POPULATION, HEALTH AND WOMEN

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INTRODUCTION

There are several issues regarding women's health, women's reproductive behavior, the fertility impact of reproductive health programs, and the effect of gender roles and expectations on all of these. First, there is a recurring theme in discussions about women's health that women have a poorer health status than men because they are not getting the health care that they need as a result of gender bias. Second, there are those who argue that the current emphasis on maternal health, including fertility regulation, only serves to deflect attention to the real concern of improving women's health as individuals (with the right to health) and not solely as mothers (Mason 1994). Third, it has also been argued that population programs should move away from their emphasis on fertility reduction (through family planning) to individual health and reproductive choice, that is, the objectives of family planning programs should be to assist individuals to achieve their reproductive goals in a healthful way rather than to reduce fertility (Germain and Faunders 1994). In response, the question has been raised whether a population program that thus shifts its emphasis will be effective in lowering fertility, if fertility reduction is also a national objective. This paper attempts to put together recently available information in the Philippines that could help sort out these interlocking issues.

The analysis of available national data reveals several interesting findings as the subsequent sections of this paper will show. First, women's health problems manifest themselves in different ways. However, there does not appear, from the data examined, evidence of gender bias in the

utilization of health care services. Second, women's health can be improved by addressing high risk fertility behavior. Thus, the emphasis on family planning and maternal care will not deflect efforts to improve women's health; rather, it will enhance such efforts. Third, women's reproductive health can have significant fertility impacts. Thus, meeting the needs of women for safe motherhood would not only improve the health of women and their children, but also contribute toward the achievement of replacement fertility, if such a goal is indeed desired. Finally, eliminating gender bias which results in the expansion of women's range of choices with respect to reproduction, contraceptive use, and health care utilization will have a permanent impact on health, not just for women, but for everyone.

This paper is organized as follows. The second section (p. 342) describes a simple framework for discussing the determinants of women's health and fertility, taking into account both proximate and socioeconomic factors and the effect of gender expectations and roles on these determinants. The third section (p. 346) describes the status of women's health based on recently available national data. The fourth section (p. 367) examines the impact of reproductive behavior on the health of women and their children, while the fifth section (p. 376) examines the impact of reproductive health on fertility. The last section (p. 380) concludes the paper.
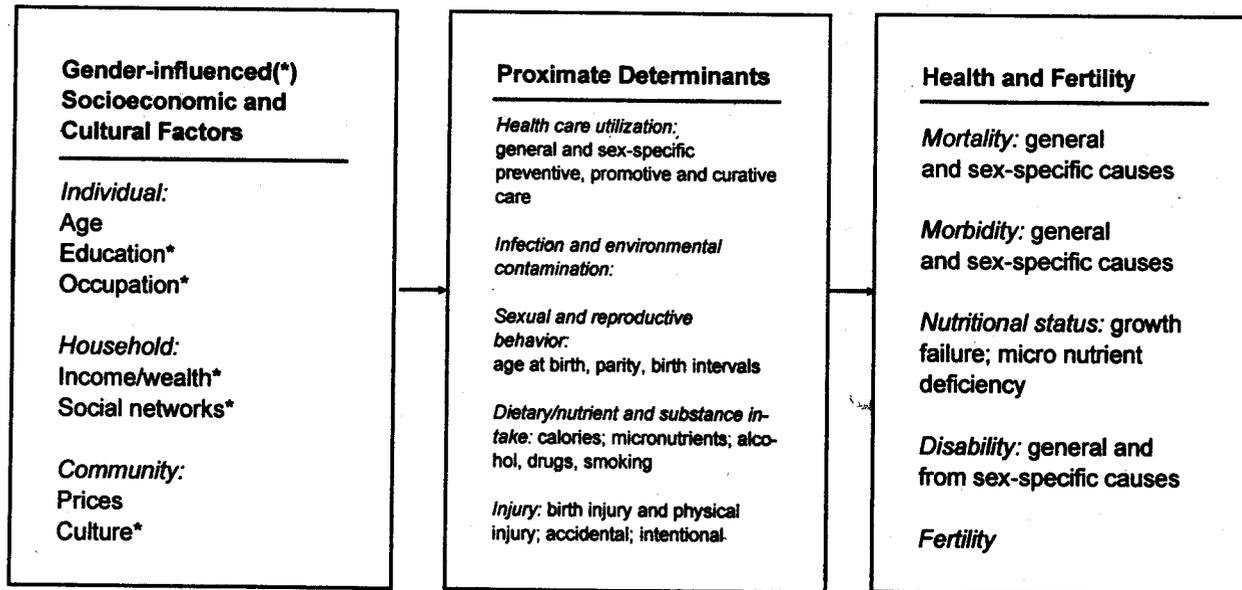
FRAMEWORK:
DETERMINANTS OF WOMEN'S HEALTH AND FERTILITY

A simple framework for analyzing the determinants of women's health is presented in Figure 1. The basic components of this framework are the health outcomes and fertility, the proximate determinants, and socioeconomic and cultural factors. Underlying these factors are gender roles and expectations.

Health outcomes are represented by measurable indicators of mortality, morbidity, nutritional status and disability. The proximate (the most direct) determinants of both health and fertility are grouped into five interacting factors: health care, which includes preventive (e.g., immunization), promotive (e.g., exercise) and curative care; infection and environmental

FIGURE 1
Determinants of Women's Health and Fertility

Gender-influenced(*)
Socioeconomic and
Cultural Factors

Individual:
Age
Education*
Occupation*

Household:
Income/wealth*
Social networks*

Community:
Prices
Culture*

Proximate Determinants

Health care utilization:
general and sex-specific
preventive, promotive and curative
care

Infection and environmental
contamination:

Sexual and reproductive
behavior:
age at birth, parity, birth intervals

Dietary/nutrient and substance in-
take: calories; micronutrients; alco-
hol, drugs, smoking

Injury: birth injury and physical
injury; accidental; intentional

Health and Fertility

Mortality: general
and sex-specific causes

Morbidity: general
and sex-specific causes

Nutritional status: growth
failure; micro nutrient
deficiency

Disability: general and
from sex-specific causes

Fertility

contamination; sexual and reproductive behavior; dietary, nutrient and substance intake; and injury. Socioeconomic and cultural factors are classified into individual factors (e.g., age, education); household factors (e.g., income and wealth, social networks); and community factors (prices of goods and services, culture). Women's health (as indicated by the four different outcomes) and fertility are directly determined by the proximate determinants acting singly or in combination. Socioeconomic and cultural factors affect women's health and fertility only through their impact on the proximate determinants.

Proximate Determinants

Health care. Many deaths due to infectious diseases can either be prevented (e.g., through immunization) or treated successfully with curative services. Female-specific diseases such as cancer of the breast and uterus, micronutrient deficiency during pregnancy and lactation, and ailments associated with the use of contraceptives, require special care. Untreated cataracts can lead to blindness. (There are more elderly women who are blind than men.)

Infection and environmental contamination. In general, the infection rate and its severity that could result in death is influenced by exposure to communicable pathogen, the susceptibility of the host (partly determined by nutritional status), and by health care. Specific infection such as mycoplasma infection of the genital-urinary tract among pregnant women is one cause of low birth weight and high infant mortality (Chen 1983).

Sexual and reproductive behavior. An active sex life increases the risk of contracting sexually transmitted diseases (STDs), which could lead to infertility and cervical cancer. Reproductive factors such as age at birth of child and birth intervals increase the risk of maternal malnutrition, morbidity and mortality, as well as the risk of infant and child mortality.

Dietary, nutrient and substance intake. Inadequate dietary and nutrient intake leads to poor nutritional status in general. Inadequate micronutrient intake during pregnancy could lead to maternal malnutrition and to low birth weight or increased risk of fetal loss. Drug abuse and alcohol and cigarette

smoking could seriously affect the fetus and birth outcomes.

Injury. This includes birth injury and physical injury. Birth injuries can be caused by incorrect delivery procedures and inadequate handling of complicated cases. Accidental injuries are influenced by various hazards in the workplace and in the home. Women may be subjected to injury from violence from men in or out of the home.

Socioeconomic and Cultural Determinants

Individual factors. Health risks and the sources of those risks vary over the life cycle of the individual. Education affects knowledge about health care, infection and environmental risks, nutrition, sexual and reproductive behavior and risks to injury. The education of women is likely to have the most significant impact on health and fertility. To the extent that gender bias prevents women from having the same opportunities for education as men, the health of women and their children will suffer.

