

Covert Contraceptive Use: Prevalence, Motivations, and Consequences

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This article examines women's covert use of contraceptives, that is, their use of a method without their husbands' knowledge. Three questions are addressed: (1) How is covert use measured? (2) How prevalent is it? and (3) What are the factors underlying covert use? Existing studies are used together with survey and qualitative data collected in 1997 in an urban setting in Zambia from married women and their husbands. Women's covert use of contraceptives is estimated to account for 6 to 20 percent of all current contraceptive use, and it is more widespread when contraceptive prevalence is low. The multivariate analysis indicates that difficult spousal communication about contraception is the strongest determinant of covert use. Husbands' disapproval of contraception works through spousal communication rather than as a direct influence on covert use. Husbands' pronatalism had no significant effect. The article concludes with implications of covert use for reproductive health and family planning programs, especially women's (and men's) needs for confidential services. (STUDIES IN FAMILY PLANNING 1998; 29,4: 360–372)

Family planning programs and research are undergoing a fundamental shift from a focus on women only to one on both partners in a sexual relationship. This shift has encouraged a growing literature on men's roles in reproductive decisionmaking and on differences between the reproductive attitudes and behaviors of wives and husbands (Bankole and Singh, 1998; Becker, 1996; Greene and Biddlecom, 1997; Stycos, 1996). The purpose of this article is to examine a family planning behavior that raises difficult questions about these research and program developments, which often replace the individual with the marital couple as the decisionmaking unit. This family planning behavior is the covert use of contraceptives.¹ Although the husband may influence—perhaps even have the dominant influence on—a couple's reproductive decisions, covert use highlights the discrepancy between husbands' and wives' contraceptive needs and intentions and serves as a strong reminder that spouses

should not be assumed to act together as a decision-making unit.

One factor driving an emphasis on the couple over the individual has been the increasing number of studies that demonstrate the influence of men's preferences and power, especially in sub-Saharan African countries, on reproductive outcomes such as contraceptive use (Mbizvo and Adamchak, 1991), childbearing (Bankole, 1995; Isiugo-Abanihe, 1994), and views about family planning (Ezeh, 1993). Based on these studies, an argument could be made that family planning programs that attempt to reach women will have a higher probability of success if they also involve their husbands or at least encourage such involvement (Becker, 1996). However, reproductive decisions made by men do not necessarily reflect their wives' reproductive preferences and may even be directly opposed to those preferences.

Covert contraceptive use is a sign that providers must continue to take into account women's rights to confidentiality in family planning services despite the adoption of education and communication strategies that are targeted at the couple as the decisionmaking unit. For example, the positive relationship between spousal communication and contraceptive use found in many studies—leaving aside problems of causality—supports increased efforts to bring husbands directly into the contraceptive decisionmaking process in clin-

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ics and to stress in client counseling and media messages the importance of discussing contraceptive use with husbands. These are, indeed, important programmatic steps for involving men as supportive partners in reproductive decisions.

Some women do not wish to have their husbands involved at all in these types of decisions, however, and they may face challenges to their right to privacy and confidentiality in adopting or switching methods as a result. If providers do not continue to ensure women's privacy and confidentiality in the delivery of family planning services, the strategies to involve men may have the unintended effect of leading a number of women to decide *not* to use contraceptives despite their desire to delay or avoid pregnancy. The question remains, how many women are using contraceptives without their husbands' knowledge? Furthermore, which women are most likely to use a method secretly, and will the prevalence of secret use change as contraceptive use in general increases?

Some references have been made to the secret use of contraceptives, mainly in Latin America and sub-Saharan Africa (Beckman, 1983; Blanc et al., 1996; Bledsoe and Hanks, 1998; Renne, 1993; Rutenberg and Watkins, 1997; Shedlin and Hollerbach, 1981; Watkins et al., 1997; Zulu, 1998). This article provides a focused summary of what is known about covert use and an empirical analysis of covert use among married women. It addresses three main questions: (1) How is covert use measured in different settings? (2) How prevalent is the covert use of contraceptives? and (3) What are the main determinants of covert use? The authors draw on published studies in a number of countries and on recently collected survey and qualitative data from Zambia. Questions in the survey and focus-group discussions in Zambia were designed in part to investigate the topic of covert use.

Quantitative and Qualitative Data from Zambia

The survey and qualitative data used in this study were collected in urban Ndola district, Copperbelt province, Zambia. Ndola is a major urban center in Zambia, a country where nearly half of the population resides in urban areas. Fertility has been slowly declining in Zambia, from 7.2 births per woman in 1980 to 6.1 births in 1996 (Central Statistical Office et al., 1997). The total fertility rate in 1996 for Copperbelt province was 5.6 children per woman of reproductive age. Knowledge of modern contraceptive methods among men and women (at least as measured by the broad indicator of hav-

ing heard of a method) is very high: Among 97 percent of married couples, both the husband and wife know of at least one modern method. Thirty percent of married women and 40 percent of married men in Copperbelt province are currently practicing contraception; more than two-thirds of this use consists of modern methods. Spousal discussion about family planning is becoming more frequent: The proportion of married women who had not spoken about family planning with their husbands in the year preceding the survey declined from 42 percent in 1992 to 36 percent in 1996 (Central Statistical Office et al., 1997; University of Zambia et al., 1993). Yet there remain substantial discrepancies between women's reproductive desires and their contraceptive behavior: 28 percent of married women in the Copperbelt were identified as wanting to delay or stop child-bearing but were not practicing contraception (Central Statistical Office et al., 1997).

The study data described below are part of a larger four-country project on the determinants of unmet need for contraception. The population-based survey and focus-group discussions were designed and conducted by the Tropical Diseases Research Centre (Ndola) in collaboration with the Policy Research Division of the Population Council (New York). The article draws on six focus-group discussions (three with married women and three with married men) and survey data from married women and their husbands. Focus-group discussions were held in December 1996 and survey data were collected from May through July 1997.

