

ROLE OF A RESEARCH COUNCIL IN IMPROVEMENT OF HEALTH

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This symposium deals with public health institutions and the role of science and technology. I have been invited — and I am very proud and happy to have been so — to discuss the role of my institution in improving health with particular emphasis on support of research and technological developments. I will address these issues in my role of secretary of the Swedish Medical Research Council. I will touch upon the issues also in my role of chairman of the European Medical Research Councils.

My description of the role of a research council will naturally be based on the situation in Sweden but within broad limits it will be applicable to the situation in other Western European countries. My discussion will deal primarily with research policies.

The idea of research councils was born in the United Kingdom after the First World War and was developed in the decades between the world wars. As in many other European countries, research councils were founded in Sweden after the Second World War. Even if Sweden was rather early — the Medical Research Council was founded in 1945 — I think that the discussions and reasonings behind the government final decision to create the Medical Research Council may be worth mentioning since they may show similarities with those in other Western European countries.

In the beginning of the 1940's a small group of professors had come to the conclusion that practically all of the limited funds of universities in the 1930's and early 1940's were used almost entirely for basic education. Since they saw the increasing opportunities of science to contribute to knowledge, and knowledge of importance to improvements in diagnosis and treatment of disease, they considered it a responsibility of government to provide additional funds for research. They advocated strongly the idea of giving these funds to an organization like the research councils in the United Kingdom. This would create the best conditions for the utilization of available funds.

It is quite interesting to follow the discussion in university circles about this proposal. Two counter-opinions were expressed and in fact by the majority of the university professors. One opinion was that the most important task of a university was education and that any additional funds should be used for improvements of education. The other opinion was that there was a need for additional research funds but these should be channelled directly to the universities. The idea that one was supposed to apply for research funds and that a group of colleagues were to decide on whether or not to appropriate funds was to them very undesirable. Thanks to the efforts, and I would of course say wisdom, of the Minister of Education a government proposal to create research councils was passed by parliament in 1945.

Another historical development which has been of great importance to the development and role of research councils today deals with the expansion of universities and university education in the 1950's, 1960's and early 1970's. In my country, the development was the following: the number of students including medical students increased severalfold between the late 1940's and early 1970's. I should mention that we have long had a restricted intake of medical students, the volume of which is determined by government. In the beginning, the increased volume of medical education was accompanied by the appropriation to medical faculties not only of resources to handle the increased number of students but also to increase the volume of medical research. After all, it was the time of the golden 1960's. However, at the end of the expansion of the number of medical students in the early 1970's, resources were almost exclusively appropriated for basic education. Almost no additional funds were provided for research.

With large variations, some of this historical development may be relevant when considering the present situation in terms of research policy and responsibilities of universities and research councils/

corresponding organizations in Western Europe. For instance, my impression is that the creation of INSERM in France 20 years ago depended, at least to some extent, on the fact that there had been a very large expansion of universities where the predominant activity was teaching. Thus, to stimulate research and to guarantee high quality in research, INSERM was founded.

In addition to developments within universities, the development of sectoral authorities (*) with a responsibility for research and development within their sector of society has been of importance when considering the present role of a research council. In many countries, not least Sweden, government funds were appropriated to an increasing extent in the 1970's to authorities under various ministries which should sponsor or carry out research and development activities of direct relevance to their fulfilling their responsibility for the sector of society in question. These increased appropriations were made at the expense of funds to universities and research councils for basic research. The case of the Rothschild plan in the United Kingdom should suffice as a non-Swedish example.

In my opinion, it is necessary to consider all the actors when it comes to a discussion of the role of a research council in promoting research and development and thereby improvement in health and health care. After all, medical research is a continuum from basic research to applied clinical research and development. The Swedish situation is that universities receive directly from government most, about 70%, of the total government funds for medical research and development. The Medical Research Council distributes a little more than 10% and a roughly equal amount comes from sectoral authorities.

Most of medical research and development is carried out in universities and university hospitals. In the Swedish system, universities, controlling most of the resources, have to provide the basic structure to enable fruitful research and research education. The Research Council has the position to provide additional funds for those activities it gives priority. The sectoral authorities provide funds for the activities they give priority. In view of what was mentioned before, it follows that sectoral authorities sponsor mission-oriented research and most frequently in a short-range perspective. In view of the fact that these authorities exist and command considerable resources, the Research Council has its major duty in providing funds for basic research.

