membership drive by each member and to open as many state branches as possible. Steps have also to be taken to increase the advertisement and to obtain a grant from the National Institute of Sciences Journal fund. However, the Council and the members should seriously discuss the position and suggest other ways and means to improve the financial position.

*Concluding Remarks:*

The picture drawn above looks apparently dismal, indicating that a great deal of spade work has still to be done. For this, I wish to draw the attention of all office-bearers' and members to take more active interest in the Association's activities, which otherwise has a great future. Naturally some of the shortcomings which the members themselves have discovered are bound to occur at this formative stage with difficult financial position.

Before I conclude, I feel it my duty to express our gratefulness to the Director of All India Institute of Hygiene & Public Health Calcutta and the Director General of Health Services, Government of India for giving us the permission to locate the Association at the Institute. My thanks are also due to the members of the Council and of different committees and sub-committees, for their ready help and co-operation in the management of the Association.

S. C. SEAL.

## PROCEEDINGS OF THE FOURTH ANNUAL MEETING OF THE CENTRAL COUNCIL

Proceedings of the 4th Annual Meeting of the Central Council of the Indian Public Health Association, held on 28th December, 1959 at the Council Hall, Poona under the Chairmanship of Lt. Col. Jaswant Singh, the President of the Association.

Members Present:—

1. Col. Jaswant Singh,
2. Dr. B. C. Dasgupta,
3. Col. Barkat Narain,
4. Dr. T. B. Patel,
5. Col. N. D. P. Karani,
6. Shri, P. C. Bose,
7. Sri, K. R. Bhide,
8. Dr. B. B. A. Dalal,
9. Dr. S. K. Sinha,
10. Dr. T. R. Bhaskaran (Jt.-Secretary).

Dr. A. L. Saha also attended the meeting by special invitation.

The Chairman welcomed the members and the agenda were taken up for consideration.

Agenda:—

1. Confirmation of Proceedings of the last meeting of the Central Council.

The Proceedings of the last meetings of the Central Council which had been circulated earlier was confirmed.

2. Receive and Consider the Annual Report of the General Secretary for the year 1959.

Dr. T. R. Bhaskaran informed the Council members that Dr. Seal the General Secretary was unable to attend the meeting due to illness. Dr. Bhaskaran read out the salient portions of the Secretary's report for the year 1959. The report was discussed and accepted by the Council with a few minor modifications.

3. Receive and Consider the Audited Accounts of the past year.

The Secretary read out the Auditor's comments. In discussing the audited accounts the member suggested that action taken on the points raised by the auditor should be brought before the next Central Council meeting for consideration.

It was also suggested that proper account book as desired by the auditor should be brought into use as early as possible.

4. Consideration of the Budget estimate for the ensuing year.

The budget estimate for the ensuing year, was then considered by the Central Council.

The Council did not agree to the suggestion made by the General Secretary regarding re-admission of defaulting members. In this connection it was suggested that a personal letter under the President's signature may be issued to all defaulting members requesting to pay up the arrears upto date.

In discussing the budget proposal Shri. P. C. Bose suggested that the advertisement sources should be more effectively tapped in which the Council members personal endeavour may also help.

Col. Barkat Narain suggested that it was desirable to have a reserve fund for the Association and that the money which has already been utilised from the Life Membership may serve as the nucleus for this fund.

The proposed budget was then approved.

5. Election of Office Bearers of the Central Council and scrutiny of the ballot papers regarding the Election of President-Elect and Vice-President for the year 1960.

The Ballot Papers relating to election of President Elect and Vice-Presidents for the year 1960 were scrutinised and the results tabulated for making necessary announcements at the Annual General Meeting.

The following office bearers were elected unanimously by the Central Council to their respective posts:—

General Secretary:—Dr. J. K. Bhattacharya,

Joint Secretaries:—
Dr. A. L. Saha, and
Dr. K. Bagchi.

Treasurer:—Dr. T. R. Bhaskaran.

6. Suggestion for election of 10 members of the Central Council for 1960.

The Council also approved the following suggestions in regard to the election of the members to the Central Council for Office bearers, for the Journal Committee and the Auditor.