The six focus-group discussions (FGDs) were exploratory in nature and were designed to inform the design of the survey questionnaire rather than stand as separate sources of data for analysis. FGDs were held in convenient community locations that were suggested when respondents were invited to participate and were led by one moderator (a female nurse) and one rapporteur (a female assistant). The selection procedure was as follows: The moderator and rapporteur visited nurses at clinics in the selected communities and explained the purpose of the research project and the discussion groups. The nurses then met with relevant community leaders (traditional healers, community-based distributors of contraceptives, and welfare officials) about the purpose of the research project and about possible focus-group participants to approach. These leaders in turn invited women and men who were using contraceptives (who were known only to the clinic nurses) and those who were not using contraceptives to participate in the discussions. The selection of participants was not random and was aimed at identifying separate groups of married women and men by current contraceptive-use status. Rather than use a household screening procedure

to identify women and men who were practicing contraception, the research team relied instead on the knowledge of nurses in the community as to who was and was not using a method and who might be interested in participating in such a study.

The discussion groups comprised between eight and 11 participants, and discussions lasted two to three hours on average. All discussions were tape-recorded with the permission of the respondents, and were then transcribed, translated from Bemba into English, and checked against the tapes. The transcripts are selectively used to illustrate particular explanations for covert contraceptive use, and are not subjected to a separate, systematic analysis.

The population survey was a two-stage, self-weighting probability sample of married women and their husbands living in urban Ndola district. Fourteen townships were purposively selected to reflect variation in family planning service provision from the 21 townships that comprise urban Ndola district. The sample consists of 1,860 married women aged 15–44 years and 1,056 husbands.² The response rate was 90 percent for eligible women and 76 percent for husbands. The lower response rate for husbands was mainly the result of difficulties in tracking husbands for an interview (87 percent of nonresponse) rather than the men's outright refusal to be interviewed. Husbands who were not successfully interviewed may differ systematically from men who were interviewed, and thus a likelihood exists that the data from husbands are biased (though in which direction is not clear). Questionnaires collected detailed information about fertility preferences, contraceptive behavior, different "costs" of contraceptive methods, and the nature of spousal decisionmaking.

For most of the following analyses of the Zambia survey data, the sample is limited to women who want to delay their next birth for at least two years or who want to stop childbearing altogether. In short, the contraceptive-use decisions of women who have already expressed a desire to prevent or delay pregnancy are examined. The sample is restricted in this manner in order to focus on women for whom the desire to avoid unintended pregnancy is clear and is likely to remain so over time (for at least two years), and for whom contraceptive use is relevant.

Definitions and Prevalence of Covert Use

The common definition of "covert use" in the literature is contraceptive use without the knowledge of the spouse. Covert use represents an individual's decision

to practice contraception without direct involvement of the spouse. In contrast, open use represents an individual's decision to practice contraception with or without the spouse's involvement, but in all cases, with the spouse's knowledge. Nonuse represents either acquiescence in the face of a spouse's opposition or an individual's decision not to use because of the perceived costs of contraception.

Of course, women and men could also be concerned about keeping their contraceptive use secret from extended family members (see Koenig et al., 1984) or even field researchers (Bleek, 1987; Phillips et al., 1997), circumstances that present measurement problems for assessing contraceptive behavior. Covert use has rarely been mentioned for unmarried people and their sexual partners, but the associated problems with communication and reproductive decisionmaking would still apply. Hiding use from family members and broader social circles rather than from sex partners probably best characterizes covert use among unmarried young adults and adolescents.

A number of modern methods available to women can be used covertly: oral contraceptives (including emergency contraception), injectables, the IUD, and subdermal implants (see Brown et al., 1990). Abortion can also be obtained secretly, although often with more severe health consequences than with other contraceptive methods. For men, the only modern method that can be used surreptitiously is vasectomy. Of course, men can use contraceptives with other women, where both the extramarital relationship and contraceptive use are kept secret from the wife. In this sense, covert use of contraceptives (usually condoms) for men would be more accurately defined as involving contraceptive use with women outside the marital union.³ Given the different meanings of covert contraceptive use for women and men, women's covert use is the sole focus of this study.

The level of covert use is difficult to determine, because the behavior itself is hidden and costs may be associated with reporting it to a survey interviewer or family planning provider. In the literature reviewed, a number of accounts of women's covert contraceptive use were evident in studies based on qualitative data from sub-Saharan Africa and Latin America. However, these studies cannot provide empirical estimates of the prevalence of covert use. Among studies using survey data, either secret use was inferred from discordant responses between husbands and wives about current contraceptive use, or direct attempts were made to measure secret use by asking the respondent if her spouse knew about her current use.

Studies of spousal differences in reports of current

contraceptive use have shown large discrepancies between what wives and husbands report. In general, 15 to 20 percent of couples give discrepant responses to questions about current use, and in most cases, the husband more often reports use than does the wife (see Becker, 1996; Ezeh and Mboup, 1997; and Koenig et al., 1984). One review of couple data from DHS surveys in 18 countries shows large discrepancies between spouses' reports of current use of modern methods, especially in sub-Saharan Africa; and in all countries except Pakistan, husbands are more likely to report use than are wives (Bankole and Singh, 1998).

Figure 1 illustrates the relationship between discordant reports of modern contraceptive use among spouses, specifically where the wife reports use and the husband does not, and the overall prevalence of modern method use among married women. If we make the bold assumption that covert use occurs when the wife reports contraceptive use and the husband does not, then estimates of women's covert use of modern methods could vary from a low of 2 percent in Brazil to 52 percent of users of modern methods in the Central African Republic. Figure 1 also shows a negative relationship between this type of spousal discrepancy in modern contraceptive use and the overall prevalence of modern method use. In those countries where the prevalence of modern method use among married women is less than 10 per-

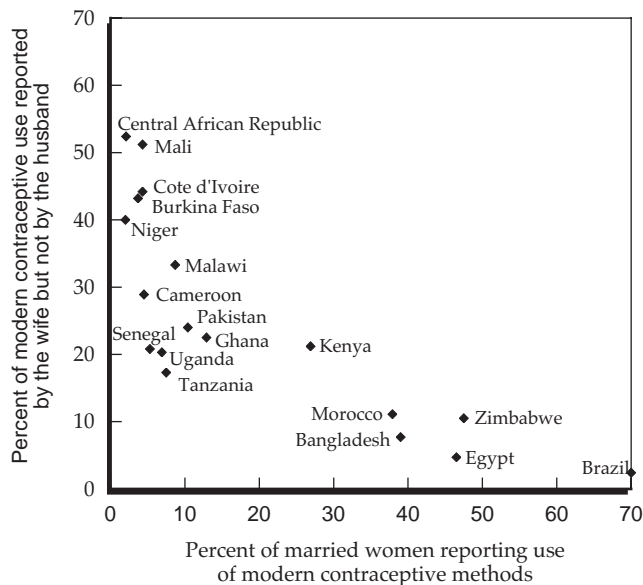
cent, covert use would likely comprise a substantial proportion of contraceptive use. Among countries characterized by a relatively high prevalence of modern method use, covert use would likely characterize a minority of women who use contraceptives.

