POPULATION AND HEALTH DATA FOR LATIN AMERICA

Dominican Republic

Mexico
Guatemala

Colombia
Ecuador
Bolivia
Brazil
Peru

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AND HEALTH DATA
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CONTENTS

Introduction

The Demographic and Health Surveys (DHS) is a program begun in 1984 to assist governments and private agencies in developing countries to conduct national sample surveys on population and health.

The main objectives of the DHS program are: (1) to provide decisionmakers in survey countries with data and analyses useful for informed policy choices, (2) to expand the international population and health database, (3) to advance survey methodology, and (4) to develop in participating countries the skills and resources necessary to conduct demographic and health surveys.

Surveys in participating countries are nationally representative of women age 15-49. They are designed to provide information on levels and trends of fertility, infant and child mortality, family planning, and maternal and child health including nutrional status of children. The data are intended to be used by program managers and policymakers to evaluate and improve family planning and health programs.

In this report, comparative population and health data are analyzed for the following DHS surveys conducted between 1986 and 1989: Bolivia, Brazil, Colombia, Dominican Republic, Ecuador, Guatemala, Mexico, and Peru. Two countries, El Salvador (1985) and Trinidad and Tobago (1987), are not included in this comparative analysis. The countries included in the report, with a population of 314 million out of an estimated total of 414 million in 1988, provide an overview of the Latin American region in the second half of the 1980s. Second-round surveys have already being conducted in Colombia (1990), Dominican Republic (1991), Peru and Brazil (1991/1992); and will be conducted soon in Mexico, Guatemala, and Bolivia. The new data will be included in an updated comparative report in 1995 which will further document the changes that Latin America is undergoing.

Basic Background Data

Country	Year of DHS	Population size (millions)	Urban (%)	GNP per capita	Life expectancy (e^0)
Bolivia	1989	6.9	50	580	54
Brazil	1986	144.0	75	2020	65
Colombia	1986	31.0	69	1240	65
Dominican Rep.	1986	6.9	59	730	67
Ecuador	1987	10.0	55	1040	66
Guatemala	1987	8.7	41	950	63
Mexico	1986	85.0	71	1830	69
Peru	1986	21.0	69	1470	63

Source for data: UNDP. Human Development Report 1990. Figures on population and percentage urban are for 1988. Gross National Product (GNP), in U.S.$, and life expectancy at birth, in years, are for 1987.

Chart 1
## Total fertility rates for two four-year periods preceding the survey

	4-7 years	0-3 years
BOLIVIA	5.5	4.9
BRAZIL	4.5	3.6
COLOMBIA	4	3.2
DOMINICAN REPUBLIC	4.6	3.7
ECUADOR	5.2	4.1
GUATEMALA	6.5	5.6
MEXICO	4.5	4
PERU	5.3	4.2

4-7 years   0-3 years
Number of years preceding survey
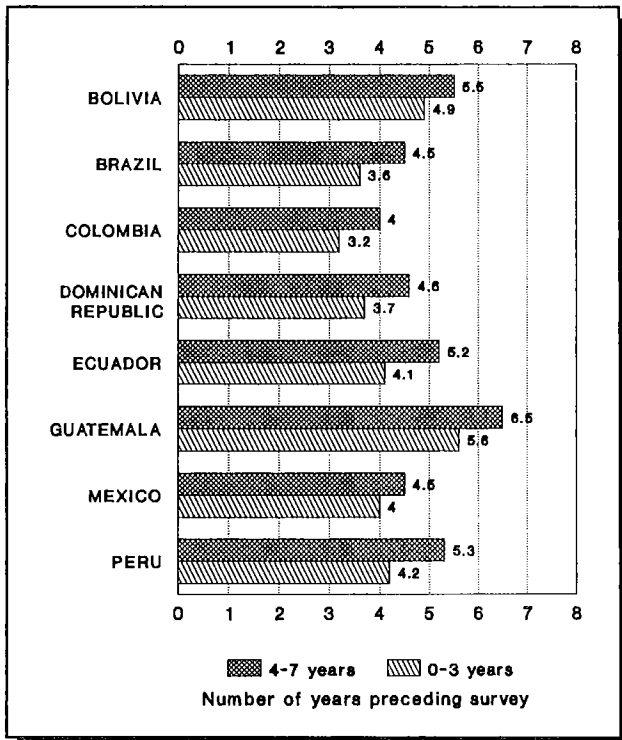
Chart 2
Total fertility rates for the five-year period preceding the survey by residence

	Urban	Rural
BOLIVIA	4	6.6
BRAZIL	3.2	5.4
COLOMBIA	2.8	4.9
DOMINICAN REPUBLIC	3.2	5.1
ECUADOR	3.5	5.5
GUATEMALA	4.1	6.6
MEXICO	3.3	6.3
PERU	3.3	6.9

Urban   Rural
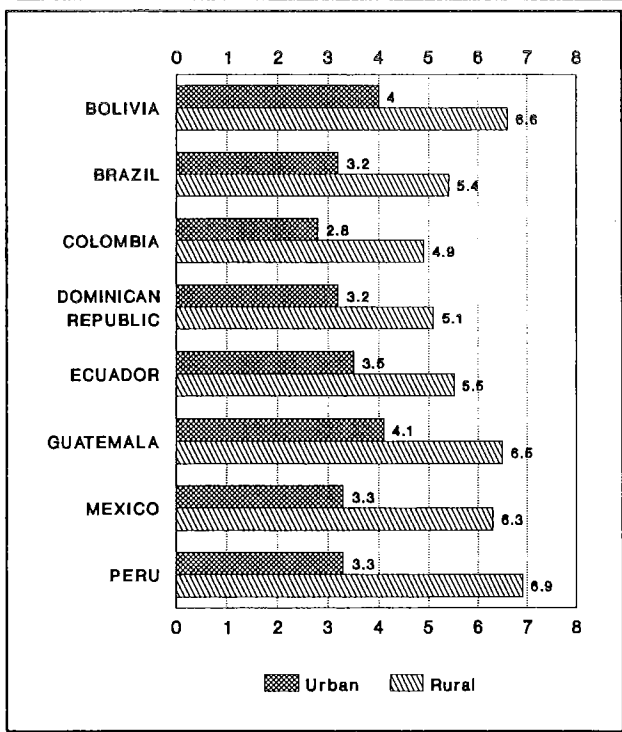
Fertility

Current Levels of Fertility and Recent Trends

According to various sources, by the mid-1980s the total fertility rate in Latin America had fallen below four children per woman. The total fertility rate (TFR) measures the number of children that would be born to a woman during her lifetime if she passed through her childbearing years conforming to the age-specific fertility rates of a given period for a given population. The range of fertility levels is well illustrated by the countries represented in the Demographic and Health Survey Program (DHS): rates of well below four children per woman in Colombia, Brazil and the Dominican Republic; rates of approximately four in Mexico, Ecuador and Peru; and much higher rates in Bolivia and Guatemala (see Chart 1).

The rapid drop in levels of fertility can be traced with DHS data, as well. Among the eight countries presented in Chart 1, the average decline in the total fertility rate from the period 4 to 7 years (48-95 months) prior to the survey to the period 0 to 3 years (1-47 months) prior to the survey was 0.85 children. This represents a sizable drop of two-tenths of a child per year. The pace of decline appears to be fairly constant, whether dealing with Colombia, with a starting TFR of 4.0, or Guatemala, with a starting fertility rate of 6.5.

Differential Fertility

It is well documented that fertility declines begin in the urban areas, often with the advent of organized family planning programs, and then gradually extend to rural areas. In four of the eight DHS countries represented in Chart 2, namely Bolivia, Guatemala, Mexico and Peru, the TFR for the rural areas varies between 6.3 and 6.9. In these countries the contraceptive revolution has not yet spread to rural areas, and the urban-rural differential in fertility is extreme (3.3 vs 6.9 in the case of Peru). In the remaining four countries, the TFR for rural areas is 5.5 or less, and the average difference in the TFR between rural and urban areas is just two children. In five of the eight countries, the TFR for urban areas varies between 2.8 to 3.3 children.

Undoubtedly the strongest social differential of fertility is the level of women's education. In all but two countries, the TFR for women with no formal education is well over 6, while for all of the countries except one, the TFR for women with 7 or more years of schooling is under 3 (see Chart 3). In general, the progressive decline of the TFR with increases in education is monotonic. However, in the cases of Bolivia, Ecuador and Mexico the TFRs appear to be unaffected until at least 4 years of education have been completed. The data can be summarized by calculating the unweighted means for the eight countries: the TFRs for women with no schooling, with 1-3 years, with 4-6 years and with 7 or more years of schooling are, respectively, 6.4, 5.7, 4.3 and 2.7 children.

It seems likely that increases in the level of education attained by women will lead to reduced fertility, apart from actions on the part of governmental or private family planning programs. To take an example, in the nine years separating the World Fertility Survey (WFS) and the DHS in Peru, the percentage of women of ages 15 to 49 with no schooling fell from 20 to 11, while the percentage with at least some secondary education rose from 36 to 51. During the same period, the contraceptive prevalence rate increased by 50 percent, in the absence of any aggressive family planning effort.

Chart 3
**Total fertility rates for the five-year period preceding the survey by education**

Legend:
None
4-6 years
1-3 years
7+ years
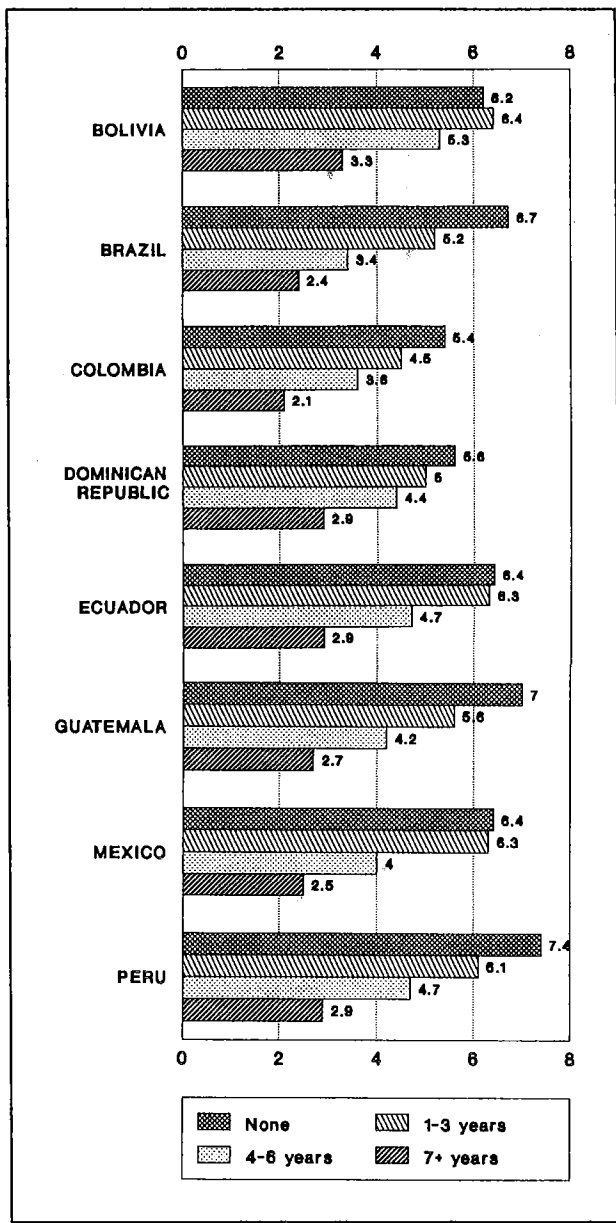
Chart 4
Percentage using contraception among currently married women by residence

URBAN AREAS | RURAL AREAS | TOTAL USE

BOLIVIA	30
BRAZIL	66
COLOMBIA	65
DOMINICAN REPUBLIC	50
ECUADOR	44
GUATEMALA	23
MEXICO	53
PERU	46

80 60 40 20 0 20 40 60 80
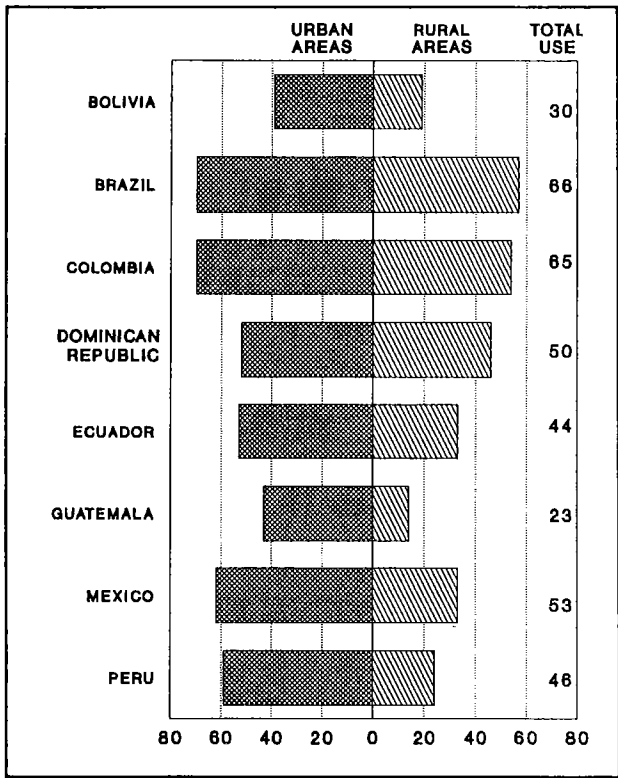
Chart 5
Percentage using contraception among currently married women by education

0 10 20 30 40 50 60 70 80

BOLIVIA, BRAZIL, COLOMBIA, DOMINICAN REPUBLIC, ECUADOR, GUATEMALA, MEXICO, PERU

0 10 20 30 40 50 60 70 80

▓ None   ▩ Primary   ▨ Secondary+
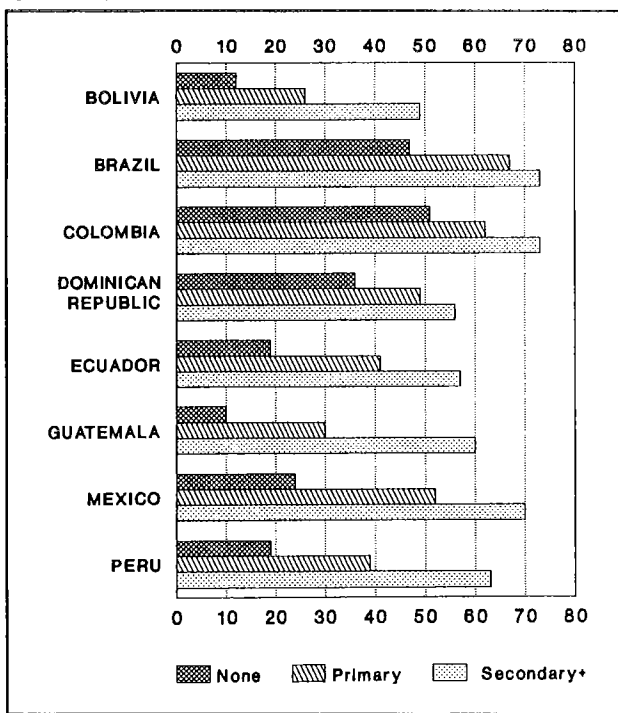
Contraception

Contraceptive Prevalence

The level of use of contraceptive methods by currently married women varies widely among countries in Latin America (see Chart 4). Contraceptive prevalence rates in Brazil and Colombia approach those of developed countries (66 percent and 65 percent, respectively); another set of countries, represented by the Dominican Republic, Ecuador, Mexico and Peru in DHS, present rates that vary from 44 percent to 53 percent; finally, two countries, Bolivia and Guatemala, have low rates (30 percent and 23 percent, respectively) which indicate that family planning is still at an incipient stage. In addition, traditional methods account for sixty percent of contraceptive prevalence in Bolivia and fifty percent in Peru.

Differentials in Prevalence of Use

Prevalence rates for contraceptive use are higher in urban areas than in rural areas in all eight countries. The differential is least in those countries with the longest tradition of activist family planning programs, represented here by Brazil, Colombia and the Dominican Republic. In the remaining countries, the differential is at least 20 percentage points, reaching an extreme of 35 points in the case of Peru. Surprisingly, contraceptive prevalence is relatively high in urban areas of Mexico and Peru.

The level of education of women is an even stronger differential of contraceptive use (see Chart 5). In four of the countries the prevalence of use among women with no formal schooling does not surpass 20 percent, while in another set of four the prevalence rate among women with at least some secondary education exceeds 60 percent. The difference in prevalence between women with no schooling and those with secondary education exceeds 40 percentage points in Guatemala, Mexico and Peru. Once again, the differential effect of education is least in those countries with the most mature programs, namely Brazil, Colombia and the Dominican Republic.

Use of Specific Contraceptive Methods

The mix of methods used in the various Latin American countries varies widely. The pill, once very popular in most of Latin America, is now utilized by less than 20 percent of users in all but Colombia and Brazil (Chart 6 highlights, for each country, the prevalence rate for the method most frequently used). Sterilization is the method most relied on by women in all countries except Bolivia and Peru. It is the preferred method of 66 percent of users in the Dominican Republic, and more than 40 percent in Brazil and Guatemala. In the absence of good delivery systems, traditional methods, principally rhythm, are relied on heavily in Bolivia and Peru.

Chart 6
Method mix of current use among currently married women

Percent Distribution of Use

	PILL	IUD	STERILI-ZATION	OTHER MODERN	TRADI-TIONAL
Legend					
BOLIVIA				60	
BRAZIL			42		
COLOMBIA			29		
DOMINICAN REPUBLIC			66		
ECUADOR			34		
GUATEMALA			49		
MEXICO			37		
PERU				50	

0   20   40   60   80   100
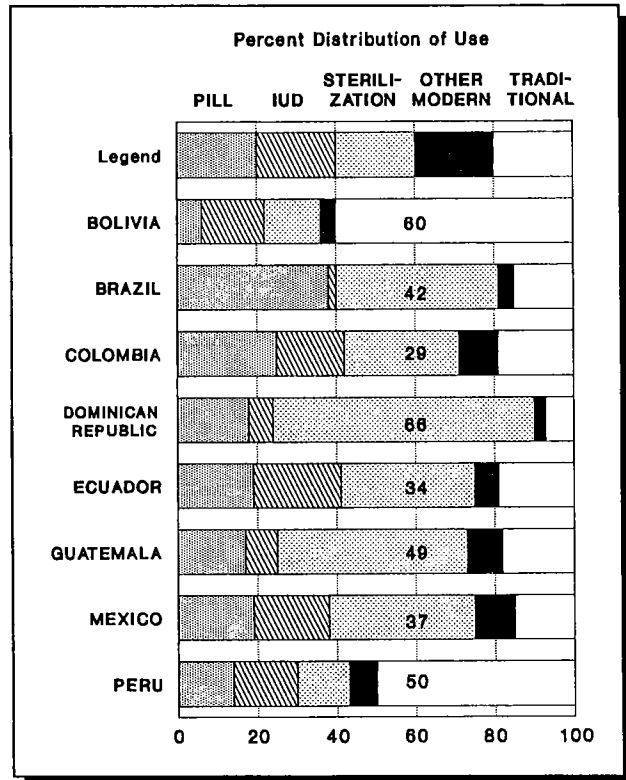
Chart 7
Wanted status of children born in year preceding the survey

Percentage of Births

	WANTED AT TIME	WANTED LATER	NOT WANTED
BOLIVIA	33		40
BRAZIL	42		32
COLOMBIA	51		22
DOMINICAN REPUBLIC	44		22
ECUADOR	61		17
GUATEMALA	71		13
PERU	38		32

0   20   40   60   80   100
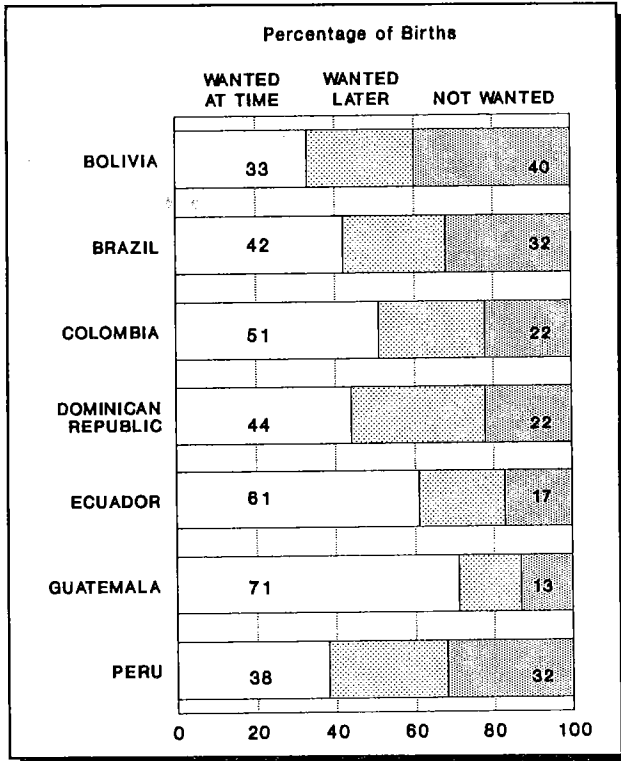
Fertility Planning

The Levels of Unwanted Fertility

In all of the DHS surveys, except Mexico, each woman was asked, concerning each child borne in the five years prior to the survey, whether at the time she became pregnant she had wanted that pregnancy then, would have preferred to wait until later, or would have preferred to have no more children at all. This type of question is known for its very low test/retest reliability in reinterview surveys, its very high correlated response variance (i.e., interviewer effect), and its subjectivity to memory lapse. In an attempt to overcome the last named problem, the following discussion is limited to children born in the 12 months prior to interview.

