A glimpse of nursing in Cuba
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Cuba is faced with the health problems of the affluent nations — cardiovascular diseases, cancer, respiratory diseases, and accidents. To achieve the same degree of success with these problems as they have with infectious diseases, Cubans will need to promote the role of the nurse to its fullest potential.

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The Canadian airline folder read: “Go Sun Living — the Bahamas-Jamaica-Antigua-Barbados-Trinidad and Tobago-Bermuda. . . . You’ve got the widest choice under the sun when you go Sun Living.”

On a day in late January 1973, many fellow passengers in the Ottawa airport were obviously going “Sun Living” in the Caribbean. I, too, was going to the Caribbean, but on a different and perhaps more stimulating mission. Through the courtesy of the Embassy of Cuba in Ottawa, I was embarking on what was to become an exciting and enriching professional journey into the world of Cuba’s health services, the place of nursing in these services, and the country’s social philosophy as it influences its health programs.

Although the primary focus of my visit was on nursing services and nursing education, I attempted to view the total health effort in relation to the country’s economy, social structure, and political organization.

The country and its population

Cuba is the largest of the Caribbean islands, being about 745 miles long with a total land mass of approximately 44,000 square miles. Haiti lies about 45 miles to the east, Florida 90 miles to the north, and Mexico 150 miles to the west.

In 1970 the population was 8,553,395, with about 60 percent living in urban areas. Recently, the government implemented a program to reduce the urbanization of the population, particularly in Havana. Resources are being allocated to smaller communities, and new satellite communities are being developed around Havana to attract the urban population.

In one such community, located about 30 miles from Havana, I saw several new apartment blocks and more under construction. The school was already in use and I watched the children assembling for physical exercise. A polyclinic served the new population.

Throughout Cuba I saw great beauty in the historic buildings that were being maintained with limited resources. The old cathedrals and churches were still in use, as no restrictions had been placed on religious freedom after the revolution. I entered one church where a funeral was in progress and saw several nuns, in full traditional habit, among the mourners.

The annual rate of demographic growth in Cuba is 1.7 percent, birth and death rates being 27.3 and 10 per 1,000 respectively. Many senior officials in the health ministry said they hoped the population would increase, as the shortage of manpower in the productive age group (15 to 64) was a serious handicap to the country’s development. In comparison with Canada, Cuba has a younger population and a smaller productive age group.

Progress in health

Recent observations by Stein and Susser, who visited Cuba under the auspices of the World Health Organization, led them to make this statement: “Before the revolution of 1959, the social and economic conditions and the health patterns of the mass of the people of Cuba were comparable with those of Latin America. With local variations, they were the conditions of developing nations everywhere. Today scarcity persists, but by many indices
the health of the population of Cuba is better than elsewhere in Latin America." 1

Examples of several of these indices of morbidity and mortality in key diseases are illustrated in the graphs that follow (Figures 1-3.) But first, mention should be made of health statistics in Cuba.

Apparently up to 1959, little attention was given to accurate statistical gathering of morbidity and mortality rates. In the 1950s, only about half the deaths were reported. After 1959, a systematic reporting procedure of morbidity and mortality was developed, and in 1962 this procedure was refined after a conference of consultant epidemiologists. Now, officials affirm that all deaths and their causes are reported through the medical certificate of death.

The response to health campaigns is evident in the morbidity and mortality rates of poliomyelitis, diphtheria, tuberculosis, acute enteritis, and tetanus.

Before 1962, about 300 cases of poliomyelitis were reported each year. After the massive inoculation campaign of 1962, there was a dramatic drop. (I found it interesting that virtually all children in the country were given the oral vaccine in one day!)

The incidence of diphtheria has also decreased because of immunization.

Tuberculosis was a serious health problem up to 1959. A massive BCG campaign was initiated after 1959, and I was told that the serious complications from primary tuberculosis have almost disappeared. The mortality rate from 1959 to 1970 was reduced by 50 percent.

The acute diarrheal diseases have declined with improvement in nutrition and in control of water and food-borne infection. For many travelers the availability of drinking water is a concern, but in Cuba the water in hotels may be safely consumed.

Although the incidence of tetanus dropped by 50 percent between 1963 and 1970, plans have been implemented to ensure further decline. Now the campaign is directed against the high-risk groups in the population.

The malaria eradication program began in 1959. In 1962 the morbidity rate was 50 per 100,000 inhabitants. The few cases reported since 1968 were those brought from outside the country. Cuba has achieved eradication of malaria and applied to the World Health Organization for registration of this fact. This recognition has just been received.

