Modern Medical Missions

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Medical programs are generally recognized as an important adjunct to evangelism and foreign missions. A traditional pattern of mission hospitals and clinics is well established. Each year there are gratifying reports on the number of admissions to mission hospitals; the number of major and minor surgeries performed; and the number of clinic visits tabulated. With these expressions of gratitude for what has been and is being done, however, there is also mounting evidence that there are problems. Medical programs become increasingly difficult to support financially; hospitals and other facilities, with ever more difficulty in meeting local government standards, are nationalized; and physicians, often dissatisfied with their service, return to the homeland to discourage others and thus make it more difficult to recruit American medical personnel.

Lewis P. Bird stated that "the death of the world's best known medical missionary, Albert Schweitzer, in 1965, sounded the death knell for the Great White Father stereotype of stethoscope and pith helmet."[1] R. G. Cochrane, former principal of Vellore Christian Medical College in southern India, said: "Medical missionary work is a temporary measure undertaken by the Church until such time as the country concerned is able to organize a more comprehensive service for its people and able to give medical and health services to all."[2] According to Franklin Neva, professor of tropical public health at Harvard, "What the developing tropical nations actually need is better nutrition, education, and preventive medicine — insect control, sanitation, and inoculation. The lack of preventive medicine so far is a heritage from the curative-medicine-minded missionary doctors."[3]

To think in such terms comes as a shock to most Christians who have never questioned the medical mission program of their church. But present

world conditions force us to reconsider the emphasis and impact of medical missions.

HISTORICAL PERSPECTIVE

The first medical missionaries were men and women who used their medical ministry as an adjunct to preaching the gospel. Few spent more than a small portion of their time actually treating the sick. As mission groups became better established, though, the trend was toward organization and specialization. The beginning of the twentieth century saw the development of medical teams and hospitals, and now more than 90 percent of medical mission activity is hospital-based. As hospitals became better organized and staffed, the tendency became well established to consider medical mission programs as self-supporting public relations projects, not as directly a part of the gospel ministry. This accounts for the frequently expressed view of missionary physicians that they could much better support the mission program financially by a medical practice in the United States.

When mission hospitals were originally established, their need was evident and unquestioned. Medical technology was simple, and simple care was appreciated. More recently there has been an increasing need to justify medical mission institutions, and the argument has usually been based on the position that the hospital is providing a quality of service not otherwise available. Improving this "quality" requires the service of medical specialists and ever more expensive equipment and facilities, and thus the cost spirals. Hence, economics becomes a study that is relevant to modern missions.

ECONOMIC FACTORS

One of the most perplexing facts of modern times is that the gap between the economically *developed* nations (e.g., United States, Europe, and Japan) and the *developing* world has widened rapidly. At the turn of the century, the gross national product per capita — roughly the equivalent of average annual income — was approximately $200 in the United States. Correspondingly, medical technology was simple, and the average cost of health and medical care was probably about $8 per person per year. Compare this with the 1967 GNP per capita figure for the United States and selected nations in the world shown in TABLE 1.[4] Note that the countries of the world having the largest populations tend to have the lower levels of GNP per capita, so that most people in the world have an annual GNP per capita of less than $100.

The situation is dynamic, though, and there is usually an annual increase. For the eight years 1960-67, the average U. S. annual increase is better than

3 percent per year. The average for the developing countries is something less. Using the 3 percent figure (low for the U. S. and high for the rest of the world), one finds that the average per capita *increase* in income is better than $120 a year in the U. S. but about $3 per year for those countries with an average GNP per capita of $100 or less. This comparison simply points out that the gap between the developed and the developing countries is widening each year in an amount greater than the base GNP per capita for most of the population of the world.

