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ON RURAL LIFE 1939

Technical Documentation

GENERAL SURVEY  
OF MEDICO-SOCIAL POLICY  
IN RURAL AREAS

prepared under the auspices of the Health Committee

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EUROPEAN CONFERENCE  
ON RURAL LIFE

13

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## FOREWORD

*In 1939, the League of Nations is convening a European Conference on Rural Life.*

*The idea of such a conference was originally propounded by the 1931 European Conference on Rural Hygiene, which recorded the opinion that it would be desirable for its recommendations to be reviewed after a period of five years in the light of the studies undertaken in the meanwhile by the Health Organisation.*

*When this period had elapsed, the Health Committee proposed that a new conference should examine the questions of rural hygiene in their natural setting, considering that any real amelioration of the standard of health in the rural environment must depend, in the first place, upon the improvement of living conditions generally.*

*This view having found acceptance, the Assembly of the League of Nations decided to organise a European conference on rural life. This conference will consider, from the technical standpoint, the various problems involved in raising the social standards and level of well-being of the rural areas of Europe ; the Governments concerned will thus have an opportunity of discussing together the methods best calculated to promote a higher standard of living and improved health protection. Accordingly, the agenda deals in turn with questions of vital statistics, agricultural economy, public health, nutrition, co-operation, education and rural planning.*

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*One of the most important items of the agenda is that of medico-social policy ; and the Health Committee has given particular attention to the thorough technical preparation of the conference's discussions on this subject.*

*After an initial phase of documentary preparation, it organised, in October 1938, a consultation, attended by officers actively engaged in the organisation of the medico-social policy of their respective countries.<sup>1</sup>*

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<sup>1</sup> See footnote on page 6.

*This consultation enabled the participants to meet and discuss the best ways of co-ordinating the presentation of the various national reports which describe the action of the public authorities in the conduct of medico-social policy in rural areas.*

*They reviewed the main problems and the difficulties encountered as well as the means of coping with them which are afforded by the medico-social equipment available in their respective countries.*

*A drafting committee, consisting of Dr. B. BORČIČ (Yugoslavia), Dr. N. M. GOODMAN (United Kingdom), Dr. Béla JOHAN (Hungary), Dr. M. KACPRZAK (Poland) and Dr. René SAND (Belgium), met in December 1938 to examine the draft report kindly prepared by Dr. Kacprzak and Dr. René Sand. This comprehensive monograph, which is to serve as an introduction to the discussions of the 1939 conference, is reproduced below.*

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<sup>1</sup> This meeting was attended by :

- Dr. O. ALKS, Director of the Department of Public Health of Latvia, Riga ;
- Dr. W. Jerzy BABECKI, Deputy-Director of the Public Health Service of Poland, Warsaw ;
- Professor J. BALTEANU, Professor of Hygiene at the Jassy Faculty of Medicine, Member of the Health Committee ;
- Dr. C. VAN DEN BERG, Director-General of Public Health of the Netherlands, The Hague ;
- Professor D. COMBIESCO, Secretary-General, Roumanian Ministry of Public Health, Bucharest ;
- Dr. Ch. FAUCONNET, Director of the Swiss Federal Public Health Service, Berne ;
- Dr. N. M. GOODMAN, Medical Officer, Ministry of Health, London ;
- Dr. Béla JOHAN, Secretary of State, Royal Hungarian Ministry of the Interior, Budapest ;
- Dr. René SAND, Secretary-General, Section of Public Health, Belgian Ministry of Public Health, Brussels ;

The following also took part in this session, in the capacity of experts :

- Dr. B. BORČIČ, Director of the Institute and School of Hygiene, Zagreb ;
  - Dr. M. KACPRZAK, Chief of Service, Polish Ministry of Social Welfare, Warsaw ;
  - Dr. A. STAMPAR, former Director of the Yugoslav Public Health Service, Zagreb ;
  - Dr. J. TOMCSIK, Director of the Hungarian State Institute of Hygiene and Professor at the University, Budapest ;
  - Dr. N. M. ATWATER, Secretary of the American Public Health Association, New York ;
  - Dr. G. ICHOK, Professor at the Institute of Statistics, University of Paris ;
  - Dr. J. J. PATERSON, Medical Officer of Health, Maidenhead, Berkshire, United Kingdom.
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## I. INTRODUCTION

*The Importance of Health.*

*In the last analysis, man will always be the subject of all our endeavours ; whether our purpose be cultural or material, the action we undertake always has as its fundamental object the improvement of the condition of mankind and the protection, raising and enrichment of human existence.*

We call civilisation the sum total of the means employed, by every people and every generation, to achieve that object more fully.

Such successive endeavours constitute the history of human progress.

In this gradual assertion of the ascendancy of life over death, *health stands in the forefront ;* the oldest civilisations, like the religious movements of all times, show their concern for health. Good health is the prerequisite of well-being and ability to work, the safeguard of intellectual and moral balance, and the most valuable asset of the individual, the family and the community.

Here, as in most other spheres, however, *scientific progress in the abstract greatly outdistances concrete achievement.* We have learnt how to lengthen the expectation of life, how to prevent or cure many diseases, how to abolish much suffering ; but we only apply that knowledge to a relatively limited extent. Doubtless, economic circumstances limit our possibilities of action ; but mere indifference, and, even more, the lack of organisation and of a broad general outlook, must also be held responsible.

Some countries have made persistent efforts to improve public health, and have been rewarded by a considerable decline in infant mortality and in the death rate from infectious diseases. Nevertheless, morbidity still remains unduly high, and a state of thorough good health is still far from being the general rule ; moreover, the victories won in the struggle against death are due more to improvements in the economic condition of the masses than to the direct

influence of health measures, which are seldom planned as part of a *rational programme*.

#### *The Need for a Health Programme.*

In view of the deficiencies still to be found in this field, and the immense advantage to be gained from concerted action in the interests of health, it is of the highest importance that each country should make a general survey of the state of public health and of its health equipment, and that it should, on that basis, construct a coherent plan for a medico-social policy, fixing, year by year, the stage to be reached and estimating and securing the financial resources required for the purpose. Such a task has lately been accomplished, and in a bold spirit of constructive realism, by a Commission appointed by the Federal Government of the United States.

#### *The Need for a Rural Health Policy.*

The steps taken in various countries to raise public health standards have invariably been more favourable to the urban population and to industrial workers. It was long believed that the farmer, living in close contact with nature, was in a privileged position from the standpoint of health. But as living and health conditions improved in the towns, urban mortality rates fell to such an extent that, in several countries, they are to-day actually lower than rural mortality rates. Villagers, living in small scattered groups, have been unable to improve their condition as effectively as town workers. The life of the peasant has altered comparatively little.

Yet the greater part of the human race lives on the land, the produce of which is essential to the existence of the whole of mankind. In addition, the birth rate has, for the most part, remained high in rural areas, thus enabling them to contribute a considerable proportion of the population of towns. It is therefore urgently necessary to set on foot, on behalf of the agricultural community, a health campaign appropriate to its requirements and economic conditions, and calculated to meet the particular difficulties to be overcome in rural areas.

*The reason why a separate medico-social policy is needed for country districts* is that, although scientific data remain constant from one region to another, their practical application varies according to local circumstances. Villages differ from towns by their remoteness, their small, scattered population, the type of activity carried on by their inhabitants, their mode of life, their habits of thought and their reactions. Not only the physical and economic possibilities, but also the social and psychological atmosphere of the countryside, call for different methods ; no effort must be neglected to make rural existence more attractive and more secure.

Such were the considerations which led the Council of the League of Nations, on the proposal of the Spanish Government, to instruct the Health Organisation to convene the European Conference on Rural Hygiene, which met at Geneva in June and July 1931. That Conference was followed by the Intergovernmental Conference of Far Eastern Countries on Rural Hygiene, held at Bandoeng (Java) in August 1937. These two Conferences, which had been carefully prepared by a series of surveys and other detailed preliminary work, laid down the principles, methods and means of action constituting a rural health policy, in a series of recommendations which were unanimously accepted by the delegates of twenty-three European nations at Geneva and thirteen Far Eastern countries at Bandoeng.

That programme has had an indisputable influence on the development of rural hygiene. Although actual methods have varied from country to country, the main lines laid down at Geneva have everywhere been followed. Before concluding its labours, the European Conference recommended that a new meeting should be held within the next five years for the purpose of surveying the progress achieved and adapting the 1931 recommendations to newer problems and to the latest advances in public health technique.