*Central Council:*

1. Dr. C. R. Naidu—Andhra.
2. Dr. S. E. D. Massilamani—Madras.
3. Dr. P. R. Dutta—Delhi.
4. Dr. W. C. Mathur—Delhi.
5. Dr. G. P. Chakravarty—Lucknow.
6. Dr. S. K. Sinha—Bihar (Patna).
7. Col. A. N. Roy—Calcutta.
8. Prof. N. Majumdar—Calcutta.
9. Prof. Uma Mitra—Calcutta.
10. Dr. B. Ganguli—Calcutta.

*Journal Committee:*

1. Dr. B. C. Dasgupta—*Editor.*
2. Dr. S. C. Seal—*Managing Editor.*
3. Dr. G. C. Ghose—*Associate Editor.*
4. Dr. A. Ghosh Hazra—*Asst. Editor.*
5. Dr. M. N. Lahiri—*Member.*
6. Dr. (Mrs.) Muktha Sen—Calcutta.
7. Dr. P. K. Ghosh—Calcutta.
8. Dr. K. K. Mathen—Calcutta.
9. Prof. N. Majumdar—Calcutta.
10. Dr. B. Ganguli—Calcutta.

7. Appointment of Auditor:—

*Auditor:*—Messrs. M. K. Mukherjee & Co., 3/1 Bankshall St., Cal. 1, in an honorarium of Rs. 100/-.

8. Consideration of Resolutions brought forwarded by the members:—

The Resolutions brought forwarded by the members were considered by the Central Council. It was suggested that resolution No. 2 may be modified.

9. Suggestion for venue and time for the next Annual General Meeting.

At suggestion of Sri Bhide the Council approved the proposal to consider Patna as venue of the next Annual General Meeting.

The out-going President Lt. Col. Jaswant Singh thanked the members of the Central Council for their co-operation and active interest throughout the year. He also welcomed the new President Col. Barkat Narain and wished him all success in the coming year. The meeting terminated with a vote of thanks to the chair.

## PROCEEDINGS OF THE FOURTH ANNUAL GENERAL MEETING

Proceedings of the Annual General Meeting of the Indian Public Health Association held on the 28th December 1959 at the B. J. Medical College Poona under the chairmanship of Lt. Col. Jaswant Singh, President of the Association. A large number of members attended the meeting.

The chairman welcomed the members and the agenda were taken up for consideration.

1. *Confirm the proceedings of the 3rd Annual General Meeting.*

The proceedings of the last annual general meeting which had been circulated to members were confirmed.

2. *Receive, consider and adopt the annual report of the General Secretary for the year 1959.*

In presenting the general secretary's report Dr. Bhaskaran highlighted some of the important points. The report was then discussed by the members present and adopted unanimously.

3. *Receive, consider and adopt the annual accounts of the year (1st October '58 to 30th September 1959).*

The account was adopted unanimously by the general body.

4. *Consider the budget estimate for the ensuing year.*

The following budget proposed by the central council was unanimously adopted:

BUDGET for 1959-60

| *Income :* | | Rs. |
|---|---|---|
| Membership Subscription for 400 members at 10/- per member | ... | 4,000 |
| Membership subscription for Associate members (300) at Rs. 2/- | ... | 600 |
| Subscription from Journal | ... | 200 |
| Advertisement Bills | ... | 8,000 |
| | | 12,800 |
| Deficit | ... | 1,800 |
| | | 14,600 |

| *Expenditure :* | | Rs. |
|---|---|---|
| Establishment | ... | 3,000 |
| Postage including that of Journal | ... | 1,000 |
| Printing | ... | 6,500 |
| Auditor's fee | ... | 100 |
| Advertisement remuneration | ... | 1,500 |
| Miscellaneous | ... | 500 |
| Expenditure for Annual General Meeting | ... | 500 |
| Typewriter & furniture | ... | 1,500 |
| | | 14,600 |

5. *Announce the Office bearers of the Association for the year 1960.*

The President announced that the following members were ddly elected to their respective office:—

President Elect.—Dr. T. B. Patel.

