Contraceptive prevalence and HIV: two-directional impacts driven policies and politics

Ndola Prata, MD, MSc
Ben Bellows, MPH
Martha Campbell, PhD
Malcolm Potts, PhD

School of Public Health
University of California, Berkeley

Paper submitted to IUSSP 2005

S101: Reproductive health

For correspondence:
Ndola Prata
University of California, Berkeley
1213 Tolman Hall
Berkeley, CA 94720-1690
Tel: (510) 643-4284
Email: ndola@berkeley.edu

ABSTRACT:

The question whether the HIV epidemic has changed the nature and/ or the resources available for family planning programs continues to raise debate. In this paper we explore how international and national policies are driving the response to family planning and HIV prevention programs. Using available literature and data from two DHSs per country, we assess family planning programs' performance and condom use in the era of HIV. We track contraceptive use since the late 80's and map changes in policies, HIV prevalence rates, and resources allocated for both programs. We analyze Zimbabwe and Mozambique. Zimbabwe, a more successful family planning program, relying on the pill did not yet witness an increase in condom use to the level desired by the HIV program. Mozambique, a weaker family planning program in the beginning of the epidemic, is witnessing a significant increase in modern contraception including male condoms.

Introduction

Family planning has long been acknowledged as an effective public health intervention (World Bank, 1993; Barnett, 1994). Offering dual protection against HIV and pregnancy, condom use is the only currently available method of preventing HIV transmission through sexual intercourse (Brady, 2003). Successful promotion and mass marketing have raised demand for condoms (Chaya, 2002). Condoms are now being marketed and sold in places where they have never been before, resulting in many cases in increases in condom use. The campaign has been somewhat successful in increasing condom use outside marriage (UNFPA, 2004). In most countries, this is not the case among married couples. This fact can be seen as a potential problem for countries with generalized heterosexual epidemics.

From their outset, most family planning programs in sub-Saharan Africa are aimed at married couples and do not emphasize condom use as an important method of contraception. However, the benefits of emphasizing condoms, as a contraceptive might be greater for married couples. Ali et al. (2004) showed that a shift in contraceptive method like from the pill to the condom would not result in increases in unwanted pregnancies. Furthermore, available evidence shows that it is easier to negotiate condom use for pregnancy prevention than for STDs/HIV protection (Smith, 2004). The question to be asked is why are family planning programs not capitalizing on this fact to increase contraceptive prevalence by renewing the emphasis on condoms?

The question whether the HIV epidemic has changed the nature and or the resources available for family planning programs continues to raise debate. Ross (2002) analyzed family planning programs in the context of HIV crisis for 12 countries in sub-Saharan Africa. In the report Ross concludes that a review of national level trends gives no evidence (up to 2002) of significant effect of HIV/AIDS responses on the provision of family planning services. Ross points out that the response to HIV crisis has clearly caused changes in donor priorities, personnel, and logistics systems, but with no compelling evidence that family planning program performance has suffered.

Family planning programs have been through increased scrutiny over time. Their policies are not always evidence-based, and changes tend to be slow or negligible. If recent increases in condom use are merely due to STDs/HIV prevention programs, did family planning programs that focused on other modern methods (such as the pill) and married couples, somehow interfere with the course of condom use and therefore the low rates we see today in highly affected HIV countries? Can family planning policies, commodity availability, and service accessibility influence in any way the uptake of condom use for STDs/HIV prevention?

Using available literature and data from two Demographic and Health Surveys (DHS) and Adolescent and Young adult Surveys, we assess family planning programs' performance and condom use in the era of HIV. We track contraceptive use since the late 80's and map changes in policies, HIV prevalence rates, and resources allocated for both programs. The two country-cases, Zimbabwe and Mozambique were chosen due to their stage of family planning program maturity when countries where hit by the HIV epidemic. Zimbabwe, a more successful family planning program, relying on the pill did not yet witness an increase in condom use to the level desired by the HIV program. Mozambique, a weaker family planning program in the beginning of the epidemic, is witnessing a significant increase in modern contraception including male condoms.

Family Planning Programs

In Mozambique, the government established in 1980 the national family planning (FP) program (INE, 1998). The program was designed to be implemented while integrated with the maternal and child health. The aims were to reduce maternal and infant morbidity and mortality (IPPF, 2005). It was starting in 1980 that family planning curricula was added to the training of health personnel at all levels. Overall, FP methods have been delivered through clinics, mostly pills and injectables. The 1997 and 2003

DHSs show an increase in modern methods use from 5.4% to 14.2% in 2003 (Fig1). Figure 1 also shows modern methods mix. The largest change from 1997 to 2003 was observed for condoms, even though the 2003 condom contribution (26%) to the overall modern methods prevalence was behind pills (38%) and injectables (30%). Because FP services are mostly delivered through clinics, major constraints to increase access are the country's poor health care infrastructure, with lack of sufficient trained health personnel (IPPF, 2005). Condoms are mostly delivered through the HIV/STD program, including the Social marketing program launched in 1996. In Mozambique, contraceptive use by unmarried women contributes greatly to the overall prevalence. With the exception of injectables, the use of modern methods for married women is consistently lower than the prevalence for all women (Appendix Table 1), especially the use of condoms (1.1% for married women and 3.7% for all women). It is among young women that the use of modern methods is growing fast. The contraceptive prevalence among 15-24 year olds in 2001 was 16% but among married women of the same age only 4%. Of those (15-24 year olds) reporting some contraceptive use, nearly 2/3 reported using condoms, followed by use of the pill (22%) (INE, 2003).

