# Contraceptive Choice and Discontinuation in Selected African Countries: A Focus on Injectables\*

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#### Introduction

The prevalence of modern contraceptive use has increased to a greater or lesser extent in virtually all African countries over the past two decades. The choice of contraceptive methods has also increased, and with that expansion, method mix has evolved differently in different countries. However, in virtually all countries use of limiting methods remains low and discontinuation rates for spacing methods remains relatively high. Getting a clearer understanding of contraceptive choice and discontinuation in programs at different levels of development and with different histories is a priority issue for family planning and reproductive health programs in sub-Saharan Africa. It is well recognized that growing injectable use has played a major role in Sub-Sahara Africa the growth of contraceptive use over the past decade. Figure 1 below presents data from five African countries on overall contraceptive and injectable use.



Figure 1

In all of these countries, injectable use has grown substantially. However, the contrast between ongoing predominant reliance on oral contraceptives in Zimbabwe and the very rapid rise in use of injectable contraception in other countries is of interest. Both scenarios create different service delivery challenges.

Underlying aggregate measures such as contraceptive prevalence and method mix are a series of contraceptive decisions and choices that a woman has to make based on fertility desires, knowledge of methods, acceptability and costs of various methods, and availability. For non-users these decisions include whether to initiate contraceptive use and which method to select; for current users whether to continue use of the current method, switch to another method or discontinue altogether are key points in the process. With this process in mind we focus on three contrasting countries and address the following questions:

- What factors explain the rapid increase in the adoption of injectables in such countries as Malawi and Ethiopia?
- Why does the pill remain very popular in Zimbabwe even in the context of increasing availability of injectables?
- What is the pattern of switching and discontinuation among users of injectables and pills under various method mix scenarios?
- What are the implications for programs in Africa generally of these patterns?

In order to address these questions using Demographic and Health Survey (DHS) data, country-specific patterns of contraceptive choice, initiation, continuation, discontinuation and switching are discussed in the light of literature relating to discontinuation of hormonal methods, and DHS analysis. A focus on reasons for discontinuation and unmet need highlights the challenge to family planning programs to improve all-method continuation, and leads to program and policy recommendations.

# **Data and Methods**

Data for the analysis come from DHS, which are nationally representative and cross-nationally comparable. Three countries that have participated in the DHS program are selected for the analysis: Malawi and Ethiopia are chosen because they are predominantly rural countries with a rapid increase in the adoption of injectable contraceptives by women in both countries. Zimbabwe was selected for analysis because of the continuing dominance of pills as the method of choice. Each of these countries has participated at least two times in the DHS (Malawi had surveys in 1992, 2000 and 2004; Zimbabwe had surveys in 1988, 1994, 1999, and 2005; and Ethiopia had surveys in 2000 and 2005). Table A1 in the Appendix presents more detailed information about these surveys. Although Malawi had a Knowledge, Attitude and Practice (KAP) survey in 1996, that survey was not included because it has limited information on several key indicators. Similarly, Zimbabwe participated in the DHS in 1988, but that dataset was not included in this analysis because it is a much older dataset.

Contraceptive discontinuation is defined as the percentage of users who discontinue a method within 12 months of beginning use during a specific episode of use. Users who switched to another method are considered to have discontinued the previous method at the time of switching (Rutstein and Rojas, 2003; Curtis and Hammerslough, 1995). The calculation of contraceptive discontinuation is based on the DHS contraceptive calendar, which is a history of women's month-by-month contraceptive practices extending five years before the survey date. As such it is possible for a woman to contribute more than one use segment within the five-year period. The contraceptive calendar was originally designed for use in countries with high prevalence of contraceptive use. However, its use was extended to all countries about five years ago. That is why both Malawi and Ethiopia have contraceptive discontinuation data only for their most recent surveys while Zimbabwe has data for surveys conducted since 1994.

#### **Changes in CPR and Method Mix**

Table 1 presents data on changes in overall contraceptive prevalence and the prevalence of injectable and pill use in Malawi, Ethiopia and Zimbabwe from the last two DHS surveys in each of those three countries. Levels of unmet need (that is, women who are not currently using contraception but who either want no more children or who do not want a child within the next two years) and total fertility are also presented.

