

# **Disagreement in spousal reports of Current contraceptive use in Sub-Saharan Africa**

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Hopkins Population Center Papers on Population

**WP 98-07**

December 1998

This research was supported by a grant from the National Institute of Child Health and Human Development--HD34889-02. We would like to thank Bryan Sayer for assistance with matching the data of husbands and wives. The library services are supported by the Hopkins Population Center grant from the National Institute of Child Health and Human Development (5-P30-HD06268). Ron Gray gave comments to improve the paper. Correspondence may be addressed to:

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Disagreement in spousal reports of current contraceptive use  
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12/1998

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## Acknowledgments

This research was supported by a grant from the National Institute of Child Health and Human Development--HD34889-02. We would like to thank Bryan Sayer for assistance with matching the data of husbands and wives. The library services are supported by the Hopkins Population Center grant from the National Institute of Child Health and Human Development (5-P30-HD06268). Ron Gray gave comments to improve the paper.

## Abstract

Contraceptive prevalence is a key variable estimated from demographic and health surveys. But the prevalence estimated from reports of husbands differs widely from that estimated for wives. In this research, using data from six Demographic and Health Surveys of sub-Saharan Africa, we examine reports from spouses in monogamous couples with no other reported sex partners in the recent period. Agreement ranged from 47% to 82% but among couples in which one or both reported use, the both category represented less than half in all nations except Zimbabwe. Husbands generally had higher reports of condoms, periodic abstinence and pills but fewer reports of the IUD, injections and female sterilization. Either discussion of family planning with the spouse and/or higher socio-economic status was associated with agreement in most of the surveys. Ambiguities in the survey question regarding current use need to be reduced, perhaps with an added probe question for non-permanent methods.

## INTRODUCTION

Contraceptive use is the intermediate variable which has the greatest impact on fertility levels in modern societies. Contraception is practiced by approximately 50% of married couples in the world with 70-80% using in the more developed nations and China but a low of only 5-15% using in many nations of sub-Saharan Africa (United Nations, 1996)

The sources of data for the estimates of contraceptive prevalence are usually self-reports in population surveys. Family planning clinic data would be an alternative source of information but these data normally only give numbers of acceptors rather than current users since continuation cannot usually be assessed. Also non-clinical methods--which are used by a sizable proportion of couples in some settings--are, by definition, missing from clinic records. Thus survey reports remain the main source of information.

The validity of self-reports of contraceptive use is usually difficult to assess<sup>1</sup>. Nevertheless there have been several such studies of oral contraceptive use, where clinic records served as the reference (e.g. Nischan et al. 1993). These studies in developed nations all found a fairly high validity for the self-reports. In developing nations, a validation in Machakos, Kenya of women using three clinic methods--IUD, injection and oral

contraception--showed validity on the order of 80% for use over a ten year period (Maggwa et al. 1993). There has been one validation of reports of condom use in the U.S. (Zenilman et al. 1995). In this study about 500 persons attending a sexually transmitted disease (STD) clinic in Baltimore, were treated for an STD and told to return for follow-up in 30 days. Condom use in the 30-day period was asked at the second visit and STD tests were again performed. Among those who said that they always used condoms in the interim period, the proportions who were reinfected were 15% for males and 24% for females. These proportions were not significantly different from those of persons who reported that they used condoms sometimes or never. Given the known protective effect of condoms against STDs, clearly the self-reports of "always use condoms" lacked validity. However, STD clinic attendees may be an atypical and poorly compliant population.

Reports of contraceptive use are critical for family planning programs which must project needs for commodities (e.g. pills and condoms). In Bangladesh, a "condom gap" appeared when researchers tried to reconcile records of large numbers of condoms provided through social marketing (92 million), with only 2 percent prevalence reported by women in a national contraceptive prevalence survey. A research study which included interviews with women, men and couples (spouses were interviewed separately) was undertaken. The investigators concluded that women under-report condom use (Ahmed, Schellstede and Williamson, 1987).