Figure 1 about here

Modern family planning services were introduced in Zimbabwe in 1953, but it was in 1965 that the Family Planning Association of Rhodesia (FPAR) was established. After gaining political independence in 1980, the Government of Zimbabwe transformed FPAR into a parastatal organization under the Ministry of Health and Child Welfare (MOH&CW), renaming it the Zimbabwe National Family Planning Council (ZNFPC). The ZNFPC is responsible for guiding family planning policy development, and also to implement two nation-wide service delivery programs: the Community-Based Distribution (CBD) program, and a small number of fixed and mobile family planning clinics. This program expanded rapidly having over 800 CBDs nation-wide. Since its inception, the ZNFPC CBD program has made significant and well-documented contributions to the demand for and use of family planning in Zimbabwe (Maggwa et al, 2001). Figure 2 shows the contraceptive prevalence for modern methods and the method

mix from the 3 available DHSs for Zimbabwe. Overall, use of modern methods has been increasing, making Zimbabwe a country with one of the highest contraceptive prevalence in sub-Saharan Africa. The FP program in Zimbabwe relies entirely on the pill, and even though the overall pill contribution to contraceptive prevalence has been decreasing over time (86%, 76%, and 67% for 1988, 1994, and 1999 respectively), it continues to be the most used modern method. The use of injectables has been increasing over time, and so did condom use from 1988 to 1994. Since 1994, condom use for FP remains low at 2%. Delivery of contraceptive methods has been done mostly through the public sector CBD program, clinics (in that order), and more recently other clinical services provided by NGOs and other private providers, and through the social marketing program. The CBD program has traditionally focused on reaching older, married women, and it has done so successfully (Maggwa, et al., 2001). The vast majority of women using modern contraception are married, with the exception of condom use (Appendix Table 1). In both years 1994 and 1999, condom use rates for married and all women in Zimbabwe was around 2%.

Figure 2 about here

STD/ HIV programs

Since 1988 the Mozambican Ministry of Health has been involved in a significant STD/HIV control program (IPPF, 2005). HIV sentinel surveillance of antenatal clinic attendees began in Maputo, the capital and major urban area, in 1988. In 1992 it was established in 5 sites in provincial towns and then was expanded in 2001-2002 to include 36 sites distributed throughout all of the 11 provinces. Overall HIV prevalence has been increasing in Mozambique. The estimated adult prevalence for 2003 is 12.2% (UNAIDS, 2004). Figure 3 shows the recent trends in HIV prevalence (median rates) for pregnant women of major urban areas (UNAIDS, 2004). HIV prevalence increased from less than 1 percent in 1988 to 18 percent in 2002 among antenatal clinic attendees tested in Maputo City. Outside of Maputo City, 12.3% of antenatal clinic attendees tested were HIV positive. Among women aged 15-24 years attending antenatal clinics, 15% in Maputo

City were HIV positive and 12% percent in the other sites were HIV positive (UNAIDS, 2004). Between 1987 and 1997, HIV prevalence among male STD clinic patients tested in Maputo increased from 3 to 19 percent. Among female STD clinic patients tested in Maputo, HIV prevalence increased from 5 percent in 1993 to 8 percent in 1997. In 1999, 15 percent of STD clinic patients tested in Maputo were HIV positive. Outside of Maputo, in 1997, HIV prevalence among both male and female STD clinic patients tested was similar, around 26 to 27 percent (UNAIDS, 2004). In Mozambique condoms are distributed primarily through the social marketing program (most of 15-24 year olds using condoms reported getting them from the social marketing program (INE, 2003), but they are available in clinics (for STD and antenatal visits) and in voluntary and counseling centers (VCT). The use of condom by adolescents and young adults at last sex is much higher that the national average for both males and females, especially among non-cohabiting partners (Table 1), and intercourse with casual partners (INE, 2003).

Figure 3 about here

Information on HIV prevalence among antenatal clinic (ANC) attendees is available from Zimbabwe since 1989. In the major urban areas, Harare, Bulawayo, and Chitungwiza, HIV prevalence among antenatal clinic attendees tested increased from 10 percent in 1989 to 30 percent in 1995 (UNAIDS, 2004). The estimated adult prevalence for 2003 is 24.6% (UNAIDS, 2004). Figure 3 shows the recent trends in HIV prevalence (median rates) for pregnant women of major urban areas (UNAIDS, 2004). Sentinel surveillance information among ANC attendees in rural areas such as communal lands, small-scale commercial farms, is available since 1990. Since 1990, median HIV prevalence among ANC women tested increased from 16% in 1990 to 20% in 1997. From 1997 to 2002, median HIV prevalence ranged around 20%. In 2000, age detail of HIV prevalence came from 19 sites and included major urban areas. In other areas, such as large-scale commercial farms, administrative centers, mines, etc., HIV prevalence is much higher. HIV among ANC attendees tested in these areas has been around 35% since 1997 (UNAIDS, 2004). However, it is among STD patients that HIV infection is the highest. In Harare, HIV prevalence among STD clinic patients tested increased from 52% in 1990 to

71% in 1995. In 1996, HIV prevalence was 53% among female STD clinic patients. Outside of Harare, median HIV prevalence among STD clinic patients was 6% from 2 testing sites in 1987. Among 15 testing sites in 1991, median HIV prevalence reached 46%. In 1995, median HIV prevalence from 7 testing sites was 65% (UNAIDS, 2004). A May 2002 report from Zimbabwe's National AIDS Council and several of its partners posit that the low use of condoms may be explained by the increasing level of stigma associated with condoms in Zimbabwe and the subsequent difficulty, for both men and women, in negotiating their use (Garbus, 2003). Nevertheless, reported condom use at last sex among 15-29 years old in Zimbabwe (Table 1), particularly among non-cohabiting partners is much higher than the overall condom prevalence presented in Figure 2.

Table 1 about here

Overall HIV and Family Planning Program Performance

To assess the HIV/AIDS program performance we use the AIDS Program Effort Index (API). The API is a composite index designed to measure political commitment and program effort for prevention and care, by capturing program's inputs and outputs. The index scores is made of 10 components: political support, policy formulations, organizational structure, program resources, evaluation and research, legal and regulatory aspects, human rights, prevention programs, care programs, and service availability (for more on the methodology see USAID, UNAIDS, WHO, and the POLICY Project, 2003).

Figure 4 shows trends in API from 1998 to 2003. Zimbabwe experience a slight decrease in API from 63 to 61, even though it can still be considered to have a strong AIDS program[1]. This decline is mostly due to declines in the components related to prevention programs (from very strong to weak); organizational structure (from strong to weak), (details in Appendix Table 2). Mozambique AIDS program on the other hand registered

[1] Countries are categorized has having a weak AIDS program if the overall score is 36-50; moderate is 52-60; strong is 61-69; and very strong is 70-82 (USAID, UNAIDS, WHO, and the POLICY Project, 2003).

an increase in the API, from a moderate (60) to a strong (68) program (Figure 4). Almost all components increased its score, but the largest changes were observed in program resources (from weak to strong); and monitoring and evaluation/research, and prevention programs (both from moderate to very strong), (details in Appendix Table 2). Comparing with Eastern and Southern Africa region, we can observe in Figure 4 that until 2000, both country's AIDS programs scored above the regional average, and Mozambique continue to do so in 2003, while Zimbabwe scored below the regional average.