Vice-Presidents.—Dr. Seshagiri Rau and Dr. V. H. Thakor.

General Secretary.—Dr. J. K. Bhattacharya.

Joint Secretaries.—Dr. A. L. Saha and Dr. K. Bagchi.

Treasurer.—Dr. T. R. Bhaskaran.

6. *Election of 10 members of the Central Council and Journal Committee.*

The general body accepted the Central Council's proposals in this connection and the following members unanimously elected.

A. *Central Council :*

1. Dr. C. R. Naidu
2. Dr. S. E. D. Masukamani
3. Dr. P. R. Dutta
4. Dr. W. C. Mathur
5. Dr. G. P. Chakravarty
6. Dr. S. K. Sinha
7. Col. A. N. Roy
8. Prof. N. Majumdar
9. Mrs. Uma Mitra
10. Dr. B. Ganguly

1. B. C. Dasgupta—*Editor.*
2. Dr. S. C. Seal—*Managing Editor.*
3. Dr. G. C. Ghose—*Associate Editor.*
4. Dr. A. Ghosh Hazra—*Asst. Editor.*
5. Dr. M. N. Lahiri—*Member.*
6. Dr. (Mrs.) Muktha Sen—*Member.*
7. Dr. P. K. Ghosh—*Member.*
8. Dr. K. K. Mathen—*Member.*
9. Prof. N. Majumdar—*Member.*
10. Dr. B. Ganguly—*Member.*

7. *Consider the resolutions brought forward by the Central Council and by the individual members.*

Seven resolutions brought forward by the members were discussed and adopted with some modifications.

The resolutions which were finally adopted by the general body were as follows:—

*RESOLUTION-I.*

In the light of the accepted policy of the Government to provide integrated health care the Conference strongly recommended that all doctors employed for this service should receive adequate non-practicing allowance. Further there should be a uniformity in allowance and other service conditions for all doctors in respect of the programme in which they are engaged.

*RESOLUTION-II.*

In view of the high cost of the production of the Association Journal it is resolved that the annual contribution from the Branch to the Central Organisation of the Indian Public Health Association be raised to Rs. 10/- from Rs. 8/- as at present.

*RESOLUTION-III.*

It is resolved that to bring the life membership of the Association to the same standard as other allied Organisations and to improve the financial position of the Association the subscription be raised from Rs. 150/- to Rs. 200/- from the year 1960.

*RESOLUTION-IV.*

In the context of integrated health services, proposed by the Indian Public Health Association be it resolved that the authorities should employ qualified public health personnel (M.B.B.S., D.P.H.) wherever available in preference to non—D.P.H.

*RESOLUTION-V*

Having observed that the subject of Preventive and Social Medicine has not been given due recognition by certain medical colleges by not opening a fully equipped and independent department and by certain Universities by abolishing a separate examination for the purpose, it is resolved that the Medical Education sub-committee of the Association should immediately take up the question of implementation of the previous recommendations of the Association on the subject and approach the Indian Medical Council and the Universities concerned to resume holding a separate examination by the first available opportunity.

RESOLUTION VI

The Association being convinced that the best time of giving health education and inculcate health practices is when the students are in the primary and secondary schools, it strongly recommends that the teaching of hygiene and elementary physiology be reintroduced both as compulsory and as selected subject for the school final examination. For this purpose it is necessary to forward a copy of this resolution to the Department of Education of each State.

RESOLUTION VII

Resolved that the following two amendments to the existing rules be made:—

*No. 1.* Under the subject—5. Classification of members. Sub-Head—B. Ordinary members.

Reference: Page 2 of the Booklet—Memorandum of Association, line 6, insert "like Licentiates in Medicine or Public Health etc." before the words "to be decided".

The amended Rule will read as follows:

Any person actively engaged in or interested in Health Works and possessing graduate standard of Education in Medicine and or Public Health, P. H. Engineering qualifications like, Licentiate in Medicine or Public Health etc. to be decided by the "Committee of Eligibility" appointed by the Council, are eligible for ordinary membership of the Association.