In the absence of validation, there are several ways to assess the reliability of reports of contraceptive use. First, the identical question can be asked of the same respondent in repeat interviews and the results compared. One complication is that on the second visit the time reference must be the date of the first interview rather than the current date; otherwise any intervening use would invalidate the comparison. As part of the World Fertility Survey, a subsample of women in Fiji, Peru and Lesotho were reinterviewed within 2-4 months after the main survey. Reliability of reporting of ever use of contraception was 79%, 81% and 81% for kappa values of .51, .63 and .63 in the three respective countries (O'Muircheartaigh, 1980, 1984). From interview-reinterview reports in Kwara state of Nigeria it was found that only 19 percent of women who reported ever use of contraception at one visit or the other reported it at both visits (Becker, Feyisetan and Makinwa-Adebusoye, 1995).

Another measure of reliability is provided by interviewing sexual partners (esp. married couples) independently and comparing responses. Table 1 lists studies which have compared reports of either current or ever use of contraception between spouses. The lowest concordance was for reports of current use in India and the highest was in Ghana (1993 DHS survey). Ever use is of course more difficult to compare. The reason is that contraceptive use with a specific (e.g. current) partner is not usually specified in the

TABLE 1 ABOUT HERE

question so some of the different reports from spouses on ever use would be mistakenly taken as an indication of unreliability when they were in fact true differences. Also, in this case the probability that there was use with (an)other partner(s) only increases with the passage of time so, *ceteris paribus*, older couples would have less reliable reports of ever use than would younger couples.

One matter which must be considered in reliability analyses is that with a binary response (use, non-use of contraception) there may be considerable agreement in reports due to chance alone. The kappa statistic was developed to adjust for such chance agreement (Cohen, 1960).

Another problem in comparing partner's reports of contraceptive use is that the time reference may be ambiguous depending on the method used. For example, responding to the Demographic and Health Survey (DHS) question "Are you currently doing something or using any method to delay or avoid getting pregnant?" is straightforward if the method is vasectomy or tubal ligation. However, the accurate response to this question is unclear if the method is the condom and it is used irregularly or is used for STD prevention rather than avoidance of pregnancy. For example, if a couple who often use the condom did not do so at the last coitus are they current users or not? There may also be difficulty defining methods such as "periodic absence" which can be construed as periods of absence



rather than deliberate avoidance of pregnancy. Perhaps the answer should depend on the relative frequencies of protected and unprotected coitus in a recent period.

In addition, there are contraceptive methods which one partner can use surreptitiously, so discrepant reports in the couple would merely reflect a true difference in knowledge of the actual situation<sup>2</sup>. Surreptitious use is easier with non-intercourse related methods--vasectomy, tubal ligation and Depo Provera--and is also possible with Norplant, the IUD, the pill and even rhythm. Since all these except vasectomy are female methods, use which is concealed from the spouse but reported to the interviewer would tend to yield higher reports from wives. Of course the woman might choose to conceal use from the interviewer as well.

A related reason for discrepancies in reports is social acceptability of contraception. It is well known that reports of socially deviant behaviors are more prone to reporting error than reports of other behaviors. In sub-Saharan Africa, contraceptive use is low in most countries (National Research Council, 1993) and has not yet reached the level of social respectability. This may have been a reason for the low reliability of reports of ever use in Nigeria in the study cited above.

While we were writing this paper, Ezeh and Mboup (1997) published an article on gender differences in contraceptive prevalence rates