Figure 4 about here

Indices of effort by large-scale family planning programs have been measured periodically since 1972. These scores are intended to capture program effort or strength (FPE), independent of outputs such as contraceptive use or fertility change (Ross, 2001). Its components include: policy, services, evaluation, and method availability. In Figure 5 we present trends in the family planning program effort scores for Mozambique, Zimbabwe and the Eastern and Southern Africa regional average. Mozambique's FPE is considered weak (overall score in 1999=43)[2]. However, in the mid-80s the program was considered almost non-existent (FPE score of >20), but has steadily improved to reach a score of 43 in 1999. All components of the FPE registered relative improvements, with the most significant change in the "evaluation" component (from a weak to moderate), (see details in Appendix Table 3).

Zimbabwe saw its FPE increase to a level of strong program until 1994 (score 68). In 1999, the FPE was considered moderate (score 61), even though still above the regional average. The two components that significantly reduced its scores from strong to moderate were "policy" and "services" (Appendix Table 3).

Figure 5 about here

[2] Countries are categorized has having a very weak or non-existent family planning program if the overall score is 0-20; weak 21-45; moderate 46-66; and strong 67 + (Mauldin & Ross, 1991).

Overall access[3] to contraceptive methods in sub-Saharan Africa has improved (Ross, 2002). From the available data for 1994 and 1999, it appears that condom access in Zimbabwe stabilized at the best, while in Mozambique increased dramatically (Appendix Figure 1).

An analysis of family planning content in HIV/AIDS, VCT and PMTCT policies in 16 countries (including Mozambique and Zimbabwe) found major gaps in the inclusion of FP in HIV prevention services (Strachan, et al., 2004). From that review, Mozambique's HIV/AIDS policy makes no reference to FP. However, VCT and PMTCT guidelines do mention family planning in their policies and include FP services. Zimbabwe's HIV policy does not mention family planning, except for the part where condoms are mentioned as an important method for protection against STD/HIV, cervical cancer, and that can also serve as contraceptives.

Trends in Resources Available for Family Planning and HIV/AIDS

Data on resources available for both HIV and Contraceptive supply by country is hard to get and sometimes even difficult to separate from reproductive health/ population programs or maternal health programs. From the limited sources available, we were able to verify that in 1999 overall resources for contraceptive supply from the major donors (UNFPA and USAID) declined (Appendix Fig 2). UNFPA tracking of expenditures by contraceptive method also shows a decline in all methods in 1999, more pronounced for condoms, which created a lot of concern (Appendix Table 4). Since 1999, reports show improvements in donor support for condoms up until 2001. The 2002 figures show again a decrease in condom support similar to those in 1999. Figure 6 shows resources for population programs in Mozambique and Zimbabwe from 1992 to 2002. With the

[3]"Ready and easy access" means that the recipient spends no more than an average of two ours per month to obtain contraceptive supplies and services. Easy access also implies that the cost of contraceptive supplies is not burdensome; to meet this criterion, a one-month supply of contraceptives should cost less than 1% of a month's wages. Family planning / contraceptive access scores are calculated from the "Family Planning Effort surveys in 1994 and 1999. The definition of "contraceptive access" can be found in the Ross (2001).

exception of the period 1997-1999, per capita dollars available for Mozambique is steadily increasing. The same period of resource decline (1997-99) can be observed in Zimbabwe, which coincides with the decline in funds from the major donors mentioned above. Since 1999 Zimbabwe's per capita funding for population programs has on average plateaued.

Figure 6 about here

Overall HIV/AIDS programs receive a large share of the development assistance. An analysis of global assistance for health, AIDS, and population done by MacKellar (2005) concluded that HIV/AIDS accounted for 25.9% of total development assistance for health, AIDS and population in 2003, while maternal and perinatal health accounted for 16%. MacKellar also notes that HIV/AIDS accounted for 5.8% of the burden of disease in 2001, compared to 8.3% for maternal and perinatal conditions[4]. Part of the assistance made available for Mozambique and Zimbabwe through the Global Fund to fight AIDS Malaria and Tuberculosis is presented in Appendix Table 5. Even though these funds represent only part of the all available funds for HIV/AIDS programs[5] in these two countries, it is clear that AIDS programs will continue to have more funds than any other health program. This is in part understandable due to the "priority" given to the AIDS epidemic.

Table 2 shows condom support for both Mozambique and Zimbabwe from 1996 to 2002. Overall, the number of condoms per male 15-59 years old appears to be increasing for the observed time period in Zimbabwe. In contrast, Mozambique's support for condoms has been very low and steady. It is important to note that we use data from UNFPA tracking system, and they note that sometimes the recording of provision of condoms is assigned to one single year while the supply is made for a two-year cycle. This makes even of more concern the fact that there are insufficient condoms to protect most of the sexual

[4] Maternal and perinatal conditions category includes "reproductive health care", (for more on this see MacKellar, 2005).
[5] Other sources of support are the President's Emergency plan for AIDS Relieve (for Mozambique), World Bank, and funds from other European countries were not accounted for.

acts in countries hardly hit by the HIV epidemic. This fact is consistent with a recent report by the UNFPA (2004) on the State of the World Population 2004. The report mentions massive shortfalls in condom supply compared with needs.

Table 2 about here

Discussion

Evidence shows that HIV programs are better funded than population programs, and there is reason to believe that they will continue to be in the future. The response to the HIV epidemic has changed funding priorities, with implications on personnel and logistics. However, for the two countries assessed in this paper we found no evidence so far that family planning program performance has suffered. Even though the Zimbabwean FPE suffered a slight decrease, so did the API for the same period. However, long-term effects might change programs if attempts to integrate family planning into HIV prevention programs continue to fail. In most countries hardly hit by the HIV epidemic, these two programs are treated as unrelated areas of intervention. Zimbabwe, one of the countries reviewed in this paper is a good example. Family planning is a strong program in Zimbabwe and can play an important role in preventing mother to child transmission (Best, 2004), but it is not mentioned in HIV policy or in the VCT or PMTCT guidelines. In contrast, Mozambique with a weaker family planning program has developed guidelines for VCT and PMTCT programs that are considered comprehensive regarding attention to family planning.

