When I selected the title for this lecture in honor of Bernard Sorhaindo, I thought that if he had been asked, these might well have been what he would have wished for his fellow citizens in perpetuity. The three approximate the basic three original components of the Human Development Index—education, health, and wealth. Taken together they give a measure of the true development of a people that goes beyond the accumulation of things material.

But I was also aware of course of the nursery rhyme

*Early to bed, early to rise*

*Makes a man healthy, wealthy and wise*

Having tried both the early as well as the late option I cannot say that I have observed any difference in my health or my bank account, although I have been advised that the secret is that one should increase one’s sleeping time by thirty minutes for every five years after the age of sixty. Of course you can then calculate the age at which one will be permanently asleep. But I also confess that I was not aware of the industry around this trio. There are about 300,000 entries in Google under the heading of wisdom, wellness and wealth.

I found an Applied Awareness Systems Institute of Wisdom, Wellness, and Wealth which said that when you have Wisdom, Wellness, and Wealth, you have Wholeness: Nothing missing, Nothing broken ...Peace! You can have it all! This Institute enjoined us to “discover how every thought you think, every word you say, and every action you take adds to or detracts from your harmony, health and happiness”. I also noted a series of Seminars on “making the shift” which advertised teaching on how to Maximize your Potential; Bring Abundance & Prosperity; Have a Renewed Sense of Direction and experience Vibrant Health. There was also an institution which went by the elegant name of the Glowing Heart Society which said that we could be taught how to “Discover how to shift your awareness from survive to thrive” and offered through a seminar that “You will tap into the power of your infinite mind by learning about the incredible and fascinating technique of Visualization!”

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*Presented at the Dr. Bernard A. Sorhaindo Memorial Lecture 2009, Roseau, Dominica, September 15, 2009*
Of course there was a fee attached to all of the exercises from these and similar institutions which offered to show us how to achieve wisdom, wellness and wealth.

This approach to wisdom, wealth and wellness by individual transformation and self-discovery is outside my area of expertise, so I intend to be more prosaic and explore with you the physical conditions that contribute to the presence or absence of wellness and indicate the kind of collective and individual wisdom necessary to achieve them. The relationship between health and wealth has been of considerable interest to me for many years and I will explore briefly the literature on the subject and indicate the relevance to the Caribbean and Dominica.

I believe the life and achievements of Bernard Sorhaindo also teach us some lessons in relation to the topic I have chosen. I knew him well, first as a medical student and have fond memories of his quiet manner, his serious approach to his studies and his devotion to sport. I recall well his soccer exploits for the University and for Taylor Hall. We lived in the same area- Mona Heights- when he did a residency at the University Hospital in obstetrics and gynecology and he would try to teach me how to graft tomatoes on to a plant known as susumba. I cannot tell you that I was a good student! I met with him on some of the several occasions I visited Dominica and was impressed by the work he and his colleagues like Gerald Grell, Eddie Amour and Rosemarie Shillingford were doing. His medical exploits were legendary and there were many stories of his courage in addressing difficult medical problems, some of them involving his own family. I never heard Bernie complain and I cannot recall him being anything but cheerful. Perhaps it was because of the support and love of his wife Althea or because of his faith or a combination of the two. His faith was evident although he did not wear it on his sleeve or like a shield or proselytize it. In later years I would meet him and Althea at the Medical Alumni reunions as he was a keen supporter of the Medical Alumni Association. He and I and my wife and Althea who both trained as nurses at the University Hospital would exchange notes about work, children and life in general.

His was a practical wisdom. He dedicated his life to the care of the ill and their restoration to wellness. I would guess that his wealth was not to be counted in the currency of the day, but in the love and respect of his family and friends. Unfortunately he smoked incessantly which brought with it the known consequences of tobacco use, and thereby hangs a lesson for us all.

When one thinks of Bernie and the medical pioneers of his day, one cannot but reflect on the development of health services in Dominica which became almost a model for the rest of the Caribbean. I am sure all of you here know that Hurricane David virtually wiped out the health facilities in Dominica in 1979. I recall a team led by Philip Boyd also a great Dominican physician and a Caribbean public health icon, accompanied by Halmond Dyer coming to Dominica and helping to redesign the system based on the fundamental elements of primary health care. Dominica avoided the rhetoric and polemic which swirled around the various definitions of PHC and established PHC as the basis of the pyramid of care that reached all persons in the population. I recall visiting
Dame Eugenia Charles and hearing her relate proudly how her own house was numbered as part of the basic public health surveillance system.

