

Population Council Knowledge Commons

Reproductive Health

Social and Behavioral Science Research (SBSR)

1999

Reproductive decisionmaking in the context of HIV/AIDS in Ndola, Zambia

Naomi Rutenberg Population Council

Ann E. Biddlecom

Frederick A.D. Kaona

Follow this and additional works at: https://knowledgecommons.popcouncil.org/departments_sbsr-rh

Part of the Demography, Population, and Ecology Commons, Family, Life Course, and Society Commons, International Public Health Commons, and the Maternal and Child Health Commons How does access to this work benefit you? Let us know!

Recommended Citation

Rutenberg, Naomi, Ann E. Biddlecom, and Frederick A.D. Kaona. 1999. "Reproductive decisionmaking in the context of HIV/AIDS in Ndola, Zambia." Washington, DC: Population Council.

This Report is brought to you for free and open access by the Population Council.

January 1999



REPRODUCTIVE DECISIONMAKING IN THE CONTEXT OF HIV/AIDS IN NDOLA, ZAMBIA

Naomi Rutenberg, Africa OR/TA Project, Population Council

Ann E. Biddlecom, Policy and Research Division, Population Council

Frederick A D Kaona, Tropical Diseases Research Center, Ndola, Zambia

The Population Council

The Population Council seeks to help improve the well-being and reproductive health of current and future generations around the world and to help achieve a humane, equitable, and sustainable balance between people and resources. The Council analyzes population issues and trends; conducts biomedical research to develop new contraceptives; works with public and private agencies to improve the quality and outreach of family planning and reproductive health services; helps governments to influence demographic behavior; communicates the results of research in the population field to appropriate audiences; and helps build research capacities in developing countries. The Council, a nonprofit, nongovernmental research organization established in 1952, has a multinational Board of Trustees; its New York headquarters supports a global network of regional and country offices.

Africa OR/TA Project II

The overall objective of the Africa OR/TA Project II is to broaden understanding of how to improve family planning services in Sub-Saharan Africa, and to apply operations research and technical assistance to improve services by:

- increasing access to a full range of family planning services and methods;
- developing service delivery strategies that are client-oriented and acceptable to various population groups;
- improving the operations of programs to make them more efficient and financially sustainable;
- improving the quality of services;
- Strengthening the capabilities of family planning program managers to use operations research to diagnose and solve service delivery problems.

This project was supported by the Population Council's Operations Research and Technical Assistance Project II, Project No. 936-3030 funded by the United States Agency for International Development (USAID).

ACKNOWLEDGEMENTS

We gratefully acknowledge the efforts of Gladys Ngoma, J. Mulenga, and Mary Mufaya in conducting this survey. We also want to thank Kathleen Siachitema for her assistance in carrying out this study and Andrew Fisher, Ellen Weiss, and Eka Esu Williams for comments on the manuscript. Finally, we wish to recognize the study participants who so generously gave to the research their time and thoughts.

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	i
Background	i
Findings	i
Recommendations	
2. Background	1
3. Study Objectives	2
4. Study Setting	3
5. METHODOLOGY	4
6. FINDINGS	5
HIV/AIDS Awareness	5
Effects of AIDS on Children	6
Reproductive Decision-making	7
Condoms	10
Perception of Personal Risk	13
HIV Testing	14
Sources of Information for Family Planning and HIV/AIDS	17
7. RECOMMENDATIONS	19
Encourage Women and Men Who Are Making Reproductive Decisions to	Consider HIV
Testing	19
Help Couples Negotiate Safe Sex	20
Promote condoms for primary prevention of HIV	21
Assist couples affected by hiv to make informed choices about contraceptive	ve
methods	
Expand and Innovate to Reach Men	22
Facilitate Inter-Personal Communication	
8. References	24

EXECUTIVE SUMMARY

♦ Background

Family planning programs are increasingly being considered as a logical focal point for STD and HIV/AIDS prevention services because they serve large numbers of women at risk, already address the sensitive issue of sexual behavior and fertility control, and the methods for preventing unwanted pregnancy and disease can be the same (barrier methods or abstinence). Family planning programs, by providing contraceptive methods, are currently one of the few sources of assistance in the sub-Saharan African region for preventing perinatal transmission of HIV, while the promotion of barrier methods contributes to the prevention of heterosexual transmission.

Given this potential, research is needed to understand how the HIV epidemic influences reproductive decision-making. The Africa OR/TA II Project undertook an exploratory study of women and men's attitudes and experiences regarding reproductive decision-making in a setting of high HIV prevalence in Ndola, Zambia. The study was conducted in collaboration with the Tropical Diseases Research Center in Zambia and the Policy and Research Division of the Population Council. It relied on qualitative methods: eight focus groups with a total of 76 participants and 23 in-depth interviews were conducted in early 1997.

The study's objectives were to examine perceptions of risk by men and women living in a high HIV prevalence setting, how these perceptions are related to decisions about childbearing and contraceptive use, and to identify opportunities for family planning programs to expand their services to address HIV prevention. Recommendations for possible program actions -- which could be tested in a future intervention research study -- are included.

♦ Findings

There is a high level of knowledge of HIV/AIDS among Ndola residents. They believe that the elevated prevalence of AIDS in their community is due to promiscuity. Respondents were particularly aware of the impact of HIV/AIDS on children in the community; both men and women cited their responsibility to care for their children as reasons for not having sexual partners outside marriage. Men, in particular, felt strongly that an HIV-infected woman should not give birth, because the child would most likely die.

In the absence of signs and symptoms of AIDS or when couples "trust" their partners, the impact of HIV status on decisions about whether and when to have more children is negligible. When asked if the risk of HIV has changed the way people in their community think about the number of children they would like to have or when to have them, respondents were perplexed about how HIV would affect these decisions unless one knew he or she was infected. However, they felt strongly that if one knew that they were infected, they should not get pregnant.

When asked what HIV positive women and men should do to avoid pregnancy, the initial response by both men and women was often "avoid sex in the home". However, this was

¹ A number of pilot programs will be initiated in antenatal clinics in 1999 to prevent perinatal transmission through improving antenatal care as well as the provision of anti-retroviral drugs and counseling on alternatives to breastfeeding for HIV-positive pregnant women.

:

quickly qualified as difficult to implement and hard on the marriage. Instead, the overall recommendation was to use family planning: "family planning is better than stopping to have sex for people with HIV to control having children".

Both women and men in Ndola strongly felt that condoms were not appropriate "medicine for the disease"; but that good behavior is. Condoms were considered unreliable because they could break or tear. Men often use them incorrectly or inconsistently. Moreover, condoms in this community are strongly associated with promiscuity in the minds of both married women and men.

The main reason for using condoms is defined almost entirely by the type of relationship in which they were to be used: for pregnancy prevention in marriage and to prevent diseases in sexual relationships outside marriage. However, some women said they would prefer or even insist that their husbands use condoms - "so that our future may be protected".

An HIV test is one option by which an individual faced with making decisions about reproduction (or other major life issues) can ascertain whether or not they are infected. Participants mentioned several reasons why someone might seek an HIV test, and the advantages and disadvantages of learning one's HIV status. Overall, respondents thought pre-marital HIV testing was good, especially if those involved did not know each other's background, or had doubts about each other's fidelity. It was however considered inappropriate to recommend that older people in long established relationships should also have an HIV test because this would raise the specter of infidelity.

♦ Recommendations

Based on this study, the following recommendations would help family planning programs expand their services in order to help clients achieve their family building goals while avoiding HIV infection within themselves, their partners and their children.