using DHS data from Central African Republic, Ghana, Haiti, Kenya and Zimbabwe. They calculated contraceptive use rates by method for husbands and wives and found that husbands in all surveys reported periodic abstinence more often while most often wives reported slightly higher prevalence of the pill, IUD and female sterilization. They stratified by type of union (monogamous or polygamous) and reported extramarital relations (or not) and found that the differentials persisted in all groups. Since two DHS surveys included questions about respondent's knowledge of the timing of ovulation during the menstrual cycle, the authors were able to show that in Ghana only 50% of the husbands and in Kenya only 13% of husbands who reported use of periodic abstinence actually knew when the fertile period was. In multivariate analyses of spousal agreement, discussion of family planning and women's education both significantly increased the odds of agreement in several countries. Unfortunately the authors included polygamous couples which is problematic because a polygamous husband gave only one report of contraceptive use without reference to any one wife, so it may or may not be with any given wife! For three DHS surveys that overlap in the two studies, we will compare our findings with theirs in the discussion section<sup>3</sup>. All of Ezeh and Mboup's analyses other than the multivariate regression were tabulations of husbands and wives separately while this paper will focus almost exclusively on the reports of husband-wife pairs. Thus we give information from the cross-tabulation of spouses reports and kappa statistics which are not reported in their work.

Also we focus on reports of monogamous couples without other sex partners--the group where ideally there would be concurrence of reports.

## METHODS

As of early 1997, Demographic and Health Surveys including both males and females (with the possibility of husbands and wives sampled in the same household) had been conducted in over 40 nations. The DHS sample designs call for a subsample of males; this was usually accomplished by interviewing all males of reproductive age<sup>4</sup> in every 3rd or 4th household in which female interviews were done. In each of the surveyed households with both sexes interviewed, men and women were interviewed separately by an interviewer of the same sex. Thus the couple data are in addition to data on any other males and females in the household. In principle it is best to have the husband and wife interviews done simultaneously to avoid "contamination" which could occur if one spouse talked with the other about the questionnaire content before the second interview. In practice in the DHS surveys it was often impossible to conduct interviews simultaneously since a) one male worker in a team had to interview males in households from the workload of three to five female interviewers; and b) males were in general less likely than females to be available when interviewers reached any given household. Thus husband response rates are also lower than those for wives.

The focus of our research is sub-Saharan Africa. Since couple differences in current contraceptive use could be due to use with other partners, we decided to include only surveys (available as of 2/1997) which also collected information on sexual intercourse with other partners in the recent period. Table 2 gives summary information about the six surveys included (Burkina Faso, Central African Republic, Ghana, Ivory Coast, Tanzania and Zimbabwe). For the main analyses, we excluded couples in polygamous unions because the male report of contraceptive use is not linked to any particular wife which makes meaningful spousal comparisons virtually impossible. Using similar logic we excluded couples in which either spouse reported sexual intercourse with other partners in the recent period. Couples were matched using line number identifiers of the wife (wives) in the male questionnaire. The number of couples varied from about 500 in Ghana to over 1100 in Burkina Faso. The percentage of couples in polygamous unions ranged from 2% in Zimbabwe to 21% in Burkina Faso. After exclusion of polygamous couples and monogamous couples in which either partner reported another sex partner in the recent period, the numbers varied between 400 and 600 (Table 2).

TABLE 2 ABOUT HERE

One objective of this research is to simply document the levels of consistency of spousal reports of current contraceptive use, including method-specific consistency. In addition, from the

literature review we developed the following hypotheses to test regarding intra-couple reporting consistency of contraceptive use.

### Hypotheses

1. Observed discrepancies between partners' reports will be consistent with surreptitious use.
2. The level of discrepancies will decline with increasing educational attainment of the partners and with modernization and socio-economic status of the household.
3. Condom use will be reported consistently higher by husbands and the discrepancy will persist even among couples where the male does not report any other sexual partners besides his wife.
4. If there is any way to measure validity, women's reports will be more valid.

The DHS samples for five of the six surveys (Ghana is the exception) are not self-weighting so weights are needed to derive nationally representative results. Though an appropriate couple weight could be derived from the individual probabilities of selection and successful interview for each partner, these probabilities are not available from and cannot be derived with variables in the public-use DHS data sets. Therefore we have used the sample weights for women in the couple; in the presence of polygamy, these are more appropriate than the male weights. Adjustments for clustering were ignored because the average number

of couples per cluster ranged from only 1.4 in Ghana to 5.0 in Burkina Faso, and these numbers were approximately halved when considering only couples with no other reported sex partners.