*No. 2.* Under the subject 9. Priviledges of members. Sub-Head—B. Voting Rights. Para—(ii) Voting rights of "Associate Members", replacing the words "20".

Thus the amended rule will read as follows:—

They shall elect one voting member for every 10 Associate Members.

*8. Fix the Venue and time of the next Annual General Meeting.*

The general body approved the proposal made by the Central Council to hold the next annual session in Bihar. In this connection the members also suggested that as far as possible it is desirable to hold the annual session of the Indian Public Health Association along with the annual meeting of the I. C. M. R.

*9. Any other business.*

As there was no other business the meeting terminated with a vote of thanks to the chair.

PROCEEDINGS OF THE PLENARY SESSION

Arising out of the panel discussion in the Symposia on Integrated Health Care, the followiug resolutions were adopted at the Plenary Session held on the 30th December, 1960 at the B. J. Medical College, Poona.

*Panel—I.*

*Health Centres in C.D.P. Blocks.*

For effective development of integrated rural health care the Public Health Association recommends that it is essential that—

(2) to implement section 19* of the E. S. I. Act and "Preventive Health Services" should be included into the services now being rendered under the E. S. I. Scheme.

(3) That the operation of the E. S. I. Scheme be extended to all industries including Mines without any further delay.

*E.S.I. Act:—Section 19:—The Corporation may in addition to the scheme of benefits specified in this Act promote measures for the improvement of the health and welfare of insured persons and for the rehabilitation and re-employment of insured persons who have been disabled or injured and may incur in respect of such measures expenditure from the funds of the Corporation within such limit as may be prescribed by the Central Government.

*Section 58:—The (State) Government should provide for insured persons and (where such benefits in extended to their families) their families in the state reasonable medical surgical and obstetrics treatment.

*Panel—III.*

*Railway Medical Organization.*

The Panel felt that this subject need further discussion).

In view of the existence of sufficient personnel and facilities in the Railway Medical Organization it is resolved that the Railway authorities be requested to introduce integrated health care programme at least in such railway colonies where dispensaries exist with more than one medical personnel in each.

In view of the increasing need for sanitary engineer's services in the Railway it is suggested that the Railway authorities may be requested to have properly trained public health engineers in their medical organization.

In this connection Co. Barkat Narain, Chairman of the Panel kindly agreed to make a personal approach to the Railway Board to explore the possibility of implementing this suggestion before passing any resolution.

*Panel—IV.*

*Industrial Health.*

For better development of Industrial Health Services the Association recommends.

(1) that there should be a very close collaboration between these services and the community health services.

(2) (i) Industrial health services should provide both curative and preventive services and should include both the workers and his family and should be operated by the industry in collaboration with State Health Department.

(ii) A Public Health Engineer should be associated with the planning of an industrial concern.

(iii) Arrangement should be made for health education to the workers as well as the Management. This would necessitate the teachers to have adequate knowledge of the various aspects of production and hazards in industries.

(3) More training facilities should be provided for Medical Officers and technicians in industrial health.

# BOOK REVIEW

EMERGENCIES IN GENERAL PRACTICE. By Dr. J. R. Goyal. Second Edition. Published by Medical Reviews, Delhi, 1960. PP. 270. Price Rs. 12.00.

A general practitioner in this country, whether practising in a town or a village often has to deal with cases of very serious and diverse nature at odd hours without any assistance of a well-equipped clinic or a hospital, nor the facilities are available in the rural areas to remove the patients to hospital. But people depend upon him for all kinds of emergencies such as burns, haemorrhage, convulsion, acute abdomen, fracture dislocation, abortion, uterine inertia, fainting attacks, accidents and injury, gangrene, hiccough, paralysis, heart failure, etc. Dr. Goyal has made an attempt to compile the remedies for such emergencies in his handbook of emergencies in a brief and practical manner to enable the practitioner to be always prepared and to keep his wit ready for immediate action.

