

AN INNOCENT ABROAD*

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For many years members of our Society and scores of others here and abroad, with generous financial aid from many sources, have pursued research and published the results in miniscule detail. Many also have worked abroad in various public health and medical programs. The ultimate goal was to unravel Nature's secrets and benefit mankind, especially in the less developed parts of the world. The "rich" U.S. Government, 400 billion in debt, scores of foundations, solvent World Health Organization, industry, and the Church have participated in these activities. It is of these matters that I will speak after some 47 years of observing and participating in them. I shall give names of persons and countries only in connection with successes.

At the age of 24 I was the minor member, the Benjamin, of a hookworm research group, Rockefeller-supported, on the way to Nicaragua. While we were enroute there was a revolution in that country and we were shunted to Penonome, Panama, to study the epidemiology of hookworm and to evaluate tetrachloroethylene. I was studying under Dr. W. W. Cort for a Sc.D. degree, and demonstrated that *Ascaris lumbricoides* females passed somewhat over 200,000 eggs per day and that in nature the eggs lived in the soil for a matter of months, not for 5 years as in the test tube. Who ever got infected with *Ascaris* via the test tube? I saw for the first time the greed and wealth of the rich land owners and the poverty, sickness, and despair of the peons. Now, nearly 50 years later, including the 60 trips to Puerto Rico where I organized their 4-year medical school, this innocent has made approximately 100 trips to various countries, engaging in organizing the teaching of medical and public health students, medical administration, industrial medicine and, recently, planned parenthood. However, I shall go down in history forever because Dr. M.

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C. Hall named a nematode after me that I found at autopsy in the rectum of a three-toed sloth in Panama.

One observation made early was that advice is usually taken and followed in direct relation to the funds—*your funds*—available to carry out the greatly needed, always innovative, pilot health or educational project which constitutes a breakthrough as long as funds are available. The world is covered with these health demonstration projects, dead and in varying stages of decay. Why? Because they are not developed with the help of the inhabitants and within their financial capacity to carry them on. What many of them demonstrated was that the health center's large budget and its many foreign and local experts had about as much impact on health as one busy general practitioner and less than one small missionary hospital.

One Far Eastern country has over 300 health centers and another has 200, inadequately staffed, ill equipped, and little used. One such health center, only a mile from a medical school which "uses" it to demonstrate public health in "inaction" to medical students and nursing students, had never been visited by the Professor of Public Health and its impact on the community was so small that it was not until we got within two blocks of it that a local resident could direct us to it. On the other hand, at a small Korean health center, whose well-baby and pediatric clinic was staffed three half-days a week by the Professor of Pediatrics from the local medical school, from 100 to 250 children were seen per session. He had organized the clinic so that nurses did much of the preliminary work and immunizations. The public recognizes first class medicine and one seldom sees a mission clinic or hospital that is not overflowing with patients. Your dollars donated to their cause are well spent.

Although they too have had their failures, I think that the Rockefeller Foundations, including the China Medical Board, have made a great contribution to the health of mankind. They recognized early that the quality of medical care and public health depended on the quality of

trained personnel. Their extensive aid to European medical and nursing schools after World War I, and the London School of Tropical Medicine and Hygiene are signal accomplishments. Their aid to the schools of the Far and Middle East set standards for the future, and the medical school in Fiji serves some 2 million square miles in the Pacific. Similar aid to schools in South America as well as in North America, and to China's Peking Union Medical College set standards for these areas. Their worldwide hookworm, malaria, and yellow fever campaigns were based upon research that they did or supported.

The "green revolution," improving the resistance to disease and the yields of corn and wheat in Mexico supported by Rockefeller which spread over South America, and the improvement in rice yields in the Philippines aided by the Ford and Rockefeller Foundations may make human survival possible in many areas of the world until mankind can control his lust and curb his reproductive proclivities. Few realize that the famous Dr. Emile Brumpt of Paris was supported for years by Rockefeller. His active laboratory, monumental textbook, and his pioneer work in mycology are landmarks. My memory of visiting his Paris laboratory in 1935 is unforgettable. After introducing me to his staff he introduced me to his several technicians, dressed in fashionable black with clinging dresses to avoid laboratory soiling. He placed his arm around each and said "This is Fifi," or "Luci," etc. Unfortunately I spent my General Education Fellowship at the London School of Tropical Medicine and Hygiene, a much more staid environment.

Being a student, professor, and finally dean of schools of public health and medicine has given me a special interest in our contribution to foreign education.