The outcome variable is agreement or disagreement of spouses with regard to contraceptive use. As stated above, unless otherwise indicated, we restricted the sample to couples in which both partners said that the husband had no other wives and in which neither spouse reported other sex partners in the recent period<sup>5</sup>. The cross-tabulated responses of husbands and wives regarding current use are recoded into the following groups: yes/yes and same method; yes/yes but different methods; husband no and wife yes; wife no and husband yes; both wife and husband no. Couples in which both partners state that they are using a method but report different methods could be considered as either disagreement or agreement. We considered the following possible classifications for the agreement category.

1. Agreement on use and method used

2. Agreement on use and method used or different methods reported but there is consistency in that the two methods could have been used simultaneously or surreptitious use is possible. The list of differing reports which are considered consistent is given in Appendix Table 1.

### 3. Simple agreement on use without regard to method

Note that agreement will be lowest using the first classification and highest using the third. For the main analyses of this paper we used the second classification. Since one could debate the decisions regarding differing contraceptive reports which are considered consistent, the other two groupings were also used and in one sense constitute a sensitivity analyses for the classification system.

Method-specific indices of agreement are also calculated. More precisely, we calculated two types of ratios: 1) the proportion of wives (husbands) reporting a given method whose spouses report the same or a consistent method and 2) the ratio of the number of couples with both partners reporting the method to the number with either reporting it. These ratios were only calculated for methods reported by at least 8 wives to avoid the problem of very large sampling fluctuations<sup>6</sup>.

In another approach to explore whose report might be more correct, we examined contraceptive methods reported by husbands whose wives stated that they were currently pregnant. Assuming the report of pregnancy is correct and that current contraceptive use would therefore be unnecessary, we can deduce that any husbands who reported such use were in error, at least with respect to the spouse.

To analyze determinants of agreement we considered selected covariates that were available in all surveys. They were: age and education of each spouse, duration of marriage, number of children ever born, urban or rural residence, presence or absence of electricity in the household, discussion with the spouse about family planning in the past year<sup>7</sup> and number of specific items owned by the household. (Items were: radio, television, refrigerator, bicycle, motorcycle and car.) Table 3 shows descriptive statistics for these covariates. As could be expected there is little variation in wives and husbands ages, duration of marriage and children ever born between the surveys. But socio-economic status varies greatly, with relatively high levels of female education in Zimbabwe, Ghana and Tanzania and low levels in Burkina Faso, Central African Republic and Ivory Coast. In Burkina Faso even most husbands have little or no schooling. The level of urbanization is similar (30-40%) in all the nations except Tanzania which has only 19% living in urban places. There is quite a wide variation in the percentage of households with electricity from a low of 4% in CAR to a high of 33% in Ivory Coast.

TABLE 3 ABOUT HERE

For bivariate analyses we used ANOVA and F-tests for continuous variables and cross-tabulations for categorical variables. For multivariate analyses, we chose to include the entire set of covariates regardless of significance of associations in bivariate



results. However, since contraceptive use is low in these nations, the logistic regression results are weighted by the large numbers of couples with both spouses reporting no use. In such a case the covariates will predict use-nonuse rather than agreement-disagreement. Therefore we fitted the same models using data only for couples in which at least one spouse reported use. Ezeh and Mboup (1997) employed the same restriction in their analyses.

Logistic models were fit with SAS software which uses the iteratively reweighted least squares algorithm (SAS Institute, 1996). Goodness of fit of a model was assessed in the usual way by comparing the  $-2 \log$  likelihood value with the appropriate chi-square cutoff value. Individual coefficients were tested by the usual Wald statistic and odds ratios were estimated by exponentiation. In addition the pseudo r-squared value was computed. Differences of coefficients from zero were tested with the conventional 5% significance level but with a one-sided test for pre-specified hypotheses on one side of zero.

For the sensitivity analyses we included the same covariates in the logistic model for each nation but changed the outcome variable to either the dichotomous variable for exact agreement (yes/no) or simple agreement (yes/no) on use.

