



Family Planning Service Utilization and Market Segmentation in the Philippines



Family Planning Service Utilization And Market Segmentation in the Philippines

**Exaltacion E. Lamberte
Nanette R. Lee
Desiree Concepcion U. Garganian
Andrew Kantner**

**Social Development Research Center
De La Salle University-Manila
Manila, Philippines**

October 2000

This report is part of the secondary analysis project for the 1998 Philippines National Demographic and Health Survey. Macro International Inc. coordinated the project and provided technical assistance. Funding was provided by the U.S. Agency for International Development (USAID).

The NDHS further analysis project is part of the MEASURE *DHS+* program which is designed to collect, analyze, and disseminate data on fertility, family planning, and maternal and child health. Additional information about the MEASURE *DHS+* program may be obtained by writing to: MEASURE *DHS+*, Macro International Inc., 11785 Beltsville, Drive, Calverton, MD 20705 (telephone 301-572-0200; Fax 301-572-0999)

Authors:

Dr. Lamberte is Professor in the Department of Behavioral Sciences, De La Salle University; Ms. Lee and Ms. Garganian are at the Social Development Research Center (SDRC) at De La Salle University; and Andrew Kantner is a consultant for ORC Macro.

Recommended citation:

Lamberte, Exaltacion E., Nanette R. Lee, and Desiree Concepcion U. Garganian. 2000. *Family Planning Service Utilization and Market Segmentation in the Philippines*. Calverton, Maryland: ORC Macro.

Contents

Summary	vi
Contraceptive Use	vi
Family Planning Source of Supply	vi
Willingness to Pay	vii
Policy and Programmatic Implications	vii
Introduction	1
1.1 Research Objectives	3
1.2 Analytical Framework	3
1.3 Sources of Data	4
1.4 Organization of the Study	4
2 Determinants of Contraceptive Use, 1993-1998	5
2.1 Levels and Trends in Contraceptive Use	5
Predisposing Factors	5
Enabling Factors	6
Community-level Factors	7
Health System Factors	7
2.2 Determinants of Contraceptive Use	8
3 Choice of Family Planning Service Delivery Point	12
3.1 Model and Identification of Variables	12
3.2 Levels and Trends in Family Planning Source of Supply	12
3.3 Methods Used by Type of Family Planning Provider	13
Enabling Factors	15
Community-level Factors	16
Health System Factors	17
3.4 Factors Affecting Choice of Service Point	17
4 Willingness to Pay and User Charges	20
4.1 Actual Costs Incurred in Using Particular Family Planning Methods	20
4.2 Willingness to Pay	21
Pills	21
IUD	23
Injectables	24
Condom	24
Sterilization	25
4.3 Amount Willing to Pay by Service Delivery Point	26
5 Conclusions and Recommendations	27
5.1 Contraceptive Use	27
5.2 Choice of Service Delivery Point	27
5.3 Willingness to Pay	28
5.4 Policy and Programmatic Implications	29
References	31
Statistical Appendices	33

Summary

Contraceptive Use

Between 1993 and 1998, there was an increase in the use of contraceptives in the Philippines. Notable gains in modern method use were recorded, mainly for injectables and female sterilization. Women from poorer households and rural areas registered the most rapid gains in family planning use. The findings also suggest that efforts to raise levels of female schooling, at least to secondary levels, result in greater family planning use. The results also show that younger women tend to use contraceptives less. Younger women of whatever marital status need to be reached more effectively by the family planning program.

Employment of women and household wealth status have a positive relation with contraceptive use, especially for modern methods. Unemployed women are less likely to use contraceptives. This correlation implies that policies that encourage women to participate in gainful economic activities will help increase the use of contraception. The relation between the household wealth index (this study's proxy variable for income) and contraceptive use also demonstrates that women with a higher income more likely to use contraception than poor women. Contrary to expectations, spousal communication about family planning and geographic accessibility to service delivery points appear to be less critical in determining contraceptive use.

Community attributes, as reflected by the type of residence and region, influence the use of contraception, although region is important only for modern methods. Women from rural areas are less likely to use contraceptives, although some improvement in rural prevalence is noted between 1993 and 1998. Modern method use improved substantially in Mindanao and areas of Luzon outside Metro Manila over the same period. The results from 1998 also show that living in an Local Performance Program (LPP) province is not an important determinant of contraceptive use.

Women who were not visited by family planning fieldworkers in the previous 12 months are less likely to use contraceptives. Visits to health facilities encourage greater use of contraceptives, particularly modern methods. The results show that more respondents heard messages about family planning on radio and television in 1993 than in 1998. However, there is little evidence that this media contact is actually associated with greater use of contraception.

Family Planning Source of Supply

With regard to provider choice, there has not been much improvement in the use of private sector facilities between 1993 and 1998. Seven out of ten contraceptive users still go to public sector facilities. However, pharmacies have become a more important source of supply for condoms over this period.

There is pronounced method specialization by source of supply. Public sector facilities mainly provide pills, injectables, and sterilization; the private sector is primarily used for IUDs and sterilization; and pharmacies are used for pills and condoms. It appears that the private sector is more readily sought for methods that require more competence and skills from service providers.

Some users who were purchasing pills from pharmacies in 1993 appear to have switched to the public sector (where pills are often provided free of charge) by 1998. The proportion of clients who sought pills from the private sector dropped while those from the public sector increased.

Age, education, and number of children influence provider choice. Older women tend to use private facilities and younger women make significant use of pharmacies for their family planning supplies. The public sector tends to provide care for less educated family planning clients, while private facilities and pharmacies tend to service more educated users.

Women who are employed with higher levels of income are more likely to go to the private sector. Family planning services from the public sector appear to benefit all income groups, from the poorest to the richest households. Public sector utilization is higher when facilities are more accessible (a travel time of less than 15 minutes), while private sector users typically must travel considerable distances for care. Enhanced accessibility of private care facilities might greatly increase the utilization of the private sector.

Community-level attributes also influence provider choice. Region and type of residence affect the choice of service delivery point. Women from Mindanao, Visayas, and rest of Luzon are more likely to obtain family planning services from public sector facilities, while women in Manila are more likely to use private sector facilities.

Among health system factors, only LPP participation appears to influence provider choice. Women in LPP provinces are more likely to use private sector facilities than women in non-LPP areas. However, media campaigns and the efforts of health personnel appear less important in affecting the choice of service delivery point.

Willingness to Pay

Ninety percent of all users are willing to pay for the services they receive. The maximum amount they are willing to pay is generally higher than what they actually pay for services rendered. The one exception to this pattern is sterilization, for which most clients would prefer to pay less for the procedure than the actual cost.

Contraceptive prices charged by private sector providers are considerably higher than those offered by public sector channels. The biggest price differentials exist for IUDs, injectables, and sterilization. Private sector prices, while higher, are actually more consistent with what clients say they are willing to pay for methods (with the exception of sterilization).

The prices paid for family planning in relation to the wealth status of households show that the market for individual methods is not always well segmented. In the case of pills, women from poorer households pay much less than women living in wealthier households. However, the markets for IUDs, injectables, and sterilization are considerably less well segmented since women from the poorest 20 percent of households pay roughly the same amount as more advantaged clients.

Community-level attributes affect the pricing system, with women from urban areas paying the highest amounts. Women in Metro Manila tend to incur the highest costs for family planning care, while women in Mindanao pay the lowest prices for contraception.

Policy and Programmatic Implications

Strategy 1. This study shows that young married women are often not using contraceptives. It also reaffirmed the importance of education in the use of contraceptives. There is a need to reinforce efforts to reach and better serve the family planning needs of young adults and women with less education. Policy initiatives and programs that may be recommended are as follows:

1. There is a need to intensify information dissemination and educational campaigns that will more effectively employ media channels, especially television. Messages should stress the importance of using contraceptives, particularly modern methods as opposed to traditional methods. For information about modern methods among the young, emphasis should be given to messages and content that dispel rumors and fear of side effects. The private sector should emphasize privacy and anonymity so that younger couples may more readily use these services.

2. More educational campaigns need to be organized among adolescents and young students. Program implementers, both at national and local levels, need to collaborate with teachers in secondary schools and colleges. A systematic educational campaign among younger women must be developed to provide accurate information on family planning and to attract adolescents' interests regarding to responsible parenthood.
3. There is a need to advocate policies and campaigns to encourage young girls to continue schooling because findings suggest that higher educational attainment has a positive effect on the use of modern methods.

Strategy 2. Although there has been some improvement in modern method use in recent years, major segments of the population remain underserved, especially the rural poor. Greater efforts will be required to address client needs (both by improving the accessibility and quality of services). Policy and programmatic action that may be considered include the following:

1. Social marketing activities in the country should be continued and strengthened. These efforts need to be expanded in rural areas. In addition, greater participation of the private sector, particularly the nongovernmental organizations (NGOs), is necessary. Subsidies may be needed to allow price reductions so that poorer women are able to pay the going rate.
2. To ensure that public subsidies flow to the most needy, the public sector needs to shift clients who can afford to pay to the private sector. One way to accomplish this shift might be to enroll the poor in health insurance schemes such as community-based health financing programs or the Philippine Health Insurance Corporation—Phase II Scheme. Another way might be to impose public sector user fees for those who can afford to pay for care in order to encourage greater use of private sector services. For both strategies, criteria will need to be established to enable local government units (LGUs) to identify very poor clients who will still require subsidized services.
3. Greater dialog needs to be encouraged among local government units in order to more effectively address the issue of providing high-quality family planning services. Given the limited resources of the LGUs (and the phasing out of free family planning commodities), some reorganization of local service provision may prove necessary. New contracting mechanisms, including various forms of vouchering (where local governments reimburse private providers for specific services) need to be explored.

Strategy 3. The results of this study document the emergence of provider specialization in the provision of family planning methods. IUDs, condoms, and sterilization are more readily supplied by the private sector, while the public sector tends to emphasize pills and injectables. For methods that require greater skill and staff competence (such as IUD insertion and sterilization) clients tend to turn to the private sector, especially those who can afford to pay for their own care. Some policy and programmatic action that might encourage more effective pluralism in the provision of family planning services include the following:

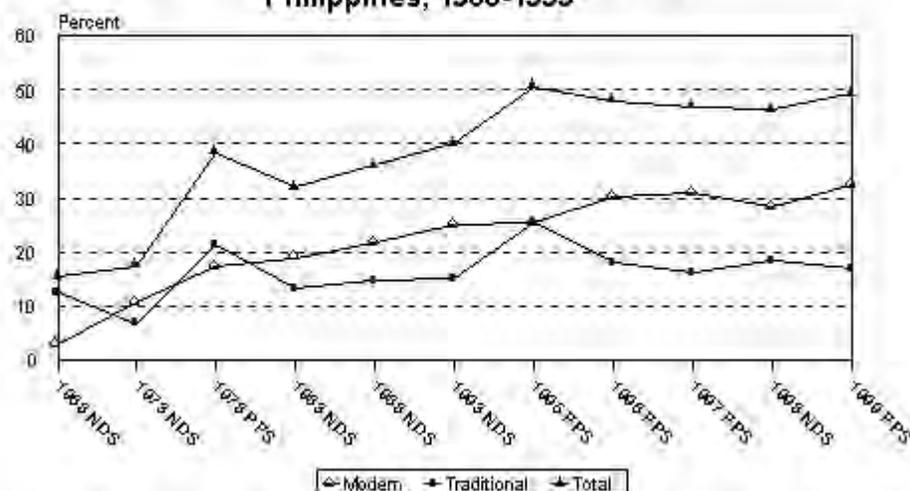
1. The national government, through the Department of Health (DOH) and the Commission on Population, should strive for the elimination of laws, rules, and implementing guidelines that serve as barriers to the involvement of private practitioners in the family planning program.
2. The private sector needs to strengthen its marketing and advocacy efforts in attracting public sector clients, especially those who can pay more for services. One way to accomplish this is to develop a pricing system for charging optimal, yet sustainable fees. Another way is to place private facilities in areas where the need for easy access and convenience is greatest.

3. Given the wide range of costs involved in seeking family planning services, prices and user charges need to be studied and established by both the public and private sectors to avoid price distortions. For transparency, prices of commodities need to be advertised so that users know the range of costs involved.
4. Services of pharmacies (and perhaps convenience stores) that sell contraceptives must be more widely recognized and supported. Pharmacy store managers may have to become better informed about contraceptive choices available to customers and options for referring customers for higher-level care.

1 Introduction

Contraceptive behavior among married Filipino women has been a continual concern in recent years, particularly owing to the slow progress in raising the rate of contraceptive use (see Figure 1). It appears paradoxical that although the Philippines was among the first countries in Southeast Asia to launch an official population program that served as a model to other Asian countries, the country's level of contraceptive use is now lower than most other Southeast Asian countries (Table 1).

Figure 1 Contraception Prevalence Rates among Currently Married Women Age 15-49 Using Modern and Traditional Contraceptive Methods, Philippines, 1968-1999



Country	1970	1977	1985	1985-92	1990-95
Newly industrialized economies					
Hong Kong	50	64	72	81	86
Republic of Korea	32	44	70	79	79
Singapore	45	77	74	84	74
China	36	61	77	83	83
Southeast Asia					
Indonesia	u	19	48	50	55
Malaysia	7	34	51	48	48
Philippines	8	22	44	40	40
Thailand	u	32	65	66	74
Vietnam	u	u	58	53	65
South Asia					
Bangladesh	u	9	25	40	49
India	12	24	35	43	41
Pakistan	4	6	11	12	18
Sri Lanka	8	44	62	62	66

u = Unknown (not available)
Sources: 1990-1995: UNDP Human Development Report 1998; 1985-1992: UNDP Human Development Report 1994; 1970, 1977: World Bank, World Development Report 1979; 1985: World Bank, World Development Report 1989

Several factors underlie this situation: among them, inadequate appreciation of relationships between population dynamics and socioeconomic development, and the poor performance of the public sector population program. Nonetheless, the present Estrada administration, in particular the Secretary of Health, the Director General of the National Economic Development Authority (NEDA), and the Secretary of Planning have recently expressed strong resolve to support the current population and reproductive health program.

Programmatic changes have affected the population policy environment and the effectiveness of family planning service delivery in the Philippines. First, during the Aquino administration, the family planning program underwent a policy shift. In that period, family planning was viewed not merely as a population issue, but also as a health issue with demographic implications (Herrin and Yasay, 1998; Lamberte, 1997; Carinno, 1995). Population issues were seen in a wider context of family welfare. The primary authority for the family planning program was transferred from the Commission on Population (POPCOM) to the Department of Health (DOH).