The reduction or eradication of major infectious disease in a few years, as revealed by these statistics, is recognized widely as a dramatic public health accomplishment. Today, the main health problems remaining in Cuba are similar to those in Canada—heart disease, cancer, and cerebrovascular diseases. The statistical profile of principal causes of death in Cuba in 1970 resembles that of a so-called developed country, with an aging population and abundant resources.

Health care available to all

This striking reduction in the morbidity and mortality from infectious diseases is not the only measure of the Cuban accomplishment. Equally impressive is the way in which primary health care has been made available to practically the entire population.

Prior to 1959, health services for residents in many rural areas were almost nonexistent. The sick were carried on horseback for long journeys, or were taken to a coastal area where they might wait several days for the arrival of a boat to transport them to hospital. Many died before arrival. I was told of graveyards at these coastal points for those who died while awaiting transportation. Today, with better road construction, rapid development of health centers, and more jeeps available, every person now has ready access to care.

It would be superficial, however, to attribute the Cuban progress in health primarily to effective measures in preventing key diseases, the better organization of health facilities and transportation, and the serious effort to pursue modern planning. With their similar accomplishments in education, housing, and agriculture, it becomes clear that
back of it all has been a revolutionary change in social philosophy. This philosophy determines not only the direction of governmental policies and the nature of institutional change, but also the quality and content of a host of attitudes and human interactions in every segment of the Cuban society.

This is not the place to elaborate on this topic, even if I were able to do so. Nevertheless, basic to the health story is the premise that the health of the nation, and therefore of the individual, is important for social and economic development. Inequalities, whether by region, social class, or by rural or urban setting, had to be overcome.

Moreover, no social goal is attained simply by laying down a good plan for professional and technical personnel to follow. Health (or education or housing) is the business of the entire citizenry, not because of an abstract principle of “participatory democracy,” but because the experience, the imagination, and the capacities of the people are required to attain the goal in both spirit and fact.

From these premises, and taking world experience into account, it follows that health policy and programs would emphasize: (a) preventive, rehabilitative, and curative medicine; (b) planned collaboration between professional, auxiliary, and volunteer personnel, with much reallocation of responsibility to provide wider and more appropriate service; and (c) active participation by the community in the arrangements of the health service and in their evaluation and improvement.

In Canada, there is growing recognition of the importance of these principles, but we have had great difficulty in applying them widely, particularly in engaging “the consumer” in the working of the health care system. In Cuba, I was most impressed by the importance of the role of mass organizations in interpreting the purpose and nature of health projects to individuals at the grass roots.

The two mass organizations most frequently mentioned were the Committee for the Defense of the Revolution and the Federation of Cuban Women. These organizations are active at the local level — the former being elected by citizens living in defined housing blocks.

In addition to the local committee, these organizations meet at the regional, provincial, and national levels. At each level are the People’s Councils, composed of various committees. A key committee in the health service is the People’s Commission on Health. When oral polio vaccine became available, members of the people’s organizations worked for weeks, explaining to every family the value of the program. They identified, to the last household, all those who required the preventive measure. Then, on the day set for the project, when all Cuban children requiring this vaccine were ready, only the technical task of ad-

ministering it remained for the health personnel and their assistants.

As an observer of health systems in several countries, I was convinced again that, no matter how well conceived a public health campaign might be, it cannot succeed without the massive participation of individuals at the local level. The spectacular drop in the incidence of infectious diseases in a short period would have been impossible without this web of communication and participation.

Structure of health services

The ministry of health is responsible for the Cuban health policy and for health administration, planning, and supervision. It has provincial and regional offices and has a close working relationship with the People’s Commission on Health at all levels.

The country is divided into six provinces and one autonomous region (Isle of Pines). In each of the provinces there is a population of approximately 1.25 million. The provinces are divided into regions of about 250,000. The 40 regions in the country are divided into health areas serving about 25,000 persons, and these health areas are divided into sectors.

The Cuban people receive care at three levels — primary, secondary (specialty), and tertiary (superspecialty). These levels have the following facilities:

- Polyclinics (health centers) at the area level, which are responsible for primary health services for approximately 25,000 residents. Each area is divided into sectors related to a population of about 3-5,000. In 1959, there were no polyclinics; at present there are 308.
- Regional hospital centers that provide specialty care services.
- Provincial hospital centers that provide highly specialized or “super-specialty” services.

The sectorial unit, a subsection of the health center, is staffed by a nursing assistant or “auxiliary public health nurse” and one other health worker — usually a sanitarian. The polyclinic staff is responsible for the work in the sector. Its staff includes one full-time director, one full-time nurse, and the services of three or more medical specialists. At least one internist, one obstetrician, one pediatrician, and one dentist work at the polyclinic. In addition to preventive and curative services, the polyclinic provides environ-
mental health services, public health services, and social services.