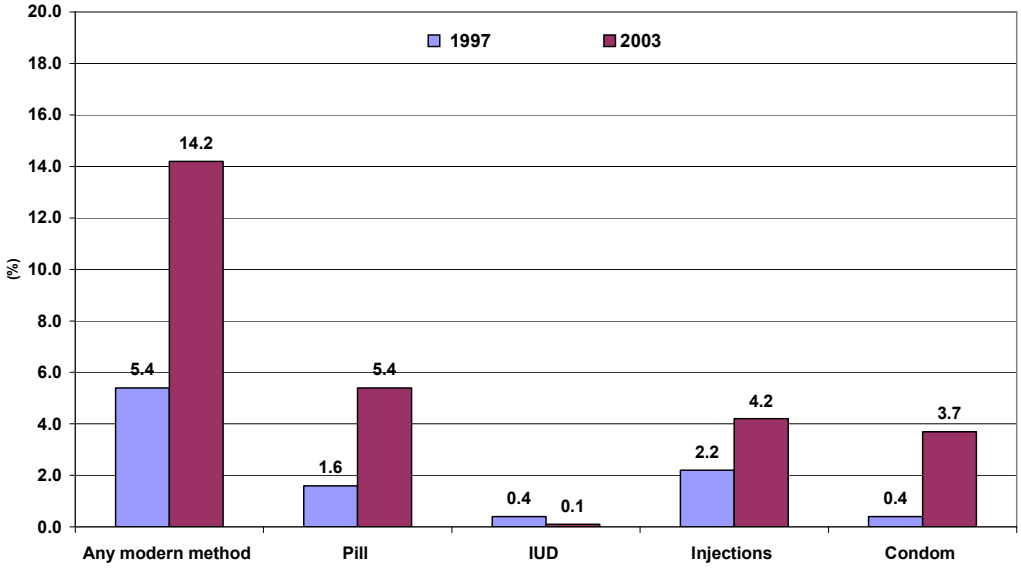
Until an effective microbicide is commercially available, condoms represent the most effective means to achieve the dual aims of reduction in HIV infection and unwanted pregnancy. Family planning policies in Zimbabwe have successfully increased demand for and use of family planning, but the same policies may be interfering with an important part of HIV prevention program. It is now time for the Zimbabwean family planning program to promote the concept of condom dual protection and dual method use, by using the same CBD strategy used for pill promotion for married couples.

Mozambique on the other hand, has a weak family planning program and a strong HIV program according to FPE and API scores respectively. Policies and guidelines are in place for the integration of both programs, and the available results are pointing to the right direction. Condom use is rising, mostly due to the HIV program, and they also make a significant contribution to the contraceptive prevalence. However, because most of the condoms are distributed through the social marketing campaign, the message focus only on STD/HIV prevention. To increase condom use, especially in rural areas with limited access to clinics (the most used mode of contraceptive distribution in the country), the Mozambican family planning program should focus its campaign on the dual protection offered by condoms.

Although further studies are warranted, we believe that in countries with high HIV prevalence, making condoms more available, promoting then extensively focusing on its dual role, and helping to overcome social and personal obstacles that limit their use, are some of the actions that should be lead by both family planning and HIV prevention programs.

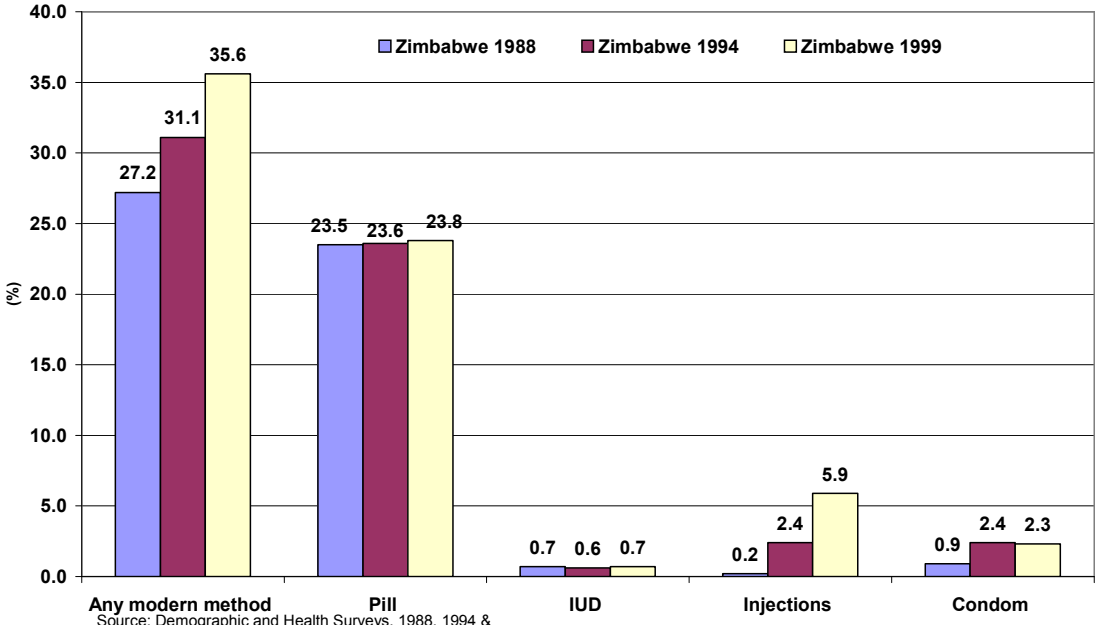
Tables and Figures

Fig 1: Contraceptive method mix. Mozambique 1997-2003.



