

Cuba's Revolutionary Medicine

by Willis P. Butler, M.D.

JOAQUIN, A THIN, BALDING thirty-two-year-old dynamo, came to one of Cuba's isolated farming regions seven years ago after a one-year rotating internship in Havana. He had intended to serve the two "rural years" obligatory for all medical school graduates and then return to the capital for a residency in obstetrics. It didn't turn out that way, however, and as we bounced over the countryside in the Land Rover assigned him by the Ministry of Public Health he explained why.

"My grades were good—that's what they go by mostly—and I was told that I could go back to Havana for the training as I had been promised, but I found that I no longer wished to leave. When I came here in 1961, there were five physicians and two public health nurses in the area for 40,000 people. Now we have 32 doctors, 11 PHN's, 19 practical nurses, and five full-time sanitarians. We had two old hospitals then with 45 beds together. Now we have an excellent new one with 185 beds. You have seen our health centers taking care of 4500 office visits a week. We have gotten potable water into every village, and yesterday you visited our day care centers for kids."

He whipped the car into the sun-drenched plaza of a pastel stucco town. "Let's go over here and I'll show you through the blood bank. That building next door is an ice plant. Over beyond that, on the hill, is the artificial insemination center. Fifty-three bulls. Tapped twice a week each. Cuba is a beef exporting nation now, you know. . . ." Joaquin was a humming computer, a wellspring of trends, figures, projects, questions and bubbling enthusiasm, much of it having to do with matters which my American colleagues would not consider even remotely medical.

During a four-day tour of the region I gathered that Joaquin was the top MINSAP (Ministry of Public Health) physician, although he never tried to pull rank. Other MD's saw most of the outpatients in the clinic (average about 35 per doctor per day), but he did a weekly stint too, "to keep my hand in," as he said. All physicians in Cuba work for and through MINSAP, and there is virtually no private practice. The Cuban Medical Association, now a vestigial organization serving a mixed educational and social function, voted in 1961, after much soul searching, to censure and effectively abolish private fee-for-service medicine. Some of it still goes on among the few rich people left in Cuba, most of whom are on waiting lists for the Miami plane. But while not illegal, private practice is regarded by the profession as highly unethical. Cuban doctors look back on traditional private practice as antisocial, placing the patient in the role of a piece of merchandise.

All of this hardly means that a new millennium of human selflessness has arrived in Cuba. Massive government pressures exerted through the power of the purse and press are perfectly

obvious to any observer and are freely acknowledged by Cuban doctors. The point, however, is that this is commonly regarded as an entirely legitimate use of moral incentive for the good of the revolution and the Cuban people. As for the medical profession's image, no Cuban hides the fact that of about 7200 trained doctors, 2500 found the idea of moving to Florida between 1959 and 1965 irresistibly attractive. But the vacuum has been more than filled since then, and the average level of social awareness and responsibility in the profession has been immeasurably raised by what those who remained scathingly call "our colleagues' betrayal of our country in her moment of need."

BEFORE GOING TO CUBA I had read almost everything I could find on the post-revolution culture, but I had found a dismaying lack of data on the country's medicine and health. On arrival I was plunged at once into an orgy of seeing, traveling and talking, and it was not until my last week that I got around to studying the professional literature: the just-published MINSAP manual called "Goals and Directives, 1968-70," the medical journals, orientation lectures for public health workers, press releases and the minutes of policy making meetings. I was finally glad that I had not done the reading earlier: every bit of this material would have sounded abstract and theoretical had I not already seen it embodied in hundreds of individual lives.

My colleagues and I heard a lot of perfectly frank griping during our meanderings through clinics, wards, operating rooms and doctors' homes, but the tone was that of camaraderie and the intent was clearly to improve matters by analysis and self-criticism within the framework of the revolution. The *joie de vivre*, especially of the younger men, swamps this small amount of discontent, and in medicine, as in other spheres of Cuban society, youth dominates the picture.

