

Gender Inequality in Health and Work:

The Case of Latin America
and the Caribbean

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Contents

Introduction	1
The Context	2
Occupational Health Hazards Faced by Women	12
The Health Benefits of Women's Paid Work	20
Discussion and Policy Implications	25
Conclusion	30
References	32

Foreword

During the second half of the Twentieth Century, employment in Latin America and the Caribbean underwent two momentous changes: the massive entry of women into the work force and the growth of the informal economy. Like other aspects of development, these two changes brought with them advantages and disadvantages. Among the benefits are expanded job opportunities for women, which improve their self-esteem, raise family incomes, and contributed to a partial reduction in gender-based discrimination. The disadvantages include the additional burden that working outside the home has meant for women, new health risks, and the loss of social protection associated with employment in the informal economy.

This paper examines these topics from the vantage point of *socially inclusive development*, and makes several short-term policy recommendations that are designed to reduce gender inequality in health and employment. Also, it arrives at a number of conclusions on ethnic- and income-based inequality.

We hope that this study will contribute to an understanding of the subject and to the Bank's policy dialogue with the borrowing member countries. The ultimate aim is to reduce gender inequality and any other inequalities that stand in the way of development and constitute a significant source of social injustice.

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Introduction

In Latin America and the Caribbean (LAC), more women than men have entered the labor force since the 1980s. By choice or need, women have assumed increasingly indispensable roles in the economy and their contribution to family income has enabled poor families to cope with financial hardship.

Although it has its own peculiarities, the region replicates a worldwide trend apparent during the last decades of the twentieth century; that is, the rapid incorporation of women into paid employment. The feminization of the workforce is a consequence of, first, reduced fertility and more female schooling which have expanded the supply of women workers and, second, the globalization of labor markets which has increased the demand for female labor. In addition, a growing social acceptance of women in the workplace has helped reduce cultural barriers against their participation in economic activities. As a result, working-age women have allocated more time to market work, as a result, they have had to juggle their responsibilities and the time allocated to childcare, housework and leisure activities.

What are the implications of these trends for women's health status? First, paid work can have a deleterious effect on health insofar as it exposes women to health hazards in the working environment. This is particularly an issue in developing regions of the world, where occupational health and safety (OSH) concepts and regulations are not widely adopted or enforced.

In addition, the juggling of responsibilities in societies where gender roles are rigid and governments provide few or no childcare services, often increases women's total work time at the expense of "leisure" (which includes time for personal care and sleep), with potential negative effects on their health status.

Second, however, balancing these potential health risks, are the positive effects of paid work on women's health. These effects are mediated by increases in self-esteem, social contacts and support, as well as by increases in personal and household income, which enables purchases of health products and services.

Lastly, in the case of women, because of their childbearing and childrearing roles, paid work can also have intergenerational effects – affecting not only their health, but also that of their children.

This paper reviews the existing empirical evidence to track the effects of women's paid work on their own and their children's health in Latin America. It begins with a brief description of the changing nature of labor markets and women's labor force participation. It then explores women's occupational health risks and mentions some initiatives that seek to respond to these risks. The next part of the report looks at the existing evidence for the positive effects of paid work on women's health and child health. The paper ends with policy recommendations.

The Context

CHANGING LABOR MARKETS

Globalization, or the global integration of production and trade, has had marked effects on labor markets around the world. In Latin America, there has been substantial growth of the number of workers employed in the service sector, including financial activities, at the expense of those working in the agricultural sector. Technological advances, global competition and labor market deregulation have changed employment processes and conditions. The latter have moved away from formal sector, 9-to-5 jobs with labor contracts, tenure and employment benefits, and toward more flexible, less permanent arrangements for employers, including subcontracting, part-time and short-term contracts with few employment benefits. Informal employment increased in Latin America and the Caribbean from an already high proportion of 44.6 percent of all employment in 1990, to 47.9 percent in 1998 (Lora and Marquez, 1998).

Both the growth of the service sector and the “informalization” of work conditions have increased the demand for female labor. Women are disproportionately employed in service jobs and in labor markets that continue to be segmented by sex. They are also willing to work under more precarious, less-than-ideal employment contract conditions (Beneria, 2001; Standing, 1999). The latter has also increased workers’ exposures to occupational hazards. Informal sector work, by definition, takes place outside formal legal standards and regulation and, therefore, outside monitoring by the government or by constituted workers associations. Informal sector workers generally fall outside the protection of labor unions, which traditionally have advocated for healthier working conditions through collective action. Informal sector employment grew in the region from 44.6 percent in 1990 to 47.9 percent in 1998. In addition, labor unions in Latin America and the Caribbean are comparatively weak and largely male-

dominated member organizations, and mostly fail to represent the interests of female workers.

The labor market in LAC is also characterized by a high level of unemployment and underemployment, along with a lack of unemployment and social security insurance for informal sector workers. Many of the region’s workers, therefore, may be willing to tolerate hazardous working conditions rather than losing their main source of income (Giuffrida et al., 2001b).

THE FEMINIZATION OF THE WORKFORCE

The last decades have witnessed a progressive feminization of the workforce in Latin America. The presence of women in the labor market is still below that of industrial economies, but the upward trend is consistent and unambiguous. Table 1 shows a rise in the proportion of women who were economically active in the period 1990 to 1995/97 in a majority of the 26 countries listed in the table. During this time interval, women’s labor force participation increased by about 5 percentage points and the gap between male and female economic activity rates in LAC as a whole decreased by 4 percentage points. Still, on average, women’s economic activity rate is about 10 percentage points lower in Latin America than in Canada, the United States and Great Britain. Women in the region represent 38 percent of the total labor force, while in more developed countries this share is closer to 45 percent.

If globalization has increased the demand for female labor, secular declines in fertility and infant mortality rates, as well as women’s educational gains, have had a similar effect on the supply side. The region’s demographic transition, which is characterized by declining fertility

Table 1 Indicator of Economic Activity of Women in LAC (%)

Country	Adult (15+) economic activity rate				Women in adult labor force 1995/1997
	1990		1995/1997		
	Women	Men	Women	Men	
Argentina ^(3b)	29	79	41	76	37
Bahamas ⁽⁴⁾	65	81	67	81	47
Barbados ⁽⁴⁾	60	76	62	73	49
Belize ⁽²⁾	24	86	34	79	31
Bolivia ^{(a) (2)}	46	84	56	74	46
Brazil ^{(b) (3b)}	44	85	51	82	40
Chile ^(3b)	32	75	35	75	33
Colombia ^{(b) (3b)}	46	80	52	78	44
Costa Rica ^{(b) (3a)}	33	83	36	81	32
Dominican Republic ^(3a)	34	86	38	86	30
Ecuador ^{(a) (3a)}	28	85	49	81	39
El Salvador ^(3a)	51	80	41	79	37
Guatemala ⁽²⁾	28	90	32	88	27
Guyana ⁽²⁾	37	84	40	85	33
Haiti ⁽²⁾	58	82	57	82	43
Honduras ^{(b) (2)}	34	87	41	88	34
Jamaica ^(3b)	62	77	69	81	46
Mexico ^(3a)	34	84	39	84	34
Nicaragua ⁽²⁾	40	87	44	86	35
Panama ^{(b) (3b)}	39	79	43	80	36
Paraguay ⁽²⁾	51	83	35	87	29
Peru ^{(a) (3a)}	29	80	55	78	44
Suriname ^{(c) (2)}	30	74	33	64	35
Trinidad and Tobago ⁽⁴⁾	38	74	47	74	39
Uruguay ^{(a) (4)}	44	75	47	74	43
Venezuela ^(3a)	38	82	41	81	33
LAC	41	81	46	80	38
Stage 2	39	84	41	81	35
Stage 3a	35	83	43	81	36
Stage 3b	42	79	49	79	39
Stage 4	52	77	56	76	45
Canada	59	76	57	73	45
United States	53	75	54	72	44
United Kingdom	58	76	60	75	46

Source: UN (2000).

a: The data relate to the urban survey conducted in the main departmental capitals of the country.

b: Data are estimated to correspond to standard age groups.

c: The data relate to the districts of Wanica and Paramaribo.

2: stage 2

3a: stage 3a

3b: stage: 3b

4: stage 4

and relatively low mortality rates, has affected the supply of women workers and in part explains the rise in women's labor force participation (Duryea and Székely, 2000).

Following the classification suggested by Duryea and Székely, we have grouped LAC countries according to their stage of demographic transition. Belize, Bolivia, Guatemala, Guyana, Haiti, Honduras, Nicaragua, Paraguay and Suriname are in the second stage, which is characterized by high fertility and declining mortality rates, particularly among infants. Most countries are in the third stage, with declining fertility and low mortality rates. We distinguish between "younger" countries in stage 3a (Costa Rica, Dominican Republic, Ecuador, El Salvador, Mexico, Peru and Venezuela) and "older" countries in stage 3b (Brazil, Chile, Colombia, Jamaica, and Panama). Finally, Bahamas, Barbados, Trinidad and Tobago, and Uruguay are in the fourth stage, where fertility and mortality are both low, and population growth is stabilize.¹ Table 1 shows a clear relationship between the stage of demographic transition and the gender composition of the labor force. The proportion of women in the workforce is lower in countries at the earlier stages of demographic transition. On the other hand, countries in the last stage of demographic transition show female labor force participation rates that are comparable with those of more developed countries.

The transition toward lower fertility and infant mortality rates reduces the time women need to spend in household (versus market) production, bearing and caring for children. Household income mediates women's time allocation between market and non-market work. Children, particularly the young, can be cared by the mother, by relatives or friends (older daughters, the elderly, kin or friends external to the household who may provide this type of support on a reciprocal basis), or by paid care-givers. While the availability of informal child care providers

¹ No country in the region is at first stage of demographic transition (i.e. with high fertility and high mortality rates).