In the meantime, the problem broadened in scope. The Health Committee realised that considerations of health can seldom be divorced from economic, demographic and social factors. It accordingly proposed to the Assembly that the second Conference on Rural Hygiene should be transformed into a European Conference on Rural Life. This conference is to be held at Geneva in 1939 ; not only the Health Organisation and the Economic and Financial Organisation of the League, but also the International Labour Office, the International Institute of Intellectual Co-operation and the



International Institute of Agriculture are co-operating in the preliminary work under the guidance of a Preparatory Commission. A great deal of material has been collected as a result of investigations, meetings of experts, reports and statistics. But before giving a general review of this material, emphasis should be laid on the profound differences in the economic, health and cultural standards of rural populations from country to country.

*Differences in Rural Environments in the Various Countries.*

A number of different sets of conditions are found in this connection in different countries and regions. In some cases, the country is so highly industrialised that the agricultural community is in the minority, the greater part of the population living in towns. That is the position in the United Kingdom, Belgium and the Netherlands. The countryside is inhabited by industrial and clerical workers, who travel daily to office or factory, and by other categories of persons whose income is not derived from agriculture. Even here, however, some districts remain isolated and can to some extent be compared with typical agricultural countries.

In other cases, the peasant population represents half, or more than half, the total, but the most modern equipment is found in farms and rural dwellings. This is the situation exemplified by the Scandinavian countries and Switzerland.

Elsewhere, we may find that, despite the existence of large towns and a considerable degree of industrialisation in some parts of the country, from a third to half of the population is still employed in agriculture, conducted—*notwithstanding various improvements*—in the traditional manner. This is the case in Scotland, France and Germany.

Finally, there are countries in which the population is very predominantly agricultural, the villages retaining their traditional aspect, in spite of varying degrees of modification due to modern innovations.

It is clearly in this last category that the problems of rural life subsist in the fullest degree, and call for measures other than those which may apply elsewhere. Districts in which agriculture has been modernised constitute, in one sense, a foretaste of the

future, and in any case a useful field of suggestions for other more backward regions.

There can be no question as to the considerable gap subsisting, from country to country, as regards economic resources, cultural standards and the relative isolation of the peasant population, which conditions their mental attitude. To those differences must be added those found in legislation and administration.

Situations so varied require a wide measure of elasticity in the formulation of the principles of a rural medico-social policy. A given recommendation will seem too modest in some countries and too sweeping in others. Allowance must be made for national, regional and local circumstances. Our object here is, however, to draw inferences rather than to offer concrete solutions ; we merely wish to map out a general line of advance, which each country will be free to follow in the light of its own requirements, possibilities of action and experience.

## II. CURATIVE MEDICINE

### *Medical Care.*

Medico-social policy in country districts should begin by the organisation of arrangements for *medical care*. This is the normal course of historical development for the protection of health, and it is but natural that the first step should be that of meeting the most immediate and keenly-felt need. The sick suffer, and to relieve them is a humanitarian duty ; it is also the means of paving the way for preventive medicine, which, from the standpoint of public health, is more important than curative medicine, though as yet less appreciated by the public.

In some countries, provision for medical care in rural districts is relatively complete ; elsewhere, it is still inadequate, or even almost entirely wanting in certain districts, owing to their isolation and lack of resources. To remedy this situation, the countries of central and eastern Europe, the Scandinavian countries and Scotland (mountainous and island regions) have adopted the system of approved provincial or local practitioners ; these receive a specified allowance, plus fees from families which can afford to pay. In Great Britain,

France and Belgium, in particular, the public relief authorities pay doctors for attendance to the poor. Furthermore, through the extension of sickness insurance and the other forms of collective medical assistance, the sick are given access to the whole armoury of preventive and curative facilities, which it is to the interest of the responsible agencies to improve so as to save money. Attending the rural population thus becomes a reliable source of income for doctors, so that they will be more willing to settle in villages, and will be *distributed* more in accordance with the needs of the public. In some countries, young doctors have to work for a time as assistants to country practitioners, or to settle in rural districts at the outset of their career.

### *Specialists.*

Though of outstanding importance, the work of the general practitioner is not sufficient in itself ; the patient must be able to obtain the necessary *drugs*, and it is no less essential for him in certain cases to consult *specialists*. Here again, the extension of sickness insurance may supply the solution by removing the chief obstacle, which is a financial one.

In England, a number of counties have been divided into districts, each provided with a medical centre where poor, insured and paying patients can consult specialists on certain days and at certain hours. This system apparently satisfies both the medical profession and the public.

Surgical operations, diagnostic examinations and special treatments must usually be carried out in hospital, and this applies also to analyses, unless they are performed at central or regional institutes.

### *Hospitals.*

It is therefore essential for the *hospitals* to form a network extending over the whole country. With the modern development of communications, patients can now be sent, within a few hours, to large institutions where the necessary equipment and skill are available.

In thinly-populated districts in certain countries, chalet-hospitals with some ten or twenty beds have been established ; these are

linked up with larger institutions, which send one of their doctors when required, the resident staff consisting of a nurse-midwife only. Such chalet-hospitals receive midwifery and accident cases, and patients who cannot be treated at home, but whose condition is such that they need not, or cannot, be removed to the regional hospital immediately. The cottage hospitals in England are institutions of a more self-contained type, though they call in the services of local doctors. It is universally recognised that these cottage hospitals perform exceedingly valuable services.

The local hospital should never have less than fifty beds, and preferably at least a hundred, so that overhead expenses can be spread over a greater number of patients. It should contain a laboratory, a radiological department and an operating theatre. Its staff should include at least one resident surgeon and an adequate number of experienced nurses.

This hospital, serving the purpose of a sorting and diagnostic centre, should be in contact with an institution possessing more elaborate equipment and staff, and also with a tuberculosis sanatorium, a psychiatric hospital and a convalescent home. The curative institutions in a given district should form a co-ordinated whole, so that patients may be moved from one to another as required, the doctors working at different points in the hospital system as occasion demands. An adequate number of isolation beds should be reserved in these various hospitals for infectious cases, if there are no special institutions for them.

The peasant is frequently unable to pay his own hospital expenses, and the local resources of the public relief authorities are usually limited. The assistance of a local or national fund, or of the social insurance organisation, is indispensable, especially in cases of prolonged illness.

#### *Dental Care.*

*Dental care* is, needless to say, still more neglected in the country than in the towns; it is expensive, and there is a shortage of qualified staff. Once again, social insurance can provide a solution for the problem. Sweden has just set up a national dental service: dentists settled in all parts of the country receive a fixed salary for attending the poor, together with fees on a recognised scale from patients in more or less comfortable circumstances.

### *Confinements.*

In the country, most confinements take place at home. For this reason, a midwifery service has been instituted in numerous countries ; the midwives also receive either a fixed salary or a separate payment for each confinement, apart from fees from families which can afford to pay.

### *Home Nursing.*

Since attention has to be given at home to patients suffering from acute or chronic complaints, these midwives, in some countries, are nurses as well. This system has been adopted in England, where throughout the country the Queen Victoria Jubilee Institute maintains nurse-midwives, who are the country doctor's best assistants. The Institute draws its funds from donations and bequests, and from contributions from the local authorities and the public, either as annual subscriptions or as fees. In other countries, home nursing is undertaken by special nurses or health visitors.

To sum up, the immediate aim should be to ensure that every rural family receives a minimum of attention, especially in cases of confinement, infectious disease or accident, and in those requiring urgent medical aid. The final goal should be, however, to provide in all cases the services of doctor, midwife, nurse, specialists and dentist, in addition to laboratory analyses and hospital treatment, and, in any event, the necessary medicaments.

The public relief authorities, social insurance organisations, the Government, provincial and local authorities and private associations should all take their due share in this system. The essential is that the system should be complete and co-ordinated and that none should be excluded from its operation.

## III. PREVENTIVE MEDICINE

### *The Two Aspects of Preventive Medicine.*

While measures are introduced to provide the rural population with effective medical assistance, the task of *prevention* should be undertaken in both its aspects : the first, or impersonal, aspect being that which concerns environment (housing, water-supply, sewage-

disposal, foodstuffs)—which we shall discuss later—while the second, or personal, aspect concerns the preventive measures taken by the doctor and the health visitor in regard to families and individuals.

Medico-social organisation cannot be regarded as a plan to be immediately and universally applied ; the expense would in any case be an obstacle. All that can be done, therefore, is to prepare a stage-wise and co-ordinated programme, covering at one and the same time both central and local administrations, both environment of the family and the individual, both preventive and curative action.