When I visited the polyclinic, I noticed that appointments were scheduled for 6 days a week over a 12-hour period to permit workers to attend at their convenience. In addition to the facilities usually found in health clinics, there were many pieces of equipment used to complete diagnostic tests at the site. I was also interested to see that the health records of all families in the polyclinic area were kept at the center. These are transferred with families when they move to another region. The director apologized for the lack of computerization of the records, but I assured him that such technological "hardware" had many shortcomings.

Patients may be referred from polyclinics to regional or provincial centers; thus, there is a network of services and referrals from the sector to the specialty/super-specialty services and back to the sector.

Nurses are grouped according to their specialties - adults, children, public health - and work as team members with the various groups and in the settings noted. Nurses in the polyclinics - particularly those whose specialty is public health - seem to work more independently than public health nurses in Canada. They visit homes, assume responsibility for a wide range of medical-technical functions, and supervise and/or maintain up-to-date files on the health status of families in their region, including information on all pregnant women.

Throughout the visit I was impressed by the high priority accorded to maternity services, care of the newborn, and attention to children. (Incidentally, all deliveries take place in hospital.) Three examples may be cited. One is the practice in maternity hospitals of having a nurse visit the home prior to the discharge of the mother and infant to assess its suitability to receive them. A second is the development of nation-wide psychiatric services in which special emphasis is placed on preventive psychiatric services for children, with psychologists carrying out regular assessments of their growth and development. The third is the provision of nutritional supplements for children, including the delivery of one liter of milk daily to each preschool child.

Cuba's manner of expanding and redistributing its supply of hospital beds illustrates well the government's policy of equalization of health benefits in all regions of the country and of sound hospital planning. In 1958 Cuba had 28,536 hospital beds, of which 54.7 percent were in Havana, which had only 22 percent of the population. By 1970, only 40.3 percent of the 40,101 hospital beds were in Havana, where the ratio of beds per 1,000 population declined from 14 to 11.3.

Meanwhile, many small urban hospitals were closed and those in the designated centers were enlarged. Nearly half of the new beds were established in the deprived province of Oriente, elevating its ratio from 1.6 to 3.7 per 1,000 (1969). In roughly the same period, more than 300 polyclinics or health centers were established, over half in rural regions.

Also, to maintain balance with hospital medicine, a prodigious effort was made to train professionals in public health - 600 in the first three years and over 1,000 in the following five; the latter were trained in a full year, not in an accelerated course.

Health manpower

A senior official told me about the projected plans for increases in health manpower, particularly in the numbers of nurses and physicians. In 1958 there were approximately 2,500 practicing nurses; in 1971, this had risen to about 5,000. However, as a medical career is attractive due to its high status and monetary rewards, many students prefer to become physicians.

In 1970, almost 30 percent of all new university students were enrolled in the three medical schools, about one-half being women. However, in 1971 quotas were imposed to curb the total number to 20 percent of all university applicants. There are currently about 7,000 practicing physicians.

To compensate for the exodus of about 3,000 physicians after the revolution, a high priority was placed on expansion of the facilities for medical education. From 1959 to 1970, two new medical schools were built and about 5,300 new doctors trained.

Physicians, nurses, and other health personnel are salaried and paid according to specialized training and seniority. Only a few doctors in Havana maintain private practice; they were in private practice before 1959. All health workers in Cuba belong to one union regardless of levels of training, status, age, or health discipline.

The goal set for the numbers of nurses to physicians is 3 to 1. There are also plans for increasing the numbers of auxiliary personnel.

This year, Cuba will host to the representatives of socialist countries that meet annually to discuss health services, manpower, and education. The 1973 discussion will center on the training of paramedical personnel, including nurses.
Although the gains made in preparation of all health personnel over the past decade are impressive, there is an immediate need to prepare a large number of qualified nurses to fill the gap for this service. This need was identified by health ministry officials, who indicated the problem was receiving priority. If larger numbers are to be attracted into nursing as a career, many factors will require study in depth, especially those factors influencing career choices of young women and the retaining of nurses in the labor force.

During the last three years of the program, medical students attend one or two half-day sessions weekly in health centers, working under the supervision of a resident or physician. They work each year for a period in sugar cane camps, responsible with a nurse and an auxiliary technical sanitarian for primary care for approximately 2,000 sugar cane workers. A similar experience for nursing students, if feasible, would be invaluable.