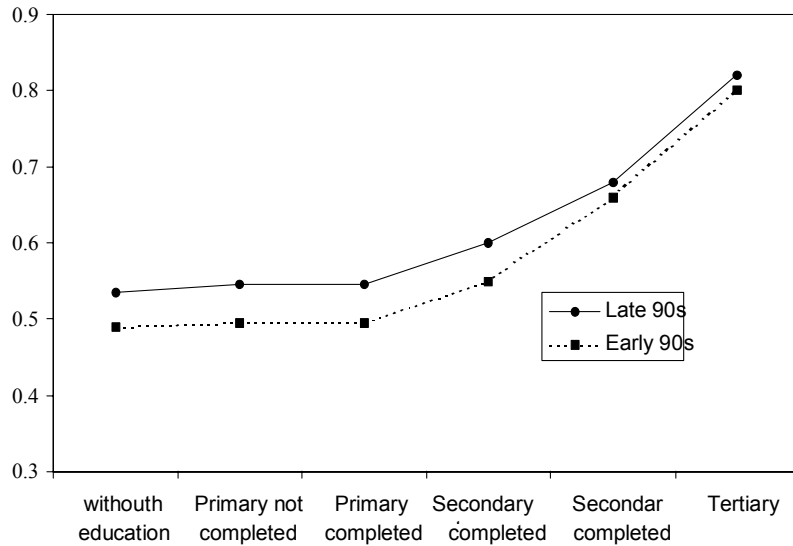
other than the mother depends on the size and composition of the household, in countries where the government does not subsidize child-care, the use of daycare centers and paid child-care services are options only available to middle- and upper-income households.

The second key determinant of women's labor supply is the level and distribution of education. Duryea and Székely (2000) used an instrumental variable technique to decompose the determinants of female market participation in Latin America based on a panel of data from 22 countries over the 1980-1996 period.² This study showed that, while participation rates in Latin America increased by approximately 35 percent during the 1980s, approximately 10 percentage points were associated with the reduction in fertility and another 3 percentage points were linked to the gains in female schooling.

The region has shown impressive gains in female education. Gender differences in the average years of education, historically favoring men, disappeared with the cohorts born in 1970 and nowadays favor women. And women with more schooling participate more in the labor market, as Figure 1 shows for women aged 30-45. This figure, however, also shows that in the late 1990s female economic activity rates increased because the participation rate of women with a lower level of education was higher than at the beginning of the decade (Duryea et al., 2001). It is quite possible that these women increased their participation rates to help their families weather economic crises, as they had done when faced with economic contraction in prior decades—in the seventies as well as in the early eighties (Leslie et al., 1988).

² Female participation rates and fertility are highly correlated, but the direction of the causality is difficult to disentangle. In fact, one can argue that women tend to have fewer children to be able to enter the labor market. Thus, instrumental variable technique is required to assess the magnitude of the structural relationship between the two variables.

**Figure 1 Economically Active Women by Educational Level
(age 30-45)**



Source: Duryea et al. (2001). Averages of 18 household surveys.

In fact, recent evidence from Colombia supports this assertion. The economic downturns of the end of the decade instigated the entry of females into the labor market. Changes in occupational categories were studied during the 1997-99 crisis in Colombia. In contrast to young women in upper income quintiles with greater resources to cope with the economic shock, young women in the poorest quintile of the income distribution dropped out of school and entered the workforce, only to be unable to find a job. Fifteen- to eighteen-year olds reduced school attendance from 55 percent to 50 percent, while reports of unemployment in this group increased by 5 percent. These changes were even more dramatic for 19- to 21-year old females, whose school attendance decreased by 7 percentage points while unemployment increased by almost 11 points (Székely et al., 2000).

The feminization of the region's workforce, therefore, can be explained by a number of converging trends. On the demand side, globalization, with its preference for service sector and

manufacturing work as well as informal job arrangements, has expanded opportunities for female labor, most often, however, in jobs that pay lower wages than men's jobs, as is documented below. On the supply side, the reduction in fertility and mortality rates as well as the gains in women's schooling have increased the supply of women workers. Economic crises, another result of globalization, seem to have further buttressed this supply by drawing low-income women into the labor force in order to help families weather these crises. Next we examine which jobs women get when they join the labor force.

SEGREGATED OCCUPATIONS

While more women work, Latin American women are still segregated into specific job categories. In fact, Latin American women face a labor market that is more segmented by gender than in other parts of the world (Horton, 1999).

Table 2 Distribution of Labor Force by Economic Activities in LAC (%)

Country	Sex	A	B	C	D	E	F	G	H	I	J
Argentina ⁽¹⁾	Men	1.11	0.36	19.12	0.94	13.56	23.80	11.12	9.37	19.49	1.13
	Women	0.22	0.03	9.71	0.27	0.40	21.53	2.25	9.31	37.76	18.53
Brazil	Men	25.99	1.68 ⁽²⁾	13.97	-	11.31	13.33	5.91	1.99	25.82	-
	Women	19.32	0.54	8.39	-	0.70	13.66	1.03	1.69	54.67	-
Chile ⁽³⁾	Men	19.37	2.11	16.31	0.94	11.99	15.04	10.31	6.96	16.97	-
	Women	4.55	0.29	12.57	0.20	0.77	25.47	3.27	8.48	44.40	-
Colombia ⁽¹⁾	Men	1.62	0.41	18.36	0.85	7.82	25.13	12.37	9.78	23.35	0.32
	Women	0.52	0.10	18.52	0.28	1.01	27.74	2.21	7.73	41.69	0.19
Costa Rica ⁽³⁾	Men	26.90	0.22	15.16	1.35	9.28	17.79	7.61	1.90	18.30	1.51
	Women	4.72	0.05	16.80	0.34	0.25	26.66	1.83	2.17	28.32	18.88
Ecuador ⁽¹⁾	Men	10.54	0.54	15.81	0.67	9.42	25.51	9.44	5.88	22.14	0.05
	Women	2.30	0.02	12.95	0.21	0.40	37.59	1.44	4.13	40.85	0.12
El Salvador	Men	37.32	0.13	14.84	0.57	8.76	16.97	6.30	3.69	11.42	-
	Women	6.34	0.02	24.49	0.10	0.37	37.14	0.59	3.73	27.21	-
Honduras ⁽³⁾	Men	49.76	0.15	12.24	0.45	7.76	12.39	3.52	2.12	11.60	-
	Women	8.90	0.19	23.78	0.20	0.43	37.10	0.50	2.27	26.64	-
Jamaica ⁽³⁾	Men	28.99	0.81	10.06	0.72	13.69	13.94	8.42	4.97	18.24	0.16
	Women	9.89	0.17	7.26	0.42	0.65	31.75	2.82	7.59	39.34	0.10
Mexico	Men	26.91	0.47	17.95	0.65	8.12	16.62	5.94	3.50	18.64	1.20
	Women	9.21	0.08	20.50	0.19	0.32	31.19	1.46	4.21	20.85	11.99
Panama	Men	25.31	0.14	10.06	0.91	11.04	20.65	9.75	5.62	15.36	1.15
	Women	1.91	0.01	9.21	0.35	0.79	27.96	3.35	8.50	33.61	14.31
Peru ⁽¹⁾	Men	7.89	0.71	13.96	0.88	9.30	26.82	14.29	7.86	18.00	0.28
	Women	3.29	0.09	10.58	0.19	0.25	45.81	1.53	5.29	22.34	10.60
Trinidad & Tobago	Men	10.83	5.24	12.18	1.67	17.64	12.57	9.59	6.22	23.96	0.07
	Women	3.39	1.44	8.23	0.69	2.82	25.83	3.57	11.51	42.52	0.06
Uruguay ⁽⁴⁾	Men	5.80	0.22	17.99	1.15	14.22	19.34	8.67	6.43	26.17	-
	Women	1.24	-	12.76	0.65	0.48	20.44	2.68	6.92	54.82	-
Venezuela ⁽³⁾	Men	15.64	1.47	14.49	1.02	12.25	20.74	8.95	5.15	20.04	0.25
	Women	1.46	0.37	11.73	0.38	0.93	30.15	1.64	6.54	46.54	0.26

Calculations based on data from ILO (1999a).

1: urban agglomerations;

2: include electricity, gas, water and sanitary services.

3: Civilian labor force employed.

4: include professional army; exclude compulsory military service

A: Agriculture, hunting, forestry and fishing.

B: Mining and quarrying.

C: Manufacturing.

D: Electricity, gas and water.

E: Construction.

F: Wholesale and retail trade and restaurants and hotels.

G: Transport, storage and communication.

H: Financing, insurance, real estate and business services.

I: Community, social and personal services.

J: Activities not adequately defined.

Table 3 New Jobs by Economic Activities in LAC. 1990-1998 (%)

Economic activity	Men	Women
Manufacturing	14	3
Wholesale and retail trade	24	34
Transport, communication and finance	25	3
Services	37	60

Source: ILO (1999b)

Table 2 shows this segmentation by gender in economic activities in various countries.³ A labor market segmented by gender has implications both for women's economic opportunities and for occupational health and safety because segregated markets restrict mobility and opportunity. With regard to economic opportunities, women are effectively barred from generally better paid male-dominated occupations. With regard to OSH, since occupational health risks are not distributed proportionally across the genders, the gains made by predominantly male labor unions will likely leave the occupational health and safety concerns of women workers unaddressed. Women will need to join workers' unions or will need to form their own. Anecdotal evidence suggests that women are becoming somewhat more visible in the regional union movement, although as they seek broader representation, they may encounter the same barriers that women trying to unionize historically faced in the United States and other industrial countries.