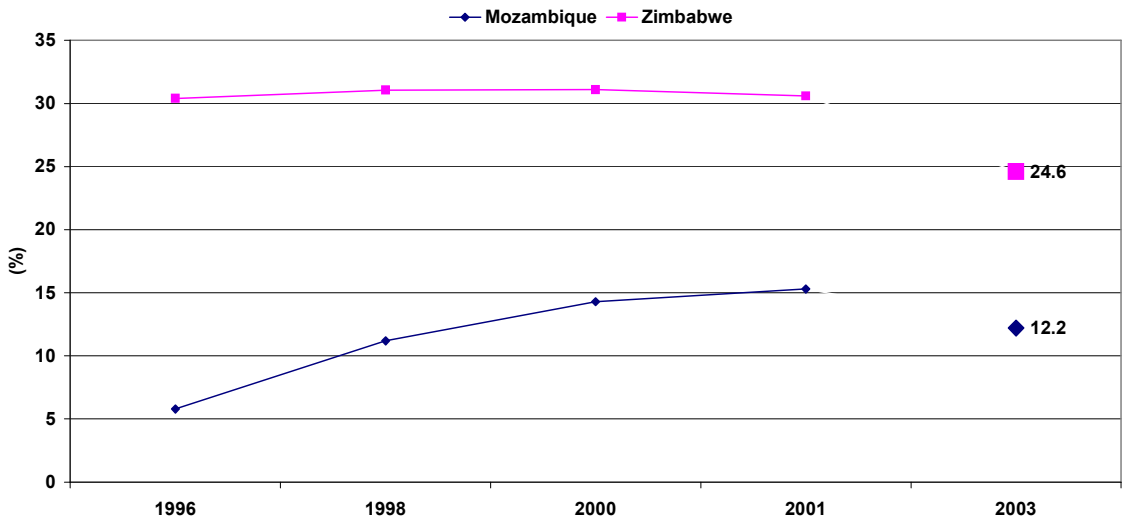
Source: Demographic and Health Surveys, 1997 & 2003.

Fig 2: Contraceptive method mix. Zimbabwe 1988-1999



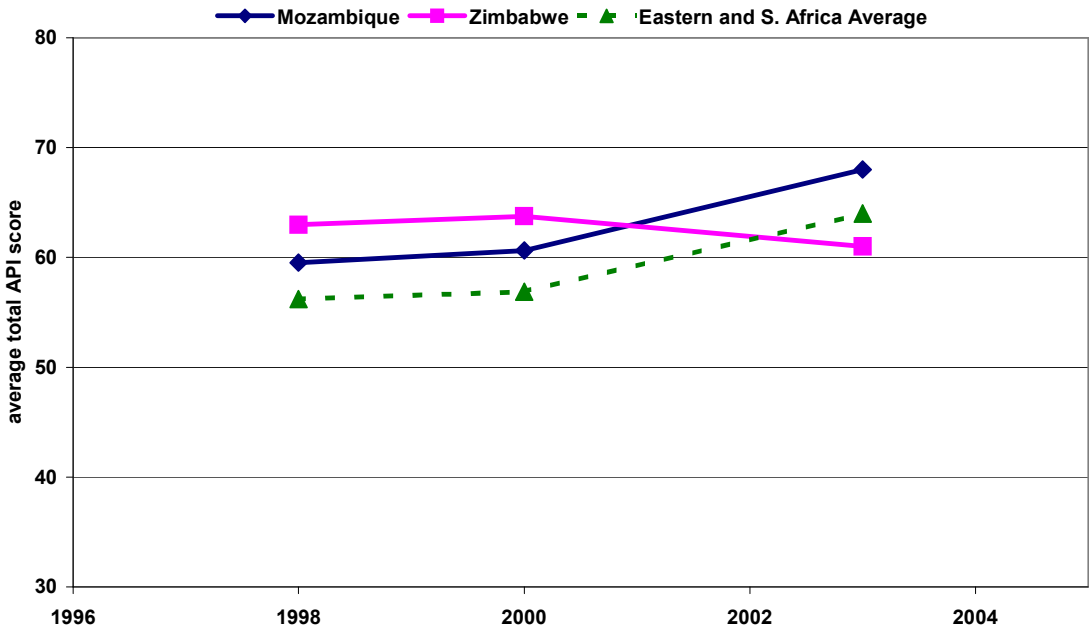
Source: Demographic and Health Surveys, 1988, 1994 &

Fig 3: Trends in HIV prevalence among pregnant women.



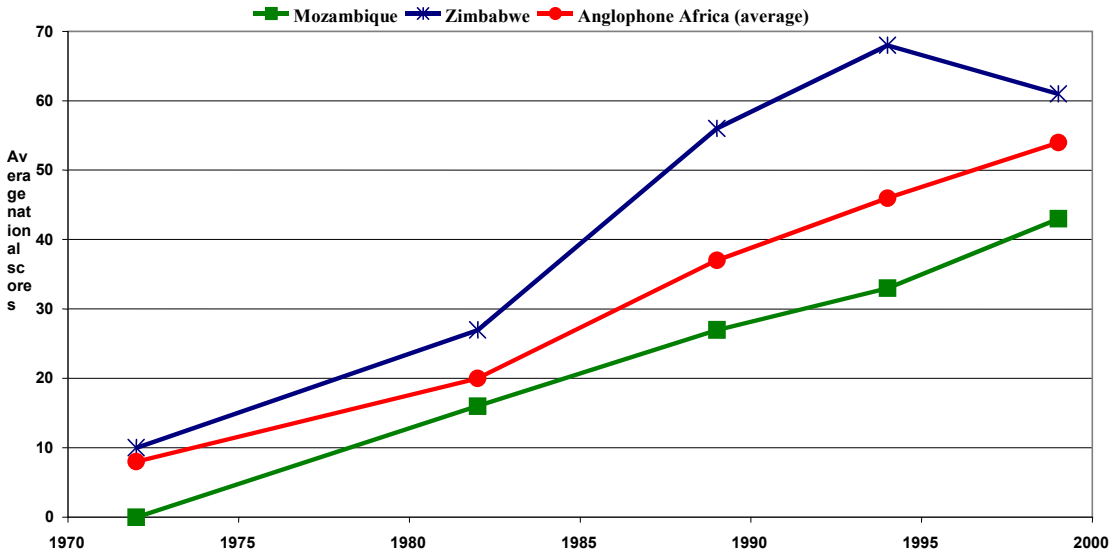
Source: UNAIDS, 2004 (Epidemiological fact sheets on HIV/AIDS and STDs).
Note: Median prevalence rates are given for pregnant women from major urban areas.