Unfortunately, the deans of medical schools abroad often have only a 2- or 4-year tenure and have to practice or take on other activities to make both ends meet. Some feel they must leave a monument in the form of a building and often there is a generous split of the funds. One foundation thought my experience might be of value in planning and the erection of a school of public health abroad. The faculty varied from 8 to 15, depending on how many were on military service, study leave, or consultation abroad. A large sum of money was to be matched by the University.

Instead of the original well-planned, well-constructed and compact three story building it ended up as a four-story, poorly constructed monster containing 108 rooms—*with an elevator*, for a race of people who walk everywhere and on weekends crowd the plains, hillocks, hills, valleys, and mountains with eager hikers. The dean, an athlete of some reputation, rides to his second floor, unheated office. I was informed that this building was planned for the next 25 years, or was it 250. How much better a smaller building which could be heated in the bitter winters, and a modest endowment to provide for one capable secretary, technicians, and perhaps faculty subsidies so that they would not have to spend so much of their time outside of the university making a living.

I presume that the institute system of Germany and the separation of the medical school (the first 2 years) and the hospital in England have had considerable influence on institutional building, but why American funds should be wasted on building a school of public health 5 miles from the medical school which greatly needed their expertise (it had an exciting view of the mountains), or a pathology department connected neither to the hospital or the department of pathology of the medical school is hard to understand. Supporting medical schools that have a student reading room with few books and a separate library for the faculty with the current journals, not available to the students, is not sound education. Are the professors, too busy practicing, afraid that the students might upstage them by reading the journals? As one professor stated, "My lecture notes are all that the students need for that is where their examinations come from." Ah, to be omniscient!

The modest medical schools in Addis Ababa, Khartoum, and Suva are not Harvards, but serve their countries well and within their means. I had a pleasant time visiting the Russian Red Cross Hospital in Addis Ababa. The USAID physician stationed there had been trying for months to gain entrance to it. At a meeting of the hospital directors of the country I met the Medical Director of this hospital and, through his attractive interpreter, told him I understood that his hospital was the Columbia University College of Physicians of Addis. This seemed to please him, but when I asked if I could visit it early the next day he replied "Nyet," the only Russian I under-

stand. However, through his interpreter I was told not until 10 A.M. The AID physician, a former student of mine, had one of his innumerable important committee meetings, but after thinking overnight decided to come with me. We were shown the hospital in great detail, including the first-, second-, and third-class rooms. When I mentioned that I understood Russia had only one class, the reply was, "This is Ethiopia." Most of the staff, which was large, had from 10 to 30 years experience—whether it was in medicine or espionage I'm not sure. To their credit there was a sign in several languages on the hospital's gate: "This hospital is open to all, 24 hours a day, 7 days a week." What more can one ask, besides first class medical care. The Medical Director promised to visit me in New York. Surprising what a few Vodkas will do.

Complicated, expensive equipment, especially the electronic print-out type, is considered proof of knowledge and importance not only in the developing countries but in the United States. Visiting consultants with financial backing are expected to furnish this equipment and fellowships abroad in unlimited amount. One medical school was given an electron microscope and the other school in the same city requested two. Do they have to cool off after hard use? We inspected the rooms prepared for them in the basement of a new building and found it under 8 inches of water. Reminds me of my ball point pen alleged to write under water, but is a dud on dry land. I was in residence in one foreign medical school which had been given a large amount of sophisticated diagnostic laboratory equipment. It was still in its cellophane wrappings after months, but on the day of the donors' visit it was carefully unwrapped and several "technicians" in white coats were fussing over it, I hope to no permanent damage.

One city public health laboratory, although they had a perfectly adequate spectrophotometer, requested a new model which could do the test considerably faster and a bit, though not significantly, more accurately. I was embarrassed to learn that the test was run only two or three times yearly. But the good, though bankrupt, neighbor's budget was underspent that FY (note my acquisition of the jargon), so they got the machine. I hope there is not another new model. Only a rich country can go into debt to give away expensive equipment.

I was asked to review the list of requests submitted by two American consultants and the dean and faculty of one enterprising medical school that I had visited several times. It totalled \$7,000,000. The histology department had copied all the names of the stains in the A. H. Thomas catalog, some 4.5 pages, and requested two bottles of each. As this is not my field I wrote to our histology department head at Columbia's College of Physicians and Surgeons. He replied that one could get by with six stains but that they used twenty. The pathology department had requested 420 autopsy knives. In view of the 35 autopsies the year before, all on prematures, I thought this a bit excessive and noted that this should be submitted as part of the military request. Very little on the list was related to medical student education. As I recall, we pared the budget down to \$150,000 which included the repair of several hundred student microscopes through which it was practically impossible to see even light. This school, with 100 students per class, claimed they were short several hundred microscopes. This was because each basic science department had 35 scopes—how else could you be important—so students stood 2 or 3 deep behind them. After their repair, and after gallons of tea and many conferences, the faculty agreed to pool the microscopes and assign each student one for his use during the year.