A study in Navrongo, Ghana (a rural setting), provided a unique opportunity to compare family planning service records on contraceptive use with survey interview data from the same women and their spouses (survey interviews were conducted by interviewers who were not aware of the contraceptive status of the respondent). Among 57 percent of the couples in which the wife was a known contraceptive user, the wife reported in the survey interview that she was using contraceptives and her husband reported that she was not (Phillips et al., 1997). If discordant responses were simply assumed to indicate covert use, then this finding suggests that more than half of contraceptive practice in this rural area may consist of secret use.

These studies of discordant reports among couples provide speculative upper bounds for the prevalence of covert use. The term "speculative" is used here because spousal differences in reporting contraceptive use are explained by numerous factors other than one spouse's intention to hide contraceptive use. Spouses' differential reporting may stem from shyness in speaking of the subject to an interviewer; for those in polygamous marriages, from confusion about which spouse contraceptive use pertains to; and from gender differences in the interpretation of questions about contraception. Making firm conclusions about the prevalence of secret use simply by comparing differences in spouses' reports of contraceptive practice is difficult.

Table 1 shows estimates of covert use from three studies that posed direct questions about secret use, all of them conducted in sub-Saharan Africa. The question about covert use was specifically phrased in all three studies as "Does your husband/partner know that you are using a method now?" The study in Uganda found that 15 percent of women who were using contraceptives said that they were doing so without their partners' knowledge (Blanc et al., 1996). This fraction was much higher in rural areas than in urban areas (18 percent versus 7 percent). The studies in a rural Kenyan setting showed that 20 percent of contraceptive users admitted to using without their husbands' knowledge (Rutenberg and Watkins, 1997; Watkins et al., 1997). In the present study of an urban area in Zambia, 7 percent of women using contraceptives said they were covertly using, a figure similar to that for urban areas in the Uganda study. Lastly, a study in rural Gambia traced the prevalence of covert use across different stages in

Figure 1 Relationship between discrepant reports of modern contraceptive use among married couples and overall prevalence of modern contraceptive use among married women in 18 developing countries



Source: Calculations of numbers presented in Table 5 of Bankole and Singh (1998).

Table 1 Prevalence of women's covert contraceptive use in three developing countries

Site/authors and date of study	Sample	Women using contraceptives (percent)	Covert contraceptive use (percent)
Lira and Masaka districts, Uganda (Blanc et al., 1996)	Women aged 20–44, married or in a consensual union (N = 1,660)	16.5 (total) 29.1 (urban) 14.0 (rural)	14.8 (total) 6.5 (urban) 18.2 (rural)
South Nyanza district, Kenya (Rutenberg and Watkins, 1997; Watkins et al., 1997)	Ever-married women aged 15–49 (N = 850)	12.0 (rural)	20.0 (rural)
Urban Ndola district, Zambia (Present study)	Women aged 15–44, married or in a consensual union (N = 1,860)	43.9 (urban)	6.9 (urban)

Note: Covert use is measured by women's reports in a survey that their husbands/partners do not know that they are using contraceptives.

the birth interval (not included in Table 1 because of incomparability). The authors found that the proportion of covert modern contraceptive use increases as the birth interval lengthens: Few women practicing contraception do so covertly when they are fully breastfeeding, but 22 percent of women using contraceptives do so covertly once their children are weaned (Bledsoe and Hanks, 1998).

The level of covert use is also negatively related to overall contraceptive prevalence, as was shown in Figure 1. Although the number of studies cited here is small, the evidence suggests that covert use is mainly a problem when contraceptive use is a relatively new or uncommon practice. As more women and men practice contraception in a given setting, covert use may characterize a smaller and smaller proportion of women (see mention of this relationship in Beckman, 1983).

Secret use has been linked to the predominant use of specific contraceptive methods, an issue that is germane for the design of family planning programs. Table 2 indicates that most women in the Zambian study who say they are using without their husbands' knowledge are using methods that can be hidden easily from a husband: the pill, injectables, and natural methods such as periodic abstinence. The difference in method choice between secret users and women who are using with their

husbands' knowledge is most pronounced for injectables and natural methods, methods that secret users employ most often. Natural methods may not seem to be methods that can easily be hidden. However, methods such as periodic abstinence likely resemble "sporadic abstinence," a method mentioned by respondents in the Uganda study as a way to avoid pregnancy without their spouses' knowledge (Blanc et al., 1996). "Sporadic abstinence" was described in that study in terms of the strategies one could employ to avoid risky sex, such as "pretending to be ill, spending nights away from home, or 'facing the wall'" (page 35).

One might ask "how covert" is covert use? As with most studies using data from couples, one spouse's perception of the other's attitudes or behavior may be different from what the other spouse reports. Table 3 shows reported contraceptive use for couples. Among covert users (the second row), more than half of the husbands (57 percent) contradicted this perception of secrecy and reported that they were using contraceptives with their wives (questions about contraceptive use were specific to use with one's spouse, and multiple methods were recorded). This finding would seem to indicate that contraceptive use is, in fact, not truly hidden; most of those husbands reporting use did not name the same method as their wife, however. Some explanations for this dis-

Table 2 Percentage distribution of contraceptive use by method, according to whether use is covert or open, among married women, urban Ndola, Zambia, 1997

Method	Covert use		Open use	
	Percent	(N)	Percent	(N)
Pill	29	(16)	37	(279)
Injectable	25	(14)	8	(57)
Periodic abstinence/ lactational amenorrhea	39	(22)	19	(143)
Other ^a	7	(4)	36	(281)
Total	100	(56)	100	(760)

Note: The sample is married women who are fecund, not pregnant, and who want to delay or stop childbearing. ^aThe category "other" includes withdrawal, IUD, condom, male and female sterilization, traditional string (*impimp*), and other unspecified methods.