The percentage of pregnancies which were wanted at the time they occurred varies widely, as highlighted in Chart 7, from 33 percent in Bolivia to 71 percent in Guatemala. Conversely, the levels of unwanted fertility range from 13 percent in Guatemala, on the one hand, to 32 percent in Brazil and Peru, and to 40 percent in Bolivia. The low figure for unwanted fertility in Guatemala results from a relatively large desired family size, coupled with only a recent awareness that women can control their fertility. The large amount of unwanted fertility in Peru and Bolivia stems in part from high failure rates of traditional methods of contraception, while in Brazil it is attributable principally to a small desired family size. Timing failures (i.e., children wanted at a later time) show the least amount of intercountry variability, ranging from 16 to 34 percent.

Differentials in Unwanted Fertility

The factor that is most highly correlated with unwanted fertility is the number of living children that a woman has. The figures included in Chart 8 highlight the difference between women with only one child and women with four or more. In Bolivia, Brazil and Peru more than half of women with four or more living children declared that they had not wanted the pregnancy leading to their last child. Unwanted fertility is also linked to the level of education attained by women (see Chart 9). The levels of unwanted fertility are generally much lower among women with at least some secondary education than among those with no schooling or with only primary school education. The fact that this relationship appears not to hold in Guatemala suggests once again that the concept of unwanted fertility is still poorly defined there. Considering only women with no schooling, the remaining countries cluster in two groups: Bolivia, Brazil and Peru, where roughly one-half of last births were unwanted, and Colombia, the Dominican Republic and Ecuador, where about a quarter were unwanted.

Chart 8
**Percentage of women who did not want last birth by number of living children**

Percentage of Married Women

Country	One	Four+
BOLIVIA	10	66
BRAZIL	14	57
COLOMBIA	6	49
DOMINICAN REPUBLIC	6	47
ECUADOR	4	31
GUATEMALA	3	17
PERU	3	57

Legend: One / Two / Three / Four+
Number of living children
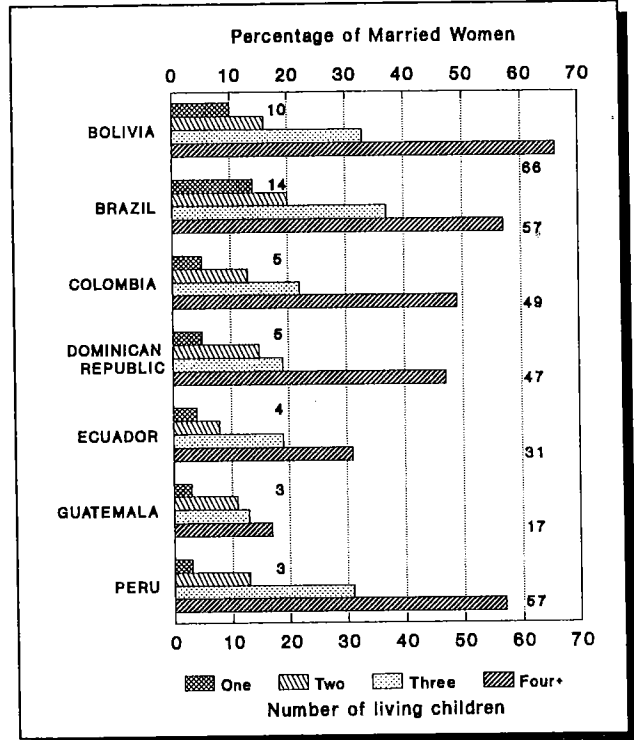
Chart 9
Percentage of women who did not want last birth by level of education

Percentage of Married Women

Country	None	Primary	Secondary+
BOLIVIA	51	44	26
BRAZIL	66	32	21
COLOMBIA	26	28	14
DOMINICAN REPUBLIC	29	26	10
ECUADOR	24	19	11
GUATEMALA	13	12	12
PERU	48	39	18

Legend: None / Primary / Secondary+
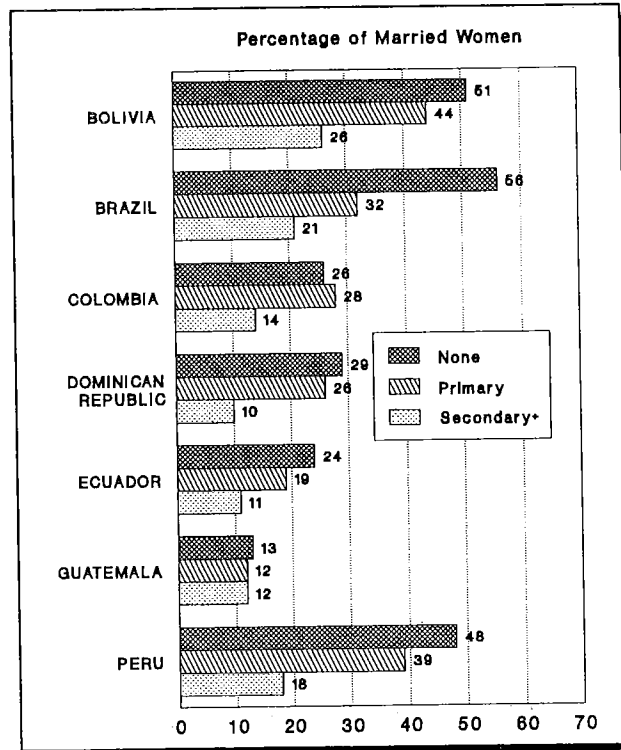
**Chart 10
Unmet need for contraception among
currently married women by type**

	TOTAL NEED	NEED FOR SPACING	NEED FOR LIMITING
BOLIVIA	36	10	26
BRAZIL	13	5	8
COLOMBIA	13	5	8
DOMINICAN REPUBLIC	19	10	9
ECUADOR	24	11	13
GUATEMALA	29	16	13
MEXICO	24	11	13
PERU	28	8	20

40 30 20 10 0 10 20 30 40
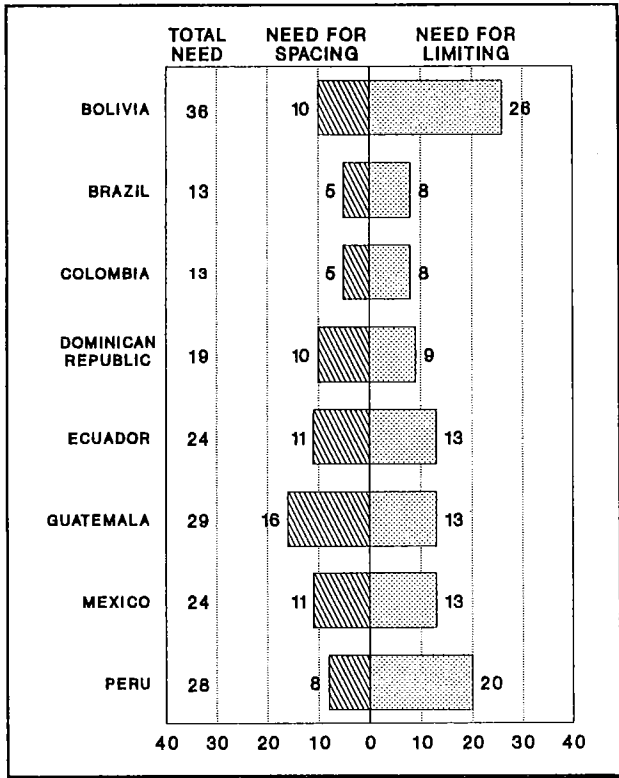
**Chart 11
Unmet need for contraception among
currently married women by residence**

Percentage of Married Women

0   20   40   60   80   100

	Urban	Rural
BOLIVIA	30	43
BRAZIL	10	21
COLOMBIA	11	19
DOMINICAN REPUBLIC	17	24
ECUADOR	19	31
GUATEMALA	24	32
PERU	18	44

0   20   40   60   80   100
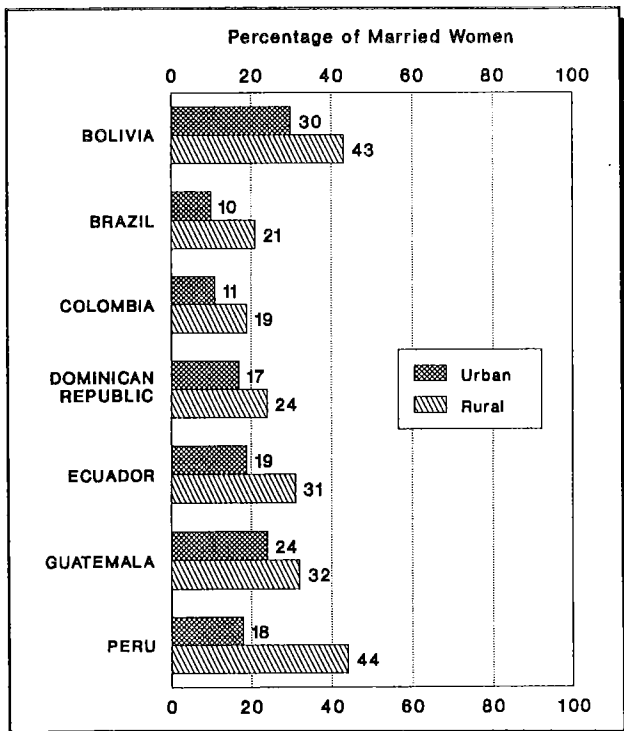
Unmet Need for Contraception

Unmet Need for Spacing and for Limiting

The concept of an unmet need for contraception grows out of the fact that many women wish to space their children, while others want no more children at all, but they are not using a contraceptive method. Women not using contraception, who are married and fecund, are classified as having an unmet need for contraception for limiting if they want no more children; and as having an unmet need for spacing if they don't want a (another) child within the next two years. The total unmet need for contraception is the sum of these two components.[1]

The two countries with the lowest levels of unmet need for contraception, Brazil and Colombia, both 13 percent of currently married women, are the two with the highest levels of contraceptive prevalence (see Chart 10). At the other extreme, with unmet need ranging from 28 percent to 36 percent, are Peru, Guatemala and Bolivia. As might be expected from the findings concerning unwanted fertility, the greatest need for contraception in Peru and Bolivia is for limiting childbearing, while in Guatemala it is more evenly balanced between spacing and limiting. The Dominican Republic, Ecuador and Mexico have moderate levels of unmet need, varying between 19 percent and 24 percent, with the need about evenly split between spacing and limiting.

Differentials of Unmet Need

In all of the countries studied, unmet need for contraception is greater in rural areas than in urban areas (see Chart 11). The differential is particularly strong in Peru, where unmet need in rural areas is 2.4 times greater than in urban areas. The greatest unmet need in urban areas is in Bolivia and Guatemala, and the greatest unmet need in rural areas is in Peru and Bolivia.

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[1]Details of the measurement procedure, particularly the treatment of pregnant and amenorrheic women, are contained in Charles F. Westoff and Luis H. Ochoa (1991) *Unmet Need and the Demand for Family Planning*. DHS Comparative Studies No 5. Columbia, Maryland: IRD

Unmet need for contraception is inversely related to the level of education attained by women (see Chart 12). Unmet need among women without schooling ranges from 22 percent in Colombia to 45 percent in Bolivia and 49 percent in Peru. At the other extreme, unmet need among women with secondary education varies between 5 percent and 16 percent, with Bolivia much higher at 22 percent. In all cases, unmet need among women with a primary education lies between that of unschooled women and those with a secondary education. The pattern is smoothly monotonic in all countries except Bolivia and Guatemala, where women with primary education have a greater unmet need than might be expected.

Unmet Need and the Demand for Family Planning

The levels of unmet need presented in the foregoing section reveal only partially the potential **demand** for family planning in Latin America. To estimate the total demand, women who are current users of contraception and those who became pregnant while using must be added to those with an unmet need. Except Guatemala, where demand amounts to only a little more than one-half of currently married women, in the surveyed countries total demand varies between 70 and 80 percent. This figure is similar to the mean prevalence of contraceptive use in developed countries during the past fifteen years.

Chart 12
**Unmet need for contraception among currently married women by education**

Percentage of Married Women

BOLIVIA: None 46, Primary 41, Secondary+ 22
BRAZIL: None 30, Primary 12, Secondary+ 6
COLOMBIA: None 22, Primary 16, Secondary+ 9
DOMINICAN REPUBLIC: None 30, Primary 20, Secondary+ 16
ECUADOR: None 37, Primary 27, Secondary+ 18
GUATEMALA: None 35, Primary 28, Secondary+ 11
PERU: None 49, Primary 32, Secondary+ 16
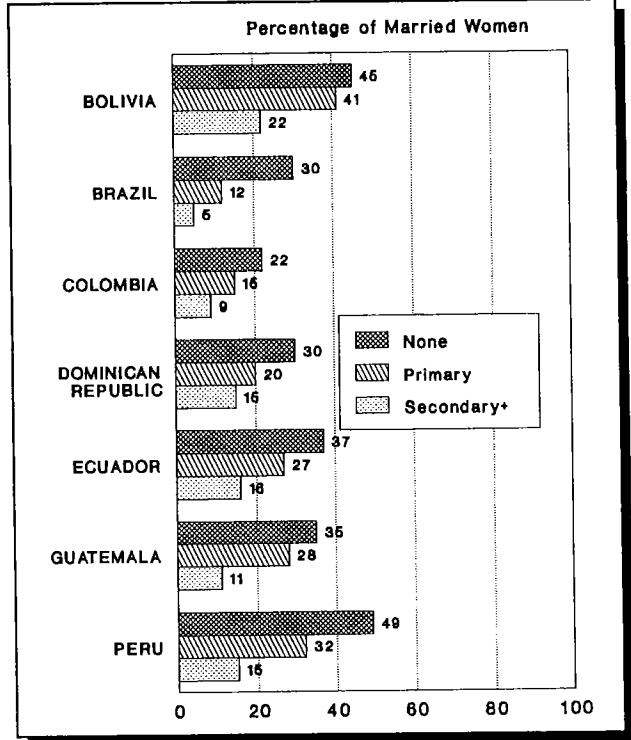
Chart 13
Mortality rates for the five-year period preceding the survey

Deaths per 1,000 Births

	UNDER 5	NEONATAL	INFANT
BOLIVIA	132		
BRAZIL	85		
COLOMBIA	43		
DOMINICAN REPUBLIC	88		
ECUADOR	82		
GUATEMALA	110		
MEXICO	61		
PERU	111		

90 60 30 0 30 60 90
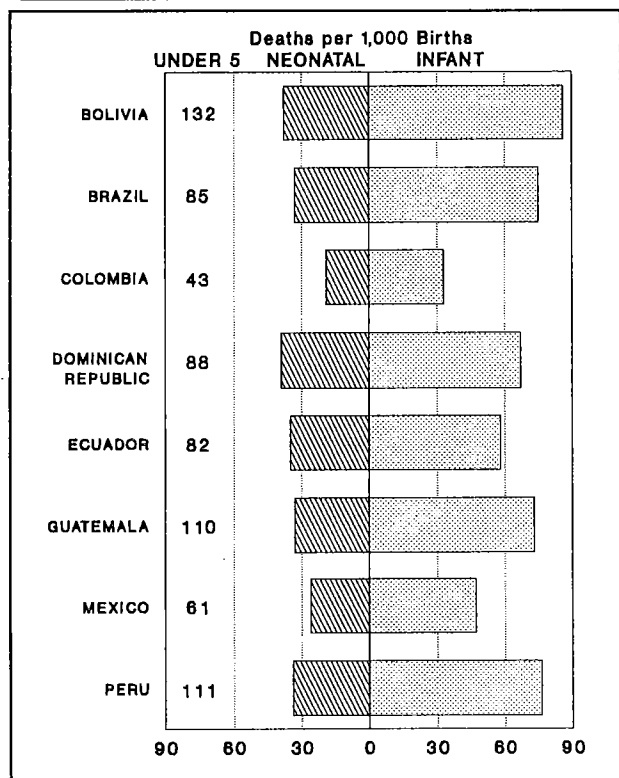
Chart 14
Under-five mortality rates for three five-year periods preceding the survey

Deaths per 1,000 Births

0 25 50 75 100 125 150 175

BOLIVIA
BRAZIL
COLOMBIA
DOMINICAN REPUBLIC
ECUADOR
GUATEMALA
MEXICO
PERU

0 25 50 75 100 125 150 175

▓ 10-14   ▨ 5-9   ▢ 0-4

Number of years preceding the survey
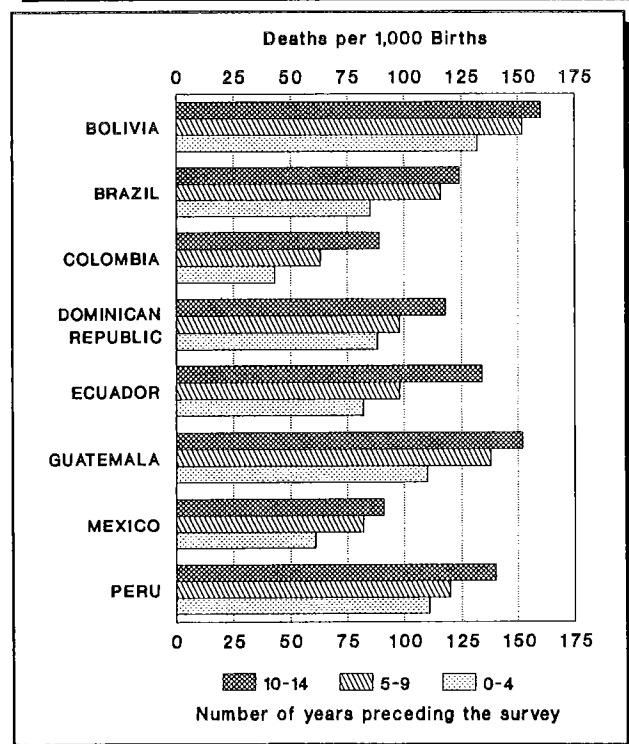
Infant and Child Mortality

Levels and Trends in Infant and Child Mortality

According to several sources, the level of infant and child mortality differs widely among the various Latin American countries, and within individual countries. Some of the Caribbean islands, as well as Costa Rica in Central America, have infant mortality rates nearly as low as the most developed countries of the world. *Infant mortality* is the number of infants who die (per thousand births) before reaching their first birthday. *Child mortality* represents the number of children who die (per thousand) between their first and fifth birthdays, while *neonatal mortality* is the number of infants who die (per thousand births) in the first month after birth.

Among DHS countries, Colombia and Mexico stand out for their low infant mortality rates (see Chart 13). At the other extreme are Brazil, Guatemala and Peru, with infant mortality rates ranging from 73 to 76 per thousand, and finally Bolivia, with an estimated rate of 86 per thousand.

Neonatal mortality rates vary from 19 to 39 per thousand. The variability among postneonatal rates is much larger. Noteworthy are the low child mortality rates for Brazil, Colombia and Mexico, and the correspondingly high rates for Bolivia, Guatemala and Peru. The trend in child mortality has been downward during the past two decades in each of the countries represented in the DHS.

The *under-five mortality* rate is the number of children per thousand births who die before their fifth birthday. The steepest relative decline has occurred in Colombia; the largest numerical declines have occurred in Ecuador, and to a lesser extent, in Guatemala and Brazil (see Chart 14). Steep declines for the most recent period are evident for Brazil, Guatemala and Mexico.

Differential Infant Mortality

A number of biological factors are linked to infant mortality. Research based on data from the WFS and the DHS surveys has clearly established that birth order, mother's age at birth, and birth spacing play important roles in determining the probability of an infant death. Of the three variables, the length of the preceding birth interval has the clearest differential effect on infant mortality (see Chart 15). In all of the DHS countries studied there is a steep drop in infant mortality when births are spaced by at least two years instead of shorter intervals. In only three of the countries (Bolivia, Colombia and Peru) is there any further gain by spacing births at least four years apart. One feature of Chart 15 that stands out is the extremely high mortality associated with intervals of less than two years in Bolivia, Brazil, Guatemala and Peru: rates in excess of 120 per thousand. A strong argument for family planning campaigns is, therefore, the reduction of short birth intervals, which are associated with higher levels of infant mortality.

