ORIGINAL RESEARCH

On the "hitherto untried process of giving doctors adequate training" in preventive medicine and public health

Socrates Litsios

It was Alan Gregg who described supporting departments of preventive medicine and public health in American medical schools as a "hitherto untried process."[1] This was in October 1938 in response to being asked by a new foundation for his advice on what role they could play in American medicine. Gregg, who had been with the Rockefeller Foundation since 1919, was then Director of its Medical Sciences Division. Gregg obtained his medical degree from Harvard in 1916. His first assignment with the Foundation was to work against hookworm in Brazil; in 1922 he was offered a position in the new division of medical education (see below). From 1922 until 1931, he was involved in numerous medical education surveys in Europe.[2]

Although Gregg's response might be interpreted as implying that the Foundation had been indifferent to this issue, this was not the case. However, in comparison to the support provided by the Foundation and other Rockefeller philanthropies to other aspects of medical education and public health, the teaching of preventive medicine and public health to medical students was a very minor priority. Why this was the case is explored in this paper.

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Organization of health departments in pre-WWI America

Why medical doctors should receive any training in preventive medicine and public health was not well-defined in pre-WWI America. One reason, however, was to improve their qualifications to serve in senior capacities in local and state health departments, e.g. as commissioner of health or senior health officer. For smaller communities, the health officer had to serve as "epidemiologist, educator, dispenser and school physician, bacteriologist, inspector, executive, etc. a veritable jack-of-all-trades," an expertise that required some training to be achieved.[3] Larger ones would be served as well by the chemist, the biologist, the engineer, the statistician, "as well as the architect – the physicist – the geologist, and other experts, for aid in special problems as these arise."[4]

The reality of most communities, however, was far from this ideal. As described in 1897 by Hermann Biggs, head of the NYC Department of Health: "There is everywhere lacking the presence of intelligent, thoroughly trained sanitary officers, because there are no provisions in this country for the education of men in matters of public health … There are no men to be found anywhere in this country with a broad knowledge of public medicine."[5] Their tenure was insecure and financial reward too

small "to encourage competent men to give their best services and put their heart into the work."[6] As a consequence, men were still being appointed who had "no previous experience or training which would fit them for the duties" they were about to undertake.[7] Financial support was so lacking for health that in 1907 the number of inspectors in the 47 US cities with populations between 50,000 and 100,000 was 250 compared to nearly 10,000 firemen and police.[8]

Earlier (19th century) efforts to make textbooks available to medical students, concerning hygiene, sanitation, preventive medicine, and public health, led to courses being taught "most casually" in medical colleges throughout the entire 100 years.[9] Biggs was one of the first to urge the training of physicians for careers in public health. In his address, quoted from above, he indicated that the "greatest sanitary need of the time [was] for the establishment of training schools in public health (similar to those existing in Great Britain), the education of physicians in the special knowledge required, and the enactment in the various states of laws requiring that medical officers of health should have diplomas in public health…"[10] He was not able to carry this idea into effect. Instead, it was William Sedgwick who had begun the teaching of sanitary science at Massachusetts Institute of Technology (MIT) in 1883 and whose school began to turn out health officers to such a degree that for a time, "practically all experts in the field of public health were trained in the Massachusetts Institute of Technology, and most of them did not have a medical degree."[11] According to Sedgwick, any community that was able to pay a young man $1,000 or even less should be able to secure "intelligent, faithful and enthusiastic service."[12]

Sedgwick conceived an educational strategy that would develop two practitioners, one in medicine, the other in the science and arts of public health. His so-called Y plan had both students together for preclinical instruction before dividing, one leading to a degree of Doctor of Medicine, the other a Doctor of Public Health. As a first step towards this goal, and with the help of two members of the Harvard Medical School faculty, George Whipple and Milton Rosenau, he organized in 1913 a joint course for a Certificate in Public Health, which bore the seals of both Harvard and MIT.

This was, more or less, the situation before the Rockefeller family threw its weight behind the reform of both medical education and the teaching of public health.

