

The Distribution and Supply of Cuban Medical Personnel in Third World Countries

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Abstract: More than 2,000 Cuban health care personnel are presently providing care in third world nations; less than five years ago this number was fewer than 100. Some 1,500 of these are physicians, representing nearly 13 per cent of Cuba's 12,000 health service physicians. Cuba dominates the health care delivery system of four small African nations and South Yemen, and Cubans are a major presence in a number of larger countries, such as Iraq. (*Am J Public Health* 1980; 70:717-719.)

Soon after the revolution in Cuba, the government chose to develop the health care delivery system as a model of the benefits to be expected under the leadership of Fidel Castro. Spending nearly 15 per cent of their national budget on health care and social welfare delivery, the Cubans have achieved a health status profile comparable to those of more developed countries.¹⁻⁵ Having made major progress at home,^{1-4, 6, 7} the Cubans are eager to export their physician-oriented health care system to developing countries.

In recent years the number of Cuban health care personnel working abroad has grown dramatically. In 1976, the government officially reported 492 health care professionals living abroad, of which 280 were physicians.⁸ By 1977, these figures were 795 and 437, respectively.³

Our figures for 1978 (Table 1), obtained directly from the

Ministry of Health in Havana and supplemented and confirmed when possible from published sources, reveal that the total number of Cuban medical personnel overseas is over 2,300. This is probably an underestimate, since our data on Iraq, Angola, Ethiopia, Jamaica, and Laos include only physicians. The number of medical doctors totals approximately 1,500, meaning that nearly 13 per cent of Cuba's 12,000 national health service physicians are now overseas.

Cuba began to export health care personnel in 1963, sending a health care delegation to Algeria, which at the time was engaged in a border conflict with Morocco. Health care personnel have remained in Algeria since that time and presently include 17 physicians, most of whom teach in the clinical subspecialties.³ In the intervening years, Algeria has greatly increased its own physician supply, so that Cubans now constitute less than one per cent of the total number of physicians.

In neighboring Libya, on the other hand, Cuba has an estimated 650 medical personnel who provide the great bulk of health care in that country. Iraq is another country in which Cuba has a large contingency of health personnel, 378 as of September 1978.

Cuba supplies almost the entire health care delivery system to four small African nations and to South Yemen, on the Arabian peninsula. In the Cape Verde Islands, there are 81 Cuban medical personnel; approximately 44 of the 62 physicians in the country are Cubans. Guinea-Bissau has 55 Cuban medical personnel; at least one-half of the country's physicians are Cubans. In Sao Tome, the 86 Cuban medical personnel include about 80 per cent of that country's physicians. Equatorial Guinea has 48 Cuban health professionals, including 26 of the country's 31 physicians.

In Ethiopia, Cuba's military presence is complemented by the presence of 300 physicians caring for the Ethiopian civilian population.⁹ These physicians make up nearly one-half of the physician population in Ethiopia. Since Ethiopia already had a medical school at Addis Ababa and a core of medical professionals, the Cuban approach in Ethiopia has been to form joint teams of health care professionals.

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Editor's Note: See also related editorial, p. 681, this issue.

TABLE 1—Distribution of Cuban Health Care Personnel Working Abroad

Third World Country	Number of Cuban Health Care Personnel*	Number of Cuban Physicians*	Total Number of Physicians** (1977)	Percentage of Cuban to Total Physicians	Population in Millions***	Population per Physician
Iraq	378	208	4500	4.6	12.5	2,778
South Yemen	94	56	98	57.0	1.8	18,367
Algeria	17	11	1698	.6	17.6	10,365
Benin	9	‡	95	‡	3.3	34,737
Cape Verde	81	44	62	71.0	.32	5,161
Angola	286	286	383	75.0	6.4	16,710
Congo	31	17	213	8.0	1.5	7,042
Equatorial Guinea	48	26	31	84.0	.33	10,645
Guinea	73	41	188	22.0	5.1	27,127
Guinea-Bissau	55	30	55	55.0	.62	11,273
Libya	650	357	2586	14.0	2.8	1,083
Mozambique	120	67	510	13.0	9.9	19,412
Ethiopia	‡	300	674	45.0	31.9	47,329
Sao Tome	86	47	59	80.0	.084	1,424
Tanzania	15	8	797	1.0	16.8	21,079
Zambia	18	11	472	2.3	5.4	11,441
Guyana	18	18	120	15.0	.81	6,750
Jamaica	17+	17	570	3.0	2.2	3,860
Laos	12+	12	46	26.0	3.5	76,087
Vietnam	‡	‡	‡	‡	51.1	‡

SOURCES: *See text.