# Table 1Trends in the prevalence of pills and injectables and related<br/>indicators

Country	Any	Pills	Injectables	Unmet	TFR
	Modern		-	Need	Rate
Ethiopia 2000	6.3	2.5	3.1	35.2	5.5
Ethiopia 2005	13.9	3.1	9.9	33.8	5.4
Malawi 1992	7.4	2.2	1.5	36.3	6.7
Malawi 2000	26.1	2.7	16.4	29.7	6.3
Malawi 2004	28.1	2.0	18.0	27.6	6.0
Zimbabwe 1994	42.2	33.1	3.2	14.9	4.3
Zimbabwe 1999	50.4	35.5	8.1	12.9	4.0
Zimbabwe 2006	58.4	43.0	9.9	12.8	3.8

Source: Demographic and Health Surveys data

<u>Note</u>: In this and other tables, contraceptive prevalence data refer to currently married women of reproductive age, except otherwise indicated.

In Ethiopia, over a five-year period, modern method contraceptive prevalence doubled, injectable use tripled, and pill use increased by about 25%. Changes were not as dramatic in Malawi between 2000 and 2004: modern method prevalence increased by two percentage points, but pill prevalence dropped by a third and injectable use increased several points. However, the 1992-2000 period in Malawi revealed striking changes: injectable prevalence grew from 1.5 to 16.4, accounting for almost all the growth in overall prevalence. In Zimbabwe, injectable use rose from 8.1 to 9.9, a modest increase, but pills remained the dominant method, increasing in prevalence from 35.5 to 43.0.

A good indicator of the probability that a modern contraceptive method is within the range of choice/selection by users is the extent to which it is known by potential users, especially by currently married women or women of reproductive age. Although knowledge doesn't necessarily lead to use of a given method, a method that is generally unknown or known by a relatively small proportion of potential users is likely to have a lower prevalence than a well-know method. The more a method is known, the higher the likelihood that it will be tried by potential users.

In Figures 2 and 3 we compare trends in the knowledge of pills and injectables of currently married women of reproductive age to knowledge of those methods by women who are not yet sexually active. In general, the pill is the most widely known modern method in Ethiopia and Zimbabwe

among married women which is not surprising since it has been available much longer. In Ethiopia, knowledge of injectables is increasing rapidly among married women as well as among women not yet sexually active. In Malawi and Zimbabwe there is some emerging evidence that knowledge of pills is either stagnating or declining among the women who are not yet sexually experienced.



 $Figure \ 2$  Trends in the knowledge of pills and injectables among married women

Source: Demographic and Health Surveys data





Trends in the knowledge of pills and injectables among WRA who are not sexually active

Source: Demographic and Health Surveys data

Among married women as well as women not yet sexually active, there is a convergence in the proportion of women who know of the pill and those who know of injectables. In Malawi, in 2000 and 2004, the proportion of married women who know the pill is actually lower than those who know about injectables; similarly among women who are not yet sexually active, injectables are known by a larger percentage of the women. The declining levels of knowledge of pills among young women in both Zimbabwe and Malawi could suggest further reductions of pill use in the future.

Taking a longer perspective reveals more dramatic changes. In Malawi between 1992 and 2004, the prevalence of injectables among married women increased twelvefold, from 1.5% in 1992 to 18% in 2004. Within the same period the share of injectables in the method mix increased from 20% to 64% while the prevalence of pills remained around 2% and its share of the method mix decreased from 30% to 7%. The change in patterns of prevalence in Ethiopia is similar. However, in Zimbabwe, oral contraceptive

pills have continued to be the overwhelmingly preferred method over the history of the program.

# **Country Profiles**

In attempting to understand these contrasting patterns it is useful to start with Zimbabwe. The country has had a well-established family planning program for many years, and for the duration pills have always been the predominant method. They have been available broadly through a range of channels and at various times have been delivered to the communities by CBD agents. Women in Zimbabwe initiate pill use at much higher rates than in Malawi or Ethiopia, and they discontinue at much lower rates (see Table 2). Side effects of the method are mentioned far less often as the reason for discontinuation of pill use than for discontinuation of injectable use.