The average annual expenditure for health and medical care per capita in the world presents an even more sobering picture (TABLE 2).[5] From median rates for growth in the six countries listed, projections are made to the year 2000. Although past experience substantiates these estimates, the projections could be wrong. Nonetheless, it seems unrealistic to expect any dramatic infusion of large sums of money in the health sector of most countries; therefore, planners must expect no more than moderate increments in per capita expenditures on health. The tremendous difference between the amounts available for health and medical care in the United States and in

TABLE 1

	POPULATION 1968 (THOUSANDS)	GNP/CAPITA 1968	GNP/CAPITA 1960-67 AVERAGE ANNUAL INCREASE
U.S.A.	200,000	$4,000	3.1
United Kingdom	55,300	1,840	3.3
Jamaica	2,000	560	2.1
Mexico	47,300	530	2.8
Philippines	36,000	180	1.0
Thailand	34,000	160	4.0
Korea (South)	30,000	120	5.0
India	540,000	80	1.5
Tanzania	10,500	70	1.2
Ethiopia	23,700	70	2.7

TABLE 2

	GNP/CAPITA		EXPENDITURES ON HEALTH PER CAPITA (1965 US $)	
	1965	2000	1963-64	2000
Indonesia	$ 99	$ 123	$ .20	$ .25
Nigeria	83	125	.50	.75
Thailand	126	402	.60	1.91
Colombia	277	359	3.50	4.54
United Kingdom	1804	6530	56.00	202.26
U.S.A.	3600	9000	200.00	800.00

the rest of the world seems certain to widen, making American-type care increasingly more economically inappropriate for the developing world. To be certain, a U. S. dollar goes much further in many countries of the world than it does in the United States. But medical equipment often costs more outside the United States, and drugs are often not significantly less, so that the difference in purchasing power of the dollar in no way closes the type of gap in funds for medical care here referred to.

NATIONAL HEALTH PLANNING

Most nations of the world are engaged in national health planning. Some have had such plans for many years, and some are just initiating such planning. Basically, health planning looks at the health needs of the nation and at its resources in personnel, facilities, and finances — and then seeks to allocate resources in such a way as to provide the most possible for the largest number of the population. This planning obviously demands the establishment of priorities and asks the question, "How can the most health be attained for the most people with the limited funds available?" Unfortunately, political considerations, the desire to build an institution as a monument, or the sincere belief that a U. S. type of service or facility is equally appropriate in a developing country are often major influences on the planning.

A second concern in national health planning is not simply the relation of total resources to total needs, but the distribution of resources within a country. Ethiopia is an illustration of the pattern in most countries of the world. In 1968, with a population of nearly 14 million, Ethiopia had a total of 362 physicians, of whom 50 percent were non-Ethiopian. Of these 362 physicians, 51 percent were located in Addis Ababa, and the majority of the remainder were in Asmara, the second city in Ethiopia. The same pattern holds true for nurses. Studies show that the amount of referrals from rural areas to cities is negligible, so that in fact 95 percent of the population is being served by about 25 percent of the physicians, or a ratio of about one doctor to 150,000 population for most of Ethiopia. Excluding the Union of South Africa, the ratio for Africa south of the Sahara is one doctor per 50,000 population. The United States currently is in an acute medical care "crisis" with 150 physicians per 100,000 population.

Recognizing the kinds of problems faced by developing nations makes more understandable their desire to control what few resources they have. As the trend to national health planning becomes better established, it behooves medical missions to correlate their future planning very closely

with that of the nations they serve. The acute shortage of resources and the fact that these will remain short for the indefinite future suggests there can be much room to cooperate. The better able the church mission is to establish a unique program that closely meets the general needs of the nation, the more likely it is that the program of the mission will be accepted and indefinitely approved.

Since both public health and medical care are considered the responsibilities of the vast majority of national governments, distinction between those aspects is not relevant outside the United States. Because most U. S. physicians outside the United States have either been trained abroad or in programs that follow the pattern of the United States or Europe, the majority of national physicians seek to provide medical care according to the pattern of the United States or Europe, and hence there results the commonly experienced competition between the foreign physician and the local practitioners. The area of least competition is in public health and preventive medicine. Since dollars for *preventive care* go much further than dollars for *treatment* of disease and for *rehabilitation,* the preventive area is ripe for expansion in medical mission programs.

PREVENTIVE MEDICINE

To what extent is preventive medicine now a part of medical mission programs?