The General Education Board and the reform of medical education

The General Education Board (GEB), a Rockefeller-funded institution, hired Abraham Flexner to survey medical education in America. Flexner was a layman who had received a bachelor's degree at Johns Hopkins. Although lacking in direct experience in medicine, Flexner was well aware of how, under the leadership of William Welch, the Johns Hopkins Medical School had become the most outstanding medical school at the time. Furthermore, it was Welch who had convinced Rockefeller, Jr. to create the Rockefeller Research Institute and appoint Flexner's brother, Simon Flexner, an eminent medical researcher, as its director.

Abraham Flexner's 1910 report proved central to the reorganization of medical education, extolling, as it did, the virtues of scientific medicine.[13] Students needed to be well-versed in the basic sciences (physics, chemistry, and biology) and needed to learn from hands-on experience; this latter was most efficiently and effectively organized in affiliation with a teaching hospital. Professors

had to be full-time and dedicated to both research and teaching. All of these reforms had already been carried out by Welch at Hopkins.

The GEB took on the task of promoting the Hopkins model in other American schools: Harvard, Columbia, Cornell, Tulane, Western Reserve, and Rochester. Given John D Rockefeller Jr's interest in China, the first effort to extend this model outside America was the Peking Union Medical College (PUMC); the China Medical Board (CMB) was established to oversee the building and running of the PUMC.[14]

Did Health Officers have to be medical doctors?

The next major development again involved Flexner. In 1913, the Foundation asked the GEB to consider the desirability of improving medical education in the United States with a view to the training of men for public health service.[15] Flexner, Secretary of the GEB, was given the responsibility of exploring existing training facilities. He organized a meeting in October 1914 to which were invited representatives of a small number of medical schools (Columbia, Harvard (Rosenau and Whipple) and Hopkins (Welch)), several senior public health men, including Biggs (now New York State Public Health Commissioner) and Charles-Edward Winslow (New York State Department of Health), and representatives of the Rockefeller Foundation, most importantly Wickliffe Rose who headed their International Health Board (IHB). Sedgwick was not invited. Although Flexner later excused himself, when Sedgwick was not invited for the second round of discussions, it seems clear that Flexner did not want to have to contend directly with an alternative view of how public health training might be organized.

Despite the absence of Sedgwick the question of whether or not health officers should have a medical degree was central to those present; opinions differed greatly. Welch visualized a qualified health officer as "a doctor of medicine with a hospital internship and two years of special training that would make him also a doctor of public health."[16] Flexner, having a similar model in mind, believed that a school of public health needed to have a strong relationship with a medical school, as public health officers had to deal with the prevention and management of disease, which they only could come to understand "in the laboratories and hospitals of a medical school."

Biggs argued against the requirement of a medical degree. Rosenau, not surprisingly, given his relationship with Sedgwick, went so far as to argue that public health was a distinct profession, separate from the practice of medicine, and that the program should be coordinated with but not subordinate to the medical school. Winslow, too, believed that public health was "not a branch of medicine or engineering … the ideal school of public health should train all the various grades of sanitary workers from the highest to the lowest. Public health nurses, sanitary inspectors, and health officers for small towns are far more urgently needed than high-trained medical officers of health." Rose ended the meeting with a vision of training that seemed to please everyone present. He described a system of training in public health services for the country as a whole, which involved one or more central institutions that covered the whole field of public health instruction, using for their laboratories the state health organizations, city health organizations, and actual field work.

Rose and Welch were assigned the task of writing the report of the meeting. Rose wrote the first version, which was then rewritten by Welch. Whereas Rose's plan called for a "national system of public health training, with a central school of public health as the focal point of a network of state schools," Welch's

version dropped Rose's system of state schools, practical demonstrations, and extensions courses, leaving in its place a "center for scientific research and the production of knowledge."

Johns Hopkins, the clear choice of Flexner, was chosen for the new institute with the understanding that Welch would be its director. In June 1916 the Executive Committee of the Rockefeller Foundation approved the plan for the School of Hygiene and Public Health. No budget for practical training was included, i.e. no links with state or local organizations, no extension courses, no demonstrations. This was consistent with Welch's belief that "the school…must not feel directly and immediately responsible for public health administration or for knowledge of public health matters throughout the nation… ."[17] Only when the Foundation pressured Welch did he move to add staff that had any practical public health experience. At one point Biggs was offered an appointment in public health administration, which he did not accept, possibly because "he may have viewed the research-oriented Welch school as largely irrelevant to the pressing needs of public health practice."[18] The school opened in October 1918 with Welch in charge, a position he retained until 1926.