Much of the credit for this phase of Dominica’s health development must go to the energetic, visionary health minister Charles Maynard and his Chief Medical Officer Desmond McIntyre who converted himself from practicing ophthalmology to being a health manager par excellence. I was proud to witness him receiving the PAHO Award for Health Administration in 1992. They gathered a team around them which was the envy of the Caribbean—Carissa Etienne, Jennifer Astaphan, John Fabien and Jean Jacob to mention those whose names I can recall, and I am sure there must have been dozens of their disciples who walked the land armed with the new approach to providing essential care to all Dominicans.

I often recount the story of going with the Director of PAHO to the north of the island to visit a small clinic which occupied a very tiny building. But the building was spotless, the benches were scrubbed clean and the supervising young nurse, who had had only the very basic training that Dr. McIntyre thought was necessary for her to carry out the essential functions required in that setting, had her basic data neatly written in a simple exercise book. She gave us visitors a description of her community and its problems which would have done any graduate student in public health proud. I have no doubt that one of the essential ingredients of the success of that age was committed leadership and the ability to imbue a large number of young persons with the mystique surrounding health and a passion for health care for all.

In the 60s and 70s when I would visit Dominica, the major areas of concern discussed with me were the infectious diseases and the problems of under nutrition. I still recall Gerald Grell relating his management of amebic abscesses. But as has been the case in all the Caribbean countries, the emphasis has shifted. Thanks in great part to the efforts of the pioneers throughout the Caribbean similar to the ones I have mentioned, the countries have passed through the phase of the health transition in which they were affected by the scourges of plague and pestilence. But now the life expectancy is increasing, female fertility continues to fall, infant mortality is declining and a new plague is the chronic non-communicable diseases such as hypertension and hypertensive heart disease, ischemic heart disease or coronary heart disease, stroke, diabetes, cancer and chronic respiratory disease. In every country almost a quarter of the adults are hypertensive and diabetes mellitus is increasing. In terms of prevalence of diabetes in the Americas, the first seven places are taken by Caribbean countries, led by Barbados where about one in seven adults is diabetic and if there were to be a competition for being the amputation capital of the world, Barbados would have very strong credentials. Professor Ennis has shown that over a period of six years there were almost one thousand amputations for diabetes in the Queen Elizabeth Hospital which is the island’s main referral hospital.

I am sure, or I hope that everyone has heard of the Caribbean approach to these problems. The Caribbean Heads of Government in their meeting in Nassau in 2001 declared that “the Health of the Nation is the Wealth of the Nation” and identified NCDs and HIV/AIDS as two of the main health problems to be faced. They also endorsed the
Caribbean Cooperation in Health which Dominicans should know was launched here in 1984. Then came the historic Summit of Heads of Government on Chronic Non-communicable Disease in Port-of-Spain in 2007 that was marked by a 15 point Declaration of commitment.

One part of that Declaration was the decision to mark the second Saturday in September as Caribbean Wellness Day. I am pleased to hear that it was successful here as it has seized the imagination of the Caribbean public and we now have the non governmental organizations, the governments, the media and the business sector joining forces to mark that day as one in which there is a call to arms for wellness. I use that military expression partly in reference to the statement made by the Prime Minister of St. Vincent and the Grenadines, Dr. Ralph Gonzalves, who said at the Summit that the idea is to create a wellness revolution in the Caribbean. The notion of a revolution applied to wellness is an interesting and innovative one, but indeed he captured the essence of the magnitude of the effort needed to seed a culture of wellness in our people. It really calls for a revolution in our thinking and practice to effect the necessary change.

It is not easy to define wellness as a positive phenomenon. One definition I encountered that satisfied my perception of the essence of the term was as follows: “Wellness is a multidimensional state of being describing the existence of positive health in an individual as exemplified by quality of life and a sense of well-being.” Wellness has to be an active process of becoming aware of and making choices toward a more successful existence.

