It is a pleasure, albeit a sad one, to deliver this lecture in memory of Dr. Elizabeth Quamina. I can say I know her well and I recall with pleasure that it was she and David who entertained me royally when I visited Trinidad and Tobago for the first time in 1963. It does not seem so long ago! We met professionally on several occasions during the course of the years, but perhaps I got to know her best when her final illness was first diagnosed. She spent several weeks with us in our home in the United States as she underwent her initial therapy and we had various opportunities to speak of many things besides fools and kings. Among those things was the role of women in the modern world and she would, I am sure, agree with me wholeheartedly that the health of women and the factors that affect it are not a peculiarly woman’s issue, but they affect all of society—both men and women.

All of us must have heard at some time the adage that a woman’s work is never done, and many of us would have grown up really believing labor was a woman’s lot. Much of the symbolism around women’s most identifying experiences is related to labor. The time leading up to what is one of the most defining characteristics of womanhood—giving birth—is defined as labor. We speak of the stages of labor and, at least in my day, the place where women gave birth in institutions was called a “labor room.” In many institutions this is very much a place of isolation, and data from our perinatology center in Uruguay show that women are treated very badly at this stage, and in many cases are really left to labor alone and undergo much unnecessary pain and suffering. I have been accused of being over dramatic when I say that this is perhaps one of the more

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

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under-recognized aspects of violence against women, and it occurs at a time when they are at their most vulnerable.

But I am almost falling into the trap of relating women’s health only to their biological reproductive role and that would not do justice to the memory of Elizabeth Quamina. Tonight I wish to examine women’s health and their double burden from several perspectives. There is the traditional approach of examining the health aspects of women’s two work roles. Women carry the burden of domestic work when they assume responsibility for the care of the home and, in addition, contribute to the family income by performing paid work, or at least work that has economic returns attached to it. There is a less traditional aspect that has assumed much more importance over the past two or three decades. Here we examine the determinants of women’s health and try to distinguish those that derive from women’s biology, their sex, and those that are determined by gender-the social construct that identifies the different roles and behaviors of the two sexes unrelated to their biologies. Finally, I will discuss briefly how the health of women is not only important for themselves but has the double effect of impacting on and in some ways determining, the health of their children through fetal programming. I will draw on evidence from various parts of the world but wherever possible make reference to data and experiences from the Caribbean.

There are numerous data from many countries in the world on the hours women spend working, and in almost all, if not every case, women spend more time than men in activities that can be defined as work. There is the well known caricature of the meek woman slaving away at a multitude of chores while the male spends time socializing with fellow males and indulging in agreeable and pleasurable activities, having finished what he perceives as his formal work. I am sure that most of you have seen pictures or witnessed women having to fetch water from long distances or gather firewood in order to carry out the essential chores of cooking and cleaning for a family with the clear cultural acceptance that this kind of work was the normal role of women and perhaps children. The energy cost of fetching water can be very high in some places. In one study in Guatemala, it was found that women who lived in communities without ready access to water would expend up to 500 calories per day fetching it. One interesting aside was that the men did not consider this to be work.

I could play the amateur anthropologist and relate the difference in division of work to the era of the hunter-gatherers when the possession of greater physical strength predicated a certain role for the male, and it was less a matter of choice what women did. In rural societies of years ago here in the Caribbean, it was a
matter of economic necessity, in many cases, for women and men to work together to produce the crops that were often the major source of family income. But the need for the physical labor of women as a domestic necessity is becoming less as the major means of production shift from the predominantly agricultural domain in many, although not all, of our societies.

The world of today is moving steadily to depend on knowledge as a major factor for production. More and more it is becoming accepted that human capital which represents the skills, knowledge, and aptitudes that derive from education and the healthy state is indeed a dominant form of capital. Physical capital and land are assuming less importance in the modern world. But yet, even in this world of ideas when physical capacity is not the key determinant of production or productivity, we still find women being compensated at lower rates for identical work that is non physical. One may argue that societal norms change slowly and the perceived role of women as being less capable and therefore being remunerated less is nothing more than a hangover from the days when physical prowess was the criterion for reward. Of course another explanation is that the differentials represent nothing more and nothing less than another manifestation of the distribution of power and influence of men in our societies, and they clearly regard their labor as more valuable and to be remunerated at higher rates.