Household factors. The higher the income of women and their households, the greater is their capacity to obtain the needed health care and to buy nutritious food for themselves and their families. This also gives them greater access to goods and services that reduce environmental risks of infection and health hazards at home that could lead to injuries. The ability of women to control income or wealth further enhances their power to make the above health-related decisions, thereby promoting better health for themselves and their families. Societal bias against women having control over household income and resources could militate against the provision of critical health inputs. The constraint posed by limited income can partly be compensated for by assistance from social networks especially in times of emergency health care.

Community factors. The prevailing costs of health care, nutrients, environmental sanitation facilities, contraceptive methods and other health-promoting goods and services affect the consumption or use of health inputs and the practice of contraception. Cultural factors affect health care use, sexual behavior, norms regarding family size and contraception, and attitudes toward violence against women.

Gender Roles and Expectations

Underlying the above factors are the traditional gender roles and expectations which affect women's (1) access to educational opportunities, especially higher education, and their choice of occupation; (2) control over their income and other household resources; (3) capacity to form alliances and social networks; and (4) preferences with respect to family size and contraceptive methods. Gender bias could also stigmatize women who have certain diseases (e.g., STDs) more than men and place the burden of contraception more on their shoulders.

## THE STATUS OF WOMEN'S HEALTH AND FERTILITY

Health and Fertility Outcomes

Mortality decline slowed down considerably in the 1980s, perhaps reflecting the effects of the economic crisis in the mid-1980s and the slow recovery thereafter. Women had lower mortality than men, as shown by life table values for survivors, life expectancy and infant mortality (Figures 2-4). However, differences in the mortality of women varied widely among regions and provinces. Thus, the main problem was probably less between men and women, and more among women of different socioeconomic characteristics.

Women, however, have special needs arising from biological and reproductive factors. These are reflected in data on causes of death (Tables 1-3). Women die from diseases and hazards unique to women: cancer of the breast, uterus and cervix (Table 2) and complications from pregnancy (Table 3). Women also suffer from micronutrient deficiencies (iodine and iron) much more than men (Table 4). The greater risk of micronutrient deficiencies among women is associated with menstruation, pregnancy and lactation. The mortality rate from anemia is higher for women than men during the reproductive ages 15-49 (Figure 5).

Data on the nutritional status of children reveal a higher prevalence of those who are underweight and stunted among females than males (Figures 6a-6d). It is not clear whether this difference is due to gender bias in

FIGURE 2
Survivors at Exact Age (lx), 1990

Excess of females over males
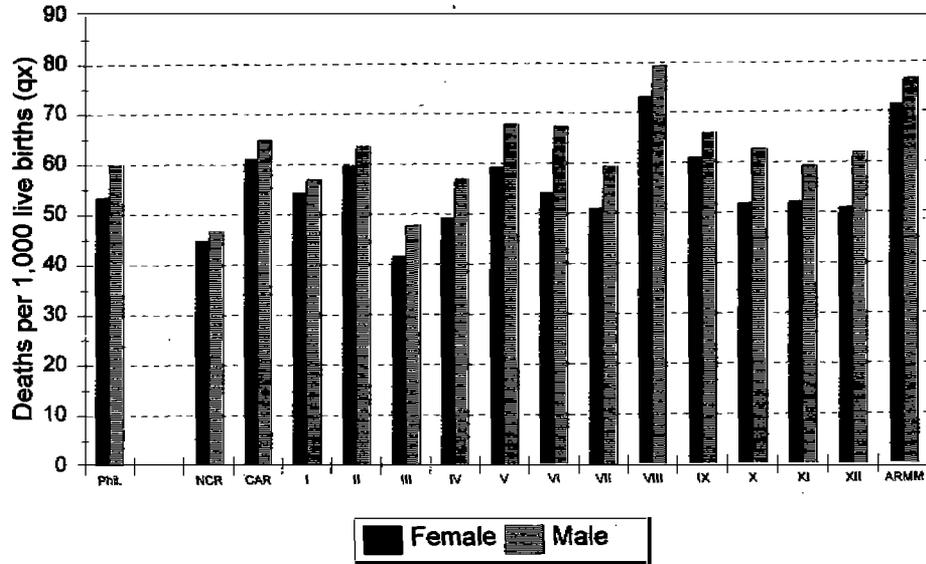
Age

■ Female □ Male
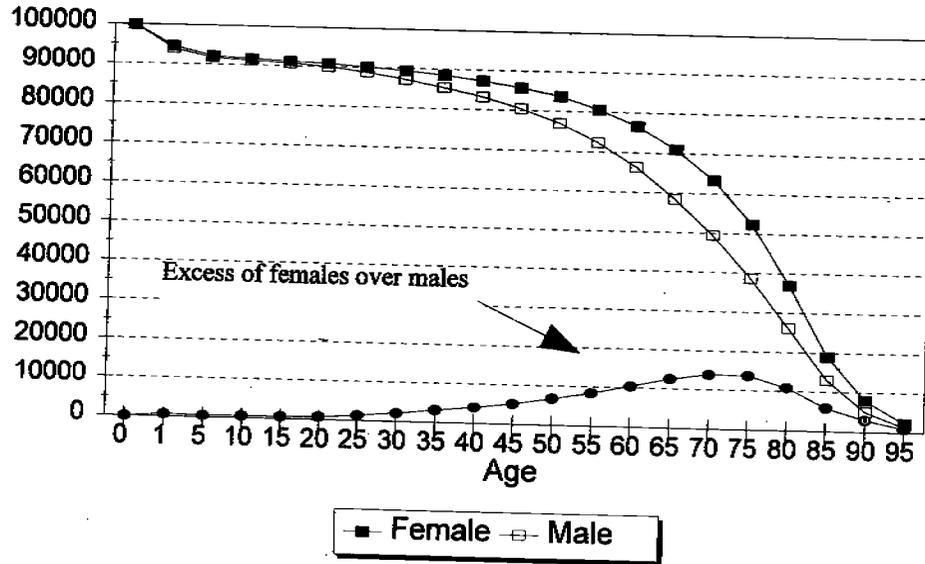
Source: Flieger, W. and J. Cabigon (1994).

FIGURE 3
Life Expectancy by Region, 1990
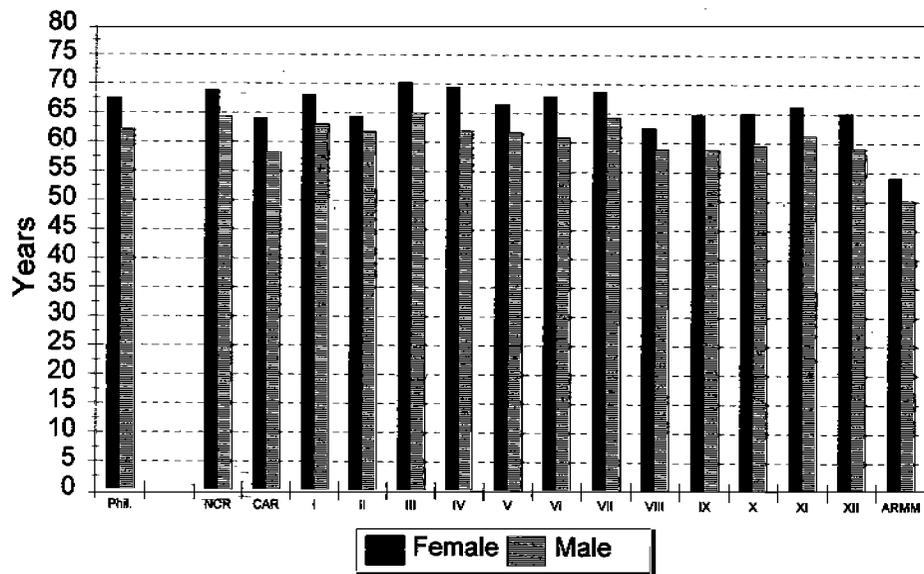
Source: Flieger, W. and J. Cabigon (1994).

FIGURE 4
Infant Mortality Rate, 1990

Source: Flieger, W. and J. Cabigon (1994).