The female workforce is overrepresented in the services sector (wholesale and retail trade, restaurants and hotels; community, social and personal services) and underrepresented in agriculture, and this employment structure has changed relatively little since 1970. Much of the growth in women's employment in the 1990-1998 pe-

riod, as Table 3 shows, took place in the service sector, which accounted for 60 percent of new jobs created. Wholesale and retail trade made up another 34 percent of new jobs, while manufacturing, transport, communication and finance represented only 6 percent of the new jobs for women. On the other hand, new jobs for men were more equally distributed among the economic activities considered.

According to official estimates, the female workforce represents around 20 percent of the economically active population in the agricultural sector. It is important to underline, however, that the female share of the counted agricultural labor force, in Latin America as elsewhere in the developing world, is subject to substantial underestimation. More accurate estimates produced by the *Instituto Interamericano de Cooperación para la Agricultura* (Chiriboga et al., 1995; Grynspan, 1999) show that women make up at least 37 percent of the agricultural labor force in the region. They work as unpaid workers in family farms as well as seasonal wage laborers in commercial agriculture; they are involved in small-scale agricultural processing and they sell agricultural products in local markets. This means that at least 7 million women are invisible in the official counts and that the occupational health risks of women in this sector are likely to be grossly underestimated.

Women's share in manufacturing is affected by the presence of the *maquila*, the export oriented manufacturers that are set up off-shore to take

³ Based on the International Standard Industrial Classification of all Economic Activities (ISIC-Rev.2, 1968).

advantage of the reduced labor costs. In many countries (e.g. Argentina, Brazil, Chile) manufacturing employment is largely male. In addition, the average proportion of women in the manufacturing has declined in the nineties. However, in countries like El Salvador, Mexico and the Dominican Republic, where *maquila* operations are important, the share of female workers in manufacturing is large (over 60% of the workforce) and has expanded. Globalization has given increased visibility to *maquila* operations and their health risks.

THE QUALITY OF FEMALE EMPLOYMENT

What is the quality of the largely segregated jobs women get? Women are disproportionately represented in low-paid employment and underrepresented as administrators and managers, although for some this situation has improved in the last decades (Gammage and Schmitt, 2001). In 1999, 50 percent of all women's jobs were in the informal sector, many of them in domestic service, which is the segment of the informal sector with the lowest levels of remuneration and social protection. This category of female employment increased by 1.3 percent during the 1990s (see Table 4).

Women's unemployment rates tend to be higher than those of men (see Table 5). The recent economic recessions linked to global and domestic financial crises have led to a disproportionate increase in the level of female unemployment, which grew from 6.1% in 1990 to 11.2% in 1998. There is also evidence that discrimination against women tends to increase as unemployment levels go up. Such discrimination is rationalized on the grounds that employing women pushes up the male unemployment rate, and that men need jobs more than women (Lim, 1996). The problem of women's unemployment tends to be especially serious at both ends of the age range (i.e., for young, first-time workers and for older women). Female unemployment rates are higher than male rates at all levels of house

hold income and education, but the highest rate (and gender gap) is observed among the poor, who experienced a 19.2 percent unemployment rate in 1998. As a result, approximately 1 out of every 5 poor women is unemployed even if she is actively seeking a job.

REDUCING WAGE DIFFERENTIALS BY GENDER

Women's wages, relative to men's, have been rising slowly but steadily for the last two decades. Although there is still a gender gap in wages, by the late 1990s, women in Latin America earned wages that compare quite favorably to the wages earned by men. Of the 15 countries with available data, the wage ratio falls below 80 percent (of male wages) only for two countries (Honduras and Guatemala). In two others (Colombia and Costa Rica), by the end of the decade the wage gap had reversed in favor of women (Duryea et al., 2001). These advances have not, however, benefited all women equally. As a result, while the wage gap between the sexes has narrowed, there is evidence that the wage gap *among* women has grown (Buvinic, 2001); that is, that poor women have been left behind. A majority of women work for low wages because of economic need in informal sector occupations where they have no social security coverage and are exposed to occupational health hazards.

Evidence from some labor force surveys that more reliably record informal sector work, shows, for instance, that women earn, on average, 25 percent less than men in the formal sector but 48 percent less in the informal sector. Within the informal sector, the largest gender inequality is observed among self-employed workers. Self-employed men earn about 39 percent less than those employed in the formal sector; self-employed women earn less than 70 percent of male wages. Domestic workers, which account for 15.8 percent of all women workers in Latin America (ILO, 1999b), only earn 23 percent of the salary of the average male in the formal sector.

Table 4 Structure of Urban Employment in LAC. 1990-1999

	Women					Men				
	Formal	Informal				Formal	Informal			
	total	total	self em- ployed	domestic service	small business	total	total	self em- ployed	domestic service	small business
Latin America										
1990	52.6	47.4	23.2	13.8	10.4	60.6	39.4	21.6	0.5	17.3
1999	50.1	49.9	23.4	15.1	11.4	56.1	43.9	24.3	0.8	18.8
Argentina										
1991	44.5	55.5	26.5	14.3	14.7	50.1	49.9	28.2	0.5	21.2
1998	48.6	51.4	20.4	15.8	15.2	52.0	48.0	24.1	0.3	23.6
Brazil										
1990	52.4	47.6	21.3	16.7	9.6	63.9	36.1	19.6	0.5	16.0
1999	48.3	51.7	20.7	20.9	10.1	56.3	43.7	26.4	0.9	16.4
Chile										
1990	54.1	45.9	20.1	14.7	11.1	66.5	33.5	21.3	0.2	12.0
1998	55.2	44.8	17.4	13.1	14.3	67.1	32.9	19.2	0.1	13.6
Colombia										
1990	53.5	46.5	26.3	5.0	15.2	55.0	45.0	22.6	0.1	22.3
1998	51.2	48.8	27.7	4.7	16.4	50.7	49.3	28.4	0.2	20.7
Costa Rica										
1990	52.5	47.5	18.6	15.8	13.1	62.3	37.7	19.1	0.3	18.3
1999	47.5	52.5	19.6	16.6	16.3	56.8	43.2	17.7	0.6	24.9
Ecuador										
1990	37.9	62.1	39.9	12.1	10.1	48.3	51.7	32.6	0.7	18.4
1998	35.9	64.1	46.7	9.4	8.0	45.5	54.5	28.9	1.0	24.6
Honduras										
1990	28.0	72.0	50.5	14.6	6.9	54.9	45.1	25.7	0.5	18.9
1999	32.4	67.6	49.8	9.9	7.9	46.8	53.2	28.6	0.7	23.9
Mexico										
1990	60.1	39.9	18.7	12.0	9.2	62.4	37.6	19.1	0.7	17.8
1999	58.8	41.2	19.2	11.4	10.6	60.4	39.6	17.8	1.2	20.6
Panama										
1991	61.9	38.1	14.0	17.8	6.3	65.5	34.5	23.8	1.0	9.7
1999	57.8	42.2	19.9	14.6	7.7	63.3	36.7	24.4	1.2	11.1
Peru										
1991	37.2	62.8	40.4	11.6	10.8	53.6	46.4	28.9	0.6	16.9
1998	35.4	64.6	38.7	11.9	14.0	54.7	45.3	23.8	0.5	21.0
Uruguay										
1990	53.5	46.5	18.5	16.2	11.8	66.2	33.8	18.6	0.2	15.0
1999	52.1	47.9	19.8	17.0	11.1	60.7	39.3	24.5	0.2	14.6
Venezuela										
1990	60.7	39.3	22.8	10.4	6.1	61.7	38.3	22.0	0.4	15.9
1999	48.6	51.4	36.6	5.9	8.9	52.4	47.6	29.6	0.2	17.8

Source: ILO (2000).

Table 5. Unemployment Rates by Household Earnings and Years of Studies in LAC. 1990-98 (%)

	Household earnings			Years of studies				Total
	Low	Medium	High	0-5	6-9	10-12	13 or more	
1990								
Women	11.8	4.7	2.2	4.4	7.6	6.9	4.1	6.1
Men	9.3	3.6	1.5	4.7	5.8	5.1	2.7	5.1
Difference	2.5	1.1	0.7	-0.3	1.8	1.8	1.4	1.0
1998								
Women	19.2	8.8	4.5	9.8	13.9	11.7	6.7	11.2
Men	13.0	5.5	2.9	8.1	8.9	7.3	4.6	7.6
Difference	6.2	3.3	1.6	1.7	5.0	4.4	2.1	3.6

Source: ILO (1999b)

WOMEN LEFT BEHIND

Social and economic indicators desegregated by gender as well as ethnicity or race shows that among the poor, indigenous women, women of African descent, and women heads of household with young children exhibit the lowest levels of well-being. For instance, indigenous girls in Guatemala are the least likely to attend school; indigenous women in Bolivia and Guatemala are most likely to work in informal occupations and have the lowest levels of returns to the same schooling when compared to non-indigenous women (Duryea et al., 2001). In 9 out of 13 countries studied, female-headed families, especially those with younger children, are more numerous in the lowest income (destitute) category (ECLAC, 1997). Female heads of household are more likely to be employed than other women, and their low earnings help explain the link between female-headed households and poverty (Buvinic and Gupta, 1997). In Brazil, women of African descent are disproportionately represented among poor female heads of household with young children (Barros et al., 1997). A study of the situation in Chile shows that a poor households headed by a woman did not enjoy the benefits of fast economic growth between 1987 and 1994. This group was more likely to be poor than its male counterparts and they also suffered the highest unemployment rates (Anríquez and Buvinic, 1997).