#### *Central Administration.*

As regards the *central administration*, there is no doubt that the necessary co-operation between health,<sup>1</sup> public relief and social welfare institutions is impossible unless the central services in these three branches are either co-ordinated or are united in a single *Ministry of Public Health or of Social Affairs*, which keeps in close touch with the institutes of hygiene (if these are not directly under it) and co-operates as far as possible with the medical faculties. The Ministry should form advisory commissions or boards whose opinion it should obtain.

As the European Conference on Rural Hygiene recommended,<sup>2</sup> the central administration should work on “ the principle of the greatest efficiency combined with the greatest economy. This *principle of maximum efficiency* was the notion which governed the whole Conference. Its corollary is the *division and technical value of the work done*. Division by areas is intended to bring into direct touch with the scattered rural population a staff and institutions which are as many-sided as possible. A functional division is intended to place at the disposal of such a population over a wider area a specialised staff and specialised institutions. . . . Another corollary of the principle of maximum efficiency is the *principle of co-ordination and unity of action*. . . . Finally, all the recommendations of the Conference were inspired by the *principle of adaptation to local conditions*.”

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<sup>1</sup> Including housing, nutrition, physical fitness, maternal and child welfare, school medical services, hospitals and the supervision of the medical profession.

<sup>2</sup> Geneva, 1931, Vol. I, page 11.

Both general and district or local health surveys are essential to the planning of an effective medico-social policy. *Monographs on both social and health conditions*, made more specific by means of health indices<sup>1</sup> or similar systems, should therefore be prepared for the country as a whole, for the various districts and for smaller areas. This is a modern application of the medical topography of Hippocrates. Mortality and morbidity statistics should also be made as complete and accurate as possible, since they will serve as a guide to the health administration and the medical profession in their work.

The central health administration cannot confine itself to stimulating and financially assisting local and private efforts ; the law must allow it to impose certain general measures (such as vaccination and the isolation of infectious cases) and to require the local authorities to take a certain minimum of sanitary measures. If need be, some authority to inflict penalties should be added to its powers of financial and technical assistance and technical supervision. The aim should be to achieve that nice balance between centralisation and decentralisation which will be best suited to the special conditions of the country. As the health services develop, gradual decentralisation seems desirable ; but the right of supervision by the central authorities should remain, together with their right to intervene in the event of technical errors or slackness on the part of local authorities or subsidised organisations.

The central health administration will call in the services of experts : engineers to inspect sanitation schemes, veterinary surgeons to inspect meat, chemists to inspect other foodstuffs, pædiatrists, tuberculosis specialists, psychiatrists, etc. (not to mention lawyers and statisticians) ; but it will consist chiefly of doctors having special knowledge of public health questions.

#### *County Administration.*

The powers of the county (departmental, provincial) health administration should extend to social preventive medicine (health

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<sup>1</sup> This system of indices has been devised by M. Falk and M. Stouman, and was applied by the latter to the town of New Haven, to a Hungarian rural district and to the city of Brussels. It was adapted to rural districts by a Conference of Experts, which met at Geneva in June 1938.

visitors, maternal and child welfare, anti-tuberculosis work, etc.), public health (housing, water-supply, sewerage, etc.) and hospitals. The aim should be, not to carry out a uniform programme everywhere, but, on the contrary, to meet the most immediate needs, which vary from district to district, to arouse an interest in hygiene among the local public and their leaders, and to co-ordinate endeavours. Just as universal experience has shown the advantage of having polyvalent health visitors (but subject to the supervision of specialised superintendents), so it is now the rule to have polyvalent county health services.

The county health administration should be under the direction of a *full-time official who is a medical man specially trained for the work (diploma in public health)*. Here again, it is no longer in dispute that the simultaneous practice of medicine and performance of duties in the public health service inevitably tends to make a doctor neglect the latter in favour of urgent cases amongst his patients ; the independence that every official should enjoy is encroached upon, his mind is distracted from questions and considerations which should absorb his whole attention, and he becomes a rival to medical practitioners whose co-operation is essential to the discharge of his official duties.

Those public authorities who believe that they are saving money in this way lose more than they save in impaired efficiency and the multiplication of posts. The *part-time* system is not merely a regrettable second-best, but an actual error in organisation ; it would be better to reduce the number of posts than to turn them into subsidiary, not to say wasted, occupations.

The medical officer of health in charge of a county service should, where necessary, be provided with assistant public health officers, and should also be given the assistance of specialists, and, if necessary, of the district institute of hygiene, besides having at his disposal in any event inspecting or superintendent health visitors.

The county health administration constitutes *the link between the central and local administrations*. In some countries, it is entirely controlled by the central authorities ; in others, it is run by the county, subject to the supervision of the central authorities, the latter fixing conditions of employment, preparing a scale of salaries and pensions, confirming appointments, supervising the work done and providing financial assistance. The county health service



should in any event form part of the national organisation and should work on the same lines as the central health administration.

*The essential function of the county health administration is to stimulate, co-ordinate and distribute work.* The medical officer of health in charge of it should possess a thorough knowledge of the area, its resources, requirements and mentality ; he should pay personal visits to the mayors, the leading members of the medical and teaching professions, the social insurance organisations, the public assistance committees and private associations. In a number of countries, these various persons and agencies have been brought together in co-ordination committees, with excellent results.

Thus helped in his task, the county medical officer of health should endeavour to combine the institutions in his county into a well-balanced whole. The isolation in which each separate hospital, sanatorium and dispensary is only too often prone to work will give place to a system of interconnection. One hospital, well situated and equipped, will specialise in the treatment of acute affections, while another, less modern, will be devoted to chronic diseases and a third will become a convalescent home. Since 1929, the efforts of the authorities in Great Britain have been successfully directed to this end.

#### *District Administration.*

The county (province, department) is divided into administrative areas or districts, each of which—possibly several grouped together for the purpose—will have its full-time medical officer of health, who will be assisted by health visitors and a sanitary inspector, unless such auxiliary staff is provided at some other level in the hierarchy of services. But this division does not imply a dispersal of effort ; the county medical officer of health will be responsible for the public health organisation of the whole county.

The district health service, which is the real executive body for purposes of public health policy, should, according to the opinion of authorities who have studied the question, have not more than from 20,000 to 50,000 people in its area, unless the medical officer of health has the help of one or more assistants. District health services will be created only as the necessary funds and staff become available. To divide up the country straight away into a number

of health districts, and to rely on doctors who have not had the necessary training and have to attend to their practice at the same time, without the requisite auxiliary staff and funds, would be to place the public health organisation on an entirely false basis from the outset.

The practice must be to proceed gradually, not to undertake too much at a time, and to make sure that whatever is done is done on a really sound basis.

The area comprised within a district will include both large towns, which generally have a health service of their own, and small towns and villages. At this *local and rural level*, the public health organisation may be developed either by the central health service or by local initiative. In either event, the work will be one of persuasion; but, in the first case, the health centre can be complete from the start, whereas, in the second, it will often be necessary to proceed by stages. In this second case, the villagers, or at all events the more enlightened among them, must be induced to support the local authorities in carrying out certain sanitary reforms—water-supply, manure-pits, cleaning of byres, tipping of household refuse. A health visitor, under the direction of a doctor, will begin by visiting infants, and this will gain her admittance to a certain number of households; later, she will extend her activities to pregnant women, school-children and consumptives, and will thus come into contact with most of the families. She will send children and adults requiring medical treatment to the local doctors. While giving no aid herself, she will apply to the public services, the public relief authorities and private organisations for help. She will endeavour to keep in touch with every child from birth to school-leaving age.

Soon the population will be ready to accept an infant welfare clinic; this will be followed by a pre-natal clinic, the medical inspection of school-children and children of pre-school age, and, perhaps, an anti-tuberculosis dispensary. In this way, a health centre will gradually be built up, with shower-baths, a first-aid post and, if there is no hospital near, a few beds for urgent cases or isolation. But here again, except in special circumstances, progress must be gradual after public opinion has been won over, and use must be made, to begin with, of municipal buildings, schools or other available premises. Little by little, a complete health centre will be

constituted, with provision for every form of preventive action and for urgent curative treatments, including, if necessary, the care of the indigent. In most countries where the population is mainly rural, the health centre will not work on purely preventive lines—the population would not understand if provision were made for the healthy and treatment were refused to the sick. But curative action will not be allowed to restrict the scope of preventive action.

If institutions such as infant welfare centres or a school medical inspection service already exist, these will be duly linked up by some suitable method of co-ordination : the best form of health centre is that of the polyvalent dispensary established in one building under a single management, but it may also take the form of separate, mutually supplementary, autonomous institutions.

