

PROBLEMS OF SOCIAL MEDICINE

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I WAS asked to discuss the problems of Blood Grouping with reference to paternity, but I suggested a change of subject in order to avoid the impression that Forensic Medicine was the only common ground for the legal and the medical professions. There is much in common also in the problems of Social Medicine. The University has been, and is bound to remain. The intellectual leader of the country; with the restitution of Self Government its importance will increase ; many of our law givers will come out of it. It is therefore proper that students of law, as possible legislators of the future, should be acquainted with the problems of health with reference to social life.

The underlying principle of Social Medicine turns round the old adage *Salus populi suprema est lex*. This principle is accepted universally but few appreciate that the *Salus populi* cannot be safeguarded adequately if the State does not interfere in many aspects of social life.

State interference in preventive medicine has developed in three phases. The earliest phase was concerned only with the prevention of epidemics. These are so terrifying and so disruptive of social life that they have attracted attention first and foremost. Legislation for their prevention and control is many centuries old, but the quarantine laws of the past were based on false principles. The medical approach to the problem was still unscientific. The existence of the bacteria as factors of disease had not yet been discovered. Infection was still attributed to miasmas which were believed to emanate from filth or from putrefying material in air, soil or water. The term "malaria" still commemorates these mistaken conceptions of the past. Quarantine laws based on these principles led inevitably to failures and a rigid intervention on the part of the State caused often discontent and opposition.

With the development of the study of Bacteriology, the role of micro-organisms in infections was proved beyond doubt. It was also possible to show that many of these organisms have peculiar habits in the manifestation of life and modes of dissemination and introduction into the human body. Thus it became possible to track the source of an epidemic and to follow with considerable detail the path of its propagation. Intervention by the State Health Authorities has now become rationally controlled. Though it is not yet possible to exterminate the micro-organisms that cause infective disease, we can often disrupt the conditions under which they multiply and disseminate and, above all, we can obstruct their approach to man. When contact of the micro-organism with man cannot be held in effective check successful action can lie also in the raising of man's resistance to infection by artificial methods. Vaccination against small-pox and inoculation against the Enteric Fevers are well-known examples of these methods. Legislation to enforce compulsory immunisation may be required when the dangers of an epidemic are serious enough. All these and other measures amount very often to compulsion and entail in addition a considerable expenditure which is in a large part recurrent; but the wisdom, utility and equity of this policy are so evident that the principles on which the legislation is based are not questioned and the necessary funds are always voted ungrudgingly.

The successes of Bacteriology have been so clamorous that for many years bacteriology reigned supreme and the other factors of disease were for the time ignored or at least minimized. The acceptance of the truth was however only delayed. It is now fully recognized that in addition to the parasitic factor, there are multiple other factors which are intimately

correlated with environment and social life. State activities to influence these factors have been (and are still) slow and attended with much procrastination. Were the effects on health as startling and dramatic as in epidemic diseases no effort or expense would be spared in stamping them out, for every member of the community, be he rich or poor, would realize that he himself might be the next victim; but because their action is insidious, and because they threaten most the poorer classes, their ravages are to some degree hidden from the community so that the social dangers they involve are not taken so seriously as they should be. It stands to the merit of the second phase of Preventive Medicine that much, though fragmentary, legislation was enacted to ensure protection against the main dangers.

Disease can even be congenital. The new-born child can carry with it a parental inheritance of ill-health which can be manifest at birth or show later in life, even as late as in old age. But congenital defects are not necessarily hereditary, they can result also from a faulty gestation. The foetus, sheltered in the womb from the hectic disturbances of the outside world, can in its turn be subjected to the effects of maternal ill-health, constitutional defects or gross lack of hygiene. Notwithstanding the compensating mechanisms of nature, an unhealthy gestation can seriously impair the future health of the mother and lead to the birth of a puny baby or of a baby who will develop ill-health later. The importance of the periods of labour and of the puerperium need no comment. In a few dramatic hours lives can be crippled or lost. It is to be emphasized, however, that maternity is in itself not a disease but a physiologic process; and is therefore expected to run an uneventful course in normal mothers who secure adequate ante-natal care. Catastrophes are apt to occur when ignorance, poverty or lack of facility impedes ante-natal care. It is one of the duties of the State to provide pregnant women with adequate protection. It is not enough to arrange for expert attendance during labour. Even in the hands of the most experienced, intervention can prove then to be untimely. The mother, for her own and for the sake of her new-born, of her family and in the long run of the community, must be guided from her early months. Ante-natal clinics with sufficient facilities within easy reach of all pregnant women are necessary. The teaching of hygiene to all married women is advisable. Necessitous mothers must be helped with funds or in some other way. Whenever circumstances suggest, legislation must protect them from such abuses as over-work, lack of rest or of adequate sleep, deficient diet, etc.