Table 3 Percentage distribution of married women's contraceptive use, by husband's reported contraceptive use with wife, urban Ndola, Zambia, 1997

Wife's reported use	Husband's reported use		Total	(N)
	Using	Not using		
Using openly	77.5	22.5	100.0	(374)
Using secretly	57.1 ^a	42.9	100.0	(28)
Not using	41.6	58.4	100.0	(190)

Note: The sample is matched, monogamous couples in which the wife is fecund, not pregnant, and wants to delay or stop childbearing. ^aOf the 16 husbands who said they were using a method with their wives, only three named the same method as their wives (all were using oral contraceptives). Multiple methods were allowed.

crepancy include: (1) women's use is indeed covert and their husbands are simply guessing; (2) husbands may have given their responses based on what they thought the interviewer wanted to hear or because they wanted to appear "modern"; (3) husbands may have used the methods they mentioned in contexts other than within their regular relationships (though the survey question referred specifically to the marital union);⁴ and (4) gender differences may have determined what husbands and wives describe as contraceptive practice (for example, men are more likely to identify natural methods, whereas women are more likely to identify modern methods). Which of these possibilities is the dominant explanation cannot be ascertained.

Overall, nearly 30 percent of couples in this study have discrepant reports of current contraceptive use. Among these, only 7 percent of the wives say that they are using contraceptives without their husband's knowledge (figures derived from Table 3). Clearly, no strong overlap is seen between spousal differences in reported contraceptive use and women's covert contraceptive use. Moreover, the level of spousal disagreement about contraceptive practice is 23 percent for women who use openly and 42 percent for nonusers (first and third rows of the table).

These findings provide further evidence that men and women often report contraceptive use differently for a variety of reasons and that these differences should not be assumed to indicate secret use. Differences found here are net of the fact that some women reported hiding their contraceptive use from their husbands. Ultimately, those women who say they are secretly using contraceptives are indeed doing so for the most part without their husband's knowledge of any use or with their husband's ignorance of the specific method, according to the Zambian data. The question remains as to why women are motivated to use contraceptives without their husband's knowledge.

Motivations for Covert Use

Numerous motivations are described in the literature to explain women's covert use of contraceptives as opposed to open use or no use. The three main motivations discussed below are (1) the husband's disapproval of contraception; (2) the pronatalism of the husband; and (3) the difficulties associated with the couple's communication about contraceptive use. The last motivation may be related either to the husband's opposition to contraception (for example, he becomes angry or violent about the subject) or to the topic's being embarrassing

or uncomfortable for the husband and wife to discuss.

Women do not undertake covert use easily, and such behavior needs normatively acceptable justifications, because a wife must act outside of or directly against her husband's authority. A husband's inadequate economic support of his children is cited by both women and men in a number of studies as persuasive justification for a woman's taking independent action, although this justification may be more characteristic of sub-Saharan Africa than of other regions (Renne, 1993; Watkins et al., 1997). In the Zambian study, women and men justify secret use on the basis of the health and economic welfare of their children rather than on the basis of the wife's right to act on her preferences independently. This point is illustrated by the following statements from women and men:

From a focus group of women who do not use contraceptives:

Usually when a man in the home starts neglecting the family, that is when a woman is pressed to stop having children, because she sees how the other children are suffering and end up with malnutrition. That is the main reason why a woman starts a method of family planning, to avoid ill-treating innocent children. So even if the husband refuses, you just go ahead and start family planning. You just continue taking the pill at the usual time secretly.

What has been said is true. You just observe what is happening at home; if there is no support, you start a pill secretly. The children look miserable and not cared for, no clothes, they move about aimlessly, no food and start begging from the streets. As a woman, this breaks your heart, therefore you have no choice but just to stop bearing children.

From a focus group of men who use contraceptives:

Sometimes [you] don't even know that your wife has started family planning; some husbands stop their wives from taking any method, and yet they can't control their sexual desires. . . . [I]f you like meeting your wife quite often, again you will cause problems for her; she will conceive before time. It is better she uses a method she is comfortable with, especially if her husband is not understanding. She has the right to take a pill secretly.

Although children's welfare is one of the most pervasive publicly offered justifications given for covert use, the husband's opposition to contraceptive use can be argued to be the driving force behind women's individual decisions to use contraceptives secretly rather than openly.

Husbands' Opposition to Use

In general, survey data indicate extraordinarily high levels of approval of contraception among men in most developing countries, and differences between men's and women's approval of contraceptive use tend to be small (Ezeh et al., 1996). In DHS surveys, however, the question usually asked of men and women is phrased with respect to contraceptive use in general: "Would you say you approve or disapprove of couples using a method to avoid getting pregnant?" (Central Statistical Office et al., 1997). Although such a question measures a general attitude toward family planning, it is inadequate for understanding whether men approve of contraceptive use for their own wives, a matter directly related to secret use (see Bledsoe and Hanks, 1998).

Based on their qualitative work in four rural communities in Kenya, Watkins and her colleagues (1997) identified three main reasons for male opposition to contraceptive use: (1) the concern that family planning will encourage infidelity among wives; (2) that contraception will interfere with men's desire to raise large numbers of children as compensations for bride payments; and (3) that use will weaken husbands' control over their wives. Thus, in contrast to what the general approval statistics indicate, many men may be uncomfortable with the idea that their wives use contraceptives for fear that use may jeopardize their own sexual or reproductive control. Further evidence supporting these reasons for male opposition to contraceptive use, primarily modern contraceptive methods, was also presented in a recent study in Malawi (Zulu, 1998).

In a hypothetical question posed in the Zambian survey, women were asked what they would do if their husbands disapproved of their using contraceptives (see Table 4). The majority of women (57 percent) said they would use contraceptives without their husband's knowledge. Another 20 percent said they would not use a method, but would try to convince their husbands, thus providing some indication that husbands' disapproval is a barrier rather than spousal communication per se.

Table 4 Percentage distribution of married women's attitudes toward covert contraceptive use, urban Ndola, Zambia, 1997

If your husband/partner disapproved of your using family planning methods, would you:	Percent
Use without his knowledge	56.5
Not use, but try to convince him	20.2
Not use	16.3
Use with his knowledge	7.2
Total	100.0
(N)	(1,860)

Note: The sample is all married women.

Sixteen percent said they would not use at all, a group of women who appear to acquiesce to their husbands' wishes. Very few said they would use contraceptives with the knowledge of their husbands (only 7 percent), a course of action that may be viewed as challenging the husband's authority.