Where there are a number of *health visitors*, each attached to a different type of dispensary, endeavours should be made, particularly in the country, to replace this specialisation by a system of allocation of each visitor to a defined area in which she should undertake polyvalent duties. Such polyvalent visitors are preferable to specialised workers ; first, because it is a mistake for several people to be looking after a family at the same time ; secondly, because a district visitor spends less time on the road than the specialised nurse with her larger area ; and, lastly, because an assistant who has sole charge of a limited area can get to know the families and win their confidence and can identify herself with the population in her district. The specialised superintendents attached to the departmental health service will give these polyvalent workers advice in difficult cases, supervise their activities and keep their training up to date.

The health visitor will take notes of individual cases, and keep a card index. But the medical officer will keep a check on the use she makes of her time and see that the greater part is devoted to what constitutes her real task.

The United States recommend one health visitor per 1,500 inhabitants. That is an ideal to be aimed at ; but, in present circumstances, the figure may be put at one assistant per 6,000 inhabitants in rural districts.

A threefold task devolves upon the health visitor in the dispensary and in the family : preventive action, education in hygiene and domestic economy, and social assistance. In principle, she should

not engage in regular sick nursing in the home, but should aim rather at enabling the families to undertake this themselves. If a qualified midwife is locally available, she can be trained for this purpose and attached to the health centre, to visit infants and pregnant women.

*Voluntary help* should not be rejected—on the contrary. But such helpers must be used according to their real ability, and not be entrusted with work which calls for professional technical training. Obedience, punctuality and discretion should be required of them. Such persons will often be the wives or daughters of local notabilities ; they should never be allowed to dominate in the control of the work. These voluntary helpers should be given definite duties which will make them feel that they are being of real use.

What is known in English-speaking countries as the *inspection of nuisances* is of fundamental importance ; this covers disinfection, inspection of housing, drinking-water, sewage and garbage disposal, foodstuffs, and, generally speaking, any source of insanitary conditions. Inspection is entrusted either to a medical officer, a health visitor or, preferably, a specially trained sanitary inspector, as in England.

### *Health Centres.*

The *primary health centre* was described by the 1931 Conference as the terminal stage in the general public health armament of a country—that is to say, the smallest agency adapted to serve the public health needs of the smallest rural area. Health centres now exist in almost every country ; but in Latvia, Poland, Hungary, Yugoslavia and certain parts of France this institution has become an essential part of the public health machinery. The health co-operatives in Yugoslavia, the Red Cross, and other organisations in different countries, have helped to establish these centres.

The essential thing is the spirit in which they work. According to the experts who studied the health indices, they should fulfil the following conditions :

- (1) They should be engaged in at least two medico-social activities—*e.g.*, child welfare and anti-tuberculosis measures or school medical service ;
- (2) They should be placed in the charge of a medical man ;

- (3) They should employ the services of a health visitor ;
- (4) If local conditions permit, they should help to co-ordinate all the relevant activities in the territorial area for which they are responsible.

The premises and equipment of the centre may be very simple : a waiting-room, a consulting-room, shower-baths and living accommodation for the nurse or doctor, or they may be much more elaborate.

In the latter case, it becomes a *secondary health centre*—that is to say, according to the definition of the Conference, a more fully developed organisation responsible, in the first place, for co-ordinating the activities of all the public health work in its area, in particular that of preventive medicine agencies maintained by the public authorities, the sickness insurance institutions or private organisations.

In addition to the minimum requirements mentioned in paragraphs 1 to 3 for the primary health centre, the secondary health centre must be so equipped as to be able to supplement and second the work of the primary centre on the technical side. It must have direct or indirect access to facilities for the various kinds of laboratory examination—for instance, the services attached to an institute of hygiene or medical institute, together with the specialised diagnostic departments.

The division of work as between the primary and secondary centres will depend mainly on the means of communication available, and upon whether the population is concentrated or scattered.

The primary centre can extend its activities through local branch agencies, more especially infant welfare centres, or by means of mobile units.

The secondary centre should be in touch with a hospital, if it is not actually installed there. It will be placed in charge of the district health officer ; this will ensure the necessary connection between the hospital system, the network of health centres and the public health administration.

### *Special Activities.*

Various special activities connected with medico-social policy are deserving of mention.

The creation in country districts of *experimental or demonstration centres* will make it possible, on the one hand, to develop technique to be employed and to assess the cost and results, and will also prove a stimulus to the authorities and the rural population. This method has been successfully employed in the United States, China, India and a number of European countries.

In Poland and Roumania, for instance, mobile units of doctors, students and auxiliary personnel spend a few days, possibly a few weeks, in a rural district, where they carry out a health survey, make the population health conscious, organise the supervision of infants and pregnant women, detect cases of tuberculosis, treat cases of trachoma, etc. As a result of their temporary stay in the area, the rural population have, in some cases, been impelled to erect shower-baths or a health centre themselves.

As another instance of such self-help, reference may be made to the achievements of the health co-operatives in Yugoslavia and Poland : out of their own resources, and with the help occasionally of subsidies and the advice of the public health services, villages have put up health centres themselves.

Yet another scheme is deserving of mention. In Belgium, the Société de médecine préventive, the Fédération médicale, the mutual benefit societies, the Government and 168 communes, representing a quarter of the population of the country, have distributed upwards of 300,000 *health record booklets (carnets de santé)*. These have just been made compulsory by Royal Decree, for the 1,200,000 school-children in the country. The booklet remains the property of the holder, and no one apart from the doctor attending the case and the doctors attached to the preventive services may ask to see it. Health booklets have been made compulsory also in Turkey and France for certain categories of persons. In Italy, the matter is under consideration, and many children already have a health record card (*fiche sanitaire*), a system which is now in force in several countries for infants, school-children and persons covered by social insurance. But the single health record booklet (*carte de santé*) covering every period of life is even more useful to the attending physician, to the medical officer responsible for preventive medical examinations and, lastly, to the holder himself, who is thus encouraged to be permanently mindful of his health.

The health record booklet costs no more than the cost of printing. If the system employed in Belgium is adopted, it provides the material for compiling morbidity statistics. Doctors report the diagnosed disease or abnormal condition to the central service, without mentioning the person's name. Professional secrecy is thus safeguarded, as in the case of the notification of causes of death.

#### *Acute Infectious Diseases.*

In preventive action in rural districts, the first thing on which attention should be concentrated is infectious diseases connected with defective public health organisation and a low economic and social standard of living, such diseases being transmitted through the medium of insects (typhus in particular) or of human excreta (enteric fever and dysentery). They can be stamped out, but only by close collaboration between the medical profession and the representatives of the economic and social life of the community. The eradication of these diseases would have as a corollary an improvement of the economic standard of living and a general rise of the cultural level. The problem is closely connected with housing, clothing, physical cleanliness, drinking-water supplies, the disposal of sewage, household refuse and manure and, lastly, with measures to prevent the contamination of foodstuffs.

Vaccination is of very great importance in the case of smallpox and diphtheria, and also in that of typhus and typhoid, but, so far as the last two are concerned, this means of protection is not a substitute for measures of sanitation.

For infectious diseases spread by secretions from the mouth and nose, the measures in the country can be none other than those applied in the town. Two points should be specially emphasised : facilities for isolation and transport facilities. The cost of isolating infectious cases in hospital should not be charged to the family or there will be attempts at evasion. The problem of transport—highly important in the case of accidents as well—is one that calls urgently for the assistance of the public health authorities, since, in most countries, it cannot be solved satisfactorily by local means.

#### *Maternity and Child Welfare.*

Next comes the question of maternity and child welfare. Agricultural countries generally have a high infant mortality, and, as

long as this situation continues, there is no sphere in which preventive action in rural districts will score more outwardly manifest—nay, more facile—successes.

Again, the rural districts, where the birth rate is always higher than in the towns, constitute the nation's main resource in perpetuating its existence ; unfortunately, in some cases, the rural death rate has now come to stand at a higher level than that of the towns ; especially is this true of the infant mortality rate. Not that the latter is the only aspect of the problem ; all possible steps must be taken to protect and improve the health of rural inhabitants from birth onwards, and to inculcate sound hygienic habits, thereby raising the population to a higher biological level.

Such is the importance of this problem that the work of the health authorities should be largely judged on their child welfare work.

The first thing is to protect the mother. In country districts, the woman's position is more precarious than that of the man : as mother, nurse, housewife and worker, she is never free and can never rest. Even when the time of delivery is approaching, she does heavy work, a fact which is not without its influence on the child and which helps to produce the excessive death rate from tuberculosis among young women. Rural opinion should be educated and agricultural life so organised that, during the last few weeks of pregnancy, at all events, the expectant mother may be released from work liable to injure her own health and, indirectly, that of her offspring.