TABLE 1
Mortality by Major Cause of Death (17 cause groups) and by Sex, 1990
(Rate per 100,000 population)

Cause group	Rate		Total, both sexes	
	Male	Female	Rate	Percent of total deaths
Total deaths from all causes	**595.8**	**415.0**	**505.8**	**100.0**
Infective and parasitic diseases	90.0	58.6	74.4	14.7
Neoplasms	43.5	39.5	41.5	8.2
Endocrine, nutritional and metabolic diseases	13.8	11.8	12.8	2.5
Diseases of blood and blood forming organs	4.6	4.5	4.5	0.9
Mental disorder	0.9	0.3	0.6	0.1
Diseases of the nervous system and nervous organs	8.4	6.4	7.4	1.5
Diseases of the circulatory system	146.8	110.9	128.9	25.5
Diseases of the respiratory system	101.9	83.9	93.0	18.4
Diseases of the digestive system	29.9	11.8	20.9	4.1
Diseases of genito-urinary system	12.5	8.8	10.6	2.1
Complication of pregnancy and the puerperium	**0.0**	**4.2**	**2.1**	**0.4**
Diseases of the skin and subcutaneous tissues	0.5	0.5	0.5	0.1
Diseases of musculoskeletal system and connective tissue	0.9	0.6	0.8	0.2
Congenital anomalies	5.1	3.7	4.4	0.9
Certain causes of perinatal morbidity and mortality	29.3	20.9	25.1	5.0
Symptoms and ill-defined conditions	33.9	32.3	33.1	6.5
Accidents, poisoning and violence (external causes)	73.9	16.3	45.2	8.9

Sources: DOH 1993; Philippine Health Statistics 1990.

TABLE 2
Mortality from Neoplasms by Sex, 1990
(Number and rate per 100,000 population)

Cause	Number		Rate	
	Male	Female	Male	Female
Malignant neoplasms of:				
Lip, oral cavity and pharynx	682	523	2.2	1.7
Esophagus	199	115	0.6	0.4
Stomach	822	573	2.6	1.9
Small intestine including duodenum	26	27	0.1	0.1
Colon	164	156	0.5	0.5
Rectum, rectosigmoid junction and anus	267	198	0.9	0.6
Larynx	119	48	0.4	0.2
Trachea, bronchus, lung and peura	2533	963	8.1	3.1
Bone and articular cartilage	563	390	1.8	1.3
Skin	45	52	0.1	0.2
Female breast	**0**	**1631**	**0.0**	**5.3**
Cervix uteri	**0**	**384**	**0.0**	**1.2**
Uterus	**0**	**909**	**0.0**	**2.9**
Other female genital organs	**0**	**360**	**0.0**	**1.2**
Prostate	324	0	1.0	0.0
Other and unspecified sites	5380	3138	17.3	10.2
Lymphatic tissue	716	778	2.3	2.5
Leukemia	43	51	0.1	0.2
Benign neoplasms carcinoma in situ, neoplasms of uncertain behavior and of unspecified nature	1669	1890	5.4	6.1
Total	13552	12186	43.5	39.5

Sources: DOH 1993; Philippine Health Statistics 1990.

intrahousehold dietary allocation. In interpreting the data, it should be recalled that male children have a higher mortality than female children. Thus, it is possible that the risk of mortality of malnourished male children is higher than that of malnourished female children. If so, the nutrition data reflect the larger number of survivors among females than among males.

Data on disability obtained from the 1990 Census of Population and Housing revealed that males had higher rates of disability, irrespective of the type of disability, except for mental illness among older women (Figures 7a-7d). It is not clear what factors might explain the higher rate of mental illness among women after the reproductive ages compared to men.

Fertility rates have been on a slow decline since 1973. In 1973, the Total Fertility Rate (TFR) was 6 children per woman. This declined to 5.1 in 1983 and further to 4.1 in 1993. Nevertheless, the fertility of Filipino women remains among the highest in Southeast Asia. In contrast, Thailand and Indonesia have already attained much lower fertility rates of 2.4 and 3.3, respectively (NSO and Macro International, Inc. 1994).
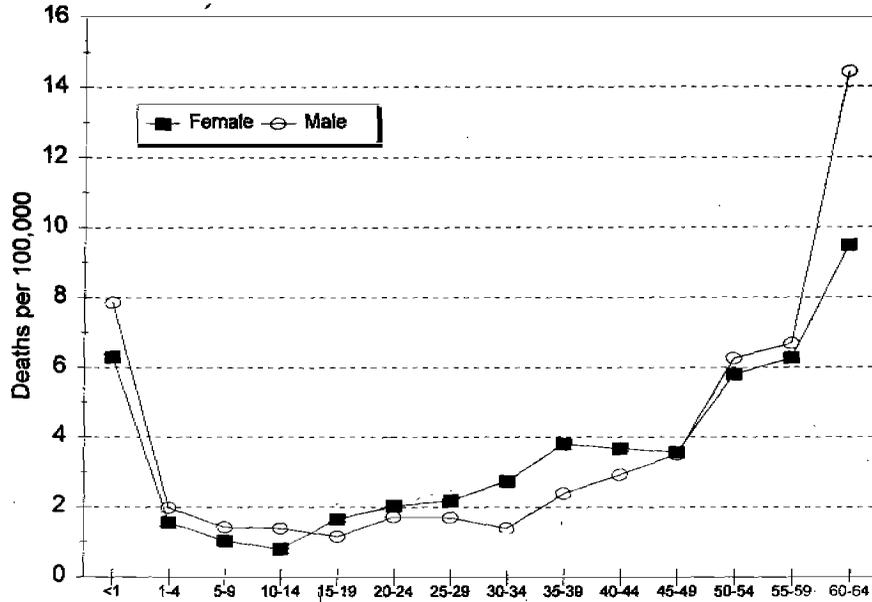
Proximate and Socioeconomic Determinants

Maternal and child care

Many of the health risks specific to women are those associated with pregnancy and birth deliveries, while those of infants and young children of either sex are associated with timely preventive and basic curative care. We describe below various aspects of maternal and child care.

Prenatal care. Data from the 1993 National Demographic Survey show that 83 percent of births in the five years preceding the survey were to mothers who received prenatal care from medical personnel: 38 percent saw a doctor and 45 percent saw a trained nurse or midwife. Only 9 percent saw a traditional birth attendant (Table 5).

The prevalence of prenatal care is higher in urban than in rural areas, and among mothers with a higher level of education. In the urban areas, 54 percent saw a doctor and 34 percent saw a trained nurse or midwife. In

FIGURE 5
Mortality from Anemia, 1990

TABLE 3
Mortality from Complication of Pregnancy and the Puerperium, 1990
(Number and rate per 100,000 population)

Cause	Number		Rate	
	Male	Female	Male	Female
Pregnancy with abortive outcome	0	103	0.0	0.3
Hemorrhages related to pregnancy	0	104	0.0	0.3
Hypertension complicating pregnancy, childbirth and puerperium	0	341	0.0	1.1
Postpartum hemorrhage	0	414	0.0	1.3
Normal delivery and other complications related to pregnancy, occurring in the course of labor, delivery and puerperium	0	345	0.0	1.1

Sources: DOH 1993; Philippine Health Statistics 1990.

the prevalence rate of prenatal care remains, additional focus needs to be placed on reaching more rural women, especially those with lower education.

Data on the tetanus toxoid injections show that 64 percent of live births in the five years preceding the survey were associated with mothers who received tetanus injections during their pregnancies. The difference in prevalence rates between urban and rural areas was small, as was the difference among women with some education. The prevalence rate among women with no education, however, was only 27 percent (Table 5).

Data from the 1987 National Health Survey are not comparable with those obtainable from the 1993 National Demographic Survey. However, it is possible that there was a significant increase in the percentage of pregnant women who received tetanus toxoid injections between the periods

TABLE 4
Micronutrient Deficiencies by Type of Nutrient, 1987
(Percent of population group)

| Nutrient and Group	Both sexes	Female	Male
A. Vitamin A deficiency			
• Night blindness			
6 months - 6 years	0.7		
7 years - 14 years	0.9		
15 years - 19 years	1.0		
• Bitot's spot			
6 months - 6 years	0.2		
B. Iodine deficiency (with goiter)			
7 -14 years		6.4	0.8
15-20 years		6.2	0.2
21 years and over		7.1	0.7
Pregnant women (21-49 years)		12.4	
Lactating women (21-49 years)		10.7	
C. Iron deficiency (with)			
6 -11 months	70.4		
1 - 6 years	38.7		
7 - 12 years	41.2		
13 -19 years		36.9	26.3
20 - 59 years		38.9	21.3
60 years and over	46.9		
Pregnant women		45.3	
Lactating women		50.6	

Source: FNRI, National Nutrition Survey 1987 as reported in Herrin et al. (1993).