(*) Examples of sectoral authorities within the medical sector in Sweden are the Delegation for Social Research, the Drug Administration, the Food Administration, the National Environment Protection Board, the Occupational Safety and Health Foundation, the Laboratory for Environmental Medicine, and the State Bacteriological Laboratory.

The pluralism in Swedish research policy and the way funds are allocated have advantages as well as disadvantages. In my opinion, it is in principle sensible that universities control a large share of total resources and thereby have a responsibility to provide the basic research structure. The disadvantage in terms of research activities has been that these resources have been too inflexible and that the distribution between various departments in a university has not been guided sufficiently by research competence, volume and priorities. In view of the fact that in recent years university resources for research have not increased in real terms, faculties and particularly medical faculties have begun to develop systems for distributing their resources on the basis of research priorities. This must be considered very gratifying and research will benefit. The balance between sectoral authorities and research councils is difficult. In my opinion, a research council and particularly a medical research council could take on many of the tasks now resting on sectoral authorities. I would even think that it would be preferable. Since medical research is a continuum from basic research to applied clinical research and development — actually, it touches areas that fall within behavioural, social and economical sciences — it would seem plausible that a single body rather than a multitude of authorities would be more able to find the proper balance between various activities. Another argument, at least in Sweden, is that the quality in assessing research proposals and in initiating research activities is considerably higher in a research council than in a sectoral authority. Although not to the extent that I have expressed it, one notices a gradual change in the research political view of government and parliament in Sweden. In the recent government proposal on research policy — the proposal covers all research and development activities funded by government — it is stated that priority should be given to basic research. It is admitted that the expansion during the 1970's of the resources for sectoral authorities at the expense of those for basic research has not been entirely suitable. It is further stated that sectoral authorities should engage themselves to an increasing extent in development of competence in the universities and in more long-range research activities.

The foregoing leads to a brief description of the activities of the Swedish Medical Research Council. The resources are used predominantly to fund basic research. In doing so, the main emphasis is on support of research groups with high international standing. It is a truism to say that a small country can not cover all aspects of medical research. I can not avoid saying that Swedish medical research appears to be of reasonably good quality and interest in an international perspective. Even if resources primarily are going to the internationally best-known research groups, the Council has the responsibility to support other research activities as

long as they are of high quality; there are two reasons: we can not always anticipate where breakthroughs may come; we have a responsibility to support training of young researchers in various areas within medical research. A small part of the Council's total resources goes to activities within areas that are considered to have an especially high societal relevance, *e.g.* research on alcohol and drug addiction, health services research, etc. The reason for these activities taking a small share of the resources is the existence of sectoral authorities with responsibilities in these areas.

I am convinced, like so many others, of the fundamental importance of high-quality basic research for the improvement of health and health care. I find it superfluous to give examples. However, other kinds of research — from applied clinical research to behavioural, sociological and economical research — are needed and will contribute to improvement of health and health care. The problem is one of balance. We have witnessed Hegel's pendulum, swinging too much to basic research in the 1960's, swinging too much to mission-oriented and applied research in the 1970's but seemingly coming to a better balance between basic and mission-oriented and applied research in the 1980's. This is my impression at least from a Swedish perspective.

I have indicated, in the foregoing, that some aspects of the Swedish situation may be relevant for

other Western European countries. In many countries, most of the resources for research are channelled directly to universities. Research councils control 5 to 20% of the total resources for medical research. Also, with variations in number and resources, sectoral authorities exist with funds for research and development. The role of a research council will depend on the actors in the whole system for medical research and development. However, it may be generally stated that research councils or corresponding organizations in the Western European countries are primarily concerned with support of basic research.

Finally, a few words about the European Medical Research Councils (EMRC). This Organization was founded in 1971 and became in 1975 a standing committee of the European Science Foundation. Its members are the medical research councils or corresponding organizations in Western Europe. The National Institutes of Health and WHO (Copenhagen) have taken part in EMRC activities from the beginning. The main purpose of EMRC is to exchange information about research policies and research activities in member organizations. In addition, EMRC has initiated research activities in some particular areas, *e.g.* human reproduction, mental illness research, technology assessment, and toxicology, areas where needs for initiating international collaboration have been defined.