In agricultural districts, many women are assisted in childbed, not by a doctor or certificated midwife, but by " handy women ", neighbours or relatives with no knowledge other than their personal experience. The consequence is a high maternal and infantile mortality, and in many cases injury to the health of mother and child. If every women in childbed is to have the assistance of a certificated midwife, the voluntary organisations or the central or local authorities must organise a service of midwives in receipt of adequate salaries, which might be further supplemented by fees from comparatively well-to-do families. In order to ensure that pregnant women shall employ the services of certificated midwives, a proposal has been put forward that any person called upon in an emergency to assist a woman in childbed shall immediately inform the nearest midwife, on pain of being prosecuted for the illegal practice of



medicine, even if there has been no payment for such services. Furthermore, to enable the mother to stay in bed for not less than seven to ten days, the private organisations or local authorities must be prepared, if there is no one to take over her domestic duties, to provide the assistance of a domestic help, as is the practice in the Netherlands, Great Britain and the Scandinavian countries. The institution of maternity homes, where pregnant women and women in childbed seeking privacy are received discreetly, renders invaluable service, as do the convalescent homes to which mothers can go to recuperate.

Medico-social protection during the first year of life should be so organised that every child may have the benefit of medical advice and the mother may receive instruction from the health visitor. In addition, arrangements should be made to assist indigent families by providing them with good milk or other food appropriate to the age and requirements of the child, and with layettes and other essentials. It is sometimes necessary to provide the mother with material support, to enable her to feed and look after her child.

Special consideration should be given to the pre-school age, as very little has been done, particularly in rural districts, to provide for the training and to protect the health of children from 2 to 7 years of age. The father is busy in the fields or on the farm and the mother is absorbed by domestic occupations, so that the child may be left to himself or given work to do which is beyond his strength (helping with agricultural work, looking after cattle, taking care of younger brothers and sisters, etc.) at an age when pastimes of an educative character should form his sole occupation ; lastly, his diet often leaves much to be desired, particularly from the point of view of quality.

The organisation of summer crèches, day nurseries, kindergartens and nursery schools would appear to be particularly necessary.

The health centre will comprise an ante-natal clinic, an infant welfare centre, a welfare centre for children of school age, and a school inspection service extending to day nurseries and kindergartens.

Only too often, this inspection simply means nothing more than the detection of the most obvious defects, which is not followed by any treatment unless the health visitor pursues the matter vigorously. Medical inspection should mean, for every child, a thorough

somatic, psychological, anatomical and functional survey, showing up the weak points and affording guidance for subsequent physical exercise, and even study and, later, the choice of a career.

These examinations will often point to the need for supplementary food, which should be supplied at school, and for medical and dental treatment. Such treatment may be provided in three ways : by sickness insurance covering the whole family, by school-children's insurance—as it exists in certain Swiss cantons—or by the school dispensary, which may, where appropriate, be incorporated in the medical service of the health centre.

The school age is the first period of life during which the individual comes under the control of a public institution. Advantage should be taken of this to detect defects of health, to correct them and to inculcate hygienic habits in the rising generation.

To what category of doctors shall the examination of children and pregnant women be entrusted, *where there is neither a welfare centre, a health centre nor a local medical officer ?*

There are five different possibilities :

(a) A medical practitioner living on the spot or in some neighbouring place may be appointed at a small allowance on a part-time basis to examine infants, school-children or pregnant women. But an official appointment such as this may tend to estrange the other practitioners.

(b) An obstetrician or pediatrician may be brought out from town on fixed days and at fixed hours. This system is costly when the distances are great. It, too, may create difficulties with the local practitioners.

(c) A mobile dispensary may be organised, installed in a motor-car, to take the medical specialist from village to village. This method is employed in the province of Liège in Belgium for radiological examination of school-children for tuberculosis. It is apt to be costly and, if used for pregnant women, infants and school-children in general, is open to the same objections as the system of bringing in town specialists.

(d) Infants, school-children and pregnant women may be conveyed by motor-bus to the nearest dispensary. The mere mention of this proposal is sufficient to demonstrate its impracticability in remote country districts.

(e) Lastly, recourse may be had to the body of local practitioners, each pregnant woman, infant and school-child being supervised by the family doctor, at the expense of the public health administration, public relief authorities or social insurance institutions, or of the persons themselves, when they can afford it. This solution offers several advantages in rural districts : it does not require special premises or equipment ; it stimulates medical practitioners to take an interest in preventive medicine ; it utilises the family doctor's knowledge of the past history, habits, living conditions and character of the person concerned and, lastly, it ensures the necessary treatment's being given if any abnormal condition is found to exist.

On the other hand, it means the dispersing of the preventive organisation, rendering collaboration between the school doctor and teacher more difficult and entrusting to a medical practitioner a task for which he is often not fitted. While the advising and preventive examination of pregnant women, infants and school-children are not in themselves particularly difficult, they call for an outlook quite different from that of curative medicine, as well as a special technique. The medical practitioner should in any case be required to possess the necessary material equipment, to have taken a post-graduate or practical course, and to enter all particulars of the case on the health card or record booklet. Difficult cases should be referred to a specialist.

Undoubtedly, wherever possible, the best plan is to establish a well-equipped ante-natal consultation clinic, infant welfare centre, and school medical inspection service in charge of a medical officer, who can thus obtain specialised experience, if he does not already possess it. But when the population is scattered and the necessary funds are not available, and this method is hence not feasible, recourse should be had to whichever of the five above-mentioned methods is most likely to produce the best results under the given conditions.

### *Tuberculosis.*

Of the various social scourges which are prevalent in country districts, one calls for very special attention. The decline in the death rate from tuberculosis is less marked in the country than in

the towns, and in rural districts on the continent this disease takes a specially heavy toll among young women.

Tuberculosis being at once an infectious and a social disease, the problem of control must be attacked with due regard to both these aspects.

Tuberculosis is usually contracted at a very early age. In the rural environment, contact with the tuberculosis bacillus occurs more often than not in the family itself and the disease is perpetuated by contagion through several generations. The unhygienic habits of the rural population and their unsatisfactory housing conditions (cramped, ill-planned houses, overcrowded with adults and especially with children) are almost bound to result in repeated heavy infection by a member of the family who may or may not be known to be tuberculous. Improper diet—often inadequate in quantity and still more often in quality—hard work and long hours add to the effects of exposure and insanitary surroundings. Action is therefore required, on the one hand, to raise the level of rural housing and of peasant life in general by every possible means, and, on the other, by suitable instruction, to inculcate improved standards of individual hygiene. Another essential point is to provide facilities for the isolation of cases of open tuberculosis.

The detection of cases of tuberculosis requires the provision of mobile anti-tuberculosis dispensaries and sorting services at the primary health centres, and the co-operation of the medical profession. Confirmation of the diagnosis should be obtainable from anti-tuberculosis dispensaries, appropriately equipped with laboratories and X-rays, under the direction of a tuberculosis specialist, and forming part, for preference, of the secondary health centres.

The dispensary staff must not wait for the patient to present himself. It must seek him out in his own home, at school—among the teaching and domestic staff, as well as among the pupils—wherever there is reason to suspect that the disease is present. The connection between tuberculosis of cattle and human tuberculosis should be borne in mind. In every case, the source of the infection must be traced. The first thing to be considered will be protective measures for children, who must be safeguarded from infection and enabled to build up their power of resistance. The dispensaries should, in addition, concern themselves with the welfare of all the tuberculosis cases in their area. They should be given the

social assistance of the health visitor and medical care, including facilities for new methods of treatment, such as collapse-therapy.

As for isolation, this is often only feasible in the peasant's own home. The family cannot afford prolonged or repeated sanatorium treatment. All possible means must therefore be employed to facilitate the isolation of the patient and to teach those around him how to look after him without danger to themselves ; the means employed will vary according to the country and the given conditions. If it is impossible to separate the patient entirely from his family, by means of a partition for example, the Dutch method is recommended ; this consists of putting up a tent or erecting a light pivoting structure at the side of the house or in the garden.

Certain patients will, of course, require, for their own good and for the welfare of the community, to be isolated, at the expense of the authorities, in a sanatorium or hospital. Without this precaution, tuberculosis control is unthinkable. The sanatorium does not provide a complete remedy for a disease which is intimately bound up with the social conditions of the community, but is nevertheless a valuable means of lessening its ill effects. In addition to the large-sized institutions, recourse may be had, as in Norway and Hungary, to smaller institutions, which are comparatively cheap to erect and run.