Parallel with the problems of maternity stand the problems of infancy. In many countries infancy has received meticulous attention mainly as an effect of their low-birth rate, which has necessarily imposed a strict economy on infantile mortality. It has been realized however that the effort is useful for its own sake. The child is father to the man. "The foundations of a healthy life must be laid in childhood".

Our infantile mortality ranks with the highest in the world though it is now on the decline. The causes for this high mortality are complex. Most of them are social. The birth-rate is high, our families large, the economic resources limited and the standard of living as a rule very unsatisfactory. Lack of compulsory education leads to lack of knowledge in the most elementary principles of hygiene amongst a good section of mothers; the housing is bad, the diets often inadequate, the climate with its long, hot, dry summers adverse. Yet many babies could be saved and many more brought up in better health, if more mothers could be instructed not to keep their infants, underfed, badly clothed or unnecessarily exposed to infections. The

problems of infancy in Malta are vast and complex and serve as a pointer to show how backwards we stand towards the solution of our social problems.

The growing child faces new dangers. Growth necessarily implies good feeding. Deficient nutrition in this period is apt to be followed, more easily than in others, by ill-health, and may even leave permanent disabilities. The faculty of walking and of romping about confers to the child initiative but adds greatly to its dangers. Traumatia, measles, whooping-cough, diphtheria, scarlet fever, the pneumonias, tuberculosis are common events. In some cases specific inoculation can afford a high degree of protection, but as a rule the child has to rely on its natural defences. The foresight, wisdom and determination of the administrators and legislators of the country will determine how much the child's natural defences will be upheld by good housing, rational town-planning, sunshine, fresh air, adequate food, cleanliness and good habits.

A further danger to childhood lies in mental trauma. Mental hygiene must have its foundation in these early years. The intellectual faculties of the child have little, if any, critical power; the unbridled phantasy and the emotions can therefore leave impressions so deep rooted as to determine behaviour for after life. The main conflicts between the instructive reactions and behaviour that is accepted as socially correct must be faced in childhood. In the few formative years the child must pass from a state comparable to that of primitive man to one of cultural and social development which mankind has taken centuries to attain. If the child is to be a useful and cultured citizen and at the same time is to preserve a temperament that will allow it to enjoy life and not develop nervousness, obsessions, anxieties and hysterias, an enlightened system of child guidance is useful. The control of schools, of child reformatories and in general of all educational movements by a medical service is therefore fully rational.

If a School Medical Service is numerous enough and is adequately trained and equipped, it can prove to be one of the main pillars of national health. It can extend its activities far beyond the routine supervision of children in the class-room. It can help the development of muscle and bone by a scientific direction of physical training and of outdoor sports; it can control the school curricula to avoid mental strain and to facilitate the receptivity of the child; it can train the teachers to a full understanding of the physical, mental and moral problems of childhood and puberty; it can propagate the principles of general hygiene. Above all, it can submit all the children to a periodical medical examination to detect the early presence of disease. This is in fact one of the big advantages of compulsory education. It gives equal opportunities to all children. A child of the poorer class, whose disease might remain undetected for a long time, gets the opportunity of individual medical attention, so that a sounder foundation for the adult health of the nation is established.

Periodical examinations on a large scale even if at long intervals, are desirable also in adult life; but at present there is little opportunity for them. The District Medical Services are not meant for this strenuous task' as they are, they have barely enough time to cope with manifest diseases which are common and dangerous as tuberculosis. These special services would not wait for the patient to seek for advice, but would themselves invite periodical attendance, especially in the case of contacts, to detect the illness as early as possible when treatment is easier more hopeful, shorter, and less costly.

In adult life health is often related to occupation. Where factories are numerous factory laws have been enacted. So far this necessity has not been felt in Malta since our occupational diseases are rare. Yet there is ample scope to improve the condition of the labourer in this respect. Though the occupation may not be dangerous in itself, many labourers are compelled to work in surroundings which are unnecessarily dangerous to the general health through lack of ventilation, sunshine, good lighting, etc. It must certainly be within the aims of any labour movement to ensure adequate hygienic protection for the labourer during work and to invoke legislation in this respect.