Second, within the Department of Health, the family planning program also underwent transformations. From a purely population program, the family planning program was integrated with child survival and safe motherhood programs, and subsequently expanded into a reproductive health program. Later the program was made part of the Integrated Family Planning and Maternal Health Program, which in turn has been made part of the Family Health Cluster Program.

Third, the adoption of the Local Government Code in 1992 affected the delivery of family planning services. The Code devolved the financing and delivery of all health services to local governments. Although efforts and initiatives have been made to forge agreements among local government units (LGUs), DOH, and POPCOM, local government officials have not always effectively implemented family planning activities (Herrin and Yasay, 1998). To address this problem, President Fidel Ramos issued an executive order on February 28, 1996 requiring all local government officials to give priority to the family planning program.

Fourth, the fiscal restraint adopted by the national government owing to the financial and economic crisis of 1997-98 generated budget cuts in the health services. In December 1997, President Ramos issued Administrative Order No. 372, which instituted the retention of mandatory reserves of 25 percent from the 1998 budget for all government departments and agencies (from nonpersonnel service expense items). This order directed all government agencies to reduce total expenditures by 25 percent. In addition, the national government reduced internal revenue allocations to all LGUs by 10 percent. These actions generated significant reductions in expenditures devoted to all forms of services at the local level. For the DOH, the need to maintain mandatory reserves has substantially reduced the resources available to reproductive health programs (Herrin and Yasay, 1998).

One of the major new policy directions initiated in recent years by the Government of the Philippines has been the Local Performance Program (LPP). Through the Department of Health, Office of Public Health Services (OPHS), the LPP seeks to assist local governments in improving the management of local health programs. The LPP has become an important component of the DOH's Integrated Family Planning and Maternal Health Program. Through this program, the OPHS works closely with the LGUs to plan and implement comprehensive population, family planning, and child survival programs. With its initial emphasis on capacity building, the LPP strives to increase the management capacity of local government offices by providing financial and technical assistance to participating provinces, cities, and municipalities. The participation of the LGUs is formalized through a Memorandum of Agreement (MOA) between the LGU and DOH (DOH, 1996). As of 1998, a total of 98 provinces and cities were participating in the LPP program.

Another major step taken to address budgetary and logistical problems besetting the family planning program has been the promotion of the private sector in the delivery of family planning services. Private sector expansion is not meant to cover both nongovernment organizations and profit-oriented and commercial outlets. Closely linked to this more pluralistic approach is the adoption of a national segmentation plan to 1) ensure that the program is effective by specifying a design for reaching and influencing designated groups, and to 2) make sure that targeted segments of the family planning market are served by the most acceptable, capable, and efficient implementing agencies (DOH, 1996).

1.1 Research Objectives

The present research aims to examine the contraceptive behavior of currently married women surveyed in the 1993 National Demographic Survey (NDS) and 1998 National Demographic and Health Survey (NDHS). It deals with the following dimensions of family planning behavior: levels and trends in contraceptive use by method, provider choice, willingness as well as ability to pay for services, and monetary costs incurred in the use of services.

This research addresses the following questions: Are there differences between the rates of contraceptive use in areas covered by LPP? Are there differences in the pattern of family planning source of supply between 1993 and 1998? Has the private sector been increasing its share of family planning clients? What factors influence choice of service delivery point? Are users of family planning services willing to share in the cost of services? What policy recommendations can be identified that will help sustain the financing of reproductive health services and expand the participation of the private sector?

1.2 Analytical Framework

Following earlier behavioral models of health service utilization (Andersen, 1978; Aday, Andersen, and Fleming, 1974; ADB, 1986), this study assumes that women's use of family planning services may be explained in terms of 1) individual and household characteristics of women, 2) community-level factors, and 3) the health service delivery system. Individual and household characteristics of women are categorized into two components, namely, predisposing and enabling factors. Predisposing factors refer to those personal characteristics that act as deterrents or catalysts for the use of health care services (Schach et al., 1976; Andersen, 1978; ADB, 1986). Predisposing factors in this analysis are age, marital status, religion, education, number of children ever born, ideal number of children, and occupation.

Enabling factors as defined by Andersen (1978) refer to conditions that permit an individual to satisfy health needs, including family planning services. Enabling factors include the wealth status of the household, employment status of the respondent, geographical access to health facilities, and spousal communication about family planning. These factors are considered to be enabling in that they are thought to be necessary for the practice of family planning and the choice of specific methods.

Community attributes constitute another cluster of variables that are considered to influence the likelihood that women use family planning. Common measures considered under this category include geographical location (regional or island group location) and type of residence (urban/rural status).

Health system variables are also considered in this analysis. These measures include access to family planning information, home visitation by family planning fieldworkers, and residence in an LPP province. It should be pointed out that contrasts are also made between 1993 and 1998 in order to capture the effects of family planning and health service policy changes that have occurred in recent years.

1.3 Sources of Data

Data for this study were drawn from the 1993 and 1998 Philippine National Demographic and Health Survey. These surveys were conducted through the joint efforts of the National Statistics Office and Macro International Inc. as part of the Demographic and Health Surveys Program (DHS). The 1993 and 1998 NDHS Surveys covered a total of 15,029 and 13,983 women, respectively, between the ages of 15-49 years.

1.4 Organization of the Study

Section 2 examines the characteristics of women who used contraception in 1993 and 1998 in relation to predisposing, enabling, community-level, and health system factors. Bivariate differentials and multivariate logistic regression results are presented. Section 3 examines factors associated with the choice of family planning service provider. In Section 4 the willingness of contraceptive users to share in the cost of services and the expenses they have incurred when seeking family planning services from various sources are evaluated. Since the 1993 NDS does not have the same level of detail as the 1998 NDHS, the present analysis only considers information on cost and willingness to pay from the 1998 survey.

2 Determinants of Contraceptive Use, 1993-1998

2.1 Levels and Trends in Contraceptive Use

Predisposing Factors

The percentage of currently married women using contraception rose from 39.8 percent in 1993 to 47.8 percent in 1998.¹ Among users of modern methods, this increase is observed across all age groups (see Table A-1). For specific methods, use of pills and IUDs decreased among younger age groups (20-29 for pills and 20-24 for IUDs; see Table A-5). Their use, however, increased among older women (ages 35-39 for pills and 35-44 for IUDs). Use of sterilization fell, whereas use of condoms and injectables rose across all age groups.

As is shown in Table A-1, contraceptive use is higher in both surveys among legally married women compared with women who are in consensual unions. Nonetheless, women who are in consensual unions exhibit a more rapid percentage increase between 1993 and 1998. Differentials according to religious affiliation are also observed. Among Roman Catholic, Protestant, and Muslim women, the most likely users of contraception (particularly modern methods) are Protestants (54.6 percent). For natural methods, Roman Catholics have the highest levels of use. Islamic women are least likely to be using either modern or natural methods. However, the CPR among Muslim women increased more rapidly (33.6 percent between 1993 and 1998) compared with women of other religious affiliations.

The use of contraception is positively associated with education. For instance, slightly more than half of all women with at least secondary levels of education are using contraception, while only about 17 percent with no education are doing so. For modern methods, use peaks among women who have entered secondary school levels. Use of natural methods is highest (14.2 percent) among the most educated respondents. For the use of specific modern methods, no exact pattern is observed when women are grouped according to educational attainment, although it is worth noting that women who have reached secondary levels of education are more likely to be using pills, IUDs, and injectables.

The greatest percentage change in prevalence is seen among women with no education (39.0 percent), while slower growth has occurred among more highly educated women. This finding is consistent with results from other developing countries, which show that less educated women are generally responsible for much of the gain in contraceptive prevalence during the 1970s and 1980s (Ross et al., 1993).

Use of contraception generally rises as the number of children ever born (CEB) increases (peaking when a couple has three children). This pattern is particularly true among modern contraceptive users. For natural method users, similar levels of use are observed among women with more than one child. Women with no children or only one child have the lowest level of contraceptive use, although these women registered the largest percentage increase in use between 1993 and 1998 (from 19.1 percent to 27.4 percent). This change may reflect a greater awareness among younger women about using contraception for purposes of birth spacing.

¹ Contraceptive prevalence rates (CPRs) reported in this study include all women who say they are breastfeeding, but not necessarily as a method of family planning. CPRs reported in the 1998 NDHS only include women “who spontaneously mentioned breastfeeding as a method of family planning and said they are currently using it as a method.” The 1998 CPR reported in this study is therefore slightly higher (47.8 percent) than the figure published in the 1998 NDHS final report (46.5 percent). With the data available to this study, it is not possible to downwardly adjust breastfeeding prevalence to be exactly consistent with the 1998 NDHS final report.

Enabling Factors

Employment status increases the likelihood of using both modern and natural family planning methods. Interestingly, over the years, unemployed women present a much higher percentage increase than those who are employed (18.6 percent for unemployed and 13.4 percent for employed).

When grouped according to the household wealth index, Table A-2 shows that women belonging to the third (middle) wealth quintile are most likely to practice family planning. Looking at trends from 1993 to 1998, the poorest quintile demonstrated the highest percentage change compared with other household wealth categories (from 26.4 percent to 37.4 percent). This pattern is most notable among poorer women using modern methods (see Figures 2.1 and 2.2).

Figure 2.1 Percentage of Currently Married Women Using Contraception by Household Wealth Index, 1993 and 1998

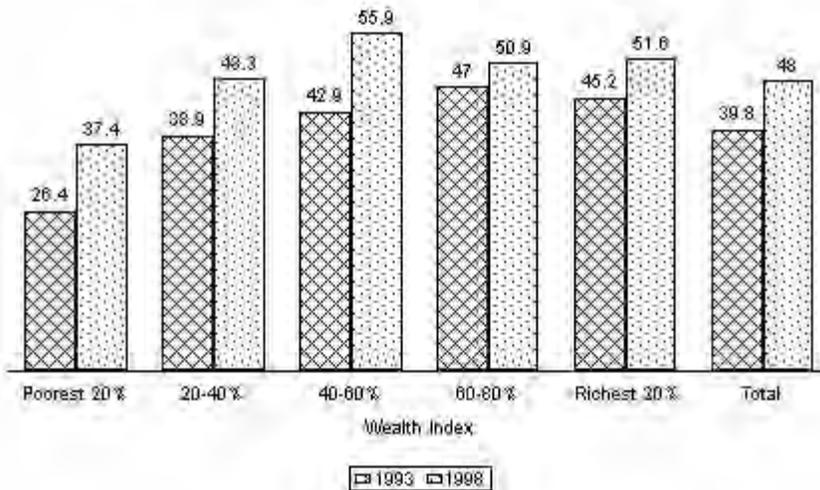
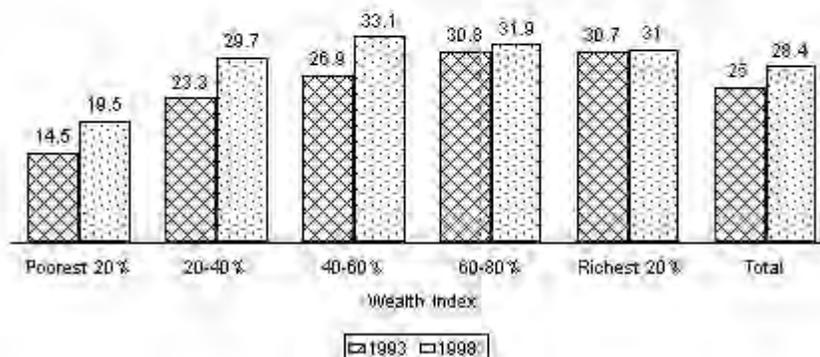


Figure 2.2 Percentage of Currently Married Women Using Modern Methods of Contraception by Household Wealth Index, 1993 and 1998



Bivariate results also demonstrate that greater spousal communication appears to promote family planning use. As can be seen in Table A-2, those who have discussed family planning with their partner are more likely to use contraceptives than those who have not done so.

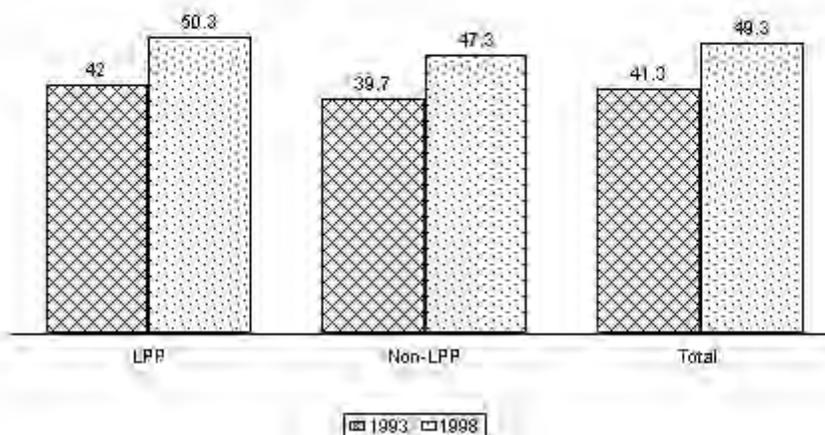
Community-level Factors

Contraceptive use among women in urban areas is higher compared with women in rural areas. Regional (island) variations in contraceptive use are generally not remarkable. Worth noting is that the use of natural methods is not very high among women from Luzon outside Manila (7.2 percent) compared with other areas, where percentages range from 12.0 percent to 14.9 percent (Table A-3). For modern methods, the highest prevalence is noted in areas located in Luzon outside Manila (29.3 percent) and Mindanao (29.2 percent). The percentage increase in the use of modern methods is highest among women residing in these areas as well.

Health System Factors

The effect of LPP in the use of contraception is not clear-cut. In both surveys, although women from LPP provinces have slightly higher levels of use (48.7 percent for LPP and 46.0 percent for non-LPP), these differences are not large. However, a somewhat more rapid increase in the use of modern methods is notable in LPP provinces (25.2 percent to 29.0 percent) compared with non-LPP provinces (24.3 percent to 26.5 percent) between 1993 and 1998 (see Figures 3.1 and 3.2).