The book has been divided into 15 chapters dealing with hyperpyrexia, nervous symptoms, acute pain, haemorrhage, acute dyspepsia, thrombosis, embolism, vomiting and diarrhoea, suppression and retention of urine, asphyxia shock, acute poisoning, burns, injuries etc. Perhaps addition of a few more chapters like acute infectious disease, tetanus, snakebite, food poisoning, animal bite, emergencies with drug administration, asthma, sudden uncon-

sciousness etc. would have added further utilities of this handbook. However, the popularity of the book is indicated in the publication of its second edition. The general practitioners should find the book useful and practical for their day to day use.

A TREATISE ON HYGIENE AND PUBLIC HEALTH, with special reference to Tropics—By B. N. Ghosh, Fourteenth Edition, edited by Dr. R. N. Ghosh D/Demy pages XV+940. Scientific Publishing Co., 85, Netaji Subhas Road, Calcutta—1. Price Rs. 22.50 n.P. or 40 S.

To keep pace with the progress of science and to accommodate the newer knowledge revision of a text book is an essential necessity. Recently, there has been a change of emphasis in the modern concept of public health, from environmental sanitation to social medicine and from preventive medicine to positive health. Ghosh's Hygiene and Public Health which was published in 1912 has maintained its usefulness and popularity by revising the book fourteen times during the course of well neigh half a century, which by itself speaks well for the life an Indian text book. The last edition has assumed an added importance due to its posthumous nature by the passing away of its eminent author in 1957.

The present edition has been brought up-to-date and has been extensively revised and re-written along the lines of newer concepts for which the credit is due to Dr. R. N. Ghosh, the son of the late author. Two new chapters have been added making a total of 31 chapters and covering 940 pages against 787 of the last edition. This edition has rightly preserved the Hygiene and Sanitation chapters as they should still represent very important fields in the training courses of the medical and public health students in this country for many years to come.

The book has been enriched by the authoritative contributions of several eminent specialists, both Indian and foreign in their respective specialized fields. The chapters which have received special attention in this edition are: Public Health Administration, Health Education, Rural Health, Social Medicine, Malaria, Tuberculosis, V. D. and Leprosy. Three appendices dealing with the practical and legal aspects have also added to its value particularly to post-graduate public healic health students and health workers in the field. The book is also liberally illustrated and well-presented for both students and health workers. However, it may be worthwhile to mention that addition of two more chapters one on Epidemiology and another on Preventive Pediatrics will add further value to this book which has already proved its worth in this country. This new edition should therefore be in still greater demand.

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IMPORTANT

Dr. S. C. Seal, Managing Editor of the Journal and lately Professor of Epidemiology, All-India Institute of Hygiene & Public Health, Calcutta, assumed new appointment in the Directorate General of Health Services, New Delhi as Special Officer on Duty. His present address is as follows:—

DR. S. C. SEAL,
*Officer on Special Duty,*
*Directorate General of Health Services*
*Central Secretariat, New Delhi.*

## NOTICE TO SUBSCRIBERS

The Indian Journal of Public Health is the Official Organ of the Indian Public Health Association and is published by the Association quarterly in the months of January, April, July and October of each year.

The Journal is meant to publish mainly original contributions and results of original investigations relating to the problems of public health, which broadly includes personal hygiene, Public Health Service, vital statistics and population studies, social and preventive medicine, microbiology and public health laboratory services, mental health, public health engineering, housing and sanitation, tropical medicine and hygiene, epidemiology and communicable disease control, industrial and physiological hygiene, occupational health, maternal and child health education, nursing, midwifery, health visiting, food and nutrition, school health, dentistry, veterinary hygiene, medical education and history of medicine, etc.

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It is therefore very proper on the part of our patrons and well wishers particularly the members of the Association to extend their earnest help and co-operation to establish the footing of the Association on a very firm and steady foundation. All these require finance and it is my fervent appeal to the defaulting members to kindly send their annual subscription for all the arrears due, to the Secretary as early as possible.

We trust we can rely on your active help and co-operation.

*Secretary, I. P. H. A.*

Calcutta:
January 1960.

# INDIAN JOURNAL OF PUBLIC HEALTH

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