Some years later at one school I examined 125 microscopes the students were having trouble with and found that they all had a most luxuriant growth of fungus on the lenses. The Dean informed me that they were a gift 23 years before, when he was a student, and they had not been repaired since then. He was requesting 150 new binocular microscopes. My Columbia microscope was 30 years old then. For \$1,400 we put all 125 microscopes in first class condition. Was I praised for this economy? No, the Dean's wife told my wife at a cocktail party, all the faculty laughed at me for being so tight and for not plunging the United States \$100,000 further in debt for the new microscopes. Moral, stay sober at parties. They said I must think that they are a second class school. I wonder! At least I can classify their administration. Recipients of charity can never get enough; like tainted money, taint enough.

Some years ago I was sent out by a number of foundations to ascertain what several medical

schools really needed to improve their medical education. After discussing this matter at some length with the deans and faculties I requested a meeting with small groups of students and house officers. The deans' reply was no, we older professors know what is best. However, I did meet with some of that "ignorant" student group and their number one request was for a text book apiece during each course. Some of their professors' notes were 30 years old! I have sat through scores of lectures abroad watching students laboriously complete their own textbooks from the professor's lecture, including his ignorance, mistakes which he erased from the blackboard, and the students' misunderstanding of his grunts. A professor should not expect students to recall at an examination formulas and chemical cycles that *he* has to copy from his notes.

The students' number two request was for a personal microscope; number three was the use of the faculty library and current journals; and, last of all, professors that did not behave like gods.

One of the Pan American Health Organization's great contributions was the arrangement for medical school students in South America to have a personal text book for each course, by direct purchase, time payments, or free for poor students.

A foreign health worker in the vineyards of public health or medical administration, or a future professor in these fields, requires academic study in the United States resulting in a degree, or degrees, and later on VIP short visits abroad to international congresses and conferences on generous per diems. He is now his country's expert, without an internship or residency, or the responsibility for a single sick person. This may be the golden, if not the royal, road to knowledge and success. Is public health, medical and hospital administration that simple? Are the manpower studies which tell us in great detail how many doctors, nurses, dentists, etc., are required to equal U. S. standards useful when those presently employed are so inadequately paid that it is impossible to keep thousands from migrating to Europe and the U.S., and to other greener pastures? One survey suggests that in 85 years time Ethiopia will require 22,500 general private practitioners, 22,500 specialist private practitioners, and 20,000 physicians in institutional

practice including the 25 to 30 medical schools, to say nothing of the hundreds of thousands of nurses and technicians needed. Usually nothing is said about electricity, or new roads to get to the villages, or vehicles, or making the villages habitable for doctor's wives and families, or providing the schools that any educated person will require for his family. In Ethiopia the per capita income is \$65 per year.

Education begins at the top. Unless the dean and heads of departments are paragons of virtue it is best to send them abroad, even for several months, on a liberal per diem before sending their bright young juniors who have command of the English language; otherwise they might feel upstaged and not permit the latter to utilize their newly acquired skills and ideas. Even this does not always work for we had a dean spend a whole year in the U. S., including 6 months at Columbia, and on returning to his school in the Orient he decided that their program, patterned after the Japanese, was best—7 hours of lectures in the last 2 years of medical school and no independent ward work with patients.

The rather large amounts spent on fellowships abroad are in general a good investment, especially for those in the preclinical sciences. On the other hand, 83% of the clinical fellows sent to the U. S. in the past 10 years are still here. When such fellows do return to their own country, teaching improves, patient care becomes more scientific and humane, and some good research has been developed. Nurses on fellowships usually work very hard and profit from their experience working in local health departments, away from glittering academia. I am even sympathetic with those who wed one of their fellow nationals and remain here. It would be cricket, however, if they would return their fellowship funds so that some other nurse could profit. However, this might make them less attractive to their future bridegrooms. After all, the majority of loans made to American college students are in default. Often seekers of foreign scholarships play the Rockefeller Foundation, China Medical Board, World Health Organization, USAID, and Planned Parenthood against each other.