- Encourage Women and Men Who Are Making Reproductive Decisions to Consider HIV Testing
- Help Couples Negotiate Safe Sex
- Promote Condoms for Primary Prevention of HIV
- Assist Couples Affected by HIV to Make Informed Choices about Contraceptive Methods
- Expand and Innovate to Reach Men
- Facilitate Inter-Personal Communication

BACKGROUND

The AIDS epidemic continues to spread in sub-Saharan Africa, infecting ever-increasing numbers of women of childbearing age. Fertility rates remain high in many countries most severely affected by AIDS. Hence a major mode of transmission of the AIDS virus in the region is from infected mothers to their children during pregnancy, delivery or breastfeeding. Between 25 and 35 percent of infants born to women infected with HIV in developing countries become infected themselves (Joint United Nations Programme on HIV/AIDS (UNAIDS)/World Health Organization (WHO), 1998a).

Rising child mortality rates in sub-Saharan Africa as a consequence of AIDS will soon wipe out the hard-won gains of child survival programmes over the past years (UNAIDS/WHO, 1998b). The children born to HIV-positive women who escape infection from their mother are fated to join the rapidly growing number of children orphaned by AIDS. For example, UNICEF estimates there are already 300,000 children under the age of fifteen orphaned by AIDS in Kenya. If present trends in Kenya continue, the number of AIDS orphans will increase to 600,000 by the year 2000 and reach nearly one million by the year 2005 (FHI/AIDSCAP, 1996).

The promotion of family planning services among HIV positive women offers the opportunity to prevent and reduce births of children who have a high probability of dying or being orphaned upon the death of one or both of their parents². In the absence of AZT prophylaxis and alternatives to breastfeeding, the use of contraception by HIV-positive women is the principal strategy to prevent AIDS in infants. Moreover, if a couple chooses a barrier method, contraceptive use will prevent or slow transmission of (or re-infection with) the virus from one partner to the other.

There are many unanswered questions about how HIV/AIDS affects decisions about childbearing and contraceptive use in sub-Saharan Africa. Our knowledge of reproductive decision making and the response to date to the HIV epidemic suggests a number of reasons why AIDS may have a negative impact on the adoption of contraception:

- 1) Women/couples may want to start or continue bearing children before they are too ill.
- 2) Pregnancy may be viewed as a demonstration of one's health to the community or a way of hiding one's own HIV status.
- 3) Women with AIDS may be in a particularly disadvantaged (and vulnerable) position to negotiate reproductive decisions with their partners.

² While contraceptive use by HIV-positive women or women at high risk of HIV infection can decrease the number of children who are born infected with the AIDS virus or likely to be orphaned, women living with HIV/AIDS have the right to be respected and supported in their choices about reproduction. This

includes the right to have children or not to have children (Gilks et al., 1998).

1

On the other hand, women/couples infected with or at risk of HIV may be motivated to adopt contraception because of concern that a pregnancy may exacerbate the progression of AIDS or recognition of the risk of perinatal transmission to their children and the difficulties those children will face as orphans.

It is also possible that the risk of HIV and AIDS is not a salient issue for reproductive decision-making, despite the prominence of the disease at virtually every level of society. Setel (1995) argues that one cannot expect reproductive responses to AIDS to be based primarily upon personal assessments of the risks to self, partner, or child. His research in northern Tanzania showed that the decision by a healthy HIV-infected person to continue childbearing is likely to be influenced by their society's value of fertility and by who holds the power in reproductive decisions, rather than by an assessment of the risk to future children.

Given the potential for family planning programs to reduce perinatal and heterosexual transmission, research is needed to understand how the HIV/AIDS epidemic influences reproductive decision-making. This research should suggest which, if any, interventions would assist women and men with HIV or at risk of infection to make informed choices about childbearing and contraceptive use and empower them to act on those choices.

To address this need, the Africa Operations Research/Technical Assistance Project of the Population Council, in collaboration with the Tropical Diseases Research Center based in Ndola, Zambia and the Policy and Research Division of the Population Council, undertook an exploratory study of men and women's attitudes and experiences regarding reproductive decision-making in a setting of high HIV prevalence in Ndola, Zambia. This information can be used to identify opportunities for family planning programs to expand their services to address HIV prevention.

STUDY OBJECTIVES

The objectives of this study are to examine perceptions of risk by men and women living in a high HIV prevalence setting, how these perceptions are related to decisions about childbearing and contraceptive use, and to identify possible programmatic responses to assist women and men to have their desired number of children when they want them while avoiding HIV infection and transmission. Ideally, programmatic responses identified in this diagnostic research will be tested in a later intervention research study.

In this report, we explore the following questions:

- How does the risk of HIV infection and AIDS affect reproductive and contraceptive decisions?
- Are condoms viewed primarily as a contraceptive, a method of preventing HIV, or as dual protection? Who uses condoms? In what circumstances are condoms used?
- How do individuals assess their own risk of HIV infection?

• Where and from whom do women and men prefer to receive family planning information and services and HIV/AIDS information and services?

STUDY SETTING

The study was carried out in Ndola, a major urban center in the Copperbelt Region of Zambia. Fifty-one percent of Zambia's population resides in urban areas that share many of the characteristics of Ndola. The study setting is part of the "AIDS belt" where the AIDS epidemic is at an advanced stage (Cohen and Trussell, 1996). According to Ministry of Health estimates (Central Board of Health, 1997), nearly one out of every five adults in Zambia is currently infected with HIV, or, an estimated 950,000 Zambian adults and 70,000 Zambian children. It was estimated that there had been more than 400,000 cases of AIDS in Zambia by the end of 1996. Sentinel surveillance data from antenatal clinics in Zambia suggest that 25 percent of pregnant women in urban settings are infected with HIV (UNAIDS/WHO, 1998c). While no data on HIV prevalence exist for Ndola, HIV transmission in Ndola is presumably as high or higher than other urban areas in Zambia due to the convergence of transportation networks in Ndola and the role the city serves as an entertainment and supply base for a substantial number of miners, seasonal workers and mobile traders.

Despite high levels of HIV/AIDS awareness, preventive behaviors such as condom use are still rather low in Zambia. Only 39 per cent of married men have ever used a condom and 19 per cent of married women had ever had partners use a condom (Central Statistical Office et al., 1997). Condom use is viewed with mixed feelings: while condoms are recognized as preventing the transmission of disease, they are also associated with promiscuity (Rutenberg et al., 1997; Tweedie and Lemba, 1996).

Fertility has been declining over the past two decades in Zambia but still remains relatively high at 6.1 births per woman (Central Statistical Office et al., 1997). Awareness of contraceptive methods (measured by the general indicator of having heard of a method) is nearly universal, even for modern methods. More than half of all married women had ever used a contraceptive method, with two-thirds of these women having used a modern method. Contraceptive use has also risen in recent years from 15 per cent in 1992 to 26 per cent in 1996, and more than half of current use consists of modern methods (Central Statistical Office et al., 1997).

Despite these gains, there remain substantial discrepancies between women's reproductive desires and contraceptive behavior. Fully 27 per cent of married women in Zambia in 1996 had an unmet need for contraception. Most of this was for delaying pregnancy rather than limiting childbearing altogether. Yet there is still evidence of a frustrated desire for limiting: the wanted fertility rate in Zambia is nearly one birth below the total fertility rate (5.2 versus 6.1) (Central Statistical Office et al. 1997).