However, the tendency for more and more women to enter the world of remunerated work outside the home is increasing and merits much reflection. Female participation in the work force in the Caribbean is among the highest in the Americas. Data from UNDP show that 68% and 61% of Jamaican and Barbadian women work, and in Jamaica, female employment is some 82% of that for males. There is no doubt that more and more females are entering the labor force. There is, however, the unfortunate phenomenon that in many instances females participate in the jobs that pay less, and in some of our countries much of the work carried out by women is in the informal sector with connotations of insecurity and poor social protection. In many situations this entry of women into the labor market is seen as nothing different from the participation of the women in rural families of generations ago. There was the need for males and females to contribute to the economic necessities of a family that could not be satisfied through the labor of one person.

But I reflect sometimes on another aspect of this drive of women to work and indeed seek to enter spheres that were thought previously to be the domain of males. I have referred on many occasions to the concepts put forward by Hegel and amplified by Francis Fukuyama, who referred to the basic drive for humankind
to struggle to achieve. Hegel described the drive for recognition that motivates all persons, and Fukuyama points out that this is similar to what is described in Plato’s “Republic” as the thymotic part of the soul that drives all of us to compete, and according to Socrates is different from the desiring or reasoning parts of the soul. It is this drive to compete and acquire that is perhaps at the heart of the liberal, capitalist democratic movement that seems to be inexorably becoming the favored form of social organization. Persons strive to be better than other persons and the indicator of success is most often material goods.

There was a time when it was felt that women would satisfy that basic thymotic drive through the achievements of their families and their children. I have come to believe that that is naïve, and as long as the currency of success is in material things then it is to be expected that women will have the same drive as men and seek to compete as vigorously or viciously as men do. Part of the frustrations that may manifest themselves in the ill heath to which I will refer later may indeed be due to the inability to fulfill this drive or the lack of opportunity to try. I find it interesting to speculate on the extent to which women can balance these two drives that derive from their biological function and their very human thymotic desires. In my mind these are very much a part of their double burden that plays itself out in many ways pulated to their health.

Before I turn to the more obvious health consequences of this double burden, I wish to refer to recent work that may not find favor with those who see nothing but good things emanating from the entry of women into the more formal world of directly remunerated work. It has been postulated that the entry of women into the market has led to the disintegration of the family with severe social consequences. One author traced the spectacular rise of crime and violence in American society in the last half of the last century and found it to be contemporaneous with the massive entry of women into the labor market. During World War II, many women were called upon to do work they never previously dreamed of doing. The impressive factory production of war materials in the U.S. was in large part due to women who after the war, did not see themselves returning to the traditional domesticity. Traditional family structure and organization changed, there was less trust in the society, there was diminution of the social capital that derives from close family interaction with the development of considerable social pathology that has been described as the “Great Disruption.” Over the course of the past 50 years as the trend has continued, society as a whole has not found a way to adjust and it is left with a void in terms of family organization for which, in my view, both sexes have to share the responsibility. I have not been able to find any comparable analysis that accounts for the apparent recent decline in urban crime in the U.S. It
is dangerous to transfer the findings from North America to the Caribbean, but one cannot but be struck with the rise in criminal activity of all types here, and wait for the social analysis that can shed some light on possible causes and solutions.

Much of the above analysis is based on the concept of woman’s work within a nuclear family, but we know that this may not be the norm in much of the Caribbean where female-headed households have been with us for generations. Almost half of all Jamaican households are headed by females and this figure is above 20% in all Caribbean countries for which data are available. When Edith Clark referred to ‘My Mother who Fathered me’ in Jamaica, she included the concept of the female responsible for the economic and social wellbeing of the family. In this setting women truly carry the whole burden.

The health consequences of this double burden may be both mental and physical. It is not an artifact that this burden induces stress that manifests itself in many minor illnesses and a whole range of anxiety neuroses. Perhaps one of the consequences of this stress, or this difference between what women wish and what they have, is the appearance of endogenous depression. We estimate that some 24 million persons in Latin America and the Caribbean suffer from depression, and by far the majority of these are women. The years of productive life lost due to depression are almost twice as many in women compared with men. In the world as a whole, female depression rates are twice those seen for men, and this occurs in both developed and developing countries. I have placed depression here with the suggestion that it is a result of the stress and anomie that arise from women’s double burden of work, but I am very conscious that in this, as in other areas, there may be no single etiology, and there are many other possible reasons or theories put forward for the high depression rates among females. Given these high rates, I would have expected to see suicide more common in women, but except for China, suicide is much more frequent in men in the countries for which data are available.