In most of the countries studied there is an excess infant mortality in rural areas as compared to urban areas (see Chart 16). The most extreme cases are Mexico and Peru, where the rural infant mortality rates exceed the urban rates by more than 80 percent. On the other hand, in Colombia and the Dominican Republic there is no evidence of differential mortality by urban-rural residence. Noteworthy are the very high rates for rural areas in Bolivia, Brazil and Peru: well in excess of 100 per thousand.

Chart 15
**Ten-year infant mortality rates by duration of the preceding birth interval**

Infant Deaths per 1,000 Births

Duration of the preceding birth interval in years
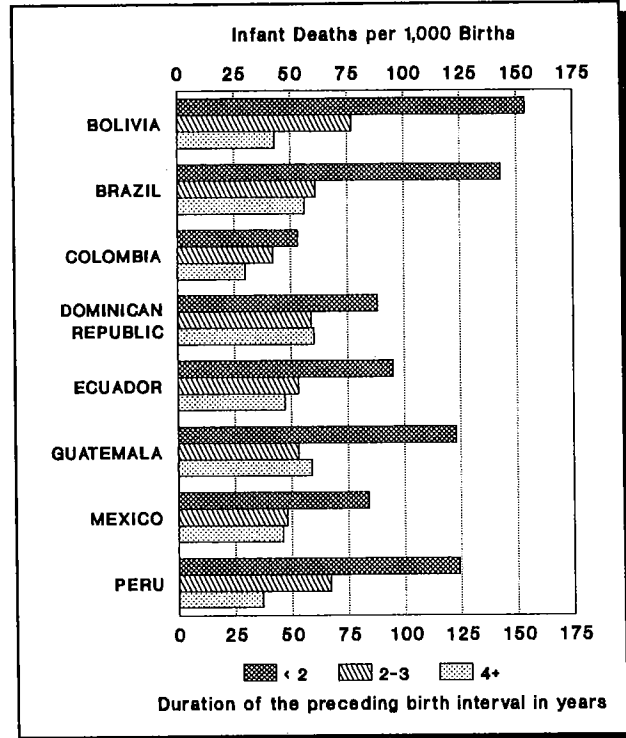
Chart 16
**Infant mortality for the ten-year period preceding the survey by residence**

Infant Deaths per 1,000 Births

Country	Urban	Rural
BOLIVIA	79	112
BRAZIL	76	107
COLOMBIA	38	41
DOMINICAN REPUBLIC	72	68
ECUADOR	52	77
GUATEMALA	65	84
MEXICO	43	79
PERU	56	105
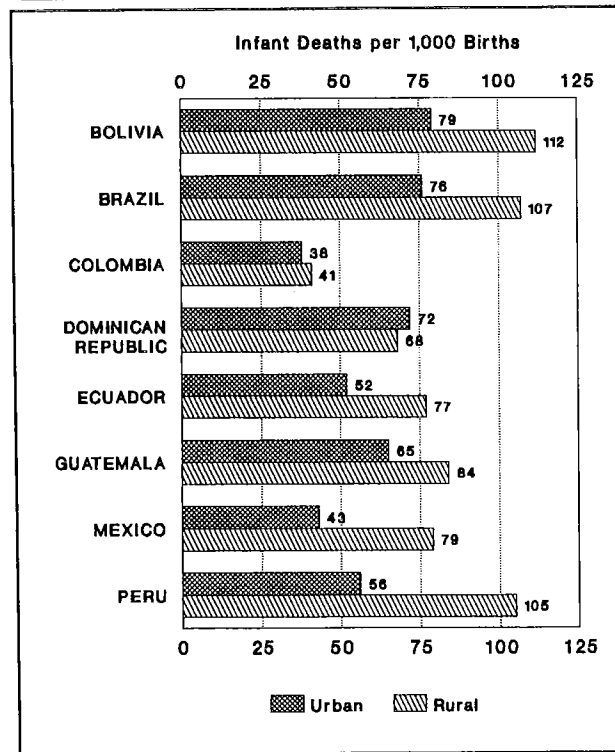
Chart 17
Infant mortality for the ten-year period preceding the survey by education

Infant Deaths per 1,000 Births

None   Primary   Secondary+
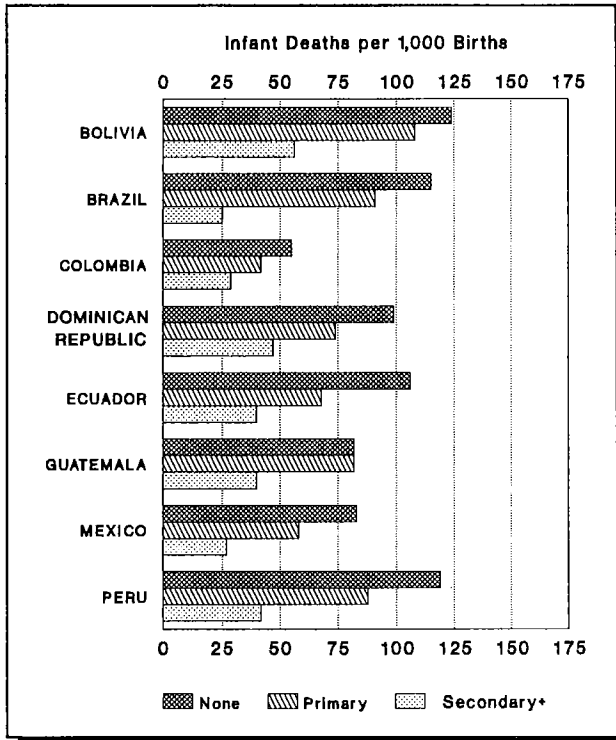
The level of education of mothers is closely related to the frequency with which infants die (see Chart 17). The relationship is seen most clearly in Brazil, Mexico and Peru where the infant mortality among mothers without schooling exceeds that of mothers with secondary education by factors in the range of three to five. Even in Colombia and the Dominican Republic, which showed no urban-rural differentials, there is a strong educational differential. In both countries, the infant mortality rate for mothers with no formal education is about double that for mothers with secondary education. The gradient of decline in most DHS countries is monotonic with increases in education. However, in Bolivia and Guatemala, real gains become apparent only with some secondary schooling.

Rates and Probabilities

The complete birth histories collected in surveys of the DHS program are ideal from the standpoint of estimating mortality in the early years of life. They do not, however, permit estimation of adult mortality or other measures of general mortality conditions, such as life expectancy at birth.

The mortality estimates presented here are not rates but true probabilities, calculated according to the conventional life table approach from the complete birth histories in the DHS surveys. For a given calendar period, *deaths* and *exposure* in that period are first tabulated for the age intervals 0, 1-2, 3-5, 6-11, 12-23, 24-35, 36-47, and 48-59 months. Then age interval specific probabilities of survival are calculated. Finally, probabilities of mortality for larger age segments are produced by multiplying the relevant age interval survival probabilities together and subtracting the product from one.

A detailed description of the method is given in:
S. O. Rutstein (1984) *Infant and Child Mortality: Levels, Trends, and Demographic Differentials*. Revised Edition. WFS Comparative Studies No. 43. Voorburg, Netherlands: International Statistical Institute.

Antenatal Care and Attention at Delivery

Antenatal Care

The proportion of women receiving antenatal care varies widely among countries in Latin America: from less than half (47 percent) in Bolivia to nearly all (96 percent) in the Dominican Republic. Women who seek antenatal care nearly always receive professional attention, i.e., from a doctor, obstetrician or trained nurse. Only in Guatemala do midwives still play an important role.

The practice of vaccinating pregnant women to protect infants from neonatal tetanus has grown considerably in the past decade. The percentage of women receiving tetanus toxoid vaccine varies greatly: from about 15 percent in Peru and Guatemala to 87 percent in the Dominican Republic. The greatest increase in tetanus coverage has been in the countries in which coverage is lowest. In Bolivia, for example, tetanus coverage increased from 15 percent five years before the survey, to 32 percent in the year preceding the survey.

The differentials in antenatal care are similar to those discussed below in relation to attention at birth.

Attention at Delivery

The type of attention women receive at the time of delivery varies widely in Latin America. The proportion of mothers receiving professional health care (from a doctor, obstetrician or professional nurse) varies from 29 percent in Guatemala to 90 percent in the Dominican Republic (see Chart 18). The bulk of births in Guatemala are attended by midwives (60 percent), while in Bolivia 41 percent of births are attended by friends or relatives.

Chart 18
Attention at delivery for women in the five-year period preceding the survey

PROFESSIONAL MIDWIFE OTHER SELF

	%
Legend	
BOLIVIA	42
BRAZIL	81
COLOMBIA	71
DOMINICAN REPUBLIC	90
ECUADOR	62
GUATEMALA	29
MEXICO	70
PERU	49

0 10 20 30 40 50 60 70 80 90 100
Percentage of Births
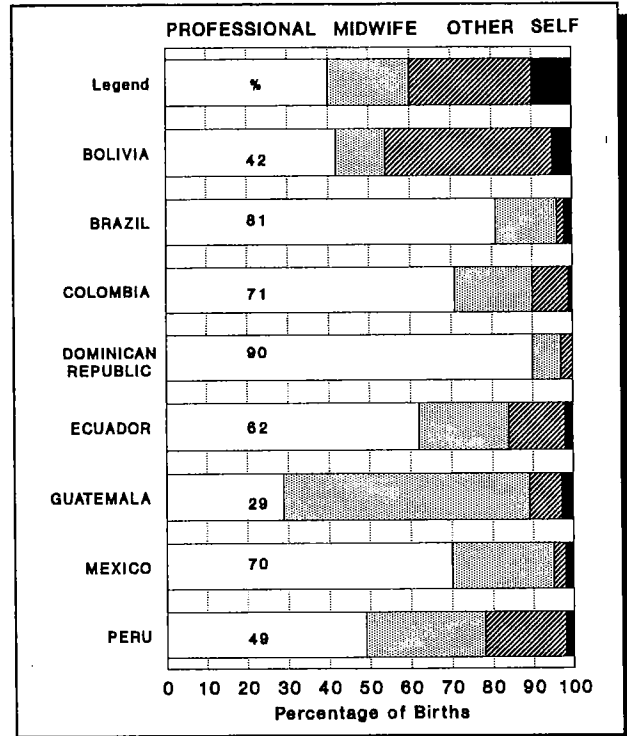
**Chart 19
Professional attention at delivery (five
years preceding the survey) by residence**

Percentage of Births

BOLIVIA — 63 / 23
BRAZIL — 92 / 59
COLOMBIA — 85 / 50
DOMINICAN REPUBLIC — 95 / 83
ECUADOR — 85 / 40
GUATEMALA — 59 / 18
MEXICO — 86 / 44
PERU — 81 / 18

Urban   Rural

**Chart 20
Professional attention at delivery (five
years preceding the survey) by education**

Percentage of Births

BOLIVIA
BRAZIL
COLOMBIA
DOMINICAN REPUBLIC
ECUADOR
GUATEMALA
MEXICO
PERU

None   Primary   Secondary+
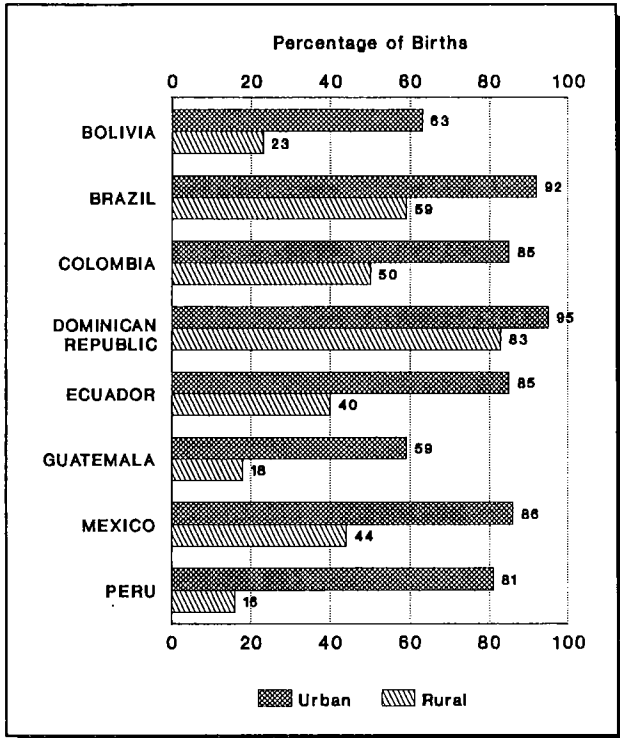
Differentials of Professional Attention

Since most health professionals reside in urban areas,
the proportion of mothers receiving professional care
at the national level depends largely on the geograph-
ical distribution of births. In all of the countries
studied, with the exception of Bolivia and Guatemala,
over 80 percent of mothers residing in urban areas
received professional care on giving birth in the five
years preceding the survey (see Chart 19). The situa-
tion in rural areas is much more variable: while less
than a fifth of rural mothers receive professional
attention in Peru and Guatemala, one-half or more of
mothers do so in the rural areas of Colombia, Brazil
and the Dominican Republic. The Dominican Repub-
lic stands out for the high proportion (83 percent) of
rural births attended by a health professional.

The strongest determinant of the type of attention
received at birth is the educational level attained by the
mothers (see Chart 20). In all eight of the surveyed
countries, over 80 percent of births to mothers with
secondary education were attended by health profes-
sionals. The contrast with mothers having no school-
ing is particularly sharp in Bolivia, Guatemala and
Peru, where only 11 to 13 percent were attended by a
professional.

Breastfeeding and Supplemental Feeding

Prevalence and Duration

Breastfeeding is an important public health concern, because breast milk is the ideal source of nutrition for infants and also provides antibodies to protect them from disease. A large majority of women in Latin America breastfeed their children. Among the eight countries surveyed in the DHS, the proportion of births who started breastfeeding ranges from 83 percent in Mexico to 96 percent in Bolivia (see Chart 21).

Despite the high percentage of infants who were breastfed, the median duration of breastfeeding varies widely: from 6 months in Brazil to 21 months in Guatemala. DHS countries in Latin America show two distinct groupings with respect to duration of breastfeeding: the traditional pattern of prolonged breastfeeding, reflected in Guatemala and the three Andean countries (Bolivia, Ecuador and Peru); and the pattern of short breastfeeding in Brazil, Colombia, the Dominican Republic and Mexico.

Differentials in the Duration of Breastfeeding

Women residing in urban areas have shorter durations of breastfeeding than those in rural areas (see Chart 22). The differences are often modest, only 2 or 3 months in four countries, but reach 8 and 9 months in Peru and Mexico, respectively. Even larger differences in the duration of breastfeeding are seen when the level of women's education is considered (see Chart 23, page 16).

Chart 21
Children under five who started breastfeeding and duration of breastfeeding
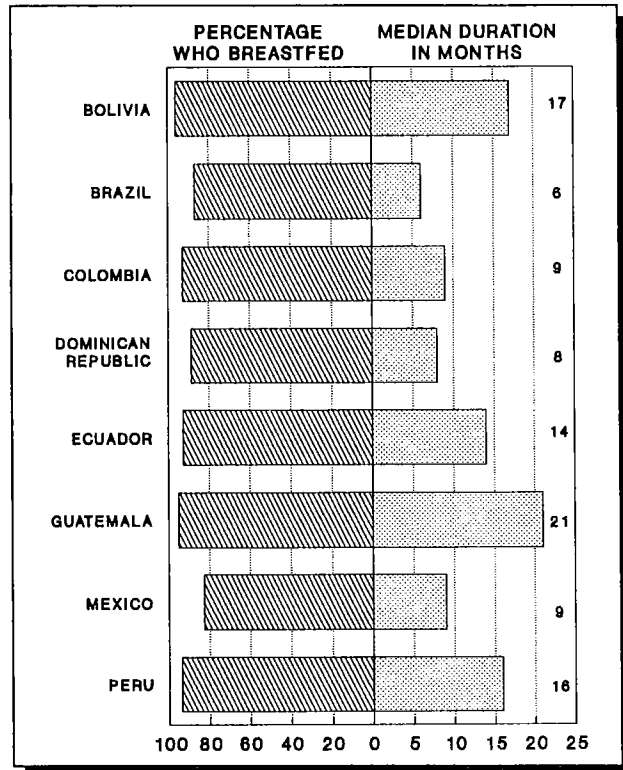
Chart 22
Duration of breastfeeding for children born in the last five years by residence
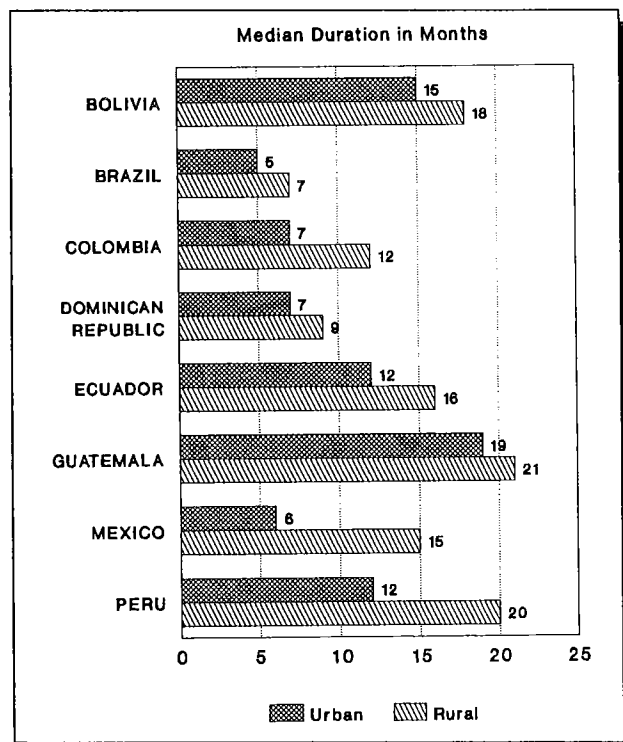
Chart 23
Duration of breastfeeding for children born in the last five years by education

Median Duration in Months

Country	
BOLIVIA	
BRAZIL	
COLOMBIA	
DOMINICAN REPUBLIC	
ECUADOR	
GUATEMALA	
MEXICO	
PERU	

None   Primary   Secondary+
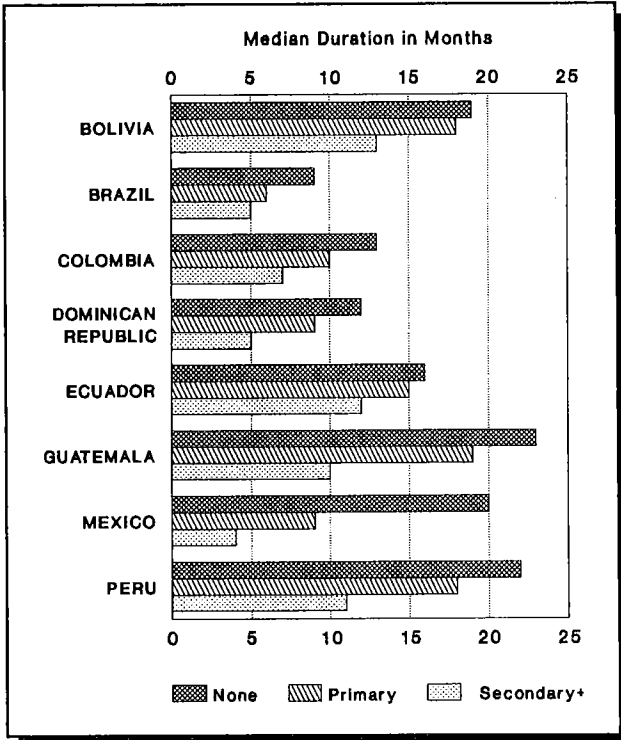
In each of the countries the relationship is monotonic: women without schooling have longer durations than women who attended primary school, and these in turn have longer durations than women who attended secondary school. The contrasts between the most extreme educational categories are particularly notable in Guatemala, Mexico and Peru. In Bolivia and Ecuador, primary education has little impact on shortening the duration of breastfeeding.

Fears are often expressed that, over time, with increasing education and urbanization, women will be less likely to breastfeed their children, and that those who do so will breastfed for shorter durations. This is not a necessary outcome. During the nine years separating the WFS and DHS surveys in Peru, the prevalence of breastfeeding rose from 91 percent to 94 percent, and the mean duration increased from 13 to 16 months. It is thought that this came about as a result of the Ministry of Health's campaigns to promote breastfeeding, and the increasingly difficult economic situation, which restricted the purchase of milk substitutes among large segments of the population.