The Effect of Husbands' Pronatalism

A long-standing assumption about men's fertility preferences is that they want more children than women do, because men do not suffer the physical or economic costs of repeated childbearing that are imposed on women. In general, studies of couples (not men and women in the aggregate) support this gender difference: "[H]usbands tend to want more children than their wives and to want the next child sooner" (Bankole and Singh, 1998: 15). The evidence is more mixed with respect to the effect of husbands' pronatalism on different reproductive outcomes. A study in Nigeria based on longitudinal data found that the influence of a man's fertility preferences depended on the number of his living children (Bankole, 1995). If a couple had four or fewer children, a subsequent birth was likely if the husband wanted it, but if they had five or more children, another birth was likely if the wife wanted it. The author argued that a woman was better able to defend her desires (and, conversely, a man was less likely to press for his desires) once she had amply demonstrated her ability to bear children. In other countries, much less support is found for a strong influence of men's fertility desires (versus those of their wives) on contraceptive use (Bankole and Singh, 1998). Under the latter circumstances, a weak relationship would be expected between a husband's pronatalism and his wife's likelihood of using contraceptives surreptitiously.

Problematic Spousal Communication

A third motivation for covert use is that it is the only way a woman can meet her own reproductive needs while avoiding problematic communication with her husband. Numerous studies show a positive association between the frequency of spousal communication and contraceptive use in general (open and covert), although this association involves problems of causality when cross-sectional data are used (Omondi-Odhiambo, 1997; Salway, 1994). Spouses who disagree with each other about whether to practice contraception may also be less likely to discuss family planning, and, therefore, the wife may be more likely to use contraceptives secretly. For example, women in the Uganda study felt that open disagreement with their husbands had high social costs (divorce being one extreme), and that covert use was a way

of circumventing both an unwanted pregnancy and the costs of directly opposing a husband's wishes (Blanc et al., 1996).

Empirical Evidence from Zambia

Multinomial logistic regression models are used here to estimate the effects of these three motivations for covert use. The three outcomes of the dependent variable are open use of contraceptives, covert use of contraceptives, and no use (the reference category). The following indicators represent the motivations for covert use that are examined: (1) the wife's perception of her husband's disapproval of contraceptive use; (2) the wife's perception of her husband's desire for another child; (3) the wife's report of discussion about contraceptives with her husband; and (4) the wife's perception of the ease of discussing contraceptives with her husband.

The first variable is based on a question about whether or not women think their husbands approve of contraceptives ("In general, do you think he approves or disapproves of using ways to delay/avoid becoming pregnant?"). This variable reflects husbands' approval in general, and not necessarily with respect to contraceptive use with or by their wives. The second variable, husband's pronatalism, is coded "1" if wives perceive that their husbands want to have a child soon while they want to delay or stop childbearing, or if their husbands want to have a child soon or delay the next birth while they want to stop childbearing altogether ("0" otherwise).

Two aspects of the quality of spoken communication about contraceptive use between spouses are examined: First, a broad assessment of whether contraceptives are appropriate to discuss (signified by ever discussed or never discussed with husband); and second, the wife's relative ease with approaching her husband about the topic of contraceptive use (coded "1" if difficult and "0" if easy or if the wife has to wait for her husband to initiate discussion). Number of living children and the wife's educational level (eight years or more versus other) are used as controls. The percentage distributions of all variables are presented in appendix Table A1.

The level of agreement between women's perceptions of what their husbands think and what their husbands say in the survey interview on the key indicators of motivations for covert use are assessed below.⁵ In this way, the role false information or misperception plays in the decision to use contraceptives surreptitiously is examined. Percentage distributions of women's and men's views, overall levels of agreement, and statistical tests for whether agreement is more than what would be expected by chance are shown in Table 5.⁶

The overall levels of agreement for each of the variables included in the table indicate high congruence between husbands' and wives' views. Wives' perceptions of their husbands' desire for another child and their husbands' own views match 64 percent of the time. The level of agreement on husband's approval of contraceptives and spousal communication about family planning (incidence and comfort) are much higher. Agreement is highest when wives view their husbands' attitudes in the affirmative; for example, when wives think that their husbands approve of family planning (94 percent agreement) or that their husbands can be approached easily about family planning (85 percent agreement).

The findings on spousal agreement concerning husband's approval of contraceptives mirror those from an analysis of matched couples in the 1996 Zambia DHS (Central Statistical Office et al., 1997). A striking finding is that 80 percent of women who think their husbands disapprove of contraceptives are married to men who say that they actually approve of contraceptives. Discrepant findings like this may lead to the conclusion that spouses misperceive each other's views and that this misperception is most likely due to lack of communication about family planning. If spousal communication were easier, perhaps these misperceptions could be corrected, contraceptive use would become a less problematic decision, and use of contraceptives (presumably open use) would be more likely to result. The argument could also be made, however, that some men intentionally misrepresent their views or behavior—a social desirability bias found with interviewer-administered questions (Tourangeau and Smith, 1996)—on questions such as general approval of contraception in order to show supportive and progressive rather than "backward" views about family planning to the interviewer (see Zulu, 1998). Confirming one explanation over the other is difficult. In either case, women's perceptions of their husbands' views and likely behavior, which may differ from what their husbands report, are, in the end, the basis upon which women decide whether or not to use contraceptives without their husbands' knowledge.

The results from the multinomial logit models are presented in Table 6 as relative risk ratios. Model 1 shows the effect of women's perceptions of husbands' disapproval of contraception on secret use and open use (versus nonuse of contraceptives), controlling for number of living children and women's education. Women are 3.7 times more likely to use contraceptives surreptitiously and less than half as likely to use them openly than not to use contraceptives if they think that their husbands disapprove of family planning. Neither women's education nor family size has any significant effects on secret use, but higher education does increase the odds that a

Table 5 Percentage distribution of wives' perceptions of husbands' views, by husbands' stated views on approval of contraception, desire for another birth, and spousal communication, urban Ndola, Zambia, 1997

Wife's perception	Husband's view			Total	(N)	Overall agreement	Kappa index ^b
	Approves	Disapproves	Does not know				
Husband's attitude toward contraception							
He approves	94.0	5.8	0.2	100.0	(518)		
He disapproves	80.0	16.7	3.3	100.0	(60)	84.0	0.13**
Does not know ^a	85.7	14.3	0.0	100.0	(14)		
Husband's desire for another child							
Wants soon		Wait	Does not want				
He wants a child soon	32.4	51.4	16.2	100.0	(74)		
He wants to wait 2+ years	14.4	65.2	20.4	100.0	(333)	64.4	0.40**
He does not want another child	4.3	20.0	75.7	100.0	(185)		
Ever discussed contraception		Ever discussed	Never discussed				
Ever discussed	89.7		10.2	100.0	(497)		
Never discussed	68.4		31.6	100.0	(95)	80.4	0.23**
Ease of discussing contraception		Easy	Difficult				
Easy	85.4	3.4	11.2	100.0	(499)		
Difficult	79.7	11.9	8.5	100.0	(59)	74.3	0.08**
Wife waits for husband to initiate	73.5	5.9	20.6	100.0	(34)		

**Significant at $p \leq 0.01$.

Note: The sample is matched monogamous couples in which the wife is fecund, not pregnant, and wants to delay or stop childbearing. ^aThe category "does not know" includes instances in which the wife does not know what the husband thinks and those in which the wife perceives that her husband does not know. ^bSee note 6 at end of text.

woman will use a method openly rather than not use one.