In the spring of 1920, Winslow, who at the time was chairman of the APHA Committee for standardizing public health education, wrote Selskar Gunn: "The committee agreed to give a certificate for one year's work to college graduates, but required a medical degree, plus two years of graduate work for the doctor of public health. I do not know whether we are right to do this or not, but it seemed to me the more conservative and the wiser course to follow. The APHA will have to leave the question of the MD requirement optional, as many schools, like Michigan, would not agree at present to follow this rule."[19] Both Winslow and Gunn were "Sedgwick's Boys," i.e., graduates of MIT. Neither were physicians, and Gunn had been a very successful Health Officer (Orange, NJ).[20] He joined the IHB in 1917 where he was stationed in France.

Tentative efforts to meet the 'lesser' needs of American states and communities

With the Hopkins school of public health well-established, George Vincent, President of the Rockefeller Foundation, called a meeting to discuss the possibility of creating other educational centers in America, including one that would prepare health officers and technicians, work in which Welch had been careful to not allow Hopkins to be involved.[21] Vincent suggested the Harvard-MIT School for Health Officers as an example for such a school. Welch was not pleased with this suggestion, as he fervently believed that any training institution had to have a strong research arm; one that was confined to preparing health officers and technicians could not be first-rate in his eyes.

Vincent also suggested the possibility of forming departments of public health in several medical schools rather than forming additional separate schools, with Simon Flexner indicating that the Hopkins school "would be a kind of foster mother to all, furnishing teachers, leaders, etc.," adding that the Harvard Medical School could be the first such center, a development which "would not preclude cooperation with Dr Sedgwick and his technology department." Welch did not object to this.

Shortly after this conference, David Edsall, newly made dean of the Harvard Medical School, undertook steps to attract the Foundation's financial support for a school of public health that would replace the Harvard-MIT school but would be developed in

cooperation with MIT.* With Sedgwick's agreement and Rose's belief that the Medical School would be "imbued with the spirit of public health," the new school of public health was to be located near the medical school.[22] Unfortunately, Sedgwick died in early 1921 at a time when he was actively working on helping develop the design of the new school in which MIT would play an integral role.

Fred Russell, who took over the IHB directorship from Rose in 1923, responded positively to a plan submitted by Edsall designed to improve "the teaching of the preventive aspects of medicine during the course of the regular teaching in several departments of the medical school."[23] Russell and Vincent saw this project as "one of great fundamental importance and distinctly one in which our Board might interest itself."[24] Furthermore, they understood it to be "the connecting link between the activities of the Foundation in the development of medical education and of the International Health Board in the development of public health."

Over the coming years, Gunn had occasion to visit both MIT and Harvard; from his comments it is clear that he did not believe that this program was developing as Russell and Vincent hoped it would. Why Gunn was interested in this needs to be explained first.

When stationed in Prague (1920-22), Gunn had many occasions to lament the lack of interest on the part of physicians in anything else but their own careers. He was equally critical of those responsible for public health work who he felt were completely ignorant of public health matters. I believe the more he realized just how long it would take to transform a ministry of health into one that was actively engaged in public health by the means of providing fellowships to younger and promising public health doctors, the more he became convinced of the need to pay more attention to introducing social medicine† into the curricula of medical schools. Also, and of very great importance, was his first-hand contact with Andrija Stampar‡.

Stampar believed that the development of public health services "required a great number of properly trained physicians."[25] In his opinion the separation of undergraduate and postgraduate training in public health was "not a good thing." Furthermore, undergraduate training was "more important" and postgraduate training should be a continuation of the former and confined "mostly to the doctors who have shown a great deal of interest in public health matters during their undergraduate studies."[26] Undergraduate studies, as Gunn told Vincent in 1927, would develop in Europe under professorships of "social medicine in important medical schools" and would, he believed, have a "stimulating effect upon public health work in general."[27]

Returning to Gunn's visit to Harvard and MIT, there he found that the MIT people still "believe that non-medical men had and can play a useful role in practical public health."[28] The Harvard people, on the other hand, "feel that public health is essentially for doctors, and have a rather disdainful attitude towards the Institute." The Harvard school depended on RF fellowships for its students, without which, it "would be a farce as a school and simply be a research institute."