Table 2Percentage of contraceptive users who discontinued within 12months of method use and the percent citing health or side-effect

	reasons			
	Discontinuation	Switching	Side effects or	
			health reasons	
Pill				
Ethiopia (2005)	60.9	21.8	22.8	
Malawi (2004)	52.3	7.8	22.1	
Zimbabwe (2006)	15.7	2.8	2.7	
Injectables				
Ethiopia (2005)	32.0	6.9	10.9	
Malawi (2004)	32.5	1.8	13.9	
Zimbabwe (2006)	24.3	7.9	10.9	

Source: Demographic and Health Surveys data

Table 2 reveals a very different pattern in Malawi and Ethiopia where injectable 12-month discontinuation rates of injectables are much lower than pills, and women mention side effects much less often as the reason for discontinuation of injectable use than for pill use. The picture presented for

Zimbabwe is one of a solidly entrenched "pill program" where women are knowledgeable about the method, use the method effectively, have adapted to any side-effects associated with the method, and discontinue at relatively low rates. Non-users who intend to use contraception in the future mention pills as the likely method that they will choose. It is also the case that in Zimbabwe injectable discontinuation is lower than in the other two countries as well. It appears that in a mature program such as Zimbabwe, the overall context supports a mature consumer base and "better" users.

Data for calculating trends in contraceptive discontinuation rates are available only in Zimbabwe. (see Figure 4). The results show that although both methods had similar rates of discontinuation around 1994 but over time, the discontinuation rates have increased for injectables while they remain relatively flat for pills.





Source: Demographic and Health Surveys data

The reasons for the increase in the proportion of women who discontinued the injectables are not clear. It is likely that they are linked to fear of side effects, particularly in a setting where the pills are the dominant method of contraception. As women become more experienced with the method, it is possible that the discontinuation rate will decrease as the trend seems to suggest.

Data from the 1988, 1994 and 1999 DHS surveys in Zimbabwe reveal relatively high pill use in both rural and urban areas, but in urban areas pill use was consistently about 12 points higher than in rural areas (approximately 30 versus 40). However, in 2006, the most recent survey (see Table 3), the rural-urban gap has narrowed to about 7 points (47.7 versus 40.7). The diffusion of higher levels of contraceptive usage generally, and the growing predominance of pills in the rural areas seems clear. In the context of relatively widespread contraceptive use (almost 60% in 2006) and relatively low TFR (3.8), contraception is broadly acceptable, pills have been available through many outlets for a long time, and women believe they are safe and effective.

The picture presented in Malawi and Ethiopia is strikingly different from Zimbabwe. Of course, levels of prevalence are much lower than in Zimbabwe (14 and 28 respectively) and fertility is much higher (5.4 and 6, see Table 1). The programs are much "younger" and contraceptive usage is far from what could be considered the norm. Table 3 presents methodspecific differences in contraceptive use between rural and urban areas for the three countries. Overall, the major point is the high levels of injectable use even in the earlier surveys and the very low levels of pill use. Both pills and injectables are substantially higher in the urban than the rural areas. In Ethiopia pill and injectable rates in 2005 in rural areas are approximately 1/3 that of the urban areas; in Malawi in 2004 injectable rates are lower in rural areas than in urban areas, but the gap appears to be narrowing (22.5 urban: 17.1 rural). The contrasts with Zimbabwe are clear: the programs are vounger, pills have never been popular, and the expansion of family planning programs in the countries coincided with growing availability of injectables. Perhaps because of the fact that the Zimbabwe program is more developed, introduction of a new hormonal method which directly "competes" with pills may have been more difficult and initial uptake slower. The next DHS will provide interesting data on this issue.

	Any	Pill	Injections	Female
	modern			sterilization
Ethiopia 2005				
Urban	42.2	10.7	25.9	1.3
Rural	10.6	2.2	8.0	0.0
Ethiopia 2000				
Urban	28.3	9.6	14.1	1.4
Rural	3.3	1.5	1.5	.2
Malawi 2004				
Urban	34.7	3.2	22.5	6.4
Rural	26.9	1.7	17.1	5.7
Malawi 2000				
Urban	38.2	4.2	22.9	7.6
Rural	24.1	2.5	15.3	4.3
Zimbabwe 2006				
Urban	68.3	47.7	11.2	3.4
Rural	53.4	40.6	9.2	1.3
Zimbabwe 1999				
Urban	61.8	44.5	7.7	3.7
Rural	43.9	30.3	8.3	2.0

Table 3Use of Contraception in Rural and Urban Areas of Ethiopia,<br/>Malawi and Zimbabwe

Source: Demographic and Health Surveys data

Data on preferred method of contraception in the future from DHS surveys support the idea that injectable use will continue to grow substantially in Ethiopia and Malawi. In Ethiopia, of women who were not using a contraceptive in 2005, but intended to use in the future, 72 per cent said they preferred injectables. In Malawi in 2004, the comparable figure was 60 percent. In contrast, in Zimbabwe in 2005 the comparable number was 27 percent, with 63 percent of the women indication that pills would be their preferred method.