Immunization of Children

Immunization Coverage

During the 1980s immunization became a major focus of child survival programs throughout the world. Mass immunization programs were undertaken in a majority of less developed countries, with the result that in many of these countries a higher percentage of children are today protected against disease than are their counterparts in the United States. In the majority of DHS countries, information on immunizations was collected from health cards; in others this information was either replaced by or supplemented with maternal recall, while in two countries no information was collected on immunization (Dominican Republic and Ecuador). The vaccinations inquired about were: BCG, three doses of DPT and of polio vaccine, and measles vaccine.

Data available for Latin America are summarized in Chart 24 for DPT vaccine. The coverage for the first dose is good, ranging from 70 percent in Bolivia to 90 percent in Colombia. But only Brazil and Colombia have good followup coverage, with 70 percent and 72 percent (respectively) fully immunized by their second birthday. The proportion of children lost to followup is particularly high in Bolivia, Guatemala and Mexico.

Chart 24
Immunization coverage for DPT vaccine among children 12-23 months

Percentage of Children

Country	DPT 1	DPT 2	DPT 3
BOLIVIA	70	51	28
BRAZIL	85	77	70
COLOMBIA	90	83	72
GUATEMALA	77	57	36
MEXICO	77	60	34
PERU	84	76	58
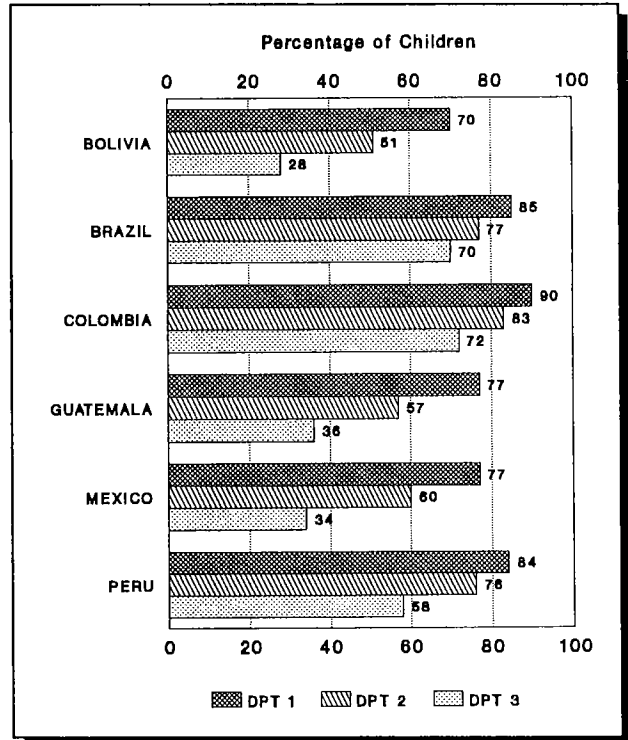
Chart 25
Immunization coverage for DPT among children 12-35 months by residence

Percentage of Children with Three Doses

	Urban	Rural
BOLIVIA	64	46
BRAZIL	88	70
COLOMBIA	89	84
GUATEMALA	70	59
PERU	80	62

Legend: ▓ Urban ▨ Rural
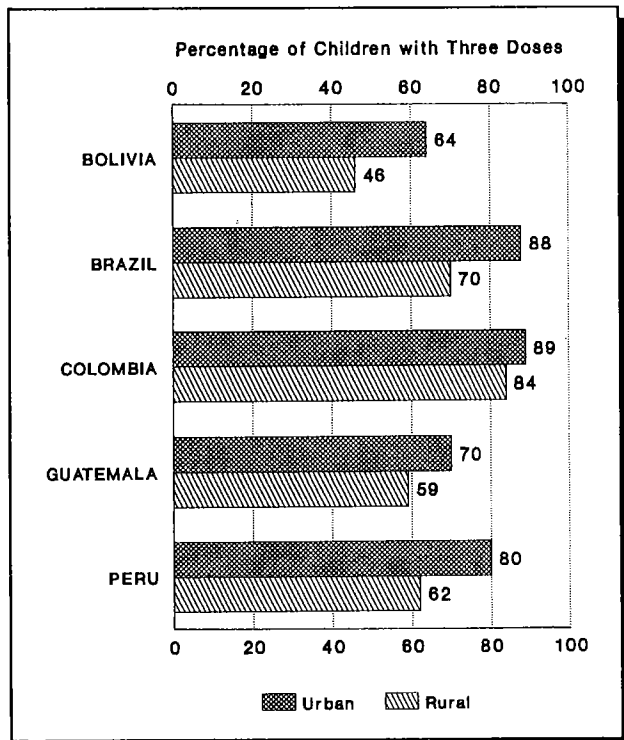
Chart 26
Immunization coverage for DPT among children 12-35 months by education

Percentage of Children with Three Doses

	None	Primary	Secondary+
BOLIVIA	43	48	70
BRAZIL	65	82	95
COLOMBIA	68	87	91
GUATEMALA	58	65	70
PERU	60	64	84

Legend: ▓ None ▨ Primary ▒ Secondary+
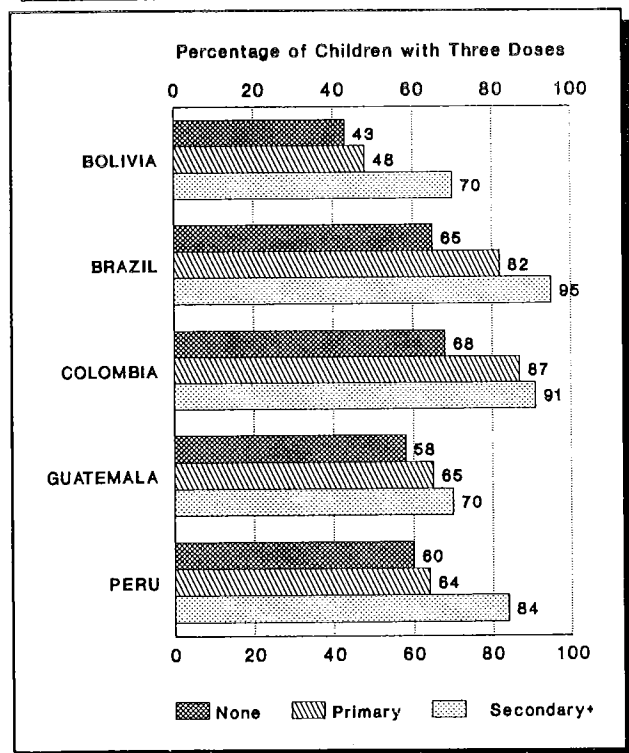
Differentials in Immunization Coverage

Differentials in coverage are examined for the third dose of DPT vaccine among children 12 to 35 months of age. (Two-year-olds are included to increase the size of the denominators.) Coverage is greater in urban than in rural areas (see Chart 25), and is greater among children of women with secondary education than among children of women with lesser amounts of schooling (see Chart 26).

Overall, the differentials for immunization coverage are much smaller than those for other phenomena (fertility, contraception, infant mortality, etc.). Thus, immunization campaigns appear to be reaching a wide range of population subgroups.

Little trend data are available for analysis. However, comparing similarly defined groups of children from the WFS and DHS surveys in Peru, the percentage who had ever received a vaccination increased from 67 percent in 1977 to 90 percent in 1986. This impressive gain is indicative of what has happened throughout Latin America.

Immunization coverage for polio is nearly identical to DPT coverage in Colombia and Peru and slightly higher for the other countries. Coverage for BCG is relatively high (over 70 percent) in Colombia, Mexico and Brazil, while Brazil and Peru have the highest level of coverage for the measles vaccine (79 percent and 72 percent, respectively) (see Chart 27).

Chart 27
Immunization coverage for BCG and measles vaccine (children 12-23 months)

Percentage of Children

Country	BCG	Measles
BOLIVIA	55	58
BRAZIL	70	79
COLOMBIA	85	64
GUATEMALA	50	55
MEXICO	73	59
PERU	57	72

BCG ▨   Measles ▨
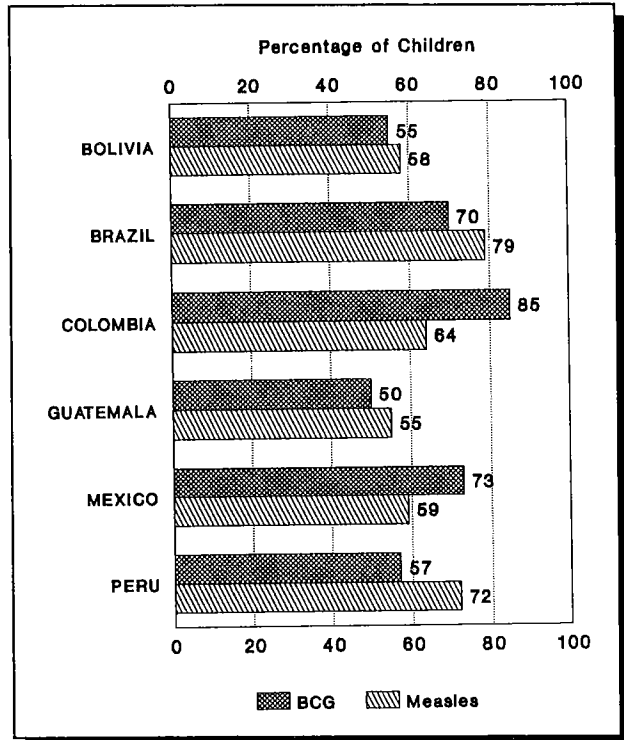
**Chart 28
Undernutrition among children
6-35 months: chronic, acute, composite**

Percentage of Children

TYPE OF
UNDERNUTRITION

- Chronic
- Acute
- Composite
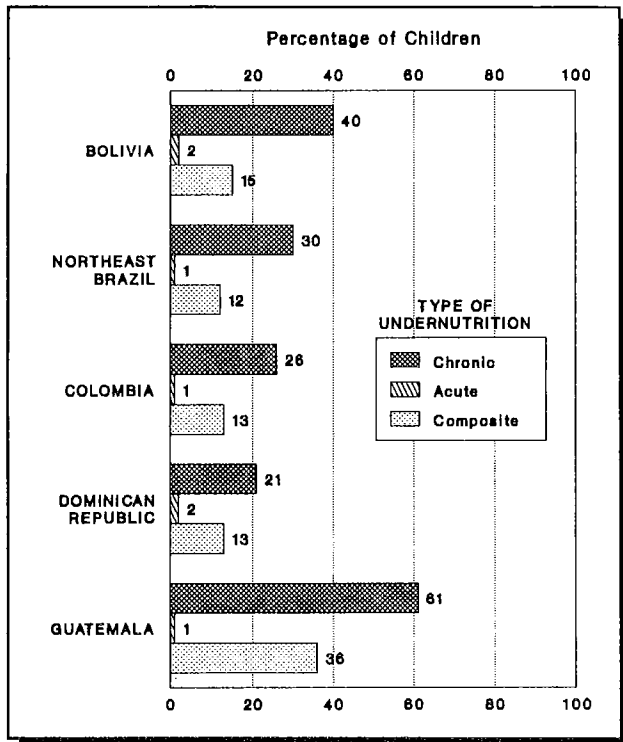
Nutritional Status of Children

Types and Levels of Undernutrition

The collection of anthropometric data on young children was an option exercised by many countries participating in the first round of the DHS surveys. In Latin America, such data were collected in Bolivia, Colombia, the Dominican Republic, Guatemala and in the Northeastern region of Brazil. The purpose of taking height and weight measures of children is to determine their nutritional status. Deficient height for a given age measures *chronic undernutrition*; deficient weight for height measures *acute undernutrition*; and deficient weight for age is a *composite* measure of undernutrition. A well-nourished reference population is used for comparative purposes. A child is defined as undernourished if he/she falls below a point that is two standard deviations below the mean of the reference population. This standard for defining undernutrition has been adopted by the World Health Organization for use throughout the world.

Chronic undernutrition is a problem in each of the populations surveyed, ranging from 21 percent in the Dominican Republic to 40 percent in Bolivia and 61 percent in Guatemala (see Chart 28). *Stunting*, a descriptive term used for chronic undernutrition, arises because of long-term insufficiency in proteinic and caloric intake. There is no evidence of acute undernutrition (*wasting*) in any of the DHS countries in Latin America (i.e., the expected statistical value of 2.3 percent is not exceeded). The *composite* measure of undernutrition ranges from 12 percent to 15 percent in four countries, rising to 36 percent in Guatemala.

Differentials of Chronic Undernutrition

Chronic undernutrition is more of a problem in rural areas than in urban areas (see Chart 29), but the differences are not large compared to urban-rural differentials for other demographic variables. The additional undernutrition in rural areas varies from 11 to 16 percentage points. Overall, half of the children living in urban areas of Guatemala, and fully two-thirds of those in rural areas, suffer from chronic undernutrition.

Differences in chronic undernutrition according to mother's level of education are much greater than those associated with area of residence (see Chart 30). The percentage of children of mothers with no educa-tion who suffer from undernutrition exceeds that of children of mothers with secondary education by ratios of 3 to 1 and 4 to 1 in the surveyed countries. This may, in part, reflect economic differentials, but it is also likely that greater education helps mothers deal more effectively with the problems associated with poverty.

Chart 29
Chronic undernutrition among children 6-35 months by residence

Percentage of Children with Chronic Undernutrition

	Urban	Rural
BOLIVIA	33	47
NORTHEAST BRAZIL	24	37
COLOMBIA	22	33
DOMINICAN REPUBLIC	14	29
GUATEMALA	50	66
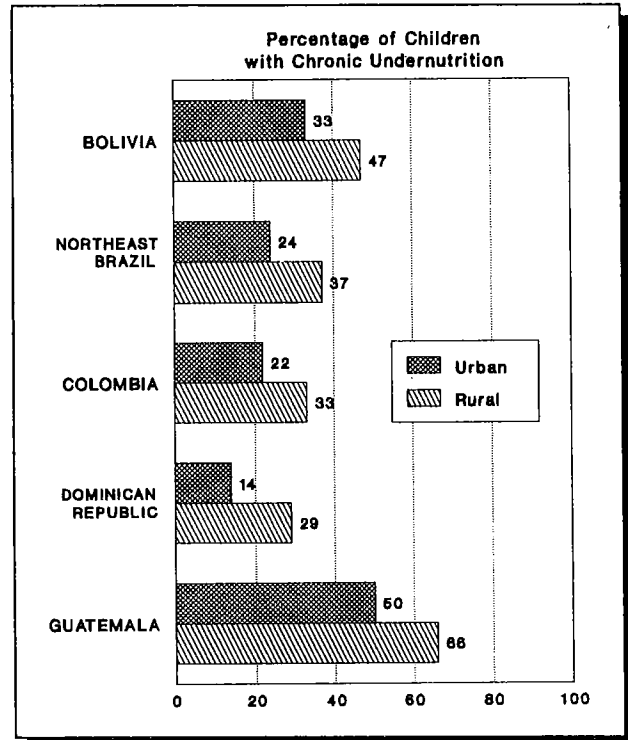
Chart 30
Chronic undernutrition among children 6-35 months by mother's education

Percentage of Children with Chronic Undernutrition

	None	Primary+	Secondary+
BOLIVIA	59	43	23
NORTHEAST BRAZIL	41	31	11
COLOMBIA	40	31	15
DOMINICAN REPUBLIC	33	25	8
GUATEMALA	72	56	27
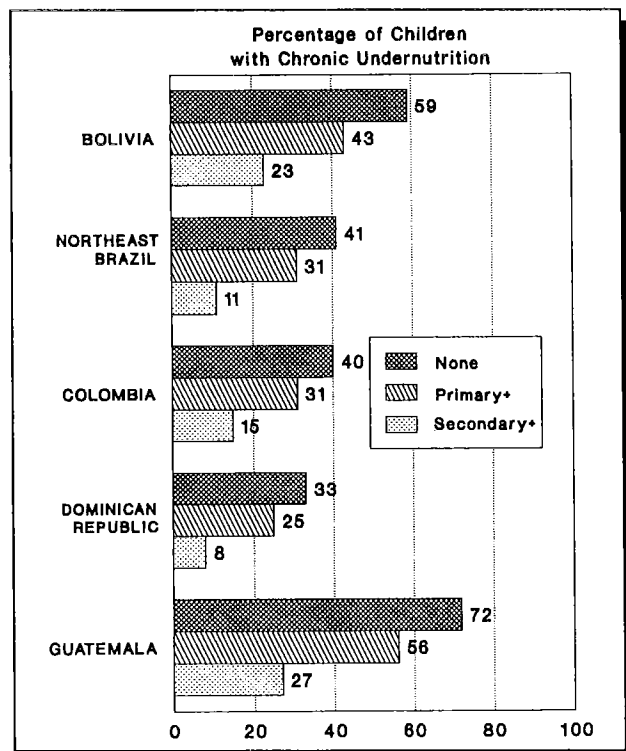
Chart 31
Prevalence of diarrhea in the two weeks preceding the survey

Percentage of Children

AGE OF CHILD

Legend:
- Under 5
- 1 year
- 4 years

BOLIVIA: 28, 41, 16
BRAZIL: 17, 27, 8
COLOMBIA: 19, 26, 11
DOMINICAN REPUBLIC: 26, 36, 12
ECUADOR: 39, 47, 24
GUATEMALA: 17, 26, 7
MEXICO: 23, 34, 12
PERU: 32, 46, 20
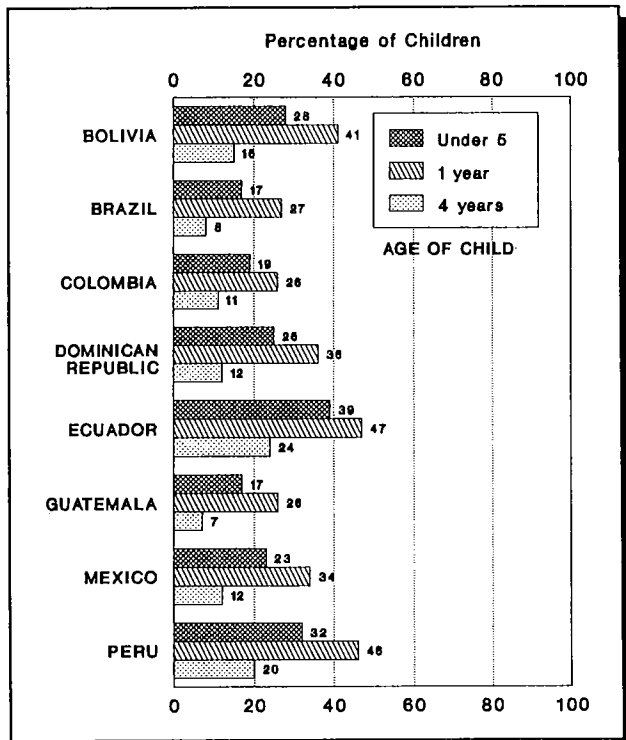
Prevalence and Treatment of Diarrhea

Prevalence of Diarrhea

Diarrheal disease is considered the leading cause of infant and child mortality in developing countries.[2] Given the international concern regarding childhood diarrhea, DHS surveys collect information on the frequency (prevalence) of diarrhea episodes and the treatment received by children who had diarrhea.

Unlike other topics considered in this report, there are some real problems of comparability in measuring the **prevalence** of diarrhea. There are both cross-national and intra-country variations in respondents' perceptions of diarrheal disease. Data collected are also affected by the seasonality of diarrheal episodes. Thus, frequencies may vary depending on when the fieldwork was conducted.

The proportion of children under five years of age who experienced an episode of diarrhea in the two weeks preceding the survey varies widely in the Latin American countries surveyed: from 17 percent in Brazil and Guatemala to 39 percent in Ecuador. However, the pattern of diarrhea prevalence by age is consistent for all countries: the highest prevalence rates are reported for children 12-23 months, which coincides with weaning. After the second birthday, the prevalence of diarrhea declines rapidly and is lowest among four-year-olds. For children one year of age, diarrhea prevalence varies from 26 to 47 percent, while among children four years of age, it varies from 7 to 24 percent (see Chart 31).

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[2]Actually, it is the dehydration which accompanies it, rather than the diarrhea itself that causes death.

The socioeconomic differentials for diarrhea prevalence are much less pronounced than the age differential. Prevalence was found to be inversely related to the mother's level of education. There is no consistent relationship across countries between diarrhea prevalence and urban-rural residence. Children living in homes with such amenities as piped water, a flush toilet, and a covered floor, are less likely to suffer from diarrhea than other children (particularly in the cases of Colombia, Mexico and Peru).

Treatment of Diarrhea

Since most of the mortality attributed to childhood diarrhea is due to dehydration, in recent years, international health authorities have emphasized the benefits of oral rehydration therapy (ORT) to counteract dehydration. National educational campaigns have been undertaken in many developing countries on the benefits of providing ORT to children with diarrhea. Provision of ORT may include the use of either prepackaged oral rehydration salts (ORS), or homemade solutions of sugar, salt and water.