It is not an easy matter in rural districts to train the patient for light work when he leaves the sanatorium. It has to be realised that, for many years, his output will be below normal and that it would be fatal for him to attempt to take up his old job. The problem is a difficult one, depending, as it does, on economic considerations, but some attempt should nevertheless be made to solve it.

#### *Venereal Disease.*

Save in exceptional circumstances, venereal disease is less frequent in rural than in urban districts. But treatment is hampered, among other reasons, by the patient's fear of his condition's becoming generally known.

The first step must be to undertake special educational action in rural districts ; the population should be made to understand that venereal diseases are to be regarded like any other infectious disease, that persevering treatment is required to cure them and the use

of secret remedies is bound to end in disappointment. The advertising of such products should be prohibited.

The doctor should systematically examine, for syphilis and gonorrhœa, pregnant women, sterile women or women in whom pregnancy has been interrupted and, generally speaking, any groups or individuals that appear to him suspect. He should arrange in every case for the dispensary or health service to conduct discreet enquiries as to the origin of the infection.

Treatment being costly, the health administration should supply the doctor with the necessary drugs without demanding to know the identity of the patient or, better still, treatment should be entirely free of charge, even outside the dispensaries.

Army doctors should inform the health service confidentially when infected members of the forces return to their village.

If there is a health centre, detection and treatment should be carried out there ; otherwise, the district medical officers and local practitioners should be responsible. Success can only be achieved if patients feel that they can count on absolute discretion being observed.

With the consent of venereal disease patients (on whom she should call if they break off their treatment), the health visitor should endeavour to prevail upon the persons living in their environment to come forward for examination.

#### *Mental Derangement.*

*Cases of mental deficiency or disease*, although fully as common in the countryside as in towns, receive even less attention there. Yet it cannot be denied that, out of any 100 children, several will be found to be mentally deficient or abnormal in character, while mental affections among adults are far from uncommon. The benefits to be derived from special education for backward subjects and the satisfactory results achieved by the early treatment of mental derangement are well known. Rural populations cannot be denied such advantages any longer.

Teachers and school doctors should devote the most careful attention to the detection of abnormality among pupils, while general practitioners should exercise the same watchfulness over adults and refer abnormal cases to specialists as soon as suspicious symptoms make their appearance.

The best solution would obviously be to attach a dispensary for mental disease to the Health Centre ; but it is generally difficult to secure the services of a competent psychiatrist.

Here again, the health visitor can render conspicuous service. In some agricultural countries, the village idiot or mentally defective is the butt of the community ; sometimes he becomes a habitual offender or a criminal. Assistance must be organised in such a manner as to provide treatment in special communities or in mental hospitals. The method tried out at Gheel in Belgium, and in similar settlements for mental deficients, shows that patients can be given a relatively free life at a reasonable cost, coupled with the requisite protection both for themselves and for society generally.

#### *Other Diseases.*

Some diseases, such as trachoma, rheumatic ailments, digestive troubles and certain skin diseases, appear to be produced or promoted by unsatisfactory social conditions. Investigations should be undertaken with a view to the organisation of systematic preventive treatment and cheap and efficient curative treatment.

The question of *alcohol* has not been touched upon here, despite its great importance, since no solution specially adapted to rural areas appears to present itself, apart from the limitation or supervision of home-distilling, and since the circumstances of the problem differ in each particular case. Anything capable of entertaining or interesting village populations will militate against alcoholism.

Finally, it should also be observed that, from a health standpoint, the presence in the countryside, for short or long periods, of town-dwellers on holiday, campers or groups of workers, frequently brings certain disadvantages in its train. Gypsies and tramps may also endanger the health of the village.

#### *Co-ordination.*

In a word, the principal aim of medico-social policy should be the co-ordination of activities and institutions. Such organisations, which are the product of the creative effort of their founders, bear in their aims and origins the stamp of an individuality which should

be respected ; but they may be prevailed upon to take their due place in a co-ordinated campaign, conducted in accordance with a well-thought-out plan which is adapted to local conditions and requirements.

To that co-ordination in the field (or, so to speak, in space) must be added co-ordination in time—*i.e.*, the organisation of the various medico-social activities in such a manner as to provide for the continuous and efficient protection of human beings at all ages, and against any danger that may threaten.

Herein lie both the main difficulty and the essential condition for success ; all institutions for treatment or prevention, and the whole hierarchy of health services, must be dovetailed and inter-linked so as to constitute a coherent whole working towards the same objective. To fit together these many component parts requires a considerable effort of organisation and co-ordination ; but it alone can lead to the desired result.

#### IV. THE FUNCTION OF SOCIAL INSURANCE INSTITUTIONS

##### *Collective Organisation of Medical Care.*

A system providing efficient medical care for rural populations calls for measures of collective organisation making available all the facilities of modern medical science for the maintenance of health and the detection and treatment of disease in its earliest stages.

Compared with other methods of collective organisation (such, for instance, as the system under which individuals pay subscriptions for medical attendance, and that of individual medical assistance entrusted to practitioners appointed by public or autonomous authorities, whether or not accompanied by financial participation by the patients), social sickness insurance has the two-fold advantage of associating those concerned more closely with the preservation of their own health, both in a financial sense and generally, by making them conscious of its importance, whilst at the same time making them appreciate more fully the importance of a rational health and welfare organisation. A sickness insurance scheme—whether compulsory, or voluntary but recognised and subsidised by public



authority—which is planned to cover all agricultural labourers and their families, and, as far as possible, the independent farmer, will help powerfully to provide efficient individual medical care.

*Medical Care as the Chief Function of the Sickness Insurance Medical Services.*

The difficulties of organisation, which formerly arose owing to the wide dispersion of agricultural populations, now no longer impede the extension of sickness insurance to rural areas. It is desirable that agricultural workers should have the benefit of all the medical care afforded by sickness insurance schemes, in so far as this is not already provided by some public medical service open to the whole rural community. The same facilities should also be extended to the members of the insured person's, family, and, in the first place, to the wife or husband and to their children until they reach adult life.

The medical services attached to the insurance system should offer patients, and make available to their doctors, every facility for effecting an early and complete diagnosis in the light of the social and occupational circumstances of each individual.

Insured persons and members of their families should be entitled, free of charge : to the services of a duly qualified general practitioner ; to drugs and other therapeutic requisites of adequate quality in sufficient quantities ; to any necessary surgical procedures and the services of specialists ; to attendance in childbirth ; to preventive and remedial dental treatment ; and to treatment and maintenance as in-patients in a suitable institution, where the type of ailment, or the family or living conditions of the patient, make this necessary.

While taking every care, in view of the limited resources at its disposal, to practise reasonable economy, and while avoiding in all cases useless or superfluous prescription or treatment, the sickness insurance medical service should collaborate in establishing an efficient organisation for medical care in rural areas. It should provide facilities for the better geographical distribution of doctors ; for the transport of insured persons or, where required, of the practitioners and auxiliary staff ; for diagnosis and the treatment provided under the insurance scheme ; and for up-to-date hospital treatment through the participation of the insurance funds in

defraying the expenses incurred and through suitable contributions towards the development and improvement of hospital equipment and health equipment generally.

*Participation of Insurance Funds in Social Disease Control.*

In the interests of the group of persons in its care, the insurance system should help in the campaign against social diseases; for these, while specially prevalent in rural areas, cannot be controlled or prevented by medical treatment alone, but call for systematic preventive measures coupled with cheap but efficient medical treatment and social action.

Action by the insurance funds in the campaign against social disease is the more necessary the less developed are the other agencies engaged in this work. It should be such as to secure for the beneficiaries of the insurance system an improvement and extension of preventive and curative treatment, unless such treatment is already available to all concerned through the operation of a public medical service.

Success will depend, in the first place, upon systematic efforts to detect cases of disease and upon early diagnosis. The task devolving upon insurance funds is to help in the work of detection and to facilitate the precautionary examination of persons exposed to or suspected of infection, and the periodical examination of any sections of the community which are specially exposed to risk. The insured person's right to consult a doctor at any moment will conduce to early diagnosis.

Insurance funds should also co-operate in organising therapeutic measures, consisting of treatment and general or special medical care supplemented by economic and social assistance and after-care and supervision. Benefits in cash are also a considerable factor in the struggle against social diseases, when they enable the standard of nutrition and housing to be maintained or improved. Other benefits, particularly those provided by the social assistance service, may prove essential to successful treatment—*e.g.*, supervision of the due observance of the attending physician's instructions, education of the patient and those living in association with him, and such forms of occupational assistance as special facilities in cases of change of occupation and re-adaptation to social life and work.

