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**5 October 2001**

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**HEALTH AND POVERTY REDUCTION: THE ROLE OF THE PHYSICIAN**  
**(Lima, Perú)\*\***

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First let me congratulate you on having selected this topic for discussion on the “Day of Medicine.” This is in the good tradition of physicians being concerned with the whole person and all that could affect his or her well-being. This is in the tradition of the great Hippocrates by whom all physicians swear. In one of his most famous treatises, “On Airs, Waters and Places” he enjoins the physician that “he must observe how men live, what they eat and what they drink, whether or not they take physical exercise or are idle and gross.”<sup>1</sup> Although the diet and idleness of his time may have been voluntary, there is no doubt that the enforced idleness and inadequate diet of the poor are of great consequence to the followers of Hippocrates.

Physicians have to be concerned with poverty. It is such a blight upon humankind that it is almost a disease. I have quoted frequently the elegant prose of the opening paragraph of the 1995 World Health report, which said: “The world’s most ruthless killer and the greatest cause of suffering on earth is listed in the latest edition of WHO’s International Classification of Diseases, an A to Z of all ailments known to medical science, under the code Z59.5. It stands for extreme poverty.”<sup>2</sup>

In examining the link between health and poverty, I will deal first with our changing or changed perception of poverty, then with the connection to health, and finally address the role of the physician in reducing poverty, and not only to the pristine function of treating the health consequences of poverty.

It is possible to be cynical and to say that the poor will always be with us and should not really occupy centerpiece in development thinking. We can never eradicate poverty. In many religious faiths special place is given to treating the poor as an act of charity and included in the general category of good works that bring their reward. Many of our saints, both ancient and modern are often depicted walking among the poor and offering them succor. But even though there may always be poor among us, the

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

\*\* **Presented during the Day of Medicine. Lima, Perú. 5 October 2001.**

<sup>1</sup> Margotta R. An illustrated history of medicine. Lewis P (ed). Paul Hamlyn, 1967.

<sup>2</sup> The World Health Report 1995-Bridging the Gaps. World Health Organization, Geneva.

perception and understanding of the importance of poverty has varied over the years. There has been no doubt, however, that poverty has a social context and relevance. Adam Smith wrote over 200 years ago in “The Wealth of Nations.” No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable.”<sup>3</sup>

On occasion, poverty has been perceived as a purely personal responsibility and we have seen societies, such as in the early days of the settlement of the United States, when the individualist focus was predominant, and being poor was regarded as a mark of deficiency in the individual as any able-bodied person should be able to provide for the basic requirements of living and not be a burden to society. Although that thinking has long disappeared, there has not been a uniform approach to poverty.

John Lewis, a former Chairman of the OECD Development Assistance Committee describes accurately and succinctly the fortunes of poverty over the last half century.<sup>4</sup> In the decade of the fifties and sixties there was enthusiasm for poverty reduction through economic growth. If the tide rose all boats would rise as well. But in the early seventies, it became clear that although many of the developing countries had attained their growth targets, the numbers of the poor had not declined and the gap between the rich and the poor in many countries had widened. The trickle down approach had not worked. Then came what Lewis calls the “Reformist Doctrine of the 1970s.” There was insistence on growth with distribution as the model for development, correcting the lags in the social sectors and meeting basic human needs. There was to be rural development, and direct attacks on poverty with particular attention to the rural poor.

One of the most eloquent proponents of this approach was perhaps McNamara who in his last address to the World Bank as President in 1980 had this to say:

“Over the past decade I have drawn attention repeatedly in this forum—sometimes at the risk of tedium—to the principal goals of development. They are: to accelerate economic growth and to eradicate what I have termed absolute poverty.

Economic growth, of course, is obvious enough. And once one has been in contact with developing societies, so is absolute poverty: it is a condition of life so limited by malnutrition, illiteracy, disease, high infant mortality, and low life expectancy as to be beneath any rational definition of human decency.”

But the oil shocks of the late seventies caused attention to shift from the poverty of the developing countries, and the world’s concern was on the stabilization of the

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<sup>3</sup> Smith A. An inquiry into the nature and causes of the wealth of nations. Cannan E (ed). University of Chicago Press. Book I, Chapter VIII, p.88.