There are some problems with the comparability of data on the treatment of diarrhea as well. Information on diarrhea treatment was gathered in a variety of ways and with varying degrees of completeness in the different countries. The format ranged from a single open-ended question to a series of specific closed questions. Data on the treatment of diarrhea are provided in Chart 32 for six countries. In Brazil and Guatemala, use of oral rehydration therapy is low, while reliance on *other* treatments (mostly antibiotics) is high. In the remaining countries, 30 to 50 percent of children were treated with ORT, and another 40 percent with other treatments. The DHS data show no consistent sociodemographic differentials in the usage of oral rehydration therapy across Latin American countries.

Chart 32
Treatment of diarrhea (percentage distribution)
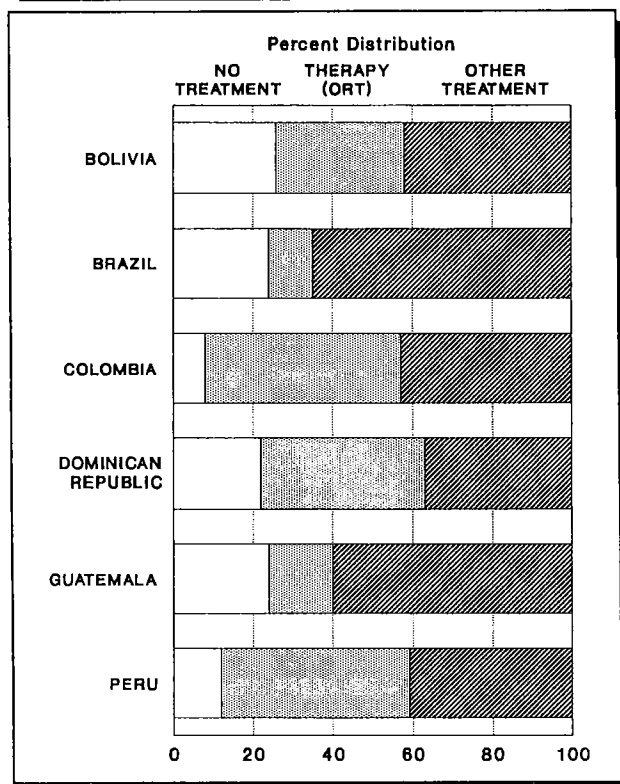
Chart 33
Percentage of nonsterilized married women in single high risk categories

BOLIVIA	1 / 41 / 25 / 10
BRAZIL	3 / 28 / 13 / 18
COLOMBIA	2 / 32 / 18 / 15
DOMINICAN REPUBLIC	4 / 28 / 16 / 19
ECUADOR	3 / 30 / 19 / 13
GUATEMALA	4 / 27 / 25 / 10
MEXICO	3 / 31 / 22 / 17
PERU	2 / 40 / 26 / 11

TYPE OF RISK:
- Young age risk
- Old age risk
- Parity risk
- Interval risk
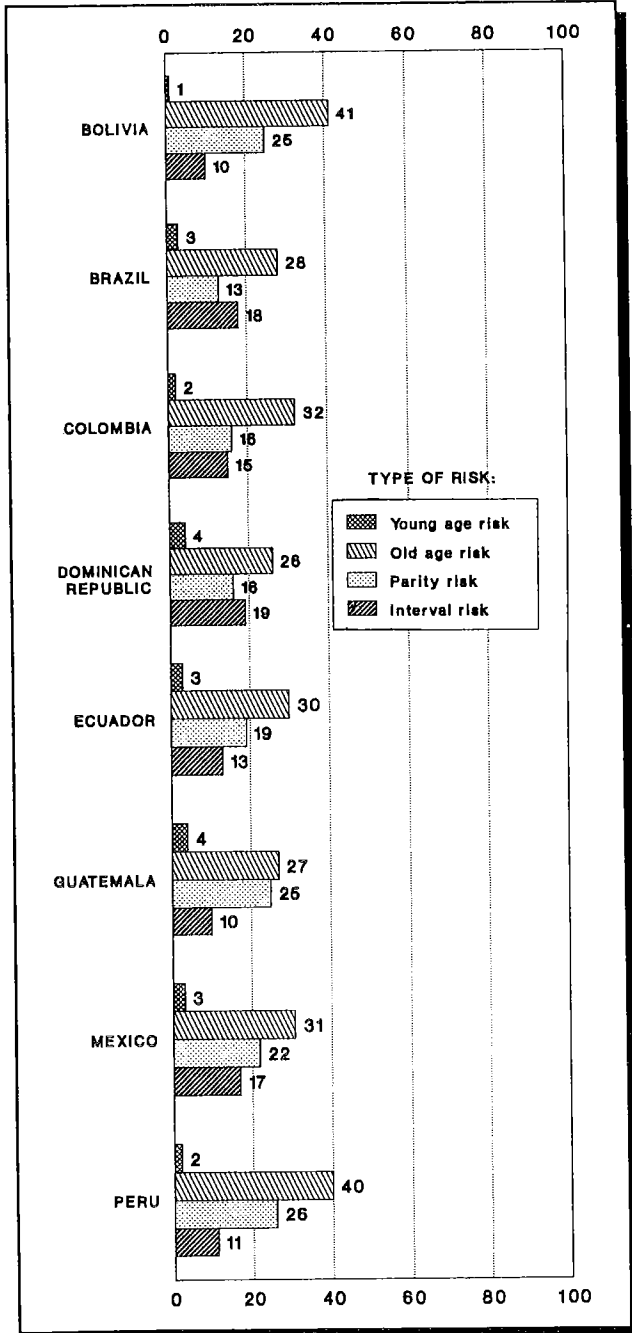
Fertility Risk Status

Types and Levels of Risk

In the section on infant and child mortality, it was seen that certain biological factors are closely linked to mortality. These include the age of the mother at time of birth, birth order, and birth interval. Children of very young mothers or children of older mothers, those born less than two years after their next oldest sibling, and those of birth order seven or higher are disproportionately at risk of early death. It is useful, therefore, to analyze the proportion of women who are at risk of conceiving a child with an elevated risk of mortality.

For purposes of this analysis, the data are restricted to *currently married women who have not been sterilized* (i.e. those most likely to conceive). Young is defined as under 18 years of age; old is 35 years or older; parity risk is assigned to women who have already had six or more births; and interval risk is assigned to women whose last birth occurred less than 15 months ago and who are not currently amenorrheic (i.e., those at risk of conceiving a child who would be born less than two years after the prior birth).

In all countries, the most frequent risk is that for *older mothers*, varying from 26 to 41 percent (see Chart 33). The percentage of mothers 35 years or older is below 30 percent in three countries: Brazil, Guatemala and the Dominican Republic; the reason for this is that in Brazil and Guatemala women age 45-49 years were excluded from the sample, and the Dominican Republic is unique because women tend to marry early, have children rapidly, then choose to be sterilized. Since sterilized women are not included for risk analysis, and since a majority of older Dominican women are sterilized, the proportion of older women in the *old age risk* category is low. At the same time, Dominican women are more likely to be in the *interval risk* and *young age risk* categories.

The second most common risk in six of the eight countries is that of *high parity*. For Brazil and the Dominican Republic the second most common is *interval risk*, again because higher parity women in these countries opt for sterilization.

Women may be subject to more than one type of risk. Thus, it would be incorrect to sum the figures in Chart 33 to arrive at the percentage of women subject to risk. The percentage of nonsterilized married women at risk, and those subject to one risk and to two or more risks are shown in Chart 34. The proportion of women subject to just one risk varies from 30 percent to 36 percent. The percentage subject to two or more risks is more variable, ranging from 12 percent in Brazil to 22 percent in Peru. The most common combination of risks is that of *older age* and *parity*. Overall, the percentage of women subject to any kind of risk varies from 47 percent in Guatemala to 56 percent in Peru.

Differential Risk

In each of the surveyed countries the proportion of nonsterilized married women at risk of conceiving a child with an elevated risk of mortality is higher in rural areas than in urban areas (see Chart 35). This is due to the greater proportion of older women giving birth and to higher fertility in rural areas. What is surprising is the relative homogeneity of the figures across countries: the variation for urban areas is from 44 percent to 53 percent, and for rural areas is from 49 percent to 61 percent.

Chart 34
Percentage of married women in high risk categories by number of risks
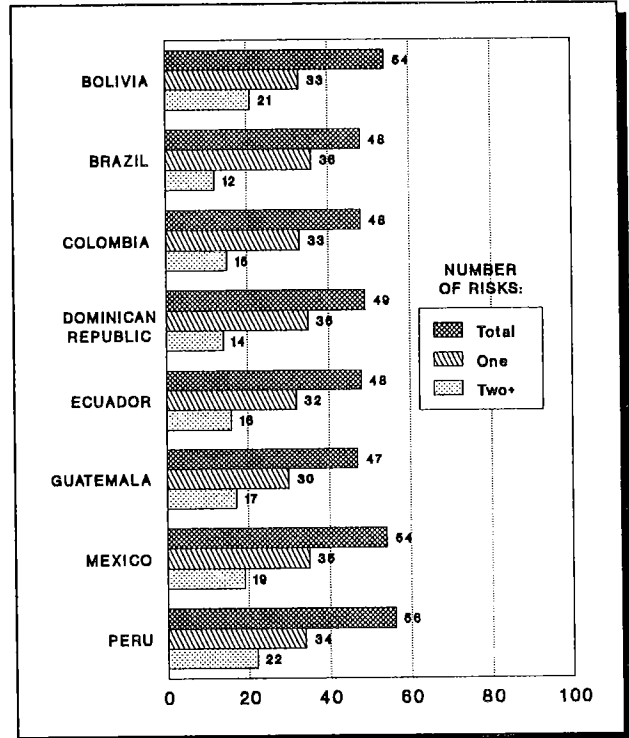
Chart 35
Percentage of married women in high risk categories by place of residence
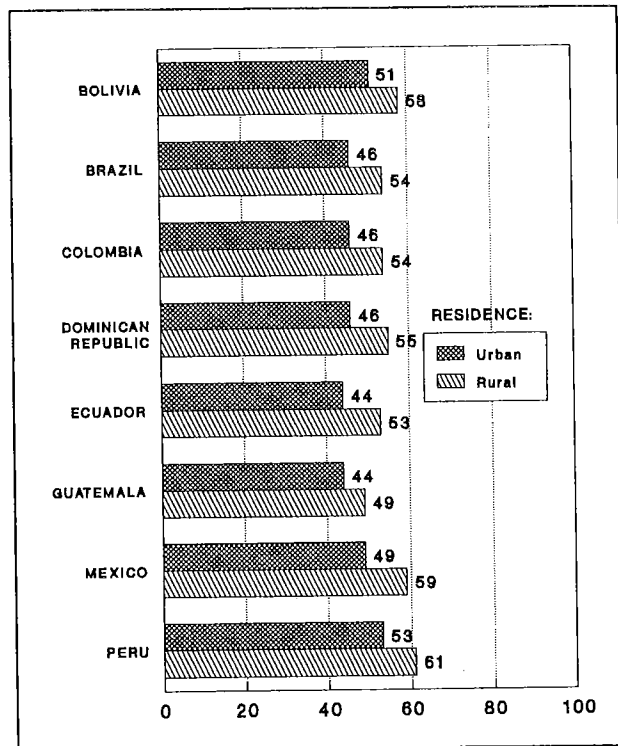
Chart 36
Percentage of married women in high risk categories by level of education

	None	Primary	Secondary+
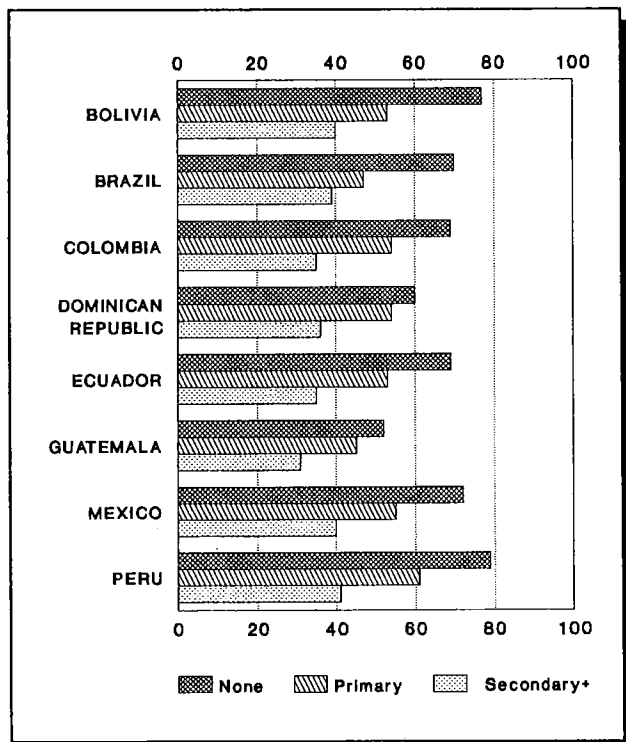
The variation in risk according to level of education is much greater (see Chart 36). On average, across countries, only 37 percent of nonsterilized married women with at least some secondary schooling are at risk, compared to 68 percent of women with no schooling. The differential effect of education is particularly strong in Peru and Bolivia, and is weakest in Guatemala.

Risk Status and the Use of Contraception

The fact that a woman may be at risk of conceiving a child with a heightened risk of early death may be ameliorated through the use of contraception. But in only two countries, Colombia and Brazil, are at least half of these women using a contraceptive method (see Chart 37). Only one-fourth or less of women at risk are using contraception in the Dominican Republic, Bolivia and Guatemala. In fact, in seven of the eight countries, contraceptive use is higher among women with no risk factor than among those at risk. Women at risk should be the principal targets of campaigns by national family planning programs.

Chart 37
Percentage of married women who are contracepting by high risk status

Country	At risk	Not at risk
BOLIVIA	24	31
BRAZIL	52	56
COLOMBIA	54	60
DOMINICAN REPUBLIC	25	25
ECUADOR	30	38
GUATEMALA	14	16
MEXICO	39	46
PERU	38	48
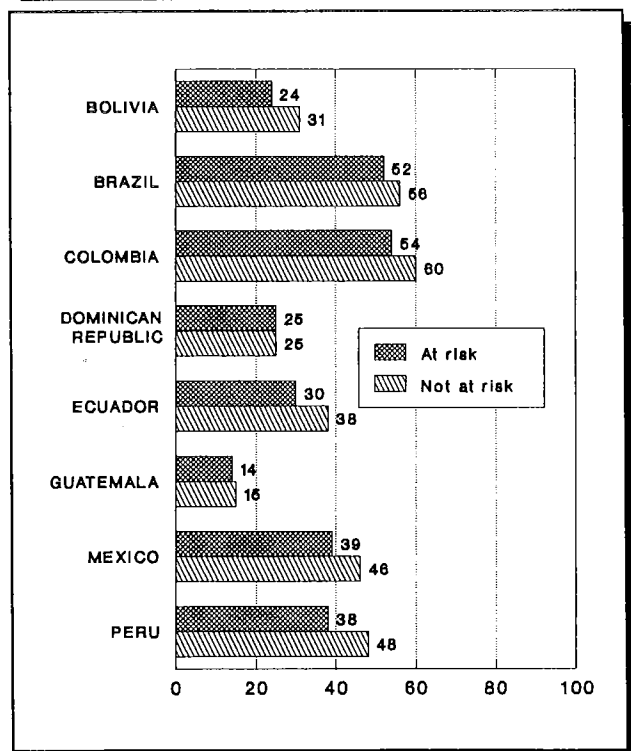
STATISTICAL APPENDICES

APPENDIX 1

FERTILITY

Table 1.1   Trends in Total Fertility Rates

Change in the total fertility rates between two four-year periods preceding the survey

Country	0-3 years preceding the survey	4-7 years preceding the survey	Percent change
Bolivia	4.9	5.5	-11.0
Brazil	3.6	4.5	-20.0
Colombia	3.2	4.0	-20.0
Dominican Republic	3.7	4.6	-19.6
Ecuador	4.1	5.2	-21.2
Guatemala	5.6	6.5	-13.8
Mexico	4.0	4.5	-11.1
Peru	4.2	5.3	-20.8

Note: Rates are for women 15-44.

Table 1.2   Total and Age-specific Fertility Rates

Total and age-specific fertility rates for the four-year period preceding the survey

Country	Age-specific fertility rates (per 1000 women)							Total fertility rate[1]
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Bolivia	95	226	247	199	144	73	24	4.9
Brazil	76	195	186	136	90	41	NA	3.6
Colombia	74	179	163	117	78	28	9	3.2
Dominican Republic	103	208	192	127	76	32	7	3.7
Ecuador	86	209	208	150	103	59	22	4.1
Guatemala	136	271	262	205	153	83	NA	5.6
Mexico	90	215	207	151	104	36	5	4.0
Peru	80	188	202	175	131	65	15	4.2

NA= Not available
[1]For women 15-44

Table 1.3 Fertility Differentials

Total fertility rates by place of residence and education for the five-year period preceding the survey

Country	Residence			Education			
	Total	Urban	Rural	None	1-3 years	4-6 years	7+ years
Bolivia	5.1	4.0	6.6	6.2	6.4	5.3	3.3
Brazil	3.7	3.2	5.4	6.7	5.2	3.4	2.4
Colombia	3.3	2.8	4.9	5.4	4.5	3.6	2.1
Dominican Republic	3.8	3.2	5.1	5.6	5.0	4.4	2.9
Ecuador	4.3	3.5	5.5	6.4	6.3	4.7	2.9
Guatemala	5.6	4.1	6.5	7.0	5.6	4.2	2.7
Mexico	4.1	3.3	6.3	6.4	6.3	4.0	2.5
Peru	4.5	3.3	6.9	7.4	6.1	4.7	2.9

APPENDIX 2

CONTRACEPTION

Table 2.1 Current Use of Contraception

Current use of contraception among currently married women by method

Method	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total	**30.3**	**66.2**	**64.8**	**49.8**	**44.3**	**23.2**	**52.7**	**45.8**
Modern	**12.2**	**56.5**	**52.5**	**46.5**	**35.8**	**19.0**	**44.6**	**23.1**
Pill	1.9	25.2	16.4	8.8	8.5	3.9	9.8	6.5
IUD	4.8	1.0	11.0	3.0	9.8	1.8	10.2	7.4
Sterilization	4.4	27.6	18.8	33.0	15.0	11.3	19.4	6.1
Other Modern	1.1	2.7	6.3	1.7	2.5	2.0	5.2	3.1
Traditional	**18.1**	**9.7**	**12.3**	**3.3**	**8.5**	**4.2**	**8.1**	**22.7**

Note: Figures for Brazil and Guatemala are for women 15-44.

Table 2.2 Method Mix

Use of specific contraceptive methods among currently married women

Method	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Modern	**40.3**	**85.3**	**81.0**	**93.4**	**80.8**	**81.9**	**84.6**	**50.4**
Pill	6.3	38.1	25.3	17.7	19.2	16.8	18.6	14.2
IUD	15.8	1.5	17.0	6.0	22.1	7.8	19.3	16.2
Sterilization	14.5	41.7	29.0	66.3	33.9	48.7	36.8	13.3
Other Modern	3.7	4.0	9.7	3.4	5.6	8.6	9.9	6.7
Traditional	**59.7**	**14.7**	**19.0**	**6.6**	**19.2**	**18.1**	**15.4**	**49.6**

Note: Figures for Brazil and Guatemala are for women 15-44.

