
CURRENT SCIENCE — 50 YEARS AGO

GOVERNMENT AND MEDICAL SERVICE†

IN a recent public address* Rao Bahadur Dr A. Lakshmanaswami Mudaliar observed that:

“Occasionally a discordant note is struck and not infrequently the criticism is levelled against scientific workers that their work is not immediately of benefit to the crying needs of the country, and has no practical value to Statesmen and Politicians, or that their work has only led to the discoveries being utilised for increasing the destructive forces against humanity. That either of these criticisms is not justified will be apparent to any student of science.”

Almost simultaneously Lord Rayleigh in the second part of his presidential address to the British Association for the Advancement of Science remarked:

“Science, it is urged, is the source of all the trouble: and we may look to scientific men for some constructive contribution to finding a remedy. It is worthwhile to enquire what basis there is for this indictment, and whether in fact, it is feasible for men of science to desist from labours which may have a disastrous outcome, or at any rate to help in finding other men to use and not to abuse the fruits of those labours.”

Science is primarily the study of Nature in all her moods and tenses and her gifts are absolutely unmoral. They acquire an adjectival character only when man hastens to stand noun substantive to them. The business of science is neither to kill nor to save human life. Its only function is to add to the general stock of knowledge. When we apply this knowledge to human affairs, questions of value arise. In view of the abuse made of certain branches of scientific knowledge, leading to the destruction of civil populations, scientists may perhaps consider the desirability of reverting to the ancient practice of hiding their light under communal bushels; and it may not be unwise to do so, because human society in the middle of the twentieth century is still like a giddy-minded girl whose wisdom has not kept pace with the accumulation of fortunes. It looks as though a new type of society has to merge into

being for handling the gifts of science without reproach and with beneficence for all.

The Jubilee address was set in a historical background, and the main thesis was “that while curative medicine has got a large part to play in alleviating the suffering and relieving the distress of individuals, it is in the wider field of preventive medicine that the real solution lies for the eradication of disease”. Illness has an economic aspect which ought to receive comparatively wider attention in the programme of measures devised by society and governments for ensuring the health and happiness of the civil populations. It must be borne in mind that the economic loss comprehends not only the monetary cost of combating ill-health, but also the diminishing return due to sickness. If these two sides are added together in order properly to show the purely financial or numerical assessment of the cost of ill-health to the nation, governments may be induced to make a far greater contribution towards the prevention and speedy relief of sickness or disablement in the social community, whose health represents its prosperity. While reflecting the rapid changes taking place around us, we sometimes wonder how far and in what manner a government’s capacity for service to its citizens in this direction is conditioned by its form. We are not indifferent to the converse study,—in the manner and the degree in which the citizen must serve his government in order that the fullest possibilities of government may be achieved. The capacity of the citizen at once to serve the government and to be guided by it, and thus to make of government a living partnership is, we think, dependent upon a wider, more explicit and more continuous education of the public than now obtains in the fundamental concerns upon which both government and the life of the individual citizen are predicated. Without such co-operation we must continue to have a people whose health, education and employability would be eternally irritating problems.

Dr Lakshmanaswami Mudaliar has given an enhanced conception of what national health really is, which is one of a very positive nature. It relates not only to the absence of diseases, and the proper functions fulfilled by the members of the community, but it embraces the sum total of human

*The Sri Krishnarajendra Silver Jubilee Lecture, 1938, University of Mysore.

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personality. It concerns not only with the bodily structure, but with every fibre of the mind and even with character. The responsibility in promoting these wider aims, fuller conceptions and increased values is mainly to be shared by the medical profession, governments and the individuals. The Jubilee Lecture emphasises the immediate medical responsibility arising from the results of recent research in medicine, surgery and the allied sciences, the possibilities of which have been realised in immunisation against epidemics or infective diseases, the functioning and control of the neuro-endocrine system, the new psychological approach to the study of the human mind, and the treatment of civilisation disorders, the analysis of food-stuffs and the fundamental importance of vitamins and the new science of genetics, disclosing the nature and mechanism of human heredity. Do the politicians who control the destiny of large populations, have the necessary acquaintance with the contributions which the human sciences are making to the social

problems, which they have to study and solve. It seems to us that viewed from the wider standpoint the responsibility of maintaining and improving the health of a population has passed from the medical profession to government action. Yet the paramount responsibility of the individual for his own health and for his own local environment remains. The efforts of the medical profession and of governments are easily nullified by individual ignorance and unwisdom. We consider that more than "Wardhaising" our schools, a definite curriculum for the inculcation of health habits in the elementary schools, the instruction in biology, hygiene and health knowledge in the higher stages, and the encouragement and training in health wisdom in the later years of education would seem to be urgently called for, and such a policy might undoubtedly prove more significant to the interests of the community, than the futile efforts to solve the "Babeldom" of India.

ANNOUNCEMENT

POTASSIUM CHANNEL MODULATORS

The conference on "Potassium Channel Modulators: New Drugs with Novel Mechanisms of Action" will be held on 15th December 1988 at Royal College of Physicians, London.

Membrane associated potassium channels play, among other roles, a major part in the control of membrane potential and in the threshold, frequency and duration of action potentials. Research into the properties of such channels has been hampered until recently by the diversity of potassium channels and by the lack of specific channel modulating drugs. Recent advances in molecular biology and electrophysiology, and the discovery of a range of compounds which block e.g. apamin, or open e.g. cromakalim (BRL 34915) and RP 49356, potassium channels have stimulated new interest. Cromakalim and other potassium channel activators in develop-

ment, such as pinacidil or nicorandil, hyperpolarise (and thus inhibit the activity of) smooth muscle, leading to antihypertensive, antiasthmatic or antispasmodic effects.

The international experts presenting this conference will describe the effects of the new modulators with reference to the latest findings on potassium channels, and will describe the potential therapeutic applications of these new drugs. The combination of latest findings, basic science and clinical relevance will make this conference indispensable for biologists, pharmacologists and clinicians in academia or industry.

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