

George A. O. Alleyne  
Director, PAHO  
5 December 1995

---

**TELECOMMUNICATIONS AND INFORMATION FOR HEALTH\*\***  
**(Miami, Florida)**

---

Mr. Chairman, distinguished guests, ladies and gentlemen. First let me thank the organizers for having invited the Pan American Health Organization (PAHO) to participate in your Conference. This is my first experience of these conferences and I am very impressed at the wealth of talent being brought to bear on the many and varied aspects of life in Latin America and the Caribbean.

It is with some trepidation that I admit that I am an "ingénue" in the area of telecommunications, but I do have some knowledge of the problems of our region and have read and listened to enough to give me some sense of excitement about the future possibilities. My pulse quickened to the words of Vice President Gore as he painted a picture of a planetary network of networks that may bring the communities of the world together. He envisaged connections and networks as providing

*Robust and sustainable economic progress, strong democracies, better solutions to global and local environmental challenges, improved health care and –ultimately, a greater sense of shared stewardship of our small planet.*

Who could fail to be thrilled at his concept of a global information infrastructure funded from various sources?

*linking villages and towns, helping people to organize and work together to solve local and regional problems ranging from improving water supplies to preventing deforestation.*

I cannot help feeling that nothing but good will come from this technological nirvana.

But my point of departure is not the technological imperative and the tremendous capacity in this area of telecommunications, but from the problems with which I am familiar and with which I have to deal. The beauty of the plough lay not in its intrinsic characteristics but that it helped us make the land give of its bounty.

I will come to health, but I will start first with our Latin America and the Caribbean. In the rush to seek common purpose we sometimes forget our diversity. We have diversity in distribution

---

\* Pan American Health Organization, Pan American Sanitary Bureau, Regional Office for the Americas of the World Health Organization.

\*\* 1995 Miami Conference on the Caribbean and Latin America

of population among and within our countries. The diversity in our economic situations is better known to you than to me. Our ethnic and climatic diversity are well documented and the diversity or inequality of life chances and health status represents a major challenge to us all. Of course, strength may derive from some aspects of that diversity as the motto of one country I know well spells out clearly.

But in spite of the diversity there are some important issues that make for commonality. There is universal acceptance that we all seek ways to work together and that every nation seeks a better life for its citizens. There is more than a perception that united effort can increase some aspects of the well-being of all our people. You will not be surprised when I claim that health is one of those components of that well-being we seek.

I will not go into all those determinants of health that must be addressed. I will begin with care which is the topic that you highlight in this Conference. Individual care is not given in a vacuum—it is based on information transmitted by, or gleaned from the individual by a series of practices and procedures. The great prospect of telemedicine is that there may be more efficient gleaning of that information and transforming it into the knowledge necessary for proper action. There is considerable enthusiasm for that aspect of telemedicine that focusses on long range diagnosis after transmission of information to some locus where it is processed better or to some person or persons at a distance where it can be analysed better. This is the traditional approach—transferring the information without the patient. It is quite proper for there to be enthusiasm about this and the possible results in terms of better and certainly more efficient care are taken as given. As I read in a recent publication

*The keys to successful telemedicine are a quick turnaround time that allows telemedicine to achieve the qualitative benefits at competitive cost, ease of use that does not force patients or doctors to modify their normal habits or work schedules and high level, error free standards that do not increase the risk of litigation.*

But I would engage you in another aspect of telemedicine that has equal or greater potential. There was a time when the majority of health problems were treated either domestically or through the folk system, with the two being sometimes coterminous. Only a small fraction of illness was treated in the formal care system. In one study I know almost half of the illnesses were treated first by home remedies. These remedies were often based on empirical knowledge or the oral tradition of the family or community.

I am attracted to the possibility of telecommunications taking us back to those days figuratively, but this time the domestic treatment will be based on information that comes from the best sources. I marvel when I think that just 20 years ago the telecommunications industry was using almost exclusively copper wire for analog telephone services. Today new technologies, digital radio, satellite communications and fiber optics are creating the possibility that every home that now has a telephone or a television will have access to the kind of telemedicine services I envisaged above. When I mention this, there is the inevitable question as to what health care workers will do. I have every confidence that mankind will always need the services of health care workers, although much of it will be different and directed to a much better informed public. This will represent one facet of the true democratization that Vice President Gore envisaged.

But I would be very remiss if I did not stress as firmly as I can that this Conference would fall short of many people's expectations, if it saw telemedicine and the use of the information that is available in the highway as being restricted to individual care. To the extent that the health status of the population as a whole is important then information has to be a tool for affecting those other determinants of population health.

I lose no opportunity to remind my audiences that the physical and social ecology are major determinants of health status. I harp on the fact that individual and collective behaviour affect health directly and information is the key to change. If I may quote from the address I gave when I was elected Director –I referred to information as perhaps

*the only instrument that can relieve the ignorance of many of our people who pay the cost of that ignorance in the coin of ill health and suffering.*

The possibility of telecommunications helping to provide and disseminate that information pleases me no end.