The fact that many women work more and work longer hours must mean that they are more prone to the occupational injuries that go with the double burden. Given the tendency to work in lower paying jobs, and often times in the informal sector, means exposure to some specific injuries. For example, domestic burns and minor trauma are common occurrences.

Now let me deal with the illnesses that are derived from the double burden of their biology and gender distinction or discrimination. There are diseases that clearly only occur in women and are, therefore, derived from their biology. The cancers of the female reproductive tract are the obvious example, but as data
become disaggregated by sex, more and more, we see which diseases have differential prevalence rates. Cancer of the cervix is a major cause of mortality and morbidity. For women over the age of 35 years, the rates for Barbados and Jamaica are among the highest in the world. The rate of mortality from cancer of the cervix in Barbados in 1992 was eight times that for Canada. There will be, of course, the theories that these high rates in the Caribbean relate to the high infection rate with human papilloma virus and derive from having multiple partners. But the real tragedy lies in the fact that the disease is essentially preventable and curable if diagnosed early. One of the reasons given for the high mortality rate is the failure of women to have the diagnostic screening with Papanicolaou smears because of their reluctance to come to the services for their own problems. But a good part of the blame must lie with the inability of health services to deal with the screening needed and provide a rapid response to the treatment of suspicious lesions. The appearance of women in our clinics with invasive carcinoma of the cervix is an indictment of our health services.

Breast cancer is the most prevalent type of female cancer in the world as a whole and causes the most female cancer deaths in the Caribbean. I have been intrigued by data produced here some years ago which showed that breast cancer was related to increasing importation and consumption of fat. These data should be followed up.

Diabetes mellitus is the chronic disease that shows the most marked sex differential. Prevalence rates for diabetes in females are higher than for males in the Caribbean and the complications are a major burden to health services. There are clearly genetic factors involved, or at least as we shall discuss later, there are factors that occur in-utero that may affect the high prevalence rates for diabetes. The high and rising prevalence of obesity in females is recognized as a major causative factor.

Severe iron deficiency anemia is another manifestation of illness that is more prevalent in women and related primarily to their biology, as they obviously lose blood during menstruation and at delivery. The prevalence rates in the Caribbean are among the highest in the Americas and anemia is perhaps the most significant nutritional problem encountered here. In some countries, up to 50% of pregnant women are anemic, a situation that is only made worse by pregnancy and delivery. The problem is compounded by the fact that there are few, if any, programs that seek to correct the anemia in women who are not pregnant. This is another reflection of the unfriendliness of routine health services to women who make contact with them mainly for their reproductive functions.
Maternal mortality is among the other health problems that derive predominantly from women’s biology. What Shakespeare describes as “the pleasing punishment that women bear” sometimes ends in tragedy. The fact that a woman should die carrying out what is a basic physiological function is a blot on our services, but it does occur. Our data show rates that vary from a low of 5.5 per 100,000 live births in Canada to a high of 457 in Haiti. It is difficult to get good data on rates from the Caribbean because in many countries the numbers are so small, but we do know, however, that such research that has been done shows gross under reporting of maternal deaths. It is estimated that about 15% of all pregnancies in women in any part of the world do have some complications and the difference that results in maternal mortality is related to the efficiency of services and the involvement of the community. I cannot leave these female health problems without mentioning the occurrence of urinary tract infections that are such a cause of morbidity in women especially during their sexually active years.

I have described the above as being related to women’s biology, but in probably every case there is some element of gender discrimination in the occurrence or the management of the problem. Maternal mortality and morbidity is held to derive in part from the subordinate position of women in society and their relative inability to take the decisions that impact most directly on their lives. Similarly, anemia in women is said to be due in part to the fact that they distribute the iron rich foods preferentially to males. This has been stated so often that it has become standard dogma, but I know of no data to substantiate this in the Caribbean. There is no doubt of the gravity of the problem, but I am not sure that to attach a gender bias to it makes for any better understanding or solution. Women need more iron because, for biological reasons, they lose more.