One of the three core elements of the national reproductive health plan launched in June 1997 is to meet the needs of individuals and couples for safe, effective, and affordable methods of fertility regulation of their choice. The Ministry recommended that family

planning information and services be offered free by the government, that men and women of reproductive age be eligible to use family planning methods without the consent of their spouses or parents, and that the involvement of men in family planning and in responsible sexuality should be addressed through a variety of means, including counseling of men by the service provider.

Lastly, the structure of Zambia's family planning and health services deserves mention because it has recently become decentralized, making focussed studies such as this one more relevant for planning purposes. Health reforms were initiated in 1992 that decentralized service delivery, planning and decision-making authority to the country's 61 health districts (Ministry of Health 1997). AIDS prevention and mitigation activities in Ndola District are coordinated by a District AIDS Task Force which works closely with the District Health Management team and AIDS service organizations to provide a comprehensive response to the HIV epidemic.

METHODOLOGY

Because the purpose of this study is to develop an initial understanding of how men and women in Ndola perceive their risk of HIV/AIDS and how this affects reproductive and contraceptive decision-making, the study relied on qualitative data collected through focus groups discussions (FGDs) and in-depth interviews (IDIs). These approaches encourage discussion, allow for fuller responses than a structured questionnaire, and accommodate the emergence of unanticipated issues.

Eight focus groups with a total of 76 participants and 23 in-depth interviews were conducted. Participants in the focus group discussions and in-depth interviews were women and men between the ages of 20 and 44 residing in four areas in peri-urban Ndola. Two low cost (income) areas, one medium cost, and one high cost were selected so as to collect views from a cross-section of the population of peri-urban Ndola. The FGDs and IDIs were evenly divided between women and men. All but a few of the participants were currently married. The interviews and focus group discussions took place in the first six months of 1997.

To guide the focus group discussions and in-depth interviews, a set of questions was developed by the project investigators. The field teams were trained by one of the principal investigators; training included a briefing on the nature and objectives of the study, a discussion of all the questions and probes in the guidelines, role-playing, and practice interviews.

The focus group discussions were held in convenient community places suggested when respondents were selected and were led by one moderator (a female nurse) and one rapporteur (a female assistant). Discussions lasted about two to three hours on average. Indepth interviews were conducted in the respondent's homes. The permission of the respondent's husband or wife was sought before the interview, although the interview was conducted in private without the spouse. Indepth interviews lasted about one and one-half hours for women and about two hours for men.

The discussions and interviews were tape-recorded, translated from Bemba to English, and transcribed. The transcripts were read by each of the project investigators who prepared summaries of the points that emerged during the interviews and jointly developed codes. The principal investigators then coded the main topics and themes in the interviews to provide a more systematic basis for assessing the content, distribution and frequencies of the views expressed by the participants in their conversations.

FINDINGS

♦ HIV/AIDS Awareness

Knowledge of HIV/AIDS in this sample of Ndola residents seems to be universal. Respondents have heard about HIV/AIDS through the campaigns on radio, television, newspaper, magazines, posters, etc. The respondents could name multiple and correct modes of transmission—i.e., heterosexual contact, from contaminated needles and instruments and contaminated blood, and from mother to child. They also recognize AIDS symptoms and correctly understand that the disease is incurable.³ Many have known people with AIDS, or believed they have as most of these relatives and friends were not diagnosed -- but were suspected - to have died of AIDS.

The prevalence of AIDS is believed to be due to the promiscuous nature of the society. Multiple partnerships are viewed as a major social feature and problem.

FGD 6 (Men, Medium Cost)

Informant 5: "...sometimes you find that you are behaving well but the wife could be doing something else and you are not aware and the people who see her doing such things cannot even tell you and they just look at her as well maybe because they are also promiscuous. These are the ones who are putting us into problems".

IDI 1 (Woman, Low Cost Area)

"Here in Ndola in Zambia, let me just say the whole Zambia, this time, promiscuity is very rampant, if see this time there is no other disease that people are dying of. Older people, those who are older than 40, 50, 60 years, this time those are the ones that are remaining, but the younger ones who are in majority are the ones that are dying."

³ That AIDS is a deadly, incurable affliction is reflected in many of the local names for AIDS: "go and say goodbye to your mother" (*kalaye noko*), "you are running towards a lion", "once you have this disease you will be sick until you die (*muzezempuya*), and "when you contract the disease you will go with it and it will not leave you" (*muyanabo*).

The study participants identified several factors that contributed to multiple partnerships:

- 1) Women are forced to exchange sex for money or other kinds of support because of poverty.
- 2) On the other hand, some people, mainly men, have too much money and spend it on drinking and sex.
- 3) Too much free time because of limited opportunities for work or school.
- 4) Finally, a major factor is alcohol consumption, which emboldens men and women to yield to risky behavior. As one IDI respondent put it: "The thing is when someone is drunk, they lose all their senses even when he is told that there is a lion he will have the courage to go there..." (IDI 22, Man, Low Cost Area).

EFFECTS OF AIDS ON CHILDREN

Respondents were particularly aware of the impact of AIDS on their own children and other children in the community as illustrated in the following quotes:

FGD 6 (Men, Medium Cost Area)

Informant 1: "The reason why AIDS disease is so difficult is that, if you have it, like me, meanwhile the wife at home is innocent, I will take it from some where else and bring it to my wife at home. So maybe my wife will die first and then I follow. Now, those children whom we have, how are they going to live? Those are the biggest worries that are there".

FGD 5 (Women, Medium Cost Area)

Informant 4: "Well, our life styles have changed because so many families have left their children scattered. Because of feeling pity on these children, you take them and keep them and take care of them, as a result, from the little, you can not manage to feed them all including your own children which God has given you, it is becoming very difficult".

The two issues that concerned respondents were that children born to infected parents would be infected themselves and that children will be orphaned when parents die. With few exceptions, respondents asserted that if an HIV-positive woman had a baby, the child would be born infected, sick and "already dead". They reported that HIV is transmitted in the womb when the mother and infant share the same blood or at birth, particularly if unclean instruments are used to cut the umbilical cord. If a couple gives birth to an infected infant, "everything will go to waste" (FGD 2, Men, Low Cost Area). Men, in particular, felt strongly that an HIV-infected woman should not give birth to more children who would be certain to die; both because of the sadness the child's death brought to the family and to avoid expending generally scarce family resources on burying the child.

A few respondents argued that not all babies were at risk of infection from their HIV positive parents. Three IDI respondents mentioned that they had heard that not all babies born to HIV positive parents dies and one IDI respondent knew of a healthy child who survived the death of its mother who had died (or was thought to have died) of AIDS.

As seen in the above quote from FGD 6, there is a general belief that once AIDS is in the home, first one parent and then the other will die. The respondents were deeply worried that if this happened to them, they did not know how their children would live. They have frequently encountered orphaned children in their community, many of whom are suffering and receiving insufficient care or "no proper care" (FGD 1, Women, Low Cost Area). The care of these children is a burden to relatives. One IDI respondent said that people did not like looking after a sick child whose mother had died of AIDS.

Men and women mentioned the welfare of children and the responsibility to care for them as reasons not to have outside partners. One woman cited this as the argument she gave to her husband that they should not indulge in risky behavior: "That is why, my friend, we should behave ourselves. Now if we become promiscuous with the large family we have, where will it go? Now how are the children going to be educated?" (IDI 12, Woman, High Cost Area). Another man said: "So like that, you should be scared to misbehave and make sure that you care for the children, they grow up and become adults, that is when it will be good, instead of continuing doing something knowing that it will kill you." (IDI 4, Man, Low Cost Area).