* The Harvard-MIT school was found to be illegal under Massachusetts law, thus forcing Harvard to go it alone but with the support of MIT.

† It was Gunn who wrote the introduction to the League of Nations, *Report of the Intergovernmental Conference on Far-Eastern Countries on Rural Hygiene*, (Geneva: League of Nations, 1937), in which he wrote of the need for preventive and social medicine to permeate the entire programme of medical education.

‡ Stampar, an outstanding public health figure, was Director of the Division of Hygiene of the Ministry of Health in Yugoslavia.

During his next trip (1928), Gunn visited Winslow's program at Yale, where he was particularly impressed with the relationship of the school to the actual field work at the State Board of Health, City of New Haven, which he judged to be "better than either Harvard or Hopkins."[29] Winslow's Department of Public Health, which he founded in 1915, was within the Yale Medical School. There, he conducted classes in the principles of public health for all medical and nursing students, and gave an elective course for undergraduates. John Grant (see below), too, admired Winslow's program. He was "one of the few living Americans that influenced [his] thinking whatsoever"; Winslow's field work in New Haven may have inspired Grant's urban health center program.[30]

Concerning Harvard, (Gunn's) criticism was even harsher: Harvard's staff "do not really understand public health work in the field."[31] Grant learned during his visit to Harvard that Edsall's efforts to permeate preventive medicine into the medical curriculum had failed. While most schools "accepted the concept, when you went around to the different schools, you couldn't see a single result."[32] That same year Edsall did admit that the "training of physicians has been very inadequate almost everywhere in the practical applications of Hygiene and Preventive Medicine."[33] In a survey carried out by the USPHS in 1939 of public health work it was found that one-half of the physicians, one-third of the nurses, and two-thirds of the sanitary officers in the whole of America were found to have had no public health training whatsoever!

Establishment of Foundation's Medical Education Program

While Rose expressed himself on the desired attributes of the medical school as regards public health, he did not believe that the IHB had any role to play in medical education as such. This point emerged in 1922 during internal discussions on the distribution of responsibilities within the Foundation. Rose is quoted as indicating that "a single arm of the Foundation should be charged with all the public health work which it is carrying out. Field should not be divided as between two or more instrumentalities within the Foundation."[34] Although it was pointed out to him that the training of medical scientists and doctors "generally underlies the work in public health and underlies specifically the training of public health workers…," Rose replied that the IHB *"does not wish* to include medical education in its program.."(emphasis added)

It was Rose who initially was responsible for extending the work of the Foundation in medical education to other countries. In 1916 he asked Dr. Richard Pearce, professor of pathology and research medicine at the University of Pennsylvania, to undertake a survey of medicine in Brazil. So successful was this project that he was appointed advisor to the IHB in medical education; in 1919, the Foundation established a separate Division of Medical Education (DME) with Pearce as Director. With the GEB responsible for medical education in America, it does not seem that Pearce was involved in any of the discussions concerning medical education there.

Failed efforts of IHB to engage DME in Preventive Medicine

Gunn, when still stationed in Paris, was promoted to Vice-President of the Foundation in 1927. This position allowed him to raise his concerns directly with Pearce. What he learned was most unsatisfactory. As summarized in his office diary: "SMG [Gunn] wonders whether the new policy of the RF in connection with medical education would mean that the program to develop strong departments of hygiene and preventive medicine in strategic medical

faculties would be abandoned. RMP [Pearce] says that it will not necessarily be abandoned but will be approached from a different point of view, namely in the form of possible aid in research, etc., in bacteriology and immunology, etc. SMG [Gunn] doubts if such aid would really materially affect and modernize teaching of hygiene in the medical schools."[35]

Had Gunn better understood Pearce's priorities he would not have been surprised at what he learned. When Gregg was Pearce's representative for Europe (where he and Gunn became very close friends), he expressed sufficient interest in the undergraduate medical education to evoke a clear response from Pearce: he (Gregg) "should not be obsessed with the idea of helping medical students only in the undergraduate school. We inherited this idea when the Division started, from work that had gone on before in other groups of Rockefeller Boards. There is no reason now why we should not get away from it to a large extent."[36] Gregg went so far as to lament (later–circa 1950) that "Pearce did not want undergraduates in public health."[37] It probably did not help matters that Pearce and Russell did not like each other.