<sup>4</sup> Lewis JP. Strengthening the Poor: Some Lessons for the International Community in Strengthening the Poor: What have we learned? Lewis JP, *et al.* U.S. Third World Policy Perspectives, No. 10. Overseas Development Council.

financial system. The adjustment processes wreaked havoc on the poor in the eighties. With recovery of the financial systems in the nineties, and with a keen appreciation of the social consequences of the economic crisis of the eighties, has come a renewed concern for poverty and all major financial and aid agencies now have poverty reduction as their major focus. The United Nations, the OECD, the International Monetary Fund and the World Bank in a landmark publication entitled “2000, A Better World for All” have established international development goals that address “that most compelling of human desires—a world free of poverty and free of the misery that poverty breeds.”<sup>5</sup> They say: “Poverty in all its forms, is the greatest challenge to the international community. Of special concern are the 1.2 billion people living on less than \$1 a day and the additional 1.8 billion living on less than \$2 a day. Setting goals to reduce poverty is an essential part of the way forward.”

Seven goals have been established:

- reduce the proportion of people living in extreme poverty by half between 1990 and 2015.
- enroll all children in primary school by 2015.
- make progress towards gender equality and empowering women by eliminating gender disparities in primary and secondary education by 2005.
- reduce infant and child mortality rates by two-thirds between 1990 and 2015.
- reduce maternal mortality ratios by three-quarters between 1990 and 2015.
- provide access for all who need reproductive health services by 2015.
- implement national strategies for sustainable development by 2005 so as to reverse the loss of environmental resources by 2015.

This inclusion of three health issues among the goals for a development that has poverty reduction as its principal aim is highly significant and a clear recognition that health is critical for poverty reduction. But in spite of my bias towards health, I have to see that the goals are taken as a whole and are mutually reinforcing. Better education improves health outcomes and similarly, better health improves the returns to education. One of the striking features of the analysis that accompanies the proposal is that, with regard to the health issues, there is a large gap between the situation as it is and the line of projection towards achieving the goal in the proposed time.

The gravity of the situation is brought out clearly in the recent World Development Report entitled “Attacking Poverty.”<sup>6</sup> This report has as a backdrop a remarkable study named “Voices of the Poor,” for which interviews were held with over 40,000 poor persons in 50 countries to ascertain what poverty meant to them.<sup>7</sup> Their responses showed clearly that for them poverty meant more than lack of material things. Well-being was seen holistically and the psychological and social dimensions figured

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<sup>5</sup> 2000, A better world for all. Progress towards the international development goals. International Monetary Fund, Organization for Economic Cooperation and Development, United Nations, World Bank Group. <http://www.paris21.org/betterworld>.

<sup>6</sup> World Development Report 2000/2001. Attacking Poverty. The World Bank. Published by Oxford University Press, 2001.

<sup>7</sup> Voice of the Poor. World Bank Poverty Net. <http://www.worldbank.org/poverty/voices/listen-findings.htm>.

prominently. The pain of multiple deprivations comes through vividly. The World Bank report attempts to codify the various dimensions of poverty and comes up with the following four areas that seem to be most critical:

There is income poverty, and the most common quantitative estimates of poverty are based on income or consumption with most of the global figures based on establishing some cut-off point below which an individual is deemed to be poor. Poverty also denotes deficiencies in health and education, and this is reflected in the development goals mentioned above. I will return to this critical relationship. The poor are also vulnerable in the sense that they are unduly exposed to multiple risks. There is the risk of ill-health, a poor environment, and the violence that often arises in situations of hopelessness and fear. More of the poor die in times of natural disasters. We see that all too clearly here in the Americas where the earthquakes, floods and hurricanes affect disproportionately the poor. But perhaps the dimension of poverty that is most egregious is that of powerlessness. The poor often have no voice, they are seldom represented at the tables of power.

We must appreciate that although we speak of poverty in a global sense, there are questions of relativity. There are variations among and within countries, there are variations between the sexes and the acuteness of poverty in a wealthy world is especially hard to bear. This aspect of relativity was well expressed by Adam Smith who, in describing the consumable commodities that might be taxed, separated the luxuries from the necessities. As he said “By necessities I understand, not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order to be without.” The necessities were the things “the want of which would be supposed to denote that disgraceful degree of poverty, which, it is presumed no body can well fall into without extreme bad conduct.”<sup>8</sup> Thus, poverty would be perceived differently in different societies.