Fig 4: Trends in AIDS Program Effort Index (API) 1998-2003



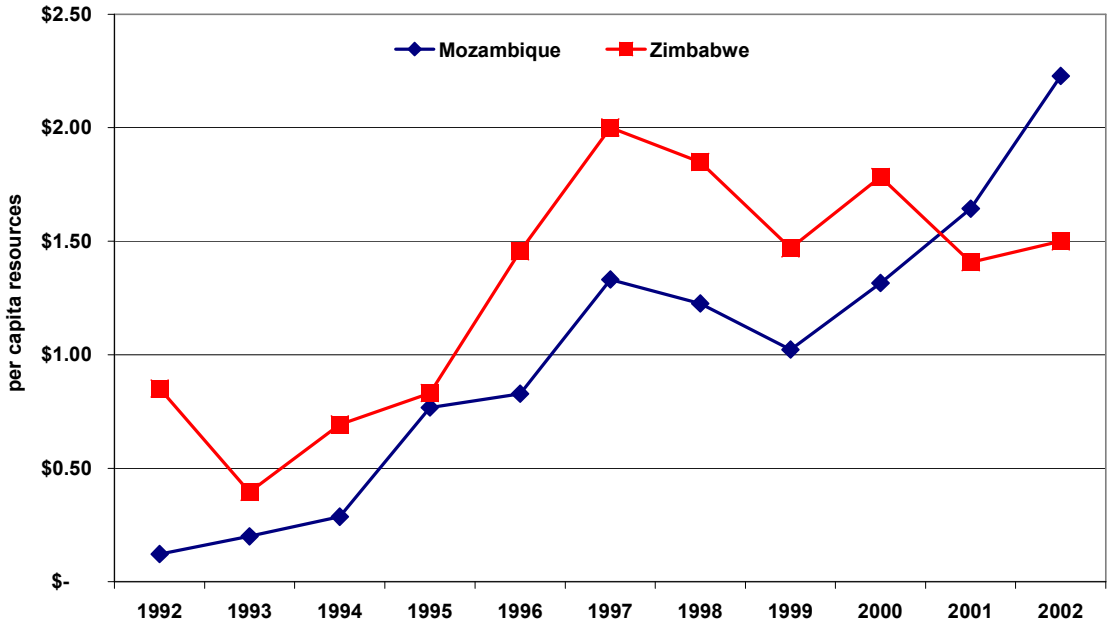
Source: Appendix table 2.

Fig 5: Family Planning Program Effort Scores



Source: Ross J, Stover J.2001. The Family Planning Program Effort Index: 1999 Cycle

Fig 6: Population program funding available



Source: UNFPA, 2002. Population Program Resources.

Table 1: Percent reporting Use of Condoms

	Condom use at last sex		condom use with non-cohabiting partner	
	Females	Males	Females	Males
Zimbabwe (15-29)	15	47	42	62
Mozambique (15-24)	10	22	30	28

Source: Zimbabwe Young Adult Survey, 2001-2002: Preliminary Report.
Mozambique Young Adult Survey, 2001: Final Report.

Table 2: Country-specific condom support, 1996-2002 (in pcs)

	1996		1997		1998		1999		2000		2001		2002	
	condoms (pcs)	per capita (males 15-59)	condoms (pcs)	per capita (males 15-59)	condoms (pcs)	per capita (males 15-59)	condoms (pcs)	per capita (males 15-59)	condoms (pcs)	per capita (males 15-59)	condoms (pcs)	per capita (males 15-59)	condoms (pcs)	per capita (males 15-59)
Mozambique	12,504,000	3.0	16,095,332	3.8	24,396,000	5.6	20,576,100	4.7	7,420,000	1.7	22,870,111	5.0	20,823,803	4.5
Zimbabwe	22,387,854	7.9	42,171,618	14.5	31,000,000	10.4	62,471,440	20.3	12,000,000	3.80	140,026,884	43.3	27,337,099	8.3

Source: UNFPA, 20002.

Appendix:

Table 1: Contraceptive prevalence and method mix.

ALL WOMEN 15-49	Any method	Any modern method	Pill	IUD	Injections	Condom	Female sterilization	Male sterilization	Implants	Any traditional method
Mozambique 1997	6.0	5.4	1.6	0.4	2.2	0.4	0.7	-	-	0.7
Mozambique 2003	18.2	14.2	5.4	0.1	4.2	3.7	0.7	-	-	-
Zimbabwe 1988	32.2	27.2	23.5	0.7	0.2	0.9	1.7	0.1	-	5.0
Zimbabwe 1994	35.1	31.1	23.6	0.6	2.4	2.4	1.7	0.1	0.1	4.0
Zimbabwe 1999	37.7	35.6	23.8	0.7	5.9	2.3	1.9	0.1	0.4	2.1

MARRIED WOMEN 15-49	Any method	Any modern method	Pill	IUD	Injections	Condom	Female sterilization	Male sterilization	Implants	Any traditional method
Mozambique 1997	5.6	5.1	1.4	0.3	2.3	0.3	0.7	-	-	0.5
Mozambique 2003	16.5	11.7	4.9	0.1	4.8	1.1	0.9	-	-	-
Zimbabwe 1988	43.1	36.1	31.0	1.1	0.3	1.2	2.3	0.2	-	7.0
Zimbabwe 1994	48.1	42.2	33.1	1.0	3.2	2.3	2.3	0.2	0.2	6.0
Zimbabwe 1999	53.5	50.4	35.5	0.9	8.1	1.8	2.6	0.1	0.5	3.2

Source: Demographic and health surveys for respective countries and years.

Table 2: AIDS Program Effort Index 1998, 2000 and 2003

AIDS Program effort index 2003

	Political support	Policy and planning	Organizational structure	Program resources	M&E, research	Legal and regulatory	Human rights	Prevention Programs
Mozambique	79	74	82	61	72	75	53	72
Zimbabwe	80	79	39	52	60	70	37	48
Eastern and S. Africa Average	80	82	68	57	58	65	44	67

Source: USAID, UNAIDS, WHO, and the POLICY Project, 2003.