FIGURE 6A
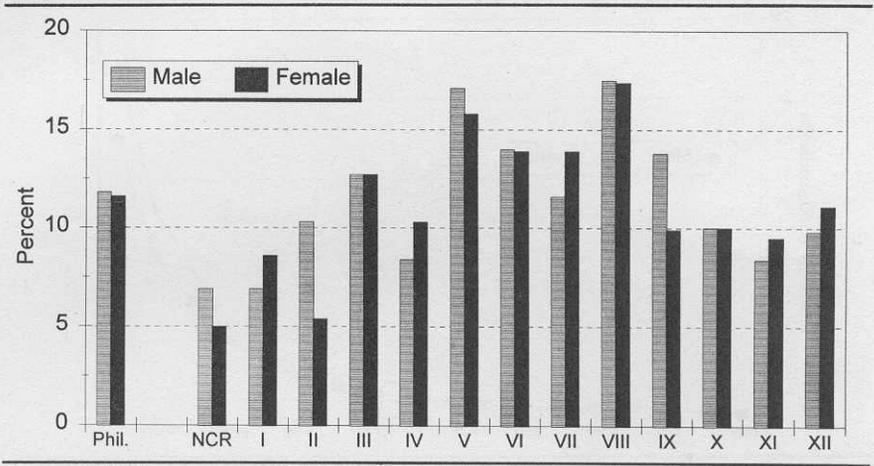**Underweight Children Aged 0-6 Years, 1989-1990**
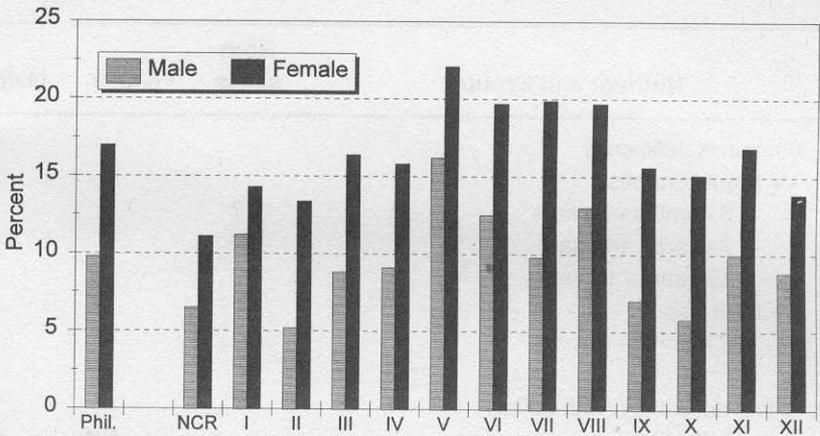
Source: FNRI as reported in Florentino et al. (1991).

FIGURE 6B
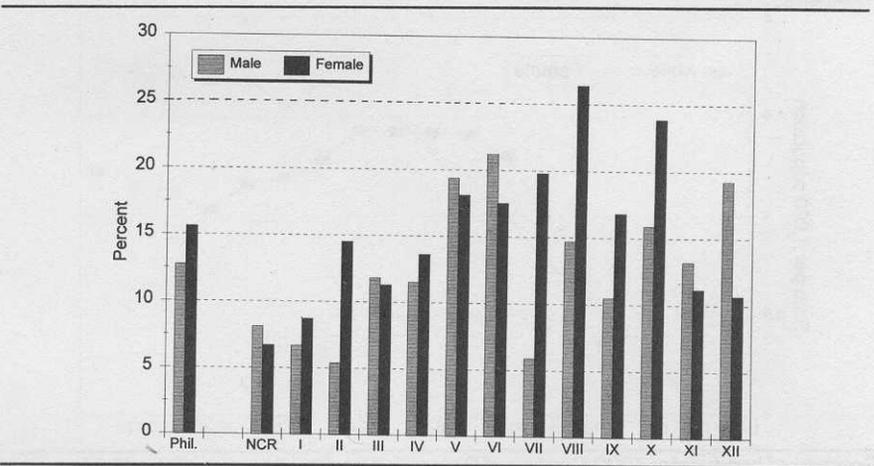**Underweight Children Aged 7-10 Years, 1989-1990**
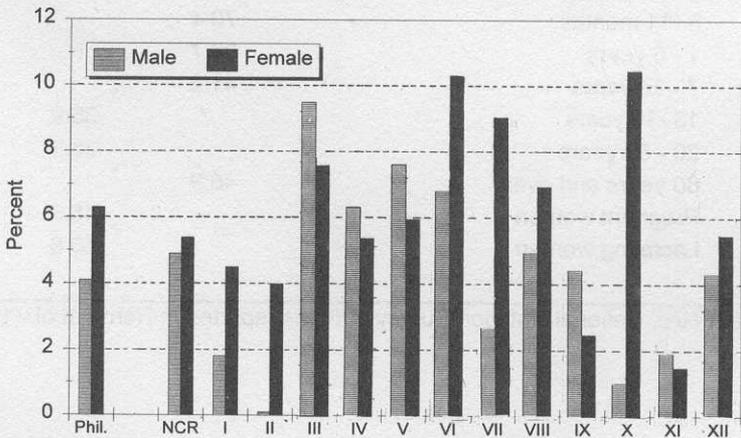
Source: FNRI as reported in Florentino et al. (1991).

FIGURE 6C
Stunted Children Aged 0-6 Years, 1989-1990

Source: FNRI as reported in Florentino et al. (1991).

FIGURE 6D
Stunted Children Aged 7-10 Years, 1989-1990

Source: FNRI as reported in Florentino et al. (1991).

FIGURE 7A
Blindness by Age and Sex, 1990
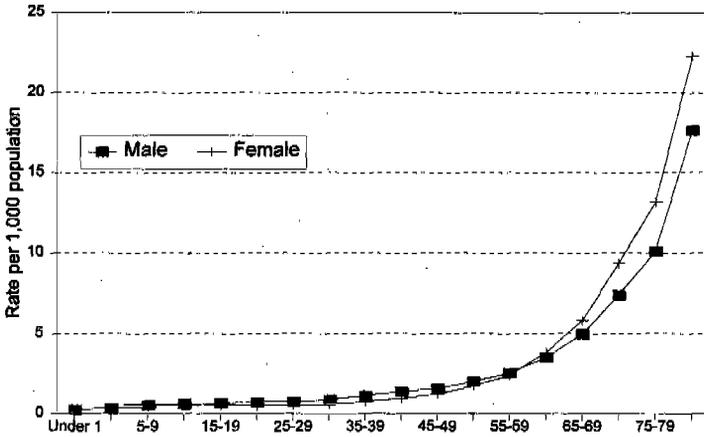
Sources of basic data: 1990 Census of Population preliminary unpublished tables.

FIGURE 7B
Mental Illness by Age and Sex, 1990
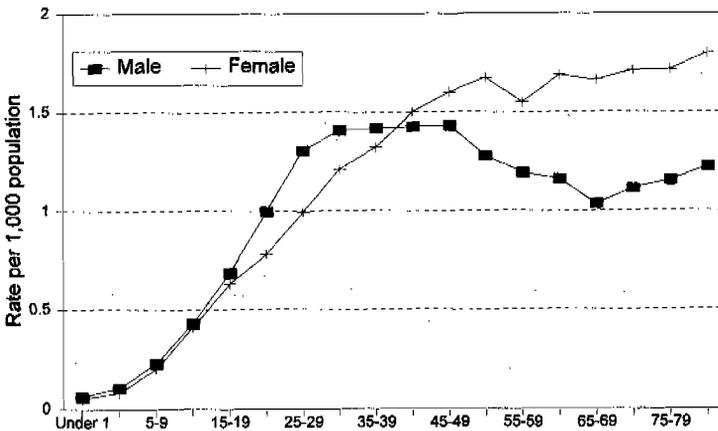
Sources of basic data: 1990 Census of Population preliminary unpublished tables.

FIGURE 7C
Orthopedic Handicap by Age and Sex, 1990

Sources of basic data: 1990 Census of Population preliminary unpublished tables.

FIGURE 7D
Persons with Any Disability by Age and Sex, 1990

Sources of basic data: 1990 Census of Population preliminary unpublished tables.