Model 2 shows the effect of spousal differences in fertility preferences. Women's perceptions of their husbands' pronatalism have no significant effect on secret or open use compared with nonuse, whereas the strong effects of husbands' perceived disapproval remain. These findings suggest that conflicting fertility preferences do not, by themselves, motivate covert use. In a compari-

son of the model chi-square statistics, the addition of the measure of husbands' perceived pronatalism barely improves the fit of the model.

Model 3 shows the effects of the nature of spousal communication about family planning. The strong positive effect of husbands' perceived disapproval on covert use is substantially diminished once the two measures of problematic spousal communication are included in

Table 6 Effects of various determinants of covert contraceptive use among currently married women, urban Ndola, Zambia, 1997

Determinant	Model 1		Model 2		Model 3	
	Covert use	Open use	Covert use	Open use	Covert use	Open use
Number of living children	1.01	1.02	1.00	1.03	1.00	1.01
Education						
8+ years	1.68	1.47**	1.66	1.47**	2.06*	1.28
< 8 years (r)	1.00	1.00	1.00	1.00	1.00	1.00
Wife's perception of husband's attitude toward contraception						
Husband disapproves of contraception	3.66**	0.44**	3.35**	0.47**	1.71	0.67
Husband approves (r)	1.00	1.00	1.00	1.00	1.00	1.00
Fertility preferences						
Husband more pronatalist			1.41	0.77	1.20	0.81
Same preferences/husband less pronatalist (r)	1.00	1.00	1.00	1.00	1.00	1.00
Problematic communication						
Never discussed contraception					1.57	0.36**
Ever discussed (r)	1.00	1.00	1.00	1.00	1.00	1.00
Husband difficult to approach	—	—	—	—	3.72**	0.68
Husband easy/wife waits for husband to initiate (r)	1.00	1.00	1.00	1.00	1.00	1.00
(N)	(1,229)		(1,229)		(1,229)	
Model Chi-square (degrees of freedom)	58.76 (6)		63.66 (8)		139.66 (12)	
Pseudo R ²	0.030		0.032		0.071	

Significant at * $p \leq 0.05$; ** $p \leq 0.01$. (r) = Reference category.

Note: The sample is married women who are fecund, not pregnant, and who want to delay or stop childbearing. The reference category for the dependent variable is no contraceptive use.

the model. Women who find it difficult to approach their husbands about the topic of contraceptive use are nearly four times more likely to use a method surreptitiously than not to use one. The incidence of spousal discussion has little effect on covert use versus nonuse; in a finding consistent with other studies, however, women are significantly less likely to use contraceptives openly if they have never discussed family planning with their husbands. Differences in spousal fertility preferences still have little effect on the likelihood of covert or open use versus nonuse. Wives' perception of their husbands' opposition to contraceptive use in general also continues to have a positive (but not statistically significant) effect on secret use, and this effect appears to work through the nature of communication with the husband (that is, he is difficult to approach about contraceptive use).⁷

Policy and Programmatic Implications

Covert use of contraceptives challenges many assumptions concerning the dominant influence of men's views about and decisionmaking authority over women's reproductive behavior (Watkins et al., 1997), and, although not cost-free, such use is a practical strategy to subvert male authority (Renne, 1993). It is usually justified by both women and men on the grounds of protecting the welfare of living children rather than as a woman's right to make reproductive decisions on her own. This study was an attempt to provide an empirical picture of this phenomenon that highlights problematic gender issues in reproductive decisionmaking.

Secret use by no means constitutes the majority of contraceptive use. In the few studies that have attempted to measure it directly, the extent to which women are secretly practicing contraception is estimated to account for between 6 and 20 percent of such practice in sub-Saharan Africa. It is much more widespread in rural areas than in urban areas. This rural-urban differential is accounted for partly by lower overall contraceptive use in rural areas, suggesting that where contraceptive use, especially of modern methods, is relatively new or not generally socially acceptable, more women who use a method will try to hide use from their husbands. Although overall prevalence of covert use is low and is likely to decline further as family planning continues to increase in many countries, it still remains an issue to account for in the design and provision of family planning services, especially crucial in areas where contraception is not widely prevalent or is just beginning to be practiced. One important reason to account for covert use is that if service providers do not pay attention

to the needs of women who want to use contraceptives covertly, these women may decide not to practice contraception at all at a critical time when innovative behavior could make a difference in the rate at which family planning spreads to the wider population.

The analysis of motivations for covert use indicates that wives' inability to approach husbands to discuss contraceptive use plays a major role. In societies where men have a large degree of control over their wives' reproductive decisionmaking, if husbands have not given their permission, open use could produce major domestic conflict. Secret use may be a wife's better option to avoid open confrontation. The prevalence of this problem is demonstrated by women's responses to a hypothetical situation in the Zambian survey regarding what they would do if their husbands disapproved of their using contraceptives. A majority of the women said that they would use a method secretly. Only a few women were prepared to disregard their husbands' views and use contraceptives openly.

The multivariate analysis indicates that of the three factors examined, difficult spousal communication was the strongest determinant of covert use. Other factors—spousal differences in fertility preferences and husbands' perceived disapproval of contraception—had no significant effects on secret use versus nonuse once the nature of spousal communication was introduced into the model. However, the nonsignificance of husbands' perceived disapproval should not be taken to mean that spousal opposition is unimportant in the determination of secret use. A wife's perception of her husband's opposition to contraceptive use may make broaching such matters with her husband difficult. These findings have several implications for programs in terms of the side effects of method use, method choice, and maintaining standards of confidentiality and privacy.