## RESULTS

Table 4 gives the distribution of couples by reported contraceptive use and various summary measures for the six countries. In the majority of couples in all nations except Burkina Faso and Zimbabwe, both partners report non-use of contraception. In all nations except Ghana and Zimbabwe there are more husbands who alone report use than there are couples in which both report use of the same method. Also couples in which the husband alone reports use outnumber those in which the wife alone reports use in all nations. This statement remains valid when those who report other sexual partners are excluded from the analyses. Among couples in which both partners report use, the majority do report the same method except in Burkina Faso. Overall, approximately eight out of ten couples in each nation agree on the reports of current use; Burkina Faso is an outlier with slightly less than five out of ten giving identical reports on use. The summaries for those couples without other sexual partners (right panel) are similar with just slightly higher agreement than in the total sample.

From the rows labelled "only" and the last row of the table which gives ratios of numbers of husbands to wives reports, it is clear that husbands report use more than their wives in all these nations. For couples without other sexual partners, these ratios are all above 1.5 (except in Zimbabwe); that is, for every three husbands who report use only two of their wives report use.

Since non-use dominates the percentages in Table 4, in Figure 1 the

three measures of agreement (for couples with no other partners) are given as percentages of the number of couples where at least one partner reported use. Among these, in only Ghana and Zimbabwe did over half of the couples have both spouses agreeing on use; in the other nations less than 40% agreed on use; the percentages ranged from 14% in Burkina Faso to 65% in Zimbabwe.

FIGURE 1 ABOUT HERE

To give further insight into the nature of the inconsistencies, Table 5 gives method-specific reports for spouses. As can be seen from the left panel, husbands in every nation report more use of the pill, condom and periodic abstinence than do their spouses. On the other hand in surveys where there are sufficient numbers of cases, wives report greater use of injection, IUD and female sterilization than do their husbands. These patterns are consistent across nations.

TABLE 5 ABOUT HERE

The right panel shows couple-level comparisons. For the ratios, the denominator is the number who report the method and the numerator is the number of their spouses who report the same method or a possibly consistent method. For the pill, in each country if the wife reports use, the husband reports use of the pill or another (consistent) method 70 to 90% of the time. However, if the

husband reports use of the pill, the wife only concurs 40 to 80% of the time. From the method by method cross-tabulation (not shown), when the husband reports pill use and the wife does not, most often she reports no use of contraception<sup>8</sup>.

For condoms, if the husband reports use, only about half of the time does the wife report use of condoms or another method consistent with that report. However, if the wife reports condoms, the husband about 90% of the time (in the 4 surveys with sufficient numbers) does report either condoms or another method consistent with her report (e.g. he reports withdrawal). For female sterilization, whenever he reports the method, the wife also reported it (values of 100% in column 7) but the reverse was not true.

The last column of the table gives the percentage of couples with both reporting a method (or consistent reports) out of those in which either partner reports the method. Periodic abstinence has the lowest concordance and pill use and condom use have higher and similar levels of concordance. Despite small numbers, none of the 95% confidence intervals for these percentages includes 100% so lack of concordance is a significant occurrence for all of these methods.

Regarding hypothesis 1, the data on injections, IUD and female

sterilization are consistent with wives surreptitious use and we can conclude similarly for the higher reports of condoms by the male. Of course, other explanations are also possible--for example husbands may forget that their wives are using the IUD or injections. The higher reports of pill use by husbands than by their wives is not consistent with surreptitious use, and whether it is overreporting by the husband or underreporting by the wives is impossible to determine from these data alone.

In the logistic regressions we examined the possible determinants of agreement/disagreement. As a value of 1.0 represents agreement, positive coefficients denote covariates which increase the likelihood of agreement while negative coefficients reflect the opposite tendency (Table 6). Identical initial models were fit for each country and then variables with a significance level less than 0.10 in any country were included in the same final model for each country in order to facilitate comparisons. As can be seen from the table, none of the covariates were significant in all nations and in CAR no covariate had significant associations. Increases in woman's education were positively associated with spousal agreement in all surveys but only significantly so in Burkina Faso and Ivory Coast. The number of items owned also has a significant positive association in Ghana and Zimbabwe.