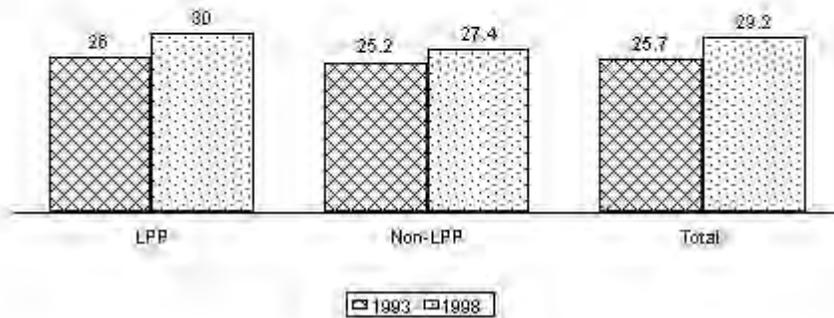
Figure 3.1 Percentage of Currently Married Women Using Any Contraceptive Method by LPP vs. Non-LPP Residency, 1993 and 1998



The bivariate analysis shown in Table A-4 also suggests that broadcast media (television and radio) may promote greater use of family planning. Both modern method and natural method use is higher if respondents report having had contact with family planning messages on radio or television. In addition, radio and television contact also appears to have promoted more rapid gains in contraceptive prevalence.

Home visits by health workers and client visits to health facilities also appear to encourage greater use of contraceptives, especially modern methods (Table A-4). Unfortunately, since these measures are not available in the 1993 NDS, it is not possible to determine the extent to which these health system factors may have contributed to the rise in contraception between 1993 and 1998.

Figure 3.2 Use of Modern Methods of Contraceptives by LPP vs. Non-LPP Residency, 1993 and 1998



2.2 Determinants of Contraceptive Use

The results from the logistic regression analysis (Table 2) indicate that the use of contraceptives is significantly influenced by age, total number of children, ideal number of children, marital status, education, and religion. Findings specifically show that older women are less likely to practice contraception. This observation is particularly true for women using modern methods. With a one-year increase in age, there is a 12 percent reduced likelihood that women will use modern methods. In addition, higher parity women are more likely to use contraceptives. With each additional child, the likelihood that women will use any contraceptive method increases by 18 percent, modern methods by 11 percent, and natural methods by 14 percent.²

Legally married women are more likely to use contraception (by 73 percent) compared with those who are cohabitating. Among legally married women, there is a 55 percent greater likelihood that they will use modern methods and an 89 percent greater likelihood that they will use natural methods.

The type of community in which women live also influences the use of family planning. Those who live in urban areas are 17 percent more likely to use contraception and 22 percent more likely to use modern methods. Education is an important determinant of contraceptive use in the Philippines. For each single year increase in educational attainment, the odds of women using any method of contraception rises by 4 percent and rises 13 percent for natural methods. This result is contrary to the findings of Alano et al. (1997) and Lamberte et al. (1999).

Religion strongly influences the use of contraceptives, both for modern and natural methods. Roman Catholics are four times more likely to practice family planning, four times more likely to use modern methods, and twice as likely to opt for natural methods than Muslim women. Protestants are five times more likely to use modern methods than Muslim women.

² It should be noted that logistic regression can overstate the odds of an event occurring when there is little variation in the distribution of cases across categories of the dependent variable. This potential source of bias is not particularly problematic in this instance given that 40.3 percent of currently married women are using and 58.9 percent are not using contraception.

Table 2 Odds ratio for significant determinants of contraceptive use (all methods, modern methods, and natural methods), 1998			
Independent variable	Odds Ratio Exp(B)		
	All	Modern	Natural
PREDISPOSING FACTORS			
Age in single years	0.972*	0.982*	--
Marital status			
Married	1.726*	1.558*	1.885*
Living Together	Reference	Reference	Reference
Religion			
Roman Catholic	4.419*	4.573*	2.289*
Protestant	5.377*	5.094*	1.888*
Others	6.221*	6.568*	1.983*
Islam	Reference	Reference	Reference
Education in single years	1.040*	--	1.126*
Number of CEB	1.183*	1.110*	1.139*
Ideal number of children	0.935*	--	0.942*
ENABLING FACTORS			
Employment status			
Unemployed	0.772*	0.814*	--
Employed	Reference	Reference	
Wealth index			
Poorest 20 %	0.657*	0.580*	
60-80 %	1.191*		
Richest 20 %	Reference	Reference	--
COMMUNITY-LEVEL FACTORS			
Residence			
Urban	1.166*	1.220*	--
Rural	Reference	Reference	
Island of residence			
Rest of Luzon	--	0.564*	--
Visayas	--	--	--
Mindanao	--	1.340*	--
Manila	--	Reference	--
HEALTH SYSTEM FACTORS			
Access to information			
TV	0.859*	--	--
No visit by FP worker	0.785*	0.797*	--
No visit to health facility	0.801*	0.737*	--
CEB = Children ever born			
* Significant at the .05 level			

Enabling factors that significantly affect contraceptive use include the work status of women and the wealth status of households (wealth index). Unemployed women are 23 percent less likely to use contraceptives than women who are working. In terms of methods, unemployed women are 19 percent less likely to use modern methods. Women who belong to the poorest 20 percent of all households are 34 percent

less likely to practice contraception compared with the richest 20 percent of households. They are also 42 percent less likely to use modern contraceptives than the women who can best afford them.

Community-level variables also affect the use of contraceptives among women. For example, women residing in urban areas are 17 percent more likely to use family planning than women living in rural areas (and 22 percent more likely to use modern methods). It is interesting to note that women in Mindanao are 34 percent more likely to use modern methods than women in National Capital Region and that the odds of using modern methods are 44 percent lower in areas of Luzon outside Metro Manila compared with NCR.

With respect to health system factors, visits to health facilities and home visits by health workers show a significant association. Women who are not visited by health workers are 22 percent less likely to use contraception and 20 percent less likely to use modern methods. Those who were not able to visit a health facility are 20 percent less likely to practice contraception and 26 percent less likely to use modern methods.

3 Choice of Family Planning Service Delivery Point

The Philippine family planning program has made strides to expand the delivery of services through public health facilities and private sector outlets. Information from the 1998 NDHS shows that public health facilities remain the predominant source of contraceptive services. They supplied 72.9 percent of all users in 1998 and 71.4 percent in 1993. Sources of supply in the public sector consist of rural health units and urban health centers (22.7 percent), hospitals (22.7 percent), and barangay health stations (23.9 percent). Private sector services are concentrated in private hospitals or clinics (15.4 percent), pharmacies (8.1 percent), private physicians (1.9 percent), and nongovernment organizations (0.1 percent). The share of family planning services provided by the public sector is somewhat lower in the Philippines compared with other countries in Southeast Asia. For example, recent estimates show that the public sector share of family planning use is 85.5 percent in South Korea, 75.8 percent in Indonesia, and 81.9 percent in Thailand.

3.1 Model and Identification of Variables

The objective of this section is to identify trends and determinants in the choice of family planning service delivery point. Facilities are categorized into public, private, and pharmacy. Explanatory variables include individual characteristics of contraceptive users, community-level attributes, and health system characteristics. Explanatory factors include age, marital status, religion, educational attainment, number of children, and ideal number of children. As earlier, enabling variables comprise employment status, the household wealth index, geographic access, and spousal communication. Community-level variables include region (geographic island) and place of residence (urban/rural status). Last, health system factors include LPP participation, visits to health facilities, and family planning fieldworker home visitation. It is important to mention that in studying provider choice, the analysis can only be conducted for current users of contraception.

Family planning providers are broadly categorized into the public and private sector. Family planning users refer only to women who were practicing modern family planning at the time of the survey and who report a source of supply. Those who report their source to be friends, relatives, churches, and others were excluded from the analysis.

3.2 Levels and Trends in Family Planning Source of Supply

Table 3 shows that the distribution of the family planning market among the three types of FP providers has not changed appreciably between 1993 and 1998. The government sector provided services to roughly seven out of ten users in both years. The relatively small share of the private sector decreased slightly over this five-year period, implying that the country is far from achieving its goal of private sector expansion (as stated in the 1996-2000 PFPS).

Family planning provider	1993	1998
Public	73.1	73.3
Private	19.5	18.4
Pharmacy	7.4	8.3
All providers	100	100
Number	2,220	2,337

3.3 Methods Used by Type of Family Planning Provider

It is evident from the 1993 NDS and 1998 NDHS that the predominant methods used were female sterilization, pills, and IUDs. From 1993 to 1998, considerable change in the percentage of users of injectables, condoms, and male and female sterilization is noted. Female sterilization users registered the greatest reduction, from 49.2 percent in 1993 to 37.5 percent in 1998.

Figure 4.1 shows that the public sector was patronized mostly by users of pills (34.5 percent) and female sterilization (47.9 percent). Between 1993 and 1998, some change in the public sector method mix has occurred. The most notable difference is the large increase in the percentage of women using injectables from public facilities (from 0.1 percent to 10.6 percent). The private sector is largely used for female sterilization (Figure 4.2). Although the proportion of these women decreased slightly between 1993 and 1998, they still comprised roughly seven out of every ten private sector clients. As expected, pharmacies were mainly used by pill and condom users, methods that tend to require less instruction and counseling (Figure 4.3).

Figure 4.1 Percent Distribution of Public Sector Users by Family Planning Method, 1993 and 1998

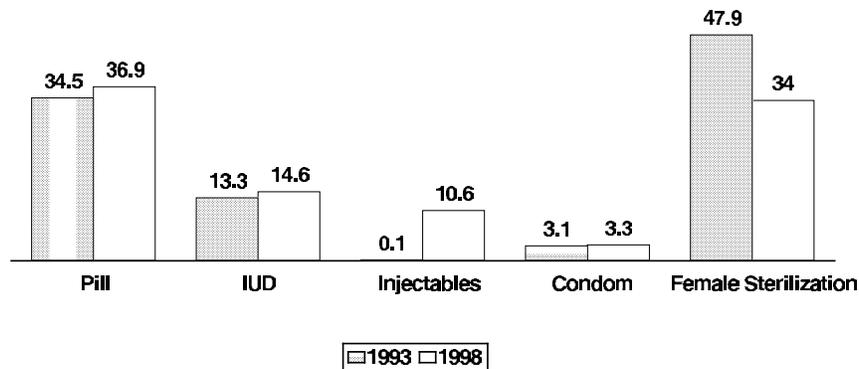


Figure 4.2 Percent Distribution of Private Sector Users by Family Planning Method, 1993 and 1998

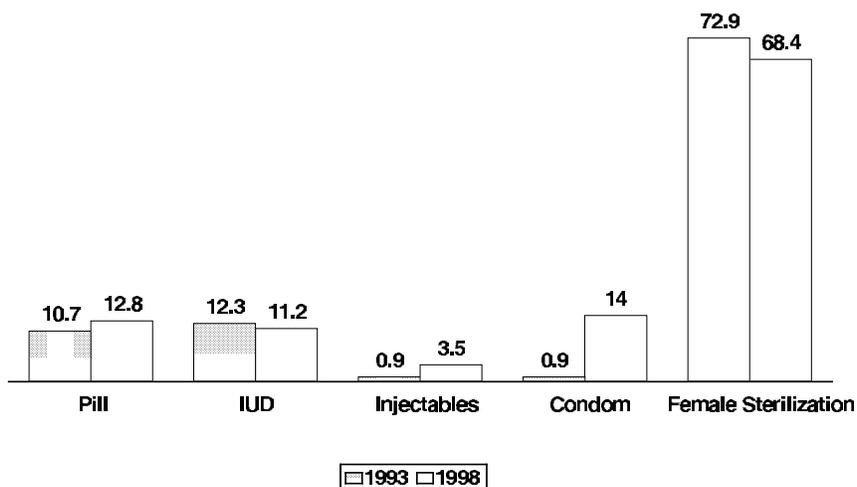
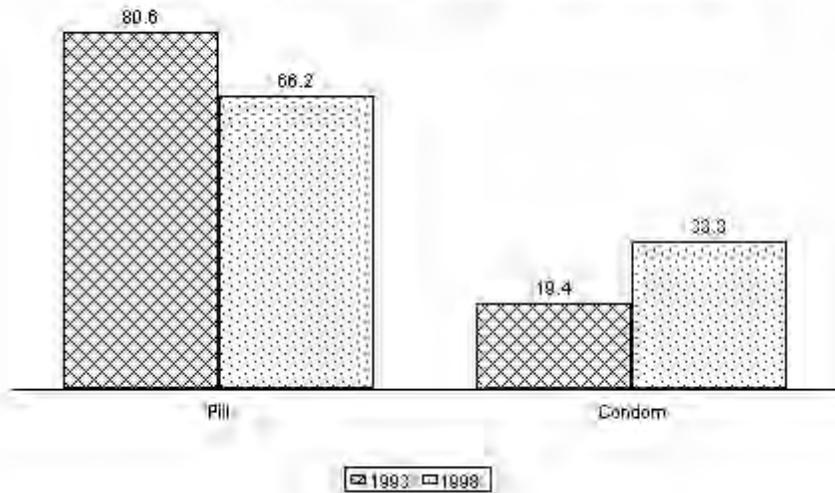


Figure 4.3 Percent Distribution of Pharmacy-Supplied Users by Family Planning Method, 1993 and 1998



These data imply that the public sector is used by both spacers and limiters. The private sector is largely used by limiters, while pharmacies are employed exclusively by spacers. In addition, women largely use the private sector for methods that require greater competence and skill on the part of the provider, implying that for these methods, users may have greater confidence in the services provided by the private sector.

Results in Table A-8 reveal that there are differences in predisposing characteristics among public sector, private sector and pharmacy users. When compared with private sector users, public sector users are likely to be younger. Pharmacy users tend to be younger than private sector users, with the highest proportion of users concentrated in the age group 20-29 years. These findings may be related to the contraceptive methods commonly used at different stages of the reproductive lifespan. Younger women tend to be spacers and to employ short-term methods that are more readily available in pharmacies, while older women, who tend to be limiters, are more likely to use sterilization offered through private sector clinical facilities.

Another variable related to age is the number of children ever born (CEB). Pharmacy users had the lowest mean CEB as they tend to be younger and are still in the early stage of their reproductive lifespan. As for the ideal number of children, the largest proportion of family planning users want to have four or more children. The one exception can be noted for pharmacy users, where the ideal number of children is only three.

High levels of education can be observed among family planning users, with only 30.7 percent not reaching secondary school. This pattern is consistent for all types of service provider. Nonetheless, public sector clients appeared to be the least educated, while pharmacy users were the most educated. Fifty-one percent of pharmacy users have reached the university level of education.

Table A-8 also shows that from 1993 to 1998, only slight differences can be observed in the predisposing characteristics of family planning users. The age distribution and ideal number of children by type of service delivery point showed no notable changes. For marital status, an increase in the proportion of women in consensual unions occurred, largely among private sector users (increasing from 2.8 percent to 6.1 percent). In addition, there were fewer women with no education or primary schooling using public, private, and pharmacy service delivery points in 1998 compared with 1993, which suggests that the educational level of family planning users may be rising in the Philippines.