AIDS Program effort index 2000								
	Political support	Policy and planning	Organizational structure	Program resources	M&E, research	Legal and regulatory	Prevention Programs	Care programs
Mozambique	63	71	67	50	57	82	56	39
Zimbabwe	61	72	67	43	61	81	73	52
Eastern and S. Africa Average	62	66	63	40	52	79	58	35

Source: UNAIDS, USAIS and the POLICY Project, 2000.

estimated API scores 1998	Political support	Policy and planning	Organizational structure	Program resources	M&E, research	Legal and regulatory	Prevention Programs	Care programs
Mozambique	62	70	66	49	56	81	55	38
Zimbabwe	60	71	66	43	61	81	72	51
Eastern and S. Africa Average	61	65	62	40	52	79	58	35

Source: Estimated by the authors from Ross, 2002, Table 1, reported changes in API scores, 1998 to 2000.

Table 3: Family Planning Program Effort Index 1994 and 1999

FPE 1994 and 1999	Policy	Services	Evaluation	Method Availability	Total
Mozambique 1994	47	27	32	30	33
Mozambique 1999	49	37	52	40	43
Zimbabwe 1994	69	71	82	52	68
Zimbabwe 1999	61	63	79	49	61

Sources: Ross, J., & Mauldin, W. 1996. Family planning programs: efforts and results, 1972-94;
Ross, J., & Stover, J. 2001. The Family Planning Program Effort Index: 1999 Cycle

Table 4: Expenditures by Method, US $million (1992-2002)

Method	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Totals	Percent
Condom	21.3	39	37.8	60.6	68	50.9	51.4	37.9	46	91.2	94.9	599	37.3
OC	33.7	48.2	43.8	46.9	63.9	30.2	34.4	44.4	71	58.1	47	521.6	32.5
Injectable	10.5	15.9	16.8	18	21.8	37.8	34.3	31.5	29.5	57.7	36.5	310.3	19.3
IUD	9.5	5.6	8.7	5.3	9.2	6.3	9.7	6.5	2.9	6.6	6.4	76.7	4.8
VFT	2.5	2.8	3.4	3.4	4.2	3	2.6	1.9	1.7	2.1	2	29.6	1.8
Implant	1.6	1.5	3.9	2.9	3.3	4	10.4	8.5	2.8	5.1	5.9	49.9	3.1
Foam/Jelly/Others	1.5	0.2	0.2	2.1	0.1	5.3	0.4	0.1	0.2	0.4	0.1	10.6	0.7
Diaphragm			0.1		0.1					0	0	0.2	0.0
EC pill					1.5					1	0.4	2.9	0.2
Female condom										2	4.2	6.2	0.4
Totals	80.6	113.2	114.7	139.2	172.1	137.5	143.2	130.8	154.1	224.2	197.4	1607	100.0

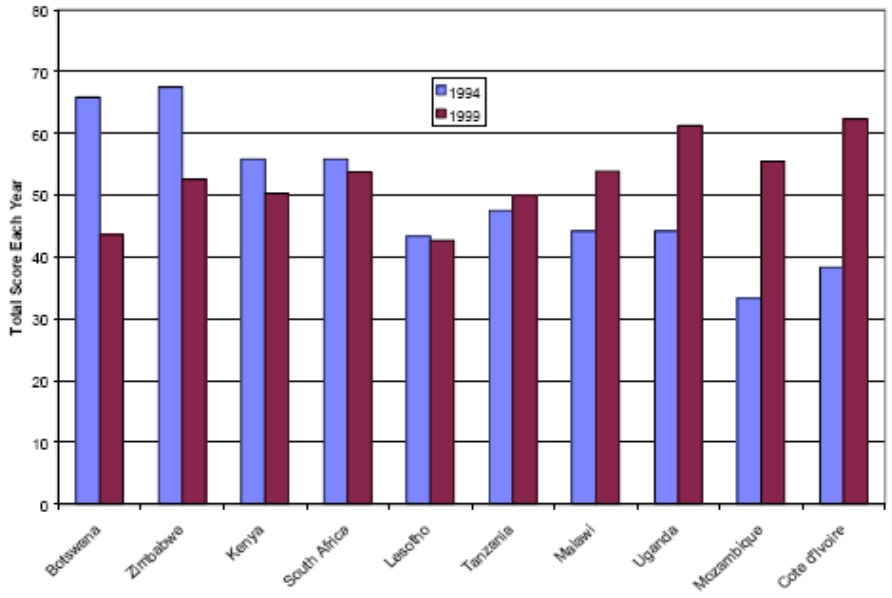
Source: UNFPA, 2002

Table 5: Global Fund Resources Available

Country (1)	Rnd	Disease Component	Source	Approved Grant Amount (USD) (3)	Total Lifetime Budgets (USD)	Program Start Date	Grant Amount (USD)	Amount Disbursed to Date (USD)	Date of Most Recent Disbursement	Status (4)
Mozambique	2	HIV/AIDS	CCM	$ 29,692,640 (G1)	$ 109,338,584	01-Jul-04	**$ 7,732,956**			Grant Agreement Signed
						15-Apr-04	**$ 21,959,684**	**8,475,099**	21-Dec-04	Disbursement 2
	2	Malaria	CCM	$ 12,217,393 (G1)	$ 28,149,603	01-Jul-04	**$ 12,217,393**	**6,653,718**	21-Dec-04	Disbursement 1
Mozambique	2	Tuberculosis	CCM	$ 9,202,140 (G1)	$ 15,201,801	01-Jul-04	**$ 9,202,140**	**1,255,750**	21-Dec-04	Disbursement 1
TOTAL				**$ 51,112,173**	**$ 152,689,988**		**$ 51,112,173**	**$ 16,384,567**		
Zimbabwe	1	HIV/AIDS	CCM	$ 10,300,000 (G1)	$ 14,100,000	01-May-05	**$ 10,300,000**	**4,333,341**	27-Apr-05	Disbursement 1
	1	Malaria	CCM	$ 6,716,250 (G1)	$ 8,877,500	01-Sep-03	**$ 6,716,250**	**5,276,938**	14-Feb-05	Disbursement 2
				$ 17,016,250	**$ 22,977,500**		**$ 17,016,250**	**$ 9,610,279**		

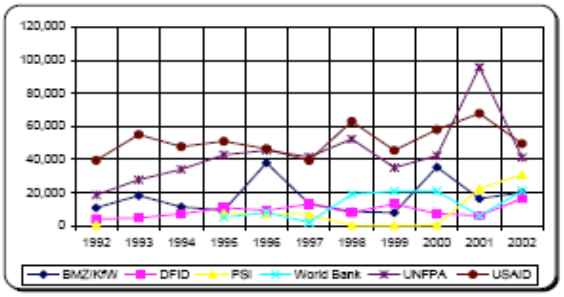
SOURCE: http://www.theglobalfund.org/search/portfolio.aspx?countryID=ECU

Appendix Figure 1: Access to Condoms, 1994 and 1999, in Selected sub-Saharan Africa Countries.