TABLE 6 ABOUT HERE

In the sensitivity analysis (Appendix Table 2), the coefficients for all covariates in all three models are consistently either above or below 1.0 though significance levels change. One result is striking. In Burkina Faso and Tanzania the odds ratio for the variable "discuss family planning with husband" is much higher when the criteria for agreement is that both report the same method. One obvious interpretation of this is that discussion with the spouse is more crucial for both partners to correctly identify the current method they are using than it is to simply agree on use. Note that the number of significant covariates is higher in the model for any use. Since the numbers agreeing on use is higher than for either other classification, there is more information to estimate the coefficients with greater precision in the models with this outcome.

In one possible test of validity, Table 7 shows that between 3% (in CAR) and 26% (in Burkina Faso) of husbands of pregnant wives reported current use of a contraceptive method. The most commonly mentioned method in Burkina Faso, Ivory Coast and Tanzania was periodic abstinence while in Ghana it was condoms and in Zimbabwe, the pill. Given that these husbands also reported no other sex partners, from these results we can conclude that some husbands do overreport use.

TABLE 7 ABOUT HERE

## DISCUSSION

In the demographic transitions of the late 20th century, increases in use of modern contraception are the major reason for fertility decline. Thus contraceptive prevalence is a crucial indicator for family planning program performance. Up until now, women's reports of contraceptive use in demographic surveys have provided the information for calculation of this prevalence rate. However, the validity of such reports is called into question when we find that the husbands of these women quite often give different reports. The purpose of this paper was to further document the levels of such discrepancies and search for explanations of these.

In the Demographic and Health Surveys from six sub-Saharan African nations studied here, there was less than 80% agreement in all except Ivory Coast. These discrepancies persisted when the analyses were restricted to only monogamous couples with neither spouse reporting other sex partners. Further, most of this agreement was in reports of nonuse; when couples with either or both reporting contraception were considered, agreement is much lower. Only in Zimbabwe do a majority of such couples agree on the specific method.

These low levels of agreement are disturbing unless we can dismiss the husbands reports and continue estimating use as reported by currently married women as was done before men were included in

demographic and health surveys. However, the finding of women's under-reports of condom use in Bangladesh and of low reliability in the other studies cited above makes us hesitate before accepting women's reports at least on intercourse-related methods. Nevertheless, in the case of a discrepancy in sub-Saharan Africa, it seems more likely that the wife's report is correct for the couple. We can deduce this from the following: a) some husbands reported current use of female methods at a time when their wives reported a pregnancy, b) virtually all of the methods are used either by or with the knowledge of the woman and, with the exception of condoms, this is not the case for men, c) Ezeh and Mboup's found that half or less of husbands who reported use of periodic abstinence, knew when the fertile period was, and d) husbands' reported use (especially the condom) when the wife reports no method could be associated with unreported extramarital coitus.

With regard to the hypotheses at the outset of this research, we have seen that data on injections, IUD and female sterilization are consistent with surreptitious use of these methods by women but the data on pill use are not. Whether the higher reports of pill use by husbands than their wives represent underreporting by the wives or overreporting by their spouses is unclear, but given that some husbands reported pill use when their wives were pregnant, some overreporting must exist. Hypothesis 2 was supported by the significant positive effects of women's education on agreement in



Burkina Faso and Ivory Coast and the positive coefficients in the other nations. Economic variables--number of items owned and presence of electricity--were also associated positively with agreement. The expected pattern of higher reports of condom use among husbands was confirmed (hypothesis 3). It was impossible to compare the validity of women and men's reports (hypothesis 4); however we were able to detect that some husbands' reports were invalid.