REPRODUCTIVE DECISION-MAKING

The respondents clearly perceived a number of negative impacts of HIV on their own children as well as children in the community. But whether a couple's decisions on childbearing and contraceptive use actually take into account the potential impact of HIV on themselves and their family depends a lot on their perception of their own risk of HIV infection and AIDS. In the absence of signs and symptoms of AIDS or when couples "trust" their partners, the impact of HIV on decisions about whether and when to have more children is negligible.

When asked if HIV is changing the way people in their community think about the number of children they would like to have or when to have them, respondents were perplexed about how HIV would affect these decisions unless one knew he or she was infected. Many respondents, and particularly men, mentioned that fertility norms in the community were changing. However, this reduction was not in response to HIV but rather couples were limiting the number of children in response to a deteriorating economy.

Both women and men were knowledgeable about a range of modern and traditional family planning methods, including condoms for the prevention of pregnancy, in order to space and limit children. Yet there was little call from respondents for a greater reliance on condoms and the dual protection they offer against unwanted pregnancy and disease, despite the high general concern about the risk of HIV/AIDS.

However, respondents felt strongly that if one of the couple is showing signs or symptoms of AIDS or has particularly promiscuous behavior which the other partner (almost always the female) perceives as putting herself or himself at risk, then pregnancy should definitely be avoided. Pregnancy in an HIV-positive woman is believed to lead to a rapid deterioration

of the woman's health and death; whether the pregnancy was aborted or carried to term, the outcome would be the same -- "Pregnancy makes the AIDS disease come out." Respondents offered varying explanations about why this happened and disagreed about whether a woman's health started to decline during the pregnancy or after delivery. However, their certainty and consensus of the negative impact of pregnancy on the health of an HIV-positive woman was clear. Women stated unequivocally that if a woman knew she had HIV, she should avoid getting pregnant because of the impact on her health.

The most commonly cited reason for avoiding pregnancy if a woman is HIV positive was to protect her health and extend her life, not only for her own sake but for the sake of the children she already had. But there was also considerable concern about vertical transmission from the mother to child; most respondents believed that all children born to HIV positive women would die in a short time, although some mentioned estimates of the proportion of children who would get the disease from their mothers. A few women agreed that they would be willing to have an HIV test prior to getting pregnant as a step to planning for another child.⁴

When asked what HIV positive women and men should do to avoid pregnancy, the initial response of both men and women was often "avoid sex in the home", that is abstain. Men listed a number of practical suggestions for implementing this: to have another woman elsewhere with whom they could use condoms, have two beds or send the wife away. However, this was quickly qualified as difficult to implement and hard on the marriage. Instead, the overall recommendation was to use family planning: "family planning is better than stopping to have sex for people with HIV to control when to have children".

As noted above, the study population was knowledgeable about a range of family planning methods and as a result, engaged in lively discussions about the most appropriate method an HIV positive couple to avoid a pregnancy. The discussion on the best method for HIV positive women is summarized in Table 1 below. The discussions did not address what method a couple should use if the man but not the woman was HIV positive.

With a few exceptions noted in the following discussion, the method–specific family planning issues discussed were similar for women and men. Three issues were paramount: effectiveness for preventing pregnancy, side effects, and effectiveness for prevention of transmission of the AIDS virus. (It was unclear whether the concern with this latter issue was about infecting an uninfected partner or re-infection.)

-

⁴ We did not specifically ask about couples who did not yet have children; that question would perhaps generate a different set of issues.

Table 1: Major issues in choosing the best contraceptive method for a HIV positive woman

METHOD:	ISSUE:		
	Effectiveness for preventing pregnancy	Side effects	Effective for preventing transmission of HIV within couple
Pill, injectables	High	Many, particularly problematic for HIV positive women	No
Sterilization	Highest, but culturally not acceptable		
Traditional methods	Low	Few, safe for HIV positive women	No
Condom	High	Breakage	Concerns about effectiveness in preventing disease

Everyone agreed that HIV positive women would want to be protected from pregnancy by an effective method. But it was also important that the method agrees "with the blood of the woman" and not "disturb" her health. Women and men agreed that modern methods are most effective but can also cause side effects, which may be particularly worrisome for an HIV positive woman. While sterilization did not come up in the women's groups and interviews, men were divided in their support for the method. Some advocated for sterilization as the most effective method while others found it culturally unacceptable. Traditional methods were believed to be good for women with HIV because they do not have side effects, but then they are not always effective.

Most discussion was around the use of condoms to prevent pregnancy when a woman is HIV positive; both men and women stated that it would be a good method for a husband and wife to use to prevent pregnancy. One interpretation could be that a person with HIV is regarded as a promiscuous person who should normally use condoms. Another possible interpretation, however, is that when the motivation is to extend the woman's life and mitigate the impact of HIV on the family, the stigma about condom use is reduced and the need to negotiate use is minimized. In fact, condoms were viewed positively in this situation: "Those who care about their health try to use condoms and live longer".

Many respondents also mentioned that condoms prevent "blood contact" (contact with sperm) when either or both partners are HIV positive, suggesting that they were aware of the benefit of reducing the risk of re-infection (when both in the couple are positive) and the risk of infection (in sero-discordant couples). On the other hand, men particularly mentioned doubts about the efficacy of the condom to prevent disease transmission.

♦ Condoms

Since condoms could potentially address the need for both pregnancy and disease prevention, the participants in the focus groups discussions and interviews were asked about their views on:

- 1) condoms as a contraceptive and method that could protect people from HIV,
- 2) who used them, and
- 3) the circumstances in which condoms were used.

Both women and men in Ndola strongly felt that condoms were not appropriate "medicine for the disease" (good behavior is the right medicine). Condoms were considered unreliable because they can break or tear and allow diseases to pass through. Some men also use them incorrectly and inconsistently. For example, a man will begin the evening with condoms in his pocket and good intentions in mind but after a few drinks and flirtations will end up leaving the condoms untouched. Some men will also not use them if they have paid a large sum for a woman's attention and sex.

Even within marriage, consistent use of condoms is difficult to achieve because men find it hard to keep a sufficient supply on hand. Thus people who rely on condoms may actually increase their risk of disease because they expose themselves more often, deceiving themselves that they are protected by occasional condom use, when in reality many acts of intercourse are unprotected.

IDI 16 (Woman, High Cost Area)

"...the medicine for this disease is just good behavior, not the condom, it [condom] is just worsening the situation, because sometimes the condom can break or tear during sex, so you have not protected anything, nothing."

Moreover, it is evident that condoms are strongly associated with promiscuity in the minds of both married women and men in this community. Because they can be used to prevent transmission of not only HIV but also other treatable STDs, condoms have eliminated the fear of infection, thus encouraging men and unmarried people to engage in casual sexual intercourse. They are also thought to reduce the chance of an unfaithful partner getting "caught", because they prevent the STDs by which a woman learns of her husband's infidelity.

None of the men and women interviewed expressed concern that condoms might encourage married women to have sexual intercourse with men other than their husbands. The influence that condoms have on increasing promiscuous behavior was almost always phrased in terms of the husband's behavior or that of unmarried young adults.

IDI 22 (Man, Low Cost Area)

"It [condom] is just the same as encouraging promiscuity because they know that they will receive condoms and believe that condoms will save them..."

IDI 7 (Woman, High Cost Area)

"As husband and wife, like in my case I do not like using condoms, because if you allow your partner in the home to use condoms he can not be faithful and he will have no fear because he will always be bringing condoms. You would think he is faithful and yet he is hiding through condom use."