Side Effects, Method Choice, and Discontinuation

The fear that a husband may detect contraceptive use (especially if side effects to health occur) is a significant problem for surreptitious users. In one study on method choice, women expressed concern about side effects to their health, "not because of physical discomfort or danger, but because 'it will show'" (Brown et al., 1990: 46). Covert use presents problems with respect to the side effects of methods in two ways. First, a woman may not seek treatment or switch methods for fear of being discovered, thus prolonging and perhaps intensifying her health problems. Second, even if she decides to seek treatment, she may not be able to do so effectively or quickly because her husband may withhold help: a ver-

sion of “you brought this on yourself, you bear the costs alone.” This situation is more likely to occur to women who depend heavily on their husband’s income for access to health care and treatment. The following remarks from a participant in a Zambian focus group of women who do not use contraceptives illustrates this point:

There are times, in the home, when some men refuse [to allow] their wives to start using family planning. Therefore, once you decide to use family planning, you have to know what to do. So, some women are afraid, and that is why they use traditional medicine or even a pill privately. And she has to choose a method that has no side effects, because if she suffers . . . the husband will be furious and tell her to count him out of that problem, so they fear to get permission from the husband. She will continue taking the method privately.

A study conducted in Nigeria found that some women would rather risk a one-time approach like abortion than opt for the continual risk of detection that such methods as the pill and the IUD present (Renne, 1993). Of course, the health consequences can be far more severe for abortion, especially with the complications that usually result from clandestine procedures. The husband is more likely to find out about efforts that have led to postabortion complications and hospitalization (a financially costly consequence).

Covert use is also associated with issues of method choice and discontinuation because of side effects, health-related or otherwise, that reveal use to the husband. For instance, a covert user may stop using a method because a side effect (for example, changes in menstrual bleeding patterns) threatens to reveal contraceptive use. Therefore, programs should take into consideration the provision of a range of methods that allow all women to realize their contraceptive-use goals, including covert use, at minimal costs.

Maintaining Confidentiality

Undoubtedly, men need to be better informed and educated about the family planning and reproductive health concerns that both they and their wives and sex partners face. Many service providers have responded to this challenge through efforts to increase men’s access to family planning (such as providing condoms at work sites), to create greater awareness of family planning, and to encourage spousal communication, and by so doing they weaken the existing barriers to contraceptive use by men and women (see reviews by Green et al., 1995; Toure, 1996). In a number of family planning in-

terventions, the outcomes were significantly better if the husband was involved; for example, wives discontinued methods less frequently if both spouses were given family planning education (see Becker, 1996, for a review of couple-based interventions).

However, covert contraceptive use indicates that some women—roughly one in every ten contraceptive users (based on existing studies)—not only do not want their husbands to be involved, but also want to keep their contraceptive use hidden from their husbands. This desire for secrecy is not simply a reflection of miscommunication between spouses. The qualitative evidence from a number of studies shows that women’s decision to use contraceptives secretly is not undertaken lightly and can have harsh consequences if their husbands discover their covert use. The results from this study argue for the importance of service providers’ taking into account women’s (and men’s) needs for confidential services. The drive in policy and program circles to include men should not preclude the essential right to privacy for those seeking family planning services.

Appendix

Table A1 Selected characteristics of married women in study sample, urban Ndola, Zambia, 1997

Characteristic	Secret users	Open users	Nonusers	Total sample
Sample size (N)	(56)	(760)	(413)	(1,229)
Mean number of living children (variable)	3.5	3.6	3.7	3.6
	Percent			
Education				
£Grade 7	58.9	60.9	69.7	63.8
‡Grade 8	41.1	39.1	30.3	36.2
Wife’s perception of husband’s attitude toward contraception				
Husband disapproves	39.3	7.2	15.3	11.4
Husband approves/don’t know	60.7	92.8	84.7	88.6
Fertility preferences				
Husband more pronatalist	33.9	15.9	21.3	18.5
Same preferences/husband less pronatalist	66.1	84.1	78.7	81.5
Never discussed contraception	46.4	9.5	26.4	16.8
Ever discussed contraception	53.6	90.5	73.6	83.2
Husband difficult to approach about contraception	46.4	6.1	14.0	10.6
Husband easy to approach/wife waits for husband to initiate	53.6	93.9	86.0	89.4

Note: The sample is married women who are fecund, not pregnant, and who want to delay or stop childbearing.

Notes

- 1 The terms "covert use," "secret use," and "surreptitious use" are used interchangeably throughout this article.
- 2 Of the 1,056 husbands who were successfully interviewed, 1,035 (98 percent) were in monogamous marriages. Of the 1,035 monogamous men, 901 (87 percent) were correctly matched to their wives' interview records. This sample of 901 couples is used for part of the descriptive analysis.
- 3 Sixteen percent of the married men in the Zambian study reported that they were sexually involved with a woman apart from their current wife or partner. Nine percent said they were involved in an extramarital relationship *and* were using methods to prevent pregnancy or disease. The condom was the method used in the vast majority of these cases. Based on these findings, 9 percent of all married men are covertly using contraceptives, although whether their wives know or do not know about this use is not certain.
- 4 Among women covertly using contraceptives, only two of their husbands reported using a method with a woman outside the marriage, in both cases condoms.
- 5 As a rule, husbands and wives in the Zambia study were interviewed separately. Given the difficulties in the field of arranging for survey interviews with husbands, wives and husbands were rarely interviewed simultaneously. Thus, some opportunity existed for discussion to occur between spouses following the interview with the first spouse, usually the wife.
- 6 The Kappa index takes into account the level of agreement expected by chance alone. Kappa ranges from 0.0 to 1.0, with 0.0 indicating that agreement is no greater than what would be expected by chance and 1.0 indicating perfect agreement. A statistically significant Kappa index indicates that spouses agree to a larger extent than would be the case by chance alone.
- 7 Checks were performed on the data to ensure that the independent variables were not highly correlated with each other. Crosstabulations of all dummy variables showed no substantial concentrations of cases in any of the cells (for example, of the 140 women who perceived their husbands' disapproval of contraception, 62 never discussed contraception with their husbands and 78 ever discussed it). Further detailed examination of the crosstabulations did not indicate that the variables described the same subset of respondents. For example, of the 62 women who perceived their husbands' disapproval of contraception *and* who never discussed the subject with their husbands, 35 found it difficult to talk about contraception with their husbands and 27 did not find it difficult.