Enabling Factors

Table A-9 shows differences in the enabling characteristics of women using different service delivery points in 1993 and 1998. The table shows that the percentage of employed women increased over this period. This pattern is observed across the three types of family planning provider. The users of the public sector had the lowest proportion of employed women. The proportion of poor women using family planning services increased, while use among the nonpoor decreased. Nonetheless, nonpoor women still comprised the majority of FP users (six out of ten users). The greatest change in the proportion of poor women using contraception was in public sector use. Pharmacies appeared to have the wealthiest clients. Figure 5.1 graphs the likelihood of women choosing the public sector by wealth index. This correlation shows that as women become more advantaged, the likelihood of going to the public sector decreases (Figure 5.2 and 5.3).

Figure 5.1 Percent Distribution of Public Sector Contraceptive Users by Household Wealth Index, 1993 and 1998

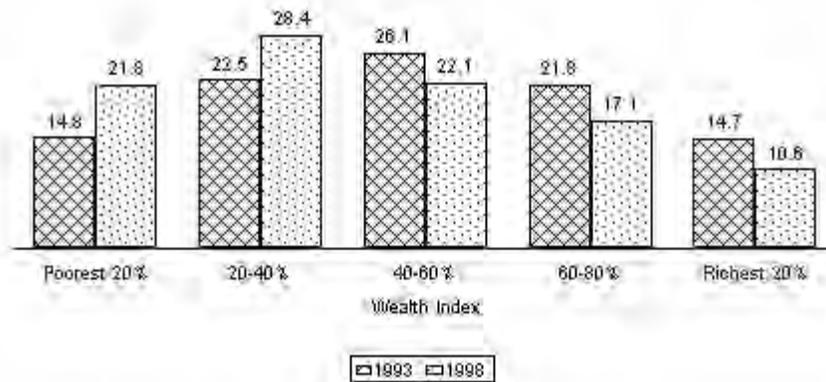


Figure 5.2 Percent Distribution of Private Sector Contraceptive Users by Household Wealth Index, 1993 and 1998

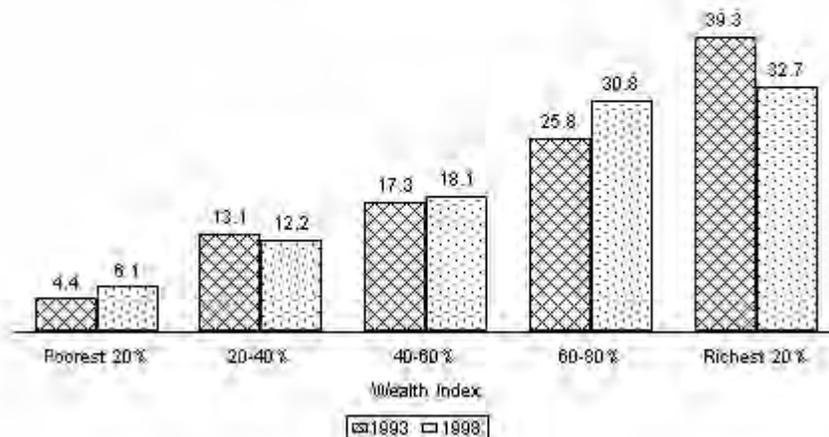
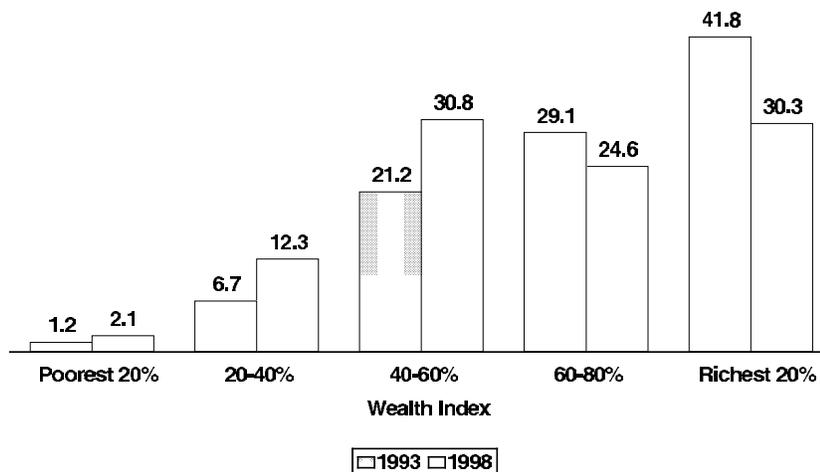


Figure 5.3 Percent Distribution of Pharmacy-Supplied Contraceptive Users by Household Wealth Index, 1993 and 1998



No clear pattern in geographic access by service delivery point can be observed among family planning clients, although it can be seen that more women required less than 15 minutes to get to their source of supply. Geographic access seems to matter most to pharmacy users. The proportion of women using pharmacies decreases as the travel time increases. On the other hand, geographic accessibility matters least to private sector clients since most users take 60 minutes or more to get to their source of supply.

With regard to spousal communication, pharmacy clients are most likely to have discussed family planning with their husband, while those using the private sector have the least frequent communication. This observation suggests that client anonymity may be a relevant factor in choosing a private sector provider.

Community-level Factors

Table A-10 presents community-level characteristics of family planning users. The results show that the concentration of private sector services in urban areas increased between 1993 and 1998. In 1993, 32.9 percent of all private sector clients lived in rural areas. By 1998, this figure declined to 25.6 percent. In other words, the public sector is increasingly the main provider of family planning services to rural clients.

By region, the proportion of private sector users in NCR and areas of Luzon outside Metro Manila increased substantially, while private sector use became less prominent in Visayas and Mindanao. This change may imply that Luzon women, when compared with women from other regions, were presented with more choices as to where to obtain services. The high proportion of pharmacy users living in Manila and the rest of Luzon may be due to the fact that these providers were more readily available (and accessible) in these regions.

Health System Factors

Information on health system factors are shown in Table A-11. In both surveys, roughly seven out of ten users live in provinces participating in LPP. There has been little change in the distribution of clients by service delivery point in LPP and non-LPP areas between 1993 and 1998. It is interesting to note that among pharmacy users, roughly five out of ten users reside in provinces or cities participating in LPP. With regard to access to family planning information through radio and television, respondents report much higher contact with FP messages in 1998 than in 1993. However, the effectiveness of these media campaigns cannot be determined since no comparisons with nonusers can be derived. The large increase in the proportion of women who have heard of family planning on radio and television may reflect the fact that FP messages on broadcast media have become more numerous in recent years.

The majority of respondents (65.3 percent) had visited a health facility within the past 12 months. Public sector users had the highest percentage compared with other sources of supply. Only a relatively small proportion of users were visited by a family planning worker within the past six months. The least likely to be visited were users from the private sector. Given this result, it would be helpful if public sector providers could do more to promote the services of the private sector.

3.4 Factors Affecting Choice of Service Point

This section focuses on the 1998 NDHS information pertaining to provider choice.³ To examine how each factor affects provider choice when considered simultaneously, logistic regression is employed. Applying logistic regression to a model of relevant variables allows one to estimate the odds that a woman seeking family planning services will go to the private sector as opposed to the public sector. Table 4 shows the results of the regression analysis. Associations that fall short of the 0.05 level of significance are not included.

The analysis reveals that among the predisposing factors only age (measured in single years), education (measured in single years) and number of children ever born significantly affect the choice of FP service delivery point. Education shows the greatest influence on provider choice. For each single-year increase in education, the odds of going to the private sector rise by 14 percent. The effect of education on provider choice was also evident in the market segmentation study of Alano et al. (1997, using the 1993 NDS data), in which it was revealed that college graduates are least likely to use the public sector. Lamberte et al. (1999) study of provider choice corroborates this result.

Having more children decreases the likelihood of using the private sector. For every additional child, the odds decrease by 9 percent. Age also has a significant effect on provider choice. As women's age increases by one year, the odds of going to the private sector rise by 3 percent.

As for the enabling factors, only the frequency of spousal communication about family planning is not an important determinant of source of supply (see Table A-9). Employment status, household wealth index, and geographic access have strong effects on provider choice. Unemployed women are 25 percent less likely to use the private sector than women who are employed. This finding affirms results reported by Alano et al. (1997) and Lamberte et al. (1999). Income was identified by both studies as the key determinant of provider choice. The results tend to confirm this finding since as women become poorer, the odds of not using the private sector increase. For instance, women from the poorest 20 percent of households are 76 percent less likely to obtain family planning services from the private sector than women in the richest 20 percent of households.

³ Pharmacies have been merged into the private sector category owing to the relatively small number of pharmacy clients.

Table 4 Odds ratios for significant determinants of private sector use of family planning, 1998	
Independent variable	Odds Ratio Exp(B)
PREDISPOSING FACTORS	
Age in single years	1.032*
Education in single years	1.135*
Number of CEB	0.907*
ENABLING FACTORS	
Employment status	
Unemployed	0.749*
Employed	reference
Wealth index	
Poorest 20 %	0.240*
20-40 %	0.322*
40-60 %	0.465*
60-80 %	0.660*
Richest 20 %	reference
Geographic access	
0-14 minutes	0.600*
60 minutes or more	reference
COMMUNITY-LEVEL FACTORS	
Residence	
Urban	1.580*
Rural	reference
Island of residence	
Rest of Luzon	0.315*
Visayas	0.320*
Mindanao	0.285*
Manila	reference
HEALTH SYSTEM FACTORS	
LPP participation	
LPP	1.498*
Non-LPP	reference
CEB = Children ever born	
* Significant at the .05 level	

Access to services is associated with provider choice. Women who only take 0-14 minutes to get to their source of supply are 40 percent less likely to use the private sector. In other words, greater public sector use is associated with improved access. This correlation implies that the public sector is likely chosen because of convenience, while private service delivery points are chosen for other reasons (e.g., possibly owing to the availability of certain methods and perceived differences in the quality of services).

The two indicators under community attributes are found to be important predictors of provider choice. Women living in areas of Luzon outside Manila, Visayas, and Mindanao are less likely to use private sector facilities than women in Metro Manila. This difference is especially marked for Mindanao women. They are 72 percent less likely to use private sector providers than women from the National Capital Region. Urban residence also increases the likelihood of using the private sector by 58 percent.

Except for the indicator on LPP participation, health system factors do not exert much influence on provider choice. In 1998, women residing in LPP provinces were 50 percent more likely to use private sector services. Residence in an LPP program area is the only health system measure that is an important determinant of private sector use. For example, media campaigns that appeared to be associated with the choice of provider in bivariate contrasts were not found to have significant effects on provider choice in the logistic regression analysis.

4 Willingness to Pay and User Charges

To obtain information about the willingness of family planning users to pay and their potential capability to share in the cost of family planning services, this study examines women's willingness to pay for services and the costs incurred in seeking family planning services or commodities from various facilities. Although public sector health facilities provide services for free (or for a small donation), it is important to examine patterns of response for both users and nonusers in relation to the willingness to pay for family planning services.

Information on the willingness to pay is generated from 1) women who are not using any family planning method but intend to use in the future and 2) women who are currently using any contraceptive method. Besides data on the willingness to share in the cost of services, information on the maximum amount clients are willing to pay is also analyzed. As regards actual expenditure or cost of services, the information is derived from current family planning users.

4.1 Actual Costs Incurred in Using Particular Family Planning Methods

Two types of cost data are presented in Table A-12. Cost of pills with the notation "free included" signifies that users who paid nothing or who obtained services for free are included in the analysis. On the other hand, the notation "free excluded" denotes that users who did not pay any amount in return for services rendered were excluded from the analysis. Those who gave certain amounts in the form of donations to service facilities are also included in this classification. For the sake of simplicity, results described below are based on costs computed with free services excluded.

Family planning costs are also higher in urban than in rural areas. These variations are notable for all methods with the exception of condoms. Differences in mean prices are also observed by region of residence. Family planning users from Metro Manila pay the highest prices for services, while women in Mindanao pay the lowest prices. These regional differences are especially notable for pills and condoms.

The findings reveal that service fees for family planning vary according to the level of household wealth (proxy for income) and type of method used. The latter is rather logical because of the varying cost requirements for different family planning methods.

Evidence shown in Table A-12 indicates that prices for a packet of pills are segmented according to household wealth levels. Women in the richest 20 percent of households pay an average of 60.3 pesos compared with only 8.2 pesos among women from the poorest 20 percent of households. For a packet of pills, women from the poorest 20 percent of households pay only 26.7 percent of the mean cost of 30.7 pesos while women from the richest 20 percent of households pay 196 percent more than the mean cost. These results suggest that pill costs are equitably distributed in relation to the wealth status of households.

IUD prices appear to be less well segmented in comparison with pills. Women from the richest 20 percent of households pay an average of 96.1 pesos for an IUD insertion compared with 69.3 pesos among women from the poorest 20 percent of households. In fact, women from the most advantaged households actually pay less than women from the 60-80 percent of wealthiest households (96.1 pesos compared with 113.1 pesos). In terms of payment shares to total mean cost, women from the poorest 20 percent of households pay 76.1 percent of the total mean cost for IUDs, while women from the richest 20 percent of households pay just 106 percent of the total mean cost. This differential constitutes a less equitable client cost profile than was obtained for pills.

In the case of injectables, women in the richest 20 percent of households pay considerably more than women belonging to other wealth quintiles. The average cost paid by the most advantaged women is 154.5

pesos, which is 363 percent more than the average mean cost of 42.6 pesos. Curiously, the average amount paid by women from other wealth quintiles is roughly similar, which suggests that the market for injectables is not equitably segmented.

Owing to the small number of condom users shown in Table A-12, it is difficult to be confident about the segmentation patterns suggested by these results. The findings show that average condom costs are considerably higher for the richest 20 percent of households compared with other wealth quintiles. The average cost of condoms for the most advantaged households is 52.2 pesos, which is considerably more than the 3.4 pesos paid by the poorest 20 percent of households. These cost differentials likely reflect differences in choice of service provider and variations in prices paid for different condom brands.

Female sterilization is the most expensive form of contraception in the Philippines. The prices paid for sterilization do not appear to be well segmented since the poorest 20 percent of households actually pay slightly more than women belonging to the next two highest wealth quintiles (20-40 percent and 40-60 percent). Women from the poorest 20 percent of households pay 67.4 percent of the mean sterilization cost as contrasted with 54.4 percent and 59.9 percent for the 20-40 percent and 40-60 percent quintiles. However, women in the richest 20 percent of households pay considerably more; namely, 8,857.9 pesos, which is 186 percent more than the mean cost of 4,757.4 pesos.