Although the levels of poverty in Latin America and the Caribbean are less than in South Asia or Sub-Saharan Asia, they are still significant. It is estimated that in 1998 there were 78.2 million persons in this Region or 15.6 percent of the population living on less than \$1 per day. It is not only poverty, however, that concerns us. It is also inequality. A recent analysis of the trends in 17 Latin American countries during the decade of the nineties showed that poverty declined in 10 or 11, but in no country did inequality decline. It was persistent high inequality that served to inhibit poverty reduction.<sup>9</sup>

Current thinking points to three main strategies for reducing poverty.<sup>6</sup> The first of these is promoting opportunity. The poor must have opportunity for access to the means for acquiring material goods. In addition, there must be opportunity for education and preserving health. Opportunity also implies greater equity in the distribution of resources.

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<sup>8</sup> Smith A. *op.cit.* Book V, Chapter 2, Part 2, Art. IV, page 402.

<sup>9</sup> Székely M. *The 1990's in Latin America: Another decade of persistent inequality, but with somewhat lower poverty.* Inter American Development Bank. Research Department. Working Paper Series; 454.

Indeed, inequality in access to land and the means of developing human capital is a significant contributor to poverty. Facilitating empowerment comes next and implies the possibility to participate in the crucial decisions and to have a voice in the management of their affairs. Voicelessness is one of the hallmarks of poverty. Finally comes the enhancement of security, or the reduction of the vulnerability to a range of natural and man-made shocks.

Health concerns figure prominently among the concerns of the poor as well as the non-poor, and indeed the evidence is that health takes pride of place among the things that human beings value. Amartya Sen's formulation of the basic or essential freedoms is quoted often in relation to poverty.<sup>10</sup> Health, education, human rights, and economic opportunity are all essential freedoms and deprivation of any or all represent poverty. Thus, there is income poverty, but the person that is deprived of basic human rights is also poor. These freedoms are all inter-related and it is difficult to envisage reduction in one without affecting the others. Deprivation of any one of these freedoms inhibits the individual's choices in terms of enjoying the others.

Sen describes poverty as capability deprivation. He writes:

“...poverty must be seen as the deprivation of basic capabilities rather than merely as lowness of incomes, which is the standard criterion of identification of poverty. The perspective of capability does not involve any denial of the sensible view that low income is clearly one of the major causes of poverty, since lack of income can be the principal reason for a person's capability deprivation. Indeed, inadequate income is a strong predisposing condition for an impoverished life.”

But given the centrality of health and the reasonable critical attention paid to income, I will focus here on the relation between the two.

It is no new truth to say that the poor are unhealthy. Poverty figures prominently among the determinants of ill health. Every stratification by social class shows that the lowest social class, which includes the poor, has worse health indicators. Every cross-country analysis ever done shows that as income increases health status improves. With rising income there is increased life expectancy and similarly a decrease in child mortality. This relationship between life expectancy and income holds in analyses done for various periods over the last 100 years and has probably always been so.

The reasons for poor health among the poor are multiple, but can be summarized by saying that the determinants of health are poorer for the poor. The physical environment is poorer—there is poor access to water and basic sanitation. The services available are poorer in quality and quantity and there is evidence that on many occasions, the poor services are more expensive. Education is poor and given the linkages between girls education and child mortality, it is not surprising that there would be more child deaths among the poor. More poor mothers die in childbirth because there is limited

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<sup>10</sup> Sen A. *Development as Freedom*. Alfred A. Knopf. New York, 1999.

access to adequate obstetric services. And so the litany goes on. The facts bear out the saying that the wealthier are healthier and conversely, the poor are less healthy.

But it is not only that they are unhealthier, the poor are more vulnerable in terms of health security. The poverty that produces ill-health may produce a vicious spiral that pushes the poor deeper into poverty.<sup>11</sup> It is well shown that in times of illness the poor who are unprotected by insurance may consume so much of their meager resources that they are forced further into a poverty trap from which they cannot escape. The burden of illness does not only fall on the individual. A major illness of a breadwinner head of a household can be catastrophic for the whole family and have repercussions for the development of the children and impairment of their life chances.