Most of our doctor acquaintances in Cuba seemed to be very matter-of-fact, unsentimental people; at least they did not readily engage in deeply personal discussion. One exception to this, a man in other ways also atypical of contemporary Cuban doctors, was Enrique, a forty-seven-year-old orthopedist who used to receive \$3000 a month ("receive," he emphasized, not "earn") and who now gets \$700 for full time attendance in a teaching hospital. "What makes this change worthwhile," he told me, "is not that it is a sacrifice. On the contrary, it is a new, better way of living. I was too stupid before to find it out myself. I had to get a kick from life and the revolution to learn this simple thing: it is more *fun* to take care of patients without worrying whether they have money and without chasing those who have it. Now all medical care is completely free."

He grinned with a mixture of self-deprecation and mischief. "Actually I give my kids the credit. My two sons, who are now also studying to be doctors, had a lot of trouble with the Jesuits in their school when they came back from the literacy campaign. You know, in 1961-62 when over 100,000 young people went for ten months to the most remote areas and taught the *campesinos* to read and write, reducing illiteracy from 23 per cent to three per cent. And what did the Church say? That it was an evil communist plot. We had some terrible fights, with me trying to defend the Jesuits, and that is when I began to see that they were right and I was wrong." This inversion of the traditional relation between the generations, incidentally, is a theme that recurs over and over again in the reminiscences of Cuban families.

Enrique states with disarming cheerfulness, "I would die for this revolution for the good it has done for my people and because it is a Christian revolution, if you mean by 'Christian' helping others." This small sermon was delivered during an impromptu bull session involving some dozen doctors, nurses, administrators and workers in a 600-bed university hospital. Enrique's straddling allegiance to Christ and Marx struck me as naive, and this was the only time I encountered the view in many hours of philosophizing with friends in Cuba. But he showed not a trace of self-consciousness, and as I glanced about the room I saw no eyebrows raised nor lips tightened, only quiet expressions of interest and respect.

"Do you have trouble getting enough supplies and materials to work with?" I once asked Enrique. "No, not really," he answered. "We can get Steinmann pins and things of that sort from Europe, or American material on the black market, and while we don't actually have all of the luxuries we would like to have, we have enough to do a good job." This was one of the few times I heard anyone come close to complaining about the U.S. blockade, which attempts to intercept not only such obviously dangerous revolutionary weapons as penicillin and surgical scissors but also medical books and journals. There is no doubt that Cuban medicine is being hurt by the blockade, but it is also apparent that they basically have the problem solved—and pride alone prevents much grumbling.

One area in which the Cubans appear to take an almost mischievous pleasure in getting around the blockade is in the field of textbooks. In a large hospital library a friend showed me, with considerable pride and amusement, brand-new Spanish-language editions of several of the latest medical textbooks. The lithography, paper, reproduction of color photos and format were exquisite and the Spanish translation first-class. These texts are referred to as "*fusilados*"—shot down. In reality they are pirated editions which get to students and physicians within a few weeks after they appear in English, due to round-the-clock efforts of teams of translators working not only in Havana but in Mexico City and Buenos Aires. All materials are free to students in Cuba.

OUTSTANDING CHARACTERISTICS of *Public Health* include: *an integrated concept of health preventive no less than curative; stress on epidemiology; planning within the framework of the overall National Plan; collective management; centralized policy making and decentralized executive and administrative function; a minimum of red tape; concentration of all health activities in the Ministry of Public Health . . .* ("Goals & Directives")

The above statement would be merely routine politicians' rhetoric for doctors from any other Latin American country, where voluminous public health treatises bear no relation to massive stagnation in medical care. It would be menacing talk to most of my American colleagues for whom government planning is an obscenity and epidemiology a closed book. For me it is simply a reminder of Joaquin's office, far from Havana. His desk and wall were covered with oversized charts, with multicolored pins and street maps of every village in his region, detailing the prevalence and incidence of a multitude of diseases from 1961 to the present, correlated with a count of the houses still lacking satisfactory latrines (less than nine per cent) and fly protection (14 per cent), and a thousand other such matters. It was a fantastic production, created by Joaquin in his spare hours, aided by an elderly couple who had learned to read and write in the literacy campaign. Was it a response to instructions from the Ministry in Havana? Yes and no. Joaquin was sent out with a general mandate to "discover the medical needs of the area and set about filling them." The details were to an astonishing degree left to him and his co-workers.