#### **Contraceptive Choice: Method-Specific Characteristics**

The rapid rise of injectable use in Malawi and Ethiopia, and in other African countries as well, raises interesting issues – specifically what are the factors related to this rise, and what are the programmatic implications. Certainly there are characteristics of the method (such as freedom from daily dosing, the potential for covert use, and the convenience of once every three months resupply), which could be attractive to potential users. In fact, many anecdotal reports highlight these advantages. DHS data support the hypothesis that these characteristics are important as well.

Considering **convenience**, it is clear that in programs in their early stage of development, access to facilities for rural women is far more difficult than for women in urban areas and therefore a method requiring fewer visits to a facility would be expected to be popular. One might find more rapid rates of increase of injectable use in rural than in urban areas. Table 3 reveals that in Ethiopia injectable use increased more than five fold in rural areas while in urban areas the rate doubled between the two surveys. In Malawi, the pattern is not quite so dramatic: in urban areas the rate of injectable use remained approximately constant between the two surveys; in rural areas, the rate of use increased slightly between the two surveys. Considering several countries, in Madagascar, Tanzania and Zimbabwe rates of growth in use of injectables in rural areas substantially exceed those in urban areas over the past two DHS surveys.

The potential for **covert or secret use** is another characteristic of injectable use which may help to explain its dramatic rise. Where family planning is not yet normative and where men generally are not supportive of family planning use, this may attract users. Anecdotal evidence, as well as rigorous studies (see Adetunji, 2006) supports this hypothesis. In order to examine this issue with DHS data, responses from men and women about method specific use were compared. We would expect that men would underreport injectable use, as compared to women. This is in fact the case in Malawi and Zimbabwe. In both countries, although men over-reported the use of pills, they tend to under report their spouses use of injectables (Table 4).

One of the ways to check whether wives were secretly using injectables is to look at the proportion of women using injectables but who were reported by their husbands as not using any method. We checked this out using the couples' data files, and the results are interesting (not presented in the Table): in Malawi, 27% of women who reported injectables as their current method were reported as using no method by their spouses. That seems to be a better indicator of secret use. The proportion of women who seem to use the injectables secretly was much lower in Zimbabwe (5%). In Zimbabwe, 30% of men whose spouses were using injections reported them as using the pill. What this result suggests it that secrecy is a factor for use of injectables for a sizeable proportion of women. However, most husbands know that their wives were using some contraceptive method, even if they don't know which one.

Method	Malawi		Zimbabwe		
	Female	Male	Female	Male	
Pill	3.3	3.8	38.6	46.0	
IUD	0.1	0.1	0.7	0.1	
Injections	15.9	11.7	9.1	7.6	
Condom	1.4	5.9	1.8	5.3	
Female Sterilization	4.8	4.8	2.7	2.0	
None	69 5	68.9	43.6	33.6	

Table 4Current Contraceptive Methods Reported by Men and Womenin Matched Couples' Files for Malawi and Zimbabwe

Source: Demographic and Health Surveys data

#### Initiation, Discontinuation and Switching

Considering contraceptive **initiation**, we do not have DHS data on reason for selection of first method or actual first method of use. The fact that in Malawi 64% of the overall prevalence is accounted for by injectables and in Ethiopia the figure is 71% indicates that a very large number of women are choosing injectables as their first method. This assumption is further supported by the age-specific use rates: injectables account for the largest percentage of the method mix in the 15-19 and 20-24 age groups. So a very large number of women are initiating contraception with injectable use: we have evidence that they like the convenience, and the potential secrecy is important to some. We also know that a substantial percentage of these injectable users (approximately 32% in both Ethiopia and Malawi) **discontinue** by the end of the first year. It is interesting to note that higher rates, more in the range of 50%, are found in prospective studies. But if women are concerned about convenience and secrecy, what would they **switch** to, what would be their second method of choice? It is not likely to be condoms, and pills are less convenient and less covert. Indeed choices are limited if the woman wants to space as opposed to limit; IUDs would appear to be a reasonable option but have never been popular in Sub-Saharan Africa. Implants are also an option but are costly and availability is limited in many areas.