Table 2.3 Differentials in Contraceptive Use: **Bolivia and Brazil**

Contraceptive use among women in union by selected characteristics, Bolivia and Brazil

Characteristic	Not using	Current Contraceptive Use		
		Total	Modern	Traditional
BOLIVIA				
Total	**69.7**	**30.3**	**12.2**	**18.1**
Parity				
No children	91.6	8.4	2.3	6.1
1 child	73.0	27.0	8.0	19.0
2 children	65.8	34.2	13.5	20.7
3 children	58.0	42.0	18.5	23.5
4 or more	72.1	27.9	11.7	16.2
Age				
15-19	84.0	16.0	2.5	13.5
20-24	77.4	22.6	7.7	14.9
25-29	65.7	34.3	12.3	22.0
30-34	60.8	39.2	17.5	21.7
35-39	63.8	36.2	15.2	21.0
40-44	71.9	28.1	13.1	15.0
45-49	85.2	14.8	6.6	8.2
Education				
None	88.4	11.6	2.4	9.2
Primary	73.7	26.3	9.1	17.2
Secondary	53.3	46.7	22.4	24.3
Higher	41.9	58.1	28.6	29.5
Residence				
Urban	61.0	39.0	17.9	21.1
Rural	80.6	19.4	5.2	14.2
BRAZIL[1]				
Total	**33.8**	**66.2**	**56.5**	**9.7**
Parity				
No children	71.6	28.4	21.1	7.3
1 child	40.5	59.5	49.0	10.5
2 children	24.8	75.2	63.3	11.9
3 children	19.3	80.7	74.1	6.6
4 or more	34.3	65.7	55.8	9.9
Age				
15-19	52.2	47.8	44.2	3.6
20-24	44.7	55.3	46.0	9.3
25-29	32.4	67.6	61.0	6.6
30-34	25.9	74.1	63.3	10.8
35-39	30.5	69.5	58.7	10.8
40-44	33.2	66.8	53.4	13.4
Education				
None	52.7	47.3	39.5	7.8
Primary	32.9	67.1	57.6	9.5
Secondary	26.8	73.2	62.4	10.8
Higher	28.0	72.0	58.8	13.2
Residence				
Urban	30.2	69.8	60.7	9.1
Rural	43.3	56.7	45.5	11.2

[1]Figures are for women 15-44

Table 2.4 Differentials in Contraceptive Use: **Colombia and the Dominican Republic**

Contraceptive use among women in union by selected characteristics, Colombia and the Dominican Republic

Characteristic	Not using	Current Contraceptive Use		
		Total	Modern	Tradi- tional
COLOMBIA				
Total	**35.2**	**64.8**	**52.5**	**12.3**
Parity				
No children	79.8	20.2	14.6	5.6
1 child	44.8	55.2	44.7	10.5
2 children	24.6	75.4	61.2	14.2
3 children	25.0	75.0	60.9	14.1
4 or more	33.3	66.7	54.1	12.6
Age				
15-19	71.1	28.9	21.2	7.7
20-24	43.0	57.0	47.2	9.8
25-29	31.3	68.7	59.4	9.3
30-34	26.2	73.8	58.7	15.1
35-39	24.0	76.0	61.3	14.7
40-44	29.9	60.1	54.2	15.9
45-49	52.3	47.7	34.9	12.8
Education				
None	49.3	50.7	42.8	7.9
Primary	38.0	62.0	49.2	12.8
Secondary	28.2	71.8	59.8	12.0
Higher	18.6	81.4	64.1	17.3
Residence				
Urban	29.8	70.2	58.2	12.0
Rural	46.4	53.6	40.6	13.0
DOMINICAN REPUBLIC				
Total	**50.2**	**49.8**	**46.5**	**3.3**
Parity				
No children	92.8	7.2	5.1	2.1
1 child	63.6	36.4	28.1	8.3
2 children	55.9	44.1	41.8	2.3
3 children	36.7	63.3	61.0	2.3
4 or more	38.2	61.8	59.3	2.5
Age				
15-19	75.4	24.6	20.0	4.6
20-24	62.1	37.9	33.2	4.7
25-29	49.0	51.0	47.4	3.6
30-34	39.4	60.6	58.3	2.3
35-39	35.2	64.8	62.2	2.6
40-44	45.2	54.8	52.6	2.2
45-49	57.6	42.4	39.8	2.6
Education				
None	64.3	35.7	32.4	3.3
Primary	51.0	49.0	46.7	2.3
Secondary	44.8	55.2	49.5	5.7
Higher	43.6	56.4	49.8	6.6
Residence				
Urban	47.9	52.1	48.8	3.3
Rural	54.0	46.0	42.7	3.3

Table 2.5 Differentials in Contraceptive Use: **Ecuador and Guatemala**

Contraceptive use among women in union by selected characteristics, Ecuador and Guatemala

Characteristic	Not using	Current Contraceptive Use		
		Total	Modern	Traditional
ECUADOR				
Total	**55.7**	**44.3**	**35.8**	**8.5**
Parity				
No children	85.6	14.4	4.6	9.8
1 child	65.6	34.4	23.9	10.5
2 children	49.3	50.7	39.6	11.1
3 children	46.0	54.0	44.8	9.2
4 or more	54.1	45.9	39.8	6.1
Age				
15-19	84.5	15.5	11.6	3.9
20-24	65.9	34.1	25.4	8.7
25-29	53.8	46.2	36.6	9.6
30-34	46.2	53.8	44.1	9.7
35-39	45.7	54.3	44.7	9.6
40-44	48.9	51.1	43.8	7.3
45-49	70.3	29.7	25.4	4.3
Education				
None	81.5	18.5	15.5	3.0
Primary	59.0	41.0	34.6	6.4
Secondary	45.2	54.8	43.1	11.7
Higher	36.4	63.6	44.9	18.7
Residence				
Urban	46.7	53.3	42.9	10.4
Rural	67.3	32.7	26.8	5.9
GUATEMALA[1]				
Total	**76.8**	**23.2**	**19.0**	**4.2**
Parity				
No children	97.3	2.7	2.2	0.5
1 child	87.3	12.7	8.2	4.5
2 children	74.7	25.3	17.3	8.0
3 children	65.9	34.1	29.4	4.7
4 or more	76.2	23.8	20.6	3.2
Age				
15-19	94.6	5.4	2.5	2.9
20-24	84.3	15.7	12.0	3.7
25-29	79.1	20.9	17.3	3.6
30-34	69.3	30.7	25.4	5.3
35-39	69.1	30.9	25.8	5.1
40-44	72.1	27.9	24.2	3.7
Education				
None	90.2	9.8	8.5	1.3
Primary	70.5	29.5	24.3	5.2
Secondary+	40.0	60.0	46.2	13.8
Residence				
Urban	57.0	43.0	35.9	7.1
Rural	86.2	13.8	11.0	2.8

[1]Figures are for women 15-44

Table 2.6 Differentials in Contraceptive Use: **Mexico and Peru**

Contraceptive use among women in union by selected characteristics, Mexico and Peru

| | | Current Contraceptive Use | | |
Characteristic	Not using	Total	Modern	Tradi- tional
		MEXICO		
Total	**47.3**	**52.7**	**44.6**	**8.1**
Parity				
No children	84.7	15.3	9.5	5.8
1 child	49.6	50.4	41.4	9.0
2 children	40.0	60.0	50.2	9.8
3 children	32.5	67.5	57.2	10.3
4 or more	48.7	51.3	44.7	6.6
Age				
15-19	70.3	29.7	24.3	5.4
20-24	52.8	47.2	41.0	6.2
25-29	46.0	54.0	43.0	11.0
30-34	37.8	62.2	52.9	9.3
35-39	38.2	61.8	54.6	7.2
40-44	40.5	59.5	50.8	8.7
45-49	65.5	34.5	29.8	4.7
Education				
None	76.3	23.7	19.3	4.4
Primary	48.0	52.0	44.8	7.2
Secondary	30.3	69.7	57.8	11.9
Higher	29.9	70.1	58.4	11.7
Residence				
Urban	38.3	61.7	52.4	9.3
Rural	67.5	32.5	27.2	5.3
		PERU		
Total	**54.2**	**45.8**	**23.1**	**22.7**
Parity				
No children	81.7	18.3	3.5	14.8
1 child	58.1	41.9	17.9	24.0
2 children	43.6	56.4	33.5	22.9
3 children	37.8	62.2	27.8	34.4
4 or more	59.3	40.7	21.4	19.3
Age				
15-19	77.3	22.7	10.2	12.5
20-24	60.4	39.6	19.7	19.9
25-29	49.9	50.1	26.7	23.4
30-34	44.8	55.2	28.7	26.5
35-39	46.3	53.7	26.9	26.8
40-44	52.5	47.5	19.6	27.9
45-49	75.1	24.9	14.9	10.0
Education				
None	80.9	19.1	7.6	11.5
Primary	60.7	39.3	17.1	22.2
Secondary	38.1	61.9	35.1	26.8
Higher	30.9	69.1	37.8	31.3
Residence				
Urban	41.5	58.5	31.6	26.9
Rural	76.0	24.0	8.4	15.6

APPENDIX 3

FERTILITY PLANNING

Table 3.1 Fertility Planning

Wanted status of children born in the year preceding the survey

Country	Child wanted then	Child wanted later	Child not wanted	Total
Bolivia	32.6	27.5	39.9	100.0
Brazil	41.9	26.0	32.1	100.0
Colombia	50.7	26.8	22.5	100.0
Dominican Republic	43.8	34.6	21.6	100.0
Ecuador	61.0	22.2	16.8	100.0
Guatemala	70.7	16.6	12.7	100.0
Mexico	NA	NA	NA	NA
Peru	38.1	29.9	32.0	100.0

NA= Not available

Table 3.2 Fertility Planning: **Bolivia and Brazil**

Wanted status of children born in the year preceding the survey by selected characteristics, Bolivia and Brazil

Characteristic	Child wanted then	Child wanted later	Child not wanted
BOLIVIA			
Total	**32.6**	**27.5**	**39.9**
Parity			
1 child	62.9	27.2	9.9
2 children	42.5	41.6	15.9
3 children	27.4	39.6	33.0
4 or more	16.0	18.1	65.9
Age			
15-19	54.4	25.1	20.5
20-24	42.2	38.5	19.3
25-29	29.0	27.8	43.2
30-34	22.7	23.3	54.0
35-49	21.8	17.2	61.0
Education			
None	29.6	19.0	51.4
Primary	29.3	27.0	43.7
Secondary+	40.4	33.4	26.2
Residence			
Urban	30.5	30.7	38.8
Rural	34.6	24.4	41.0
BRAZIL[1]			
Total	**41.9**	**26.0**	**32.1**
Parity			
1 child	61.4	24.2	14.4
2 children	42.0	38.0	20.0
3 children	39.9	22.8	37.3
4 or more	22.7	20.3	57.0
Age			
15-19	46.0	32.6	21.4
20-24	46.7	32.3	21.0
25-29	48.0	22.2	29.8
30-34	33.9	21.5	44.6
35-49	23.9	17.2	58.9
Education			
None	27.2	17.1	55.7
Primary	41.2	27.1	31.7
Secondary+	52.0	26.6	21.4
Residence			
Urban	46.0	25.3	28.7
Rural	33.4	27.2	39.4

[1]Figures are for women 15-44

Table 3.3   Fertility Planning: **Colombia and**
                  the Dominican Republic

Wanted status of children born in the year preceding the survey by
selected characteristics, Colombia and the Dominican Republic

Characteristic	Child wanted then	Child wanted later	Child not wanted
COLOMBIA			
Total	**50.7**	**26.8**	**22.5**
Parity			
1 child	76.5	18.7	4.8
2 children	48.5	38.5	13.0
3 children	47.5	30.7	21.8
4 or more	27.9	23.0	49.1
Age			
15-19	72.4	19.4	8.2
20-24	55.7	31.9	12.4
25-29	49.1	29.4	21.5
30-34	43.1	25.3	31.6
35-49	25.2	16.5	58.3
Education			
None	37.0	36.6	26.4
Primary	45.4	27.0	27.6
Secondary+	61.8	24.6	13.6
Residence			
Urban	52.0	28.9	19.1
Rural	48.9	24.0	27.1
DOMINICAN REPUBLIC			
Total	**43.8**	**34.6**	**21.6**
Parity			
1 child	58.4	36.9	4.7
2 children	45.9	39.5	14.6
3 children	45.2	35.4	19.4
4 or more	25.9	27.6	46.5
Age			
15-19	45.0	44.7	10.3
20-24	45.7	36.7	17.6
25-29	46.5	31.7	21.8
30-34	41.8	27.5	30.7
35-49	27.3	22.1	50.6
Education			
None	34.2	36.7	29.1
Primary	39.4	34.4	26.2
Secondary+	55.6	34.9	9.5
Residence			
Urban	47.1	33.8	19.1
Rural	39.3	35.7	25.0

Table 3.4 Fertility Planning: **Ecuador and Guatemala**

Wanted status of children born in the year preceding the survey by selected characteristics, Ecuador and Guatemala

Characteristic	Child wanted then	Child wanted later	Child not wanted
ECUADOR			
Total	**61.0**	**22.2**	**16.8**
Parity			
1 child	81.5	14.9	3.6
2 children	62.1	30.3	7.6
3 children	59.2	21.4	19.4
4 or more	45.7	23.5	30.8
Age			
15-19	78.9	13.7	7.4
20-24	65.8	24.9	9.3
25-29	55.3	27.6	17.1
30-34	56.9	19.5	23.6
35-49	48.9	18.4	32.7
Education			
None	51.3	25.0	23.7
Primary	59.5	21.4	19.1
Secondary+	66.7	22.8	10.5
Residence			
Urban	62.4	23.5	14.1
Rural	59.3	20.8	19.9
GUATEMALA[1]			
Total	**70.7**	**16.6**	**12.7**
Parity			
1 child	86.6	10.3	3.1
2 children	67.4	22.0	10.6
3 children	69.4	17.9	12.7
4 or more	66.0	17.0	17.0
Age			
15-19	83.1	13.1	3.8
20-24	73.3	18.4	8.3
25-29	70.7	18.1	11.2
30-34	63.6	19.8	16.6
35-49	64.2	9.3	26.5
Education			
None	72.6	14.0	13.4
Primary	71.6	16.3	12.1
Secondary+	50.8	37.3	11.9
Residence			
Urban	60.4	25.4	14.2
Rural	74.2	13.5	12.2

[1]Figures are for women 15-44

Table 3.5 Fertility Planning: **Peru**

Wanted status of children born in the year preceding the survey by selected characteristics, Peru

Characteristic	Child wanted then	Child wanted later	Child not wanted
Total	38.1	29.9	32.0
Parity			
1 child	61.5	35.3	3.2
2 children	51.7	35.8	12.5
3 children	35.0	33.7	31.3
4 or more	19.8	23.1	57.1
Age			
15-19	51.4	35.1	13.5
20-24	46.0	37.4	16.6
25-29	39.3	30.1	30.6
30-34	34.7	25.8	39.5
35-49	19.4	19.4	61.2
Education			
None	23.2	28.4	48.4
Primary	34.4	27.1	38.5
Secondary+	48.2	33.7	18.1
Residence			
Urban	43.7	32.9	23.4
Rural	32.2	26.7	41.1

APPENDIX 4

UNMET NEED
FOR CONTRACEPTION

Table 4.1 Unmet Need for Contraception

Total unmet need for contraception by selected characteristics of currently married women

Country	Age groups						Number of children					Residence		Level of education			
	15-19	20-24	25-29	30-34	35-39	40+	0	1	2	3	4+	Urban	Rural	No edu-cation	Pri-mary	Sec-on-dary	Higher
Bolivia	40.0	41.9	40.8	38.4	35.3	24.7	15.5	26.3	34.0	35.3	42.6	29.5	43.3	45.1	40.8	24.4	12.5
Brazil	20.4	16.5	11.9	9.6	12.8	12.0	13.4	10.0	9.4	9.6	20.0	9.5	21.4	29.6	12.4	5.7	3.8
Colombia	21.4	16.2	12.6	11.9	12.3	12.3	11.9	11.3	11.2	10.6	17.9	10.8	19.0	22.0	15.2	9.2	2.9
Dominican Rep.	30.1	30.8	21.6	17.2	12.4	8.8	16.7	24.1	23.6	16.9	17.5	16.6	23.9	29.6	20.1	17.7	8.7
Ecuador	32.6	30.8	26.0	22.4	19.7	19.0	13.1	25.3	23.3	18.9	28.8	18.8	31.0	36.6	27.3	18.0	8.0
Guatemala	29.0	29.1	30.2	30.4	29.6	26.4	17.4	23.0	28.1	24.7	35.8	23.7	32.0	34.5	27.8	10.9	9.7
Mexico						Information not available											
Peru	42.2	30.9	27.7	27.0	25.4	25.5	21.0	22.0	21.4	24.1	34.7	18.0	44.3	48.9	31.6	16.5	9.2

Note: Unmet need as a percentage of currently married women.

Table 4.2 Total Demand for Contraception

Total demand and its components for currently married women

Country	Demand for contraception			Unmet need			Current use			Percent of demand satisfied		
	Total	For spac-ing	For limit-ing	Total	For spac-cing	For limit-ing	Total	For spac-ing	For limit-ing	Total	For spac-ing	For limit-ing
Bolivia	69.8	17.5	52.3	35.7	9.5	26.2	30.3	6.5	23.8	43.4	37.1	45.5
Brazil	81.1	24.2	56.9	12.8	4.8	8.0	66.2	17.9	48.3	81.6	74.0	84.9
Colombia	80.9	22.1	58.9	13.5	5.1	8.3	64.8	15.4	49.4	80.1	69.7	83.9
Dominican Republic	71.2	20.8	50.4	19.4	10.0	9.4	49.8	9.6	40.1	69.9	46.2	79.6
Ecuador	70.8	23.8	47.0	24.2	10.8	13.4	44.3	11.6	32.7	62.5	48.7	69.6
Guatemala	53.4	22.1	31.4	29.4	16.4	13.0	23.2	5.1	18.1	43.3	23.1	57.6
Mexico	79.0	25.9	53.1	24.1	11.0	13.1	52.7	13.5	39.2	66.7	52.1	73.8
Peru	77.8	21.7	56.1	27.7	8.1	19.6	45.8	11.2	34.6	58.8	51.6	61.7

Note: Total demand as a percentage of currently married women. Total demand includes method failure, current use and unmet need.

Table 4.3 Total Demand for Contraception by Selected Characteristics

Total demand for contraception by selected characteristics of currently married women

Country	Age groups						Number of children					Residence		Level of education			
	15-19	20-24	25-29	30-34	35-39	40+	0	1	2	3	4+	Urban	Rural	No education	Primary	Secondary	Higher
Bolivia	60.4	71.7	82.4	85.3	74.1	48.3	28.7	57.7	73.1	79.6	76.3	73.7	67.5	59.6	71.8	78.8	76.0
Brazil	73.2	76.2	84.0	88.7	84.8	79.4	44.1	72.6	88.3	94.8	89.9	82.0	84.0	79.0	83.3	82.2	81.0
Colombia	55.5	83.1	87.5	88.8	90.4	72.1	34.8	73.8	90.9	91.4	87.5	84.9	77.9	78.3	81.0	86.8	84.4
Dominican Rep.	59.5	73.0	76.3	82.2	77.4	58.3	27.0	64.8	75.6	84.6	81.6	71.6	73.0	66.7	71.6	77.3	71.0
Ecuador	51.3	68.6	78.2	79.7	76.6	61.8	32.3	63.9	76.4	76.7	78.0	75.7	66.9	55.4	71.2	77.2	80.5
Guatemala	34.8	46.2	53.0	62.2	61.1	54.3	20.3	36.5	57.2	58.6	60.5	69.1	46.4	44.3	58.9	77.5	74.7
Mexico						Information not available											
Peru	70.6	82.5	88.5	88.9	83.8	64.2	47.1	72.6	84.7	86.9	81.2	83.0	74.4	70.6	77.5	85.8	89.6

Note: Total demand as a percentage of currently married women. Total demand includes method failure, current use and unmet need.