I wish to refer to another perhaps more practical application of telemedicine and the health net that is assuming more relevance. There was a time not so long ago when we felt that the infectious diseases were a thing of the past –our technology would conquer the organisms. There was the tendency to characterize countries according to their health problems in the sense that some of the more developed ones were concerned with the diseases of unhealthy lifestyles, and the less developed countries had their attention focussed on the infectious diseases. Now, because of changing ecological patterns where man enters hitherto unexplored niches, because of changing public health practice, increased global travel and changes in the behaviour of the organisms themselves we have to rethink our situation. There is now global concern for the new emerging or reemerging diseases.

The countries have elaborated a hemispheric plan for dealing with these diseases and the major element of that plan is an early warning system based on knowledge of the pattern of occurrence of disease. Disease surveillance is thus of critical importance and telecommunications provide the optimum mechanism for the rapid transmission of information about epidemics. Recent events in Africa with the outbreak of the Ebola virus epidemic and here in Nicaragua with the outbreak of leptospirosis, highlighted the importance of having information available rapidly. The health profession has an even more challenging task today, as the media have a wealth of communication facilities at their disposal that they use with great efficiency.

PAHO is committed to working with the American countries to develop an appropriate surveillance system. Believe me when I say that this is not an esoteric subject of interest only to health personnel. The occurrence, spread and notification of disease affect commerce, tourism and has implications for countries' national security.

When PAHO was founded 93 years ago, the Ministers of Health who participated travelled leisurely with their ladies by steamship to Washington and the pace of things shown by that mode of travel was reflected in the technology for communicating. But the change in technology has not altered the intensity of PAHO's interest in information and its use. As I have said on another occasion. "We will traffic in information." Our particular interest in information dissemination for

health has been heightened by the Summit of the Americas and our role as an inter-American agency committed to following-up the spirit and letter of the agreements reached here last year.

We are undergoing steady change in the way we manage information at PAHO. We have embarked on an ambitious program to establish our own web site and make available to you a wealth of information about the Organization and more importantly about health status in the Americas. We have undertaken to work with countries such that each has a basic set of care health data available to any other country in the Americas. You have heard of our efforts in relationship to the use of telecommunication in cases of emergencies and disasters.

I know that in the public health sector much of our information transfer technology is still a relic of the days of telegraph, telephone and radio. I know enough to appreciate that telematics which involves interactive and multimedia technology is upon us and will be yet another part of the information infrastructure that democratizes health information. But, as I began by saying, clarification of the problem is the first step and I am confident from what I have heard of your discussions, that there will be enough of you to show us how to match the technology to the problem in the most efficient manner possible. There will be enough of you to help Ministers of Health in their dialogue with Ministers of Communication in order to establish those systems that directly serve health, but more importantly serve us all.

But all of these developments have costs. I have to turn to you very directly when I mention costs and I refer both to the costs of becoming involved as well as to the costs of turning a blind eye to efforts to improve the health status of our countries through these new technologies.

The costs of the required advances in telecommunications and telemedicine cannot be borne by the public sector alone and private investment and promotion of competition are the foundation of the global information infrastructure proposed by Vice President Gore. The mix of private and public sector involvement and investment in this field simply mirrors much of what is proposed for health as a whole. I believe that free enterprise can and must play an important role in these future developments. I am enthusiastic about the possibility that many of the innovative ideas about the use of telecommunications for health and the proposals for making these technologies widely available in the Americas, at an affordable cost, will come from private enterprise.

I wish you also to note that the health sector is not a minor part of the national economies. The Americas as a whole spent almost 800 billion dollars in health in 1990 and in Latin America and the Caribbean some 6% of GDP is devoted to health.

And finally I ask you to think about the cost of not becoming involved in the thinking around future developments in health –including health care. The social stability of the countries is a prerequisite for safe investment and I do not have to emphasize to you that the perceptions about health and the availability of care –facilitated in the future as it well may be through telemedicine – are important factors in maintaining that stability. The maintenance of a healthy environment and the health of its people are parts of the foundations of this region's major industry –tourism –in which many of you are involved.

Organizations like mine that were founded to facilitate joint activities by countries to promote the health of the American people will continue to do their part. I hope that groups of persons like you will see a role for yourselves in researching, developing and applying the best technologies to health. I am sure this Conference has persuaded you that telemedicine as a rapidly emerging field, linking the best of computer science, telecommunications technology and medicine has tremendous potential. I hope that you will enter it with enthusiasm and with equal enthusiasm invest your ideas and capital in the application of telecommunications as a whole to the improvement of the health of Latin America and the Caribbean.

r:\speeches\030e-95