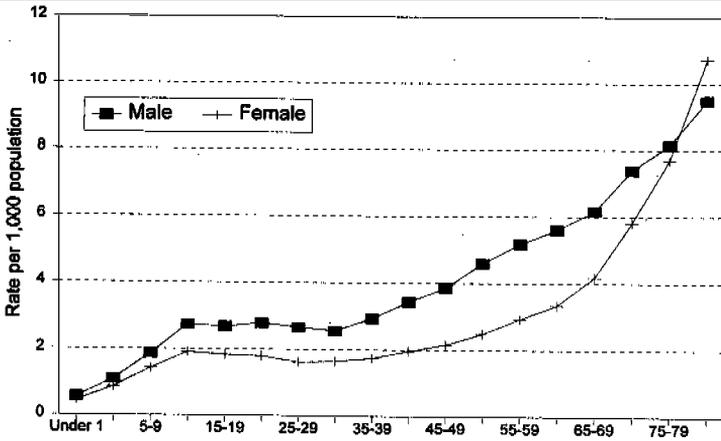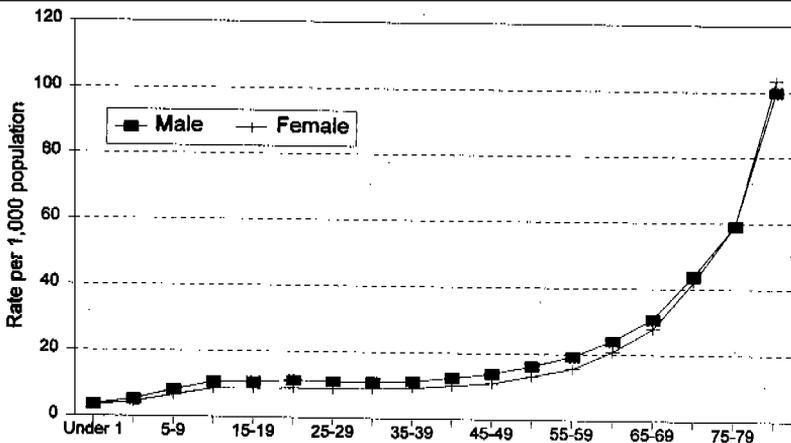TABLE 5
Prenatal care: Percent Distribution of Live Births in the Five Years Preceding the Survey
by Source of Prenatal Care During Pregnancy,
and Percent with Tetanus Toxoid Injections Given to the Mother During Pregnancy, 1993

Characteristics	Prenatal care provider*					Percent with tetanus toxoid injection	Number of births
	Doctor	Trained nurse/ midwife	Traditional birth attendant	No one/ missing	Total		
Residence							
Urban	53.9	34.4	5.7	6.1	100.0	63.1	4269
Rural	23.5	54.7	12.4	9.5	100.0	65.6	4533
Mother's education							
No education	10.7	22.8	41.3	25.1	100.0	26.6	244
Elementary	19.5	54.6	14.5	11.4	100.0	60.4	3637
High school	42.7	46.5	5.1	5.7	100.0	71.3	3114
College or higher	72.0	25.4	0.8	1.8	100.0	65.7	1808
All births	**38.3**	**44.8**	**9.1**	**7.8**	**100.0**	**64.4**	**8803**

*If the respondent mentioned more than one provider, only the most qualified provider is considered.
Sources: NSO and Macro International, Inc., 1994; National Demographic Survey 1993.

1981-87 and 1988-93: 64 percent versus 38 percent (see Herrin et al. 1994). However, there is still a long way to go insofar as the provision of injections to all pregnant women to reduce the risk of neonatal tetanus is concerned.

Birth delivery. Only a little over half of all births during the preceding five years were delivered with the assistance of medical personnel, such as doctors, trained nurses or midwives (Table 6). This means that a large percentage of births still take place with the assistance of traditional birth attendants — 45 percent of all births during the preceding five years. The percentage is higher in the rural areas than in the urban areas: 61 percent versus 28 percent. The percentage of birth deliveries assisted by medical personnel, especially doctors, increases with mothers' higher education .

Child immunization. Table 7 shows the overall vaccination coverage for children aged 12-23 months. Overall, 72 percent of these children received all of the necessary vaccines. There does not seem to be any bias against female children with respect to immunization. The coverage rate is highest for BCG and the first doses of DPT and polio (91 percent each). It should be noted that the high rates of child immunization reflect the effects of the *Oplan Alis Disease* of the DOH, a massive nationwide immunization campaign held on April 21 and May 19, 1993. The data for the 1993 National Demographic Survey were collected from April to June 1993. With respect to background characteristics, higher coverages are observable in urban than in rural areas, and among children of women with higher education than among those with lower education.

Prevalence and treatment of acute respiratory infection. Table 8 shows that 9 percent of children under five years of age experienced coughing accompanied by rapid breathing during the two weeks prior to the survey. Of these children, 51 percent were taken to a health facility or provider. The prevalence of acute respiratory infection was generally higher in rural areas than in urban areas, and among children of less educated mothers than of more educated mothers. Moreover, the percentage of children who were taken to a health facility or provider was higher in urban areas and among children of more educated mothers. There appears to be no clear bias against female children with respect to being taken to a facility or provider.

TABLE 6
Birth Deliveries: Percent Distribution of Live Births in the Five Years Preceding the Survey by Type of Assistance During Delivery and by Place of Delivery, 1993

Characteristics	Attendant assisting during delivery					Place of delivery		
	Doctor	Trained nurse/ midwife	Traditional birth attendant	Others/ un-known/ missing	Total	Health facility	At home	Number of births
Residence								
Urban	39.6	30.8	28.4	1.3	100.0	43.5	56.2	4269
Rural	13.1	23.0	61.2	2.7	100.0	13.8	86.0	4533
Mother's education								
No education	2.6	6.7	76.9	13.9	100.0	3.9	96.1	244
Elementary	10.6	23.9	63.0	2.5	100.0	12.3	87.5	3637
High school	26.7	32.8	39.4	1.1	100.0	29.3	70.5	3114
College or higher	58.8	25.2	15.4	0.7	100.0	61.7	37.9	1808
Total	26.0	26.8	45.3	1.7	100.0	28.2	71.5	8803

Sources: NSO and Macro International, Inc., 1994; National Demographic Survey 1993.

TABLE 7

Vaccinations by Background Characteristics: Percentage of Children 12-23 Months
Who Had Received Specific Vaccines by the Time of the Survey, 1993

											Number
				Percentage of children who received:							
		DPT			Polio						of
Characteristics	BCG	1	2	3+	1	2	3+	Measles	All*	None	Children
Sex											
Male	91.5	90.9	87.7	79.9	91.0	86.3	77.9	81.4	71.0	6.4	899
Female	90.8	91.4	88.1	79.9	90.8	86.1	78.4	81.5	72.1	7.1	843
Residence											
Urban	93.0	93.0	90.0	81.4	92.9	89.0	81.2	83.7	73.2	4.9	860
Rural	89.4	89.4	85.9	78.5	89.0	83.4	75.2	79.2	69.9	8.6	883
Mother's education											
No education	51.2	51.2	48.0	46.1	51.2	48.0	46.1	48.2	43.0	46.8	47
Elementary	88.4	88.7	83.8	75.0	88.4	82.5	73.7	76.9	67.6	8.5	696
High school	93.6	93.2	91.0	81.3	93.0	88.1	78.6	85.0	72.1	4.6	625
College or higher	97.4	97.3	95.4	90.8	97.0	94.6	89.7	88.2	81.5	2.0	374
All children	91.2	91.1	87.9	79.9	90.9	86.2	78.2	81.4	71.5	6.8	1742

*Children who are fully vaccinated (i.e., those who have received BCG, measles and three doses of DPT and polio).
Sources: NSO and Macro International, Inc., 1994; National Demographic Survey 1993.

TABLE 8
Prevalence and Treatment of Acute Respiratory Infection:
Percentage of Children Under Five Years Who Had a Cough Accompanied
by Rapid Breathing During the Two Weeks Preceding the Survey,
and the Percentage of Ill Children
Who Were Taken to a Health Facility or Provider, 1993

Characteristics	Percentage of children with cough and rapid breathing	Percentage taken to a health facility or provider*	Number of children
Child's age			
0 < 6 months	7.4	(56.5)	751
6 - 11 months	10.7	56.0	905
12 - 23 months	11.0	55.0	1,742
24 - 35 months	9.3	49.6	1,752
36 - 47 months	7.1	47.2	1,712
48 - 59 months	6.6	(44.8)	1,596
Sex			
Male	8.7	51.9	4,359
Female	8.7	50.6	4,099
Residence			
Urban	7.4	55.8	4,135
Rural	9.9	48.0	4,323
Mother's education			
No education	9.8	***	215
Elementary	9.9	47.1	3,456
High school	8.5	54.9	3,027
College or higher	6.5	60.5	1,760
All children**	**8.7**	**51.3**	**8,458**

Note: Figures are for children born in the period 1-59 months preceding the
        survey.

        *Includes health post, health center, hospital and private doctor.

        **Includes 7 children who were given an injection.

        ***Less than 50 cases.

Sources: NSO and Macro International, Inc., 1994, National Demographic
         Survey 1993.