Comparing prices by source of contraceptive services in Table A-12, results show that the cost of contraception is considerably higher when obtained from private providers. In comparison with the public sector (when free commodities are excluded), private sector clients pay 4.85 times more for pills, 5.43 times more for IUDs, 8.85 times more for injectables, and 4.32 times more for sterilization. However, private sector clients pay only 1.78 times as much for condoms. The low prices reported for public sector services partially reflect government subsidization for family planning services.

4.2 Willingness to Pay

The findings from the 1998 NDHS indicate that 90 percent of all respondents are willing to pay for the services they receive. The present analysis makes use of the information on the maximum amount women are willing to pay. The results are shown in Table 5.

Pills

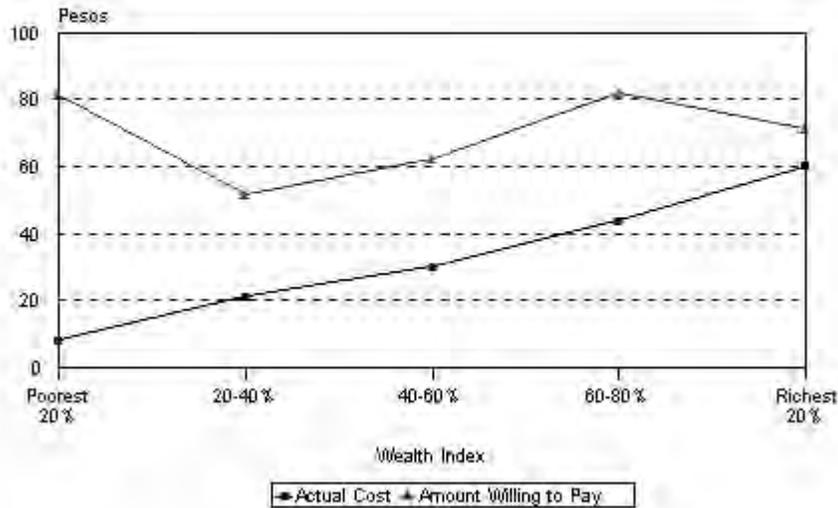
Users of pills are willing to pay more for the services they receive. The amount they are willing to pay is considerably higher than the amount they actually pay (Figure 6). Ironically, it is women in the poorest 20 percent of households who are willing to pay the highest amount (81.4 pesos). This figure is actually slightly more than women in the richest 20 percent of households are willing to pay (71.0 pesos).

The same observation can be made for women not using any method but with a future intention to practice family planning. The poorest 20 percent of these women are willing to pay a relatively high amount (73.9 pesos), which is only slightly less than the amount specified by women from the wealthiest households (74.7 pesos).

Table 5 Maximum amount respondents are willing to pay for family planning method (in pesos), 1998

Family planning method and wealth index	Nonusers who intend to use (Mean no. of pesos)	Family planning users (Mean no. of pesos)
Pill		
Poorest 20 %	73.9	81.4
20-40 %	48.7	51.6
40-60 %	62.5	62.1
60-80 %	74.8	81.9
Richest 20 %	74.7	71.0
Total	66.8	70.0
IUD		
Poorest 20 %	151.9	151.1
20-40 %	164.0	149.1
40-60 %	72.4	73.7
60-80 %	279.2	250.2
Richest 20 %	249.6	261.3
Total	165.1	169.7
Injectables		
Poorest 20 %	59.6	60.4
20-40 %	73.8	75.9
40-60 %	158.2	194.9
60-80 %	108.4	118.3
Richest 20 %	161.3	167.6
Total	103.7	121.6
Condom		
Poorest 20 %	35.3	40.4
20-40 %	47.1	55.2
40-60 %	45.6	33.4
60-80 %	41.3	48.3
Richest 20 %	45.8	55.4
Total	43.2	49.1
Female sterilization		
Poorest 20 %	1016.5	907.5
20-40 %	1041.5	1062.7
40-60 %	923.3	844.6
60-80 %	1267.1	1263.2
Richest 20 %	1478.8	1483.4
Total	1120.6	1115.2

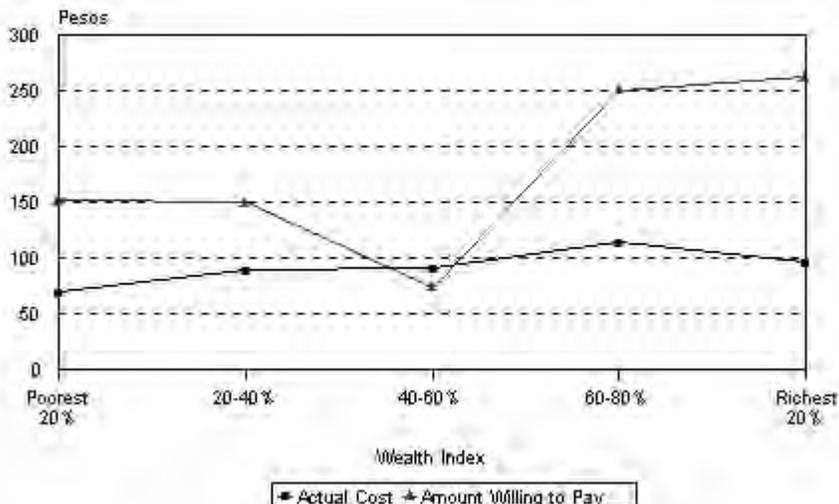
Figure 6 Actual Cost and Amount Users are Willing to Pay for Pills (in Pesos), by Wealth Index



IUD

In the case of IUD users, women in wealthier households are willing to pay more for IUDs than women in less-advantaged households. The difference between actual costs and the amount users are willing to pay is more than 200 pesos for households in the fourth and highest quintiles (Figure 7). Clearly, there appears to be considerable scope for charging higher prices for IUDs among women residing in the wealthiest 40 percent of households. On the other hand, users who belong to the 40-60 percent wealth quintile report that they are already paying more than they would like to spend.

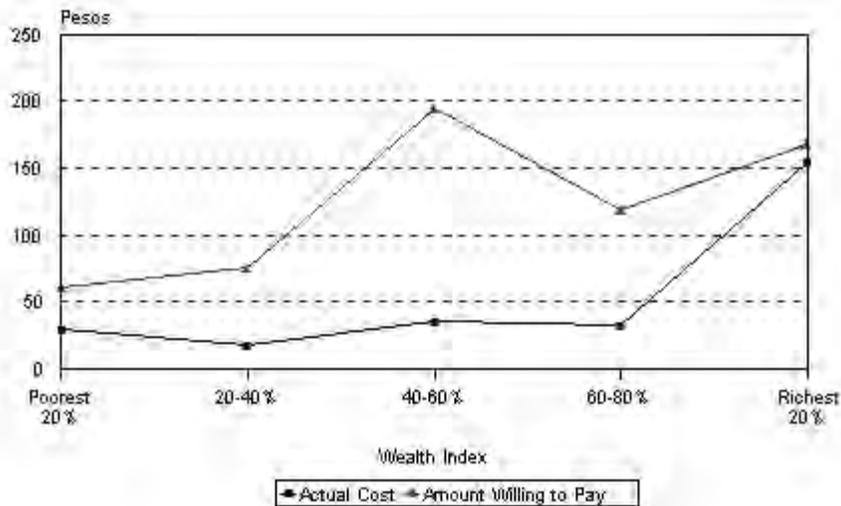
Figure 7 Actual Cost and Amount Users are Willing to Pay for IUDs (in Pesos), by Wealth Index



Injectables

As can be seen in Figure 8, with the exception of the poorest and richest 20 percent of households, injectable users are often paying considerably less than they would be willing to pay. This divergence is especially pronounced for women living in middle-wealth households (40-60 percent quintile). The actual costs paid for injectables are not well segmented since women from the most disadvantaged households are paying roughly the same amount for injectables (29.3 pesos) as women residing in the wealthiest 60-80 percent of households (32.0 pesos).

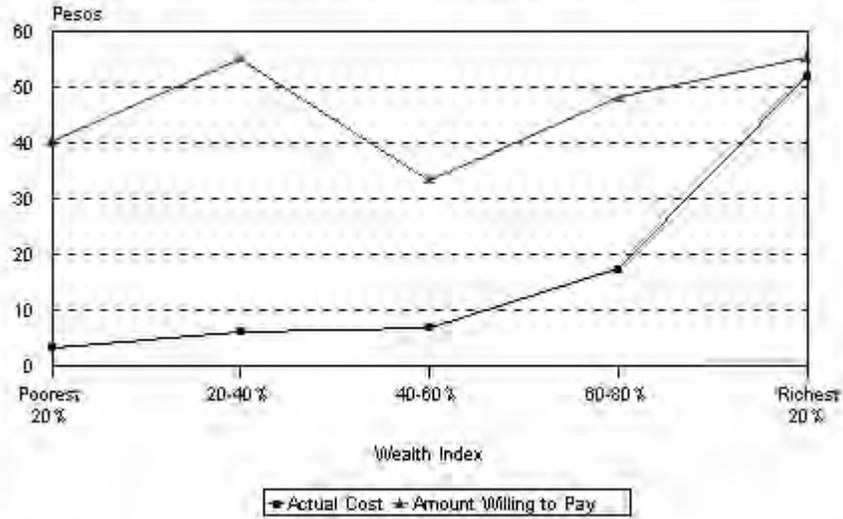
Figure 8 Actual Cost and Amount Users are Willing to Pay for Injectables (in Pesos), by Wealth Index



Condom

The amount that most condom users currently pay for condoms is less than 10 pesos (about \$.25 US). Condom users say they are willing to pay between 33.4 and 55.4 pesos for condoms. Given that condom use is presently rather low in the Philippines, factors other than cost (e.g., accessibility and satisfaction with the method) are more likely to inhibit use. Although Figure 9 suggests that higher prices could be charged for condoms without restricting use, this course of action might not be advisable given current efforts to make condoms more acceptable and widely used as a means of combating sexually transmitted diseases, including HIV/AIDS.

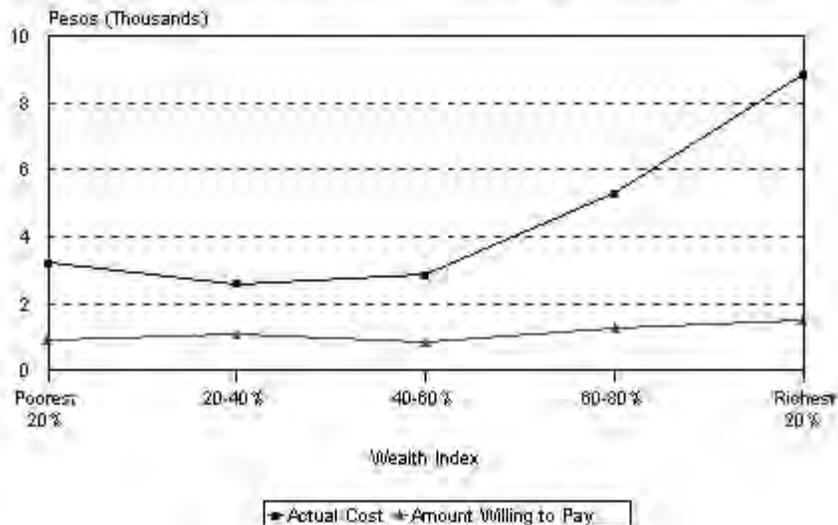
Figure 9 Actual Cost and Amount Users are Willing to Pay for Condoms (in Pesos), by Wealth Index



Sterilization

Unlike other methods, sterilization users across all wealth quintiles report that the price they paid for the method is actually more than they would like to pay. This divergence is most pronounced among sterilization clients living in the wealthiest 20 percent of households (Figure 10). These women say they are willing to pay 1,483 pesos for sterilization and yet report an average cost of 8,877 pesos. Even with free services included in the calculation of mean costs for each wealth quintile (see Table A-10), actual costs still exceed the amount that sterilization users say they would like to pay. These findings imply that the higher cost of sterilization may be inhibiting more widespread use of the method.

Figure 10 Actual Cost and Amount Users are Willing to Pay for Sterilization (in Pesos), by Wealth Index



4.3 Amount Willing to Pay by Service Delivery Point

Results shown in Tables A-13 and A-14 indicate that willingness to pay varies among users of different service delivery points, especially in terms of the maximum amount clients reported they would be willing to pay. Across all types of modern methods, the maximum amounts users are willing to pay does not differ in terms of service delivery point within lower price ranges. When prices get to be higher, users of private service delivery points are more willing to pay than clients using public sector facilities. This pattern is observable for all modern methods.

In conclusion, the results suggest that users are more than willing to pay for the services they received from their service delivery points. The amount they actually paid was much lower than the maximum amount they reported to be willing to pay. The costs private service users incurred are much higher than the costs users of the public sector incurred, possibly reflecting a willingness to pay more for services that are perceived to be of higher quality. In addition, users of the private sector are willing to pay even higher costs, while public sector clients are less inclined to pay more.

5 Conclusions and Recommendations

5.1 Contraceptive Use

Between 1993 and 1998, there was an increase in the use of contraceptives in the Philippines. First, notable gains in modern method use were recorded, mainly for injectables and female sterilization. Women from poorer households and rural areas registered the most rapid gains in family planning use.

Second, among predisposing individual characteristics, age, marital status, religion, education, number of children ever born, and ideal number of children most strongly influence contraceptive use. These factors are related to women's need to limit or space their children and acquire adequate understanding of the importance of contraceptive use. Similar to previous studies, women's schooling is positively associated with contraceptive use, particularly in the case of modern methods. The findings strongly suggest that policies and efforts to raise levels of female schooling, at least to secondary levels, will result in greater family planning use. The results also show that younger women tend to use contraceptives less. Younger women of whatever marital status need to be reached more effectively by the family planning program.

Third, among the enabling factors, employment status of women and household wealth status have a positive relation with contraceptive use, especially for modern methods. Women not gainfully employed outside the home are less likely to use contraceptives, particularly modern methods. This correlation implies that policies that encourage women to participate in gainful economic activities will help increase the use of contraception. The relation between the wealth index (this study's proxy variable for income) and contraceptive use also demonstrates that women with a higher income are more likely to use contraception compared with the poor women. Contrary to expectations, spousal communication about family planning and geographic accessibility to service facilities appear to be less critical in determining contraceptive use.