Health measures compound concerns about the well-being of poor women. As with economic indicators, health indicators desegregated by income show widening disparities between better-off and poor women. In absolute terms, poor women are most vulnerable. In six countries studied, females in the bottom 20 percent of the income distribution report the highest burden of health problems relative to both males and females in other income quintiles. And although a greater proportion of these women have a health problem, they are the least likely to seek treatment. Moreover, inequality is evident in this group: at the same levels of need, poor women do not receive similar levels of care (Henderson et al. 2000) Further, poorer women spend more on health care as a percentage of their income and are least likely to be covered by health insurance.

POOR WOMEN AT HIGH RISK

As the prior sections have shown, while the impact of paid work on health (both positive and negative) is a pertinent question for the majority of working women in the region's workforce, it becomes critical for poor women. The latter have increased their labor force participation rate in recent years very likely as a result of need (although many cannot find work), they

face higher health risks (both occupational and general) than better-off women and earn very low wages. Women's wages, when they are adequate, are positively related to their own as well as to their children's health. When wages are too

low, the opposite effect may be true—work, in combination with other factors transmitting disadvantage, may lead to stagnation or deterioration in women's health and that of their children.

Occupational Health Hazards Faced by Women

GENDER DIFFERENCES

Quantitative information on occupational hazards in LAC is scarce and presents serious limitations. Official statistics, derived from disability compensation systems are available only for the relatively small proportion of the workforce who work in the formal sector and receive compensation. However, even if workers are covered by a reporting system, the poor identification of occupational diseases and the legal and bureaucratic features of the systems raise questions about the validity and accuracy of the estimates. Giuffrida et al. (2001b) applied the rates of the population covered by reporting systems to the whole workforce and estimated that around 27,000 fatal occupational accidents occurred in the region in 1998, which represents 0.135 fatal accidents per 1,000 workers. Accounting for

The figures on work accidents among workers affiliated to the *Instituto Mexicano del Seguro Social* (IMSS) in 1999, which represent about one third of all the workers in that country, reveal that men have higher rates of work-related occupational accidents and illness at all age groups (see Table 7).⁴ Similarly, Giuffrida et al. (2001a), analyzing data from a 1996 Mexican household survey, found that, after controlling for age and characteristics of the work, women were less likely than men to report work-related impairment.

Women and men are exposed to different types of work hazards, since they mostly work in different occupations (remember that the region exhibits the highest degree of occupational segregation by gender). Table 8 reports the estimates of work-related impairment in Mexico

Table 6. Estimated Annual Occupational Fatalities in LAC in 1998

<i>Work-related accidents</i>	Estimates
Estimated number of fatal accidents	27,270 – 68,147
Fatality rate (per '1000 workers)	0.135 – 0.338
Fatal accidents reported in official statistics	7,443
Fatal accidents unreported	19,827 – 60,704
Non-fatal accidents with 3 or more days out of work (millions)	27 – 51

Sources: Giuffrida et al. (2001b).

underreporting and the likely higher exposure to occupational hazards in the informal sector, the estimate increases to 68,000 fatalities, representing 0.338 fatal accidents per 1,000 workers. The same study also estimated that between 27 and 51 million occupational accidents cause 3 or more days' absence from work (see Table 6).

Examination of existing statistics on compensated occupational injuries and illnesses reveal that women and men have distinctive patterns.

based on a national survey administered in 1996.

⁴ Examination of IMSS data from the 1995-99 period reveals that the number of occupational accidents reported by male workers diminished by more than 7%, while work-related accidents suffered by women increased by 12%. Considering rates, occupational accident among male workers decreased about 10 percentage points more than among women, suggesting that improvements in occupational safety were concentrated in occupations with a predominant male workforce.

Table 7 Number and Rates of Work-Related Accidents Among Workers Affiliated to the Social Security in Mexico 1999 –(by age group)

Age group	Number of accident			Rate per 1000 worker		
	Men	Women	Total	Men	Women	Total
Total	319,319	104,186	423,505	43.37	23.24	35.75
14 or less	149	58	207	19.53	8.14	14.03
15 - 19	28,952	9,062	38,014	38.65	13.02	26.31
20 - 24	66,042	18,928	84,970	45.35	16.83	32.92
25 - 29	63,470	18,337	81,807	46.58	22.31	37.45
30 - 34	47,307	15,653	62,960	44.54	27.55	38.62
35 - 39	36,607	14,596	51,203	43.76	34.08	40.48
40 - 44	26,791	11,575	38,366	42.86	37.10	40.95
45 - 49	19,583	7,940	27,523	43.51	38.60	41.97
50 - 54	13,784	4,751	18,535	42.87	36.80	41.13
55 - 59	9,600	2,198	11,798	42.05	26.30	37.83
60 - 64	4,265	728	4,993	37.81	17.47	32.32
65 - 69	1,528	214	1,742	26.51	8.77	21.23
70 - 74	599	65	664	18.32	4.08	13.66
75 and more	642	81	723	10.80	3.24	8.56

Source: IMSS (1999).

It shows that while men were more likely to report physical work-related impairments, women report higher proportions of mental or intellectual work-related impairments. In sum, women seem to face less physical risks at work than men, but more negative risks from the psychosocial work environment.

Women's illness and injury rates may be artificially lowered by technical factors because working women tend to spend less time at the workplace than their male counterparts. For example, the 1998 Nicaragua household survey showed that working women spent, on average, about one hour less than men at the workplace (see Table 9). Thus, female accident rates, which are usually calculated per worker rather than per hour worked, may appear lower for this reason.

Table 8 Work-Related Impairment in Mexico 1996

Type of impairment	Number			Proportion		
	Men	Women	Total	Men	Women	Total
Sight, hearing or speech	224,031	51,126	275,157	35.40	31.09	34.51
Movement, muscular-skeletal	368,994	56,461	425,455	58.30	34.34	53.36
Mental or intellectual	2,693	11,926	14,619	0.43	7.25	1.83
Other	37,170	44,921	82,091	5.87	27.32	10.30
Total	632,888	164,434	797,322	100.00	100.00	100.00

Source: authors' calculation based on the household survey *Encuesta Nacional de Empleo y Seguridad Social* (Mexico, 1996).

Table 9. Time Spent in Workplace and Housework by Nicaraguan Men and Women Aged 15 – 65 (hours)

Activity	All population		Working population	
	Men	Women	Men	Women
Work in family business	3.0	0.9	4.1	3.0
Paid work	3.0	1.2	4.1	4.0
Unpaid work	0.3	0.2	0.4	0.7
Total time spent in workplace	6.2	2.4	8.6	7.7
Domestic work (cooking, cleaning, etc)	1.4	4.6	1.1	2.7
Child and elderly care	0.2	1.1	0.1	0.7
Total time spent in housework	1.5	5.8	1.3	3.4
Total	7.8	8.2	9.9	11.1
Number of observations	2900	3099	2095	977

Source: authors' calculation based on the household survey *Encuesta Nacional de Hogares Sobre Medición de Vida* (Nicaragua, 1998).

Another element that may have important implications for epidemiological research is the difficulty in accounting for the existence of male-female task segregation. Women and men with the same job titles often perform different tasks, thus they may have different exposures to work related hazards (Messing et al., 1994). Moreover, factors associated with work-related accidents may differ by sex. Thus, when women and men are combined in the analysis of work-related accidents and sex is included in the analysis as an explanatory variable, relationships that are important for one sex may be confused or weakened when data from the other sex are included (Messing et al., 1998).⁵

⁵ Another factor that might artificially lower women's illness rates is the different exposure to occupational diseases that are more likely to go undetected (e.g. occupational cancers). However, the available data does not support this hypothesis. In the United States, about 5% of cancers in men are attributed to occupational exposures. For women, the percentage is estimated at no more than 1% (Harvard Center for Cancer Prevention, 1996). A study conducted in Spain estimated that the percentage of total cancer deaths attributed to occupational exposure was 6% in men, and 0.9% in women (González and Agudo, 1999).

When comparisons are made within the same industry, the results of studies comparing gender exposure to occupational hazards are variable. Sometimes women report more accidents than men, sometimes fewer. Looking at the examples from the LAC region, a study documenting the occupational health problems in a sample of 497 workers of the maquiladora industry in Nogales (Sonora, Mexico) found that women workers had a greater probability of suffering work-related diseases and sickness than male workers (Balcazar et al., 1995). Another study that looked at the prevalence of byssinosis—an occupational lung disease—among workers in a cotton mill in Managua, found that female workers had a much higher prevalence than male workers (Velazquez et al. 1991). This result was attributed to different exposure between sexes in both workplace and non-workplace setting (e.g. household wood stove smoke). Female health care workers showed a higher prevalence rate of tuberculosis than their male counterparts in a tertiary care center in Mexico City (Ostrosky-Zeichner et al., 2000). The prevalence of tuberculosis was particularly high among nurses, a job with a typically high concentration of female workers, thus, gender differences were attributed to job segregation in the workplace.

To conclude, it is difficult to compare occupational accident rates between male and female

workers because of their very different working conditions. It is, nevertheless, convenient to use accident rates as an indicator for occupational health problems, but women's specific situation in the workplace must be taken into account.