A medical mission survey sponsored in 1958 by the Loma Linda University School of Medicine Alumni Association indicated that in 20 out of 46 Seventh-day Adventist mission hospitals surveyed there was no preventive-medicine, health-education program for Seventh-day Adventist members, hospital workers, inpatients, outpatients, or the surrounding communities. The majority of the remaining centers reported minimal endeavor. Essentially the same survey was repeated in 1963, and again 50 percent of the doctors reported no public health and preventive medicine program in effect in their areas, although all were in favor of it and felt that it was greatly needed. The report stated:

> The majority of these men, despite heavy work loads, are willing to do all they can to institute such a program.
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> In some areas, regardless of frequent protestations to the contrary, there is almost total emphasis upon curative services (for remuneration) to the exclusion of preventive medicine and health education. . . .
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> All of the doctors believe that a public health education program holds tremendous opportunities and challenges to overseas personnel.[6]

Increasingly other mission groups are recognizing preventive medicine as an opportunity for Christian witness. In response to the inquiry of how medical mission work will be expanded in the next ten years, a 1969 survey by the Medical Assistance Programs, Inc., (MAP) discovered that public health education was the first priority.[7] The Christian Medical Commission of the World Council of Churches in 1968 stated:

> Reorientation of Christian medical work is obviously required. We call the Churches to turn their attention in the direction of comprehensive health care of man, his family, and his community. The needs are great — to relieve suffering and heal disease; but, no less, to prevent disease and promote general health — but resources are limited. Yet, we are responsible to use those resources in ways that will bring the greatest benefit to all. We must grow in our ability to see man as his total self and to meet his needs in that context. . . . In the new healing ministry the community is the patient. In treating the whole man each individual can be cared for only within his community ecology. Disease prevention and health promotion can be effective only when there is as much concern for the healthy as for the sick.[8]

Dr. John Bryant dramatically described the situation and the need for change, pointing out that 35 to 60 percent of all deaths in the developing countries occur in children under five, and that the principal causes of mortality are diarrhea, influenza, pneumonia, and malnutrition. Further:

> This gloomy story is not growing brighter as our knowledge increases, as more doctors and nurses pour out of medical school, and as countries move along the path of modernization. In our effort to limit the destructiveness of these diseases we seem to be mired down in a mud we do not understand. One can almost sense that the health professions, with all their weapons of modern biomedical technology, are being mocked. We must ask if we are seeing the right issues. It is possible, even likely, that the medical tools we are using are not the right ones.
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> The great weapons of modern medicine are aimed at the pathophysiology of disease and its susceptibility to pharmaceutical, immunological, or surgical attack. Health services are designed to deliver those weapons mainly through the hands of doctors. The dismal fact is that these great killers of children — diarrhea, pneumonia, malnutrition — are beyond the reach of these weapons.
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> If children sick with these diseases reach the physician, there are sharp limits to what he can do. Diarrhea and pneumonia are often not affected by antibiotics, and the frequent presence of malnutrition makes even supportive therapy difficult or futile. And even these interventions by the physician, whether or not they are therapeutically effective, are only sporadic ripples in a running tide of disease. We are speaking of societies in which, at any given time, a third of the children may have diarrhea and more than that may be malnourished. Their lives are saturated with the causes — poverty, crowding, ignorance, poor ventilation, filth, flies.
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> And there are obstacles to using the modern medical care that is available. Societies not yet penetrated by understanding of the germ theory of disease and methods of modern medicine have their own ways of looking at health matters. Some diseases are so constantly present as to be accepted as a part of every passing day. Even when acceptance becomes awareness of something wrong, the sense of the duration of a disease is different, the time when urgency is felt is different. And the channels to

health care are not the ones we see as self-evident; there are many alternatives, each with its time and purpose, each built on community experience. The channels we know may be used late, if at all.

What happens when the child does reach the physician earlier in the course of the disease? The long wait, the quick evaluation, a bottle of medicine, perhaps some words of advice, the slow walk back to the same home. What will be different now in the child, or in the way the mother takes care of him or of the other children?

We must not assume that health is being cared for simply because a system for health exists. We must learn to recognize the right issues, find out what are the right tools, and put them in the right hands. It may require developing approaches to health care that are entirely new. We must be willing to do so.[9]

Dr. William H. Foege pointed out:

A medical center can become a mecca of quality medical care — but what is the price? If $100 would save a life we are easily content to say the cost of saving a life is $100. But if that $100 had been instead invested in providing safe water supplies or better nutrition and if it could have saved 10 lives instead of one, then the cost of saving one life is not simply $100 but is $100 plus nine deaths.[10]