Fourth, community attributes, as reflected by residence and region influence the use of contraception, although region is important only for modern methods. Women from rural areas are less likely to use contraceptives, although some improvement in rural prevalence is noted between 1993 and 1998. Modern method use improved substantially in Mindanao and areas of Luzon outside Metro Manila over the same period.

Last, health system factors pertain more to access to family planning information and the efforts of health personnel. Women who were not visited by family planning fieldworkers in the previous 12 months are less likely to use contraceptives. Visits to health facilities encourage greater use of contraceptives, particularly modern methods. The results show that more respondents heard messages about family planning on radio and television in 1993 than in 1998. However, there is little evidence that this media contact is actually associated with greater use of contraception. The results from 1998 also show that living in a Local Performance Program (LPP) province is not an important determinant of contraceptive use.

5.2 Choice of Service Delivery Point

With regard to provider choice, the following should be emphasized. First, there has not been much improvement in the use of private sector facilities between 1993 and 1998. The public sector still dominates the family planning market. Seven out of ten contraceptive users still go to public sector facilities. However, pharmacies have become a more important source of supply for condoms over this period.

Second, there is pronounced method specialization by source of supply. Public sector facilities mainly provide pills, injectables, and sterilization; the private sector is primarily used for IUDs and

sterilization; and pharmacies are mainly used for pills and condoms. It appears that the private sector is more readily sought for methods that require more competence and skills from service providers.

Third, some users who were purchasing pills from pharmacies in 1993 may have switched to the public sector (where pills are often provided free of charge) by 1998. The proportion of clients who sought pills from the private sector dropped, while those from the public sector increased.

Fourth, among the predisposing factors, age, education, and number of children influence provider choice. Older women tend to use private facilities and younger women make significant use of pharmacies for their family planning supplies. The public sector serves less educated clients, while private facilities and pharmacies tend to provide family planning methods to more educated users.

Fifth, the enabling factors that determine choice of provider are employment status, household wealth status (income), and geographic access. Women who are employed and have higher levels of income are more likely to go to the private sector. Family planning services from the public sector appear to benefit all income groups, from the poorest to the richest households. Public sector utilization is higher when facilities are more accessible (a travel time of less than 15 minutes), while private sector users typically must travel considerable distances for care. Enhanced accessibility of private care facilities might greatly increase the utilization of the private sector.

Sixth, community-level attributes also influence provider choice. Region and type of residence affect the choice of service delivery point. Women from Mindanao, Visayas, and the rest of Luzon are more likely to obtain family planning services from public sector facilities, while women in Manila are more likely to use private sector facilities.

Last, among health-system-related factors, only LPP participation appears to influence provider choice. Women in LPP provinces were more likely to use private sector facilities than women in non-LPP areas. However, media campaigns and the efforts of health personnel efforts appear less important in affecting the choice of service delivery points.

5.3 Willingness to Pay

The following conclusions can be drawn about willingness and capability to pay. First, 90 percent of all users are willing to pay for the services they receive. The maximum amount they are willing to pay is generally higher than what they actually pay for services rendered. The one exception to this pattern is sterilization; most clients would prefer to pay less for the procedure than the actual incurred cost.

Second, contraceptive prices charged by private sector providers are considerably higher than those offered through public sector channels. The biggest price differentials exist for IUDs, injectables, and sterilization. Private sector prices, although higher, are actually more consistent with what clients say they are willing to pay for methods (with the exception of sterilization).

Third, the prices paid for family planning care in relation to the wealth status of households show that the market for individual methods is not always well segmented. In the case of pills, women from poorer households pay much less than women from wealthier households. However, the markets for IUDs, injectables, and sterilization are considerably less well segmented since women from the poorest 20 percent of households pay roughly the same amount as more advantaged clients.

Last, community-level attributes affect the pricing system, with women from urban areas paying the highest amounts. Women in Metro Manila tend to incur the highest costs for family planning care, while women in Mindanao pay the lowest prices for contraception.

5.4 Policy and Programmatic Implications

Strategy 1. This study shows that young married women are often not using contraceptives. It also reaffirmed the importance of education in the use of contraceptives. There is a need to reinforce efforts to reach and better serve the family planning needs of young adults and women with less education. Policy initiatives and programs that may be recommended are as follows:

1. There is a need to intensify information dissemination and educational campaigns that will more effectively employ media channels, especially television. Messages should stress the importance of using contraceptives, particularly modern methods as opposed to traditional methods. For information about modern methods among the young, emphasis should be given to messages and content that dispel rumors and fear of side effects. The private sector should emphasize privacy and anonymity so that younger couples may more readily use these services.
2. More educational campaigns need to be organized among adolescents and young students. Program implementers, both at national and local levels, need to collaborate with teachers in secondary schools and colleges. A systematic educational campaign among younger women must be developed to provide accurate information on family planning and to attract adolescents' interests regarding to responsible parenthood.
3. There is a need to advocate policies and campaigns to encourage young girls to continue schooling because findings suggest that higher educational attainment has a positive effect on the use of modern methods.

Strategy 2. Although there has been some improvement in modern method use in recent years, major segments of the population remain underserved, especially the rural poor. Greater efforts will be required to address client needs (both by improving the accessibility and quality of services). Policy and programmatic action that may be considered include the following:

1. Social marketing activities in the country should be continued and strengthened. These efforts need to be expanded to rural areas. In addition, greater participation of the private sector, particularly the nongovernmental organizations (NGOs), is necessary. Subsidies may be needed to allow price reductions so that poorer women are able to pay the going rate.
2. To ensure that public subsidies flow to the most needy, the public sector needs to shift clients who can afford to pay to the private sector. One way to accomplish this shift might be to enroll the poor in health insurance schemes such as community-based health financing programs or the Philippine Health Insurance Corporation—Phase II Scheme. Another way might be to impose public sector user fees for those who can afford to pay for care in order to encourage greater use of private sector services. For both strategies, criteria will need to be established to enable LGUs to identify very poor clients who will still require subsidized services.
3. Greater dialog needs to be encouraged among local government units in order to more effectively address the issue of providing high-quality family planning services. Given the limited resources of the LGUs (and the phasing out of free family planning commodities), some reorganization of local service provision may prove necessary. New contracting mechanisms,

including various forms of vouchering (where local governments reimburse private providers for specific services) need to be explored.

Strategy 3. The results of this study document the emergence of provider specialization in the provision of family planning methods. IUDs, condoms, and sterilization are more readily supplied by the private sector, while the public sector tends to emphasize pills and injectables. For methods that require greater skill and staff competence (such as IUD insertion and sterilization) clients tend to turn to the private sector, especially those who can afford to pay for their own care. Some policy and programmatic action that might encourage more effective pluralism in the provision of family planning services include the following:

1. The national government, through the Department of Health (DOH) and the Commission on Population, should strive for the elimination of laws, rules, and implementing guidelines that serve as barriers to the involvement of private practitioners in the family planning program.
2. The private sector needs to strengthen its marketing and advocacy efforts in attracting public sector clients, especially those who can pay more for services. One way to accomplish this is to develop a pricing system for charging optimal, yet sustainable fees. Another way is to place private facilities in areas where the need for easy access and convenience is greatest.
3. Given the wide range of costs involved in seeking family planning services, prices and user charges need to be studied and established by both the public and private sectors to avoid price distortions. For transparency, prices of commodities need to be advertised so that users know the range of costs involved and will not be deceived with unreasonable prices charged by unscrupulous providers.
4. Services of pharmacies (and perhaps convenience stores) that sell contraceptives must be more widely recognized and supported. Pharmacy store managers may have to become better informed about contraceptive choices available to customers and options for referring customers for higher-level care.

References

- Aday, L.A., R. Andersen, and G. Fleming. 1974. A framework for the study of access to medical care. *Health Services Research*, vol. 9 (fall).
- Alano, B., et al. 1997. *Family planning use in the Philippines: Market segmentation study*. Manila: The Futures Group International.
- Andersen, R. 1978. Access to medical care in the U.S. realized and potential. *Medical Care*, vol. 16 (July).
- Asian Development Bank (ADB). 1986. Use of rural health services. *Proceedings of the regional seminar on the use of rural health services*. Manila: Asian Development Bank.
- Feyisetan, B.J., and M. Ainsworth. 1996. Contraceptive use and the quality, price and availability of family planning in Nigeria. *The World Bank Economic Observer*, vol. 10, no. 1.
- Bulatao, R. 1989. *Choosing a contraceptive method in Asia and the United States*. Colorado Westview Press, Inc.
- Cariño, L. 1995. The population policy in the Philippines. *The Philippine Journal of Public Administration*, vol. 39, no. 1.
- Casterline, J.B., A.E. Perez, and A.E. Biddlecom. 1996. *Factors underlying unmet need for family planning*. Research Division Working Paper No. 84. New York: The Population Council.
- Department of Health. 1996. *Philippine Family Planning Strategy 1996-2000*. Manila: Department of Health.
- Department of Health (DOH) [Philippines]. 1996. *Local Performance Program (LPP) Brochure*. Manila: Department of Health.
- Herrin, A., and C. Yasay. 1998. *Population, poverty and the economic crisis in the Philippines*. First draft. Manila: Asian Development Bank.
- Lamberte, E. E. 1990. *Determinants of utilization of maternal health care among the poor*. Unpublished Ph.D. dissertation. Quezon City: Department of Sociology, University of the Philippines.
- Lamberte, E., M. Sherman, and R. Brooks. 1999. *Understanding provider choice of family planning clients: Consumer intercept study*. Manila: The Futures Group International and De La Salle University.
- Lamberte, E. E. 1997. *Human values-public health connection*. A joint publication of the Pacific Basin Research Center, Kennedy School of Government, Harvard University, Cambridge, MA and De La Salle University Press, De La Salle University, Manila.
- National Statistics Office. 1997. *1997 Family Planning Survey, Final Report*. Manila: NSO.
- National Statistics Office. 1999. *1999 Family Planning Survey, Final Report*. Manila: NSO.
- National Statistics Office, Department of Health, and Macro International Inc. 1999. *1998 National Demographic and Health Survey*. Manila: NSO, DOH, and Calverton, Maryland: Macro International Inc.

- Orbeta, A.C., and E.M. Pernia. 1999. Why slowing population growth in the Philippines is an imperative. *Policy Notes*. Makati City: Philippine Institute for Development Studies, NEDA.
- Osteria, T., and A. Kantner. 1998. *Post-partum family planning services in the Philippines: An assessment of current service provision and future program requirements*. Manila: De La Salle University and Hawaii: East-West Center.
- Schach, E., E. Kalimi, and D. Hawthorne. 1976. Predisposing and enabling factors. In R. Kohn and K. White, eds., *Health care: An international study*. London: Oxford University Press.

Statistical Appendices

Table A-1 Percentage of women using contraceptive methods, by selected characteristics, 1993 and 1998: Predisposing factors

Characteristic	All methods			Modern methods			Natural methods			Number	
	1993	1998	%	1993	1998	%	1993	1998	%	1993	1998
			Change			Change			Change		
Age											
15-19	16.7	21.7	29.9	9.9	11.4	15.2	2.2	5.3	140.9	233	244
20-24	31.6	39.8	25.9	19.0	24.0	26.3	5.0	6.0	20.0	1,169	967
25-29	38.7	50.8	31.3	23.7	29.3	23.6	7.1	9.9	39.4	1,753	1,586
30-34	45.6	52.8	15.8	29.1	32.4	11.3	9.1	11.0	20.9	1,834	1,730
35-39	48.0	55.3	15.2	29.4	31.6	7.5	9.2	14.4	56.5	1,647	1,602
40-44	43.0	49.2	14.4	27.0	28.8	6.7	8.8	13.4	52.3	1,355	1,243
45-49	27.0	34.3	27.0	19.4	21.5	10.8	3.7	6.6	78.4	940	965
All	39.8	47.8	20.1	24.9	28.2	13.3	7.4	10.6	43.2	8,931	8,337
Mean age (years)	33.17	33.75		33.89	33.86		33.88	34.47			
Marital status											
Married	41.1	49.3	20.0	25.8	29.2	13.2	7.7	11.2	45.5	8,155	7,467
Consensual union	25.3	34.9	37.9	15.6	19.9	27.6	3.4	5.4	58.8	774	869
All	39.8	47.8	20.1	24.9	28.2	13.3	7.4	10.6	43.2	8,929	8,336
Religion											
R. Catholic	40.6	48.2	18.7	25.4	28.3	11.4	7.4	11.1	50.0	7,357	6,748
Protestant	42.5	54.6	28.5	27.8	32.1	15.5	8.3	9.9	19.2	266	586
Islam	9.7	14.6	50.5	6.5	6.8	4.6	2.1	5.4	157.1	341	369
Others	42.9	56.4	31.5	27.5	36.2	31.6	9.0	9.3	3.3	965	633
All	39.8	47.8	20.1	24.9	28.2	13.3	7.4	10.6	43.2	8,929	8,336
Educational attainment											
No Education	10.5	17.2	63.8	7.1	9.5	33.8	2.1	4.1	95.2	238	169
Primary	34.2	42.5	24.3	21.6	25.4	17.6	5.3	8.1	52.8	3,548	2,756
Secondary	43.5	51.5	18.4	27.8	30.5	9.7	7.7	10.5	36.4	3,058	3,050
College or higher	47.1	51.5	9.3	28.5	29.9	4.9	11.1	14.2	27.9	2,084	2,361
All	39.8	47.8	20.1	24.9	28.2	13.3	7.4	10.6	43.2	8,928	8,336
Number of CEB											
0 to 1	19.1	27.4	43.5	9.9	13.4	35.4	4.3	7.1	65.1	1,793	1,870
2	42.6	52.7	23.7	24.5	29.4	20.0	10.1	11.4	12.9	1,581	1,557
3	50.8	59.0	16.1	34.8	38.7	11.2	7.7	10.6	37.7	1,562	1,579
4 to 5	51.6	58.4	13.2	35.0	37.6	7.4	8.5	12.8	50.6	2,173	1,910
6 or more	33.9	42.6	25.7	19.7	22.1	12.2	6.3	11.5	82.5	1,818	1,421
All	39.8	47.8	20.1	24.9	28.2	13.3	7.3	10.6	45.2	8,927	8,337
Mean no. of children	3.79	3.56		3.79	3.54		3.65	3.70			
Ideal no. of children											
0 to 1	34.5	47.6	38.0	19.9	27.3	37.2	9.7	11.2	15.4	5	187
2	39.3	47.6	21.1	24.5	27.1	10.6	7.9	11.2	41.8	201	4,551
3	41.4	50.4	21.7	26.1	30.0	14.9	7.4	10.5	41.9	1,924	2,827
4 to 5	41.0	49.3	20.2	25.9	29.6	14.3	7.4	11.0	48.6	3,004	467
6 or more	31.6	33.9	7.3	19.7	20.0	1.5	5.2	8.0	53.8	2,239	167
All	40.0	48.1	20.3	25.1	28.4	13.1	7.4	10.6	43.2	7,373	8,199
Mean no. of children	3.89	5.55		3.80	4.18		4.50	4.87			