This definition clearly implies several inputs into the state of wellness, and perhaps it is disciplinary myopia which entices me at least initially, to dwell predominantly on the physical dimension which impacts on that positive health. We physicians accept that we are often limited in our perceptions, but whether we like it or not we have to face the presence of disease or prevent disease which contributes to the unwellness of our people as individuals and our populations. I do not wish to debate the obvious point that an individual can have some perturbation of his essential physiologic processes-his milieu interieur, and still feel well, but I often contend that while this is a real and not a theoretical construct, we still have to deal with the prosaic phenomena of the physically abnormal and I will refer to the NCDs in this context.

Dominica certainly shows that it has its fair share of the chronic noncommunicable diseases and demonstrates the prevalence of the risk factors which are known to contribute to these diseases as shown by a recent survey carried out with the assistance of PAHO. Thirty percent of the population has blood pressure levels that would usually be considered as hypertension and requires therapy of some sort. Approximately 12% of females are diabetic and surprisingly the figure in males is twice as high. Incidentally, I am pleased to note the reactivation of the Dominica Diabetes Association. The first four causes of death here are consistently hypertensive heart disease, diabetes, coronary heart disease and strokes. About 15% of the adult population smokes and almost twice that number are exposed to smoke in the workplace. About 30% of males are overweight or obese and females show twice that figure. About two out of every three Dominican women are overweight or obese. About 16% of males had
low levels of physical activity and the figure for females was twice as high. We know that the predominant risk factors for NCDs include tobacco use, overweight, high levels of cholesterol, physical inactivity and inadequate dietary intake of fruits and vegetables. When all the data were analyzed, 20% of Dominican males and about 40% of females had three or more risk factors for chronic diseases. This has to be of major concern.

The second major problem to which I will refer is that of HIV/AIDS. Since the epidemic was recognized in 1987 just over 300 persons have tested positive for HIV, and in 2006 there were 8 positive males and 6 positive females. The estimated prevalence was 1% in 2007. There is a dearth of information on the likelihood of HIV in high risk groups such as sex workers and men who have sex with men. But seventy two percent of those diagnosed with HIV are male which raises the suspicion that there is a significant presence of men who have sex with men and sex worker clientele among the infected males.

I was pleased to note that there is an active National HIV/AIDS Response Program and a National AIDS committee with wide representation and there is a commitment to achieving Universal Access to prevention, treatment and support by 2010. It was also good to see the involvement of the business sector as well as other stakeholders especially in education, prevention and support services. It is clear that the epidemic has not reached the proportions seen in some other Caribbean countries, but that is no cause for complacency and there can be no reduction of effort especially as regards to prevention and the application of the preventive measures that have been shown to be effective. There is the natural high level of concern with treatment especially as the effective drugs became available, but now everyone is appreciating that there has to be the same concern for prevention if we are not continually adding new cases to what could become an expanding treatment pool.

How do these health problems affect wellness and how are they to be prevented so as to create the wellness at the individual and population level that is necessary? Here I will posit that the wellness needed at the individual and population level will in large measure be determined by the individual and collective wisdom. There is a well recognized ladder which establishes the sequence of data, information, knowledge and wisdom. The thesis is that data represents the sterile facts as conveyed or created by the senses; these data are assembled in a meaningful way and their interrelationship so structured that information is produced. This information is disseminated and is internalized by individuals to form their knowledge. I always contend that it is information and not knowledge that is shared. It is on the basis of this individual knowledge that the individual acquires the wisdom to take one or other action. When I speak of collective wisdom, I refer to individuals pooling their own individual knowledge to facilitate or arrive at a wise decision. A cabinet takes a wise decision based on the collective knowledge and wisdom of the ministers.

Against this background, it is possible propose the approach to the wisdom needed to produce individual and population wellness. There is obviously a responsibility of the individual. No one is force fed, thus it is simple to say that avoidance of obesity is an individual responsibility. This is only partly true. To the
extent that the individual is influenced by the physical and social environment, then the factors that modify that environment have to be taken into account in determining the resulting wellness. The prevention and or treatment of almost all diseases entail not only individual volition, but also a change in the enabling environment. It is here that governments in our ordered democratic societies play key roles.