But the facet of the relationship that is coming more into the debate is the impact of health on wealth and the possibility that investment in health may be an anti-poverty strategy itself. To quote from the Economist “The idea that ill health reinforces poverty is less familiar than the view that poverty causes ill health, but equally true.”<sup>12</sup>

I have been fortunate to be the co-chair of a working group of the Global Commission on Macroeconomics and Health. Our working group deals with “Health, Economic Growth, and Poverty Reduction,” and many of the following ideas have developed from the work of this group and discussion with its members on the mechanisms by which investment in health could lead to economic growth and thus be seen as an anti-poverty measure.<sup>13</sup> Of course, I acknowledge from the beginning that economic growth, per se, does not necessarily lead to a reduction in income poverty. It is necessary, but not sufficient as the lessons of the decades of the fifties and sixties taught us.

The most obvious mechanism through which health leads to wealth is through increased productivity. Healthier persons can produce more, given the other conditions that are conducive to or can facilitate production. This has been shown most elegantly by the work of Robert Fogel, who has demonstrated that some 30 to 50% of the economic growth of Great Britain and France over the past 200 years has been due to the investment in health and nutrition.<sup>14</sup> The availability of adequate nutrition led to an increase in the labor force and increased productivity of those already working. The large number of beggars in Britain in the nineteenth century was because so many persons simply did not have enough food to support their basal metabolism and have any energy left over for productive work.

The relation of wages to health and nutritional status is also striking. Adult height as a proxy for the cumulated effects of health and nutrition, is positively correlated with

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<sup>11</sup> Gertler P, Gruber J. Ensuring consumption against illness. Mimeo. University of California, Berkeley, MIT and NBER.

<sup>12</sup> The Economist. Helping the poorest. 14 August 1999, p. 11.

<sup>13</sup> Much of the data cited here will appear in the formal Report of the Working Group.

<sup>14</sup> Fogel R. Economic growth, population theory and physiology. The bearing of long term processes on the making of economic policy. American Economic Review. 84:369-395.

earnings in both affluent and poor settings. The effect of health is perhaps most marked in the early years of life. Infant malnutrition leads to impaired cognitive development and poor school performance that will translate into reduced capacity to earn. Recent evidence demonstrates that the effect of malnutrition may begin even earlier, as malnutrition in utero may program the individual to later development of some chronic diseases. More recently it has been shown that when mothers and children during the first three years of life were supplemented with calories, some 20 to 30 years later those children who were now adults were earning more than those who had not been supplemented. It is not only physical health but mental health that is also important for productivity. Persons with mental illness are more frequently absent from work and their work output is less.

There have been recent studies from Peru that bear on the relationship of health to labor market productivity. Days of illness have been used as a measure of health, and it is clear that health has a strong and positive impact on wages. The largest effect of illness on productivity was found among the poorer workers.<sup>15,16</sup>

Much of the concern for health and the economy has been concentrated on the cost of specific illnesses, with malaria, tuberculosis, and HIV/AIDS getting most attention as being diseases that are more prevalent among the poor and are potent causes of poverty. WHO estimates, for example, that the cost of TB annually is of the order of 12 billion dollars. But at least there is hope in the sense that there is appropriate therapy to cure TB, but the scenario for HIV/AIDS especially in poor countries is a grim one. Studies from the Caribbean which has a prevalence rate for HIV/AIDS second only to Sub-Saharan Africa show that the disease may result in economic loss of about 5% of GDP per year.

Attention to health may also produce economic benefit through resulting changes in the demographic profile of countries. As infant and child mortality rates fall there is a fall in fertility, but as the two are not simultaneous, there is a period of increase in the working age population. If there is gainful employment for this adult population then there is a possibility of a “demographic dividend.”

Health may contribute to economic growth through wider social effects. One of the most striking of these is tourism. Tourist destinations are exquisitely sensitive to health concerns and outbreaks of disease can rapidly scare away tourists as was seen here during the cholera epidemic that began in 1991.

International development goals also include education and, here also, health has a role to play. As was pointed out earlier, malnourished children have poor cognitive development and poor school performance. In addition, good health by extending life

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<sup>15</sup> Murrugarra E, Valdivia M. The Returns to Health for Peruvian Urban Adults by gender, age and across the wage distribution. In *Wealth from Health*. Savedoff WD and Schultz TP(eds). Inter American Development Bank Washington D.C. 2000.