REPRODUCTIVE HEALTH

The most obvious difference between men and women is in their reproductive system. Various researchers have shown that during pregnancy, women's respiration and metabolism are more active and health hazards from exposure to chemicals in the workplace increase (Mattison, 1999). Moreover, exposure to some types of occupational hazards may produce negative consequences on the fetus and offspring. For example, it has been shown that exposure to chemicals such as pesticides may also affect the fetus (Waliszewski et al. 2000). and links have been established between

cides and higher c genital malformatio

Ergonomic hazards standing or exertion associated with in low birth weight a association between weight was found women who work their last pregnancy Pena et al., 1999). tween low birth w conditions, such as 50 hours, and prob study that analyze who gave birth in M (Cerón-Mireles et a

Maternity protectio comprehensive and to three months m full wages or most Table 10). Howev only to workers in t omy who are cov example, under Me entitled to 12 weel receive their full

which are paid by the IMSS. However, to be eligible for the IMSS-funded maternity leave wage subsidy, workers must have contributed to the IMSS fund for thirty weeks in the twelve-month period prior to the maternity leave, otherwise, the employer must pay 100 percent of the maternity leave wage benefit. Thus, even if all working women were legally entitled to 12 weeks of paid maternity leave, the majority of the female workforce that is employed in the informal sector would not receive any subsidy from the IMSS. In both the formal and the informal sectors there are frequent cases of employers who refuse to hire pregnant women in order to avoid paying maternity wages; who force women to resign before they can claim maternity leave; or allow women to take maternity leave, but refuse to pay them while on leave (Human Rights Watch, 1998).

Table 10. Maternity Leave Benefits in Latin America and the Caribbean in 1998

Country	Length of maternity leave	Percentage of wage paid in covered period	Provider of coverage
Antigua and Barbuda	13 weeks	60	S.S. + possible employer supplement
Argentina	90 days	100	Social Security
Bahamas	8 weeks	100	40% Employer / 60% S.S.
Barbados	12 weeks	100	Social Security
Belize	12 weeks	80	Social Security
Bolivia	60 days	100% of national min wage + 70% of wages above min wage	Social Security
Brazil	120 days	100	Social Security
Chile	18 weeks	100	Social Security
Colombia	12 weeks	100	Social Security
Costa Rica	4 months	100	50% Employer / 50% S.S.
Cuba	18 weeks	100	Social Security
Dominica	12 weeks	60	S.S. / Employer
Dominican Republic	12 weeks	100	50% Employer / 50% S.S.
Ecuador	12 weeks	100	25% Employer / 75% S.S.
El Salvador	12 weeks	75	Social Security
Grenada	3 months	100 (2 months), 60% for 3rd month	S.S. / Employer
Guatemala	12 weeks	100	33% Employer / 67% S.S.
Guyana	13 weeks	70	Social Security
Haiti	12 weeks	100 for 6 weeks	Employer
Honduras	10 weeks	100 for 84 days	33% Employer / 67% S.S.
Jamaica	12 weeks	100 for 8 weeks	Employer
Mexico	12 weeks	100	Social Security
Nicaragua	12 weeks	60	Social Security
Panama	14 weeks	100	Social Security
Paraguay	12 weeks	50 for 9 weeks	Social Security
Peru	90 days	100	Social Security
Saint Lucia	13 weeks	65	Social Security
Trinidad and Tobago	13 weeks	60-100	S.S./Employer
Uruguay	12 weeks	100	Social Security
Venezuela	18 weeks	100	Social Security

Source: UN (2000).

household survey in Nicaragua show that, when asked about the activities performed the previous day, men (aged between 15 and 65) spent on average six hours and a quarter at work versus two and half hours spent on average by women (see Table 9). However, counting both the time spent in the workplace and doing housework, women, on average, work about half an hour more than men. If we look at the sub-sample of the employed population, the difference is striking. Women work, on average, one hour and 10 minutes more than men.

It has been hypothesized that the combination of being employed and having children may have a detrimental effect on women's health (multiple roles effect) (Bird and Fremont, 1991). On the other hand, the relationship might go in the other direction, as healthy people may be more willing and able to engage in the roles of employment, marriage or parenthood. This observation suggests a complex relationship between health, and the need to carefully distinguish the independent contribution of work and prior health in explaining women's time allocation decisions (Verbrugge, 1983). Indeed some researchers have suggested that multiple roles may give people security, resources, self-esteem and a feeling of greater satisfaction, thus, having a positive effect on health (e.g. Sieber, 1974; Spreitzer et al., 1979).

To date the research, done largely in industrial countries, has shown conflicting results. Wolfe and Haveman (1983) using data from the Michigan Panel Survey of Income Dynamics found that both the childcare and housework demand on women and the dual role of working and having young children were associated with deterioration in health. On the basis of longitudinal data from Germany, Cramm et al. (1998) found that the double burden of employment and caring for young children diminished the positive impact of employment on women's health, and for women in manual jobs, the negative effect of employment on health prevailed. Analysis of a cross-sectional survey of Detroit found that the combination of jobs plus family responsibilities had no significant effect on women's health (Verbrugge, 1983). Similarly, a study based on

longitudinal data from the National Longitudinal Surveys of Young Women did not find evidence that longer hours of employment nor having more children resulted in harmful effects on health (Waldron et al., 1998). However, these studies did not control adequately for the potential reverse causality between health and the likelihood of being employed and having children, which might have biased downward the estimated effect of multiple roles on health.

A recent survey summarizing evidence from a number of qualitative studies, shows that overall performing overlapping activities over prolonged periods can have detrimental effects on the well-being of women and children (Floro, 1995). In Latin America, a study of university teachers in Caracas, Venezuela, found that women with greater workloads in home tasks were more likely to complain of anxiety and depression (Blanco and Feldman, 2000). Another study based on interviews with poor rural women in Mexico, found strong evidence of increasing emotional and psychological disorders, as a result of the increased intensity in their time use (Roldán, 1985).

Stress at work is also likely to be related to the degree of control over duties to be carried out and over the organization of work (Hall, 1989). Jobs assigned to women are characterized by a low level of decision latitude and are more likely to be stressful (Cerón and Pimentel, 2000). A study based on cross-sectional data from a poor community in the city of Salvador in Northeast Brazil also found that there was an association between being an informal worker (among whose ranks women are overrepresented) and a number of physiological symptoms (Santana et al., 1997). However, the study did not determine whether the statistical association was a casual relationship and failed to control adequately for differences in socioeconomic status that could be associated both with physiological symptoms and informal work.

MUSCULAR-SKELETAL DISORDERS

A major research area in occupational health is muscular-skeletal problems, which include ar-

thritis, carpal tunnel syndrome and inflammations of various joints. Muscular-skeletal disorders of the upper limbs are now among the most frequent work-related diseases in many LAC countries (see Reis et al., 2000). Muscular-skeletal problems are a major occupational risk factor for women because of the nature of the tasks assigned to many women in factories and offices that require high levels of repetitive work and involve repetitive strain. For example the prevalence of carpal tunnel syndrome, a work-related ailment characterized by wrist pain and loss of manual sensitivity, is 2 to 10 times more frequent in women than in men (De Krom, et al., 1990). In LAC, high prevalence rates of muscular-skeletal disorders have been recorded among women workers involved in maquiladora assembly operations and in secretarial jobs (Meservy et al., 1997; Ribeiro, 1997).

Mechanical equipment injuries account for a high proportion of all work-related injuries in all occupations (Gardner et al., 1999). The design of machinery and equipment is a major cause of injury when it is not conceived or not used properly, particularly in the manufacturing sector. In the design of equipment and tools, the anthropometric data used do not always reflect the characteristics of the working population who will use it. Most of the personal protective equipment and tools used worldwide are designed based on male populations from Germany or the United States. This means that many women workers are not properly equipped for their protection.

SEXUAL HARASSMENT

Sexual harassment at work is one form of violence against women, a health and safety matter as well as an issue of human rights.⁶ The influx of women into the workforce over the past thirty years has both magnified the problem and enabled women to be more vocal about their own defense. Sexual harassment may be defined as

⁶ Some commentators add the jurisdiction of health and safety legislation as another area where sexual harassment can be attacked (Aeberhard-Hodges, 1996).

any non-work-related behavior having a sexual component (Gutek, 1985). Many behaviors constitute sexual harassment, but the two main categories are: 1) quid pro quo harassment, in which economic penalties are placed on employees who refuse sexual advances; and 2) hostile work environment claims, involving a hostile offensive workplace atmosphere caused by sexual harassment, without threat of economic loss.

Harassment in a general sense is one example of discrimination: a group or individual with more power or confidence picks on a weaker group or individual. Those responsible are often men in a position of authority over the person they are harassing. More generalized workplace harassment which is not tied to group membership and is known by many names including bullying, mobbing, and emotional abuse, is now the focus of more research and policy attention (Keashly, 1998; Rayner, 1997; Sheehan et al., 1999). Examples of these behaviors include exclusion from key work activities, silent treatment, put-down in front of others, yelling and screaming, flaunting status, and taking credit for work.

Sexual harassment in the workplace, especially in its more extreme forms, may have serious consequences for the persons targeted, including physical violation, depression, fatigue, headaches, sleeplessness, hostility, inability to concentrate, lower job satisfaction and organizational commitment, and deterioration of interpersonal relationships at work (Gutek and Koss, 1993; Vaux, 1993).

Women are far more likely to experience sexual harassment than men, partly because of the status and role of women in society, but also because of their status and role in the workplace. Sexual harassment has been described as the most common and least discussed occupational health hazard for women. Scientific studies in developed countries have shown that between 45 and 50 percent of women have experienced sexual harassment at some time during their working lives (Labour Research Department, 1999; Sheffey and Scott, 1992).

However, not much is known about the incidence of sexual harassment in Latin America. A survey of 302 women in Argentina revealed that 47.4 percent were the object of sexual harassment (Unión del Personal Civil de la Nación, 1997). In Uruguay, a survey of 1,295 individuals found that 15 percent knew of a female colleague who had experience of sexual harassment (Raga, 1999). Certain groups of women are particularly vulnerable, including live-in domestic workers, and women who work in non-traditional occupations like in the *maquiladoras*. For example, La Botz (1994) in her study of the *maquiladoras* described sexual harassment as “endemic.”