Co-operation between insurance funds and other agencies or institutions engaged in combating social disease, as also with the medical profession, must necessarily proceed on the basis of a pre-arranged joint programme designed to co-ordinate the work of all participants, fill any gaps and eliminate duplication. Such a scheme can be based either on a system of sharing out the work among the various agencies, or on team work by all concerned ; in the latter case, its execution can be entrusted either to a body created *ad hoc*, or to some existing agency which is particularly qualified to carry out one particular part of it.

*Participation of Insurance Funds in the General Preventive Action.*

Insurance funds can make a substantial, though indirect, contribution to the development of preventive and curative institutions by providing facilities enabling such establishments to be patronised by insured persons. They may even participate directly in the improvement and extension of these institutions, provided they are assured that their standard of efficiency is adequate and that they really will be thrown open to the members of the funds.

Insurance funds should assist in spreading hygienic habits among insured persons and their families (personal hygiene, diet, etc.).

Finally, insurance institutions can contribute to the local improvement of public health by encouraging the construction of healthy dwellings through the grant of mortgage loans and building advances. Further, by investing capital in undertakings of social and economic value, they can strengthen rural economy and promote rural sanitation (extension of means of communication, water-supplies, etc.).

## V. NUTRITION

The aim of modern public health work is not merely to prevent disease but also to improve the standard of physical and mental fitness and the well-being of the population. Among the many factors upon which an influence must be exerted to that end, diet stands in the forefront.

Public health departments have accordingly called in specialists, set up national committees to work in conjunction with the various

League organs, and drawn up programmes designed to implement national nutrition policies. Apart from its health aspect, the problem involves economic, agricultural, social and educational considerations. Health services must therefore collaborate with every organisation whose activities are concerned with these various matters.

Their first action should be to carry out surveys. It has already been shown by their means that even where the diet of peasant families is quantitatively adequate (*i.e.*, calories), it generally shows great qualitative deficiencies (protein, vitamins and mineral salts). Rural populations do not by any means consume as much of their own produce—milk, butter, eggs, meat, vegetables and fruit—as could be desirable. Pregnant women, nursing mothers and children frequently suffer from a definite deficiency of these essential nutrients.

Not only the selection of foods, but also the method of preparing them, are based on traditions at variance with the teachings of modern science. Each country should make a study of current methods of preparation in order to determine what loss in nutritive and protective foods is involved.

The fiscal and Customs systems, transport policy, and the organisation of production and distribution, also influence the diet of the population to an extent which must be borne in mind. In this branch of work, too, popular education must be resorted to. In the United States, visiting "nutritionists" or "dietitians" study the food habits of families and promote improvements by suitable propaganda. They work in close contact with the medical profession. In Czecho-Slovakia, Hungary and Yugoslavia, mobile units are now engaged in a similar task in villages, where they organise practical demonstrations for housewives. The staff of these units is specially trained. In other countries, female assistants visit country housewives for purposes of instruction. Efforts are being made to develop the domestic economy teaching in primary and secondary schools and to make it more practical.

Every endeavour should be made to provide pregnant women, nursing mothers and children of all ages with clean milk and fresh vegetables and fruit. School canteens are no less necessary in the countryside than in towns. The Health Centres will have to study this question in addition to carrying out investigations and education.

The problem of clean milk is both one of the most important and one of the most difficult to solve. While of the highest value as a food, milk may prove dangerous if it is not collected, carried and preserved with all necessary precautions. Where it is not possible to pasteurise milk efficiently, boiling is the only method which can render it completely safe.

The provision of rural slaughterhouses is much to be desired. Meanwhile, and for as long as cattle are slaughtered in the village, efficient inspection must continue.

Although information is already available concerning the nutrition of rural populations in a few European countries,<sup>1</sup> it will be necessary to amplify and supplement these data.

Fresh investigations were contemplated at the meetings of Directors of Schools and Institutes of Hygiene and of representatives of National Nutrition Committees.

In order to provide a uniform foundation for these investigations, the Health Organisation has prepared a detailed guide ("Guiding Principles for Studies on the Nutrition of Populations"<sup>2</sup>) for the use of health authorities. It is to be hoped that the fullest possible use will be made in rural areas of the methods there described, as they enable a comparison to be made between the actual diet of the populations concerned and the standards laid down by the Technical Commission on Nutrition of the Health Organisation;<sup>3</sup> it will thus become possible to lay down the foundations of a rational nutrition policy for those populations.

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<sup>1</sup> The results of the studies already undertaken have been published in the report of the Mixed Committee on Nutrition (see pages 181 *et seq.* and 273 *et seq.* of document A.13.1937.II.A.) and in the *Bulletin of the Health Organisation* (Vol. V, No. 3, pages 554 *et seq.*). Further information will be found in the documents prepared after the second meeting of Representatives of National Nutrition Committees, and in a special report prepared for the Conference on Rural Life.

<sup>2</sup> Document C.H./Com.Exp.Alim./50(2).

<sup>3</sup> See, in this connection :

(a) Report on the Physiological Bases of Nutrition : *Bulletin of the Health Organisation*, Vol. V, Extract No. 6, September 1936 (document C.H.1197(2) ;

(b) Report of the Technical Nutrition Commission on the Work of its Third Session : *Bulletin of the Health Organisation*, Vol. VII, Extract No. 8, June 1938 ;

(c) Report of the Special Committee of the Technical Nutrition Commission on its Meeting of August 22nd-24th, 1938 (document C.H. 1355, September 1938).

## VI. PHYSICAL TRAINING

Every medico-social policy should include a scheme of up-to-date physical exercises, accompanied by the appropriate medical supervision.

The object is twofold : on the one hand, the effects of occupational work and of a defective mode of living must be corrected ; on the other hand, some relaxation must be provided, a fresh interest created and the monotony of daily existence broken.

Although landworkers perform strenuous physical labour, especially at harvest-time, at other times they stand just as much in need of suitable exercise as town-dwellers.

Physical training should begin in school, and be continued through the agency of clubs and similar institutions for young people and adults.

Sports-grounds should be provided, either at the school or separate from it ; swimming exercises should be given ; and various national games, together with cycling, football and other forms of sport which are already popular in the countryside, should be facilitated. There exist certain gymnastic methods which are specially adapted to rural conditions ; they have given very satisfactory results, not only in their countries of origin, but elsewhere.

Physical training requires the assistance of a competent instructor, who may be the school-teacher himself, and the co-operation of a doctor—either a specialist in athletics, or a general practitioner who has studied the subject. Medical supervision of physical training and sports is one of the tasks for which the Health Centres should be equipped. Each individual should be examined first when he begins physical exercises or goes into training for some particular sport ; this examination should be subsequently renewed, with the object of detecting any ill effects caused by over-violent exercise or prolonged physical strain.

## VII. RURAL PLANNING

The dwelling of the landworker is still, in many cases, damp, dark, inconvenient and overcrowded. This is one of the main

causes of the spread of contagious infections and social diseases, and also of the rural exodus. Such dwellings should, on the contrary, be light, comfortable, attractive and adapted to the life and work of the countryman. It should have a pure water supply and suitable arrangements for the disposal of sewage and garbage.

The improvement of agricultural conditions of life, particularly as regards rural planning, is of paramount importance to all European countries, even the most highly industrialised and advanced. That improvement should aim at providing a healthy life for the rural population, this being the essential basis of any rational public health and social welfare organisation.

Rural planning frequently forms part of a national plan entrusted to special organisations.

However that may be, one of the most important objects of medico-social policy is to set up standards for what may be termed "healthy rural dwellings and a healthy countryside". These standards should be adequate to meet the physiological requirements of those concerned in respect of space within and around the dwelling, ventilation, protection from heat, cold and damp; insolation, light, pure water,<sup>1</sup> and sewage and garbage disposal. Standards of this type are already in existence in some countries, while the Housing Commission of the Health Organisation has devoted much time to defining those standards in terms of climate, customs and local conditions.

The health authorities should ensure the strict enforcement of those standards in the preparation and execution of any planning scheme; that scheme should deal not only with the hygiene of dwellings and outhouses, water-supplies and sewage disposal, but should also include plans for the proper siting of new dwellings and of communal buildings, for the construction and maintenance of public highways, and for hygiene of school buildings, market premises and cemeteries. Efforts should also be made to render villages more attractive, while preserving their rustic and traditional character.