Some women and men explicitly argued that if there were no condoms, then people would be more willing to stay with one sexual partner only. One focus group discussant compared the availability of condoms to the availability of free lawyers, which would encourage people to commit crimes because they thought they could always go free. He concluded: "If there were no condoms we would not be doing bad things" (FGD 2, Men, Low Cost Area).

Respondents cited the association of promiscuity with condom use as the main reason why men are hesitant to buy or obtain condoms. Even though condoms are usually offered free of charge at most clinics, men will rarely get them from there. More commonly, they will buy condoms at chemists' or other shops or in bars, to maintain anonymity. They feel that if they go to the clinic, the staff there will tell others about it.

FGD 2 (Men, Low Cost Area)

Informant 6: "The reason why men refuse to be found in clinics or family planning mostly, the people [nurses] we find there are the ones we know...So mainly we would prefer buying to getting them from the clinic because the majority of the nurses who work at the local clinic live with us in the same community. So they will be saying, AA, did you see the father of Kangwa, we saw him yesterday when he came to get condoms. AA, that one is also promiscuous."

Most women and men think of condoms in terms of disease prevention first and pregnancy prevention second. However, the main reason for using condoms is defined almost entirely by the type of relationship in which condoms would be used. Married couples are thought to use condoms for pregnancy prevention. For sexual relationships outside marriage, women and men think of condom use in terms of disease prevention.

FGD 8 (Men, High Cost Area)

Question: "Why do people use condoms, is it to prevent pregnancies or disease?"

Informant 5: "To prevent the two of them but they are used in different places, when you are with the Ms. [girlfriend] you can use a condom to prevent the disease but with your wife you cannot say that you are preventing the disease..."

Informant 7: "With a wife it prevents her from getting pregnant quickly, with Josephine [girlfriend] you are scared of contracting AIDS."

Pregnancy prevention was mentioned by many men as an acceptable reason for men to propose condom use to one's wife (and to a lesser degree, for women to propose condom use to their husbands). Men were much more likely to mention using condoms for family planning at some time with their wife, e.g., early in marriage or when the clinic ran out of pills, than women. These men viewed condom use within marriage as a matter of trust. "...If you have discussed it with your partner, I don't think there can be a problem" (IDI 14, Man, High Cost Area).

However, few people thought it appropriate to use condoms within marriage for disease prevention.⁵ The women tended to blame the men for refusing to use condoms within marriage and the men tended to blame both partners for being against it. Often the wife sees the proposal for condom use by the husband other than for family planning as sign of unfaithfulness.

IDI 13 (Man, High Cost Area)

"Usually in marriages, it is the women who refuse to use condoms; sometimes some of them make a lot of noise, if you bring condoms home she would even say, what are these things for? Forgetting that in the past we used them and now that there is HIV she would think that I have been unfaithful."

Though very few women reported actually using condoms with their husbands, many women said that wives could insist that their husbands use them..."so that our future may be protected" (IDI 20, Woman, High Cost Area). But mostly, they prefer that the husbands end the outside relationships. Some women mentioned that men use condoms with their girlfriends in order to protect the wife. Women would even purchase condoms for their husbands for this purpose, because they (the women) were the ones who were affected if condoms were not used.

But there are circumstances in which men thought condom use was inappropriate, even in extra-marital sexual relationships. If the girlfriend was trusted and showed no signs of illness, then the man would discontinue using condoms with her. At issue here is trust that one's partner is HIV-negative (or without other sexually transmitted diseases), reliance on symptoms for evidence of a disease, and non-use of a condom to indicate this trust.

When asked specifically why men and women do not wear condoms, most respondents said it was mostly men who refused to wear condoms and this was for reasons of sexual pleasure: they prefer to have "skin to skin" or "direct" sex.

FGD 4 (Men, Low Cost Area)

Informant 5: "The main reason here of wanting to use a condom is that if you have sex with a woman using a condom, it is the same as having done nothing, so when you have sex without a condom, they feel better skin to skin."

-

⁵ As discussed in the previous section about condom use when one is known to be HIV+, the one situation that arose where condom use for disease prevention was appropriate in marriage was if one partner (usually posed as the husband) showed signs of AIDS illness. In this case, condom use was deemed to be a good thing in order to prevent transmission to the unaffected spouse.

Fewer people said that women were the ones who refuse condoms in marriage, and this was due to reasons of morality: women do not want their husbands to use condoms with them because it makes the wives feel like prostitutes. Men reported that girlfriends also raise the same objections.

While awareness of the condom and the fact that it can prevent disease transmission is nearly universal, many women and men thought that the condoms were not to be trusted to prevent disease (or pregnancy) due to the quality of the condom and the way condoms are used. Men especially voiced doubts of the efficacy of condoms. Condoms were described as tearing during sexual intercourse because they were too small or were of poor quality.

FGD 6 (Men, Low Cost Area)

Informant 5: "Yes, just like he has said about the condom, even though they have made it, sometimes it has just brought problems because there are times when you can be wearing a condom but then it tears off inside, so where is the safety there?"

Problems were also described to a lesser degree in terms of human error: men use expired condoms, which are more prone to rupture, or men do not use condoms consistently.

FGD 2 (Men, Low Cost Area)

Informant 11: "...condoms in another way are just okay, the problem is with us people, I can pick a girl today, maybe she is sick but I say, I will buy a condom. I will use a condom today if I meet her and tomorrow, the third time I will not use a condom, I will say, no, she is just okay and I will not use a condom."

♦ Perception of Personal Risk

While the study participants voiced clear opinions about what people should and should not do regarding reproductive decisions if they were infected with HIV, they also repeatedly returned to the point that it is difficult for people to make decisions if they did not know if they were infected. We asked the respondents in the in-depth interviews how much they *personally* felt at risk of HIV infection.

More than half of the respondents felt that they were not at any risk of HIV. There was little difference between men and women in self-assessed risk. The reasons women and men gave for not feeling at risk were that they were "well behaved", they trust themselves, or because they and their partner trust each other. It is clear that the study participants have internalized the message that "sticking to one partner" can help protect one from HIV infection.

Some women, however, felt at risk of HIV infection because they did not know about their partners' sexual behavior and other partners they might have. Concern about the family's

health has clearly been a major motivation for behavior change for some of the men, as illustrated in the following quote by a woman speaking about changes in husband's behavior:

FGD 7 (Female, High Cost)

Informant 3: "It [life in this community] has changed, there are some especially those with husbands who are well behaved, their marriages are becoming steady for those who are fearing diseases and just know their wives, they just know that this is my only wife. They know that if they go to other women their wives will also be affected. Those people's home are strong because of fear of diseases but there are others who do not care, they just throw themselves all over, that again is bringing worries to the wives who are remaining at home."

The main reason men felt at risk was due to past promiscuous behavior. Despite the animated reports of promiscuity in their community, none of the interviewees confessed to current promiscuous behavior. Perhaps this reflects real behavior change, more likely it measures reluctance to admit to such socially sanctioned behavior.

People admitted to feeling at risk of HIV infection in indirect ways; they were not worried about being infected personally but voiced concern about how the disease would impact on their children and younger relatives. One woman admitted to being fatalistic about contracting HIV while another man offered that it was easy to contract the disease if you are not careful.

♦ HIV Testing

An HIV test is one option by which an individual faced with making decisions about reproduction (or other major life issues) can ascertain whether or not they are infected. HIV tests are available in Ndola through the Ndola General Hospital, at private clinics such as at the Tropical Diseases Research Center, and at an NGO (Hope Humana) counseling and testing center. In order to explore whether there would be demand for HIV testing and an opportunity to expand this service, we examined whether people in this community know of the availability of a test for HIV, under what circumstances the test is available, and where one could go for a test.