WOMEN FACING HIGHER RISKS

The available information on women’s employment patterns and occupational health hazards highlights the high health risks faced by poor women, who were left behind by recent progress. In addition to the emotional and mental stress that most women are exposed to, their initial comparatively low health status and the low wage work they obtain (mostly in the informal, unprotected, sector) places them at high risk for reproductive and other health hazards in the workplace.

The Health Benefits of Women's Paid Work

THE IMPACT OF WORK ON HEALTH

A positive correlation is often found between health and participation in the labor market. Thus, despite the argument that exposure to hazards in the working environment may damage health, women who work in paid jobs report, on average, better physical well-being than others, most of whom are unemployed, retired or keeping house. Table 11 shows self-reported health status among Brazilian women aged 15 years and older by occupational status. A higher proportion of working women assesses their health as excellent, very good or good compared to non-working women. Similar patterns emerge in other countries of the region, such as Jamaica. The positive correlation between employment and health generally remains significant and substantial with adjustment for age, education, marriage and race (Bird and Fremont, 1991; Ross and Mirowsky, 1995). A plausible mechanism or process is needed to

contacts and support.⁷ Conversely, specific forms of non-employment may be unhealthy. In particular, those who were laid off or fired, or who cannot find work, have a low sense of control, low levels of social support, and suffer distress as a consequence. Failure to get or keep a job may result in demoralization and neglect, and thus in poor health. Thus, involuntary unemployment may diminish health, whereas voluntary non-employment, which includes being in school or retired or being a homemaker, may not (Pearlin et al., 1981).

A positive indirect effect of employment is related to the fact that paid jobs increase household income and decrease economic hardship, both of which improve physical well-being. The seminal model developed by Michael Grossman (1972) posits that individuals choose to allocate their available time and money so as to achieve the combination of health and other goals they value most, given their available resources. In

Table 11. Health Status of Women Aged 15 Years and Older by Work Status (%)

Self-assessed health	Brazil: employed ^a		Jamaica: economically active ^b	
	Yes	No	Yes	No
Excellent	14.91	9.33	28.7	27.0
Very good	24.01	19.05	28.9	22.5
Good	39.87	35.57	28.2	24.1
Fair	19.07	28.59	11.4	14.8
Bad	2.14	7.46	2.9	11.6

Source: (a) *Pesquisa Sobre Padrões de Vida* (Brazil, 1995-96); (b) *Jamaican Survey of Living Conditions* (1989).

support the hypothesis of a casual relationship. Some researchers have argued that labor market participation may improve women's health status because of increased self-esteem, social

other words, individuals are assumed to maximize their utility subject to their budget constraint. Women in paid employment bring addi-

⁷ See Ross and Mirowsky, (1995) for a review.

tional income and augment the total amount of resources available in the household.

Researchers have repeatedly demonstrated the positive empirical relationship between income and health at the individual and national levels (Fiscella and Franks, 1997; Preston, 1975; Pritchett and Summers, 1996). These findings support the hypothesis that individuals and households maximize their utility (including health) according to their budget constraint. Thus, a positive effect of work on health comes into play through the budget constraint's effect on the consumption of health-improving goods (Parker and Wong, 1997). The result is that women in paid jobs are more likely to be able to afford medical care, higher quality diets and better housing for themselves and their children.

THE IMPACT OF HEALTH ON WORK

Despite the facts and arguments supporting a causal interpretation, other researchers argue that much or most of the correlation between health and employment results from a selection of healthy people into employment and unhealthy ones out (Repetti et al., 1989; Waldron, 1991).

Several facts and evidence support this view. Clearly, physical impairments can limit the capacities employers require. Even in the absence of a specific disease, many common or chronic diseases erode energy and concentration, and thus reduce both labor supply and wage rates (Luft, 1975; Schultz and Tansel, 1997). A recent volume edited by Savedoff and Schultz (2000) collects numerous studies carried out in Latin America examining the empirical relationship between health and labor income. A study that analyzes data from Mexico suggests that a decline of one year in age at menarche—an indicator that is closely linked with adult health—is associated with an increase in wages of 23 to 26 percent (Knaul, 2000). A study in Colombia found that one more day of disability is associated with a decrease in earnings by rural women of about 13 percent and that taller women earn more (about 7 percent more per centimeter) (Ribero and Nuñez, 2000). In Peru one less day

of reported illness in a month increased the wage rate of urban and rural women by 3.4 and 6.2 percent respectively (Cortez, 2000). A similar effect was estimated among Jamaican women (Neitzert and Handa, 2000).⁸

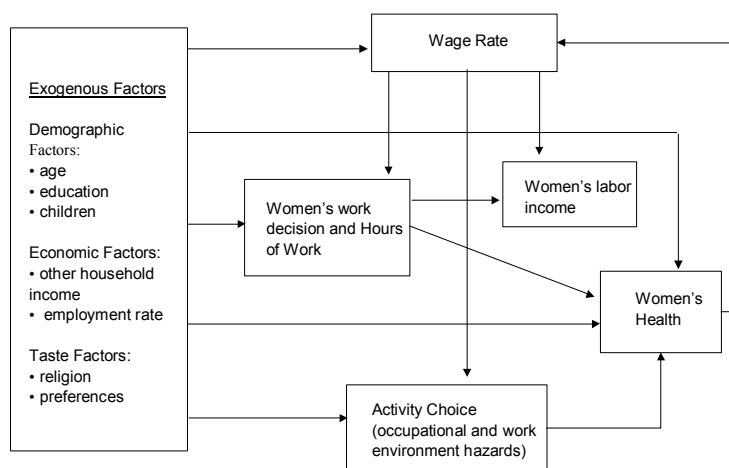
JOINT EXAMINATION OF HEALTH AND WORK

The discussion so far shows that women's work decisions, labor income and health are jointly determined and linked in a complex relationship. The linkages are represented in Figure 2, based on the models suggested by Wolfe and Haveman (1983) and Haveman et al. (1994). Factors that are outside the control of the individual (exogenous factors) are grouped into demographic, economic and preferences (taste) factors. Women's wages are determined by health status and other exogenous factors (e.g. education, age, and experience). Wage rates and exogenous factors determine women's decisions to participate in the labor market, the allocation of time between market work and other activities (leisure, housework and childcare) and the activity chosen. Women's health status depends on selected demographic and economic exogenous factors, the hours of market work, the occupational hazards in the work activity chosen, as well as labor and non-labor income. Thus, for simplification, work is hypothesized to have a negative effect on women's health because of reduced leisure time, the imposition of additional time stress, and exposure to hazards in the workplace. Alternatively, the positive effect of work on health derives from the increased income and the positive role it may play on self-esteem, social contacts and support.⁹

⁸ In general the effect of health on wages is found to be stronger among men than among women.

⁹ However, in many developing countries, social security insurance and income maintenance for the unemployed are virtually non-existent for those working in the informal sector. For this reason many poor women in the region have no other options than holding on to their jobs. Therefore, they are more concerned with the immediate need of keeping their job to feed themselves and their children than with the negative health effects of hazardous working conditions.

Figure 2 A Model of the Linkages Between Women's Work and Health



Empirical estimation of these effects is problematic; it may produce statistically biased findings and lead to potentially misleading conclusions for two main reasons. First, “healthy” workers are likely to be preferentially selected for paid jobs, which provides a plausible explanation of the observed correlation between good health and paid workers. Healthier individuals may have better chances of getting or keeping a paid job. Some people without jobs cannot work because of a disability, others seem less attractive because of a disease or a disability. Another important factor is related to occupational mobility. Faced with a serious health problem, for example, a worker may change his/her occupation to a less demanding one or drop out of the labor force altogether. These factors may produce important biases in cross-sectional studies of occupational health, and are usually referred to as the “healthy worker” effect. Thus, the correlation could reflect the effect of health on employment, rather than the effect of employment on health (Repetti et al., 1989; Waldron, 1991).

A second source of bias arises because of the presence of “unobservable heterogeneity” among women. In other words, health and occupation decisions are likely to be both related to some characteristics that the researcher does not observe, which makes the two events correlated. Thus, standard statistical assumptions break

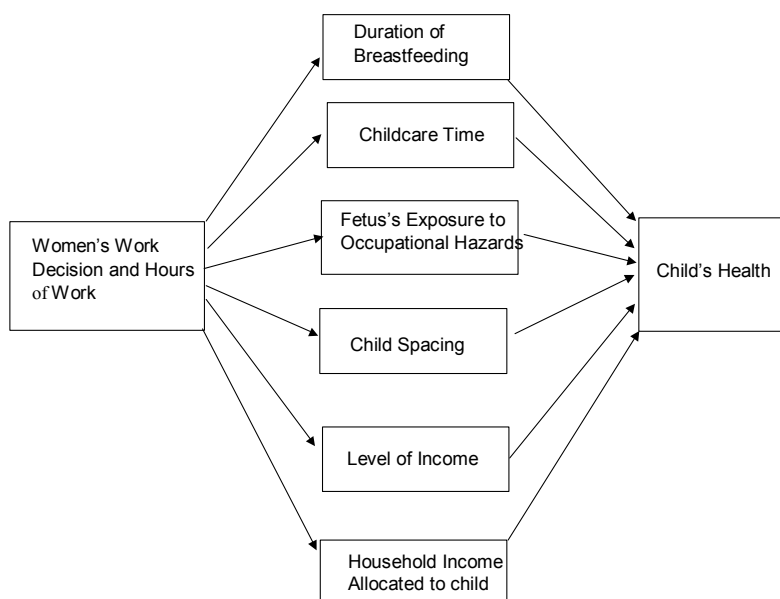
down and direct estimation of the relationship between health and occupation by standard epidemiological methods is likely to be biased. For instance, if a woman is aware of being particularly sensitive to a specific occupational hazard, she may decide not to work in occupations that expose her to it. If this form of adverse selection were widespread, it would bias downward and in some cases reverse direct estimates of the adverse health effects of the working environment (Rosenzweig and Schultz, 1983).