For many years the International Health Board, Rockefeller supported, had able physicians trained in public health as consultants, assigned to the ministries of health of many countries around the

world to help develop local health activities with special emphasis on sanitation including excreta disposal, insect control, and pure water supplies. And, of course, they were interested in medical care and communicable diseases. Considerable progress was made but the problems were overwhelming, and as native physicians were given public health training Rockefeller gradually phased out this most difficult program. When one now visits these developing countries there is little evidence of lasting effects of these programs in the rural areas.

If one is ignorant of history he is bound to repeat the failure of others. Now enters the knight in armor, democratic armor, that is, and he is going to change the world. So, in addition to sending military advisors to South Vietnam, he recruits thousands of college graduates with little or no special training in health matters. These so-called A. B. Generalists are going to change the social, sanitary, and health conditions of numerous nations. One of these Peace Corps generalists I met in a small village in West Africa was there to teach the women the refinements of child feeding. Moslems do not take kindly to strange men attempting to talk to their females, and many a throat has been slit over this extra-curricular exercise. Some 65 of these A. B.'s were given 3 months to study the Korean language, a mixture of Korea's own Hangul language, developed in the 14th century, and that of the Chinese who held them in bondage for centuries. They were to teach birth control to the public in fractured Korean. As a physician, discussing this matter with a female patient who has sought you out, in your own language which you both have mastered, is not easy; hence you can understand why this innovative program, costing over a million U. S. dollars, brought few results. The person who directed the Peace Corps wanted it to be "amateur," and in this he succeeded beyond his fondest dreams. The greatest benefit was to the young physicians whose 2 years of service gave them an insight into public health and medicine abroad and kept them out of the Vietnam war that killed 50,000 American youths. At present this program—which long ago should have been discontinued by this bankrupt country, having cost nearly a billion dollars—is recruiting older workers with needed skills. I realize that I have trodden on sacred ground with my head covered!

The function and utilization of consultants

In order for a consultant in some phase of public health, medical care, medical education, or science to make a useful and lasting contribution, several conditions must be present in the institution to which he is assigned.

There must be a need. This need must be specific, and identified, and possible of solution. When the need, as it often is, is due to lack of faculty or to incompetent faculty due to low salaries or inadequate budget, there is little a consultant can do. When teaching or research require additional materials and equipment, funds for their purchase must be available from some source.

It is important that the consultant have a high level counterpart who is interested, available, and with the authority to implement new ideas and programs. One gets the impression that having a consultant is a prestige item for a dean or head of a department. It demonstrates that he is burdened with important, difficult decisions. Often the consultant is little used except for help in securing commodities or fellowships.

Some months ago a Korean newspaper carried an article critical of the WHO consultant program, as all they gave was "advice" and in turn some of their expenses were defrayed by the Korean Government, obviously a waste of funds.

The faculty and administration must be available for consultation and discussion. All too frequently this underpaid group spends most of its time lecturing at other institutions, consulting with government agencies, or on paid committees to earn a sufficient amount to house, feed, clothe, and educate their families. For family planning consultants this last item looms large, for frequently our colleague in family planning has not "practiced what he now preaches" and has a large family to support, as has his family planning consultant.

My most successful consulting venture was the complete development of the University of Puerto Rico Medical School. Chancellor Benitez of the University was the ever-available counterpart. The need was a medical school. With great economy, sufficient local funds were available and I could call freely on the faculty resources of my own institution, Columbia University, College of Physicians and Surgeons. Five years after the decision was made to start a medical school

the first class of 50, not 16, graduated and the School was approved by the American Association of Medical Schools. It has grown and flourished over the past 20 years. The heads of the clinical departments had their boards, but I thought that several months in a first-class department would help them develop a strong department and intern and residency program. We also needed some special training for a few young clinicians in special fields. The University of Puerto Rico, through me, presented this budget of \$30,000 to several foundations without success. For some reason it does not make me happy to be refused on a medical matter and escorted to the elevator by a sociologist—mere prejudice on my part. The Markle Foundation supplied the funds. Like getting in on IBM 20 years ago. Later one of the foundations made generous grants to the then thriving school.

Haiti was so impressed by the Puerto Rican Medical School, where some of their physicians took residencies, that I was invited by President Duvalier, Sr. to be their guest. After a careful study of their medical school and hospital I estimated that \$200,000 would greatly improve its medical education program. But again several foundations and the U. S. Government refused, suggesting that such a grant would be interpreted—by whom?—as a recognition of the unusual political regime in Haiti, forgetting the 4,000,000 poor Haitians. Does literally giving away millions of tons of grain to Russia, which supplied the munitions to kill and maim thousands on thousands of American youth recently, indicate we approve of their political regime? Ah, to be 70 years old! Did the millions we spent in Indonesia indicate that Sukarno was headed for sainthood?