Table A-2 Percentage of women using contraceptive methods, by selected characteristics, 1993 and 1998: Enabling factors

Characteristic	All methods			Modern methods			Natural methods			Number	
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998
	Employment status										
Unemployed	35.8	44.0	22.9	22.4	25.7	14.7	6.3	9.6	52.4	5,090	4,399
Employed	45.1	52.1	15.5	28.4	31.1	9.5	8.8	11.7	33.0	3,821	3,925
All	39.8	47.8	20.1	25.0	28.2	12.8	7.4	10.6	43.2	8,911	8,324
Wealth index											
Poorest 20 %	26.4	37.4	41.7	14.5	19.5	34.4	5.6	9.8	75.0	1,829	2,064
20-40 %	38.9	48.3	24.2	23.3	29.7	27.5	7.1	9.5	33.8	1,899	1,871
40-60 %	42.9	55.9	30.3	26.9	33.1	23.0	7.9	11.5	45.6	1,957	1,563
60-80 %	47.0	50.9	8.3	30.8	31.9	3.6	7.7	10.6	37.7	1,670	1,457
Richest 20 %	45.2	51.6	14.6	30.7	31.0	1.0	8.7	13.2	51.7	1,506	1,224
All	39.8	48.0	20.6	25.0	28.4	13.6	7.4	10.7	44.6	8,861	8,179
Spousal communication											
No	--	28.4	--	--	20.3	--	--	5.2	--	--	1,863
Yes	--	53.5	--	--	30.5	--	--	12.2	--	--	6,453
All	--	47.9	--	--	28.2	--	--	10.6	--	--	8,316

Table A-3 Percentage of women using contraceptive methods, by selected characteristics, 1993 and 1998: Community-level factors

Characteristic	All methods			Modern methods			Natural methods			Number	
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998
	Residence										
Urban	42.8	51.6	20.6	27.7	31.3	13.0	7.8	11.1	42.3	4,629	4,222
Rural	36.4	43.9	20.6	22.0	25.0	13.6	6.9	10.1	46.4	4,300	4,114
All	39.8	47.8	20.1	25.0	28.2	12.8	7.4	10.6	43.2	8,929	8,336
Island of residence											
Rest of Luzon	38.7	47.7	23.3	24.7	29.3	18.6	4.7	7.2	53.2	3,733	3,454
Manila	41.9	50.3	20.0	27.3	28.7	5.1	7.1	12.1	70.4	1,272	1,298
Visayas	44.1	47.2	7.0	24.5	24.4	-0.4	9.6	14.9	55.2	1,803	1,641
Mindanao	39.3	46.9	19.3	24.5	29.2	19.2	10.3	12.0	16.5	2,121	1,943
All	39.8	47.8	20.1	24.9	28.2	13.3	7.4	10.6	43.2	8,929	8,336

Table A-4 Percentage of women using contraceptive methods, by selected characteristics, 1993 and 1998: Health system factors

Characteristic	All methods			Modern methods			Natural methods			Number	
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998
LPP participation											
LPP	40.3	48.7	20.8	25.2	29.0	15.1	7.8	11.0	41.0	6,201	5,629
Non-LPP	38.5	46.0	19.4	24.3	26.5	9.1	6.4	9.8	53.1	2,728	2,707
All	39.8	47.8	20.1	24.9	28.2	13.3	7.4	10.6	43.2	8,929	8,336
ACCESS TO FP INFORMATION											
Heard FP on TV											
No	39.9	36.9	-7.5	22.8	21.6	-5.3	6.9	9.9	43.5	6,066	2,705
Yes	51.6	45.9	-11.0	29.6	31.4	6.1	8.3	11.1	33.7	2,832	5,623
All	39.8	47.8	20.1	25.0	28.2	12.8	7.3	10.6	45.2	8,898	8,328
Heard FP on radio											
No	37.4	44.6	19.3	22.8	24.0	5.3	7.0	10.7	52.8	5,043	2,611
Yes	42.7	49.3	15.5	27.7	30.1	8.7	7.9	10.6	34.2	3,871	5,716
All	39.7	47.9	20.6	24.9	28.2	13.3	7.3	10.6	45.2	8,914	8,327
Visited health facility last few months											
No	--	42.0	--	--	23.4	--	--	9.9	--	--	3,457
Yes	--	51.9	--	--	31.7	--	--	11.1	--	--	4,873
All	--	47.8	--	--	28.2	--	--	10.6	--	--	8,330
Visited by FP worker in last few months											
No	--	46.0	--	--	26.7	--	--	10.4	--	--	6,814
Yes	--	56.1	--	--	35.2	--	--	11.6	--	--	1,520
All	--	47.8	--	--	28.2	--	--	10.6	--	--	8,334

Table A-5 Percentage of women using specific modern contraceptive methods, by age and education, 1993 and 1998, and percent change

Characteristic	Pills			IUD			Injectables			Number	
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998
Age											
15-19	(72.7)	(55.6)	-23.5	(27.3)	(22.2)	-18.7	--	(22.2)	--	22	27
20-24	70.3	65.4	-7.0	22.1	14.3	-35.3	0.5	13.4	25.8	222	231
25-29	56.6	53.7	-5.1	14.0	15.9	13.6	0.2	15.9	78.5	415	464
30-34	37.4	42.8	14.4	12.8	14.8	15.6	0.4	14.8	36.0	540	566
35-39	20.3	25.8	27.1	10.2	13.9	36.3	0.2	13.9	68.5	498	519
40-44	12.6	8.3	-34.1	6.8	8.0	17.6	--	8.0	--	380	361
45-49	3.1	3.7	19.4	7.7	5.6	-27.3	--	5.6	--	194	216
All	33.6	34.8	3.6	12.1	13.0	7.4	0.2	8.3	40.5	2,271	2,384
Education											
None	(23.5)	(13.3)	-43.4	(17.6)	(6.7)	-61.9	--	(26.7)	--	17	15
Primary	31.7	33.1	4.4	11.7	11.1	-5.1	--	8.8	--	788	714
Secondary	36.3	38.2	5.2	12.5	14.5	16.0	0.2	9.0	44.0	862	945
Higher	32.6	32.6	0.0	11.6	12.9	11.2	0.5	6.5	12.0	604	711
All	33.6	34.8	3.6	12.0	13.0	8.3	0.2	8.3	40.5	2,271	2,385
Characteristic	Condoms			Sterilization			Number				
	1993	1998	% Change	1993	1998	% Change	1993	1998			
Age											
15-19	--	--	--	--	--	--	22	27			
20-24	3.2	6.1	90.6	4.1	0.9	-78.0	222	231			
25-29	5.8	6.3	8.6	23.1	11.9	-48.5	415	464			
30-34	5.6	5.8	3.6	43.9	27.4	-37.6	540	566			
35-39	3.0	6.4	113.3	66.1	48.7	-26.3	498	519			
40-44	2.4	5.3	120.8	78.2	72.3	-7.5	380	361			
45-49	1.5	4.2	180.0	87.6	85.2	-2.7	194	216			
All	3.9	5.7	46.2	50.1	38.2	-23.8	2,271	2,384			
Education											
None	--	(6.7)	--	(58.8)	(46.7)	-20.6	17	15			
Primary	1.6	4.3	168.8	54.9	42.7	-22.2	788	714			
Secondary	4.3	5.1	18.6	46.5	33.2	-28.6	862	945			
Higher	6.5	8.2	26.2	48.7	39.8	-18.3	604	711			
All	3.9	5.8	48.7	50.1	38.1	-24.0	2,271	2,385			

Note: Figures in parentheses are based on fewer than 30 cases

Table A-6 Percentage of women using specific modern contraceptive methods, by enabling factors and community-level factors 1993 and 1998, and percent change

Characteristic	Pills			IUD			Injectables			Number	
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998
ENABLING FACTORS											
Employment status											
Unemployed	38.1	38.4	0.8	13.4	13.4	0.0	0.1	9.4	93.0	1,156	1,133
Employed	28.9	31.6	9.3	10.5	12.6	20.0	0.4	7.4	17.5	1,113	1,248
All	33.6	34.8	3.6	12.0	13.0	8.3	0.2	8.4	41.0	2,269	2,381
Wealth index											
Poorest 20 %	45.1	42.9	-4.9	16.0	15.6	-2.5	--	13.6	--	268	403
20-40 %	41.0	35.9	-12.4	15.1	17.1	13.2	0.2	8.1	39.5	449	566
40-60 %	34.3	35.2	2.6	11.3	11.1	-1.8	0.4	6.7	15.8	540	522
60-80 %	31.2	31.0	-0.6	9.4	12.6	34.0	--	7.3	--	522	477
Richest 20 %	21.9	29.1	32.9	10.0	7.5	-25.0	0.6	5.7	8.5	479	385
All	33.6	34.8	3.6	11.9	13.0	9.2	0.3	8.2	26.3	2,258	2,353
COMMUNITY-LEVEL FACTORS											
Residence											
Urban	31.8	33.8	6.3	10.2	10.7	4.9	0.2	7.3	35.5	1,320	1,351
Rural	36.1	36.3	0.6	14.7	15.9	8.2	0.3	9.6	31.0	953	1,034
All	33.6	34.8	3.6	12.1	13.0	7.4	0.3	8.3	26.7	2,273	2,385
Island of residence											
NCR	33.1	36.4	10.0	5.5	6.0	9.1	0.3	2.1	6.0	268	1,025
Rest of Luzon	30.8	33.7	9.4	8.0	8.0	0.0	0.3	8.3	26.7	449	407
Visayas	36.2	29.2	-19.3	11.5	16.2	40.9	--	11.3	--	540	571
Mindanao	36.8	39.8	8.1	24.2	24.5	1.2	0.2	10.3	50.5	522	385
All	33.6	34.8	3.6	12.0	13.0	8.3	0.2	8.3	40.5	1,779	2,388
Characteristic	Condoms			Sterilization			Number				
	1993	1998	% Change	1993	1998	% Change	1993	1998			
ENABLING FACTORS											
Employment status											
Unemployed				3.9	5.5	41.0	44.4	33.3	-25.0	1,156	1,133
Employed				4.0	6.1	52.5	56.2	42.4	-24.6	1,113	1,248
Total				3.9	5.8	48.7	50.2	38.1	-24.1	2,269	2,381
Wealth index											
Poorest 20 %				2.6	5.2	1.0	36.2	22.6	-37.6	268	403
20-40 %				2.7	3.7	37.0	41.0	35.2	-14.1	449	566
40-60 %				4.8	7.1	47.9	49.1	39.8	-18.9	540	522
60-80 %				3.6	5.9	63.9	55.7	43.2	-22.4	522	477
Richest 20 %				5.4	7.5	38.9	61.8	50.1	-18.9	479	385
Total				4.0	5.8		50.2	897	-24.1	2,258	2,353
COMMUNITY-LEVEL FACTORS											
Residence											
Urban				4.7	6.2	31.9	53.0	42.0	-20.7	1,320	1,351
Rural				2.8	5.2	85.7	46.0	33.1	-28.0	953	1,034
Total				3.9	5.8	48.7	50.1	38.1	-24.0	2,273	2,385
Island of residence											
NCR				4.1	10.9	165.9	57.1	44.7	-21.7	268	1,025
Rest of Luzon				4.2	3.8	-9.5	56.6	46.2	-18.4	449	407
Visayas				4.3	8.4	95.3	47.9	34.9	-27.1	540	571
Mindanao				3.1	4.2	35.5	35.7	21.2	-40.6	522	385
Total				3.9	5.8	48.7	50.1	38.1	-24.0	1,779	2,388

Table A-7 Percent distribution of women using modern contraceptive methods by method, according to type of provider, 1993 and 1998, and percent change

Method	Public			Private			Pharmacy			All		
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change
Pill	34.5	36.9	7.0	10.7	12.8	19.6	80.6	66.2	-17.9	33.3	34.9	4.8
IUD	13.3	14.6	9.8	12.3	11.2	-8.9	--	0.5	--	12.1	12.8	5.8
Injectables	0.1	10.6	10,500.0	0.9	3.5	288.9	--	--	--	0.2	8.4	4,100.0
Condom	3.1	3.3	6.4	0.9	1.4	55.6	19.4	33.3	71.6	3.9	5.4	38.5
Female sterilization	47.9	34.0	-29.0	72.9	68.4	-6.2	--	--	--	49.2	37.5	-23.8
Male sterilization	1.2	0.3	-75.0	2.3	1.4	-39.1	--	--	--	1.3	0.5	-61.5
LAM	--	0.1	--	--	--	--	--	--	--	--	0.1	--
Modern abstinence	--	0.2	--	--	1.4	--	--	--	--	--	0.4	--
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,622	1,711		431	430		165	195		2,218	2,336	

Table A-8 Percent distribution of women using modern contraceptive methods by predisposing factors, according to type of provider, 1993 and 1998, and percent change