Epidemiology, for the benefit of the uninitiated, means not just the study of epidemics but the study of disease and health as mass social phenomena. In the U.S., this research is largely confined to a few government specialists and agencies. In Cuba it begins in the first years of medical school and is a sort of obsession with rank and file Cuban doctors. Cubans tie it in with another of the "outstanding characteristics of public health" and especially of medical education: the teaching of Marxism-Leninism. It is strongly argued that no true understanding of disease as related to the total environment, much less an effective program of prevention, can be achieved in a parasitic, exploitative, capitalist society. On the other hand, it is also strongly emphasized that "Marxism-Leninism can never replace specific mastery of specific scientific knowledge."

As I read the policy papers I saw not hollow abstractions but a young dermatologist in a big Havana hospital who quoted endless off-the-cuff (and as I later confirmed, very accurate) figures on all manner of non-dermatological diseases, hospital bed population ratios in distant provinces, areas of serious shortages in supplies, etc., *ad infinitum*. I recalled the quiet pride of a score of nurses in clinics, factories and child care centers, their immunization records often stored in beat-up oak cabinets but accessible and up-to-date. I recalled kitchen and street corner confabs between doctors, housewives, workers, nurse's aides and passersby in which a decision might be made to send volunteer drivers with the MINSAP jeep after hours to haul in immunization delinquents, or to tell (not advise) MINSAP to spend that 5000 pesos on water storage tanks rather than on another sanitarium. A striking feature of all such occasions was the utter informality and egalitarian spirit. Health education, the "basis of progress," means "interchange among equals," I was told. "We learn from the people."

I recalled showing some young doctors a headline from a U.S. medical journal: "Fear of Planners Stirs American Hospital Association." They were both amused and perplexed. "But don't they want to be able to look ahead?" asked one. "Isn't it a logical necessity for a single entity to embrace patient care, physical plant, and education of the doctors who are destined to provide the former and utilize the latter?" For these men it is a source of deep confidence as well as pride that

their government, which budgeted \$20 million in 1958 for health, allocated over \$260 million in 1967. Cuban doctors regard it as a matter of direct and urgent *medical* importance that Cuban families have an abundance of good lean meat and that Cuban children are receiving five quarts of whole milk a week.

Planning and collective management at their best were illustrated by the massive powwow that went on for over a year in 1964-65 and involved scores of distinguished medical educators. Everybody agreed that medical education had been atrocious in Cuba and that, "We have an unparalleled opportunity to build from scratch, given a clean revolutionary slate and a small country." Four months were spent drawing up a plan for profound revision of curriculum and methods, which was submitted for discussion and amendment by medical educators throughout the land, a process that took another nine months. No matter how some of it might strike American medical ears, the program undeniably represents the spirit and desires of Cuban physicians and teachers. Its chief elements are: adherence to socialist principles; elimination of professorial deadwood and creation of full-time paid professorships; stress on preventive medicine; development in the students of broad culture and a socialist conscience; emphasis on development in the students of broad principles of biology; no separation of theory and practice; stress on the humanistic and social character of medicine; the linking of medicine and productive work and service to a community; and recognition of the central character of the Ministry of Public Health.

DESPITE THE DEFECTION of almost a third of its trained physicians, Cuba, with a ratio of about one doctor per thousand people, stands high among Latin American nations. But Cubans emphasize that the overall ratio is a poor index to the nation's health; geographic distribution is a far more important factor.

While some Latin American countries require six months rural service in an internship, with many loopholes, and while such underdeveloped areas as Mississippi and Arizona dabble with incentives like scholarships and interest-free loans, Cuba's solution to the problem of distribution of doctors is massive, direct, and I suppose to U.S. medical minds, brutal: two full years in the boondocks following the one-year rotating hospital internship. For everybody. There are no exceptions. If a doctor is good enough in the opinion of his teachers and the educational committee of MINSAP, and if he has not become too wrapped up in the challenge of rural practice, he may return to the city for specialty training. The decision is collective; the doctor has a vote but not the final say.