Speaking to the longstanding debate between curative or preventive medicine, R. C. Hendrickse, a doctor in Nigeria, reasons: The most persuasive argument in favor of curative efforts is the humanitarian appeal of thousands of sick children who daily besiege clinics and hospitals in urgent need of treatment. The most potent argument in favor of preventive efforts is the certain knowledge that their wide application will, in the long run, reduce much more effectively the overall morbidity and mortality rates.[11]

The Christian Medical Commission in its report recommending a more comprehensive health care in medical mission programs included the following realistic conclusion:

These suggestions will fall on some institutions and agencies that will have difficulty responding to them. For example, while some hospitals may be fully utilized as part of a comprehensive health programme, there are others where beginning such a programme may require entailment of established activities that are less relevant to health needs.

Despite these and other difficulties the Christian Medical Commission is utterly convinced that we face a radically new and changing situation and that our Christian calling demands that we find effective means whereby the ministry of healing might be directed toward the wholeness of man in his community.[12]

EVALUATION OF CHRISTIAN MEDICAL MISSIONS

The Bible does not clearly differentiate between spiritual and physical healing. Physiologically, the differentiation of body, mind, and soul is artificial. The gospel commission, "Go ye therefore and teach all nations," is not limited to a professional group.[13] All of us have an obligation.

To restore in man the image of his Maker, to bring him back to the perfection in which he was created, to promote the development of body, mind, and soul, that the

divine purpose in his creation might be realized — this was to be the work of redemption. This is the object of education, the great object of life.[14]

If we would elevate the moral standard in any country where we may be called to go, we must begin by correcting their physical habits. Virtue of character depends upon the right action of the powers of the mind and body.[15]

For we are made a spectacle unto the world, and to angels, and to men.[16]

If the purpose of the health program of the church is the same as other aspects of the program of the church — "to restore in man the image of his Maker" — then the question logically arises, "How is this best measured?" Restoration presumably involves change in a man's way of life, a reflection of changes in man's inward life. Measurement of change would thus seem to be a better evaluation than the number of visits to a physician or admissions to a hospital.

There is no question that medical care can gain the confidence of people so that they are receptive to change. But medical care in itself does not change a person. There is even a danger that by providing treatment to persons who have brought disease on themselves by their way of life, and sending them back to that same way of life, may harden them, in fact, in their intemperate life. This is simply to say that medical treatment or surgery does not in itself basically change a person, although it may provide an ideal opportunity to promote a change of life, if the opportunity is adequately followed up and utilized.

To try to evaluate mission medicine on the basis of quality of medical care is to raise such questions as the following: By whose standards is quality measured? More specifically, is American medicine and technology, which currently costs $400 per person per year in the United States, appropriate to areas of the world where less than $1 per person per year is available to pay for health and medical care? Are there dangers involved in developing a level of practice that cannot be continued in the absence of overseas physicians or overseas funds? Is this preparing the way for greater involvement of local nationals? Is there a danger in raising aspirations and fixing the demands of those in developing countries on unattainable goals?

CHALLENGES FOR MODERN MEDICAL MISSIONS

Despite the somewhat dismal picture here painted, the future for health evangelism as a church missionary effort is bright indeed. There has probably not been a time in the world's history when the desire for change was greater than now. Current conditions offer unusual challenges for programs that are prepared to meet man's total needs — physically, mentally,

spiritually, and socially. Cultures and people *are* changing and this change needs to be directed. Why should economic development by the developing world be synonymous with the adoption of European or American diet or smoking or drinking habits? Utilization of every church as a health center could initiate an influence for good that would be noted by the whole world. Seventh-day Adventist hospitals still have the opportunity to demonstrate to the world that hospitals can operate as comprehensive health centers. The world is crying for this help, but no one has yet demonstrated very effectively what such a program is or can be.

The effectiveness of health education has been glimpsed in the Better Living crusades in Iran and more recently in the Philippines and elsewhere in the Far East.[17] Since 1962 pastors and teachers have been trained in health education at Heri Hospital in Tanzania, and the Adventist church has accepted their increased effectiveness as pastors and teachers.[18] As yet, though, these programs are considered experimental and have not been officially incorporated in the mission program. Health and medical programs remain isolated from the rest of missionary effort.