The government has the authority to so change the environment that it becomes easier for the individual to avoid the risk factors that contribute to the NCDs. It is the government that can facilitate the population having access to facilities that enable people to have more physical activity. There is no doubt that taxation on tobacco is one of the most powerful and cost effective means of reducing tobacco consumption of smokers and preventing the young from beginning to smoke. Legislation can prohibit smoking in public places. Government can implement all the commitments made when it signed and ratified the Global Framework Convention on Tobacco Control. The government can, through its capacity to legislate, regulate or tax, alter the enabling environment appropriately. We know for example that the reduction of salt intake has a positive impact in terms of lowering blood pressure. While the individual can be persuaded to consume less salt, the more effective way to achieve a reduction in salt intake by the population as a whole is by measures that reduce salt in food. The banning of transfats in New York was by government action.

There will always be resistance by individuals who preach the virtues of free choice, but to the extent that disease control has societal implications, then it is important for the government as the prime agent of its people to be active in ensuring that the enabling environment is conducive to wellness. However, although the main authority may rest with governments, there are other actors in the state which may play a role. Business for example, may establish the kinds of workplace environments that facilitate wellness and the concept of workplace wellness is now well established. Civil society can be a powerful voice in advocating for the most health or wellness–promoting enabling environments.

The notion of a positive enabling environment also applies in the case of HIV/AIDS. It is true that since the major mode of transmission is sexual intercourse which is obviously an individual action, major responsibility rests on the individual to adopt the appropriate behavior. But there are environmental forces that relate to sexual practices. We know that there is stigma and discrimination against persons with HIV/AIDS. This is a factor in the environment which conditions the decision of sexually active persons who are HIV positive to come forward for treatment and for those who may have been exposed to come forward to be tested. Thus the reduction of stigma and discrimination in the society as a whole would make for a better public health approach to the disease.

But this is not the only area of concern. We know that homosexual intercourse takes place and is a mode of transmission of the disease. All over the Caribbean the prevalence rate of HIV is higher in homosexual sex workers. We also know that stigma and discrimination against homosexuals makes it extremely difficult for them to come out of the closet and seek testing or treatment. It is difficult to dissect the origins of this
stigma, but to some extent it is supported by the law and by cultural norms. I know of the sensitivity around this subject in the Caribbean and I have profound respect for the different opinions. There was a time when I had hoped that the laws making it illegal for consenting males to have sex in private would be changed through the political process. I do not believe now that this will happen and the change in the law when it comes will be through the judicial system as occurred recently in India where after seven years of litigation, the Supreme Court struck down a 150 year old law that made homosexual sex between consenting adults illegal. This law had its basis in the British penal code of 1860. I suspect that our Caribbean laws are similarly a vestige of our colonial history. But like other vestiges of colonialism these too will pass, perhaps as in India as a result of judicial process. While these laws affect the control of HIV, in addition I believe they affect negatively the basic human rights of individuals.

But will our wellness or our freedom from illness make us wealthy? The answer is undoubtedly yes. The literature is now replete with studies showing that health contributes to wealth through several mechanisms. The most obvious is that the healthy person can work better, healthy children learn better and both of these improve the income and welfare definitely at the household level. Conversely the ill cannot be productive and the care of the ill places a strain on national resources. This is one of the arguments used to promote the actions needed to address the risk factors of the chronic noncommunicable diseases. Further, the burden of long term treatment of these diseases can place significant strain on family income. But the mechanism that would have been of interest to Bernie and apparently was critical to the economic growth of the Asian countries is what is known as the demographic dividend. As the infant mortality falls before fertility declines the result is a cohort of young persons who when they reach the productive age can contribute significantly to wealth creation provided the environment facilitates their effective participation.

Mr. Chairman, let me end by thanking you for the opportunity to deliver this lecture in honor of my friend Bernie Sorhaindo. I know that there have been many glowing tributes to this illustrious son of Dominica, proud alumnus of the University of the West Indies, admired professional who helped hundreds if not thousands of youngsters to see the light of day. I trust that the ultimate tribute will be the memory of those and the others he helped through his wisdom to enjoy the wellness that brought them the opportunity for wealth. I trust that down the years those whom you ask to give this lecture will feel as honored as I am to contribute some little bit to his already rich legacy.

I thank you for your attention.