Table 5 presents data (based on very small numbers) on what women switched to who switched from injectable use to another method. In each case the vast majority switched to pills. In Ethiopia and Malawi, this change does not predict well for ongoing contraceptive usage, given the rates of pill discontinuation in those countries. After pills, in Malawi the most common method switched to was condoms, and that in Ethiopia implants and periodic abstinence was reported. In Zimbabwe, the relatively small percentage of women who used injectables and switched, switched to pills.

	Ethiopia (2005)	Malawi (2004)	Zimbabwe (2006)
Pills	88.8	55.7	86.6
M. Condoms	2.7	14.5	4.9
Implants	4.0	1.4	3.0
Diaphragm	-	-	1.9
M. Sterilization	-	-	0.9
Periodic	4.5	1.5	-
abstinence			
Withdrawal	-	18.5	0.6
Other	-	8.3	2.2
Total (N)	100.0 (84)	100.0 (50)	100.0 (66)

Table 5Methods adopted by women who switched from injectables

Source: Demographic and Health Surveys data

#### **Programmatic Implications and Issues**

#### 1. Understanding Costs

The likely continued growth in number of injectable users in Africa raises a number of programmatic issues and opportunities, including cost and sustainability. Steiner and Bratt (2009) have calculated the cost per CYP by method for thirteen African countries (Figure 5). This calculation includes commodity costs (see RH Interchange website for commodity costs), costs of materials and supplies, labor time inputs, and annual staff salaries. The height of each bar represents the range of cost per CYP across the 13 countries; the diamond shows the medium value.



Figure 5

Steiner and Bratt, 2009

\* Note: This may understate the cost per CYP of Sino-implant since the calculations assume one implant provides 3.5 CYO; however, the implant is a three year method

While generic DMPA and OCs are approximately the same cost, they are both substantially more expensive than IUDs and the new subdermal implant produced in China, Sino-implant which is growing in availability in Africa. Budgeting, procurement, and logistic support for the provision of adequate supplies of injectables to meet the growing demand will inevitably create challenges for the service delivery system. Further, relatively high discontinuation rates in effect increase the service delivery costs of the method as initial, more time-intensive counseling is repeated more frequently.

## Service Delivery Models/Task Shifting, and Task Sharing

The service delivery mode also affects the cost - to the system and to the user. Whether the method is injected at a facility (public or private), by some community worker, or procured at a pharmacy will very likely affect continuation. When injectables (or other methods for that matter) are made available at the community level, this reduces the time and financial costs to the women, as well as addressing acceptability issues. A number of studies have shown that community delivery of contraceptives and reliability of fieldworker visits reduces discontinuation (Hossain and Phillips, 1996). This approach clearly enhances convenience and the potential for covert use are increased. In terms of cost, the implications of community-based delivery are not clear. While such approaches, frequently referred to as taskshifting or task sharing, typically use lower-level providers or trained volunteers, thereby reducing salary costs, the recurring costs of supporting such a system (including supervision, training, travel, M&E, etc.) have not been well documented. At the outset, policy barriers may need to be addressed, and broader health system issues such as assuring adequate supply at a range of different types of service delivery points, may need to be strengthened.

The expansion of CBD programs in Sub-Saharan Africa, and the use of lower-level providers relates to the issues of task-shifting and task sharing. In the context of severe shortages of doctors, nurses and midwives, the use of community health workers raises the possibility of taking some of the pressure of under-staffed facilities and at the same time bringing the services closer to the clients and, hence, greatly expanding use. Pilot studies in Madagascar and Uganda (FHI, 2007) have already shown the strong impact of this approach on initiation of injectable use; it will be important to monitor the continuation rates associated with this mode of service provision. Work is ongoing in East Africa to demonstrate to policy makers in a number of countries where policy restrictions exist that trained volunteers can counsel appropriately and safely inject Depo in a community setting.