An example of the kind of program that might be feasible and practical in many areas is one which is said to have eradicated fatal malnutrition in a Haitian village, having succeeded with "root-of-the-problem techniques and a shoestring budget."[19] Haiti was chosen because of the known severity of malnutrition there. Thirty-seven percent of preschool Haitian children have been shown to suffer first-degree malnutrition, another 21 percent second-degree, and 3 percent third-degree. A total of 61 percent of the children surveyed showed a measurable degree of malnutrition based on weight for age. Only one child of every two born in Haiti lives long enough to reach its fifth birthday.

For the remedial program, Fond Parisen, a village of 3,500, housed in dried mud and thatched huts in an arid region twenty-five miles east of Port-au-Prince, was selected as typical of the rural settlements in which 90 percent of the Haitian people live. The survey team found that on any given day in Fond Parisen, 30 to 40 cases of nutritional edema could be found among the preschool children; not a single child of age 1-6 came up to the average expected weight.

For the given economic and cultural conditions, the team decided to develop a new type of action program with tailormade objectives and working arrangements. Top priority was given to eradication of fatal malnutrition in infants and children under six years of age. Two elements were judged necessary to attain this objective: (*a*) a combination of local foods

that would prevent fatal infant malnutrition and (*b*) a method of getting these foods into the children's stomachs.

Developing the successful food combinations involved two years of chemical analysis at Virginia Polytechnic Institute of all the cereals, beans, peas, and peanuts of Haiti. The best combinations for this region proved to be mixtures of 70 percent rice, corn, or sorghum with 30 percent common red, white, or black beans.

With the nutritional answer at hand, the second phase began: finding a way to get the foods to the children. The heart of the problem here was to educate the mother, who determines completely the food the preschool child eats. The technique tried at Fond Parisen was demonstration: person-to-person instruction of mothers on selecting, preparing, and feeding their children the proper combination of cheap local foods available — on the premise that there could be no more forceful or dramatic effect on mothers than to see with their own eyes the changes wrought in their children through a better diet.

A new type of nutritional rehabilitation center was developed. Called a Community Mothercraft Center, it was a simple village building where illiterate mothers could be taught how to keep their children alive and reasonably well nourished by use of the food mixtures that had been developed. The answer to the educational problem proved to be the use of subprofessional personnel (usually girls of little more than high-school training) as resident supervisor-teachers. With four to six weeks of special training, followed by one to two months of apprenticeship in the field under experienced staff members, the girls were equipped with the basic nutritional and child care knowledge needed for their job.

After two years of operation of the Mothercraft Center in Fond Parisen, during which time there had been no economic improvement in the village, fatal malnutrition among preschool children had been eradicated and nutritional edema had all but disappeared. Follow-up surveys showed, in addition, that there was measurable improvement in the dietary status of the community as a whole, improvement that was undoubtedly due to the pervasiveness of the mothers' influence in family feeding. With unchanged food budgets, mothers were providing their families with 30 percent more calories, 50 percent more protein, and substantially more of several other essential nutrients. This demonstration is a striking example of the solid progress that can be made by a down-to-earth attack at the heart of the problem.

The cost of operating the center has varied from village to village, rang-

ing from $1,000 to $2,000 per year, depending on the degree of community participation and the local cost of food. At Fond Parisen the figure is about $2,000 for a Mothercraft Center that "graduates" nearly a hundred children and their mothers in the course of a year. Two such centers can be operated for less than the cost of maintaining one pediatrics bed in a Haitian hospital for a year. The pediatrics bed might be used to treat half a dozen malnourished children. But what change would that treatment make in the home or in the mother's care of the child?

Why shouldn't every Adventist church develop a Mothercraft Center or other similiar programs? Such a program reminds us of the counsel given the Seventh-day Adventist church in 1909:

> The Church of Christ is organized for service. Its watchword is ministry. Its members are soldiers, to be trained for conflict under the Captain of their salvation. Christian ministers, physicians, teachers, have a broader work than many have recognized. They are not only to minister to the people, but to teach them to minister. They should not only give instruction in right principles, but educate their hearers to impart these principles. Truth that is not lived, that is not imparted, loses its life-giving power, its healing virtue. Its blessing can be retained only as it is shared.
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> The monotony of our service for God needs to be broken up. Every church-member should be engaged in some line of service for the Master. Some cannot do so much as others, but every one should do his utmost to roll back the tide of disease and distress that is sweeping over our world. Many would be willing to work if they were taught how to begin. They need to be instructed and encouraged.
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> Every church should be a training-school for Christian workers. Its members should be taught how to give Bible readings, how to conduct and teach Sabbath-school classes, how best to help the poor and to care for the sick, how to work for the unconverted. There should be schools of health, cooking schools, and classes in various lines of Christian-help work. There should not only be teaching, but actual work under experienced instructors. Let the teachers lead the way in working among the people, and others, uniting with them, will learn from their example. One example is worth more than many precepts.[20]