Table 4.4 Percentage of Demand Satisfied by Selected Characteristics

Percentage of demand for contraception satisfied by selected characteristics of currently married women

Country	Age groups						Residence		Level of education				Total
	15-19	20-24	25-29	30-35	35-39	40+	Urban	Rural	No education	Primary	Secondary	Higher	
Bolivia	27.6	33.5	43.9	48.5	49.8	46.2	55.0	29.9	20.0	38.0	62.6	79.1	43.4
Brazil	67.5	74.7	82.6	86.0	83.3	84.4	86.5	70.1	60.6	82.5	90.9	91.6	81.6
Colombia	54.2	73.0	81.5	84.6	85.1	82.5	84.6	71.2	67.2	78.4	85.6	96.4	80.1
Dominican Republic	43.0	53.6	68.5	75.8	83.9	84.6	74.2	64.4	54.1	69.6	73.4	82.5	69.9
Ecuador	31.0	51.2	61.5	69.1	72.1	68.6	72.0	50.1	33.4	58.7	73.1	83.4	62.5
Guatemala	15.5	34.4	40.0	49.7	50.9	51.4	63.4	29.7	22.1	50.8	81.2	78.4	43.3
Mexico					Information not available								
Peru	33.7	52.4	60.8	64.8	66.1	58.7	73.5	34.0	27.6	53.2	75.5	82.5	58.8

APPENDIX 5

INFANT AND CHILD MORTALITY

Table 5.1 Infant and Child Mortality

Infant and child mortality rates for the five-year period preceding the survey

Mortality rate	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Infant (< 1 year)	**86**	**75**	**33**	**67**	**58**	**73**	**47**	**76**
Neonatal	38	33	19	39	35	33	26	34
Postneonatal	48	42	14	28	23	40	21	42
Child (1-4 years)	**51**	**11**	**10**	**23**	**25**	**40**	**14**	**38**
Under-five	**132**	**85**	**43**	**88**	**82**	**110**	**61**	**111**

Table 5.2 Mortality Trends

Under-five mortality rates for three five-year periods preceding the survey

Period	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
0-4 years	132	85	43	88	82	110	61	111
5-9 years	152	116	63	98	98	138	82	120
10-14 years	160	124	89	118	134	152	91	140

Table 5.3 Infant Mortality Differentials

Infant mortality rates for the ten-year period preceding the survey by selected characteristics

Characteristic	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total	**96**	**86**	**39**	**70**	**65**	**79**	**56**	**79**
Child's sex								
Male	106	98	41	79	70	91	60	84
Female	86	73	38	62	60	68	52	74
Birth Order								
First	80	62	30	70	59	84	42	62
2-3	88	73	41	64	52	71	50	63
4-6	101	100	42	68	69	78	60	89
7 or higher	124	160	51	91	104	100	88	115
Duration of Preceding Birth Interval								
Under 24 months	154	143	53	88	95	123	84	124
24-47 months	77	61	42	59	53	53	48	67
48 or more months	43	56	30	60	47	59	46	37
Mother's Age								
Under 20	101	103	46	85	62	99	63	100
20-29	92	82	37	60	63	72	53	68
30-39	93	86	40	79	63	78	57	86
40 or older	140	143	45	105	141	166	74	104
Mother's Education								
None	124	115	55	99	106	82	83	119
Primary	108	91	42	74	68	82	58	88
Secondary+	56	25	29	47	40	40	27	42
Residence								
Urban	79	76	38	72	52	65	43	56
Rural	112	107	41	68	77	84	79	105

APPENDIX 6

ANTENATAL CARE AND ATTENTION AT DELIVERY

Table 6.1 Tetanus Toxoid Coverage

Percentage of births in the five-year period preceding the survey whose mothers received at least one tetanus toxoid injection by place of residence

Residence	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total	**20.2**	**40.5**	**38.9**	**87.1**	**38.6**	**13.8**	**NA**	**15.5**
Urban	25.7	42.8	37.9	88.4	43.1	15.9	NA	22.2
Rural	15.1	36.1	40.4	85.4	34.3	13.1	NA	8.2

NA= Not available

Table 6.2 Changes in Tetanus Toxoid Coverage

Percentage of births whose mothers received at least one tetanus toxoid injection in the five-year period preceding the survey

Period	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total in preceding 5 years	**20.2**	**40.5**	**38.9**	**87.1**	**38.6**	**13.8**	**NA**	**15.5**
Preceding year[1]	32.2	38.1	48.1	86.1	39.4	22.2	NA	19.8
5 years ago[1]	14.8	42.8	27.8	90.9	35.4	9.6	NA	13.6

NA= Not available
[1]Standardized on birth order

Table 6.3 Antenatal Care

Type of antenatal care received by mothers for all births in the five-year period preceding the survey

| Country | Type of antenatal care | | | | No antenatal care |
	Total	Professional	Midwife	Other	
Bolivia	46.7	45.1	1.1	0.5	53.3
Brazil	73.9	73.2	0.0	0.7	26.1
Colombia	74.1	72.8	1.0	0.3	25.9
Dominican Republic	95.6	94.9	0.6	0.1	4.4
Ecuador	72.9	69.7	2.5	0.7	27.1
Guatemala	72.7	34.1	38.1	0.5	27.3
Mexico	84.3	71.0	13.0	0.3	15.7
Peru	62.3	55.3	5.7	1.3	37.7

Note: Percentage of births with antenatal care.

Table 6.4 Attention at Delivery

Type of attention received at delivery by mothers for all births in the five-year period preceding the survey

| Country | Type of attention at delivery | | | |
	Professional	Midwife	Other	Self
Bolivia	42.3	12.4	40.5	4.8
Brazil	80.7	14.6	2.3	2.4
Colombia	71.4	18.7	8.7	1.2
Dominican Republic	89.7	7.5	2.6	0.2
Ecuador	61.9	22.2	13.6	2.3
Guatemala	29.1	60.1	7.8	3.0
Mexico	69.6	24.9	3.0	2.5
Peru	49.5	28.8	19.6	2.1

Note: Percent distribution.

Table 6.5 Antenatal Care and Attention at Delivery: **Bolivia and Brazil**

Antenatal care and attention at delivery for births in the five-year period preceding the survey by selected characteristics, Bolivia and Brazil

Characteristic	Tetanus toxoid	Antenatal Care				Attention at Delivery			
		Profes-sional	Mid-wife	Other	None	Profes-sional	Mid-wife	Other	Self
BOLIVIA									
Total	**20.2**	**45.1**	**1.1**	**0.5**	**53.3**	**42.3**	**12.4**	**40.5**	**4.8**
Birth Order									
First birth	21.6	58.9	0.8	0.0	40.3	57.0	10.7	29.0	3.3
2-3	20.7	49.7	1.5	0.3	48.5	47.1	12.5	36.2	4.2
4-6	19.5	38.8	1.1	0.8	59.3	35.9	13.9	44.3	5.9
7 or higher	18.9	29.0	1.0	1.2	68.8	24.7	11.8	57.4	6.1
Mother's Age									
15-19	22.4	49.3	0.4	0.0	50.3	48.4	15.0	35.2	1.4
20-24	21.4	51.3	1.8	0.0	46.9	49.0	13.6	33.6	3.8
25-29	22.5	47.6	0.8	0.2	51.4	43.8	11.5	39.4	5.3
30-34	20.5	45.7	0.9	1.6	51.8	41.5	12.9	41.6	4.0
35-39	16.3	36.9	1.9	0.0	61.2	38.1	14.0	41.8	6.1
40 or older	15.3	33.9	0.6	1.0	64.5	28.8	7.5	56.4	7.3
Mother's Education									
None	9.4	15.5	1.1	1.5	81.9	11.0	14.2	66.9	7.9
Primary	19.2	38.0	1.5	0.3	60.2	34.1	14.6	46.2	5.1
Secondary	31.6	77.8	0.5	0.1	21.6	78.2	8.2	11.4	2.2
Higher	23.1	96.4	0.0	0.0	3.6	96.9	1.2	1.2	0.7
Residence									
Urban	25.7	62.6	1.3	0.2	35.9	62.8	11.0	23.2	2.0
Rural	15.1	28.8	1.0	0.8	69.4	23.1	13.8	56.6	6.5
BRAZIL[1]									
Total	**40.5**	**73.2**	**0.0**	**0.7**	**26.1**	**80.7**	**14.6**	**2.3**	**2.4**
Birth Order									
First birth	43.6	83.1	0.1	0.5	16.3	89.8	7.0	2.4	0.8
2-3	39.4	78.3	0.0	1.0	20.7	83.9	12.9	1.7	1.5
4-6	37.9	63.0	0.0	1.0	36.0	71.0	21.8	2.8	4.4
7 or higher	41.7	50.6	0.0	0.0	49.4	65.4	26.0	3.0	5.6
Mother's Age									
15-19	43.8	66.2	0.8	0.8	32.2	80.1	15.4	2.2	2.3
20-24	38.5	74.2	0.0	0.5	25.3	82.9	12.9	2.4	1.8
25-29	39.1	75.1	0.0	0.7	24.2	81.2	13.9	1.7	3.2
30-34	40.1	76.7	0.0	0.9	22.4	80.3	15.3	2.8	1.6
35-39	46.4	69.9	0.0	1.3	28.8	80.2	15.0	1.8	3.0
40 or older	41.5	59.8	0.0	0.0	40.2	71.6	21.7	4.1	2.6
Mother's Education									
None	33.3	45.6	0.0	0.0	54.4	63.8	29.8	1.9	4.5
Primary	41.1	73.3	0.1	0.8	25.8	79.9	14.8	2.7	2.6
Secondary	46.5	94.2	0.0	1.4	4.4	97.9	1.1	1.0	0.0
Higher	34.8	98.1	0.0	0.0	1.9	98.3	1.7	0.0	0.0
Residence									
Urban	42.8	84.6	0.0	1.0	14.4	91.5	6.1	1.2	1.2
Rural	36.1	50.5	0.1	0.2	49.2	59.4	31.5	4.4	4.7

[1]Figures are for women 15-44

Table 6.6 Antenatal Care and Attention at Delivery: Colombia and the Dominican Republic

Antenatal care and attention at delivery for births in the five-year period preceding the survey by selected characteristics, Colombia and the Dominican Republic

Characteristic	Tetanus toxoid	Prenatal Care				Attention at Delivery			
		Profes- sional	Mid- wife	Other	None	Profes- sional	Mid- wife	Other	Self
COLOMBIA									
Total	**38.9**	**72.8**	**1.0**	**0.3**	**25.9**	**71.4**	**18.7**	**8.7**	**1.2**
Birth Order									
First birth	42.0	83.6	0.6	0.3	15.5	84.6	11.7	3.5	0.2
2-3	40.1	77.7	1.1	0.4	20.8	75.1	17.8	6.6	0.5
4-6	34.3	58.8	1.2	0.1	39.9	57.4	27.1	12.6	2.9
7 or higher	35.4	55.1	1.1	0.0	43.8	49.7	23.2	24.2	2.9
Mother's Age									
15-19	47.6	76.4	1.2	0.0	22.4	67.1	24.4	8.5	0.0
20-24	40.4	75.7	1.3	0.8	22.2	76.2	18.4	5.3	0.1
25-29	39.7	74.3	0.7	0.1	24.9	75.6	15.4	8.2	0.8
30-34	38.6	70.0	0.6	0.2	29.2	67.4	20.2	9.8	2.6
35-39	34.7	70.1	1.3	0.0	28.6	61.9	24.0	13.2	0.9
40 or older	27.5	62.6	1.3	0.0	36.1	63.4	14.8	16.5	5.3
Mother's Education									
None	40.8	45.0	1.8	0.0	53.2	48.9	34.0	15.9	1.2
Primary	37.1	66.2	1.3	0.4	32.1	63.6	23.1	11.9	1.4
Secondary	42.9	91.0	0.2	0.1	8.7	90.1	7.4	1.6	0.9
Higher	26.5	94.5	0.0	0.0	5.5	94.6	5.4	0.0	0.0
Residence									
Urban	37.9	82.5	0.5	0.3	16.7	84.7	11.8	2.7	0.8
Rural	40.5	57.7	1.7	0.2	40.4	50.3	29.6	18.3	1.8
DOMINICAN REPUBLIC									
Total	**87.1**	**94.9**	**0.6**	**0.1**	**4.4**	**89.7**	**7.5**	**2.6**	**0.2**
Birth Order									
First birth	89.3	97.3	0.4	0.0	2.3	94.8	4.5	0.7	0.0
2-3	89.3	95.6	0.7	0.0	3.7	92.1	5.8	2.0	0.1
4-6	82.2	92.0	0.7	0.3	7.0	86.0	9.3	4.3	0.4
7 or higher	83.0	91.4	0.8	0.5	7.3	75.6	17.6	6.0	0.8
Mother's Age									
15-19	86.1	94.8	0.1	0.1	5.0	90.3	7.7	1.9	0.1
20-24	88.5	94.9	0.4	0.0	4.7	91.8	6.2	1.7	0.3
25-29	88.2	96.9	0.3	0.1	2.7	92.0	5.8	2.0	0.2
30-34	85.6	93.2	1.5	0.1	5.2	87.9	9.3	2.8	0.0
35-39	84.5	94.9	0.2	0.6	4.3	82.9	10.1	6.3	0.7
40 or older	83.7	89.7	2.0	0.4	7.9	81.2	13.0	5.6	0.2
Mother's Education									
None	75.8	83.7	0.9	0.3	15.1	73.5	17.9	7.1	1.5
Primary	86.4	94.3	0.7	0.2	4.8	88.3	8.5	3.0	0.2
Secondary	91.8	98.9	0.5	0.0	0.6	97.5	2.4	0.1	0.0
Higher	92.7	100.0	0.0	0.0	0.0	98.5	0.7	0.8	0.0
Residence									
Urban	88.4	96.0	0.7	0.2	3.1	94.9	4.1	0.9	0.1
Rural	85.4	93.5	0.5	0.0	6.0	82.8	11.9	4.8	0.5

Table 6.7 Antenatal Care and Attention at Delivery: **Ecuador and Guatemala**

Antenatal care and attention at delivery for births in the five-year period preceding the survey by selected characteristics, Ecuador and Guatemala

Characteristic	Tetanus toxoid	Antenatal Care				Attention at Delivery			
		Profes-sional	Mid-wife	Other	None	Profes-sional	Mid-wife	Other	Self
ECUADOR									
Total	**38.6**	**69.7**	**2.5**	**0.7**	**27.1**	**61.9**	**22.2**	**13.6**	**2.3**
Birth Order									
First birth	40.7	80.3	2.0	0.7	17.0	77.7	15.6	6.0	0.7
2-3	41.8	72.3	2.6	0.9	24.2	68.5	20.1	9.7	1.7
4-6	36.1	63.0	2.5	0.9	33.6	50.9	25.4	20.8	2.9
7 or higher	31.3	56.0	3.1	0.0	40.9	37.3	33.4	24.0	5.3
Mother's Age									
15-19	42.2	64.4	5.6	1.1	28.9	57.3	34.4	8.3	0.0
20-24	43.6	73.7	1.2	0.5	24.6	67.3	21.6	9.8	1.3
25-29	37.1	69.2	3.1	0.8	26.9	63.2	23.5	12.1	1.2
30-34	39.6	71.6	2.4	1.4	24.6	64.6	15.5	17.7	2.2
35-39	36.2	66.6	2.2	0.0	31.2	53.4	23.9	16.0	6.7
40 or older	26.5	61.5	3.1	0.0	35.4	50.4	25.2	20.4	4.0
Mother's Education									
None	22.6	44.8	3.0	0.0	52.2	31.7	28.5	30.3	9.5
Primary	37.4	63.6	3.4	1.0	32.0	53.5	28.3	16.2	2.0
Secondary	48.9	88.0	0.5	0.7	10.8	86.7	9.7	3.3	0.3
Higher	37.6	96.7	1.1	0.0	2.2	96.1	3.9	0.0	0.0
Residence									
Urban	43.1	82.2	0.8	0.9	16.1	85.2	10.1	4.0	0.7
Rural	34.3	57.6	4.2	0.5	37.7	39.6	33.8	22.8	3.8
GUATEMALA[1]									
Total	**13.8**	**34.1**	**38.1**	**0.5**	**27.3**	**29.1**	**60.1**	**7.8**	**3.0**
Birth Order									
First birth	14.7	45.3	34.3	0.4	20.0	44.8	49.5	4.6	1.1
2-3	14.5	37.6	36.8	0.2	25.4	33.6	57.3	7.0	2.1
4-6	13.0	28.7	41.0	0.5	29.8	22.5	63.4	10.2	3.9
7 or higher	13.2	24.3	39.5	1.1	35.1	14.9	71.2	8.6	5.3
Mother's Age									
15-19	20.1	34.3	39.3	0.7	25.7	33.3	59.7	6.0	1.0
20-24	14.1	34.9	38.3	0.2	26.6	30.9	59.7	7.6	1.8
25-29	14.2	37.1	38.6	0.3	24.0	32.4	58.0	7.3	2.3
30-34	13.3	34.8	36.0	0.6	28.6	27.8	59.5	8.4	4.3
35-39	11.6	29.0	37.7	0.2	33.1	22.9	63.1	8.3	5.7
40 or older	11.0	25.5	41.6	2.2	30.7	20.1	67.1	9.9	2.9
Mother's Education									
None	10.2	18.5	45.9	0.8	34.8	12.8	70.6	12.5	4.1
Primary	18.4	44.3	33.3	0.2	22.2	39.2	55.3	3.4	2.1
Secondary+	12.4	86.1	9.5	0.0	4.4	87.3	12.1	0.3	0.3
Residence									
Urban	15.9	57.1	22.6	0.3	20.0	59.4	36.6	3.5	0.5
Rural	13.1	25.6	43.8	0.5	30.1	17.9	68.8	9.4	3.9

[1]Figures are for women 15-44

Table 6.8 Antenatal Care and Attention at Delivery: **Mexico and Peru**

Antenatal care and attention at delivery for births in the five-year period preceding the survey by selected characteristics, Mexico and Peru

Characteristic	Tetanus toxoid	Antenatal Care				Attention at Delivery			
		Profes-sional	Mid-wife	Other	None	Profes-sional	Mid-wife	Other	Self
MEXICO									
Total	NA	**71.0**	**13.0**	**0.3**	**15.7**	**69.6**	**24.9**	**3.0**	**2.5**
Birth Order									
First birth	NA	81.5	10.2	0.0	8.3	80.6	17.7	1.2	0.5
2-3	NA	77.7	10.7	0.2	11.4	76.2	20.6	2.5	0.7
4-6	NA	63.6	14.9	0.5	21.0	62.0	30.0	3.9	4.1
7 or higher	NA	48.6	20.3	0.6	30.5	46.7	39.2	6.0	8.1
Mother's Age									
15-19	NA	70.7	15.1	0.0	14.2	69.9	27.2	2.5	0.4
20-24	NA	71.0	15.7	0.4	12.9	69.0	26.3	3.5	1.2
25-29	NA	75.5	11.7	0.3	12.5	72.7	23.8	2.6	0.9
30-34	NA	72.6	8.7	0.1	18.6	72.3	20.6	2.4	4.7
35-39	NA	62.9	14.6	0.2	22.3	63.8	28.1	3.5	4.6
40 or older	NA	60.4	16.3	1.0	22.3	58.8	29.1	4.7	7.4
Mother's Education									
None	NA	38.2	26.8	1.3	33.7	29.8	52.8	8.5	8.9
Primary	NA	69.8	14.3	0.1	15.8	69.1	26.3	2.7	1.9
Secondary	NA	94.3	1.2	0.0	4.5	94.9	4.6	0.2	0.3
Higher	NA	96.1	0.0	0.0	3.9	100.0	0.0	0.0	0.0
Residence									
Urban	NA	83.7	6.1	0.0	10.2	86.0	12.0	1.2	0.8
Rural	NA	51.3	23.7	0.7	24.3	44.1	44.8	5.8	5.3
PERU									
Total	**15.5**	**55.3**	**5.7**	**1.3**	**37.7**	**49.5**	**28.8**	**19.6**	**2.1**
Birth Order									
First birth	17.9	68.1	4.7	1.0	26.2	66.9	23.5	9.5	0.1
2-3	19.0	62.2	4.1	1.2	32.5	58.6	24.5	15.6	1.3
4-6	12.8	49.3	6.7	1.2	42.8	41.0	29.6	25.9	3.5
7 or higher	10.6	36.8	8.4	1.7	53.1	25.4	41.3	29.5	3.8
Mother's Age									
15-19	21.3	51.4	6.0	1.3	41.3	46.7	33.3	18.0	2.0
20-24	19.8	57.9	4.7	1.7	35.7	54.8	28.9	15.7	0.6
25-29	16.5	59.6	5.4	1.1	33.9	52.5	28.7	17.5	1.3
30-34	13.9	56.0	5.6	0.8	37.6	52.4	23.8	20.7	3.1
35-39	11.3	49.8	7.1	2.0	41.1	42.8	30.2	22.8	4.2
40 or older	10.9	46.7	7.1	0.9	45.3	36.4	34.6	26.6	2.4
Mother's Education									
None	7.0	20.1	11.8	2.2	65.9	12.0	41.4	40.0	6.6
Primary	13.5	46.3	6.8	1.9	45.0	36.1	37.4	24.6	1.9
Secondary	22.9	81.9	1.7	0.0	16.4	83.4	12.8	3.7	0.1
Higher	19.1	97.5	0.0	0.0	2.5	96.8	3.2	0.0	0.0
Residence									
Urban	22.2	79.5	2.1	0.1	18.3	80.5	15.4	3.8	0.3
Rural	8.2	28.8	9.7	2.6	58.9	15.7	43.5	36.8	4.0

NA= Not available

APPENDIX 7

BREASTFEEDING
AND SUPPLEMENTAL FEEDING

Table 7.1 Breastfeeding

Percentage of children under five breastfed and median duration of breastfeeding in months

Characteristic	Bolivia		Brazil[1]		Colombia		Dominican Republic	
	Breastfed	Median duration	Breastfed	Median duration	Breastfed	Median duration	Breastfed	Median duration
Total	**96.3**	**16.5**	**86.7**	**6.0**	**93.1**	**8.9**	**89.3**	**7.6**
Birth Order								
1-2	96.0	15.3	85.8	5.1	93.0	7.2	88.2	6.4
3-4	96.5	18.2	86.5	6.9	94.0	10.3	89.2	8.2
5+	96.6	17.8	89.1	7.9	92.1	14.0	91.7	11.2
Age								
Under 25	96.3	15.9	86.8	5.3	93.6	7.8	89.1	7.2
25-34	96.5	17.2	87.1	6.4	92.9	10.4	89.3	8.4
35+	95.7	19.2	85.2	8.9	91.6	12.0	90.4	10.2
Education								
None	97.7	19.0	85.8	9.3	92.6	12.8	90.4	12.2
Primary	96.7	17.5	86.2	5.8	92.9	10.1	90.6	8.6
Secondary	94.6	14.1	89.8	5.5	93.7	7.0	86.2	5.4
Higher	94.3	9.7	91.1	5.1	91.2	6.1	83.2	3.8
Residence								
Urban	95.1	14.7	85.7	5.3	93.0	7.4	87.0	7.0
Rural	97.5	18.3	88.8	7.3	93.2	12.1	92.3	8.5