**World Health Statistics Annual 1977, Volume 3, Health Personnel and Hospital Establishments (ISBN 9240677739) World Health Organization, Geneva, Switzerland, 1978.

***Prichett W: World Population Estimates 1978. Washington, DC, The Environmental Fund, 1978.

‡Number unknown.

Cuba has had two African failures. In Somalia, Cuba was faced with war between leftist Somalia and more leftist Ethiopia, and was asked to remove all its delegation. Sierra Leone's President, Dr. Siaka P. Stephens, told one of the authors (PG) that he asked Cuba to remove its two medical personnel in 1977, but Cuban officials denied having had medical personnel in Sierra Leone when asked about the incident.

In South Yemen, Cuban involvement has evolved from providing nearly the entire health care delivery system to the point where Cubans are now building the country's first medical school in Aden. The country's 98 medical doctors are now more or less evenly divided into two categories: specialists teaching in the university, and physicians providing primary care.

Cuba has the following numbers of medical personnel in four non-African countries in addition to South Yemen: Guyana 18,¹⁰ Laos 12, Jamaica 17, and Vietnam (number unknown). The 17 Cuban physicians in Jamaica were readmitted after being asked to leave in mid-1977 following a medical malpractice incident. Cuba and Vietnam have an agreement to send Cuban medical personnel to Vietnam and also to train Vietnamese physicians in Cuba.³ The Cuban government has not released any official report of the number of medical personnel who have been assigned under that agreement.

Even in the very poor African nations, Cuba's approach to health care delivery is very much along the lines of the physician dominated polyclinic model. Each polyclinic is staffed by primary care physicians who specialize in internal

medicine, pediatrics, and obstetrics and gynecology.^{4, 5, 11} Nurses and other professionals play a secondary role in this system, as the present official Cuban policy completely rejects both family practitioners and non-physician practitioners. At first, the entire health care team—both physicians and ancillary personnel—was comprised of Cubans. More recently, Cuba's policy has been to train native ancillary health personnel. This policy will allow Cuba to focus its efforts on supplying additional physicians to expand the number of clinic sites.

The physician's service abroad is generally for one or two years, with pay comparable to that of the native physicians in the country in which they are stationed. The physician's family remains in Cuba and continues to receive the full salary that the doctor would have earned in the domestic medical service. This is an important factor since Cuban physicians' salaries are significantly higher than those of most other workers, and physicians have a relatively high standard of living.⁴

Conclusion

In less than five years, the number of Cuban medical personnel working abroad has increased from less than 100 to more than 2,000. Because Cuba is a socialist state with strong ties to the Soviet Union, and has openly provided military support to "national liberation" movements in Africa, many in the United States question the purportedly humanitarian motivation behind Cuba's medical foreign policy.

Many of the countries in which Cuban medical personnel are working, however, are clearly in need of such help. Until the United States is ready to share its medical resources on a large scale, many countries of the third world are likely to continue to accept such help from our small southern neighbor.

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Pilot Study of Smoking, Alcohol and Drug Abuse Prevention

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Abstract: A longitudinal pilot study gathered data on the onset and prevention of smoking, alcohol, and drug abuse among 526 students from two junior-high-schools in California. Over two school years, students who were trained to resist social pressures toward tobacco, alcohol, and drug use began smoking at less than one-half the rate of those who did not receive special training. Frequent alcohol and marijuana use was also less prevalent among the students who received such training. (*Am J Public Health* 1980; 70:719-721.)

Preventing the onset of cigarette smoking is a major public health goal.¹ Tobacco use is difficult for individuals to control and the usual pattern of life-long, dependent smoking is associated with serious health consequences. Although moderate use of alcohol and marijuana is widespread, and

many people believe that judicious use of these substances may create no serious social or medical risk,² there is general agreement that frequent use of these substances among young adolescents should be prevented. Thus schools and health agencies have sought effective programs to deter or delay smoking, alcohol, and drug use among junior-high-school students. Narrow strategies of prevention have tended to yield disappointing or paradoxical results,^{1,3} prompting researchers to study the problem in search of more effective preventive measures.

Social pressure, particularly peer pressure, appears to be an important factor favoring the onset of early adolescent smoking,⁴ and is probably also involved in the onset of alcohol and drug abuse.⁵ These findings suggest that training students to resist specific social pressures toward tobacco, alcohol, and drug use may reduce the frequency of those behaviors. To gather data on that hypothesis, our research team has been conducting a longitudinal study of the onset of smoking, alcohol, and marijuana use among students in two roughly-matched, middle-class junior-high-schools in California. The background and early results of our investigation are published elsewhere.⁶ This report presents one further year of follow-up study.

Study Design

In one of the two schools studied, following six hours of

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