Not only can such a training program help bring about a revival within the church as it works for others, but also it holds promise of being more effective in promoting health than traditional medical missionary efforts. It can only be successful, though, as ministers, physicians, and teachers work together in a common effort. Best of all, because it utilizes present organization and facilities, it can be economically feasible in all parts of the world. As the church enters a new era in the world's history, it should be eager to innovate and experiment in medical missionary work. There is much to gain and little to lose.

CONCLUSIONS

1. National health planning increasingly seeks to control both medical

care and public health. The continuation of medical mission programs is dependent on development of programs mutually agreed on between mission and government. This is most likely to be in areas of service where the mission program can provide services or programs that are not easily available otherwise.

2. In most countries, preventive medicine and public health programs are far weaker than medical care programs, and felt needs are thus often greatest in this area. Government public health programs are least successful in local application. It is in the local community that church mission programs have their greatest strength; and if local churches were to promote health programs, their community influence could be far greater than that of most local government action programs.

3. Hospitals can provide the centers out of which to carry on comprehensive community health programs. To do this, however, the hospital must recognize itself, first and foremost, as a training center and must develop adequately supervised outreach programs utilizing church pastors, school teachers, and other nonmedical personnel as local agents. Such programs must include a communications network and referral possibilities from the periphery to the hospital center. This is to suggest that the influence of the hospital should and must permeate every Seventh-day Adventist church and church school and thereby influence the communities where these are.

4. Financing of comprehensive health programs must depend not only on fee for service, but also recognition and funding as legitimate evangelistic efforts. In addition, there must be exploration of funding by foundations and other agencies for specific aspects of programs. Since preventive care programs do not usually require expensive investments in facilities or equipment, funding is not so large a factor as in traditional medical programs.

"Emerging nationalism, evolving governmental health care programs, increasing costs in upgrading mission medical facilities, and exploding populations argue effectively and urgently against perpetuating into the '70s those provincial, antiquated medical [mission] properties which serve only parochial and independent interests."[21] The problems that are now clamoring for attention should force our church to take a new look at the direction and scope of medical missionary efforts, to help assure that investments already made in programs and institutions are not lost to the church, and that the full potential of health evangelism will be realized in the modern mission setting.

SUMMARY

Modern medical missions face new challenges that suggest an urgent need to reevaluate traditional programs. Medical missions are increasingly isolated from the mainstream of other missionary efforts and evaluated primarily by the quality of medical care offered. As the economic gap between the so-called developed and developing nations widens, the question becomes ever more important: "By whose standard is quality to be measured?" Is it appropriate to attempt to provide the type of medical care which in the United States costs an average of almost $400 per person per year to areas of the world where less than $1 per person per year is available to pay for health and medical care?

Nations increasingly seek to control what few health and medical resources they have. Public health programs and medical care are both accepted as the government responsibility of most nations. The area of least competition is public health and preventive care, especially at the community level. If local churches were to use their influence to promote health programs, their community influence could be far greater than that of most local government programs, and such programs would meet with great favor by most governments.

If the purpose of the health program of the church is to contribute to the restoration of the sin-broken relationship between God and man and to do its part "to restore in man the image of his Maker," then the ultimate evaluation must be change in the way of life of those served by the church health program. Recognizing the present impetus and desire for change in the world provides unusual opportunities for directed change to meet man's total needs — physical, mental, spiritual, and social. Such a program, obviously requiring a team effort, could help bring recognition of medical missions as part of the regular program of the church rather than as simply a public relations endeavor.

The church is urged to reconsider its medical mission program, both to ensure that the investments already made in programs and institutions are not lost and to promote health evangelism as an effort of *all* the church, not of just an isolated segment. This is the challenge of modern medical missions. "The world is open for it."[22]

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