Most respondents know that there are tests for the AIDS virus, which can be obtained at a hospital or clinic. Participants mentioned several reasons why someone would seek an HIV test. Most felt that if someone was suffering from a lingering or repeated illness or if a current or former partner had died of AIDS, he/she should get an HIV test. Men felt that if one had been promiscuous in the past and were worried about AIDS they should have a test and "find out the truth".

One respondent reported how his negative test result had been an impetus for changing his promiscuous behavior and forgoing sexual relationships outside marriage (IDI 22, Man, Low Cost Area). Women, but rarely men, mentioned that one might get an HIV test so that

if it turned out positive, one would know how to take care of oneself, use condoms to not spread the disease, and avoid pregnancy.

Both women and men mentioned that one could get an HIV test "just to know" or "just to see how good your health is". But people are very afraid of a positive result. For example, one focus group respondent said: "...if you know that when you were growing up your behavior was risky, you cannot go there [for testing], you will be scared that they might find you with the disease" (FGD 6, Men, Medium Cost Area). Respondents strongly believed that an HIV test was dangerous because the knowledge that one was HIV positive could cause depression and feelings of hopelessness that could lead to suicide or an accelerated death from AIDS. Some respondents said that a "fit" person should never get an HIV test, thus implying that knowledge of a positive result while still healthy was more dangerous to one's wellbeing than walking around ignorant of one's status. Some respondents also believed that doctors and HIV counselors would not or should not report a positive result to a well person because of the consequences for his/her mental wellbeing.

Men expressed feelings of distrust about HIV tests in general. They feared that HIV counselors would not keep the HIV test results confidential and public discussion of one's status could lead a person to suicide. It was not clear from the transcripts whether suicide would be due to public stigma and shame or whether it was due to an individual's difficulty in accepting the result. Some men expressed suspicions that they were probably being given negative results when they actually were positive. Some evidence they cited was that widows of men who had died of AIDS sometimes received negative results and people with negative results sometimes died presumably of AIDS some months later.

There were only a few comments, all from men, about the stigma attached to an HIV test and positive result. A few men mentioned that people will "laugh at you" if you get a positive result. The great reluctance to seek HIV testing appears to arise much less from fear of social sanctions or repercussions than individuals' own difficulty in coping with a positive result.

Much of the discussion focussed on two specific types of HIV testing: pre-marital testing and pre-employment testing. Overall, respondents thought pre-marital HIV testing was good, especially if you did not know each other's background or did not trust each other's fidelity. There was strong agreement that discordant couples should not marry as the HIV negative individual was sure to get infected, they would both die bringing an early end to the marriage, and any children would also be affected and die. Thus respondents supported pre-marital testing because it prevents HIV transmission to the negative partner as well as vertical transmission to children. Several respondents mentioned "to have a child who was free from AIDS" as a reason to go for pre-marital testing.

IDI 15 (Woman, High Cost Area)

Interviewer: "In your opinion, do you think it is good to go for HIV testing before getting married?"

Respondent: "It is good to know before those people get married if one of them has the disease or not."

Interviewer: "Why is it good to know before getting married?"

Respondent: "It is good to know so that if one of them has the disease that marriage should be dissolved right away because it is all death."

Interviewer: "Suppose it is in your family if there were people who intend to get married, would you encourage them to go for HIV testing?"

Respondent: "Yes, I can encourage them to go for testing, at the time they say that they want to get married, before they have sex together, you should go for testing because if you do not have the test there will be a problem in future these things have brought a lot of problems in the homes in this community. You just see them get married and immediately after the birth of their child death sets in."

There appears to be considerable pressure by relatives for couples to go for a pre-marital HIV test. In fact, some respondents said that it was frequently the case that individuals trusted their partner but went for a pre-marital test anyway to satisfy their relatives. Also, a pre-marital test establishes a baseline that the marriage was beginning "AIDS-free" and eliminates conflicts about whether one partner brought HIV to the marriage. However, respondents resented this pressure to have a pre-marital HIV test as it diminishes love and romance and a discordant result usually means the end of the relationship. Respondents knew of some couples who married for love regardless of the test result. There were also a few reports of couples who had married but decided not to have children.

A pre-marital test was discussed as an opportunity for young people to get tested, but no such analogous opportunity was available to older people. It was considered inappropriate to recommend to older people in long established relationships that they should have an HIV test, as it would raise the specter of infidelity. Similarly, even after the death of one or more children, few people would go for an HIV test to see if they were infected in order to make a decision to stop having children, though some would take a "rest" from childbearing and wait to see if they got sick. However, the initiation of a marriage presented an opportunity for young people to learn whether or not they were infected and head off future problems of HIV infection in that relationship. Notwithstanding, the study participants understood that a pre-marital HIV test and negative result did not confer protection and that one or both partners could be infected later.

Almost all respondents had heard of companies, the government, and the military testing candidates prior to employment or enlistment. Most respondents, particularly the men, had strong but mixed reactions to these policies. The reasons for opposing this type of testing were varied. There was the general opposition, as discussed above, of the fear of psychological effects and declining health, which followed any HIV test. There were also concerns about linking employment status to HIV status. For example, a person would assume they were HIV positive if they were denied a job for whatever reason following an HIV test or other people might suspect that someone's unemployment was the result of their HIV status. Another set of reasons for opposing pre-employment testing clustered around the belief that HIV positive people can still be productive workers: someone with HIV may still have many productive years to work and work will help people with AIDS to live longer. There was the pragmatic view that with so many people sick with HIV, if companies

do not hire anyone who is HIV positive there will be no one left to hire. Finally, there was concern about discriminatory testing policies and that only general workers, but not managers, are tested.

Nonetheless, study participants were more in favor of than opposed to pre-employment HIV testing. They felt it was impractical for companies to hire people with HIV who may only work for a short time but cost the company a considerable sum in health care, death benefits, and pension. Respondents were concerned that companies would waste jobs on people with HIV and thought companies should screen to be sure they give those jobs to people who could benefit from them over a long period. Many were concerned that if HIV positive people took up jobs, their condition would deteriorate from the effort of working. One respondent observed that if a company hired someone with HIV, that person would use the money he earned to be promiscuous and end up further spreading the disease.

SOURCES OF INFORMATION FOR FAMILY PLANNING AND HIV/AIDS

To help us develop ideas for program interventions, we asked the study participants about where they received information and services for family planning and for HIV/AIDS. We asked them what they liked and disliked about these sources and what other kinds of places they might like to get information and services. We also asked if the preferred family planning and HIV/AIDS information and services should be offered to women and men separately or as couples.

Distinct gender differences emerged in where women and men obtain information about family planning. The most common source women mentioned was the maternal and child health (MCH) clinic, particularly when they go for antenatal services or health services for their young children. Women were satisfied with how information was delivered at the clinic but men complained about the lack of privacy at clinics (e.g., a nurse would tell other people in the community that so-and-so's father had shown up for family planning) and that the nurses at clinics were inexperienced. The hospital was viewed as a credible place for family planning information, but was not used often for this purpose.

Radio messages and programs about family planning were also common sources of information for women and men. However, one problem often cited was that a radio format did not allow for people to ask questions about the material presented or engage in a dialogue—a problem not encountered at clinics. The radio was viewed positively as a source of information because both the wife and husband had an opportunity to learn. Pamphlets and booklets were also viewed as sharing this advantage, although many noted that these sources would be out of reach for the illiterate or those who do not speak or read English.