Intimately connected with the health of the labourer are the problems which result from "want". The fear of economic insecurity for himself and especially for his family in case of longed unemployment, disease, death and even old age, leads frequently to anxiety states, dyspepsias, deficiency diseases, inadequate rest, incomplete treatment of disease, deficient rehabilitation after illness, tendency to relapses and is one of the strong contributory factors in the incidence of pulmonary tuberculosis. It is often argued that medicine, like the church, should not dabble in economics and in politics. Yet modern Medicine feels it a duty to point to the community fundamental truths and to insist that the *Salus Populi* can never be safeguarded satisfactorily if the Atlantic Charter's "Freedom from Want" is not kept as a lofty goal to aim at.

Another vast problem is housing. Apart from the emergency conditions which have resulted from the war, housing is a problem in itself. Too many of the houses in our town slums and in our villages are obsolete and unhygienic. Many are built on a style which has evolved from the military exigencies when aggression by Turkish Pirates was a living threat; they are now badly lighted, poorly ventilated, difficult to keep clean and to keep free from pests and insects. A large number have no water supply or have only a primitive one. They are unprovided with drainage and open into narrow, tortuous, unkept streets. The majority were overcrowded even before the present emergency; some accommodate domestic animals in dangerous vicinity to man. Life in such surroundings is dangerous and depressing. The problem is not only sanitary. It is also educational and social. The house is the sanctuary of the family. Degrading houses loosen family ties, turn the children into scamps, contribute to social discontent and work for class hatred. The necessity to face the problem has been repeatedly urged by our Health Authorities before the war, but things have remained much as they were. The heavy expenditure which is required, vested interests and apathy are obstacles. The problem is now again on the table with a greater probability of success; but it is certainly an anomaly that to obtain reform in housing wholesale destruction of houses by enemy action was necessary.

Of equal importance is the problem of diet. Unlike other machines, the human organism requires material not only as fuel but also for wear and tear, growth, repair and reproduction. Hence human diets must be calculated not only in terms of quantity, but also of quality. It is a fact that a large section of the population in pre-war days was underfed, not so much because enough food was not taken, but because the correct articles were not chosen in their proper proportions. So long as to a mixed and proper diet, but when penury curbs appetite the only guide is hunger. The cheaper bulky foods are then chosen, with the frequent omission of one

or more essential food factors. This leads to the so-called deficiency diseases, whose danger lies not only in themselves but also in the predisposition to infections as tuberculosis.

The experiences of controlled rationing in many countries during this war have brought home the fact that, wherever it was possible to follow the principles of scientific nutrition in rationing, the health of the poorer classes was raised to a much higher standard, without increasing the purchasing-value of their diet above their possibilities as calculated by pre-war standards. This has been possible in a large part because old-standing habits and time-honoured prejudice had to be given up. Prejudice, habits and commercial propaganda have popularized undeservedly certain products of little or no value, whilst other useful articles are avoided. Biochemical study has led to the production of many preserved and dried foods which can be sold at a cheap price. If these are supplemented by a few other articles a fully nutritious and hygienic diet can be worked up at a price within the reach of everyone. If the poorer classes were to be directed how to spend their money better, many of the problems of nutrition would be solved.

It is essential at the same time that a carefully guided fiscal and economic policy be followed. Indirect taxation is in itself a danger to the standard of living of the poor. Strict precautions are necessary to avoid influencing the cost of any essential food article directly or indirectly. Supplementary foods can be distributed free of charge or at a nominal price to those that really need them. A step in this direction is the distribution of the milk and cod liver oil to school children during school hours. The distribution of other foods to other groups may present considerable administrative difficulties. It is however useful to emphasize that children are not the only members of the family that call for help. Experience has shown that the mother fares worse of the whole family. She gives preference to the father, as the bread-winner, and to the children out of maternal instinct. She is often last to realize that she requires food more than anyone else. She has to cope with pregnancies, nursing, haemorrhages, etc. though not usually the bread-winner she has to face the difficulties and troubles at home; she is the core of the health of the whole family. Ill-health and malnutrition can be reflected very easily in the offspring.