## **Improving Continuation of Injectables**

What seems clear is that community outreach approaches, if well implemented and monitored, can reduce discontinuation by having more time for counseling and assuring the resupply is delivered to the women in a timely and convenient fashion especially in rural areas where access is more difficult. Source of supply is an important issue. Whether the method is injected at a facility (public or private), by some community worker, or procured at a pharmacy will very likely affect continuation. The DHS provides three main categories to describe source of supply: government facilities, private medical, and private other. Unfortunately these categories do not make it possible to determine whether a user is being supplied by a community-based or outreach program (whether public or private). This is important since it would be useful to look at the impact of home- or community-based delivery on initiation, continuation and switching in Sub-Saharan Africa. As mentioned previously, research has demonstrated the positive impact of home delivery of contraceptives on continuation, and it would be extremely helpful to have information on this topic from DHS surveys.

Although we lack comparative data from large scale sample surveys on many issues relating to contraceptive discontinuation generally and injectable discontinuation in particular, a number of operations research and clinical studies have been conducted which guide efforts to improve continuation:

<u>Improvements in clinical practice</u> have the potential to improve injectable continuation. A study by FHI (Steiner et al, 2008) in South Africa found that women were being turned away from clinics for the reinjection because the reinjection window was not being applied correctly, or because they were slightly late, exceeding the two week grace period. In one study in South Africa, among 400 users, one third of those who were late for their reinjections were sent home and one half of those received no temporary method. Clinical research in Uganda, Zimbabwe and Thailand showed it was safe to expand the reinjection window from 2 to 4 weeks and developed a training intervention to modify clinical practice. If applied, the new WHO Medical Eligibility Criteria that include reinjection between 2 weeks before or 4 weeks after the three month injection schedule should reduce discontinuation rates for injectables.

<u>Improvement in technology</u> can also make a difference. The completion of the long-standing effort to improve the delivery system by putting the subcutaneous form of DepoProvera in Uniject should increase the feasibility of provision by lower level provider and perhaps even home and self injection.

By <u>enhancing switching</u>, all-method continuation can be increased. Efforts have been made to improve counseling so that when women adopt a method, they are counseled to return to the provider if they are having problems, and are informed of the possibility of switching to another method. While this counseling should be encouraged as a quality issue, several studies designed to look at the impact of such an intervention on continuation have failed to show significant results (Harbison, 2005). The introduction of new methods expands choice. In particular, increased availability of low-cost options for switching may help reduce all-method discontinuation. The pricing of the new Sino-implant discussed earlier makes it an affordable option, but it requires insertion and removal by a skilled provider. Hence, availability and use are highly limited at the present time.

<u>Matching methods with fertility intentions: spacing and limiting.</u> It is well known that use of permanent methods is very low in Sub-Saharan Africa, and use of long-acting methods (IUDs and implants) is relatively low as well. Many women who want to limit, that is, who do not want additional children, are using short-term methods which have relatively high discontinuation rates. Figure 6 presents information on demand to limit fertility (as opposed to space) and method being used for a number of African countries including Ethiopia. Across all of the countries, of those women desiring no more children, many are using no method, and of those using contraception, many are using short-acting methods. Promoting longacting or permanent methods for women who want no more children can reduce discontinuation, unmet need and unintended pregnancy.



## Demand to limit, using to limit and method mix

Bakamjian, 2009, based on DHS data

All of these issues address an finding highlighted by Curtis and Blanc (1997) over a decade ago in the analysis of contraceptive histories from six countries (Bangladesh, Colombia, Egypt, Indonesia, Peru, and Zimbabwe.) They found that "socioeconomic variables and level of education are ...important in the case of switching and abandonment while in need. Women's SES is negatively related to abandonment in every country except Bangladesh. These findings suggest that cost and access factors may contribute to contraceptive outcomes although they are seldom mentioned as reasons for discontinuation." They suggest that method choice and discontinuation require further analysis, especially focusing on the nature of community level effects, and the role of service availability.

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Country	Survey	No. of Women	No. of Men	Men's Age
	Year	Age 15-49		
Ethiopia	2000	13,367	2,607	15-59
	2005	14,070	6,033	15-59
Malawi	1992	4,850	1,151	20-54
	2000	13,220	3,092	15-54
	2004	1,168	3,261	15-54
Zimbabwe	1994	6,128	2,141	15-54
	1999	5,907	2,609	15-54
	2005	8,907	7,175	15-54

Table A1Some Basic Information about Survey Data Used in thisAnalysis

Source: Demographic and Health Surveys data