Source: Ross, 2002

Appendix Figure 2: Donor Support for contraceptive supply: 1990-2002, in US$000.



References:

Ali, M. M., J. Cleland, et al., 2004. Condom use within marriage: a neglected HIV intervention. Bull World Health Organ **82**(3): 180-6.

Barnett, B., 1994. Family planning reduces mortality. Network **14**(3): 4-7.

Best, K. 2004. Family Planning and the Prevention of Mother-to-Child Transmission of HIV: A review of the Literature. Family Health International. Working Paper Series. April, 2004. No. WP04-01.

Brady, M. 2003. "Preventing Sexually Transmitted Infections and Unintended Pregnancy, and Safeguarding Fertility: Triple Protection Needs of Young Women," p. 137. *Reproductive Health Matters* 11(22): 134-141.0

Chaya, N., K.-A. Amen, et al. 2002. Condoms Count: Meeting the Need in the Era of HIV/AIDS, Population Action International**:** 44.

CSO, 1989. Zimbabwe Demographic and Health Survey 1988. Central Statistical Office, Harare, Zimbabwe, Ministry of Finance, Economic Planning, and Development, Harare, Institute for resource Development/Macro System Inc. Calverton Maryland. December 1989.

CSO, 1995. Zimbabwe Demographic and Health Survey 1994. Central Statistical Office, Harare, Zimbabwe, Macro International Inc. Calverton Maryland. September 1995.

CSO, 2000. Zimbabwe Demographic and Health Survey 1999. Central Statistical Office, Harare, Zimbabwe, Macro International Inc. Calverton Maryland. December 2000.

Global Fund, 2005 http://www.theglobalfund.org/search/portfolio.aspx?countryID=ECU

INE, 1998. Moçambique Inquerito Demografico e de Saude 1997. Instituto Nacional de Estatistica, Macro International Inc. Calverton, Maryland, USA. Agosto 1998.

INE, 2003. Inquerito Nacional sobre Saude Reproductiva e Comportamento Sexual dos Adolescentes e Jovens (INJAD). Relatorio Final. Instituto Nacional de Estatistica, Agosto 2003.

INE, 2004. Mozambique Demographic and Health Survey 2003. Preliminary Report. Instituto Nacional de Estatistica, Ministry of Health, MEASURE DHS+ ORC Macro. Calverton, Maryland, April 2004.

IPPF, 2004. Country Profile: Zimbabwe. In: http://ippfnet.ippf.org/pub/IPPF_Regions/IPPF_CountryProfile.asp#Sexual; 2004.

IPPF, 2005. Country Profile: Mozambique. In: International Planned Parenthood Federation; 2005.

MacKellar, L. 2005. Priorities in Global Assistance for Health, AIDS, and Population. Population and development Review 31(2): 293-312. June, 2005.

Maggwa, B, Askew, I., Marangwanda, C. et al.2001. An Assessment of the Zimbabwe National Family Planning Coincil's Community Based Distribition Program. April, 2001.

Mauldin, W, Ross, J., 1991. Family Planning Programs: Efforts and Results, 1982-89. Studies in Family Planning, Vol 22(Nov-Dec, 1991), 350-367.

Ross J, Stover J.2001. The Family Planning Program Effort Index: 1999 Cycle. Family Planning Perspectives Volume 27, Number 3, 119-129. September 2001.

Ross, J. 2002. Family Planning programs in the Context of the HIV Crisis, With Reference also to Maternal Health Programs. The Futures Group. POLICY Project.

Ross, J., & Mauldin, W. 1996. Family planning programs: efforts and results, 1972-94. Studies in Family Planning, 27(3), 137-147.

Smith DJ., 2004. Premarital sex, procreation, and HIV risk in Nigeria. Studies in Family Planning. 2004 Dec;35(4):223-35.

Strachan, M, Kwateng-Ado, A, Hardee, K et al., 2004. An Analysis of Family Planning Content in HIV/AIDS, VCT, and PMTCT Policies in 16 Countries. POLICY Working Paper Series No.9. January, 2004.

UNAIDS, USAID and the POLICY Project, 2000. Measuring the Level of Effort in the National Response to HIV/AIDS: The AIDS Program Effort Index (API).

UNAIDS/WHO. 2004. Mozambique Epidemiological fact Sheets on HIV/AIDS and Sexually Transmitted Diseases.

UNAIDS/WHO. 2004. Zimbabwe Epidemiological fact Sheets on HIV/AIDS and Sexually Transmitted Diseases.

UNFPA, 2002. Financial resource flows for population activities in2002. United Nations Population Fund. http://www.resourceflows.org/index.php/articles/c51/

UNFPA, 2004. State of the World Population 2004. United Nations Population Fund.

UNFPA, 1999. Donor Support for Contraceptives and Logistics.

UNFPA, 2002. Donor Support for Contraceptives and Condoms for STI/HIV Prevention 2002.

USAID, UNAIDS, WHO, and the POLICY Project, 2003. The level of Effort in the National Response to HIV/AIDS: The AIDS Program Effort Index (API) 2003 Round.

Wawer MJ, Gray R, Serwadda D, Namukwaya Z, Makumbi F, Sewankambo N, et al. Declines in HIV Prevalence in Uganda: Not as Simple as ABC. In: 12th Conference on Retroviruses and Opportunistic Infections; 2005; Boston, MA; 2005.

World Bank, 1993. Investing in health: the 1993 World Development Report . The World Bank. Washington, DC. USA.