This brings me to those health problems that are exclusively or predominantly determined by gender considerations. I have come to believe that violence against women is one of the most important of these problems, not only because of the actual trauma produced, but because the problem is so often ignored and under reported. Fortunately, Caribbean women are not subject to such extremes of violence such as the genital mutilation that still occurs in some African societies, but this is no cause for comfort. Most of the acts of violence against women are committed by their partners or at least by persons whom they know. It is fashionable to deal with violence against women solely in the context of the general increase in violence in the society as a whole, and there is no lack of evidence that violence of all forms is increasing. Aggression is a normal human trait but it does not always result in violence or injury. The translation of
aggression into acts of violence that result in injury is learned behavior and, therefore, can be unlearned. In the case of violence against women, other factors come into play. Much of the violence that is played out in domestic settings is a manifestation of the power relationships in the society where women are often regarded as the property of the male with whom they may or may not have a permanent relationship. Another tragic aspect of violence against women is that so much of it goes unreported, and perhaps only that which results in significant injury is brought to the attention of the criminal justice system. I was pleased to see the attention being paid to domestic violence here in Trinidad and Tobago. The Act passed here last year seeks to provide greater protection for victims of domestic violence. It notes the “alarming frequency and deadly consequences” of domestic violence. The consequences for women in Trinidad and Tobago are deadly indeed, as of the 23 murders resulting from domestic violence in 1998, 14 of the victims were female. I was impressed to see not only the Act, but some of the preventive measures being put in place, such as the domestic violence hotline.

HIV/AIDS was originally a disease of men who had sex with men but it has become very much a disease spread by heterosexual contact. You are all aware of the magnitude of the epidemic here in the Caribbean, with prevalence rates second only to those of Sub-Saharan Africa. It is clear that this spread into the heterosexual population has a gender component. There is no lack of information about the mode of spread and the effectiveness of condom use in preventing the infection, but there is good evidence that women’s inability to negotiate sex or the use of condoms during sex plays a part in the spread of the disease. There is nothing new about a call for women to negotiate sex or use sex as a tool for gaining socially desired ends. In the Greek play, Lysistrata, Aristophanes tells us of the refusal of women to have sex with their male partners unless they stopped fighting. Should I adduce this as a marvelous example of two important social phenomena which modern women might do well to note? First, there is the power of women as they band together in groups. I have come to believe that there is intrinsic merit and strength in sisterhood, and many of our programs that seek to reduce gender inequity, including that which manifests itself as domestic violence, rely on interaction with women’s groups. Second, there is the power of sex as a bargaining chip, which I am sure, still finds expression in many interactions between the sexes.

The unequal treatment of women in our health services is another manifestation of the double burden that women bear as a result of gender inequity. This is often disputed and most health authorities hold up their maternal and child health services as examples of the special treatment accorded to women. There is
no doubt of the advances made in maternal and child health services, but we often forget that the emphasis is predominantly on the child and less on the mother. As evidence of this, we note the great difference in the ratios between the developed and the developing countries for infant mortality compared with those for maternal mortality. Both outcomes depend on health services. Whereas the difference in infant mortality between the best and the worst countries in the Americas is about fifteen fold, that for maternal mortality is almost one hundred fold.

But the difference extends beyond the maternal and child health services. There is evidence that for similar conditions, women receive inferior treatment. It is now well established that women experience more episodes of illness than men and the caricature of the complaining woman with minor ailments that leads to the label of being neurotic is grossly unfair. We have supported research on the treatment of women in the health services for complaints that were unrelated to their reproductive role and show the extent to which their complaints are ignored or mistreated. It was also interesting to note that men thought of primary care services as something for women and babies. One of the interesting aspects of this kind of health services research to me is how seldom there is disaggregation of data by sex. The differential in treatment is not restricted to adults. In some cases mothers bring male children for treatment earlier than they do females. I have suspected that this is one of the reasons for the higher mortality among female children with acute respiratory infections.

In many of the economies of Latin America and the Caribbean, the informal sectors of the economy are assuming ever greater importance. There is a strong tradition of this in the Caribbean, where inter-island trading in the South and the famous “bend-down plazas” in Jamaica, are almost the peculiar province of women. This form of trading brings with it certain health hazards related to frequent travel and stress. But we have become more concerned that in many Latin American countries with social security systems that include health care, these women in the informal sector are virtually unprotected.

I view the recent increase in the consequences of smoking among females as another example of the burden women have to bear. Women are paying now for tobacco use over the past years with increased rates of cancer, heart disease, and other tobacco-related diseases. In Canada and the U.S., lung cancer that is caused mainly by tobacco use, has overtaken breast cancer as the leading cause of cancer mortality. There is no doubt that women are targeted specifically by the tobacco companies with seductive advertisements that portray smoking as a manifestation
of the reduction of gender inequality and as evidence of being liberated-whatever that means.