Due to this complexity, few studies can claim to have been able to disentangle the various factors that constitute the relationship between women’s work and health. However, the evidence collected so far suggests that, on average, the net effect of work on women’s health is positive.

WOMEN’S WORK AND CHILD HEALTH

Women’s work is also linked with the well-being of her offspring. Figure 3 shows the complexity of the relationship between a mother’s employment and her child’s health. Women’s

Figure 3 A Model of the Linkages Between Women’s Work and Child’s Health



work can have a negative effect on child health because of the reduction of the time that is devoted to childcare and breastfeeding (see Leslie, 1998; Blau et al., 1996). Negative associations have been found in the case of pregnant women. Work during pregnancy may produce negative effects on the development of the fetus, which may affect the child’s health (in the previous section we referred some evidence that show a relationship between low birth weight and extremely poor maternal working conditions in Mexico).¹⁰

In contrast, women’s work can have a positive effect on child health because of the positive income effect and longer birth spacing. A recent study of n households in low-income urban communities found that children of employed mothers were better off in terms of their weight and height than those whose mothers were not employed. This study also found that in families with working mothers, childcare was poorer because the caregiver was less likely to be observed washing their hands than mothers who stayed at home with their child, and the the variety of the food given to the child was more limited. This suggests that the positive associations of work with child health might be due to income rather than improved care (Lamontagne et al., 1998). Another study in Santiago, Chile,

the mother worked while pregnant and birth outcomes.

¹⁰ However, in their seminal paper analyzing the determinants of birth weight using data from a national representative sample in the U.S., Rosenzweig and Schultz (1983) did not find any statistically significant relationship between the number of months

which controlled for genetic factors (mother's height) and mothers' schooling, showed that child nutritional status (height for age) improved when poor mothers earned income. This finding was not replicated for non-poor mothers, again suggesting the importance of additional income for child well-being (Buvinic, 1998).

There is a growing body of literature on the intrahousehold allocation of resources and the role of individual preferences in household decision making. According to this literature, a household member's control over resources outside the family (or "threat points") – such as unearned income, wage rate or employability – affects the intrafamily distribution of resources. This happens because greater threat points imply greater bargaining power and, hence, influence decision making (Manser and Brown, 1980; McElroy, 1990; Alderman et al., 1995; Handa 1996). Preferences may differ within the household and several studies show that, relative to men, women tend to favor children in their resource allocation behavior with implications for their health (Dwyer and Bruce, 1988; Thomas, 1990; Kennedy and Peter, 1992).

Empirical evidence supports this hypothesis. In Jamaica maternal work was related with reductions in the family budget devoted to tobacco

and alcohol (usually driven by the male's demand) and increases in the demand for goods that have a positive effect on children's health, such as food and preventive care (Handa, 1994). A study in Guatemala found that women who earned a higher proportion of the family income had significantly more control over decision-making in all areas except food purchases, which were already primarily women's decisions. Controlling for potentially confounding variables, the percentage of the total family income earned by women was highly associated with children's nutritional status, suggesting that income control by mothers may have benefits for children (Engle, 1993).

Altogether, the evidence available suggests that maternal employment has a positive effect on child health (Leslie and Paolisso, 1989). This relationship is reflected in Table 12. Summary statistics from the Demographic and Health Surveys (DHS) support the finding that women in paid employment are more likely to give birth to children who are not underweight.

Table 12. Proportion of Children Smaller than Average or Very Small at Birth by Mother's Occupational Status (%)

	Guatemala 98-99	Nicaragua 98
Paid employee	26.43	29.84
Did not work	32.47	31.36
Self-employed	28.54	25.25
Unpaid worker	25.00	34.78
Average	31.36	30.29

Source: authors' calculation based on various demographic and health surveys (DHS).

Discussion and Policy Implications

It is a fact that all women work. They perform multiple roles of market production, home production, and reproduction. Although women work, on average, longer hours than men and contribute substantially to family income, the work of many women goes unrecognized. The results of this review paper suggest that the short-term policy actions described below would go a long way toward improving the health and well-being of women in the labor market.

REDUCE DISCRIMINATION IN THE LABOR MARKET

The disadvantages and discrimination that LAC women face in the labor market can be distinguished between: (a) situations where employers do not hire women or pay them less than men based on cost and productivity concerns; and (b) those based on prejudices and gender biases. These considerations may help policymakers to identify crucial points of intervention and the appropriate actions.

In relation to the first point, women may display lower levels of productivity (as expressed through wages¹¹) than men because they are disadvantaged in terms of having lower levels of education, training, and previous work experience, factors that directly affect worker productivity. Interruptions in work experience because of childbearing or family responsibilities may compound their disadvantage in the labor market. However, these differences between male and female workers may also reflect earlier discrimination, which prevented women from obtaining education, training and experience in the first place.

¹¹ In economic theory, where there is enough competition over workers, wages are likely to closely match worker's productivity levels.

Discrimination is complex and difficult to detect. It may appear initially as assumptions about the gender division of labor on the part not only of employers, but also the wider community or society at large, as well as women workers themselves. These assumptions reflect the values, still preponderant in the region, assigned to delegation of the reproductive role to women and the productive role to men, prescriptions regarding appropriate jobs for women and men, and the perception that women are secondary earners and non-committed members of the workforce. The sharp occupational segmentation by gender observed in the region supports the prevalence of these values. Such prejudice or bias, combined with actual disadvantage, reinforce discrimination. In the worst situations, women may become systematically discriminated against as a group, producing and earning less than men. Thus, employers may discriminate against women in general, screen individual applicants on the basis of gender and prefer to hire a man over a woman even if the woman has the same education, training and experience.

To protect working women, many countries have adopted special measures that include bans on night shifts, underground work and other activities considered dangerous for women and their reproductive health.¹² Other measures limited the number of hours of work and overtime that women could carry out each week and were oriented to the protection of women's traditional role as mother and wife. In recent years, such measures have been increasingly questioned because, in some cases, protective legislation has had discriminatory consequences that reduce women's access to employment. Some employers and policymakers, for example, may use the

¹² There is little empirical evidence showing that these types of work are more or less dangerous for women than men, although the reproductive health of women may theoretically increase their vulnerability relative to men.

notion that employment is typically negative in its impact on women with families to justify existing gender inequalities in employment opportunities and pay. In addition, women may have been excluded from hazardous occupations as a working group, instead of removing the risk from the workplace for the protection of all workers' health. Thus, there is the need to review legislation and regulation in the countries of the region to eliminate direct and indirect discrimination.

Research on the effects of sex discrimination laws is quite limited. A recent paper by Neumark and Stock (2001) analyzed the effect of sex discrimination/equal pay laws in the United States during the 1940-1970 period. The two authors found some evidence, although it was not very strong, that these regulations boosted women's relative earnings, but they also found quite robust evidence that the laws reduced female employment. Thus, laws prohibiting wage discrimination based on sex may impose trade-off between higher wages and lower employment.

Because the majority of poor women in the region work in the informal sector and in agriculture, their status in these sectors is key to the improvement of their well-being. Their income (and thus health improvements for a substantial fraction of the lowest income women) can be improved by increasing productivity in these sectors. Improved productivity and its effect on wages may also reduce the conflicts with their family responsibilities; efficiency gains may free up time while higher wages may allow for paid childcare. Women can significantly improve their productivity if they are given technical assistance and training to improve the management of their activities, and better access to credit and other factors of production.

REDUCE UNDERLYING INEQUALITIES IN EDUCATION AND HEALTH

The link between women's education and improved health is well established. Women's education is also clearly related to access to paid occupations, with higher quality jobs and better

wages. Schooling and knowledge may also improve the efficiency in the production of health. Studies have consistently found that mother's education is positively correlated with child health and nutrition in developing countries (see Cochrane et al., 1982).

Women's educational attainment and health status has improved significantly in the last decades. Unlike other developing regions of the world, young women in Latin America and the Caribbean attain, on average, higher educational levels than men. In the health arena, women live longer than men, but are reported to suffer more often from morbidity and disability. Nevertheless, increasing inequality in the distribution of education and health among women in different income, ethnic and/or racial groups has translated into higher inequality of work opportunities and wages. This underlying inequality in human capital investment presents serious challenges to the promotion of women's health and well-being.

It is also important to recognize the inequality in the distribution of disadvantages and the high probability that these would cumulate. Thus, a disproportionate number of women will cumulate disadvantages (e.g. uneducated, unskilled, poor, single working mothers) and will be among the most vulnerable in the labor market. To deal with women's disadvantaged position, action should be taken in the form of positive measures and targeted programs to improve women's health, education and training, as well as to provide support services and improve employment opportunities for women. It is important to ensure that interventions are introduced as early as possible to avoid a process of cumulative disadvantage.

WORK TOWARD COMPREHENSIVE SOCIAL INSURANCE FOR THE POOR

As shown earlier, the informal sector (casual employment, subcontracting, part-time work, home-based work, short-term employment, self-employment) provides the bulk of opportunities for women in the region, particularly poor women. It provides alternatives to the traditional

standard employment model, which typically restricts women's options. More flexible management of working hours and flexibility in the place of work could also benefit women. However, many women go into the informal sector because they have no other choice. In the informal sector, occupational health and safety standards are not normally observed or enforcement is difficult. Given that women's employment in the informal sector represents more than half of total jobs, it is essential to find ways to protect women and other vulnerable groups from the more negative aspects of such work.