Men repeatedly mentioned that there were few places where they could get family planning information. Some said they relied on what their wives picked up at the clinics. As a consequence, men reported that there were often disagreements among couples because the wife was informed about contraception and the husband was not. Additionally, men got

information about family planning from their friends, especially those who had been married a long time.

The MCH clinic and the radio were mentioned as sources about HIV/AIDS as well. A problem noted about radio programs were that the programs are often on too late at night. Yet many participants did not want children to hear the programs, and so the timing of radio programs should not be too early in the evenings either.

Other important sources of information about HIV/AIDS were talks and workshops given at church and seeing pictures of (in the newspaper or on posters) or encounters in their community with people with AIDS. Mostly women rather than men mentioned church gatherings. These meetings were seen as being more effective at spreading information than those held at medical facilities because 1) many more people attend, 2) they are held in convenient locations, and 3) meetings can be held frequently.

Pictures of people with AIDS or symptoms of other sexually transmitted diseases (e.g., sores on the genitals) were an especially effective medium because they conveyed the *seriousness* of the disease. Men in particular expressed this view. Participants also emphasized the benefit of being able to communicate information to non-English speakers.

Divergent views emerged among both women and men about whether HIV/AIDS information and education should be conducted separately by sex or for both sexes together. Some participants argued that men and women must learn together since the information is the same and the problems that people face from HIV/AIDS are the same. Most importantly, *husbands and wives* should learn together so that they will have the same understanding of how to prevent HIV/AIDS and neither spouse can blame the other for not adhering to preventive behavior. Women felt that if couples received education together, men would be more likely to internalize the information since they were getting it directly rather than indirectly through their wives. Some men and women qualified their views by saying that *only* married women and men should learn together.

Other respondents argued that men and women should be informed about HIV/AIDS separately, mainly for reasons of privacy and confidentiality. Both men and women said they would feel shy talking about sexual behavior in front of the opposite sex. Men in particular felt they would have to hide information about their sexual behavior if women were part of a group, because women from the community would know other women in the community and the information might get back to the men's wives.

Almost all participants were unified in their view that it was difficult to bring generations together to learn about HIV/AIDS. Even those who advocated that men and women learn together cautioned that education on HIV/AIDS should be done separately by generations. A common feeling is that men and women from older generations would find it inappropriate to discuss sexual behavior issues in front of the younger generation. One exception to this view remains the role, though diminishing, of older women teaching younger, pre-marital women about sex and contraception by way of the initiation rite.

RECOMMENDATIONS

Family planning programs have been viewed as a logical focal point for STD and HIV/AIDS prevention services because these programs 1) serve large numbers of women at risk, 2) already address sensitive issues of sexual behavior and fertility control, and 3) methods for preventing unwanted pregnancy and disease can be the same (barrier methods or abstinence). Family planning programs, by providing contraceptive methods, are currently one of the few sources of assistance in the sub-Saharan African region for preventing perinatal transmission of HIV, ⁶ while the promotion of barrier methods contributes to the prevention of heterosexual transmission. Here we briefly review some key findings from this study in light of what they suggest family planning programs can do to help people achieve their family building goals while avoiding HIV infection and transmission to themselves, their partners and their children.

♦ Encourage Women and Men Who Are Making Reproductive Decisions to Consider HIV Testing

The results suggest that knowledge of the general threat of HIV and the particular risks to children are widely shared. Study participants were clear that women with HIV should not bear children. Yet they also acknowledged that not many people actually know whether they are infected with HIV or not. While the majority of respondents said they do not feel a risk of being infected with HIV because their current behavior protects them, many women admitted to being worried because of their husband's sexual behavior, and men were worried because of their past behavior. Family planning programs should address the risks of continued childbearing in this setting where most people do not know their HIV status and assist women and men to ascertain their likelihood of being infected with HIV.

The risk factors for HIV are well known and a number of risk assessment checklists, tools, and exercises have been developed to be used by providers during counseling -- in individual or group sessions with peers, with and without partners, and for self-assessment. Family planning programs could explore how these tools should be integrated into their programs to help clients assess whether they may be infected or are at high risk of infection and what the appropriate reproductive and contraceptive choices are.

Family planning programs could promote, or offer, voluntary HIV testing to women (and men) with no symptoms of HIV, as this is the only way to know definitively whether or not there is a risk of perinatal transmission or risk of a premature death of a parent while there are still children in the house. An initial step for family planning programs may be to provide counseling about the advantages as well as the potential negative consequences of an HIV test and referrals for testing. The study results suggest that pre-marital testing -- at the outset of new relationships when it is acknowledged that a future spouse may have had previous partners -- is more acceptable than other kinds of HIV testing. Family planning programs with adolescent or unmarried clients should consider offering information and

10

-

⁶ A number of pilot programs will be initiated in antenatal clinics in 1999 to prevent perinatal transmission through improving antenatal care as well as the provision of anti-retroviral drugs and counseling on alternatives to breastfeeding for HIV-positive pregnant women.

referrals for this service.

Any program that promotes voluntary HIV testing for women must first ascertain if the benefits of the test will outweigh potential harm. In some settings, women who have sought HIV testing, particularly when they receive a positive result, have suffered violence from their partners or others in the community and/or abandonment. It is encouraging that these latter situations did not come up in Ndola. In fact, many men recognized that they are the ones who bring AIDS into the home and women are victims of their behavior. However, the study results also suggest that tests may simply be unacceptable in longstanding relationships because of the issues they raise about trust. Prior to promoting voluntary HIV tests to this population, it would be critical to ascertain the acceptability by women, their partners, and the community of the test and establishing one's HIV status.

It will be important to document whether knowledge of one's HIV status is sufficient to stimulate reproductive behavior change. The IDIs suggest that actual knowledge of one's own HIV status could influence reproductive behavior in that women who know they are HIV positive should avoid pregnancy to protect their own and their children's health. However, the finding that knowledge of one's own HIV status influences fertility decisions is contradicted by a small number of studies in the region conducted among populations who were actually informed of their HIV status (see Rutenberg et al., 1997 for a review of these studies). If a woman's knowledge of her own HIV status does *not* influence her subsequent fertility behavior, we need to know more about what factors influence women or couples to continue to bear children in the face of such poor outcomes for the unborn child.

♦ Help Couples Negotiate Safe Sex

Women feel at risk of HIV infection because of their partners' sexual behavior; moreover, men recognize that they are putting their partners -- and their children -- at risk through promiscuous behavior. Family planning programs could expand from their already significant role in providing women with information about family planning and HIV/AIDS to assisting them to discuss and negotiate safer sexual behavior with their husbands. Men are clearly concerned about the impact of HIV/AIDS on their children. Programs should exploit these concerns about the safety of children and the integrity of the family and help couples confront how multiple sexual partnerships, unprotected intercourse, and the risk of disease may affect their family.

In Ndola, the most compelling arguments for fertility regulation address the wellbeing of the child (Rutenberg et al., 1997). It is widely accepted that births should be spaced sufficiently so that children have sufficient time to develop, the mother can fully recover from a pregnancy and birth, and the family has adequate economic and emotional resources to support the child. Parents are concerned to regulate their sexual behavior in order to avoid producing too closely spaced children. Family planning programs have addressed this concern by promoting contraceptive methods that help couples space their children.

Family planning programs could take a similar approach to promoting safer sexual behavior in order to avoid HIV infection for the benefit of the family. Men and women know what types of behavior change – partner reduction and condom use – will reduce the risk of HIV infection. However, they need justification for behavior change, particularly when it is difficult to admit to the behaviors that put them at risk. Suggesting change for the wellbeing of the family may an acceptable approach for many couples.