Prevalence and treatment of diarrhea. Table 9 shows that about 10 percent of children under five years of age had diarrhea in the two weeks preceding the survey. Of these, 34 percent were taken to a health facility or a provider. Compared to children of more educated mothers, a relatively higher proportion of children of less educated mothers had diarrhea but only a smaller proportion of them were taken to a health facility or provider. For example, 11 percent of children of mothers with elementary education had diarrhea during the two weeks preceding the survey, of which 30 percent were taken to a health facility or provider. In contrast, only 9 percent of children of mothers with college education or higher had diarrhea during the same period, but 46 percent of them were taken to a facility or provider. There appears to be no clear bias against female children with respect to being taken to a facility or provider.

Summary. The brief description above of the extent to which women and their children received appropriate care reveals at least two important observations. First, while significant progress was achieved in providing appropriate maternal and child care, much work still remains to be done to reach all those with high health risks. These include women and children in rural areas, and women with low education. Second, it appears that the education of the woman is a major factor in health care utilization. Increasing the education of women and their knowledge of health care would go a long way toward improving women's (and their children's) health. But higher education does not only imply improved knowledge; more importantly, it reflects a higher status of women and the associated ability to make informed decisions regarding health care and other matters. Finally, with respect to child care, there appears to be no clear bias against female children.

Contraceptive behavior

We now describe recent data on contraceptive behavior as affected by socioeconomic factors, in particular by residence and education of women, and by source of contraceptive supplies or service.

Contraceptive use. The slow decline in fertility noted earlier is proximately determined by the slow increase in contraceptive prevalence rate.

TABLE 9

Prevalence and Treatment of Diarrhea: Percentage of Children Under Five Years Who Had Diarrhea in the Two Weeks Preceding the Survey and Percentage Who Were Taken for Treatment to a Health Facility or Provider, 1993.

Characteristics	Percentage with diarrhea	Percentage taken to a health facility or provider*	Number of children with diarrhea	Number of children
Child's age				
0 < 6 months	9.3	***	70	751
6 - 11 months	17.0	41.1	154	905
12 - 23 months	15.6	33.4	272	1,742
24 - 35 months	9.6	33.0	169	1,752
36 - 47 months	6.6	31.5	112	1,712
48 - 59 months	4.9	***	78	1,596
Sex				
Male	10.2	32.0	445	4,359
Female	10.0	35.9	410	4,099
Residence				
Urban	9.7	36.2	403	4,135
Rural	10.5	31.8	452	4,323
Mother's education				
No education	10.0	***	22	215
Elementary	11.4	29.6	393	3,456
High school	9.6	33.2	289	3,027
College or higher	8.6	45.7	151	1,760
All children**	10.1	33.9	855	8,458

Note: Figures are for children born in the period 1-59 months preceding the survey.

*Includes health post, health center, hospital, and private doctor.

**Includes 5 children who were given an injection and 9 children with missing information on treatment.

***Less than 50 cases.

Sources: NSO and Macro International, Inc 1994, National DemographicSurvey 1993.

Data in Table 10 show a slow increase in contraceptive prevalence rate from 1983 to 1993 after a sharp increase from the early years of the National Family Planning Program from 1973 to 1978. The rate for both modern and traditional methods rose from 32 percent in 1983 to 36 percent in 1988 and to 40 percent in 1993. The contraceptive prevalence rate for the Philippines in 1993 is much lower than that experienced by neighboring countries in earlier years, notably Indonesia (50 percent in 1991) and Thailand (66 percent in 1987) (NSO and Macro International, Inc. 1994.)

The popular methods of contraception include female sterilization, pill, natural family planning and withdrawal (Table 11). The pattern is similar among couples of different background characteristics such as urban-rural residence, level of mother's education and number of children. The data, however, show that contraceptive prevalence is higher in urban than in rural areas among mothers with a higher level of education, and among couples with larger numbers of children.

Table 12 shows that a large majority (71 percent) of current users of modern contraceptive methods obtained their supplies or service from the public sector, mainly from government hospitals and Barangay Health Stations. Private hospitals and clinics were the main private sources of supplies and services, providing 16 percent of the total to current users.

THE IMPACT OF REPRODUCTIVE BEHAVIOR ON HEALTH·

**Direct Health Risks Associated With the Use
of Specific Contraceptive Methods**

While current contraceptive methods are generally safe, they do not meet all the requirements of all users. Certain types of contraceptive methods pose increased health risk among women with different characteristics (e.g., age, prior history of high blood pressure, heart disease, etc.) and women who smoke. Evidence on this comes primarily from the developed world (Ross and Frankenberg 1993). The only clue we have about potential health

TABLE 10

Trends in Contraceptive Use:

Percentage of Currently Married Women Aged 15-49

Using Modern Contraceptive Methods and Traditional Methods, 1968-1993

Survey	Modern methods	Traditional methods	Total
1968 National Demographic Survey	2.9	11.5	15.4
1973 National Demographic Survey	10.7	6.7	17.4
1978 Republic of the Philippines Fertility Survey	17.2	21.3	38.5
1983 National Demographic Survey	18.9	13.1	32.0
1988 National Demographic Survey	21.6	14.5	36.1
1993 National Demographic Survey	24.9	15.1	40.0

Sources: NSO and Macro International, Inc. 1994; National Demographic
         Survey, 1993.

risks comes from the responses of discontinuing users and nonusers regarding the side effects of contraceptives. We present recent data below.

Data on reasons for discontinuing the use of contraception suggest that different methods have specific health risks (Table 13). Natural family planning and traditional methods such as withdrawal are associated with method failure and, therefore, with increased risk of unplanned pregnancy (with the associated health risks to mothers and children). On the other hand, modern methods such as the pill and IUD are associated with side effects and health risks at least as perceived by women users. Clearly, the promotion of women's health will be served by the development of more effective and safer methods of contraception.

Table 14 shows the reasons for not using contraception among currently married women. The desire for more children was the main reason for not using contraceptive methods for 20 percent of women. Another 19 percent said that they did not need to practice contraception on account of such

Current Use of Contraception: Percent Distribution of Currently Married Women by Contraceptive Method Currently Used, 1993

Method	Total	Residence		Mother's education				Number of children				
		Urban	Rural	No education	Elementary	High school	College or higher	None	1	2	3	4+
Any method	40.0	43.0	36.8	10.8	34.5	43.8	47.1	1.9	26.7	44.0	51.5	43.4
Modern methods												
Any modern method	24.9	27.6	21.9	7.2	21.5	27.6	28.5	0.6	13.9	25.4	35.5	27.4
Pill	8.5	9.0	8.0	1.6	7.0	10.1	9.4	0.6	9.7	13.1	10.1	6.3
IUD	3.0	2.9	3.2	1.4	2.6	3.5	3.3	0.0	2.5	4.3	4.0	2.7
Injection	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1
Diaphragm/foam/jelly	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Condom	1.0	1.3	0.6	0.0	0.4	1.2	1.9	0.0	1.0	1.4	1.2	0.9
Female sterilization	11.9	13.9	9.6	3.8	11.1	12.3	13.5	0.0	0.7	6.3	19.5	16.9
Male sterilization	0.4	0.4	0.3	0.4	0.4	0.4	0.2	0.0	0.1	0.2	0.6	0.5
Traditional methods												
Any traditional method	15.1	15.4	14.9	3.6	13.0	16.1	18.6	1.3	12.7	18.5	16.1	16.0
Natural family planning	7.3	7.8	6.8	2.1	5.2	7.6	11.1	0.7	5.9	9.9	7.7	7.5
Withdrawal	7.4	7.3	7.5	1.1	7.3	8.1	7.4	0.6	6.5	8.0	8.0	8.2
Other methods	0.4	0.2	0.5	0.3	0.4	0.5	0.1	0.0	0.4	0.6	0.4	0.3
Not currently using	60.0	57.0	63.2	89.2	65.5	56.2	52.9	98.1	73.3	56.0	48.5	56.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8961	4638	4323	239	3564	3072	2085	558	1319	1745	1657	3682

Sources: NSO and Macro International, Inc. 1994; National Demographic Survey, 1993.

TABLE 12
Source of Supply for Modern Contraceptive Methods:
Percent Distribution of Current Users of Modern Contraceptive Methods
by Most Recent Source of Supply, 1993

Source	Pill	IUD	Condom	Female sterili- zation	All methods*
Public sector	**73.4**	**78.7**	**55.6**	**70.4**	**71.4**
Government hospital	2.7	17.7	4.0	59.2	32.6
Barangay health station	53.9	30.7	34.9	3.3	25.0
Barangay supply office	2.6	2.4	2.2	0.4	1.5
Puericulture center	14.2	28.0	14.5	7.5	12.4
Medical private	**23.4**	**19.5**	**40.6**	**28.5**	**26.3**
Private hospital/clinic	3.6	12.8	3.8	26.8	16.4
Pharmacy	17.4	0.0	36.0	0.0	7.3
Private doctor	2.4	6.7	0.8	1.7	2.6
Other private	**2.2**	**0.6**	**2.7**	**0.8**	**1.4**
Store	0.2	0.0	1.9	0.0	0.2
Church	0.0	0.0	0.0	0.8	0.5
Friends/relatives	2.0	0.6	0.8	0.0	0.8
Other	0.4	0.7	0.0	0.3	0.4
Don't know	0.0	0.0	0.0	0.0	0.1
Missing	0.7	0.4	1.1	0.0	0.4
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	764	273	90	1104	2272

*Includes 34 cases of male sterilization

Sources: NSO and Macro International, Inc. 1994; National Demographic
         Survey, 1993.