References

- Bankole, Akinrinola. 1995. "Desired fertility and fertility behavior among the Yoruba of Nigeria: A study of couple preferences and subsequent fertility." *Population Studies* 49, 2: 317-328.
- Bankole, Akinrinola and Susheela Singh. 1998. "Couples' fertility and contraceptive decision-making in developing countries: Hearing the man's voice." *International Family Planning Perspectives* 24,1: 15-24.
- Becker, Stan. 1996. "Couples and reproductive health: A review of couple studies." *Studies in Family Planning* 27,6: 291-306.
- Beckman, L.J. 1983. "Communication, power, and the influence of social networks in couple decisions on fertility." In *Determinants of Fertility in Developing Countries: Fertility Regulation and Institutional Influences*, Volume 2. Eds. Rodolfo A. Bulatao and Ronald D. Lee. New York: Academic Press. Pp. 415-443.
- Blanc, Ann K. et al. 1996. *Negotiating Reproductive Outcomes in Uganda*. Calverton, MD: Macro International and Kampala, Uganda: Institute of Statistics and Applied Economics.
- Bledsoe, Caroline and William F. Hanks. 1998. "Legitimate recuperation or illicit stalling? Time, contraceptive use, and the divided man in rural Gambia." Paper presented at the annual meeting of the Population Association of America, Chicago, 2-4 April.
- Bleek, Wolf. 1987. "Lying informants: A fieldwork experience from Ghana." *Population and Development Review* 13, 2: 314-322.
- Brown, J.E. et al. 1990. "Listening to the clients: Qualitative family planning studies from Kenya and Zambia." New York: Population Council. Unpublished report.
- Central Statistical Office [Zambia], Ministry of Health, and Macro International. 1997. *Zambia Demographic and Health Survey, 1996*. Calverton, MD: Central Statistical Office and Macro International.
- Ezeh, Alex Chika. 1993. "The influence of spouses over each other's contraceptive attitudes in Ghana." *Studies in Family Planning* 24,3: 163-174.
- Ezeh, Alex Chika and Gora Mboup. 1997. "Estimates and explanations of gender differentials in contraceptive prevalence rates." *Studies in Family Planning* 28,2: 104-121.
- Ezeh, Alex Chika, Michka Seroussi, and Hendrik Raggars. 1996. *Men's Fertility, Contraceptive Use, and Reproductive Preferences*. Calverton, MD: Macro International.
- Green, Cynthia P., Sylvie I. Cohen, and Hedia Belhadj-El Ghouayel. 1995. *Male Involvement in Reproductive Health, Including Family Planning and Sexual Health*. Technical Report 28. New York: United Nations Population Fund.
- Greene, Margaret E. and Ann E. Biddlecom. 1997. "Absent and Problematic Men: Demographic Accounts of Male Reproductive Roles." *Policy Research Division Working Paper* No. 103. New York: Population Council.
- Hollerbach, Paula. 1983. "Fertility decision-making processes: A critical essay." In *Determinants of Fertility in Developing Countries: Fertility Regulation and Institutional Influences*, Volume 2. Eds. Rodolfo A. Bulatao and Ronald D. Lee. New York: Academic Press. Pp. 797-828.
- Isiugo-Abanihe, Uche C. 1994. "Reproductive motivation and family-size preferences among Nigerian men." *Studies in Family Planning* 25,3: 149-161.
- Koenig, Michael A., George B. Simmons, and B.D. Misra. 1984. "Husband-wife inconsistencies in contraceptive use responses." *Population Studies* 38,2: 281-298.
- Mbizvo, Michael T. and Donald J. Adamchak. 1991. "Family planning knowledge, attitudes, and practices of men in Zimbabwe." *Studies in Family Planning* 22,1: 31-38.
- Omondi-Odhiambo. 1997. "Men's participation in family planning decisions in Kenya." *Population Studies* 51,1: 29-40.
- Phillips, James F., Kubaje Adazu, Martin Adjuik, and Alex Nazzar. 1997. "Denial of contraceptive use among known contraceptive adopters in a rural area of northern Ghana." Paper presented at the annual meeting of the Population Association of America, Washington, DC, 27-29 March.

- Population Reference Bureau. 1997. *World Data Sheet*. Washington, DC: Population Reference Bureau.
- Renne, Elisha P. 1993. "Gender ideology and fertility strategies in an Ekiti Yoruba village." *Studies in Family Planning* 24,6: 343–353.
- Rutenberg, Naomi and Susan Cotts Watkins. 1997. "The buzz outside the clinics: Conversations and contraception in Nyanza Province, Kenya." *Studies in Family Planning* 28,4: 290–307.
- Salway, Sarah. 1994. "How attitudes toward family planning and discussion between wives and husbands affect contraceptive use in Ghana." *International Family Planning Perspectives* 20,2: 44–47, 74.
- Shedlin, Michele Goldzieher and Paula E. Hollerbach. 1981. "Modern and traditional fertility regulation in a Mexican community: The process of decision making." *Studies in Family Planning* 12,6/7: 278–296.
- Stycos, J. Mayone. 1996. "Men, Couples, and Family Planning: A Retrospective Look." *Cornell University Population and Development Program Working Paper Series* No. 96.12. Ithaca, NY: Cornell University.
- Toure, Lalla. 1996. *Male Involvement in Family Planning: A Review of the Literature and Selected Program Initiatives in Africa*. Washington, DC: SARA Project.
- Tourangeau, Roger and Tom Smith. 1996. "Asking sensitive questions: The impact of data collection mode, question format, and question context." *Public Opinion Quarterly* 60,2: 275–304.
- University of Zambia, Central Statistical Office [Zambia], and Macro International. 1993. *Zambia Demographic and Health Survey, 1992*. Columbia, MD: Macro International.
- Watkins, Susan Cotts, Naomi Rutenberg, and David Wilkinson. 1997. "Orderly theories, disorderly women." In *The Continuing Demographic Transition*. Eds. G.W. Jones, R.M. Douglas, J.C. Caldwell, and R.M. D'Souza. New York: Oxford University Press.
- Westoff, Charles F. and Akinrinola Bankole. 1995. "Unmet Need: 1990–1994." *DHS Comparative Studies* No. 16. Calverton, MD: Macro International.
- Zulu, Eliya. 1998. "The role of men and women in decisionmaking about reproductive issues in Malawi." *African Population Policy Research Center Working Paper* No. 2. Nairobi and New York.

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