<sup>16</sup> Cortez R. Health and Productivity in Peru: Estimates by Gender and Region. In *Wealth from Health*. Savedoff WD and Schultz TP (eds). Inter American Development Bank. Washington, D.C. 2000.

expectancy, increases the possible returns to any investment in education. The longer persons live, or rather the longer their period of healthy productive life, the greater will be the returns on the investment in their education.

What is a possible role for the physician in poverty reduction? The obvious one is that if he or she discharges his or her pristine function of promoting health, preventing or curing illness, and ensuring adequate rehabilitation, that might be enough. But let me go further and try to involve all physicians. There has been a tendency to see almost two cultures of medical practice. There is the personal care physician and the physician whose major concern is population health, and although the sniping between the two has lessened, it has not disappeared entirely. I am very conscious of these two cultures as it were, having myself been a part of both. My first 24 years of medical practice were devoted to personal care medicine and the last 20 to concerns for the health of populations. It is important that both cultures recognize the critical benefit of the samaritanism that is almost the exclusive province of the personal care physician and that there is no threat in this approach to the application of the technologies of modern science to the health that both groups pursue. We protect and promote the health of populations, but we often give support and succor to individuals and neither is intrinsically more important than the other. All physicians have a native interest in human well being and perhaps it is my own appreciation of the extent of individual suffering that comes from disease that makes me more sensitive to the need to attend to the health of populations.

If one accepts the view that poverty is a deprivation of certain capabilities, of which health is one, then by definition anything done to improve health reduces poverty. Thus the physician by improving or promoting the health of the individual or the group is by definition contributing to poverty reduction. But this is not enough. Physicians have a role as important social actors. By the nature of their profession they have to be concerned with social well-being and must see health not only from the point of view of the intrinsic good that it undoubtedly is, but also because health is instrumental in addressing some of the other aspects of poverty. As we have shown, good health is important for economic growth of countries. Disease depresses countries' economic potential.

I acknowledge that in many instances physicians suffer from the disadvantage that their articulation of a pro-health position can be seen as self seeking. This is mainly so when the advocacy is for the services in which they may have a pecuniary interest. But we know that among the factors that determine the health and productivity of populations, the type of services that bring gain to individual physicians are of minimal importance. Thus, physicians have to be strong advocates for the other determinants of health. In addition, we have to be even stronger advocates for the position that the investment countries make in the health of all the population is a critical factor in the reduction of poverty in all its forms. I speak here more specifically of interventions that are the responsibility of the state. Of course, there will have to be health interventions specifically directed to the poor given the fact that they suffer more illnesses, although great care must be taken to avoid the all too common phenomenon that services designed expressly for the poor are usually poor services. Perhaps the intervention that is most



useful is one of providing insurance such that illnesses do not become catastrophic and plunge the poor further into a poverty trap from which they cannot escape.

I am sure you are aware of the kinds of health interventions that will improve health and for which physicians should advocate. There are those interventions that have a very high social content and return, such as immunizations, safe water, and basic sanitation. In addition, there should be a certain basic package of services that should be available to all citizens. Note that availability does not imply that the state or a state enterprise has to be responsible for delivery of the package that will vary depending on the epidemiological and financial situation of countries, but it cannot exclude attention to those diseases that bear so heavily on the poor. Peru is a prime example—one that is held up to the world of a model program for the treatment of one such disease—tuberculosis. Clearly, given the importance of early childhood nutrition, any package must also address the needs in this area.

I do not have to tell physicians how to be advocates. Throughout history physicians have had the ears of the mighty and the powerful. In more modern times we have seen their associations becoming advocates for one or other cause. It would be a major positive step to see these associations active in acquiring the information to enable them to be advocates for the kinds of issues I have addressed.

Mr. Chairman, 150 years ago, one of my medical heroes, Rudolf Virchow, began a Journal called “Medical Reform” at a time when according to him; “physicians everywhere meet in assemblies to determine in common consultation the needs of their profession.” Virchow, was acutely conscious of the social causes of diseases and of the acute and often unmet needs of the poor. He was also a believer in the power of physicians to initiate change for the better and stated; “The physicians surely are the natural advocates of the poor and the social problem largely falls within their scope.”<sup>17</sup> I should hope that Virchow would be pleased with the interest Peruvian physicians are taking in the relation of health to poverty reduction.

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<sup>17</sup> Virchow R. *Collected Essays on Public Health and Epidemiology*. Volume 1, Berlin, 1879. Rather LJ (ed). Science History Publications, USA, 1985.