TABLE 13
Reasons for Discontinuation of Contraception: Percent Distribution of Discontinuation of Contraceptive Methods in the Five Years Preceding the Survey by Main Reason for Discontinuation According to Specific Methods, 1993

Reason for discontinuation	Method discontinued						Total*
	Pill	IUD	Condom	Natural family planning	Withdrawal	Other	
Became pregnant	14.5	9.0	26.1	47.5	52.6	40.6	34.0
To become pregnant	20.9	17.3	16.7	21.0	14.1	11.0	18.1
Side effects	24.3	24.5	2.9	1.6	4.4	6.0	11.9
Health concerns	6.3	7.5	2.8	1.4	1.2	1.9	3.5
Husband disapproved	2.1	2.4	11.6	3.4	4.8	0.0	3.6
Other reasons	16.4	19.3	29.4	12.0	10.0	21.1	14.5
Missing	15.5	20.0	10.5	13.1	12.9	19.4	14.4
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women*	1196	153	169	708	1036	53	3354

*Includes users of injection, vaginal methods, female sterilization and male sterilization.

Note: Other reasons include access/availability, inconvenient to use, cost, infrequent sex, menopause and marital dissolution.

Sources: NSO and Macro International, Inc. 1994; National Demographic Survey 1993.

TABLE 14
Reasons for Not Using Contraception:
Percent Distribution of Currently Married Women
Who Are Not Using a Contraceptive Method by Reason for Not Using, 1993

	Age		
Reason	15-29	30-49	Total
Wants children	32.2	15.6	20.1
Opposed to family planning	3.0	3.3	3.2
Religion	5.6	4.5	4.8
Lack of knowledge	9.4	4.7	6.0
Costs too much	0.6	0.4	0.4
Hard to get methods	0.4	0.4	0.4
Side effects	27.4	19.5	21.6
Health concerns	11.3	9.5	10.0
Inconvenient	2.2	2.1	2.1
Not likely to get pregnant*	5.4	23.5	18.6
Others	1.9	16.0	12.3
Don't know/missing	0.6	0.5	0.5
Total	100.0	100.0	100.0
Number of women	929	2505	3433

*Old/difficult to get pregnant/infrequent sex/ husband away/menopausal/had
         hysterectomy.
Sources: NSO and Macro International, Inc. 1994; National Demographic
         Survey, 1993.

varied reasons as being too old, finding it difficult to get pregnant, infrequent
sexual activity, or having husbands who are away most of the time or who
have had hysterectomy. Opposition to family planning and religious reasons
do not appear to be major reasons for nonuse as only 8 percent of women

mentioned these as reasons for nonuse. Moreover, access-related factors (costs, hard to learn, hard-to-get supplies) were mentioned by only 7 percent of all nonusers; hence, these too did not constitute major factors for nonuse.

On the other hand, the major reasons for nonuse appear to be related to health concerns (side effects and health concern) cited by 32 percent of women. Thus, whether the health concern was real or imagined, it only underscored the great need to improve the quality of information and service given to contraceptors to protect them from unnecessary health risks.

Impact on Infant and Child Mortality

It is well known that births to women below 20 years and over 35 years, parity 4 and over, and birth spacing at less than 24 months are associated with increased risk of infant and child mortality (Ross and Frankenberg 1993). Table 15 shows the distribution of women and children according to these categories of increased risk of infant and child mortality as a result of the fertility behavior of the mother. The table also presents the risk ratio, which is the proportion dead of births in a specific risk category to the proportion dead of births not in any risk category. Thus, the risk ratio measures the risk of mortality of children in any risk category relative to children who are not in any risk category.

The data reveal that 62 percent of the total number of children born in the five years preceding the 1993 National Demographic Survey is in one or more high risk categories. Short birth intervals and high birth order are the two most common high-risk factors. Fourteen percent of the births in the last five years occurred after an interval of less than 24 months and 19 percent were of birth orders greater than three. Multiple risk categories combine the different single risk categories. Correspondingly, 9 percent of mothers bore children at short intervals while 12 percent of mothers bore children of higher birth order.

The most common multiple risk categories were high birth order and women more than 34 years of age (11 percent) and short birth interval and high birth order (also 11 percent). Correspondingly, 26 percent of mothers bore children of higher birth order and when they were more than 34 years

TABLE 15
High Risk Fertility Behavior:
Percent Distribution of Children Born in the Five Years
Preceding the Survey Who Are at Elevated Risk of Mortality,
and the Percent Distribution of Currently Married Women
at Risk of Conceiving a Child with an Elevated Risk of Mortality
by Category of Increased Risk, 1993

Risk category	Birth in last 5 years preceding the survey		Percentage of currently married women*
	Percentage of births	Risk ratio	
Not in any risk category	37.6	1.0	31.1**
Single risk category			
Mother's age < 18	2.3	1.7	0.2
Mother's age > 34	1.7	1.2	7.5
Birth interval < 24	13.5	1.3	9.3
Birth order > 3	19.0	1.5	12.1
Subtotal	36.5	1.4	29.1
Multiple risk categories			
Age < 18 and birth interval < 24***	0.2	****	0.1
Age > 34 and birth interval < 24	0.4	****	0.5
Age > 34 and birth order > 3	11.2	2.2	26.4
Age > 34 and birth interval < 24 birth order > 3	3.2	3.5	4.1
Birth interval < 24 and birth order > 3	10.9	2.5	8.8
Subtotal	25.9	2.4	39.8

TABLE 15 (continued)

Risk category	Birth in last 5 years preceding the survey		Percentage of currently married women*
	Percentage of births	Risk ratio	
In any risk category	62.4	1.9	68.9
Total	100.0		100.0
Number	8803		8961

Note: Risk ratio is the proportion dead of births in a specific risk
        category to the proportion dead of births not in any risk category.
        *Women were assigned to risk categories according to the status
          they would have at the birth of a child, if the child were conceived
          at the time of the survey: age less than 17 years and 3 months,
          age older than 34 years and 2 months, latest birth less than 15 months
          ago, and latest birth order of 3 or higher.
        **Includes sterilized women.
        ***Includes the combined categories age < 18 and birth order > 3.
        ****Fewer than 200 cases.
Sources: NSO and Macro International, Inc. 1994; National Demographic
        Survey, 1993.

of age, while 9 percent of mothers bore children of high birth orders and at
short intervals.

The risk ratio for mothers less than 18 years is 1.7, meaning that the
proportion dead of children born to these women was 1.7 times the proportion
dead of children born to women who were not in any risk category. Children
in multiple risk categories have higher risk ratios than those in single risk
categories. Thus, children born to mothers aged 35 and over, at intervals less
than 24 months and of birth orders greater than 3 had a risk ratio of 3.5, meaning
that the proportion dead of children born to these women was 3.5 times the

children born to women who were not in any risk category. Thus, fertility in the high risk categories is associated with higher infant and child mortality.

A study conducted by Casterline (1991) using data from the 1988 National Demographic Survey concluded that if all women in the high risk categories were protected by contraception, the result would be large and positive health benefits. The study estimated that if births to women in four health risk categories (aged 35 and over, aged less than 20, parity 4 and over, and spacing births at less than 24 months) could be averted, the infant mortality rate would decline by roughly one-quarter (from 50 deaths per 1,000 births to 38 deaths per 1,000 births) and the early childhood mortality rate by roughly one-fifth (from 30 per 1,000 to 24 per 1,000). These findings imply that a significant reduction in infant and child mortality can be achieved by changing the reproductive behavior of married couples in a way that reduces the health risks of childbearing to mothers.

THE IMPACT OF REPRODUCTIVE HEALTH ON FERTILITY

Would improving women's health alone through family planning lower fertility to levels approaching the demographic objective of replacement fertility? The 1993 National Demographic Survey provides some data that bear on this question. Table 16 shows the "unmet need" for family planning. Women with unmet need include those who are not using any method of contraception but want to delay their next birth for two or more years and those who want to stop childbearing. The data show that 12 percent of women need contraception to space births and that another 14 percent need it to limit births. Altogether, 26 percent of all women have an unmet need for family planning. Satisfying this need for family planning could increase the contraceptive prevalence to 69 percent.