Enough has been said to show how multiple, varied and frequent are the causes of ill-health. It is not surprising that with the modern high standards of good health, the unhealthy are found to be the more numerous. The concept of health has altered. Health is no more considered as a static condition, the mere absence of demonstrable disease. A concept based on dynamic equilibrium is now accepted. The human organism is always reacting to the changes which take place within and around it. If the body is perfectly balanced within itself and in regard to the outside world, and if in addition it has the potentiality to regain its equilibrium easily, whenever this has been disturbed, perfect health is enjoyed. This standard of health is only theoretical. In reality no such ideal exists. Life is always under some handicap so that some abnormality is inevitable; but the power of compensation to the abnormality is inevitable; but the power of compensation to the abnormalities can be great. Well compensated abnormalities are of ten undetected; but even, when they are noticed, if they are slight and the reserve powers are great so that the individuals has the full enjoyment of all his faculties, good health is said to be present. When the disturbance exceeds certain limits (which are conventional and ill-defined), so that full enjoyment of one's faculties is considered

to be poor, disease is said to be present. There is no sharp and clear-cut boundary between health and disease. The difference is one of the degree of disbalance and of reserve powers.

This concept of health dominates this third and present phase of State Medicine. The term "positive health" has been used for the purpose, not because health can be otherwise than positive, but because it has served to emphasize the necessity of developing health in either direction : by avoiding disease and by increasing the reserve powers against it through natural and artificial methods. It has been shown that the potentialities of enjoying health and of avoiding illness are much increased with a sound parentage, proper standards of housing, town-planning, ventilation, sunshine, fresh-air, nutrition, exercise, recreation, sleep and mental rest. There is nothing new in these suggestions. What is new is the emphasis which is laid on them. The approach to the problems of disease is now physiological as well as pathological and the stress is laid equally on both.

From these concepts and from the fully-grown conviction that no reform can be adequately effective if the State does not interfere by appropriate legislation modern Social Medicine is evolving. When State intervention was invoked in the past centuries against epidemics, the inspiration lay more in the instinct of self-preservation than in a feeling of charity or social righteousness. In the subsequent periods, charitable motives played a great part, though a utilitarian mentality which measured every social move in terms of economic gain or loss, jarred many a healthy reform. In Malta, charity was a strong motive. It was fostered by Christian principles and the traditions which followed the activities of the Knights Hospitallers. The Government Department which to a few years ago was chiefly responsible for this social work, revealed its motives in its very name of Department of Charitable Institutions. This Department has now changed its name. apart from any other motive for this change the term Charitable is anachronistic. Charity is plausible on the part of the individual, but on the part of the modern State, there is no place for it. What is given is the full right of the people. All the citizens have an equal right to live up to good standard of health; as a corollary all the citizens have a right for all the requirements that are essentials to maintain health. This is not a new principle; but emphasis is now laid on the right of citizens to expect State interference by appropriate legislative or other measures to ensure that facilities for the preservation of health in the widest sense come within reasonable reach of all.

The objections to this principle are numerous. It is claimed that its implications are wide and too difficult to put into effect so that its open proclamation creates difficulties to the State, and leads to discontent by emphasizing class distinction. This objection is open to the criticism that the proclamation of a truth is never profitably adjourned; any attempt to suffocate truth will end in discomfiture. The recognition of a principle is the first step for success. Social discontent will be greater if a class realizes that its rights are encroached upon. Indeed the principles mentioned above are so just (and in the long run so utilitarian too) that their adoption should never become object of dissension or strife but should serve as a lofty goal to aim at by all.

Another objection turns round the biological fact that in all limited space overcrowding leads necessarily to limitations in the standards of health. This objection would hold, if we had no possibilities for Emigration. The rational approach to the problem is to improve the education of the masses and make emigration easier.

A third objection is financial and economical. It is pointed out that we cannot afford to adopt easily the social schemes which countries richer than us are with difficulty attempting to put into effect. The objection would be sound if one insisted that these social reforms were to be rushed. Everyone will agree that reforms of a vast entity will require long years to become a reality. We cannot put the cart before the horse, but in such matters a start is always good. We must also give precedence to other social measures. Thus the introduction of compulsory education will be a reality in the not distant future. The principle for its adoption has been universally accepted and that is a deciding factor. Yet only a few years ago compulsory education was considered a utopia. May in a few years time the reforms of Social Medicine be in equally position!