Close co-operation will be necessary between the organs participating in rural planning and the various technical groups such as

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<sup>1</sup> In some countries especially ice-borne bacterial infections raise problems for which a solution must be found.

doctors, hygienists, agronomists, architects and various types of engineer.

For this purpose, it is essential that the public health system should have at its disposal, even in its rural outposts, a qualified staff including sanitary engineers, sanitary inspectors and housing inspectors.

An extensive propaganda campaign, in which the Health Centre and the visiting assistants can play a leading part, should be launched so as to reach every institution or body concerned, as well as the rural population itself. The various aspects of this question, which is of paramount importance, and the numerous technical problems it raises, are dealt with in a special report.

#### VIII. EDUCATION OF RURAL POPULATIONS IN HEALTH MATTERS

Everything that has been said above shows the fundamental importance of securing *the understanding support and help of the rural populations themselves*. Success depends on the introduction of modern ideas of health protection into every part of the landworker's existence. The circumstances of his daily life and toil, including his dwelling, equipment and the distribution of labour, should be so organised as to make the application of rules of health simple—nay, automatic ; he must be taught to lead a healthy life without thinking about it. And so agricultural communities should be taken one by one, interested, instructed and convinced. Persuasion is a slower process than compulsion ; but it alone can give lasting and positive results. *Education should pave the way for legislation and for the organisation of health in the countryside.*

The education given should be based upon general and local information. On the one hand, public opinion should be enlightened as to the needs of the agricultural population ; on the other, when action in a particular village is being initiated, general concepts should be conveyed by individualised illustrations, villagers being shown, for example, that the death of a child or of the father or mother in some particular family could have been prevented ; or again, that if, because of defective equipment or the absence of



proper precautions, milk is of doubtful purity and therefore fetches a low price, greater care would enable the producer to secure a bigger profit. In other words, each peasant must be made to realise that hygiene pays.

Once that has been achieved, we shall secure, though not without much effort and delay, the requisite degree of understanding and co-operation. We shall even obtain support for the work, either in the form of willingness to pay additional taxes, or in the form of subscriptions, gifts of fuel or food (for instance, when a crèche is being started) and personal help in the shape of labour when a dispensary is being built, a sports-ground opened, etc.

In the sphere of health, as in any other, it must be borne in upon the population that it is its duty to be active, and not merely to wait passively until public authorities improve its lot. The greater the degree of decentralisation and liberalism in the country's system of government, the more necessary this personal participation becomes. Agricultural organisations demand tariff protection, cheap credit and better means of communication from the Government ; but the peasant population must also practise self-help, understand its own particular problems, co-operate actively in their solution, thus becoming the author of its own progress.

Popular education in health can be conducted in a number of different ways : newspaper articles, posters, pamphlets, lectures, films, etc. Among the most powerful means are broadcast talks, travelling exhibitions, mobile units and theoretical and practical instruction in health subjects in schools and barracks. By way of supplement to civic, hygienic and domestic training, which should form part of all primary education, the Junior Red Cross organisations are already actively engaged in teaching school-boys and school-girls the rudiments of health and sound daily habits.

Both the central and the local health authorities should steadily pursue their efforts in this direction and supplement them by organising health campaigns and special health, child welfare, or cleanliness weeks or days, and the like.

In the villages, even more than in the towns, the cleanliness of the household and the health of the members of the family is in the hands of the housewife. It is therefore essential that she should be won over to this cause and that the necessary knowledge should be imparted to her. At the same time, the instruction of the father

of the family must not be neglected, since he can do much to help his wife in this connection. Even more important, however, is the younger generation ; education in domestic economy and hygiene, beginning at school, must be continued by the health visitors and by every available propaganda method.

#### IX. TRAINING OF DOCTORS AND AUXILIARY PERSONNEL IN PREVENTIVE AND SOCIAL ACTION

One lesson which emerges from the experience of every country is the *need for training the medical profession for the accomplishment of its preventive and social duties*. Doctors who have been practising for twenty years or more have in most cases only received training in the purely technical aspects of hygiene. Although, in recent years, the scope of public health instruction has in many cases been broadened, it still remains true to say that faculties and academies of medicine, the medical Press, medical associations and the profession itself still concentrate on laboratory research, refinements of diagnosis and the search for new methods of treatment. The preventive and social functions of the practitioner are no longer ignored, but little more is done than to make passing reference to them. They still do not permeate teaching in lecture-rooms and hospitals, nor do they figure prominently in university examinations, Press articles, theses, papers read to learned societies or debates in professional medical circles. At the same time, it is being gradually realised that doctors have to concern themselves not only with the fate of sick persons but also in that of the community as a whole.

Medical students must therefore be given a better understanding of their future preventive and social duties, while practitioners should be brought to realise that they represent the main line of defence of the health of the community.

The reform of medical teaching is a question ever under discussion but never settled. The syllabuses have now reached saturation point, and what is required is therefore not to add further courses of lectures but rather to imbue medical teaching with a new spirit.

In the initial stage of training, teaching in physiology should consist in the study of the normal human being as observed by the students on themselves, on school-children, infants in crèches,

etc., with all the relevant observations regarding constitutional character, predispositions, symptoms of nutritional, respiratory and circulatory deficiencies, etc.

In his lectures on pathology and therapeutics, and in the clinica, courses of medicine, surgery, obstetrics, pediatrics and other special subjects, the professor will have opportunities of dealing with methods of prevention, social factors and remedies, and the social significance of diseases. This part of the training will be greatly facilitated if a social department is attached to the hospital.

Finally, lectures on hygiene should be given from a social standpoint and be accompanied by visits, demonstrations, practical exercises and courses affording grounding in preventive and social medicine, in occupational medicine and in public relief and social insurance medicine. It is recommended that an independent chair of social medicine should be founded to stimulate this development and to assist in the creation, within the faculty, of an active research and training centre.

Medical training and medical progress itself both tend towards specialisation. But it must not be forgotten that, in the countryside, even more than in towns, the chief part is still played by the general practitioner ; medical faculties must therefore concentrate their efforts on him. Special attention should be given to the adequate preparation of students in the fields of obstetrics, pediatrics, maternal and infant hygiene, current medicine and minor surgery ; students should attend out-patients' departments as well as hospital wards.

What we have said above, however, concerns future doctors only. So far as the existing practitioners are concerned, the chief means of action are Press articles and books, papers read to learned societies, congresses and refresher courses, demonstrations and practical courses. In some countries, refresher courses are now compulsory, either for the profession as a whole (in which case they consist chiefly of clinical courses), or for doctors engaged on public health work or attached to public health institutions ; in other countries, the Government or the social insurance funds compensate doctors who attend such courses. Medical associations could contribute actively by participating in this form of training and by encouraging it.

In any event, the training of doctors and students is—like the education of the public—an essential prerequisite of the development

of a medico-social policy. It is no less necessary to impart some knowledge of practical hygiene to the teaching profession, while engineers, agronomists and architects should also be given such instruction. Houses, offices and factories are still being built which violate the most fundamental canons of public health, while land improvement, levelling and irrigation schemes are still carried out in such a way that, owing to the lack of proper precautions, they promote the spread of malaria.

Finally, a system *for training public health officers and assistants should be organised.*

This question can be dealt with in a few words: the meetings of directors of schools and institutes of hygiene have already laid down the conditions under which such training must be given, and we are justified in saying that the problem has already been solved in many European countries. It must not be forgotten that, since these experts have an educational rôle to play, some notion of educational principles is just as necessary to them as their social and hygienic training.

The institutes and schools of hygiene, whose relations with health authorities on the one hand and universities on the other are dealt with in the recommendations put forward by the various meetings of directors already held, have a part to play which is steadily growing in importance and which will continue to do so.

In most European countries, they already advise the local authorities, carry out surveys and investigations, give demonstrations, undertake analyses, manufacture and distribute sera and vaccines and take charge of the treatment of rabies, carry out theoretical and practical research, and train—sometimes also find positions for—health personnel, including public health officers, health visitors and inspectors. With the latter, they keep in close contact by organising refresher and practical courses. In a word, they are at once technical bodies, research centres and training institutions, exercising an influence which extends throughout the sphere of public health policy and organisation. They contribute to the spread of the principles of prevention and social medicine among the medical profession, in administrative and governmental circles and even among the general public.

Being particularly well qualified to investigate those aspects of rural hygiene which are still obscure or controversial, they are often

called upon to take an active part in the organisation of public health in rural areas.

The permanent links created by the Health Organisation of the League of Nations between directors of schools and institutes of hygiene have powerfully aided progress in this direction ; a satisfactory medico-social policy applying to the countryside is closely bound up in with vigorous growth of their activities.

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