Gregg must have been particularly frustrated given the fact that while Pearce was attempting to cool his interest in undergraduate education, Vincent urged upon Daniel O'Brien, Gregg's assistant, the "importance of stressing the preventive idea in all our medical education work–we entered this field for the sake of promoting public health interests–more important to educate the average doctor than even the special public health Officer ... we should aim at as intimate team-play as possible between the 2 aspects of medicine."[38] Vincent may have been the President of the Foundation, but his powers were clearly very limited. All he could do, by and large, was to encourage those who were moving in directions that he approved of.

The new policy for the DME was supported by Edsall in his capacity as head of a special committee asked to explore possible future directions for the DME. Edsall's report indicated that the particular functions of the DME (which was in the process of becoming a Division of Medical Sciences (DMS)) "should be to develop opportunities for aiding men in and training others for research in those fundamental sciences that bear upon the problems of Hygiene and Preventive Medicine."[39] The role of the DME should be "largely confined to aiding those sciences upon which Public Health is built, and furthering research and advanced training in these."

The "almost" in Edsall's 1928 admission that training of physicians has been very inadequate in the practical applications of hygiene and preventive medicine (see above) no doubt reflects the fact that he was fully aware of what John Grant was doing in China, as he had been a visiting professor at the PUMC in 1926. Grant, a medical doctor (University of Michigan), employee of the IHB from 1917, and an RF fellow at the Hopkins School of Public Health (1920-21), was appointed professor of public health at the PUMC in 1921, a position he held until 1934, when he joined Gunn in a special project concerning rural reconstruction in China.[40] Grant was convinced that "curative and preventive medicine could be combined at PUMC and a community approach taught."[41] In 1923, he outlined an undergraduate course in hygiene. Introducing any of these ideas in a conventional medical school, according to Grant, would have been "a very uphill job," but "fortunately, the PUMC heads of departments averaged less than 40 years of age, and were open to suggestions."[42] If there was opposition to the idea of "uniting prevention and cure" it derived from the work

of the IHD[§] to control hookworm in the American Southern states. There, according to Grant, the IHD had to promise that they would not do any curative medicine before they could set up a county health department – "unfortunately, the IHD permitted that separation of curative and preventive to be extended to foreign countries, through their staff members, who in Europe, Asia and other places tried to develop the health unit idea, where there was no curative being undertaken."[43] Nevertheless, Russell was "sold on this idea of a community practice field" following his visit to China in 1927.[44]

By the time Edsall came to China, Grant, as head of the newly established department of hygiene, had established an urban health demonstration center in one area of Peking, in which curative and preventive work was undertaken. For this purpose the city government had transferred authority for sanitation and hygiene to Grant's Health Station. Later, he developed a rural demonstration area which was to prove critical in the development of China's rural health system.[45]

Revived interest in undergraduate medical training in Preventive Medicine

Pearce died unexpectedly in early 1930. That same year Vincent was replaced by Max Mason. Although it was Mason who had promoted Gregg to replace Pearce, he and Gregg never established the same kind of rapport that Gregg had had with Vincent. In fact, theirs was a "difficult relationship."[46] How important this is to our story is not clear since undergraduate medical education could not have been a priority in an organization whose mandate, as announced in May 1930 by Rockefeller Jr., was the "advancement rather than the diffusion of knowledge (which) means that the Foundation is concerned with research rather than with education; that, in general, it deals with universities and research institutes rather than with colleges. The field of the Foundation is narrowed still further by its emphasis on pure rather than applied research."

On his arrival in New York, in early 1931, Gregg learned that Mason had doubts concerning whether there should be any program in the medical sciences, and, in any case, if there were to be one, its focus would no longer be specific countries. For a combination of reasons, Gregg chose to concentrate his attention on the field of psychiatry.[47] Being a "seasoned Foundation man who knew how to operate effectively in difficult organizational circumstances" he spent the next few years raising the priority of psychiatry to the point where the trustees in April 1933 agreed to allow his division to devote special attention to the sciences underlying psychiatry.[48]