Women could be assisted to negotiate safer sex by providing them with opportunities for individual counseling and group interactions, with or without their partners, during which they can share personal experiences and model new behaviors (Gupta and Weiss, 1993). Such opportunities enable them (and the men) to discuss their sexual lives and the consequences of adopting or negotiating risk reduction. They also allow individuals to recognize that there are other couples with similar concerns, and permit them to try out new communication strategies in a non-threatening environment.

♦ PROMOTE CONDOMS FOR PRIMARY PREVENTION OF HIV

Two main issues emerge from the study as barriers to condom use for the prevention of HIV infection. One issue is the problematic association of condoms with outside relationships, prostitution, promiscuity, and lack of trust. When one partner in a couple proposes condom use, it suggests that either he or she has been unfaithful, does not trust that his/her spouse has been faithful and/or suspects that the partner has a sexually transmitted disease. This association is virtually unavoidable, as condoms have been promoted heavily in the region, and elsewhere, for the prevention of diseases associated with multiple partnerships.

The second issue is the problems inherent in the characteristics of the condom. Some users experience a reduction in pleasure because of a loss of sensation or friction; condoms must be at readily hand at the moment when needed, and the fact that condoms do break and tear, particularly if they have been stored improperly or for too long.

The integration and promotion of condoms, including female condoms, within family planning programs merits further attention. The most promising strategy to increase condom use according to the results of this study is to reposition condoms from a product used primarily for disease prevention to one used between loving couples to protect the family's health.

We found that many women and men thought condom use within marriage to prevent disease was appropriate, or at least a necessary concession. When someone is HIV positive, condom use is even desirable. Some women are eager to use the dual protection offered by condoms and blame their spouses for resisting condom use. We also found women who were resistant to condom use as well as men who were advocates of condom use.

Family planning clinics can assist women with negotiating condom use with their partners as well as attack resistance on the part of women. One approach worthy of exploration is to assist women to negotiate with their partners for consistent condom use with partners outside of the marriage in order to protect the family. As a new product, female condoms can be offered as an alternative contraceptive method, to overcome the stigma of male condoms. Family planning programs should ensure that their providers advocate condom use, promote its proper handling, and assist women with communication skills and

techniques--which respond to the problems and needs the clients themselves identify - to negotiate condom use with their partners.

♦ ASSIST COUPLES AFFECTED BY HIV TO MAKE INFORMED CHOICES ABOUT CONTRACEPTIVE METHODS

Once a couple affected by HIV (either at high-risk of infection or actually infected) makes a decision to avoid a pregnancy, they need good information about the benefits and drawbacks of the various contraceptive methods. Given the current available methods, such a couple has two choices: to abstain from sexual relations (which was rejected as impractical by study participants) or use two methods concurrently - a barrier method and a more effective contraceptive method. The couple needs to understand and accept that there is a trade-off between the efficacy of the various methods to prevent pregnancy and to prevent transmission of or re-infection with the virus.

Family planning programs need to update providers on the safety and efficacy of the various contraceptive methods and addressing special needs of HIV positive women; for example, that women with AIDS may suffer from diarrhea and have poor absorption of hormonal methods. They also need to ensure that the full range of available contraceptive methods is acceptable and viable for the community. For example, comments made by participants in this study suggested that sterilization was not an acceptable contraceptive method in this community. Yet sterilization—tubal ligation or vasectomy—is a safe, highly effective contraceptive choice for couples who have made the decision to have no more children and are worried about the side effects of other methods.

♦ Expand and Innovate to Reach Men

The study results regarding the sources of family planning and HIV/AIDS information people rely on and how well these address their needs suggest a number of ways in which family planning programs could expand on and innovate in the ways they provide information and services to men.

Family planning programs should strive to make family planning clinics more male-friendly. Women reported that family planning clinics were their main source of information for both family planning and HIV/AIDS. But men feel unwelcome at family planning clinics. They resent being left ignorant or having to rely on second-hand information gathered from their wives and friends.

Men should be given comparable access to family planning and HIV/AIDS information as women. This could be achieved by offering information and education activities and services delivery targeted to men, such as community-based distribution agents or workplace services. Or by reorienting attitudes and service delivery to welcome men to participate as partners with their wives or girlfriends.

A clinic can create opportunities for couples to meet alone with a counselor or with a larger group in order to expand their information and education activities and promote couple communication. When men attend the clinic with their partners, staff should use this as an occasion to initiate couple discussions on sexual behavior and health, which will contribute to HIV prevention for both partners. This approach, of course, is not for everyone. Some women and men requested this kind of opportunity so that couples could have the same information and make joint commitments to safe sexual behavior. Others were not interested in having this kind of open discussion with their partner and preferred to make their own decisions. Men particularly were opposed to group discussions that include both women and men as it was felt that privacy and confidentiality would be compromised by the presence of the other sex.

♦ Facilitate Inter-Personal Communication

Clinics should incorporate opportunities for inter-personal communication in their clinic and community information and education activities. Inter-personal communication is critical to helping people change their behavior. Women and men reported the radio as a common source of family planning and HIV/ AIDS information but cited as a problem the fact that the radio format does not allow for discussion. Programs should look for opportunities within or outside the clinics to bring people together to listen to radio shows, watch videos, or hear a talk and then discuss what they have heard. These discussions would offer people a chance to increase their understanding of how to care for themselves and their family's health in the presence of the HIV/AIDS epidemic and validate with their peers the choices they have made and the consequences of those choices.

REFERENCES

- Central Board of Health. 1997. *HIV/AIDS in Zambia*. Ministry of Health, Lusaka, Zambia.
- Central Statistical Office [Zambia], Ministry of Health and Macro International Inc. (1997) Zambia Demographic and Health Survey, 1996. Central Statistical Office and Macro International Inc., Calverton, MD
- Cohen, Barney and James Trussell, eds. 1996. *Preventing and mitigating AIDS in sub-Saharan Africa*. Washington, D.C.: National Academy Press.
- Family Health International (FHI)/AIDSCAP. 1996. AIDS in Kenya: Socioeconomic Impact and Policy Implications.
- Gilks, Charles et al. 1998. Sexual Health and Health Care: Care and Support for People with HIV/AIDS in Resource-Poor Settings. Health and Population Occasional Paper. Department for International Development: London, U.K.
- Gupta, Gita Rao and Ellen Weiss. 1993. Women and AIDS: Developing a New Health Strategy. International Center for Research on Women: Washington, D.C.
- Ministry of Health. 1997. Family planning in reproductive health: Policy framework, strategies and guidelines. Ministry of Health, Lusaka, Zambia.
- Rutenberg, Naomi, Ann E. Biddlecom, Fred AD Kaona, and A. Kathleen Siachitema. 1997. 'Reproductive decision-making in the context of HIV/AIDS in Zambia'. Paper presented at the Annual Population Association Meetings, Washington, D.C.
- Setel, P. 1995. "The effects of HIV and AIDS on fertility in East and Central Africa." Supplement to Health Transition Review Volume 5.
- Tweedie, Ian and Musonda Lemba. 1996. *Perceptions of Health Providers, Family Planning, and Contraceptives in Zambia: Smoke that Thunders*. Johns Hopkins Center for Communication Programs, Baltimore, MD.
- UNAIDS/WHO. 1998a. Report on the Global HIV/AIDS Epidemic.
- UNAIDS/WHO. 1998b. AIDS Epidemic Update: December 1998.
- UNAIDS/WHO. 1998c. Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases, Zambia.