Women bear the burden of their own health and, unlike males, bear a great burden for their unborn children. The evidence is now clear that the nutritional state of the infant in-utero has a significant impact on the propensity to develop one or other of the chronic diseases. Diabetes and hypertension are more common in those infants who were malnourished in-utero. I always ask the question, however, if the conditions in-utero can predispose one to the development of chronic diseases in later life, the effect should theoretically be seen equally in both sexes, so why, for example, is diabetes commoner in women? The answer probably lies in the unequal distribution of other risk factors that may come into play earlier or later in life, and obesity is the one that comes most readily to mind.

Perhaps the most serious aspect of the burden women have to bear in many parts of the world is just that of survival. In many cultures that value male children much more highly than females there may even be female infanticide. Amartya Sen writes of the “100 million missing women.” He calculated from demographic and other data that over the last decade over one hundred million females have disappeared as a result of the excess female mortality that results from gender discrimination. Of course, I would like to think that this does not take place in the Caribbean.

Should women always be condemned to bear these double burdens? The answer is definitely no. The biological factors are immutable, but those that derive from the differential treatment of the two sexes are socially determined and therefore can be changed. I do not underestimate the difficulty of accomplishing such change but we can outline some of the steps that have to be taken. First is the appreciation of the phenomenon, and the medical world has to begin accepting that there is differential treatment of women. Society as a whole has to begin to appreciate that the sexes play different roles, but the accent is on different, without making a value judgment about the worth of one versus another. This, interestingly enough, involves mothers being even handed in the distribution of the family resources and instilling the respect for the value of different roles.

But societal change takes a very long time and there are very practical things that can be done more easily. I believe the most important actors in engendering change—and the double entendre is intentional—are women’s groups. Our Organization is involved in programs to reduce domestic violence in several countries in the Americas and while the first steps have been to identify what we
call the “critical path” women take when there is perceived violence, the most efficient actors in initiating change are women’s groups of all kinds. These may form around a variety of interests that include religion, commerce, social action, among others. Some have been instrumental in initiating legislation that addresses the issue of violence, others have been effective in offering support to their sisters who have suffered. Physicians also come into contact at early stages of domestic violence and often adopt the attitude that these domestic affairs are none of their business instead of counseling the victim and referring her to the centers or groups that may help. In most of our countries, it is the police that are the ones to deal with many incidents of domestic violence and they too often adopt the attitude that domestic violence is a matter to be sorted out between the two parties, especially since the victim in most cases is reluctant to press charges. I have already mentioned the legislative advances here.

Physicians also have a role in the many actions to be taken. For example, the organization of services should be such as to eliminate gender bias. They need to be taught that women indeed suffer more episodes of illness and learn how to treat the manifestations of stress that may arise from the double burden. We need to be much more aggressive in addressing the problem of obesity which is assuming epidemic proportions in all countries, and the Caribbean is no exception. The vacuous recommendation to “diet” that is given by physicians is often a reflection of ignorance about nutritional needs at various stages. Several years ago, the Caribbean Food and Nutrition Institute (CFNI) began a program in schools that was entitled “Eat right, Exercise right and Weigh right” to inculcate into children some of the basic principles needed for nutritional health. It is at this early age that the programs against obesity must start. I accept that it is difficult to battle the kinds of propaganda that encourages fast foods and the parental attitudes that often make such foods glamorous and sometimes a reward for good behavior of one or other kind. I also know the attraction of television that draws children away from physical activity. But I believe that there can be national effort to counteract these adverse influences.

But above all we need more and better information to allow us to demonstrate that we often hide our discrimination against women under a cloak of ignorance which is not excusable simply because it is not based on malevolence. Customs die hard. We have to promote the idea that diversity is good and is a strength for any society. Those of us who work in health have to keep always before us the possibility that we may be unconsciously contributing to the negation of the value of such diversity when we condone gender discrimination in any form.
However, I believe Elizabeth would not have liked me to end on a negative note. She might have pointed out that she did not have a double burden – that she became all that she could be and found in a domestic arrangement the kind of support that did allow her to realize her potential and be fulfilled. I would agree and perhaps the advocacy of precept is perhaps the most effective way of making the case after all.