During this interim period Russell continued to promote the idea of public health training in undergraduate medical schools, while gathering information on what was going on in America. Given the fact that American doctors had "too many opportunities to go to other fields," he did not see rapid progress but could foresee a future where all of the medical profession would be trained in public health.[49] From Dr. WS Leathers, head of the Department of Public Health, School of Medicine, Vanderbilt University (the only medical education program that Stampar found acceptable during his visit to the States in 1931), who sent a questionnaire on this subject to 76 schools of medicine in America, Russell learned just how undeveloped this area was. Only 9 of the 60 schools that responded could be regarded as having provided for teaching hygiene and preventive medicine in a manner "approaching the methods employed in teaching other major subjects in the

[§] The IHB became the International Health Division (IHD) in 1927.

curriculum." The teaching in the remaining schools was of a "desultory, uninteresting and poorly organized type." This phase of medical training "unmistakably" is a phase of medical teaching that is generally neglected – "at the present time medical students are being graduated with scarcely any detailed knowledge of this important phase of medical service."[50]

With the merging of the GEB and the Foundation, the DMS inherited responsibility for medical education in America. Gregg now joined Russell in promoting this subject as much as he could; however, what he could do was limited by lack of funds and his much greater priority of ensuring the success in his major area of interest, that of psychiatry.

From Winslow (27 April 1931 diary entry), Gregg learned of the "very good results" that he was obtaining by assigning a dispensary case to a student for thorough preparation from the preventive point of view." Smillie (Harvard) informed him (3 May 1931) of his "unwise" moves to saturate the curriculum with preventive medicine. Winternitz (Yale) (30 May 1931) lamented the fact that his colleagues and the medical profession in general "do not see Medicine as a whole and the relationship of the practitioner to the community." From Russell he learned just how unsatisfactory was the training of undergraduates at Hopkins, so much so that a NY State Committee on credentials for acceptance of physicians for public health service in the State of NY had placed it and Rochester on the list of medical schools whose curricula were inadequate in teaching of public health to medical students!

Gregg waited until June 1935 to discuss with Mason the idea of carrying out a survey of hygiene and public health in medical schools, an idea that Mason found "worthwhile doing" but, as there was expected to be a substantial reduction to the Foundation's income for 1936, it was not feasible to consider a staff appointment of an individual to take direct charge of a program in the teaching of public health. Gregg, however, had sufficient funds to engage John G Fitzgerald from the University of Toronto, and Charles Smith, from Stanford University in late 1935 to carry out a survey in North America and Western European medical schools. Unfortunately, Fitzgerald's report "produced few constructive ideas."[51] As O'Brien observed – there was "much too much on medical education and inconsequential material on the problem in hand, that is, the teaching of public health to medical students."[52]

Gregg continued to include budget items related to this topic over the next couple of years. For example, in 1936, Cornell University appropriated $112,000 for the establishment of a health center in New York City to be used to develop a first-class department of preventive medicine; in 1939, the Foundation appropriated $350,000 to be expended at the rate of not more than $35,000 a year for the establishment of a Department of Preventive Medicine at the Johns Hopkins Medical School to be used for salaries of staff, including a professor of preventive medicine; and in 1944, Washington University received $24,000 for the teaching of preventive medicine over a three-year period.

As Director of DMS, Gregg became a member of the CMB which continued to oversee the PUMC, whose program had largely remained unchanged until the mid-1930s when the new Nationalist government (with Grant almost acting as an undercover agent who probably wrote the position papers for the Ministry of Health) began to pressure the PUMC to make its program more relevant to the immediate health needs of China.[53] Included in their recommendations was the need for the faculty of the PUMC to become more familiar with the life of the majority of the population and that teaching give more emphasis on public health, parasitology, and bacteriology. Stampar,

who arrived in China as an expert on behalf of the League of Nations Health Organization, also joined those who believed that the PUMC should alter its program in order for "the population as a whole [to] receive greater benefits."[54]

Gregg visited China in September 1932, where he met Grant and discussed plans for graduate training in public health. Shortly after this visit, Grant prepared an "initial" three-year budget for the development of graduate facilities in public health.[55] Gregg supported Grant's proposals but lack of funds prevented this idea from moving any further, although Grant continued unsuccessfully to promote the idea of developing a school of public health in China until he left in 1938.