As far as I could tell, the system works well. There are a few pockets of serious maldistribution left, with one doctor for six or eight thousand people, and Havana still has too many: one for every 322 inhabitants. But with 2100 new graduates on deck for the coming three years (50 per cent are women), the picture looks bright.

The system is acceptable to the profession because of sound historical reasons and deliberate planning:

1. Throughout the five years of school and internship the importance of the general practitioner is played up; theory is valued mainly as the basis for practice; patient contact begins early, examinations are heavily practical, and classes

are small. Mature specialists are encouraged to sally out of their narrow fields and study alien subjects as a broadening intellectual adventure.

2. Rural service is rendered directly to the poorest people and is stressed as an important revolutionary duty. (Quite a few doctors whom I met had fought at the Bay of Pigs, and a number of them were veterans of the early guerrilla fighting in the Sierra.) Every July the entering freshmen class works for a month in agriculture.

3. The budget for new construction and supplies is heavily weighted to favor rural areas so that one of the main attractions of the city for young doctors is minimized. I was amazed again and again to find in the most remote areas such things as air-conditioned isolation units solely for the treatment of burns, radio equipped ambulances, hospital autopsy rates approaching 95 per cent, and autoclaves large enough to sterilize mattresses. Parenteral fluids, dressings and such items seem to be abundant. Similarly, more and more specialists are being assigned for short rotations to rural areas, a top priority goal for the present Three-Year Plan. The government regards these matters not only as provision of needed services, but as a sort of sociological experiment. Instead of fairly even across-the-board allocation, the practice is to pick the most backward districts, pour funds and personnel into them and study the extent to which they leapfrog ahead in a most non-egalitarian fashion.

4. The beginning salary for rural doctors is \$300 a month, and the top salary for a hospital director in the city is only about \$800 a month, so that the salary spread is not very great within the profession. Salaries are graded upward rather sharply in the following years so that if a doctor is still in the country after five years he receives equal or slightly higher pay than his urban counterpart.

This emphasis on rural care and the general practitioner illustrates the vein of optimism running through Cuban medicine. During a national conference of medical educators on the kind of physician Cuba needs, a major question was that of quantity versus quality. The conclusion: we don't have to choose, we will have both. The answer I invariably got when I asked about the use of paramedical personnel (for example, midwives and surgical assistants) was, "We really don't need them. We will have enough doctors." I realized then that the much discussed question of paramedical personnel in our own country arises not out of a concern for widening health care, but from an acknowledgment of the "hopeless" shortage of doctors. The Cubans see this as a sort of semantic evasion. *If* one puts enough resources into good medical education and produces enough doctors, and *if* doctors rid themselves of stereotyped ideas about what they are too good to do, why can't it all be done by MD's?

Eighty-six per cent of all births in Cuba now take place in hospitals and the vast majority of these are doctor-attended. Of considerable importance in this achievement is the generous use of "maternity hotels"—simple, cheap live-in quarters near the hospital to which women are brought from remote areas a full month before they are due to deliver.

Connected with this is the question of sex education, which begins in primary school and is thorough and frank. Matter-of-fact attitudes toward sex are encouraged by the widespread participation of youngsters in stock breeding, including a spectacular program of artificial insemination which happens

to be managed almost 90 per cent by girls of high school age. Birth control clinics are held in most of the larger hospitals and information and materials are available free on request, but the government has no organized active program to push the practice. The position stated to me by many physicians is that birth control is entirely up to the individual couple or family and is not a proper subject for government policy. Oral contraceptives are not available to my knowledge, apparently because of residual doubts about their safety among the medical profession. The most common method used is an intrauterine loop.

I WAS TOLD BY Doctor Daniel Alonzo, chief of the MINSAP section on international relations, of the excellent network of bloodbanks throughout Cuba. Then he ruefully went on to present the other side of the picture, noting the recent increase in the incidence of serum hepatitis, which parallels the increased use of blood transfusion. "Medically speaking, Cuba now enjoys the mixed blessing of being in the ranks of the developed countries rather than the underdeveloped," he observed. "That is to say that infectious diseases which are still the scourge of so many tropical areas are now much less important causes of death in Cuba than heart disease, cancer and stroke." Cuba's peculiar transitional state between backwardness and advancement is neatly epitomized by the fact that in MINSAP's program for 1968-70, a final drive against the *Aedes* mosquito and yellow fever is given equal rank with a crash program against cancer of the female breast and cervix.