Characteristic	Ecuador		Guatemala[1]		Mexico		Peru	
	Breastfed	Median duration	Breastfed	Median duration	Breastfed	Median duration	Breastfed	Median duration
Total	**93.0**	**13.9**	**94.6**	**20.8**	**83.0**	**8.6**	**93.6**	**15.9**
Birth Order								
1-2	92.6	13.0	93.1	18.9	81.1	6.1	92.9	11.9
3-4	93.5	13.9	95.8	21.7	85.5	9.3	94.1	18.6
5+	93.0	16.8	95.2	22.3	83.6	13.0	94.0	19.6
Age								
Under 25	93.9	13.6	94.3	19.8	82.9	7.3	94.0	14.7
25-34	92.3	14.6	95.5	21.1	84.4	9.2	93.8	15.8
35+	91.8	13.0	92.9	24.5	78.6	9.6	92.4	19.1
Education								
None	94.4	16.3	96.2	23.1	89.9	19.7	96.1	21.9
Primary	94.2	15.1	93.6	18.9	82.5	9.2	94.4	18.2
Secondary	89.5	12.3	89.2	10.1	79.2	4.4	91.5	11.8
Higher	93.4	9.8	91.9	9.3	84.9	3.6	89.8	8.9
Residence								
Urban	90.7	12.3	92.3	19.2	78.9	5.7	91.3	11.8
Rural	95.2	15.6	95.5	21.4	89.5	14.8	96.1	19.5

[1]Figures are for women 15-44

Table 7.2 Breastfeeding and Supplemental Feeding among Children 0-4 Months

Among children 0-4 months, percentage with breastfeeding and supplemental feeding

Country	Breastfed exclusively	Breastfed and plain water	Breastfed and other foods	Any breast-feeding
Bolivia	55	4	38	97
Brazil	3	11	57	71
Colombia	18	5	63	86
Dominican Republic	13	13	56	82
Ecuador	27	10	53	90
Guatemala	NA	NA	NA	NA
Mexico	33	1	38	72
Peru	31	4	57	92

Note: Information is for last-born living child.
NA= Not available

Table 7.3 Breastfeeding and Supplemental Feeding among Children 7-14 Months

Among children 7-14 months, percentage with breastfeeding and supplemental feeding

Country	Children 7-11 months			Children 12-14
	Breastfed plus solids/ no bottle	Breastfed/ no solids	Not breastfed	Children still breastfeeding
Bolivia	39	24	15	71
Brazil	15	9	60	24
Colombia	13	12	52	36
Dominican Republic	11	16	59	26
Ecuador	15	42	25	56
Guatemala	NA	NA	NA	NA
Mexico	20	13	48	35
Peru	24	23	26	66

Note: Information is for last-born living child.
NA= Not available

APPENDIX 8

IMMUNIZATION OF CHILDREN

Table 8.1   Immunization Coverage

Percentage of children 12-23 months immunized for specific vaccines, including health card information and maternal recall

Vaccines	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
BCG	55	70	85	NA	NA	50	73	57
DPT								
DPT 1	70	85	90	NA	NA	77	77	84
DPT 2	51	77	83	NA	NA	57	60	76
DPT 3	28	70	72	NA	NA	36	34	58
Dropout rate[1]	60	17	20	NA	NA	54	56	31
Polio								
Polio 1	79	91	90	NA	NA	80	94	85
Polio 2	61	85	83	NA	NA	60	87	77
Polio 3+	38	75	72	NA	NA	39	57	57
Measles	58	79	64	NA	NA	55	59	72
Full immunization	18	57	54	NA	NA	18	21	36
Number of children	1108	578	556	NA	NA	823	1017	526

[1]From DPT 1 to DPT 3
NA: Not available

Table 8.2   Immunization Coverage Differentials for DPT 3

Percentage of children 12-35 months with a health card immunized for DPT 3 by mother's education and residence

Characteristic	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Mother's education								
None	43	65	68	NA	NA	58	NA	60
Primary	48	82	87	NA	NA	65	NA	64
Secondary+	70	95	91	NA	NA	70	NA	84
Residence								
Urban	64	88	89	NA	NA	70	NA	80
Rural	46	70	84	NA	NA	59	NA	62
Number of children	490	857	560	NA	NA	942	NA	433

NA: Not available

APPENDIX 9

NUTRITIONAL STATUS
OF CHILDREN

Table 9.1 Undernutrition among Children under Three

Percentage of undernutrition among children 6-35 months by type

Type	Index	Bolivia	Brazil[1]	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Chronic	Height-for-age	39.8	30.4	26.4	20.5	NA	61.1	NA	NA
Acute	Weight-for-height	1.5	1.1	1.4	2.3	NA	1.3	NA	NA
Composite	Weight-for-age	14.6	12.2	12.7	12.7	NA	36.0	NA	NA

Note: Percentage of children 6 to 35 months of age who are below -2 standard deviations from the mean of the NCHS/CDC/WHO reference population for each index.
[1]Northeast only

Table 9.2 Chronic Undernutrition among Children under Three

Percentage of chronic undernutrition among children 6-35 months by selected characteristics

Characteristic	Bolivia	Brazil[1]	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total	**39.8**	**30.4**	**26.4**	**20.5**	**NA**	**61.1**	**NA**	**NA**
Sex								
Male	42.0	30.3	27.3	24.3	NA	62.6	NA	NA
Female	37.8	30.6	25.5	16.9	NA	59.7	NA	NA
Age								
6-11 months	21.0	27.7	15.1	10.0	NA	39.0	NA	NA
12-17 months	37.6	38.1	19.8	17.5	NA	66.8	NA	NA
18-23 months	49.7	27.7	30.4	27.9	NA	72.7	NA	NA
24-29 months	47.9	29.8	32.6	26.3	NA	64.7	NA	NA
30-35 months	49.0	28.8	35.5	23.3	NA	67.6	NA	NA
Birth Interval								
First birth	33.6	17.1	20.7	12.3	NA	50.6	NA	NA
Less than 2 years	46.0	34.7	35.0	25.2	NA	64.0	NA	NA
3-4 years	44.3	36.8	31.8	26.8	NA	65.6	NA	NA
More than 4 years	29.1	25.8	15.6	13.4	NA	55.8	NA	NA
Mother's Education								
None	58.8	40.7	39.9	32.5	NA	72.1	NA	NA
Primary	43.1	31.2	31.3	25.3	NA	55.6	NA	NA
Secondary or higher	24.4	10.8	15.1	7.9	NA	26.6	NA	NA
Residence								
Urban	33.2	23.9	22.0	14.2	NA	49.8	NA	NA
Rural	46.6	36.5	33.4	29.4	NA	65.7	NA	NA

Note: Percentage of children 6 to 35 months of age who are below -2 standard deviations from the mean of the NCHS/CDC/WHO reference population for height-for-age.
[1]Northeast only

APPENDIX 10

PREVALENCE AND TREATMENT
OF DIARRHEA

Table 10.1 Prevalence of Diarrhea

Prevalence of diarrhea in the two weeks preceding the survey by selected characteristics

Characteristic	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total	**27.9**	**16.8**	**18.8**	**25.0**	**38.9**	**16.6**	**22.7**	**32.1**
Child's Age								
Under 1 year	31.5	23.5	25.1	34.1	41.4	23.4	32.8	42.6
1 year	41.4	26.7	25.9	35.9	46.8	25.9	33.7	45.8
2 years	28.8	17.7	19.1	23.9	37.9	15.5	20.4	30.9
3 years	20.8	10.5	13.0	18.1	31.4	10.3	14.4	23.5
4 years	14.9	8.2	10.9	11.8	24.3	7.3	11.7	19.6
Mother's Education								
None	28.6	22.8	24.6	21.0	47.2	15.0	26.8	34.5
Primary	30.1	17.5	20.9	26.2	44.3	18.3	23.1	34.8
Secondary	25.4	9.5	14.2	25.7	29.7	►17.9	20.3	28.9
Higher	14.5	9.6	8.1	14.4	25.0		13.9	20.8
Residence								
Urban	28.0	15.0	16.9	25.8	35.3	17.6	20.0	29.7
Rural	27.8	20.6	21.6	24.0	43.3	16.3	27.1	34.9
Piped Water								
No	28.5	21.6	22.2	23.2	NA	16.5	30.1	36.2
Yes	27.0	14.2	16.2	25.9	NA	16.8	19.6	25.8
Toilet								
No	29.3	21.9	23.2	26.0	44.9	16.5	25.7	34.9
Yes	24.0	11.4	16.3	22.4	32.4	17.2	15.8	23.3
Covered Floor								
No	NA	NA	24.0	24.3	44.0	16.4	29.6	35.7
Yes	NA	NA	17.3	25.2	38.3	17.1	20.0	27.1

NA= Not available

Table 10.2 Knowledge of Packets of Oral Rehydration Salts (ORS)

Knowledge of ORS packets used for oral rehydration therapy (ORT) by education and place of residence

Characteristic	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total	**66.7**	**NA**	**87.3**	**88.5**	**NA**	**58.1**	**NA**	**62.4**
Mother's Education								
None	42.6	NA	74.6	73.7	NA	38.4	NA	25.7
Primary	63.6	NA	85.2	87.2	NA	73.2	NA	52.3
Secondary	86.5	NA	92.3	93.7	NA	►90.3	NA	87.2
Higher	94.1	NA	97.0	97.8	NA		NA	95.4
Residence								
Urban	77.5	NA	89.7	89.9	NA	75.1	NA	84.1
Rural	55.6	NA	82.7	86.3	NA	50.7	NA	33.4

Note: Asked of mother who had a child in the five years preceding interview.
NA= Not available

Table 10.3 Treatment of Diarrhea: **Bolivia and Brazil**

Treatment of diarrhea by selected characteristics, Bolivia and Brazil

Characteristic	No treatment	ORS packets	Recom-mended fluid	Other	Total
		BOLIVIA			
Total	**25.5**	**23.4**	**8.7**	**42.4**	**100.0**
Child's Age					
Under 1 year	33.0	15.6	6.9	44.5	100.0
1 year	19.7	32.4	9.4	38.5	100.0
2 years	26.2	21.6	10.3	41.9	100.0
3 years	21.4	21.2	7.7	49.7	100.0
4 years	30.0	20.6	8.7	40.7	100.0
Mother's Education					
None	40.8	18.0	10.6	30.6	100.0
Primary	24.4	24.7	7.2	43.7	100.0
Secondary+	14.6	25.3	10.7	49.4	100.0
Residence					
Urban	18.3	24.0	9.2	48.5	100.0
Rural	32.5	22.8	8.2	36.5	100.0
		BRAZIL[1]			
Total	**23.7**	**8.9**	**1.8**	**65.6**	**100.0**
Child's Age					
Under 1 year	13.5	13.5	0.6	72.4	100.0
1 year	30.3	7.7	3.7	58.3	100.0
2 years	22.2	8.3	1.2	68.3	100.0
3 years	25.6	3.8	1.1	69.5	100.0
4 years	32.7	8.0	1.6	57.7	100.0
Mother's Education					
None	29.0	7.4	0.0	63.6	100.0
Primary	24.2	8.5	2.5	64.8	100.0
Secondary+	11.1	14.8	0.0	74.1	100.0
Residence					
Urban	24.5	12.3	0.7	62.5	100.0
Rural	22.4	3.7	3.5	70.4	100.0

ORS= Oral rehydration salts
[1]Information for children to women 15-44

Table 10.4 Treatment of Diarrhea: **Colombia and Dominican Republic**

Treatment of diarrhea by selected characteristics, Colombia and Dominican Republic

Characteristic	No treatment	ORS packets	Recom- mended fluid	Other	Total
COLOMBIA					
Total	**8.0**	**41.8**	**7.0**	**43.2**	**100.0**
Child's Age					
Under 1 year	10.9	41.2	5.9	42.0	100.0
1 year	6.3	49.8	6.8	37.1	100.0
2 years	8.0	35.6	7.3	49.1	100.0
3 years	6.5	38.8	10.7	44.0	100.0
4 years	7.5	37.3	5.3	49.9	100.0
Mother's Education					
None	10.4	27.8	3.8	58.0	100.0
Primary	8.4	43.7	7.5	40.4	100.0
Secondary+	5.9	42.9	6.7	44.5	100.0
Residence					
Urban	5.9	43.8	5.7	44.6	100.0
Rural	10.6	39.3	8.6	41.4	100.0
DOMINICAN REPUBLIC					
Total	**21.9**	**37.3**	**4.2**	**36.6**	**100.0**
Child's Age					
Under 1 year	27.9	38.4	5.1	28.6	100.0
1 year	21.6	36.5	3.4	38.5	100.0
2 years	18.9	37.9	4.0	39.2	100.0
3 years	15.3	38.9	4.3	41.5	100.0
4 years	20.8	32.8	4.7	41.7	100.0
Mother's Education					
None	22.6	20.5	1.5	55.4	100.0
Primary	23.0	36.9	4.5	35.6	100.0
Secondary+	18.7	42.3	4.1	34.9	100.0
Residence					
Urban	20.7	39.4	3.6	36.3	100.0
Rural	23.7	34.4	5.2	36.7	100.0

ORS= Oral rehydration salts

Table 10.5 Treatment of Diarrhea: **Guatemala and Mexico**

Treatment of diarrhea by selected characteristics, Guatemala and Mexico

Characteristic	No treatment	ORS packets	Recom- mended fluid	Other	Total
GUATEMALA[1]					
Total	**24.0**	**13.1**	**2.8**	**60.1**	**100.0**
Child's Age					
Under 1 year	24.5	15.3	2.8	57.4	100.0
1 year	11.3	18.3	3.3	67.1	100.0
2 years	26.9	11.5	3.1	58.5	100.0
3 years	32.5	3.6	2.4	61.5	100.0
4 years	49.2	3.3	1.6	45.9	100.0
Mother's Education					
None	27.0	12.2	1.9	58.9	100.0
Primary	23.0	13.0	3.3	60.7	100.0
Secondary+	13.0	18.5	5.6	62.9	100.0
Residence					
Urban	20.5	17.1	3.9	58.5	100.0
Rural	25.5	11.4	2.4	60.7	100.0
MEXICO					
Total	**15.0**	**4.4**	**NA**	**80.6**	**100.0**
Child's Age					
Under 1 year	16.7	5.9	NA	77.4	100.0
1 year	9.7	4.9	NA	85.4	100.0
2 years	13.0	2.6	NA	84.4	100.0
3 years	20.2	1.7	NA	78.1	100.0
4 years	22.5	4.7	NA	72.8	100.0
Mother's Education					
None	20.5	5.8	NA	73.7	100.0
Primary	14.3	3.7	NA	82.0	100.0
Secondary+	12.7	5.2	NA	82.1	100.0
Residence					
Urban	14.2	3.8	NA	82.0	100.0
Rural	15.9	5.2	NA	78.9	100.0

ORS= Oral rehydration salts
NA= Not available
[1]Information for children to women 15-44

Table 10.6 Treatment of Diarrhea: **Peru**

Treatment of diarrhea by selected characteristics, Peru

Characteristic	No treatment	ORS packets	Recom- mended fluid	Other	Total
Total	**11.8**	**3.6**	**43.6**	**41.0**	**100.0**
Child's Age					
Under 1 year	16.6	1.7	44.4	37.3	100.0
1 year	8.7	4.6	43.6	43.1	100.0
2 years	8.0	4.6	50.3	37.1	100.0
3 years	12.9	3.8	40.2	43.1	100.0
4 years	12.4	4.1	36.4	47.1	100.0
Mother's Education					
None	14.2	4.3	46.9	34.6	100.0
Primary	13.4	3.7	44.3	38.6	100.0
Secondary+	7.8	3.1	40.8	48.3	100.0
Residence					
Urban	9.3	2.9	40.4	47.4	100.0
Rural	14.2	4.4	46.8	34.6	100.0

ORS= Oral rehydration salts

APPENDIX 11

FERTILITY RISK STATUS

Table 11.1 High-risk Fertility Status

Percentage of nonsterilized currently married women at risk of conceiving a child with an elevated risk of mortality by type of risk

Risk	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Not in Any High Risk Category	**45.6**	**52.0**	**51.6**	**50.6**	**51.7**	**52.7**	**46.4**	**44.3**
In Any High Risk Category	**54.4**	**48.0**	**48.4**	**49.4**	**48.3**	**47.3**	**53.6**	**55.7**
Single High Risk Categories								
Only young	0.8	1.6	1.6	2.8	2.4	3.2	2.7	1.1
Only old	21.0	18.4	17.7	13.1	15.5	11.3	14.5	19.4
Only parity	5.2	2.5	2.4	3.0	3.9	8.7	5.0	5.0
Only interval	6.5	13.3	11.6	15.9	10.3	6.6	13.0	8.2
Multiple High Risk Categories								
Young+interval	0.2	1.1	0.5	1.2	0.6	0.5	0.7	0.3
Old+parity	17.6	7.7	12.1	11.3	13.1	14.1	14.3	19.0
Old+interval	0.7	0.6	0.7	0.6	0.5	0.5	1.1	0.5
Parity+interval	0.9	1.7	0.8	0.9	0.9	1.6	1.2	0.9
Old+parity+interval	1.4	1.2	0.9	0.6	1.1	0.8	1.1	1.3
Type of High Risk Categories								
Young age risk	1.1	2.7	2.1	4.0	3.1	3.7	3.3	1.5
Old age risk	40.7	27.8	31.5	25.6	30.2	26.7	31.0	40.2
Parity risk	25.1	13.1	16.2	15.7	18.9	25.1	21.7	26.2
Interval risk	9.7	17.9	14.5	19.1	13.4	10.0	17.0	11.3
Number of High Risk Categories								
1 category	33.5	35.8	33.3	34.9	32.2	29.9	35.2	33.7
2 categories	19.5	11.0	14.1	13.9	15.1	16.6	17.3	20.7
3 categories	1.4	1.2	0.9	0.6	1.1	0.8	1.1	1.3
Total-All Women[1]	**30.2**	**20.7**	**21.1**	**17.9**	**25.8**	**27.8**	**26.5**	**30.4**

Note: High-risk categories are defined as follows:

Young: Under 18 years of age
Old: 35 years or older
Parity: 6 or more births
Interval: Less than 15 months since last birth and not currently amenorrheic.

[1]Women at high-risk as a percentage of all women interviewed

Table 11.2 High-risk Fertility Status by Selected Characteristics

Percentage of nonsterilized currently married women at risk of conceiving a child with an elevated risk of mortality by selected characteristics

Characteristic	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
Total	**54.4**	**48.0**	**48.4**	**49.4**	**48.3**	**47.3**	**53.6**	**55.7**
Education								
None	76.7	69.7	69.2	59.7	69.1	52.4	71.7	78.9
Primary	52.6	47.2	54.4	54.1	52.9	44.5	55.3	61.2
Secondary+	40.1	39.4	34.8	35.6	34.8	30.9	39.5	40.6
Residence								
Urban	51.0	45.5	45.6	45.6	44.2	44.2	49.4	52.6
Rural	58.4	53.6	53.9	55.0	53.2	48.6	59.4	60.8
Fertility Preference								
Want another child	33.3	33.9	34.0	37.4	35.6	36.3	38.9	34.5
Undecided	38.9	40.8	36.8	46.3	43.2	51.6	45.5	49.1
Want no more children	58.7	59.2	56.5	63.4	55.2	58.0	59.9	60.3
Contraceptive Use								
Using	51.9	46.5	46.0	49.4	42.6	45.0	49.3	50.3
Not using	56.7	49.9	51.5	49.4	51.3	47.7	56.6	59.8
Want no more & not using	60.2	62.0	61.7	65.2	57.9	59.0	63.3	63.4

Table 11.3 Contraceptive Use and High-risk Fertility Status

Percentage of nonsterilized currently married women who are using a contraceptive method

Risk category	Bolivia	Brazil	Colombia	Dominican Republic	Ecuador	Guatemala	Mexico	Peru
In Any High-risk Category[1]	23.9	52.0	54.1	25.1	30.4	13.6	38.5	38.1
Not in Any High-risk Category	30.8	55.5	59.5	25.2	38.3	14.9	45.7	47.5

[1] At risk of conceiving a child with an elevated risk of mortality