Characteristic	Public			Private			Pharmacy			All		
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change
Age												
15-19	1.0	1.2	20.0	0.2	1.4	600.0	0.6	0.5	-16.7	0.9	1.2	33.3
20-24	10.6	10.2	-3.8	4.2	4.2	0.0	15.2	18.5	21.7	9.7	9.8	1.0
25-29	19.2	21.8	13.5	11.8	8.6	-27.1	27.4	24.6	-10.2	18.3	19.6	7.1
30-34	23.3	24.4	4.7	22.9	18.8	-17.9	28.7	28.2	-1.7	23.6	23.7	0.4
35-39	21.7	20.9	-3.7	25.6	25.8	7.8	15.9	19.5	22.6	22.1	21.7	-1.8
40-44	15.9	14.1	-11.3	23.8	23.5	1.3	9.8	3.6	-63.3	17.0	15.0	-11.8
45-49	8.3	7.4	-10.8	11.5	17.7	53.9	2.4	5.1	112.5	8.5	9.1	7.1
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,623	1,712		433	430		164	195		2,220	2,337	
Mean age (years)	33.78	33.34		36.40	37.38		30.89	31.16		34.07	33.90	
Marital status												
Single	--	0.1	--	--	--	--	0.6	1.5	150.0	--	0.2	--
Married	92.8	91.1	-1.8	93.3	90.2	-3.3	90.3	90.3	0.0	92.7	90.9	-1.9
Living together	5.5	7.3	32.7	2.8	6.1	117.9	9.1	7.2	-20.9	5.3	7.0	32.1
Widow	0.9	0.8	-11.1	3.0	1.4	-53.3				1.2	0.8	-33.3
Not living together	0.8	0.8	0.0	0.9	2.3	155.6		1.0	100.0	0.8	1.1	37.5
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,624	1,710		432	429		165	195		2,221	2,334	
Religion												
R. Catholic	84.0	80.5	-4.2	81.3	82.5	1.5	88.0	84.5	-4.0	83.8	81.2	-3.1
Protestant	3.5	8.7	148.6	3.2	5.8	81.3	1.8	6.7	272.2	3.3	8.0	142.4
Islam	1.1	1.0	-9.1	.7	1.4	100.0	.6	0.0	-100.0	1.0	1.0	0.0
Others	11.3	9.8	-13.3	14.8	10.3	-30.4	9.6	8.8	-8.3	11.9	9.8	-17.6
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,623	1,710		432	429		166	194		2,221	2,333	
Educational attainment												
No education	0.9	0.8	-11.1	0.5	0.2	-60.0	--	--	--	0.7	0.6	-14.3
Primary	39.2	35.2	-10.2	25.0	18.4	-52.4	13.9	10.3	-25.9	34.6	30.1	-13.0
Secondary	39.6	41.4	0.0	32.4	32.2	-0.6	36.4	38.5	5.8	38.0	39.5	3.9
College or higher	20.3	22.6	11.3	42.1	49.2	16.9	49.7	51.3	3.2	26.7	29.9	12.0
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,624	1,711		432	429		165	195		2,221	2,335	
Number of CEB												
0 to 1	6.9	9.7	40.6	5.1	8.1	58.8	21.9	22.8	4.1	7.6	10.7	40.7
2	16.9	19.6	16.0	15.3	16.0	4.6	24.4	25.3	3.7	17.1	19.4	13.5
3	23.8	24.7	3.8	27.1	30.9	14.0	24.4	26.8	9.8	24.5	26.0	6.1
4 to 5	34.4	30.8	-10.5	39.1	33.7	-13.8	21.3	17.0	-20.1	34.4	30.2	-12.2
6 or more	18.0	15.2	-15.6	13.4	11.2	-16.4	7.9	5.2	-34.2	16.4	13.6	-17.1
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,623	1,710		432	430		164	194		2,219	2,334	
Mean no. of children	3.92	3.64		3.78	3.55		2.90	2.61		3.81	3.54	
Ideal no. of children												
0 to 1	1.9	1.9	0.0	1.4	2.3	64.3	3.0	4.6	53.3	1.8	2.1	16.7
2	19.2	22.3	16.1	22.2	18.6	-16.2	37.6	27.2	-27.7	21.2	22.0	3.8
3	35.2	33.7	-4.3	32.8	31.2	-4.8	35.8	35.9	0.3	34.8	33.4	4.0
4 to 5	35.6	36.0	1.1	37.8	38.6	2.1	18.8	27.2	44.7	34.8	35.8	2.9
6 or more	7.7	5.4	-29.9	4.8	8.1	68.8	4.2	3.6	-14.3	6.9	5.7	-17.4
Nonnumeric response	0.3	0.8	166.7	0.9	1.2	33.3	0.6	1.5	150.0	0.5	0.9	80.0
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,622	1,710		433	430		165	195		2,220	2,335	
Mean no. of children	3.79	4.14		3.85	4.58		3.45	4.27		3.77	4.23	

Table A-9 Percent distribution of women using modern contraceptive methods by enabling factors, according to type of provider, 1993 and 1998, and percent change

Characteristic	Public			Private			Pharmacy			All		
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change
Employment status												
Employed	46.0	49.1	6.7	58.9	63.5	7.8	53.9	57.4	6.4	49.1	52.4	6.7
Number	1,621	1,708		433	427		165	195		2,219	2,330	
Wealth index												
Poorest 20 %	14.8	21.8	47.3	4.4	6.1	38.6	1.2	2.1	75.0	11.8	17.2	45.8
20-40 %	22.5	28.4	26.2	13.1	12.2	-6.9	6.7	12.3	83.6	19.5	24.0	23.1
40-60 %	26.1	22.1	-15.3	17.3	18.1	4.6	21.2	30.8	45.3	24.1	22.1	-8.3
60-80 %	21.8	17.1	-21.6	25.8	30.8	19.4	29.1	24.6	-15.5	23.2	20.3	-12.5
Richest 20 %	14.7	10.6	-27.9	39.3	32.7	-16.8	41.8	30.3	-27.5	21.5	16.4	-23.7
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,611	1,685		427	425		165	195		2,203	2,305	
Geographic access (min)												
0-14	30.6	34.5	12.7	20.5	19.3	-5.8	42.7	46.6	9.1	29.6	32.7	10.4
15-29	17.9	15.5	-13.4	17.9	16.3	-8.9	21.3	23.8	11.7	18.2	16.3	-10.4
30-59	26.8	23.3	-13.1	30.7	30.2	-1.6	28.7	16.1	-43.9	27.7	23.9	-13.7
60 or more	24.6	26.7	8.5	30.9	34.2	10.7	7.3	13.5	84.9	24.6	27.0	9.8
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,603	1,703		424	430		164	193		2,191	2,326	
Spousal communication												
Number	--	86.7	--	--	67.8	--	--	91.6	--	--	83.7	--
Number		1,677			413			190			2,280	

Table A-10 Percent distribution of women using modern contraceptive methods by community-level factors, according to type of provider, 1993 and 1998, and percent change

Characteristic	Public			Private			Pharmacy			All		
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change
Residence												
Urban	52.9	48.8	-7.8	67.1	74.4	10.9	87.9	82.6	-6.0	58.3	56.3	-3.4
Rural	47.1	51.2	8.7	32.9	25.6	-22.2	12.1	17.4	43.8	41.7	43.7	4.7
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,624	1,711		432	430		165	195		2,221	2,336	
Island of residence												
Manila	11.8	10.4	-11.9	21.5	25.2	17.2	46.7	44.6	-4.5	16.3	16.0	-1.8
Rest of												
Luzon	44.0	44.6	1.4	33.7	41.7	23.7	32.7	33.3	1.8	41.2	43.1	4.6
Visayas	19.7	18.4	-6.6	21.2	15.2	-28.3	10.3	8.7	-15.5	19.3	17.0	-11.9
Mindanao	24.4	26.7	9.4	23.6	17.9	-24.2	10.3	13.3	29.1	23.2	23.9	3.0
Total	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
Number	1,624	1,711		433	429		165	195		2,222	2,335	

Table A-11 Percent distribution of women using modern contraceptive methods by health system factors, according to type of provider, 1993 and 1998, and percent change

Characteristic	Public			Private			Pharmacy			All		
	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change	1993	1998	% Change
LPP participation												
LPP	73.1	73.6	0.7	66.2	64.8	-2.1	44.8	44.6	-0.4	69.7	69.6	-0.1
Number	1,623	1,710		432	429		165	195		2,220	2,334	
Access to FP information												
Heard FP on TV	35.1	71.7	104.3	45.1	82.8	83.6	50.9	89.2	75.2	38.2	75.2	96.9
Heard FP on Radio	49.0	74.0	51.0	50.8	73.9	45.5	34.8	64.4	85.1	48.3	73.2	51.6
Read FP in Newspapers	--	44.2	--	--	59.8	--	--	57.9	--	--	48.2	--
Read FP on Posters	--	50.2	--	--	59.4	--	--	59.5	--	--	52.7	--
Read FP in Brochures	--	39.0	--	--	47.2	--	--	50.8	--	--		--
Number	1,620	1,708		432	430		165	195		2,217	2,333	
Visited health facility in last few months												
		67.8			57.9			59.5			65.3	
Number		1,709			430			195			2,334	
Visited by FP worker in last few months												
		25.6			13.8			18.5			22.8	
Number		1,710			429			195			2,334	

Table A-12 Average cost of services for specific modern contraceptive methods, by method and selected independent variables, 1998

Independent variable		Cost of pills (free included)	Cost of pills (free excluded)	Cost of IUDs (free included)	Cost of IUDs (free excluded)	Cost of injectables (free included)	Cost of injectables (free excluded)
Wealth index							
Poorest 20 %	Mean	4.7	8.2	46.2	69.3	14.8	29.3
	Number	181	103	69	46	57	29
20-40 %	Mean	13.0	21.1	62.6	88.5	13.7	17.9
	Number	205	126	87	61	45	35
40-60 %	Mean	19.6	30.3	66.7	90.9	27.3	35.1
	Number	186	120	62	45	32	25
60-80 %	Mean	30.0	44.0	84.4	113.1	23.0	32.0
	Number	145	99	65	48	33	24
Richest 20 %	Mean	47.7	60.3	75.6	96.1	102.9	154.5
	Number	97	76	23	18	23	15
Total	Mean	19.8	30.7	65.4	91.1	28.5	42.6
	Number	813	525	306	220	190	127
Respondent's occupation							
Not working	Mean	14.5	23.3	69.7	99.0	20.4	30.5
	Number	380	236	133	94	97	65
Prof., tech., manag.	Mean	43.5	62.0	55.1	90.5	96.3	132.8
	Number	38	27	22	14	10	7
Clerical	Mean	43.4	57.6	181.5	232.9	320.4	365.6
	Number	38	29	11	9	3	2
Sales	Mean	24.9	37.5	78.1	93.2	17.2	26.5
	Number	169	113	68	57	32	21
Agri-self-employed	Mean	5.5	8.3	38.2	48.9	21.5	30.3
	Number	51	34	26	20	27	19
Services	Mean	14.8	26.2	21.1	41.2	8.3	20.8
	Number	78	44	25	13	16	6
Skilled manual	Mean	23.6	35.3	30.1	46.3	36.2	41.7
	Number	75	50	23	15	12	10
Total	Mean	19.5	30.5	65.0	90.7	28.0	42.0
	Number	831	533	310	222	198	132
Source of last FP method							
Public	Mean	6.7	12.0	31.3	46.3	15.5	23.9
	Number	632	350	250	169	182	118
Private	Mean	47.8	58.2	235.6	251.2	182.2	211.5
	Number	55	45	48	45	15	13
Pharmacy	Mean	68.9	70.5				
	Number	129	126				
Other	Mean	32.8	43.6	99.2	125.8	13.5	13.5
	Number	15	11	9	7	2	2
Total	Mean	19.5	30.5	65.4	90.7	28.0	42.0
	Number	831	533	308	222	198	132
Residence							
Urban	Mean	26.2	37.5	81.4	109.8	40.2	54.2
	Number	456	318	145	108	99	73
Rural	Mean	11.5	20.0	50.6	72.6	16.0	26.8
	Number	375	215	164	115	99	59
Total	Mean	19.5	30.5	65.0	90.7	28.0	42.0
	Number	831	533	310	222	198	132

Table 12—Continued

Independent variable		Cost of condom (free included)	Cost of condom (free excluded)	Cost of sterilization (free included)	Cost of sterilization (free excluded)
Wealth index					
Poorest 20 %	Mean	1.5	3.4	1,398.8	3,208.0
	Number	23	10	94	41
20-40 %	Mean	3.8	6.3	1,488.9	2,588.4
	Number	22	13	189	109
40-60 %	Mean	5.1	7.0	1,645.4	2,852.7
	Number	33	24	222	128
60-80 %	Mean	12.6	17.5	3,582.4	5,320.6
	Number	28	20	208	140
Richest 20 %	Mean	37.4	52.2	5,718.9	8,877.9
	Number	27	19	175	113
Total	Mean	12.4	19.0	2,842.5	4,757.4
	Number	132	86	887	530
Respondent's occupation					
Not working	Mean	8.1	12.3	2,145.3	3,739.2
	Number	53	35	328	188
Prof., tech., manag.	Mean	71.9	113.0	6,704.9	11,339.7
	Number	11	7	73	43
Clerical	Mean	9.6	11.6	3,564.9	7,443.6
	Number	14	11	36	17
Sales	Mean	6.0	10.2	4,176.6	6,290.5
	Number	22	13	213	141
Agri-self-employed	Mean	6.5	7.5	1,346.2	2,443.8
	Number	5	4	75	41
Services	Mean	7.6	18.3	1,630.4	2,963.1
	Number	14	6	108	59
Skilled manual	Mean	4.2	6.0	2,324.1	3,362.0
	Number	20	15	69	48
Total	Mean	12.2	18.6	2,916.3	4,875.7
	Number	138	90	909	544
Source of last FP method					
Public	Mean	4.1	8.3	1,258.1	2,210.9
	Number	56	28	587	334
Private	Mean	3.9	14.8	6,382.1	9,541.7
	Number	6	2	299	200
Pharmacy	Mean	10.5	11.8		
	Number	65	58		
Other	Mean	67.3	259.6	26.9	64.2
	Number	11	3	21	9
Total	Mean	12.2	18.6	2,920.3	4,879.1
	Number	138	90	907	543
Residence					
Urban	Mean	17.7	23.6	3,651.9	5,652.8
	Number	84	63	567	366
Rural	Mean	3.6	7.1	1,696.6	3,271.0
	Number	54	27	342	177
Total	Mean	12.2	18.6	2,916.3	4,875.7
	Number	138	90	909	544

Table A-13 Percent of public and private sector users of the pill willing to pay specific amounts (pesos) for their method, 1998

Amount willing to pay (pesos)	Pills	
	Public	Private
10	90.5	99.5
25	55.9	88.0
50	28.1	70.7
75	17.3	56.0
100	9.8	37.5
150	4.6	19.0
200	3.8	14.1
300	3.2	10.9
>300	1.1	8.2
Number	250	49

Table A-14b Percent of public and private sector users of the IUD, injectables, and condoms willing to pay specific amounts (pesos) for their method, 1998

Amount willing to pay (pesos)	IUD		Injectables		Condom	
	Public	Private	Public	Private	Public	Private
10	99.2	100.0	96.7	100.0	87.5	81.9
20	91.2	93.9	82.9	100.0	51.8	52.8
30	78.8	91.8	64.6	100.0	32.1	30.6
50	67.6	91.8	49.2	100.0	14.3	19.4
100	34.8	79.6	26.0	73.3	8.9	12.5
250	16.8	59.2	11.0	60.0	1.8	1.4
500	7.2	28.6	2.2	20.0	--	--
750	4.0	12.2	0.6	6.7	--	--
1000	2.8	10.2	0.0	6.7	--	--
Number	250	49	181	15	56	72