Table 17 shows the distribution of births according to whether the particular pregnancy was planned, unplanned but wanted at a later time, or not wanted at all. The data show that 56 percent were wanted at the time of conception. However, 28 percent were wanted but at a later time and 16

TABLE 16

Need for Family Planning Services: Percent of Currently Married Women with Unmet Need for Family Planning, 1993

Characteristics	Unmet need for family planning		
	For spacing	For limiting	Total
Age			
15-19	27.1	4.4	31.5
20-24	28.2	7.0	35.2
25-29	19.7	12.6	32.3
30-34	12.2	15.6	27.9
35-39	6.4	17.1	23.6
40-44	2.6	19.5	22.2
45-49	0.5	8.9	9.5
Residence			
Urban	11.4	12.1	23.5
Rural	13.6	15.6	29.1
Education			
No education	18.4	15.2	33.6
Elementary	11.6	18.1	29.8
High school	13.5	12.1	25.6
College or higher	11.5	8.8	20.3
Total	**12.4**	**13.8**	**26.2**

Note from source: Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrheic women whose last birth was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children.

Sources: NSO and Macro International, Inc. 1994; National Demographic Survey 1993.

TABLE 17

**Fertility Planning Status: Percent of Births in the Five Years
Preceding the Survey by Fertility Planning Status,
According to Birth Order and Mother's Age, 1993**

	Planning status of birth					
	Wanted then	**Wanted later**	**Wanted no more**	**Missing**	**Total**	**Number of births**
Birth order						
1	79.1	18.4	2.3	0.3	100.0	2,190
2	58.7	35.9	5.1	0.3	100.0	1,961
3	54.9	32.7	11.9	0.6	100.0	1,605
4+	41.9	27.6	30.0	0.5	100.0	4,061
Age at birth						
< 20	67.3	29.5	3.3	0.0	100.0	783
20-24	62.6	31.0	5.8	0.6	100.0	2,651
25-29	57.0	30.2	12.4	0.4	100.0	2,758
30-44	50.8	27.2	21.6	0.4	100.0	1,985
35-39	45.1	21.4	32.8	0.6	100.0	1,188
40-44	34.9	16.6	48.3	0.2	100.0	420
45-49	**	**	**	**	100.0	33
Total	55.7	28.0	15.9	0.4	100.0	9,817

Note: Birth order includes current pregnancy.
         ** Less than 50 cases.
Sources: NSO and Macro International, Inc. 1994; National Demographic
         Survey, 1993.

percent were unwanted. The percentage of unwanted births increased with birth order and with the age of the woman at the time of birth.

Defining wanted fertility as that which would ensue if all unwanted births were prevented and comparing this with the actual fertility rate, it was found that only 2.9 births of the total 4.1 births per woman represented wanted fertility (Table 18). What this implies is that if women bear only the number of births that are wanted given the current level of fertility preferences, then the total fertility rate will decline to 2.9 births per woman. This is more than the replacement level of 2 but is a significant movement toward it. If the long-term demographic goal is to further reduce fertility to the

TABLE 18
Wanted Fertility Rates:
Total Wanted Fertility and Total Fertility Rates
for the Three Years Preceding the Survey, 1993

	Total wanted fertility rate	Total fertility rate
Residence		
Urban	2.6	3.5
Rural	3.3	4.8
Mother's education		
No education	4.0	4.9
Elementary	3.7	5.5
High school	2.9	3.9
College or higher	2.4	2.8
Total	2.9	4.1

Note: Rates are based on births to women aged 15-49 in the period 1-36 months preceding the survey.
Sources: NSO and Macro International, Inc. 1994; National Demographic Survey, 1993.

replacement level, then fertility preferences (i.e., the number of children wanted and the spacing of births) should be changed in addition to satisfying currently unmet needs for family planning.

Casterline (1991), using the 1988 National Demographic Survey, showed that satisfying the unmet need for contraception would reduce the total fertility rate to 2.8 births per woman. If women could eliminate high risk fertility through effective contraception, the total fertility rate (TFR) would be reduced to 2.4 births per woman. Finally, if unmet needs (based on current preference) are satisfied and high risk births are eliminated, TFR will be reduced to 2.1 births, which is the replacement level. Casterline emphasized that the assessment of the impact on fertility of satisfying the need (both preference-based and health-risk based) for family planning must be regarded as hypothetical and illustrative of the extent of change that might result from a successful family planning program.

In summary, meeting the needs of women for safe motherhood would not only improve women's health and those of their children, but would also contribute to the achievement of replacement fertility if such a goal is indeed desired. Underlying this capacity to meet the health needs of women is their greater capacity to make choices regarding the number and spacing of children and family planning methods.

CONCLUSIONS

Analysis of available national data reveals that women's health problems manifest themselves in different ways. Although women generally have lower mortality than men, there are health risks specific to women that deserve special attention. These include health risks associated with repro-duction, nutritional risks associated with pregnancy and lactation, and health risks associated with the use of certain contraceptive methods.

From the data examined, there does not appear to be any evidence of gender bias in the utilization of health care services. However, it is possible that gender bias indirectly affects women's health by maintaining traditional expectations and roles regarding (1) women's reproductive role (where they

may be pressured by society to bear children far greater than the desired number); (2) women's responsibility for contraception relative to men (as a consequence of which they face more risks than men); and (3) choices with respect to education and control of wealth which affect women's ability to use various health inputs when needed.

Women's health can be improved by addressing high risk fertility behavior. It is well known that births to women under 20 years and over 35 years, parity 4 and over, and birth spacing at less than 24 months are associated with increased risk of infant and child mortality. Recent analysis shows that a significant reduction in infant and child mortality can be achieved by changing the reproductive behavior of married couples in ways that reduce the health risk of childbearing to mothers. If this is the case, then the emphasis on family planning and maternal care will not deflect efforts to improve women's health but rather enhance them.

Women's reproductive health can have significant fertility impacts. Recent data and analysis suggest that if all unwanted births (births to women who do not want any more children under current circumstances) could be prevented, the Total Fertility Rate (TFR) would decline from 4.1 births to 2.9 births per woman. Other estimates show that if both high risk fertility and unwanted births could be prevented through safe and effective contraception, the TFR would decline to replacement levels. While the results are merely indicative of the extent of fertility change that might result from successful reproductive health programs, they suggest that meeting the needs of women for safe motherhood would not only improve women's health and those of their children but also contribute toward the achievement of replacement fertility, if such a goal is indeed desired.

Eliminating gender bias which results in the expansion of women's range of choices with respect to reproduction, contraceptive use, and health care utilization will have a permanent impact on health not just for women but for all.

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POPULATION, HEALTH AND WOMEN

Behavior toward health utilization may vary. But one thing is obvious — education changes the perception of people toward policies and programs including those on health care. So what do we do with those who have less education? Certainly, we cannot go back in time to give them more formal education.

One way to compensate for lack of formal education then is through various information and education programs. To be effective, these programs must be focused properly to the people and provide answers to their individual needs.

Provision of information, however, is not sufficient for households to make proper decisions. For instance, will adequate education or information guarantee that housewives are given ample rights to make household decisions (such as the proper size of the family, matters of education for the children, and so on)? Will these enable them to withstand maltreatment from their husbands? These are bigger issues that require a much larger intervention. It is not simply inviting information to help but perhaps changing how people or segments of the populace perceive other people, issues, and problems. Looking at society as a whole, how do we change the entire system? Do we start from the educational system or the home?

On nutrition for example, it is a universal notion that women, especially pregnant women, need nutritious food. Yet, local surveys have shown that women are the last priority in household food consumption. Moreover, contraceptives with their attendant health risks, almost always target women

because male contraceptive methods do not quite figure with men's stature in the society.

Inspite of the dominance of or the superior stature afforded to men, particularly in Philippine society, more women have outlived men. Many may find it perplexing but the data speak for themselves. In Europe, Africa, Asia or the United States, women are biologically superior to men.

Again, when we go back to the issue of how data and other information can help catalyze changes for a better society, we find the usefulness of surveys, reports and studies. Data and other information have different implications, depending on how we interpret them. The ideal approach is two-pronged — going *back* to basic research to assure that the data and theories make sense, and going *down* to the people to see how they are affected when data are translated into policies and programs. That is why the little stories — anecdotes and anthropological accounts — matter as much as the large, macro statistics.