
International Perspectives

Kenya: A Case Study in Third World Medicine

Arthur Kaufman, MD, Dayton Voorhees, MD, Ellen Tabak, MSPH, Ginger Perry,
and David L. Neumann, MD
Albuquerque, New Mexico, and Denver, Colorado

Kenya, an East African nation of 15 million, achieved independence from Britain in 1963. It opted for a free enterprise economy in a continent of newly emerging Third World African nations that exercise far more government control of national resources and services than does Kenya. Reflective of the nation's economic system, Kenya's medical care is heterogeneous. Of the roughly 2,500 physicians in the country, 75 percent work in government service but, until recently, could supplement their income by caring for private patients. Most did. The remaining physicians work exclusively in private practice or in church affiliated centers. A large portion of the latter are European (white) physicians serving in a missionary capacity.

Distribution of physicians is poorly regulated, their consequent location being severely lopsided in favor of concentration in the nation's largest cities: Nairobi in the highlands, Mombassa on the coast. Yet 80 percent of the population of Kenya resides in rural areas. Thus, whereas Kenya has an overall physician-patient ratio of 1 to 10,000, the

ratio in rural areas is closer to 1 to 50,000.¹ To address this problem, the Ministry of Health is placing rural, health teams throughout rural Kenya in small district hospitals and village dispensaries.² The teams are composed of a health officer (roughly equivalent to a physician's assistant in the United States), nurse midwife (serving as clinic nurse, public health nurse, and midwife), and a records clerk. Physicians are stationed in district hospitals, but they supervise dispensary teams only on a monthly or bimonthly basis. Although the organization appears rational in terms of distribution of at least minimum service, the efficiency of the teams is often undermined by a lack of equipment and pharmaceutical supplies. Missionary and private facilities are far better staffed and supplied, drawing substantial funding from church, philanthropic, and government donations originating outside the country. Since their service is targeted locally rather than nationally, however, their service often generates a "feast-or-famine" quality to the national health care scene.

A third component of Kenya's health service is its traditional healers, or herbalists. Kenya has a rich history of native healers whose recognition and importance, especially for physician-poor rural areas, was suppressed during British colonial rule and dismissed by European missionary health care providers. The significance of traditional healers in Kenya, however, can be illustrated by the work of Dr. John Kalii, a herbalist who runs a clinic in Ulu, a rural village 55 miles southeast of Nairobi in the heart of the Kamba tribe. He and his

From the Department of Family, Community and Emergency Medicine, University of New Mexico School of Medicine, and the Family Medicine Department, Lovelace Medical Center, Albuquerque, New Mexico, and the Departments of Preventive Medicine and Family Medicine, University of Colorado School of Medicine, Denver, Colorado. Requests for reprints should be addressed to Dr. Arthur Kaufman, Department of Family, Community and Emergency Medicine, University of New Mexico School of Medicine, 620 Camino de Salud, NE, Albuquerque, NM 87131.

assistants run a busy outpatient and hospital service, seeing almost 600 patients a day. Further, they have an established mutual referral and consultation agreement with the local district government hospital.

Yet, Kenya's health problems, like those of the Third World in general, are hardly caused by insufficient or poorly distributed health care services. They are a reflection of poverty, malnutrition, and competing priorities in the political and economic arena. Today, 35 percent of Kenyan children do not survive past five years of age, and in poorer regions of the country, this figure rises to 50 percent. The leading causes of death among children are pneumonia, diarrhea, and malnutrition, all preventable or curable. Yet a disproportionate amount of government funding is funneled to physicians, staff, and advanced technology at Kenyatta National Hospital, the University referral center in Nairobi. One pediatrician at Kenyatta, an infectious disease expert, lamented that he has seen little improvement in the 35 percent mortality figure among children referred to his hospital as medical technology has improved. The children die, he said, of "too little, too late!" Environmental risk factors such as impure water and inadequate nutrition simply render patients' susceptibility to illness too high and their resistance and reserve too low.

Kenya's health problems are in large measure reflective of the health of her economy. Take, for example, one of Kenya's major industries—tourism. Large game parks form the backbone of this profitable industry. Yet these remunerations are seen mainly at the national level and "not by people who have to co-exist with wildlife—often at substantial cost to life and livelihood."³ Game parks take up huge tracts of potentially cultivable land in a nation in which only 10 percent of the land is under cultivation and that, now, overused. The World Bank has recently completed a commissioned study, which called for drastic alterations in Kenya's economic use of game park lands. Major recommendations include (1) converting a sizable portion for cultivation, to offer the benefit of this land to the many rather than the few, and (2) reintroducing controlled, big-game hunting, banned in 1975, as a means of enhancing tourism's profits while generating newer, secondary industries, such as trophy-mounting, which would provide an important new source of employment.

At Kenya's current birthrate of 4 percent,⁴ the population will double within 20 years, a crisis that current projections for economic growth or medical service expansion cannot hope to match. For this reason, serious efforts are underway to mount a new national birth control program. Two prior attempts by the Ministry of Health brought meager results, and now, a health minister explained, there will be an attempt to house the latest national family planning effort in the Office of the President as a means of giving the program the authority needed to overcome traditional reticence in this matter. However, Kenyans' reluctance to practice birth control is not unlike that found among other Third World populations. It seems paradoxical that the poorer the nation, the higher the birthrate. Yet it is patently logical from the viewpoint of a mother in an underdeveloped country: if she cannot be assured her children will survive, the bearing of more children is her hedge against the future. In a poor, agricultural society without assured benefits for the aged, one's children become the cornerstone of future social and economic security. Thus, overpopulation in the Third World is often misperceived as solely a consequence of lack of education, when, in fact, for the childbearer, it is a matter of survival. From this perspective, successful family planning does not precede, but follows, economic development. The effectiveness of China's family planning effort can be appreciated on these terms.⁵

A study of disease patterns and health care delivery in underdeveloped countries like Kenya should be of increasing concern to health workers in the West, for they are a startling reminder that the roots of illness lie deep in the economic, social, and political fabric of a nation.

References

1. King M: Medical Care in Developing Countries. London, Oxford University Press, 1966, pp 1-19
2. Onyango Z: Health facilities and services. In Vogel LC (ed): Health and Disease in Kenya. Nairobi, East African Literature Bureau, 1974, pp 107-125
3. Matheson A: The big footprints? *Africana* 7(3):5, 1980
4. Kimani SM: Economic and social development. In Vogel LC (ed): Health and Disease in Kenya. Nairobi, East African Literature Bureau, 1974, pp 49-62
5. Kaufman A, Voorhees D, Bunch CP, et al: Recent developments in family planning in China. *J Fam Pract* 12: 581, 1981