Ezeh and Mboup recently published a parallel study of couples reports; DHS data from Ghana, Central African Republic and Zimbabwe are common in both papers. Though the topic studied was the same in their analyses and ours, in only the multivariate analyses of agreement on use did Ezeh and Mboup actually examine differences at the couple level; their other analyses were of husbands and wives separately. Also they included polygamous couples in the multivariate analyses, used some different background variables and included endogenous variables in the regressions so comparisons between studies are difficult. (Clearly the endogenous variable knowledge of contraceptive methods, will predict use at some level since couples who don't know a method cannot be users!) However, women's education was found to be a significant predictor of agreement in several nations in both studies. They concluded by suggesting, as we have, that husbands were more likely to overreport use than women were to underreport use, partly based on the observation that many husbands reporting use of periodic

abstinence had inaccurate knowledge of the ovulatory cycle.

One source of the problem of spousal disagreement that could be corrected relatively easily is the vague wording of the question: "Are you currently doing something or using any method to delay or avoid getting pregnant?" The time reference 'current' is imprecise. Incorporating a specific time reference for current use should lead to lower discrepancies. For example, one could inquire if the couple was protected from the risk of pregnancy at the last intercourse if it occurred within the last month<sup>9</sup>. Probing of knowledge of the ovarian cycle among those who report use of periodic abstinence as suggested by Ezeh and Mboup is another way to assess accuracy of reporting. Where there is polygamy, the husband can be asked about contraceptive use with specific partners; this has already been implemented in the 1996 Tanzania DHS.

The incorporation of men in reproductive health programs is a recommendation from the 1994 International Conference on Population and Development (United Nations, 1995). In three of the six nations studied here the agreement on use of contraception is highly associated with discussion of family planning. As contraceptive use becomes socially acceptable in sub-Saharan Africa, spouses can be encouraged via the media, family planning program personnel and others to discuss these matters and to the

extent that this happens, we can expect husband and wife reports of contraceptive use to be more in agreement. In the interim, large discrepancies between spouses should give pause to those wanting to employ contraceptive use as an outcome variable at the individual level.

Notes:

1. Note that validation studies are limited to clinic populations.
2. This highlights an ethical reason why reconciliation interviews with both partners are generally inappropriate.
3. The numbers in our couple samples are slightly different from theirs, perhaps due to exclusions of a few cases with missing information or to slight differences in matching.
4. Note from Table 2 the different age ranges used for men in the various national surveys.
5. In Burkina Faso and Ivory Coast, the reference period for the question 'sex with other partners' was two months whereas the reference period was four weeks in CAR, Ghana, Tanzania and Zimbabwe.
6. Sample weights were not used in constructing these ratios since they could mask the differences of interest.
7. The reference period for 'discussion of family planning with husband' was one year in Burkina Faso, Ghana, Ivory Coast and Tanzania; it was 6 months in CAR and Zimbabwe.
8. Among couples in which the husband reports pill use and the wife does not, her report is non-use of contraception in the following proportions of cases: 7 of 10 in Burkina Faso, 2 of 2 in CAR, 8 of 12 in Ghana, 5 of 6 in Ivory Coast, 6 of 7 in Tanzania and 35 of 45 in Zimbabwe.
9. Though this would obviously be a useless question for the rhythm method.

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## Abstract

Contraceptive prevalence is a key variable estimated from demographic and health surveys. But the prevalence estimated from reports of husbands differs widely from that estimated for wives.

In this research, using data from six Demographic and Health Surveys of sub-Saharan Africa, we examine reports from spouses in monogamous couples with no other reported sex partners in the recent period. Agreement ranged from 47% to 82% but among couples in which one or both reported use, the both category represented less than half in all nations except Zimbabwe. Husbands generally had higher reports of condoms, periodic abstinence and pills but fewer reports of the IUD, injections and female sterilization. Either discussion of family planning with the spouse and/or higher socio-economic status was associated with agreement in most of the surveys. Ambiguities in the survey question regarding current use need to be reduced, perhaps with an added probe question for non-permanent methods.