On top of occupational health concerns, informal sector and self-employed workers, where most women workers are concentrated, have little access to health or unemployment insurance benefits. Only 5 percent of women in the poorest 20 percent of the income distribution are affiliated with public or private health insurance and this low coverage is not compensated for by public health services, where the same inequitable patterns of access and utilization hold (Henderson et al., 2000). Lack of health insurance means that out-of-pocket payments are a large portion of total health spending and adverse health episodes may have extreme impoverishing effects, moving the whole household into poverty (Wagstaff, 2000). Like general health insurance, occupational accident insurance is also limited to the formal sector.

The informal sector also concentrates unemployment (World Bank, 2000). Few countries in the region are able to afford universal unemployment insurance and few programs aimed at smoothing consumption during periods of unemployment are available for informal sector workers. Recently, several countries in the region have begun to finance workfare programs, which essentially function as unemployment insurance for the informal sector on a limited scale.¹³ This lack of protection against income

¹³ Workfare programs, such as *Trabajar* in Argentina and *Empleo en Acción* in Colombia, generally finance construction or infrastructure rehabilitation activities and provide temporary workfare jobs to

drops due to unemployment or catastrophic illness has important consequences on general health status, as well as food consumption levels and their impact on health.

How to extend formal sector protection to the informal sector? Increasing formalization is one option. Formalized work relations would promote better labor conditions and allow for enforceable labor rights and access to formal social risk management instruments, such as health, accident, sickness, pension and unemployment protection. Further, since informal sector businesses and individuals are unlikely to self-insure, there is a role for governments to correct market failure (Holzmann and Jorgensen, 1999). In spite of these potential benefits, the very factors that created the extensive informal sector in Latin America make greater formalization difficult to implement. High non-wage costs in the form of direct and indirect taxes, regulation and licensing, in many cases with weak links between contributions and benefits, all create strong incentives for informality. In 1999, for example, mandatory contributions to social security¹⁴ as a percent of gross wages in the region varied between 11 percent in Honduras to 48 percent in Argentina leading to a high regional average, only slightly lower than rates in the OECD countries (IDB, 2001). Argentina, Uruguay, Colombia, Brazil and Peru have contribution rates relative to GDP that are higher than the OECD average. Many studies suggest that the costs of labor market regulations are borne by workers in the form of lower take-home wages and/or reduced employment and by employers in the form of increasing costs and lower profits.¹⁵ The effectiveness of these taxes is also

unskilled workers. Given this emphasis, they tend to employ men rather than women.

¹⁴ Social security programs refer to pensions, disability and death pensions, health insurance, maternity benefits, unemployment insurance, workers' compensation and family allowances.

¹⁵ Estimates reported by the IDB (2001) suggest that mandatory social security contributions and job security provisions have a negative effect on employment rates. Opinion polls (*Latinobarometro*) reported in this same paper show that workers in Latin America may value the benefits afforded by social security

low; rates are high and so is evasion in the formal sector.¹⁶ Non-wage labor costs are not the only barrier to formality; limited access to credit in financial markets and burdensome administrative requirements for property ownership and business creation, as well as lack of credible legal protections, also create substantial disincentives and are the subject of a growing literature. Thus to increase formalization in the short term, governments may have to pursue two, possibly contradictory, courses of action. First, governments must consider reducing social security and other taxes that are not perceived to provide sufficient benefits by workers or employers. Second, they should improve the organization and quality of tax-financed services and regulations in order to strengthen the link between contributions and benefits and create incentives for formality.

A second and feasible short-term option is the provision of a safety net for the poor. While governments in the region face resource constraints and the need to maintain low non-wage labor costs, reallocation of existing spending away from inefficient public social programs and toward targeted social insurance programs for the poorest, especially poor women, is a viable and short-term policy for most governments

ADVOCATE FOR WOMEN WORKERS

The process of empowering people in the workplace has been a successful vehicle to enhance the work environment in the last decades. However, the particular needs of women have, so far, received very little attention in the establishment of health promotion policies because women are underrepresented in these bodies. For example, women workers are underrepresented in decision-making bodies such as national safety councils, occupational health services, trade unions, and enterprise level safety and health committees. Action to empower women in the formal sector needs to improve their representation in labor market institutions and in collective bargaining structures, especially at leadership level. For those working in the informal sector, group or collective representation is crucial, as a result, the rights to associate freely and to organize are fundamental to women's empowerment (see Box 1). A good sign in the region is the professionalization of NGOs that look after women's concerns. They have fought hard for improving women's sexual and reproductive health and increasingly focus on improving their occupational health. Examples include, for instance, *Coverco*, an NGO in Guatemala set up to

Box 1: Independent Monitors in El Salvador

El Salvador's duty free, export-oriented apparel factories employ mostly women (80 percent of the total workforce). A recent government report found unhealthy air and water conditions, large amounts of forced overtime and the frequent dismissal of workers who supported labor unions. But some factories have taken pro-active measures to improve conditions through the creation of a group of independent monitors made up of local union, religious and academic leaders who meet regularly with workers to hear complaints, investigate problems, make spot checks and look over books. All agree that human rights violations in the factory are down with respect to other factories. Nevertheless, lack of freedom to organize remains an unresolved issue. (New York Times, 2001)

in the region.

contributions less than workers in industrialized countries due to low quality care and sustained deterioration in the real value of pensions.

¹⁶ In Guatemala, for example, only 5% of taxes are actually collected. Chile leads the region with a 20% collection rate (IDB 2001).

monitor labor conditions in the *maquila* industry and in agriculture. Governments and international agencies need to nurture and strengthen NGOs such as *Coverco*, as well as women's associations and groups in civil society by, among other actions, providing training and funding

and creating conditions that encourage local philanthropy.

OCCUPATIONAL SAFETY RESEARCH AND INFORMATION GATHERING

OSH in Latin America and the Caribbean is still in its infancy and there are fewer experts as well as safety and monitoring equipment, and less enforcement than in developed nations (Delclos et al., 1999). OSH research in the region is underfunded. Estimates show that only about 5 percent of occupational health research in the world takes place in developing countries, which clearly demonstrates a severe imbalance between the share of the population, the severity of the problem and the resources available in these countries (Partanen et al., 1999). Moreover, women are less often studied than men and in many mixed studies, the sex factor is often not

investigated (Niedhammer et al., 2000). Thus, scientific research oriented toward the well-being of women workers is needed to yield a better understanding of women's conditions (Dumais, 1992).

Information about women's work and health at work is particularly scarce, as standard occupational classifications frequently omit the types of work undertaken by women, especially those related to "invisible" occupations in the informal sector and in agriculture. Accordingly, it is important to enhance the effort of data collection agencies, including those that collect information on employment to establish coherent policies for women in the workplace. In particular, it is important to have this information desegregated by income as well as ethnic and racial groupings.

Conclusions

This paper has reviewed the situation of women in the labor market in Latin America; the occupational health risks they face; and the relationships between women's health and work. It has also made a series of short-term policy recommendations for the improvement of women's experience in the workplace and its impact on their health. Overcoming inequality between rich and poor first and foremost, and between women and men, with poor, indigenous and black women most at risk, is the region's continuing major challenge.

While the Latin America experience may not yet be typical of other developing regions, it is likely to reflect their future, as women's education and health status improves and economies become increasingly interdependent and thus vulnerable to external shocks and its effects on the labor market.¹⁷ Income and human capital inequality, though most pronounced in Latin America, is also a major theme in the rest of the developing world, as are high levels of informality in labor markets and occupational segregation. Information on occupational illnesses and injuries is also scarce in other regions.¹⁸ Tzannatos' (forthcoming 2003) describes these underlying differences between regions and gender.

Indeed health inequalities continue to increase around the world. The rich data sets of the industrialized world certainly seem to show that variations in life expectancy and health status by

social class continue to be found and are in fact widening. Although, the strength of the relationship varies between countries, age groups, health measures used and gender (Auerbach and Krimgold, 2001). In the United Kingdom, where there is a long tradition of research into inequalities in health, life expectancy differences between high and low social classes increased for women over the past decade from 2.1 to 3.4 years. A slightly higher increase was registered for men (Drever and Whitehead, 1997). In the former communist countries of Central and Eastern Europe, life expectancy has fallen since 1989. This fall has been concentrated among those with the lowest levels of educational attainment and associated with drastic reductions in real wages (Shloknikov et al., 1988).

Widening health inequalities are in large part the result of increases in poverty and income inequality. Table 13 shows that income inequality is in fact increasing in some regions such as Sub-Saharan Africa and Eastern Europe, indicating that the Latin American experience of large income inequality and its consequences for women's and men's work options and health outcomes may hold lessons for other regions.

¹⁷ The "rest" of the developing world is defined as Sub-Saharan Africa, East Asia and the Pacific, South Asia, the Middle East and North Africa, and Eastern Europe.

¹⁸ However, the baseline status of women in the workforce in regions of the developing world such as Africa and East and South Asia is quite different. Labor force participation rates are more variable, wage gaps are larger (the exception is China, where wage setting is centrally planned, see Ahuja et al., 1997) poverty more intense, educational attainment and life expectancy lower.

Table 13 Income Inequality in Various Regions, 1980s and 1990s
(averaged Gini coefficients)

Region	1980s	1990s
Eastern Europe	25.01	29.94
South Asia	35.01	31.88
East Asia & the Pacific	38.7	38.09
Middle East & North Africa	40.45	38.03
Sub-Saharan Africa	43.46	46.95
Latin America & the Caribbean	49.75	49.31

Source: Deininger and Squire (1996).

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