The advice given by consultants must be practical. Recommending that salaries must be increased in order to recruit and retain faculty is usually gratuitous, though well meaning. In general a salary increase for government employees must be shared by all and not just one university, school, department, or person. An endowment, research grant, or special fund must be available if individuals are to benefit financially. Although additional faculty may be greatly needed and promotion in rank necessary, the University table or organization must be followed and seniority respected. Hence, it is necessary to work within the framework of the annual budget and profes-

sional staff available. I have never met a faculty whose members were not fully aware of their low salary, lack of professional staff, slow promotion, small budget, and lack of secretary and technicians. Consultants need not waste their time calling attention to and boring the locals with these obvious problems unless they have a practical solution for them.

Endowments are a way of life of both private and public universities in the United States. Expensive fellowships are still provided to institutions abroad, but no endowments. However, because of poor salaries the able, well trained faculty disappear to greener fields. If the Harvard School of Public Health requires an endowment of \$31,000,000 plus all the generous foundation grants, NIH grants, and AID subsidies, why is an endowment considered impractical or unnecessary for a similar institution abroad? It would be a permanent means of attracting and retaining first rate faculty. The Rockefeller Foundation endowed the Peking Union Medical School. These are now the funds of the China Medical Board.

Teaching by a consultant is completely effective only if he has good command of the language. One of the most devastating events of my medical career was listening to a Scandinavian give, in fractured English, a lecture on some biochemical minutiae. Lectures requiring a translator are as unsatisfactory to the audience as to the consultant. Dr. John W. Fertig, Professor of Statistics at Columbia University, Faculty of Medicine, speaks Spanish and Portuguese better than many of the natives, and has been the father in this field in South America through his 20 summers there under WHO auspices. However, if teaching aids, excellent slides from the *host* country, a movie, or better still, a patient or a family are used, the method may be copied by the consultant's counterpart. The consultant's lecture affects, in one way or another, only the group present, while motivation or improvement of his counterpart's teaching methods may be reflected for many years. However, one must recognize that the effects of the consultant's efforts may disappear when he leaves. Some years ago I was a consultant to the preventive medicine department in a Far Eastern university. To dramatize the problem of venereal disease I had two prostitutes tell their story. They were examined

weekly for gonorrhea and every 2 months for syphilis. A child bitten by a dog and treated before the class was the background for a rabies discussion; two brothers who came down with typhoid fever a week apart were the background of a typhoid fever prevention lecture; and a child with tuberculous meningitis and the source, his grandfather, were used in the discussion of this most prevalent disease. This was the first time that patients with real problems had been used in the teaching of preventive medicine and it was a great success. My counterpart has made a reputation lecturing on the teaching of preventive medicine through the use of patients but, except for my demonstrations, a patient has never again been used in the medical school in teaching preventive medicine. It is too much work. The consultant failed to convince or motivate his counterpart.

In another country I studied the venereal diseases problem, which was massive in their port city. Here, examinations were not made but each prostitute was given a massive weekly dose of penicillin. In spite of these mandatory injections no reactions to the antibiotic were reported. This would make an interesting study. Were the girls afraid of losing their livelihood if they reported sick?

In an attempt to indoctrinate the young medical student with the need for planned parenthood

and to soften the pure memory blow so often complained about by first-year students, at Seoul National University we arranged for the week of anatomy of the reproductive systems and the week of sexual endocrinology in physiology to coincide. This arrangement permitted the matter of the various loops, condoms, surgical procedures, and the "pill" to be discussed with the aid of urologists and obstetricians, making the subject live. Demographers from the Department of Preventive Medicine discussed the world population problem and Korea's attempts to keep its growth within reasonable limits. South Korea now has 31,000,000 people, and few natural resources.

Although you may feel that I have been unduly critical, it is not with malice, for I feel like Mark Twain when he was 70 years old and, like the rest of his male world, dressed in black as though ready for the undertaker, but as he remarked, "I may be, but from today on I shall always dress in white and continue to speak what is left of my mind."

I leave you with the saying of the Philosopher Alinsky: "The single most important thing I ever learned years ago was that I'm going to die. For once you accept your own death all of a sudden you are free . . . you no longer care except so far as your life can be used to promote a cause you believe in."