Post-WWII developments

Following the war, Grant, who had spent more than 7 years in India, where he was highly successful in assisting the Indian medical community develop progressive ideas concerning social medicine, was re-assigned to New York to a "new job" whose initial focus was the study of medical care.[56] This was a consequence of the Board of Scientific Directors of the IHD having decided that the Foundation should try and find new fields for the IHD to study. George Strode, Director of the IHD, had proposed that the Foundation engage in a study of social medicine, as it impinged on the delivery of medical care. The only other person that Grant found sympathetic to that idea, "or who had given any thought to speak of, was Alan Gregg," who had been supporting several small projects, in the field of medical care, "in order to keep the ball rolling…"[57] This view of Gregg's work was consistent with what Grant had learned some 20 years earlier when he had witnessed Gregg's efforts to get a strong department of preventive medicine established in a medical school in Japan, which led him to conclude that Gregg would "go to the borderlines of what his terms of reference were for his division, to get things done that eventually were undertaken by the IHD."[58]

Grant went through a period of what he called "a course of self-education in this field."[59] As part of this education he surveyed health care in some 12 countries around the world (Australia, Canada, Denmark, England, France, The Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United States). Before undertaking this trip Grant gave a talk on "certain trends" concerning the health department and medical care in which he outlined his vision for America. His summary reads as follows: "The United States is rapidly laying the foundation for a vast extension of medical care and health services. The expansion of these services must be undertaken by a single administrative body for the whole community, not by several governing bodies. If adequate medical care is to be attained, particularly in its health aspects, this body should be public health administration. Health departments can ill afford to ignore the outstanding world trend in the organization of medical care and health services which is the regionalization of hospitals and their interrelation in each area in a unified plan to provide a two-way flow between medical care facilities, as well as for training and research." That Grant was out of touch with health care developments in America goes without saying. Nevertheless, he remained upbeat in his belief that "international trends" would somehow impinge themselves on the American scene to bring about the changes that he promoted.

His trip 'confirmed' what he had already outlined as the distinctive trends then dominating health development: "Any economic barrier to adequate medical care will be removed through either voluntary or

compulsory insurance. The distribution of health care will be increasingly improved through institutions in regional areas based, as far as possible, on teaching hospitals, integrated with non-teaching hospitals and health centers. ... The key factor in rapid establishment of this pattern is the degree of aptitude of the medical profession, and especially the general practitioner who serves as the quarterback of the medical team, in providing community family health care. The development of this aptitude requires the reorientation and extension of medical education to include social as well as clinical pathological diagnosis."[60]

The IHD and DMS were merged in 1950 into the Division of Medicine and Public Health. The new division was designed "to meet today's larger concept of medicine, in which the formerly distinct boundaries between curative and preventive medicine were rapidly disappearing."[61] Dr. Andrew J Warren was named its director. Gregg was promoted to Vice-President; Grant became one of its five associate directors. This new program continued to aid medical schools "to integrate the preventive aspects of medicine with clinical teaching."[62]

Concluding comments

One of the basic principles that guided the Foundation's public health work was that it worked "only with and through governments."[63] No effort was made to "over-persuade a government to undertake a forward step prematurely or with misgiving." Demonstration projects, such as the search for more cost/effective malaria control methods, aimed to help "a health officer to prove to his community the value of an innovation."

On the other hand, the Foundation's and GEB's efforts concerning medical education focused on individual schools. There was no demand on governments as such to be partners; if anything, there was some fear the involvement of government might interfere with the running of the school. This helps explain Gregg's strong protests when Grant attempted to place the PUMC at the center of China's medical education program. Gregg believed this might undermine the quality of the education received at the PUMC, or as he put it: "knowledge is so likely to outlive national ends and is so far more easily defined and so much more consistent than national ones, that the criticism of high standards as not serving national ends can be a boomerang."[64]

Given this politic, progress, i.e. the successful incorporation of preventive medicine in the undergraduate medical curriculum, depended on the presence of strong individuals dedicated to this end – Stampar in Yugoslavia, Winslow at Yale, Grant at the PUMC, and Leathers at Vanderbilt. Conceivably, a more pro-active policy might have led to more success but this is not obvious as true success meant more doctors entering the field of public health, something that depended on more progressive attitudes on the part of those who controlled public financing, something for which little evidence is available. One would have to look more closely at this subject in the post-WWII period to judge if the Foundation could have done better.

References

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