Although comments were made on the possibility of a university-based degree program for nurses, no specific plans are under way. I suggested that a core of nurses prepared in a basic program at a university school of nursing might make a unique contribution to leadership in nursing and in health care. I did not feel I made my case sufficiently convincing. I was pleased to learn that no plans were underway to introduce a "feldsher" type of worker.

The 3 1/2-year basic educational program for nurses is hospital-based. It provides a sequence of theory and clinical practice somewhat similar to that of the hospital schools of nursing in Canada, except that more subjects on general education are taught and more experience is provided in public health. During a visit to one school of nursing and a hospital used for student clinical instruction, I was shown the rotation plans for students. These are similar to the rotation plans found in many of our hospital schools of nursing.

The weekly schedule for students is six days. (Graduate nurses work six days per week.) Students from the adjacent area live at home, others are "boarding" students.

Each school of nursing has a full-time nurse director, qualified in teaching and administration from the National School, as well as nurse teachers for theory and nursing practice. Some of the latter teach and supervise students in the nearby hospital. The students' learning experience in polyclinics and rural hospitals is supervised by nurses who meet regularly with the school staff.

Considerable emphasis is placed on the regular evaluation of students in both theory and practice. Each week a meeting of administrative and teaching personnel is held to discuss evaluation and plan programs. For example, in the first week of each month the nurse director holds a meeting to examine the coordination and progress of the course and to identify special problems. The meeting held the second week, composed of teachers, examines identified problems and plans solutions.

The meeting of teachers held the third week focuses on development of new plans. During the fourth week, the director of the school and the director of nursing of the "home" hospital meet together with their senior staffs to discuss various aspects of the program. Directors of nursing from specialized hospitals and student representatives attend, the secretary being a student who is a member of the Communist youth movement. Teachers of "general" subjects, such as chemistry, geography, and mathematics, attend most of these meetings.

Following graduation, the nurse is sent to a special area of need—usually a rural area—for one to two years. However, if the nurse is married, this is taken into consideration so that husband and wife are not separated. I was told that many nurses discontinue active practice because of family needs, but the rate of attrition was not specified.

Postbasic education for nurses is offered at the National Teaching Unit (more than a school of public health), where some 40 courses are taken by 2,059 students (1973). The latter include students in epidemiology, nutrition, sanitation, and health services administration. Here, nurses may enroll in advanced courses for community nursing, obstetrical nursing, pediatric nursing, general or adult nursing, and administration/teaching.

Nurses are selected for these courses on the basis of demonstrated interest, experience, attitude, and political orientation. About two-thirds of each course is taken at the National Unit, and one-third in hospitals or health centers. Graduates in midwifery are fully used in the pre- and postnatal programs; as well, they look after normal deliveries.

General comments

Although the one week of observation was well planned and as comprehensive as possible for that short time, it would be presumptuous for me to make anything but general comments. Certainly from prior study of documents and from observations and discussions, the health of all citizens, regardless of location and status, has been a government priority. Since the revolution 14 years ago, emphasis has been placed on promotion of health and prevention of disease, and new programs have been developed to meet the health goals. Their progress toward
these goals is under continuous, critical evaluation.

The visit gave me an opportunity to assess the role of nurses within the new service. I was greatly impressed by the nurses I met — their vitality, intellectual capacity, and professional commitment — at the ministry, in hospitals, schools of nursing, polyclinics, and so on. I was also struck by the youthful and attractive nursing students with whom I spoke during the visit.

However, in spite of the key role that had obviously been played by nurses in the reorientation of health services, they were grouped together with all paramedical personnel. The reference to the health team was always "doctors and paramedical personnel."

One of the health manpower problems identified during the visit is the lack of sufficient nurses. With approximately 5,000 practicing nurses and 7,000 physicians, a concerted effort will be required to reach the stated goal of three nurses to one physician. This ratio would seem to be appropriate in relation to experiences in other countries and in view of the changing pattern of health problems.

Unlike most countries in Latin America, preventable diseases are under control. Cuba is now faced with the health problems of the affluent nations — cardiovascular diseases, cancer, respiratory diseases, and accidents. To achieve the same degree of success with these problems as with infectious diseases, a great effort will be needed to promote the role of the nurse to its fullest potential. For, as stated in a World Health Organization report: "... in countries where medicine is highly developed and nursing is not, the health status of the people does not reflect the advanced stage of medicine."

Points that might be considered to attract more women into the nursing profession are: an examination of the present role and status of nurses in the health team, the educational requirements to enter nursing as a career, and the appropriate reward in responsibility and remuneration. At least one school of nursing should be within a university to add still another dimension to the contribution that nursing could make toward the health goals of the nation.

References