Life expectancy in Cuba today is sixty-eight. Alonzo stressed that climate is less important as a determinant of health than are social and economic conditions, and that the special category of "tropical medicine" is probably misleading in that sense. He apologized for making invidious comparisons, and then quoted statistical data from other Latin American countries participating in the Alliance for Progress. For example, infant mortality in Central America is currently 67 per thousand live births and in South America 79; in Cuba it was 33.09 (as of 1967). *Alianza* publications acknowledge that it will not be possible to obtain 5.8 doctors per 10,000 inhabitants in South America by 1980; Cuba had 8.8 by 1966. Maternity mortality in Havana is 30.2 per 100,000 live births, and for all of Cuba 43.5; Louisiana has 42 white, 73 nonwhite.

As though in an effort to balance the picture, Dr. Alonzo went on to discuss present shortcomings and deficiencies. Nursing services and training are not up to the level of other medical activities. Improvements, especially in rural areas, are a must for 1968-70. Present strategy calls for stress on establishing nursing schools in the more backward districts and using local girls as much as possible. Standardization, or quality control, in the medical specialties must be implemented.

Another weak area is dental care. Cuba is tackling this through the training of "stomatologists," a sort of hybrid dentist-doctor specializing in care of all diseases of the mouth rather than just the teeth. Caries are widespread, and while vague reference to prevention is made in the protocol for 1968-70, I was astonished that no specific mention was made of fluoridation, a curious lapse in a supposedly rigid planning setup.

Cuban leaders also recognize their lack of really top people in several fancy research fields. Almost any good molecular

biologist or immunologist, for example, with acceptable political references, is likely to be offered a job if he visits Cuba. There are Cubans highly trained in these areas, but they are scarce. In the quiet new air-conditioned buildings of various institutes, one meets a high proportion of Czech, Soviet and Chinese students.

I NOTE WITH CURIOSITY and some embarrassment at this point that I have written far more about doctors and medical care than about patients and the Cuban people in general. Perhaps I was slightly mesmerized by the wonderfully leisurely talks I had with my Cuban colleagues, and by such truly startling sights as 1000 gorgeous brand-new Soviet binocular microscopes lined up in a laboratory for second-year medical students, or a gleaming Dutch anesthesia machine which informed friends here tell me is the world's finest, or an automated Chinese multipurpose biochemical analyzer.

I did, of course, talk to scores of individuals, healthy and sick, in hospitals, on buses and on street corners, in schools, in homes and cafes. The pride they feel in their medical progress since 1959 simply knows no bounds. For them it is a bedrock of personal faith and confidence in the future based sometimes on political conviction and intellectual data, sometimes on participation in health projects, but more often on a private experience, something that happened to an uncle, a mother, a son or a friend.

"Care for each patient as though he were your father, mother, wife or child." The policy manual of MINSAP echoed the words of the director of a mental hospital near Havana with almost 5000 patients. His opening remarks to me were, "Medicine has to be a humane science, and the first and most important thing to realize is that mental patients are human beings above all else." A description of this marvelous institution would be a chapter apart. I will mention here only the single small building that has been deliberately left unoccupied and with the old bars in place, by way of symbolic and striking contrast to the new buildings, all of which are sunlit and completely devoid of window bars. The directorship of this hospital before the revolution was a prize political plum. The director commonly made ten or twelve thousand dollars a month from graft, resale of supplies, and by hiring out patients to work on the plantations of wealthy Cuban and American landowners.

The ghosts of the former inmates of this hospital, the ghosts of tens of thousands of kids who used to live out their short lives with the big bellies of hookworm and the sores of nutritional disease, if they did not die of diarrhea in the first year of life, the ghosts of workers cut down in their prime by malaria and tuberculosis, the ghosts of women who died cruelly—or mercifully—in childbirth—these specters are stark facts in the living memory of every Cuban today. Their mute testimony suggests that the following is more than a slogan: "Public health is not only an objective of the revolution, but comes to be a powerful instrument of revolution as well."

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